

The Commercial & Financial Chronicle

INCLUDING

Bank & Quotation Section
Railway Earnings Section

Railway & Industrial Section
Bankers' Convention Section

Electric Railway Section
State and City Section

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CLEARING-HOUSE RETURNS.

The following table, made up by telegraph, &c., indicates that the total bank clearings of all the clearing houses of the United States for the week ending to-day have been \$2,314,365,993, against \$2,818,754,466 last week and \$2,890,402,418 the corresponding week last year.

Clearings—Returns by Telegraph.	1914.	1913.	Per Cent.
Week ending Nov. 28.			
New York	\$910,551,797	\$1,251,858,068	-28.0
Boston	82,017,213	107,436,278	-23.7
Philadelphia	95,452,559	108,969,214	-12.4
Baltimore	22,129,662	25,734,541	-14.0
Chicago	198,532,754	212,709,523	-6.7
St. Louis	49,714,242	57,073,904	-12.9
New Orleans	14,929,582	15,309,461	-2.5
Seven cities, five days	\$1,364,337,809	\$1,779,095,989	-23.3
Other cities, five days	462,736,941	492,284,917	-6.0
Total all cities, five days	\$1,827,124,750	\$2,271,380,906	-19.6
All cities, one day	487,241,243	619,021,512	-21.3
Total all cities, for week	\$2,314,365,993	\$2,890,402,418	-19.9

The full details for the week covered by the above will be given next Saturday. We cannot furnish them to-day, clearings being made up by the clearing houses at noon on Saturday, and hence in the above the last day of the week has to be in all cases estimated, as we go to press Friday night. We present below detailed figures for the week ending with Saturday noon, November 21, for four years:

Clearings at—	Week ending Nov. 21.				
	1914.	1913.	Inc. or Dec.	1912.	1911.
	\$	\$	%	\$	\$
New York	1,402,845,262	1,848,111,972	-24.1	2,015,377,697	1,819,279,401
Philadelphia	158,692,107	173,199,785	-8.4	182,119,320	148,314,952
Pittsburgh	46,480,330	58,739,383	-20.9	58,499,387	50,772,588
Baltimore	34,396,707	40,362,689	-14.8	41,987,335	38,584,896
Buffalo	11,431,116	14,266,312	-19.9	13,041,713	10,806,466
Albany	6,515,293	7,897,639	-17.5	6,411,828	6,439,848
Washington	7,082,900	4,864,517	-10.2	4,713,140	4,153,584
Rochester	4,307,358	3,676,249	-18.6	3,191,576	2,486,293
Syracuse	2,931,183	3,228,289	-18.5	2,676,109	2,199,435
Reading	1,671,078	1,941,820	-13.9	1,779,125	1,728,923
Wilmington	1,569,150	2,272,740	-30.9	1,678,941	1,267,795
Wilkes-Barre	1,685,530	1,768,927	-4.7	1,684,420	1,454,664
Wheeling	1,749,832	2,294,118	-23.8	2,307,569	1,800,508
Trenton	2,044,243	1,933,898	+5.7	1,726,403	1,126,403
York	887,439	889,145	-0.2	964,477	912,143
Erie	950,038	1,162,973	-18.2	1,029,215	871,047
Greensburg	460,000	510,000	-9.8	500,000	495,930
Chester	658,045	765,397	-14.0	701,146	491,273
Altoona	628,100	689,800	-9.9	655,000	493,500
Binghamton	608,018	712,707	-14.7	577,088	464,266
Albany	1,221,305	1,437,258	-15.0	1,551,635	848,529
Lancaster	391,257	487,593	-20.1	356,353	
Montclair					
Total Middle	1,691,956,455	2,179,296,774	-22.4	2,347,300,849	2,102,578,617
Boston	145,429,773	162,731,354	-10.0	163,952,065	166,210,640
Providence	7,216,200	9,141,900	-21.1	9,760,000	7,156,100
Hartford	4,251,097	4,584,629	-7.3	4,453,882	4,063,925
New Haven	3,319,255	3,363,374	-1.3	2,822,243	2,756,140
Springfield	2,642,072	2,577,638	+2.5	2,602,301	2,145,177
Portland	2,073,072	2,167,297	-4.3	2,245,081	2,071,438
Worcester	2,591,344	2,807,196	-7.7	2,634,215	2,125,888
Fall River	1,192,752	1,645,243	-2.8	1,369,076	1,303,468
New Bedford	1,157,932	1,252,487	-7.6	1,061,372	976,636
Lowell	746,161	849,847	-13.1	519,968	529,763
Holyoke	749,372	841,291	-10.9	708,377	600,000
Bangor	625,005	482,646	+29.6	707,875	521,262
Total New Eng	172,994,635	192,454,898	-10.1	192,836,455	190,460,437

Note.—For Canadian clearings see "Commercial and Miscellaneous News."

Clearings at—	Week ending Nov. 21.				
	1914.	1913.	Inc. or Dec.	1912.	1911.
	\$	\$	%	\$	\$
Chicago	293,328,273	334,983,540	-12.4	322,278,314	274,215,111
Cincinnati	22,882,400	26,442,900	-13.5	26,214,700	24,894,300
Cleveland	21,380,151	23,339,749	-8.4	23,329,749	18,923,581
Detroit	26,180,590	28,124,052	-6.9	27,475,483	19,614,496
Milwaukee	16,800,315	16,405,529	+2.4	5,532,590	13,034,691
Indianapolis	8,092,506	8,532,651	-5.2	8,672,319	8,889,906
Columbus	6,079,900	6,447,200	-5.7	6,754,000	5,596,400
Toledo	6,691,042	6,349,155	+5.4	5,305,314	4,084,188
Peoria	3,055,609	4,149,518	-26.4	3,957,145	4,084,188
Grand Rapids	2,975,387	3,659,798	-19.6	3,554,321	3,825,655
Dayton	2,000,286	2,645,453	-24.4	2,307,750	2,053,816
Evansville	1,171,731	1,365,213	-14.2	1,217,217	1,285,694
Kalamazoo	537,063	686,371	-21.7	875,142	697,833
Springfield, Ill.	1,055,264	1,081,245	-2.4	1,142,273	926,398
Fort Wayne	1,246,117	1,229,237	+1.4	1,138,172	912,589
Akron	1,598,000	1,823,000	-12.3	2,058,000	1,417,000
Lexington	635,846	690,733	-8.0	954,101	869,320
Youngstown	1,181,642	1,439,587	-17.9	1,523,248	1,025,605
Rockford	848,559	996,214	-14.9	896,396	860,562
Canton	1,513,275	1,655,000	-8.6	1,271,776	1,116,529
Quincy	772,990	799,848	-3.4	769,852	638,962
Springfield, O.	688,542	714,411	-3.6	570,087	406,335
South Bend	663,230	690,900	-3.9	600,000	521,959
Bloomington	609,880	655,463	+4.1	618,716	620,453
Mansfield	477,109	485,140	-2.3	501,194	398,161
Decatur	427,607	444,629	-3.8	464,728	300,383
Jackson	570,000	610,586	-6.7	550,000	500,000
Danville	390,000	411,056	-5.1	449,236	449,908
Linma	440,000	475,000	-7.4	452,235	327,433
Lansing	580,000	559,291	+3.4	507,227	381,072
Jacksonville, Ill.	267,320	316,955	-15.5	255,533	255,015
Ann Arbor	271,349	179,920	+51.2	195,401	147,273
Adrian	10,479	95,923	-89.1	40,000	43,346
Owensboro	302,469	443,620	-31.7	442,170	497,761
Tot. Mid. West	425,725,031	478,771,287	-11.1	460,277,190	392,732,679
San Francisco	57,771,322	53,968,932	+7.0	60,464,489	53,513,393
Los Angeles	20,170,386	25,630,600	-21.3	27,215,349	19,475,055
Seattle	11,589,967	17,377,388	-15.9	12,611,908	9,862,449
Portland	11,700,000	12,982,365	-9.9	12,315,612	11,439,756
Spokane	3,724,738	4,729,950	-21.2	4,825,378	4,303,803
Salt Lake City	10,190,963	11,641,693	-12.5	8,704,299	9,190,717
Tacoma	2,007,263	2,357,399	-14.9	3,167,650	3,389,506
Oakland	3,587,536	3,674,277	-2.3	3,826,323	3,269,434
Sacramento	2,515,198	2,712,423	-7.2	2,459,202	1,864,092
San Diego	1,849,293	2,232,300	-17.2	2,875,950	2,000,000
Fresno	1,504,628	1,511,195	-0.4	1,600,406	1,282,126
Stockton	1,151,889	1,154,587	-0.3	1,136,873	1,150,692
Pasadena	706,323	923,034	-23.5	1,202,488	817,329
San Jose	791,878	658,315	+20.2	863,612	865,530
North Yakima	420,089	500,000	-16.0	472,444	419,272
San Jose	298,264	318,324	-6.3	300,180	300,000
Long Beach	502,840				
Total Pacific	129,979,737	138,773,230	-6.3	144,035,172	123,123,154
Kansas City	73,608,024	60,885,299	+20.9	61,800,259	52,585,136
Minneapolis	34,054,619	32,283,723	+5.5	33,320,529	25,841,885
Omaha	17,714,702	18,136,966	-3.0	18,003,105	13,590,121
St. Paul	12,849,738	13,249,780	-5.8	16,098,800	13,123,990
Denver	11,698,882	11,952,840	-2.1	11,872,795	11,058,826
Duluth	9,274,880	7,707,415	+20.3	9,735,518	6,330,036
St. Joseph	8,567,926	8,720,473	-1.8	7,188,592	6,016,939
Des Moines	4,649,793	5,036,194	-7.7	4,855,247	3,789,318
Sioux City	2,906,897	3,374,504	-13.9	2,900,000	2,344,506
Wichita	3,756,565	3,657,113	+2.7	3,540,105	3,364,475
Topeka	1,534,410	1,777,957	-13.7	1,677,894	1,549,862
Lincoln	2,161,752	2,064,459	+4.7	1,764,643	1,443,428
Davenport	1,222,534	1,480,785	-17.4	1,515,770	1,463,543
Cedar Rapids	1,662,033	1,535,691	+8.3	1,680,424	1,075,900
Fargo	2,281,730	725,110	+214.6	534,184	883,613
Colorado Springs	702,804	720,405	-2.4	738,028	630,178
Pueblo	1,406,925	1,393,965	+0.9	1,461,177	1,055,263
Fremont	352,989	258,968	+38.6	178,066	164,517
Hastings	798,797	456,269	+75.0	451,013	343,076
Aberdeen	1,408,671	1,527,213	-7.8	1,478,340	1,013,943
Waterloo	1,487,016	1,469,331	+1.2	1,339,042	1,011,251
Helena	812,930	683,749	-18.9	552,364	350,000
Billings					
Total oth. West	195,145,898	179,955,877	+8.4	183,059,903	150,205,430
St. Louis	74,705,018	87,638,414</			

OUR PANAMA NUMBER.

At a time when nearly the whole of Europe is involved in war, it seems peculiarly fitting that occasion should be taken to glorify the arts of peace. Among the great achievements of the time and the age, none surpasses in magnificence and in far-reaching effects—in the new possibilities it opens up for the development of commerce and the betterment of the human race—the building of the Panama Canal.

The year 1914 will always be memorable for two great events, the gigantic conflict which is now devastating Europe and the opening of this new waterway to promote the peaceful pursuits of man. The one of these events is a blot upon civilization, the other represents civilization's highest fruitage.

Accordingly, we issue to-day, in conjunction with "The Economist" of London, England, and "The Economist" of Chicago, a special supplement in commemoration of the latter achievement. A copy of this special number goes to every one of the subscribers of the three publications.

THE FINANCIAL SITUATION.

Surely the New York Clearing-House authorities erred sadly when in reconstructing the form of the weekly return, to make it conform to the conditions growing out of the inauguration of the new Federal Reserve banks, they omitted altogether the item of gold holdings in recasting the statement. One rubs his eyes in amazement when in scanning the return one finds this most important item missing. If it had not actually happened the act would seem inconceivable. Indeed, if at any time within the last few years when the money interests of New York have been assailed with such unpardonable viciousness by politicians and demagogues in and out of Congress, any one had dared to suggest that a Clearing-House return would ever be issued purporting to show reserves but failing to indicate how much of these reserves consisted of actual gold, the suggestion would have been scoffed at and held to be as devoid of substance as the baseless insinuations and assertions that have in recent periods been hurled with such recklessness, and wholly without provocation, against the New York banking institutions.

Yet, on the morning of the establishment of a new banking system which everyone with rare enthusiasm, but perhaps prematurely, is hailing with delight, and which is to inaugurate a new and much more enlightened era than any existing heretofore in the country's banking history, here comes last Saturday's Clearing-House bank return, a thousand years behind the times, and omits all reference to the gold holdings, the one thing above every other thing concerning which the world is seeking information. If it had not previously been the custom to give out the figures, the act might be passed over, but the fact is that no practice is so rigidly fixed in Clearing-House rules, which have always conformed to the highest banking standards, as that of recording the details of the money holdings. There is no apparent explanation for the step, except that in changing from the old form of return to the new, the item has been dropped.

Not only does the new form of return omit giving the gold holdings; it conveys no information whatever as to the character or quality of the reserve. The old form of return segregated the cash reserves under two heads, namely "specie" (which everyone knew to mean gold, since silver has become so greatly depreciated) and "legal tenders". This was clear, definite and precise. Now, instead of these specific cash items the return simply shows Reserve, and this is sub-divided under three heads, (1) "Reserve in own vaults", amounting last Saturday to \$350,462,000; (2) "Reserve in Federal Reserve Bank," amounting to \$96,060,000; and (3) "Reserve in other depositories," amounting (after corrections) to \$25,484,000. The whole three are then lumped and called "Aggregate Reserve", with this aggregate reported \$472,006,000.

In the first place, it should be noted that the attempt to show the cash reserve has been altogether abandoned. There is of course no doubt as to the character of the reserve in the Federal Reserve Bank, and this can with perfect propriety be counted as "cash," for it exists as a special protection for the member banks of the Federal Reserve Bank. "Reserve in Other Depositories," however, cannot in any way be considered as akin to cash. It represents the reserve which the trust companies are allowed to keep on deposit with the Clearing-House banks, and hence does not constitute cash at all. There is no reason at all why in the Clearing-House return this "Reserve in Other Depositories," after having been stated separately, should be treated as it if were cash reserve and made part of "Aggregate Reserve" and used to swell the "Excess Reserve," thus making this excess reserve (on the basis of the lowered 18% requirement instead of the former 25%), \$137,890,540.

To be sure, under the law the trust companies are allowed to count these deposits with the banks as part of their reserve, but so they were under the old law, and yet the Clearing House refused to be bound by that rule and never treated the item (always stated separately) as "Cash Reserve" or included it in figuring the excess or the deficiency in reserve. The objection now to such a course is vastly stronger than before, because the percentage of reserve itself has been materially reduced. The Legislature sets its own standard, to which the State banks and trust companies must, of course, conform. The law, however, simply fixes a positive minimum below which the institutions must not go. The Clearing House stands for a higher standard, not merely the legal requirement, if that be deemed inadequate—a standard conforming to the best banking practice, built on years of experience. The Clearing House has intimated too, that the same policy is to control in the future.

In a statement published last week the Chairman of the Clearing House Committee, Mr. Albert H. Wiggin, took occasion to point out that the increase in surplus reserve produced by lowering of legal reserves from 25% to 18% is "not a change in condition", and that "many of our important institutions find it impracticable to do business satisfactorily on as low a reserve as the law permits." He also cautioned against considering the new and larger surplus as "a fund awaiting investment." It is thus evident that, notwithstanding the more lenient requirement of the law, the Clearing House authorities, guided by experience, mean to adhere

to the same conservative practice as in the past. But that makes it all the more incomprehensible that deposits which the trust companies are carrying with the banks themselves should be used in figuring the excess reserve as if it were that much additional cash when it is really a liability owing by the banks.

The main purpose, however, of our present comment is to call attention to the absence of any figures showing the stock of gold in bank vaults. These gold holdings are covered up under the general designation "Reserve in Own Vaults." There is absolutely no way of telling what this item is composed of, that is, how much of it is gold, how much of it legal tenders and how much of it national bank notes. It is composed of the whole three of these and, therefore, is a meaningless conglomeration, having nothing to excuse it except the nominal sanction of the law.

It may appear to some that we are trifling when we say that national bank notes form part of this reserve in vaults, but we are simply stating a fact. National banks, of course, cannot count their own notes or the notes of other banks as reserve. The State banks and trust companies, on the other hand, can, as the State law expressly allows it. Formerly the Clearing House refused to give its sanction to the arrangement but now it deems the statute sufficient, and these national bank notes go into the self-same hopper, when held by State institutions, and are counted as reserve in vault. It will, hence, be seen that the computation of the excess reserve, which for last Saturday was given at the huge figure of \$137,890,540, involves a double process of dilution, first, in including \$25,484,000 of deposits of the trust companies with the banks and second in including whatever national bank notes the trust companies and State banks may be counting as part of their reserves.

All this renders it all the more important that the gold holdings should be reported as a separate item, the same as in the past. There is no true reserve except gold, notwithstanding what the law may say. And the world's experience and the world's authorities recognize nothing else as reserve. The chances are that the omission to state these holdings is merely the result of inadvertence, reflecting hasty action or action taken without sufficient consideration at a time when the opening of the Federal Reserve banks made it necessary to alter the form of return in some material particulars. We cannot imagine that there is any purpose to conceal. Clearing-House management has ever been open, frank and above board. The authorities have always recognized that the banks perform public functions and that the public has a right to knowledge of their condition; and a fundamental fact bearing on their condition is the extent to which their liabilities are fortified with gold.

For the Clearing House now to withhold knowledge on that point would be taking a step backward towards the darkness of the Middle Ages. And what a spectacle we would be presenting to the world! Even the benighted countries of Europe, now engaged in a war which has no parallel in the history of the human race, with their resources strained to the breaking point, keep making regular returns of their gold stock, notwithstanding the inducements to the contrary. The Bank of England, the Rock of Gibraltar in the financial world, has not once since the outbreak of the war even delayed

issuing its weekly return, while the Bank of Germany, after one or two interruptions following the outbreak of war, is again making weekly reports. Even the Bank of France, though it was obliged, owing to the onrush of the German invaders, to move all its belongings from Paris to Bordeaux, keeps giving out occasional statements showing its stock of gold and various other items appertaining to its condition.

Shall it be said that the New York Clearing-House banks, at the financial centre of the New World, stand alone in refusing to report how much gold they possess and to show the changes in their holdings from week to week. Many of the financial journals of London and other European centres collect figures each week, just as this newspaper does, with reference to the gold holdings of the European banks, and then add a line to show the gold holdings of the New York "Associated Banks" as the designation is on the other side. If the Clearing House persists in its present course these statisticians will now have to report that the New York figures are no longer available, that instead of giving the gold stock the Clearing House gives out merely a composite item called "Reserve in Own Vaults" and consisting of various kinds of paper money in addition to gold. What an occasion for financial comment this would be and how the finger of scorn would be pointed at this country.

There is of course no difficulty at all about reporting the figures. The Clearing House gets complete detailed returns from all the separate banks each week. The occasion for criticism lies in the fact that in giving out the footings it omits to make public the gold holdings, lumping the same with other items. The departure is a most remarkable one (if it be more than mere inadvertence) and absolutely nothing can be said in excuse or extenuation of it. In times of crises the Clearing House has frequently omitted to publish the figures of condition for the separate banks. It is doing this now and there is abundant reason and justification for such a course. But never at any time since the resumption of specie payments on Jan. 1 1879—that is, over 35 years ago—has it ever in any week failed until last Saturday to report the specie holdings as a separate and distinct item. That is an enviable record and nothing should be now tolerated that will serve to cast a blemish upon it.

While Portugal has as yet made no specific declaration of war, the Portuguese Congress on Tuesday decided that that country should co-operate with the Allies when they consider the step necessary. The Minister of War is expected to issue a decree ordering partial mobilization in the near future. Full mobilization will, it is calculated, produce a force of 250,000 men. In addition Portugal has in commission five protected cruisers, three destroyers, four torpedo boats and three submarines, besides an obsolete battleship and some old gunboats. Bulgaria has notified the Allies that she will remain neutral, and the Bulgarian Premier has asked the Allies to define the limits of Bulgarian expectations in territory.

The sensational developments in the war this week are, first, what is described as a German catastrophe in Poland, and, second, the loss of another British warship with at least 736 officers and men. In addition, the British Admiralty announced yesterday that the British collier *Khartoum* had been sunk by a

mine off Grimsby. In the House of Commons yesterday Winston Churchill declared that the losses to the British merchant marine have not been as great as was anticipated since the opening of the war. Lord Churchill said he had expected a 5% loss to the mercantile marine, but during the first, second and third months of the war the loss has been only 1.9%. He further stated that the British fleet would be increased by fifteen warships by the end of 1915, while the maximum reinforcements Germany could receive up to that time was three ships.

Full official details of the German defeat in Poland are still lacking, though such a conservative authority as Lord Kitchener told the House of Commons on Thursday that the Russians had defeated the Germans with the heaviest losses yet suffered in the war. Dispatches from Russian sources declare that not only has the German invading army of General von Hindenburg been crushed and his forces divided, but that the army of General von Makensen, which went to von Hindenburg's relief, has also been met and defeated. The German front, south of Plock, is said to have been cut in two and the Russians have driven a wedge into the German line between Plock and Lowicz. The Southern half of the German army is endeavoring to cut its way through to join the German forces further to the right, from which it is also said to be cut off. The other half of the divided army is declared to be vainly endeavoring to fight its way out of the trap into which General von Hindenburg was led by striking toward the North. Russian war critics declare that the surrender of this part of the army, which is surrounded, must soon ensue. Estimates of the number of German prisoners reported captured in the battle runs as high as 50,000. On the other hand, an official German statement asserts that no decision in Poland has yet been reached. General von Makensen's troops at Lodz and Lowicz are said to have inflicted heavy losses on the first, second and a portion of the fifth Russian armies. The Germans claim to have taken 40,000 prisoners, 70 cannon, 160 ammunition wagons and 156 machine guns. Except for artillery contests, the battle in the West (in France and Belgium) is virtually at a standstill, although in isolated attacks each side claims to have made some progress.

The British battleship *Bulwark* was blown up on Thursday in the River Thames, off Sheerness, at the mouth of the estuary of Medway, only 35 miles from London. A vice-admiral and a rear-admiral who were at Sheerness reported that they were convinced that the disaster was caused by a magazine explosion. Ammunition was being loaded on the warship. When the smoke had cleared away the ship had entirely disappeared. Immediately after the explosion the vessel was blotted out by smoke, and as the veil slowly lifted, all that could be seen was a handful of men struggling in the water. An official inquiry into the disaster has been started, and thus far the official view holds that the explosion was accidental and internal. Outside of this the more general view is that the work was either that of a spy, the result of treachery of some kind on board, or, finally, that the *Bulwark* was blown up by a submarine. To date the losses to the British navy number nineteen ships—a superdreadnought, a battleship, ten cruisers, two submarines, two gunboats and three converted cruisers. The Turks in the Caucasus regions are being driven towards Erzerum, according to

an official announcement. Anti-Christian agitation is spreading in Palestine and the Italian Consul at Jerusalem has appealed for warships. The renewed advance by Austria into Serbia is causing uneasiness in Bulgaria as to the future of the Balkan States. Italy, too, has been affected by the Austrian advance and her ambassadors at the European capitals have been called home to confer with the Cabinet.

What is accepted as a satisfactory explanation by Turkey for the firing on the launch of the United States cruiser *Tennessee* by Turkish troops at Smyrna last week has been received from United States Ambassador Morgenthau by the State Department. The Ambassador communicates the Turkish commander's "very great regret" that he was obliged to fire on the launch. The commander at Smyrna first ordered two blank shots of warning fired. "The Turkish sentinel, after waiting two minutes," the Ambassador reports, "was obliged to fire the third shot in another direction from that of the launch, which latter shot was merely to prevent the helmsman of the launch from holding his course, which would have led directly on to the mines at the entrance to the fort, and to rescue him from a very certain danger. The commander at Smyrna expresses very great regret that such an obligation was presented to the sentinel of the port, which he attributes to the indifference of the helmsman of the launch."

In accordance with the Administration's plans, the American forces of occupation under General Frederick Funston, after a stay in Vera Cruz of seven months, left that port on Monday. They embarked on transports en route for the United States. As the Americans withdrew, first from the outlying districts, and then from the city itself, the Constitutionalists entered and nominally occupied the territory vacated. Hence there was no formal turning over of the city to any of the Mexican factions. Considerable rioting and looting are reported to have taken place, but the Constitutionalist forces finally succeeded in restoring order. General Zapata seems to be in the immediate charge of military affairs at Vera Cruz. Provisional President Carranza, surrounded by his uniformed officers, entered the city on Thursday afternoon and the residents lined the streets to give him an enthusiastic welcome. With Carranza were Generals Obregon and Alvarado and many minor officers, the entire Government staff of officials, most of the employees, besides a large body of troops. The party was met at the Custom House by General Aguilar and staff. A banquet followed and congratulatory speeches were made by the leaders. Carranza will install his capital at Vera Cruz.

Meanwhile General Villa is said to be carefully proceeding to Mexico City. He is confident that Zapata has not renounced the Aguas Calientes convention and has dispatched a delegation of his officers from Tula to Mexico City to meet Zapata, or whoever is in charge of the capital for Zapata, and discuss the situation. If he finds that Zapata has renounced the convention, as followers of Carranza state, then Villa will fight for the possession of the city. But if he finds that Zapata is tractable, it is believed Villa will enter with his army. Villa is said to be at Tula and General Guiterrez is at Queretaro. Guiterrez, it will be recalled, was the choice for Provisional President of the Convention of generals

recently held at Aguas Calientes. In an official announcement our Secretary of State, Mr. Bryan, on Thursday announced that Villa had promised to keep order and protect private and property rights when he gets into Mexico City.

The volume of subscriptions to the new British war loan has not been officially announced, but London correspondents agree that the amount of £350,000,000 has been over-subscribed. The subscriptions range in size from £95, the issue price, to £200,000, the latter representing the application of a large insurance company. It is announced that banks and insurance companies all over the United Kingdom and throughout the Colonies as well, subscribed liberally. The loan has not appreciably strengthened the private discount market nor the views of money lenders, notwithstanding the tying up of funds by the requirement that £2 per £100 must accompany each subscription.

The Chancellor of the Exchequer, Lloyd George, in the House of Commons yesterday, while not giving figures, announced that the loan had been highly successful. The feature of the transaction, he said, was the enormous number of individuals, totaling nearly 100,000, who had made applications for small sums. These subscribers are to receive allotments in full. The cabled accounts of the Chancellor's speech undoubtedly do not correctly report him. He is made to say that the financial deadlock which followed the outbreak of war was due to inability to collect outstanding debts abroad. As an instance, Mr. Lloyd George is declared to have referred to the United States, which he said owed Great Britain about a thousand millions sterling (\$5,000,000,000), "but we could do no business," he added. The Chancellor is probably referring to the more or less general estimate that British capital to the extent of between \$4,000,000,000 and \$6,000,000,000 is at present invested in American railroad and other securities. How he can regard this as a debt that by inference should be collected it is rather difficult to conceive. The estimate made of American indebtedness immediately owing to England by Sir George Paish, the British Treasury representative, who recently returned home from conferences with bankers and Treasury officials in this country, was about \$250,000,000, which, obviously, is far below the views of the Chancellor. In enumerating the steps taken by the Government to assist commerce during the war, Mr. Lloyd George said that the Government had undertaken responsibilities which no Government ever had been called upon to assume before. "We had not merely our own business to run," the Chancellor continued, "but we were an essential part of a machine that ran the international trade of the world. We carried half the produce and provided the capital that moved this produce from one part of the world to another, not merely ourselves, but for other countries."

Lloyd George told his hearers that the action which the British Government had taken was to save British trade, British commerce, British labor and British lives. The Government, he said, had hypothecated the credit of the State in order to restore these exchanges upon which the commerce and industry of the country depended, and upon which the whole community depended for their daily life. One hundred and twenty million pounds sterling (\$600,000,000) of bills, Mr. Lloyd George

continued, had been discounted by the Bank of England, and that showed, he said, that out of a total of between £300,000,000 and £500,000,000 of bills out at the beginning of the war, a greater part was disposed of in the ordinary course. The total amount of bills which had arrived at maturity and for which the Bank of England had found money was £60,386,000. It was estimated that at the end of the war there would be about £50,000,000 of bills in what he would call "cold store" through their belonging to belligerent countries or for other reasons. There would not be a penny lost to the great accepting houses, and the total loss upon the whole of these transactions, he estimated, would not be equal to the cost of a single week of carrying on the war, and in addition British commerce and industry would be saved from one of the worst possible catastrophes.

So far as the London financial markets are concerned, there does not appear any immediate movement to re-open the Stock Exchange there, although the decision of the Governors of the New York Exchange to resume bond trading to-day on a restricted basis has produced an excellent impression at the British centre. London authorities seem to agree that little will be done in the way of official trading there until the New Year arrives. This view was taken by Sir George Paish. It is considered probable, however, that after the next settlement, December 1, the London Stock Exchange Committee will make a more general extension of fixed minimum prices for securities than is at present the case. Consols are reported to have sold during the week privately in London below the established minimum prices of 68½, which is not unnatural in view of the active competition of the new loan. The successes reported for Russian arms in Poland are said to have induced fresh investment buying of Russian securities in London. Kaffir shares have favorably reflected the apparent collapse of the South African rebellion.

A definite date, Dec. 7, has been set for re-opening the Paris Bourse. Official announcement to this effect was made yesterday after a conference between the Minister of Finance and a syndicate of French brokers. Trading will be confined exclusively to cash transactions. The French provincial bourses are open. We do not understand that any formal action has been taken closing them, business apparently having merely been suspended. Quotations on these provincial bourses suggest a tendency toward further depression. But the chief form of trading in France, so far as securities are concerned, seems to be in the shape of lists sent to their customers by leading brokerage banks containing securities available for purchase or sale. But even these operations are believed to be of limited volume. Advices from Paris state that the French Government will probably prolong the moratorium for a further period. The French Cabinet has authorized the Minister of Finance to advance 20,000,000 francs to the Greek Government. Subscriptions were invited on Thursday to a short-term 5% French national defense loan and amounted to 700,000,000 francs for France alone. In addition, 300,000,000 francs of Treasury bonds were already in circulation. The Minister of Finance, Alexandre Ribot, submitted to the Cabinet a decree raising to 1,400,000,000 francs (\$280,000,000) the amount issuable of war defense bonds. It is proposed to issue bonds in small denominations, as low as 100

francs. Subscriptions to these bonds will be taken at all tobacco shops, post-offices and savings banks.

That Germany will be forced to issue another war loan, notwithstanding the large issue recently so successfully distributed, is officially announced. A second supplementary budget for 1914 has been introduced in the Bundesrath authorizing the expenditure of 5,000,000,000 marks and an issue of Treasury warrants to a maximum of 400,000,000 marks. The second war loan will constitute the principal business in the Reichstag when it meets on Dec. 2. The loan just issued is expected to last for a considerable period—it was at first stated that it would last a year—but the Government, it is stated, desires to take precautionary measures in order to be assured that money will be forthcoming as required. The session of the Reichstag will, it is understood, be a short one and, aside from the new credit, will confine itself to the ratification of the various emergency measures promulgated by the Bundesrath. Advices cabled from Dresden state that the Saxon Government is about to introduce a bill authorizing an extraordinary State loan of 200,000,000 marks to relieve the general distress incurred by the war. Cable advices from Vienna, via Rome, state that the Austrian war loan of \$1,000,000,000, to which we referred in last week's "Chronicle," closed with subscriptions of \$290,000,000. Of this amount \$5,000,000 was squeezed out of Bosnia and Herzegovina, although it is officially announced that this money was spontaneously invested. It is also announced that the Treasury will continue to accept investments, despite the closing of the war loan.

European bank rates still continue without quotable change. In London private bank rates are 3% for sixty-day bills and 3½% for long bills. Quotations at other European centres for private bank discounts as reported by mail are nominally: Paris, 4%; Berlin, 6¾%, and Amsterdam, 3¼%. Official bank rates at the leading foreign centres are: London, 5%; Paris, 5%; Berlin, 6%; Brussels, 5%, and Amsterdam, 5%.

The weekly statement of the Bank of England indicated a decrease of £347,210 in the gold holdings and of £349,000 in the reserve. The loan item (other securities) increased £4,212,000. Public deposits increased £2,405,000 and other deposits increased £9,128,000. An expansion of £1,000 was shown in note circulation and a decrease of £401,000 in notes reserved. The proportion of reserves to liabilities this week is 31.60, against 34.04 last week and 54.38 last year. The preparations for subscriptions to the new war loan were undoubtedly the chief basis for the increase in loans. The Bank's gold holdings aggregate £72,222,932, comparing with £37,422,608 at this date last year. The reserve totals £55,358,000, against £27,456,243. Loans are £111,315,000, against £29,591,342, and "other deposits" are £156,462,000, against £40,724,468. Our special correspondent furnishes the following details by cable of the gold movement into and out of the Bank for the Bank week: Inflow, £623,000 bought in the open market and receipts of £30,000 *net* from the interior of Great Britain, against which there were £1,000,000 set aside and "earmarked" currency note redemption account. We add a tabular statement comparing for the last five years the different items in the Bank of England return:

	1914. Nov. 25. £	1913. Nov. 26. £	1912. Nov. 27. £	1911. Nov. 29. £	1910. Nov. 30. £
Circulation.....	35,314,000	28,416,365	28,311,835	28,731,960	28,394,980
Public deposits.....	18,691,000	9,749,254	13,179,627	12,128,431	11,415,399
Other deposits.....	156,462,000	40,724,468	41,753,316	40,618,588	39,685,467
Gov't securities.....	26,285,000	11,184,993	13,034,576	14,437,210	14,643,568
Other securities.....	111,315,000	29,591,342	31,760,724	28,911,031	28,491,146
Reserve, notes & coin.	55,358,000	27,456,243	27,924,435	27,075,283	25,686,492
Coin and bullion.....	72,222,932	37,422,608	37,786,270	37,357,243	35,631,472
Proportion of reserve to liabilities.....	31.60%	54.38%	59.81%	51.32%	51.47%
Bank rate.....	5%	5%	5%	4%	4½%

The weekly return of the Imperial Bank of Germany, as cabled yesterday, showed an increase of 32,716,000 marks in gold. The item of "specie, bank notes and notes of other banks" decreased 119,189,000 marks; Lombards increased 4,227,000 marks. Bills of exchange increased 117,779,000 marks; stocks decreased 3,622,000 marks; current notes decreased 50,845,000 marks and deposits increased 58,788,000 marks. The Bank's gold holdings now aggregate 1,978,761,000 marks. One year ago the total holdings of cash, including gold, was 1,540,100,000 and two years ago 1,142,400,000. The note circulation aggregates 4,009,165,000, against 1,837,714,000 marks in 1913 at this date and 1,796,002,000 marks in 1912.

Local money conditions have indicated still further ease this week. One influence has been the publication of the weekly bank statement in the new form necessitated by the inauguration of the Federal Reserve Law. As a result of the reduction in reserves which the banks and trust companies in the Clearing House under the new regulations are now permitted to carry, the banks and trust companies reported reserves in excess of the new requirements, according to a revised statement, amounting to \$137,890,540, which, however, includes that portion of their reserves kept by the trust companies on deposit with the banks, and to that extent, therefore, is fictitious. This compares with a surplus reserve of \$7,413,900 (all in cash) shown by the previous week's statement. The Clearing House Committee found it necessary to issue a corrected report on Thursday, as it had been discovered that more or less confusion had arisen in preparing the original statement of last Saturday, when an excess of reserve of \$176,830,520 was reported. Some members failed to include in the item of "Loans, &c.," the real estate holdings. In the item "Reserve in other depositories" the excess on deposit over the amount allowed as reserve was included. Amended returns show that the item "Loans, &c.," should have been about \$18,000,000 larger and that the item "Reserve in other depositories" should have been about \$39,000,000 less. With these corrections the excess in reserve in the published statement of November 21 was \$137,890,540 instead of \$176,830,540. The full statement appears on a subsequent page of this issue of the "Chronicle". Even the revised figures represent an exaggeration of actual conditions as far as true reserves are concerned, and there seems slight likelihood that for a considerable time to come the New York institutions will desire to do business on as low a reserve as the law permits. It is obvious that comparisons of items in the new form of the bank statement with those in the old form can have little value. The statement, which is one of averages, shows loans of \$2,164,651,000. The reserve carried in the vaults of the Clearing House institutions amounts to \$350,462,000; the reserve in the Federal reserve

bank is \$96,060,000 and in other depositaries \$25,484,000. The net demand deposits amount to \$1,936,028,000 and the net time deposits \$91,932,000. The circulation outstanding is given at \$92,652,000. The aggregate reserve is \$472,006,000 and, as already noted, the excess reserve is \$137,890,540. The banks are continuing to actively retire their Clearing-House certificates and their emergency circulation. Of the latter there has thus far been retired \$76,855,320 out of a total issued in New York of about \$133,000,000.

Ninety-day funds have loaned quite freely this week at $4\frac{1}{2}\%$ and time money rates, as a whole, may be quoted at $4\frac{1}{2}\%$ to $4\frac{3}{4}\%$ for all periods up to six months, comparing with $4\frac{3}{4}\%$ @ 5% a week ago. Commercial paper is on a $4\frac{1}{2}\%$ @ 5% basis for sixty and ninety day endorsed bills receivable and for four to six months' single names of choice character. Names less favorably known are $5\frac{1}{2}\%$ @ 6% . Call money has covered a range of $4\frac{1}{2}\%$ @ $5\frac{1}{2}\%$ during the week. On Monday $5\frac{1}{2}\%$ and $4\frac{3}{4}\%$ were the highest and lowest figures, respectively, with 5% the ruling rate; on Tuesday 5% was the highest and renewal basis, with $4\frac{3}{4}\%$ the lowest; on Wednesday $4\frac{3}{4}\%$ was the highest and ruling rate, with $4\frac{1}{2}\%$ the lowest; Thursday was a holiday—Thanksgiving Day; on Friday the range of quotations was $4\frac{1}{2}\%$ @ $4\frac{3}{4}\%$, with renewals at the lower figure.

In sterling exchange the market has shown a good undertone, as the supply of bills has not quite kept up to expectations. Cotton bills, while being offered rather more freely, are still far below normal. Another influence of the firmness has been the news that the Stock Exchange has decided to open for bond trading on Saturday. This seemed responsible for more or less speculative buying of exchange by large institutions, probably in anticipation of a demand for remittances in payment for sales that some authorities expect will take place on a liberal scale for foreign account as soon as official opportunity becomes available. This is a point, however, on which difference of opinion exists, though it has been argued that the buying of exchange by houses through whom sales would in the natural order of events be conducted merits significance. London bankers, however (quoting a special dispatch to the "Journal of Commerce" from its London correspondent), do not expect that the opening of the New York Exchange will be accompanied by active liquidation. American railway bonds, the correspondent argues, are not held in large amounts in Continental Europe, except, possibly, to a fair extent in Holland. Germany probably sold out very freely before the war began, as German bankers appear to have been fully in touch with events then approaching and had ample opportunity to sell. In England high-grade American railroad bonds are held in large amounts as estate investments of long standing. They have always paid their interest and are considered safe. Hence, with the extreme ease prevailing in money in London and the decision of the British Government to aid the Stock Exchange situation, there is no reasonable expectation, the correspondent adds, that these bonds will be sacrificed. Furthermore, they cannot be sold by cable, as contracts for future delivery are not permitted under the New York Stock Exchange's new regulations.

The United States Assay Office on Wednesday raised the premium on gold bars to 5c. from 4c. per

\$100. The lower figure has been the regular Assay Office charge for some years, to cover incidental expenses in connection with refining, &c. The higher premium will make but slight difference in the gold export-point, which is now quoted at 4 8965 for bars. It is figured that there is a difference of only about 6 points now between the shipping prices of gold bars and gold coin to Canada, one reason for that being that the Government recently replenished the gold stock in the New York Sub-Treasury with new gold coin. These are of full weight, and it is figured have brought down the shipping point to 4 8971 on coin. Bankers, however, have not found it necessary to ship additional gold to Canada this week.

Exchange on Berlin continues weak, checks having declined still further to $85\frac{3}{4}$ @ $85\frac{7}{8}$, against $86\frac{1}{4}$ a week ago, while cables are quoted at the close at $85\frac{7}{8}$ against $86\frac{3}{8}$. The offerings of marks have been active, which suggests a continued movement to convert Berlin credits into dollars. It is understood that Germany, like other belligerents, is buying supplies here with some freedom. These will, of course, require payment. Hence the necessity of establishing German credits in this country. Paris checks have still further advanced, closing at 5 09 $\frac{1}{2}$, against 5 12 a week ago, while cables closed at 5 09, against 5 11. Exchange on Amsterdam is about 1-16 firmer, closing at $40\frac{5}{8}$ @ $40\frac{3}{4}$ for bankers' sight, $40\frac{3}{8}$ for bankers' cables, while commercial sight is slightly easier at $40\frac{1}{4}$ @ 40 5-16. Italian exchange finished at 5 36 $\frac{1}{2}$, against 5 39 $\frac{1}{2}$ last week.

Compared with Friday of last week, sterling exchange on Saturday was slightly higher, with demand quoted at $4 88\frac{1}{8}$ @ $4 88\frac{1}{4}$, cable transfers at $4 88\frac{7}{8}$ @ 4 89 and sixty days at 4 85. On Monday a decidedly firm undertone was apparent and demand advanced to $4 89\frac{1}{8}$, cable transfers to $4 90\frac{1}{8}$ and sixty days to $4 87\frac{3}{4}$; the rise was mainly attributable to lighter offerings, owing to a decrease in the volume of exports as contrasted with the previous week; active buying by Stock Exchange firms also had a stimulative influence. Sterling rates fluctuated sharply on Tuesday; demand bounded up to $4 90\frac{1}{4}$ in the early transactions on heavy buying by important banking concerns, while later an increase in the supply of commercial bills brought about a decline to $4 89\frac{1}{4}$, this in turn being followed by a recovery to $4 89\frac{5}{8}$ at the close on renewed inquiries from Stock Exchange brokers in preparation for an early resumption of business in that institution; the day's range was $4 90\frac{1}{2}$ @ $4 91\frac{1}{4}$ for cable transfers, $4 89\frac{1}{4}$ @ $4 90\frac{1}{4}$ for demand and $4 86\frac{1}{2}$ for sixty days. On Wednesday an easier tone prevailed; demand bills declined to $4 88\frac{1}{2}$ @ $4 89\frac{1}{4}$, cable transfers to $4 89\frac{3}{4}$ @ $4 90\frac{1}{4}$ and sixty days to $4 86\frac{1}{4}$ @ $4 86\frac{1}{2}$; as compared with the previous day's activity, trading was dull and lifeless, being largely of a pre-holiday character, with very little actual business transacted. On Friday the market ruled quiet but firm. Closing quotations were $4 86\frac{1}{2}$ @ $4 86\frac{3}{4}$ for sixty days, $4 88\frac{3}{4}$ @ $4 89\frac{1}{8}$ for demand and $4 89\frac{3}{4}$ @ 4 90 for cable transfers. Commercial on banks nominal, documents for payment nominal. Seven-day grain bills $4 87\frac{3}{4}$ @ 4 88. Cotton for payment nominal, grain for payment nominal.

The New York Clearing-House banks, in their operations with interior banking institutions, have gained \$8,392,000 net in cash as a result of the currency movements for the week ending Nov. 27.

Their receipts from the interior have aggregated \$13,184,000, while the shipments have reached \$4,792,000. Adding the Sub-Treasury operations, which occasioned a loss of \$17,833,000, the combined result of the flow of money into and out of the New York banks for the week appears to have been a loss of \$9,441,000, as follows:

Week ending Nov. 27.	Into Bnks.	Out of Bnks.	Net Change in Bank Holdings.
Banks' interior movement.....	\$13,184,000	\$4,792,000	Gain \$8,392,000
Sub-Treasury operations.....	12,963,000	30,796,000	Loss 17,833,000
Total	\$26,147,000	\$35,588,000	Loss \$9,441,000

The following table indicates the amount of bullion in the principal European banks:

Banks of	Nov. 26 1914.			Nov. 27 1913.		
	Gold.	Silver.	Total.	Gold.	Silver.	Total.
England..	£ 72,222,932	£	72,222,932	£ 37,422,608	£	37,422,608
France..	164,880,000	13,160,000	178,040,000	141,043,880	25,721,240	166,765,120
Germany..	97,434,300	1,808,200	99,242,500	62,740,950	14,265,800	77,006,750
Russia..	171,472,000	4,264,000	180,736,000	167,358,000	5,820,000	173,178,000
Aus-Hung.	51,578,000	12,140,000	63,718,000	51,207,000	10,561,000	61,768,000
Spain..	22,417,000	27,827,000	50,244,000	18,971,000	29,159,000	48,130,000
Italy..	46,823,000	2,500,000	49,323,000	45,546,000	2,950,000	48,496,000
Netherl'ds	14,357,000	132,200	14,489,200	12,459,000	683,800	13,142,800
Nat. Belg.	15,380,000	600,000	15,980,000	8,405,333	4,202,667	12,608,000
Sweden..	5,781,000	-----	5,781,000	5,695,000	-----	5,695,000
Switz'land	9,695,100	-----	9,695,100	6,875,000	-----	6,875,000
Norway..	2,265,000	-----	2,265,000	2,550,000	-----	2,550,000
Tot. week	679,305,332	62,431,400	741,736,732	560,273,771	93,369,507	653,643,278
Prev. week	685,323,342	62,173,600	747,496,942	558,329,798	92,538,290	650,868,088

a Data for 1914 for Oct. 15. c July 30. d Sept. 21.

POLITICAL REGULATIONS AND PROSPERITY.

Except that it includes by natural implication rather than distinct statement the fact that production from the earth must always be the beginning and condition precedent of prosperity, Mr. James J. Hill put the business case very compactly when he recently said: "The volume of the country's business is reflected in the commodities moved by the railroads; with railroad earnings steadily decreasing, the talk of prosperity is simply not true; no better barometer on the state of the country's business than railroad earnings can be taken." This is the view of a veteran man of business affairs, not a politician; of a practical man rather than a theorist; of a man whose life and labor have been constructive rather than destructive. It comes just after a renewed chant from Washington about a New Day, a glorious future right before us, a country now emancipated from a condition of bondage to greedy capital, and a lot more of iridescent soap-bubble talk.

Neither extravagant optimism nor extravagant pessimism is justified, although we seem to be getting expressions of both alternately. The bare fact is that the minimum degree of trade which mere subsistence and daily necessities compel is going on, as always, and there is something more. Accounts meant for encouraging come concerning the motor trade, but a considerable use of the motor is strictly commercial and luxury always seems active. The stores will be thronged as usual in the next four weeks, the human wave rolls along the streets, the many amusement places show undiminished attendance; but in financial crises there appear to be plenty of people with money to spend on luxuries. All through the past eight or ten months business has been kept under threat of vivisection by amateur surgeons, with reiterated assurances that the operation might frighten and even be a little painful, but the speedy result would be splendid for both friends and subjects. The fright was imaginary and needless, because the doctor knows and must be trusted; it was merely psychological, and business only thought itself fearful and faltering—it was really confident and moving with firm step.

This soothing talk was to be expected, for the amateurs could not persevere in their course and admit that any injury had been wrought. The Executive Mansion has its own superior sources of information, we were told. A few letters of plaudits and of gratitude for the emancipation policy were paraded, and anything of a different tenor was rejected as almost treasonable. One sort of testimony was natural, spontaneous and conclusive; the other was condemned as artificially produced. Were we not told, some months ago, of a quasi "conspiracy" to construct a pseudo public opinion against the benevolent Administration policy? Were not some business organizations accused of sending out form letters whereby to elicit apparently voluntary opinions in criticism? Were not the railroads in particular charged with trying to bring an artificial pressure wherewith to force or browbeat the Inter-State Commerce Commission? Were not some letters given out as samples of the underhand and concerted work which was going on in order to make it appear that the country was disturbed in mind, whereas in fact things were doing nicely? And now we are assured (officially and therefore inerrantly) that the country is just about entering upon a period of unparalleled prosperity, &c.

There has been some improvement upon the situation precipitated by the war; this has already been noticed; it was both natural and expected and it need not be recapitulated. Yet Mr. Hill is correct and careful in saying that business is in a hesitant state, that people are not buying now as they would be if more confident about the future, that the labor situation is another deterrent as to building operations, that if the urgent financial needs of Europe put an upward pressure upon interest rates, that pressure will be felt here also and will sharply enhance the financial difficulties of the railroads, and that "the reports with respect to trade do not substantiate the claims made about prosperity." Noting exceptional instances which prove the rule, the broad statement is that business is only fair and that it is in "watchful waiting."

The sum of it is that the trouble is "psychological," a state of mind which means distrust more than confidence; but the worst of the truth is that this results from persistence in theoretical political folly; the mischief lies in presumptuous meddling. The unavoidable uncertainties of life are serious enough; add the uncertainty that political regulators will undertake next, and what wonder the menaced owner of capital savings dares not launch out in new ventures? He is told that now the work is finished; but there is no warrant of that, and the last batch of violent stuff has yet to do its work on the business system. The hope now is that there will be a long term of rest (and possibly that some of the "medicines" may be thrown away, after watching the squirms they cause), but confidence can revive only gradually, as hope becomes justified by result.

THE EVIL SPIRIT OF DISTRUST.

One effect of war which seems to be escaping general attention is the inevitable breaking down of moral restraint. When men, stirred by fierce passions, find themselves caused to live for a time in circumstances where human life is held cheap, where rights of property and of person are swept aside, and the Ten Commandments are abrogated, the effect

on character and habits, even when peace is restored, is sure to be more or less permanent. The community into which soldiers return, despite the steadying effect of wide personal sorrow, is sure to suffer under a recrudescence of vice. It needs a substantial reinforcement of moral and religious vigor if it is to withstand the relaxing of moral restraint and the sudden and bold aggressiveness of every sort of evil.

The whole world is sure to be affected in this way after the world-wide war now raging. We, in our American isolation, will not altogether escape. It is the part of wisdom, therefore, to have it in mind when we consider the conditions in which we are living and the influences that are at work among us. These, just now, are in some ways deeply disturbing. They concern not only economic and financial relations, but the more serious moral ones. The former we are fully alive to. The latter we are aware of, but we either are not giving them attention, or are uncertain as to just how to deal with them.

We have spoken recently of the retrogression of democracy in its political methods. The country is suffering at the moment a somewhat similar retrogression in public confidence. Politically, the eyes of the people have been turned expectantly to political leaders, as they are just now turned, by the war, to military ones. It is significant that at the same time their confidence in the business morality and personal integrity of men prominent in civil life is severely shaken. Whether this is a justifiable feeling or not is relatively not so important as is the question as to its exact extent. It is sufficient that, whether it is due to an awakening of the public conscience and a sharpening of judgment of both public and private conduct, or to an outbreak of much more or less justifiable "muck-raking," or to excessive and often thoughtless legislation, the fact is that some notable reputations have been destroyed, many have been shaken and there is, both at home and abroad, altogether too much distrust of men who in the business world occupy high and responsible position.

With that distrust as a personal grievance we are not now concerned. It is injurious and greatly to be deplored, but in time it will remedy itself. Our concern is with its effect upon the public itself and upon the community at large, as bearing upon the new conditions into which we are sure to be carried. In this relation it ought to be understood and to be dealt with in a large and intelligent fashion.

The other day a Connecticut judge of the highest personal probity and standing, lately retired from his bench, said in conversation with reference to the New Haven Railway, "When such men are indicted by the grand jury as if they were common criminals, the people are bewildered. It is simply inconceivable." He went on to say, "If they have broken the law, they must pay the penalty, but who can believe they had any such knowledge or intention?" The fact is, there has been such rapid extension of law, making many things illegal which were done in the ordinary course of business, thus creating new crimes, that the country has not grasped its significance, nor have individuals appreciated the change. When, for example, the owner of a stage line bought out a less successful competitor, or a manufacturer absorbed the only other mill in the country producing the same fabric with his own, or the farmer accustomed to walk down the railroad track to reach his lower lot, continued to do so, one and all of them found that

they were breaking the law and were liable to arrest and indictment. Just and desirable as the new laws may be which make these acts criminal or illegal, obviously the acts are wrong in a different sense from those violations of law the significance of which was long understood, or is established in a recognized moral code. As a consequence, men of standing in the community have in many directions been lowered, if not degraded, in the public eye. Of course, far more serious evils are extant in the community, and, after being long covered up, have of late been brought to light. And this has always been true from the beginning of the Republic. Washington's Administration was burdened by it; and the War of the Revolution had its scandal, no less than did the Spanish War.

We do not propose to review the facts or attempt to determine the responsibility for what has occurred. We are concerned with quite another side of the situation, viz., the resulting public temper of distrust toward men who in one way or another may be prominent, and for that reason are more or less important in the general life of the community. Many have long found it hard to believe that any "politician" is honest, or to-day that any rich man is not an oppressor. Not a few rich men are wholly apathetic as to public affairs, and some are permanently discouraged as to the future, because of this feeling of distrust and antagonism. They say, "It is all party politics," meaning that there is no serious attempt to promote the public welfare, and that the public itself is stirred only by the talking and writing of those who have axes to grind. When any man, high or low, tries to work some change for the general good, or to remedy some evil, he is accused of "playing politics," or of wanting something for himself.

This always unfortunate condition is a most serious fact in our situation to-day. We are urged to be neutral and to cultivate an open mind in regard to the European War because the United States will have some important duties in the day of final settlement. Here is a more pressing situation. We have innumerable more or less grave problems before us at home. We never more needed wise and strong leaders in every department of life than we do in these days of widely extending national interests. How are we to get these men if we cherish this temper of distrust? We need to recognize that such men are largely the product of the common life. They arise out of the body of the people. Unless they are recognized and sustained, they quickly fall back, themselves or their children, because none of us lives to himself. We depend, one upon another, for all that we are. Capacity for public service is of slow acquisition. It has to be developed and encouraged. It needs, from the start, recognition and cheer.

In 1877 Jowett, the great Master of Balliol, wrote to his friend, Sir Robert Morier, the English Ambassador, "Don't let us complain of things or persons, or of the nineteenth century, or of the indifference of the country occupied in making money, but simply say to ourselves, 'These are the things and persons through which and with which we have to work, and by influencing them, or managing them, or forcing them, the end must be attained, or not at all.'"

There is a host of young men, and young women, too, for that matter, who are filled with a desire to be of service and to do something worth while in

the way of service to others or for the State, and that in no selfish spirit. Wherever one turns one comes upon new groups who are thus at work, many of whom are started or sustained by some unheralded rich man or woman. The future is with people so inspired. Everything depends upon the atmosphere in which they find themselves. Dr. Kane, the Arctic explorer, in the depth of the Arctic winter, wrote in his journal, "a desponding or complaining spirit would sweep our decks like a pestilence." If that could be said of a little company of tried and picked men, what is to be said of the effect of a general distrust of would-be public servants, high or low?

In our Civil War many intelligent and patriotic men in the North did not believe in the success of the Union cause because of the absence of a Union sentiment and party in the South. Their faith rested upon party organization and leadership, and they failed to reckon with the deep moral sentiment which leadership or organization cannot call forth or set in array when great interests are at stake. That deep moral sentiment is unworthily expressed in public distrust. It is to be recognized in its better aspects and as an abiding expression of all that is constructive and vital in the life of the people. It ought not to be clouded or diverted by the mist arising from suspicion or scandal. The chief asset of any community is the character of its leading men. If they are discredited it is quickly destroyed, and their place is sure to be taken by men of a different temper and purpose.

Why is it so hard to get men of the highest standing to accept public office? There must be a reason. We need to restore our idea of politics to its original significance of devotion to the public welfare. There is no worthier service, no nobler ambition. If this conception could be restored to the public mind, it would be promptly responded to. The fact is that the existing situation is not only in our own control, but is largely the result of our own doing. Leadership will count here as largely as in any other connection. The dishonest man is for us a public enemy and the unscrupulous man of position a traitor.

There is to-day a loud call for men who are prominent by position or responsibility to guard themselves carefully against those methods in business which have created the distrust, or which may be open to accusation. The honesty which is something more than astute observance of the law or careful adherence to the customs of trade, but is governed by a strict regard for the moral law and personal honor, and doing to others as we would have them do to us, is the most effective antidote for suspicion or malice or reckless muck-raking. To exalt uprightness, to give strength and validity to the moral law, to ensure appreciation of honest men, and to promote the vigorous health of the business community is a task requiring the united action of leading business men themselves and of the community acting as a whole. We need to remember that no man is perfect, that a man is to be estimated by the trend of his life, that his character as a whole stands for something, and is his proper defense, and that he can be held to his best by the respect and the confidence of his neighbors. We are to have still greater need of leading men in the growth of the country and the development of our public institutions. We have, one and all, no small part to play

in producing them. The real and appreciative demand will surely create the supply, as a reckless spirit of distrust will as surely destroy it.

THE INJUSTICE OF RAILWAY MAILS PAY.

Mr. Ralph Peters, Chairman of the committee on railway mails pay and representing 264 roads, has made another attempt to obtain justice by publishing an appeal to Senator Bankhead of Alabama, Chairman of the Senate Committee on Post-offices and Post Roads. Mr. Peters says in part that after two years of most careful inquiry the joint committee on this subject of payment for mails carrying, under the chairmanship of former Senator Bourne of Oregon, established three fundamental facts; that the roads as a whole are underpaid for this work at least three millions a year; that they are also required to render important military services, aside from actual transportation, without any payment therefor; and that these conditions which produce underpayment are due to certain defects in the present system. These defects appear to be chiefly weighing of mails only quadrennially, the entire non-payment for distributing space in apartment cars and a variety of services at terminal and transfer places, the underpayments and non-payments being estimated at nine millions a year. Therefore the roads desire to have these defects corrected by an annual weighing and by paying for the various car spaces and services rendered, as just stated. This, says Mr. Peters, would correct the present injustice and furnish for the future a basis of known experience; would provide an automatic plan for the fast-developing mail service; and would remove opportunity for friction and misunderstanding.

Publishing this appeal carries the subject along to the people and seeks to use the publicity which we are frequently asked to believe and are really forced to believe is the effectual although not always immediate cure for admitted evils. In this matter appeal to the people seems to fail, for apparently the people do not care enough for justice in this one concrete case to take any trouble about it. Calling the quadrennial weighing a "defect" is very mild language; the term "injustice" comes nearer and the term "robbery" is not extravagant. A number of test weighings of mail matter having been made for reaching a test of their average, and that test being probably not unfair at the time, then the bulk and weight of mail matter is largely and progressively increased.

The parcels post makes the largest part of the increase, and this class of matter is entirely new. Congratulations over the success of this post and its great economic value to the people (particularly in getting food products from producer to consumer) have been frequently printed, and we have been told of mailing brick walls in parcels of a few bricks at a time and a variety of other materials ranging from fence posts to small children; a great public benefit and an achievement for the party in power, but the fact that it is at the expense of the carriers causes slight notice. The express companies complain of their own serious hurts, and one company has retired compulsorily.

The matter is an old one; this is the suggestiveness and should be the felt disgrace of it. No citizen buys or could buy or would expect to buy material

for services distributed over a term of years to come on a basis of present prices, and certainly on a basis of weights which were once correct but become progressively false. The wrong done is flagrant. What is almost worse is that Government is undertaking to call all large business to the bar under accusation, and to expose, correct, and punish its alleged wrongdoing and unfair dealing; yet this very Government comes forward with unclean hands and refuses to purge itself.

THE UNION PACIFIC AFTER ITS EXTRA DISTRIBUTION.

The year embraced by the present annual report of the Union Pacific Railroad Company, covering the twelve months ending June 30, 1914, was marked by transactions of large importance arising out of the special dividend made on the common shares of the company. This involved the distribution of a large block of the investment holdings of the stocks of other companies. It should be understood that parting with these stocks has not in any way affected the extent of road included in the company's own operations or diminished or impaired its traffic and revenues. The Union Pacific Co. is to-day, as it was before the Supreme Court decision compelled the company to dispose of its holdings of Southern Pacific stock, a large revenue producer. Moreover, even with its investment income diminished by reason of the distribution of Southern Pacific shares, the income account shows a large margin of surplus above the dividend requirements.

What the company was called upon to do in the carrying out of the Supreme Court decree compelling a dissolution of common control of Union Pacific and Southern Pacific properties was the disposition of \$126,650,000 of Southern Pacific Company stock owned directly or indirectly by the Union Pacific Railroad. How this was accomplished is part of the history of the previous fiscal year, but to a better understanding of the situation it will be well to recall briefly the plan to that end adopted and carried out. Stated in brief, \$38,292,400 par value of the stock of the Southern Pacific Co. held was exchanged for \$42,547,200 of Baltimore & Ohio stock (half common and half preferred) held by the Pennsylvania R.R. The remaining \$88,357,600 Southern Pacific stock held was deposited with a trust company in New York and trustees' certificates issued against the same; but under such restrictions that the certificates can not be converted into the underlying Southern Pacific stock by any owner of Union Pacific stock. The certificates were then offered to Union Pacific shareholders, preferred and common, at \$92 per share.

In the year under review the transaction was carried a step further. The Union Pacific already held a large block of Baltimore & Ohio stock and the additional shares acquired from the Pennsylvania R.R. raised its total holdings of Baltimore & Ohio shares to \$53,607,800 common and \$28,480,000 preferred, or \$82,087,800 of Baltimore & Ohio stock of both classes. It was decided to distribute the whole of this, together with some cash, as an extra dividend upon Union Pacific common stock. The extra dividend was declared out of the unappropriated accumulated surplus and made payable April 1 1914. Each share of Union Pacific common got \$12 par value in Baltimore & Ohio preferred stock, \$22 50 in Baltimore & Ohio common stock and \$3 in cash.

The Union Pacific still has outstanding a large amount of bonds convertible into Union Pacific common. Had all of these bonds been converted, substantially all the Baltimore & Ohio stock owned would have been appropriated to the dividend. As a matter of fact, however, \$26,835,225 of convertible bonds failed to avail of the option to convert, and accordingly a small amount of Baltimore & Ohio shares still remains in the Union Pacific treasury—\$3,594,035 common and \$1,805,992 preferred stock.

It will be observed that the extra dividend represented the equivalent of \$37 50 per share in Baltimore & Ohio stock at par, and cash. This still left the company with the proceeds of the sale of \$88,357,600 of Southern Pacific stock offered to Union Pacific shareholders at 92 and having a money value of considerably over \$80,000,000. Thus the position of the Union Pacific, even after the large special or extra dividend, remains a very strong one. Until the appearance of the annual report, this week, it was not known what disposition had been made of the proceeds of the sale referred to. The report shows that the money has been invested temporarily in railroad bonds, equipment trust obligations, short-term railroad notes and secured loans, which, while affording a reliable income, can be converted into cash when needed. A list of these security holdings is given in the report.

The payment of the extra dividend was postponed by litigation until July 20 1914. The dividend not having actually been paid prior to the close of the fiscal year, the amount representing the same was charged to profit and loss and set up as a reserve under "appropriated surplus," while on the other side of the account the cash and Baltimore & Ohio stock to be distributed in the extra dividend are set aside as "assets reserved for payment of extra dividend."

Altogether, a total of \$74,020,372 is involved in this extra dividend distribution. And it is a remarkable fact, showing how large is the surplus the company has accumulated during the seventeen years of its existence, that after charging off the amount represented by the extra dividend a credit balance still remains to profit and loss in the large sum of \$90,586,423, this, too, after having set up a year ago a reserve of \$50,000,000 for depreciation of securities, of which there still remained on hand June 30 1914 \$35,418,052. This depreciation reserve has been created for the purpose of providing for any further depreciation in the value of the company's investment holdings of stocks and bonds. It is wholly precautionary and a dictate of prudence.

With the declaration of the extra dividend it was immediately arranged to reduce the regular distribution on Union Pacific common from 10% per annum to 8%, the return from the extra dividend yielding the additional 2%. The last two quarterly payments have been on the basis of the lower rate of distribution. Altogether 9% in dividends is charged up against the year's income. The income account shows that after allowing for this 9% and for all other charges, there remained a surplus of no less than \$9,331,426 on the operations of the twelve months, equal to over 4% more on the \$222,293,100 of Union Pacific common outstanding. In other words, over 13% was earned for the shares, even after a reduction in the income from investments for part of the year through the distribution of the Baltimore & Ohio shares held. This, too, is the

result after a considerable loss in net revenue from the transportation operations.

The company's gross earnings from the transportation business suffered relatively little decrease, notwithstanding the reaction in general trade. In the previous year there had been an increase in these gross revenues of no less than \$7,660,849, raising the total to the very largest figure on record. From this large total there was a falling off in 1914 of only \$1,523,126, or a little over 1½%. Unfortunately, however, this was attended by an increase in expenses and a further rise in taxes, the two together, along with the loss in gross, producing a falling off in net of \$3,315,751. It is proper to state, however, that the increase in operating expenses was due to the creation of a reserve for depreciation of equipment in order fully to conform to the accounting regulations of the Inter-State Commerce Commission. Beginning with July 1 1913 operating expenses, it is stated, have been charged monthly with an amount based upon the estimated life of equipment in service, whereas previously it was the practice to charge operating expenses with the original cost (less salvage) of units of equipment retired from service. The increase for the year due to this change is stated to have been \$1,581,663. Excluding this item, operating expenses show a decrease of \$201,628, not counting, of course, the taxes, which made a further increase of \$412,590, on top of the large and uninterrupted increases of other recent years.

The fact that operating expenses distinct from renewals should have decreased even to a small extent is a gratifying fact, in view of the rising tendency of expenses generally as disclosed in the reports of other large railroad systems. The traffic of the system was, on the whole, well maintained. In the number of tons of revenue freight there was actually a small increase, 17,155,390 tons having been carried in 1914, against 16,456,182 tons in 1913, but there was a falling-off in the long distance traffic and the average haul, therefore, decreased, with the result that the tonnage movement one mile was reduced somewhat, being 6,168,799,317 for 1914, against 6,283,029,209 in 1913. There was also a falling off in the long distance through passenger traffic, so that the number of passengers carried one mile aggregated only 888,375,847 in 1914, against 903,046,763 in 1913.

Operating efficiency, however, was fully maintained. The lading of the trains was slightly reduced and yet was held at the high figure of 430 tons of revenue freight alone, or, including company freight, of 559 tons. This indicates very marked advance as compared with the record of less than 280 (including company freight) tons the first year of the company's organization. We have already stated that this train-load is a trifle less—about 7 tons less—than the average for the preceding year, but the average rate realized was a little better (on account of the fall in long distance traffic, probably because of a failure of the crops in certain parts of the West), being 9.75 mills per ton mile, against 9.70. Thus, it happened that the trains earned precisely the same amount as in the previous year, namely \$4 18 per mile run.

The yearly new capital requirements continue large and, therefore, the course pursued by the management in retaining the cash proceeds derived from the sale of Southern Pacific stock to the share-

holders, amounting to \$80,000,000, and investing the same temporarily in short-time obligations, so that the cash would remain ready to hand, was a wise one. Just at the moment the money, apparently, is not needed, if one can judge from the figures in the report. The year's expenditures for new mileage and new property and for additions and betterments reached almost 21 million dollars cash—in exact figures \$20,919,271. Nevertheless, it appears from the balance sheet that cash on hand June 30 1914 stood within a million dollars of the amount on June 30 1913, the comparison being \$10,861,733, against \$11,855,029. On the other hand, there was due the company on loans and bills receivable \$17,386,377, against only \$8,268,964 the previous year. Thus, the position of the company in this as in earnings and in other respects is an exceptionally strong one.

PROSPERITY LUNCHEON TO NEW YORK FEDERAL RESERVE OFFICERS.

The "prosperity luncheon" tendered on Tuesday to the officers and members of the Executive Committee of the New York Federal Reserve Bank by the Members' Council of the Merchants' Association of New York brought together a gathering of about 1,625 business men, who filled to overflowing the grand ballroom of the Hotel Astor, where the affair was held. Benjamin Strong Jr., Governor of the Federal Reserve Bank, was the principal speaker at the luncheon, which was presided over by William C. Breed, Chairman of the Members' Council. Pierre Jay, Federal Reserve Agent and Chairman of the board of directors, was likewise a speaker, and so were Henry R. Towne, formerly President of the Merchants' Association and a member of the Executive Committee of the bank, and Irving T. Bush, President of the Bush Terminal Co. and Chairman of the Committee on Banking and Currency of the Merchants' Association when the Federal Reserve Law was enacted. Mr. Breed in addressing the gathering discussed its significance as follows:

Our guests may be interested to know that the word "prosperity" became entangled with our desire to pay them a personal compliment because the committee found that in the mind of the public prosperity and the establishment of the Federal Reserve banking system were synonymous terms, and that in any event the merchants of New York wanted to make them such. New York, the largest market, and, therefore, of necessity the most conservative, can ill afford to allow any evidence of optimism or prosperity to pass unnoticed. The Association believes that there are many evidences of better times, and among these places first and foremost the inauguration of the Federal Reserve banking system. The Association does not believe that real prosperity can come through a great or rapid inflation of credit, which should and can be controlled under the Act; but rather because the new banking system makes possible a gradual expansion of the natural credit resources of the country along solid lines, and makes it impossible for a sudden panic to sweep away in a few weeks the results of business efforts of a lifetime.

Mr. Strong declared that the new system has already erased the word "panic" from our financial lexicon, but warned his hearers that the Reserve banks cannot make prosperity. "As they gradually assume their functions," he said, "they will certainly aid in the recovery of business from the shock of war and, I hope, will reap their share of the rewards."

We quote the following from Gov. Strong's remarks:

Until Nov. 16 the Federal Reserve Act was simply the expression of what Congress believed the country demanded in banking and currency legislation. Since Nov. 16 it has become a powerful force behind our business machinery. The test of its ability to accomplish the objects desired will be determined by the experience of the future. We must bear in mind that banking legislation in the United States affects over 25,000 institutions with resources of \$25,000,000,000. Since the panic of 1907, the States of New York, Pennsylvania, Ohio, Illinois and California have made important or complete revisions of State banking laws, and Congress has enacted the Federal Reserve law.

Legislation of this sweeping character, which in the case of the Federal Act reposes broad powers of interpretation and direction in a Federal board, must be dealt with conservatively. The defects of the old system may have been corrected by the new, but we must be sure that other defects have not crept undetected into the Act, from which unsound tendencies may develop, thereby defeating the purpose of Congress and creating other weaknesses which it would require further legislation to correct. Judgment must be suspended and a generous attitude must be observed, both toward the Federal Reserve Board and the measures adopted by it for the development and control of the new system, and toward the managements of the various Reserve banks in their exercise of the functions of these new institutions. A liberal spirit of co-operation will insure the success of the system. Determined opposition can be made to defeat its progress.

The first notable development in the inauguration of the system was the payment of the capital installment, and during the past week the completion of the initial reserve transfer, largely in gold, without recourse to the deposited reserves in the reserve and central reserve cities. Out of the \$110,000,000 of such transfers made to the Federal Reserve Bank of this city, a negligible amount was made by New York banks for account of their correspondents in this district, and over \$85,000,000 of the amount trans-

ferred was in gold. The spirit of co-operation thus exhibited by the banks of this district, and particularly by the members of the New York Clearing-House Association, in this as in all matters connected with the establishment of the Federal Reserve Bank of New York, gives striking evidence of their intention to permit no opposition to develop which may interfere with a thorough test of the plan. This insures its success.

Some of you no doubt have at times been subjected to the uncertainty and anxiety of having obligations to meet without the immediate means of meeting them, except through credit with a bank. Your business may have been in a sound condition, but still your bank be unable to care for your legitimate needs. Certainly your business, as well as your peace of mind, will be promoted by a greater certainty in regard to your credit at the bank, and particularly at a time when money rates may be high and business uncertainty prevail. Therein lies an important function of the Reserve Bank system. It will broaden and stabilize the market for commercial borrowings.

The Federal Reserve Act provides for the discount by Federal Reserve banks (I quote from the law) "of notes, drafts and bills of exchange arising out of actual commercial transactions." The limitation thus imposed upon the Reserve banks in the character of paper which they may discount raises three important questions: First, shall the test of the eligible character of the paper be evidenced in the form of the paper itself? Second, if the note does not bear such evidence on its face, shall the Federal Reserve banks accept the statement of the member banks that it does comply with the statute; or, third, shall the member banks provide themselves with such means of information as will enable them to determine whether paper offered for discount complies with the statute?

The note of a merchant representing goods purchased, if drawn upon an acceptor, who may be either the purchaser of the goods or a bank or banker, affords reasonably certain evidence on its face of the character of the transaction which it represents, and that it complies with the statute. Such paper is, in fact, the bill common to the London market, and known by bankers the world over. If gradually, without undue disturbance of existing methods, the accepted bill can be substituted for the note of hand, a class of paper will be created which will command a premium in the money markets of this country. Its convertibility at minimum rates of discount will serve as an inducement to both the buyer and the seller of goods to substitute this form of credit for direct bank borrowings against book accounts. Many obstacles must be overcome before any such practice can be generally introduced. A merchant drawing a bill in Hongkong for acceptance in New York must know that the bill can be sold in Hongkong. The bank in Hongkong with which he does business and which will be asked to buy the bill must know that the credit is good, and if it buys the bill that he or his agent (say in New York) can get immediate discount. He should be able to ascertain the rate, and should know that the rate will be fairly stable. While the banker in Hongkong will know the drawer of the bill, he must also be informed as to the standing of the acceptor in New York.

There are to-day in this country no acceptance houses, very few of the national and State banks are engaging in the acceptance business, and furthermore, unfortunately, the Federal Reserve Act limits the new acceptance privilege of the national banks to the acceptance of bills representing the exportation or importation of goods. In England the small number of acceptances and discount houses, which, however, do a vast volume of business, has enabled the business and banking world to become familiar with London credits to an extent that is not true of any other money centre. Similar information regarding our credits must be disseminated the world over. Knowledge of the credit of American firms and institutions will follow the trade of the country, but it will not precede it. The process of education which must accompany the general use of bills drawn and accepted in dollars will take time and patience. One important function of the Reserve banks at the outset should be to standardize the development of this practice and put a premium upon that bill which conforms to sound business principles. Accommodation acceptance, where the bill does not represent the sale of commodities, should be discouraged, so that eventually a dollar acceptance will, in fact, represent the sale of a commodity, the proceeds of the ultimate sale of which will provide the funds to meet the bill at maturity.

The second question has already been answered in part. The Reserve Board has, for the present, placed upon the management of each member bank the responsibility of determining and giving satisfactory assurance to the Reserve banks that paper offered by it for discount generally conforms to the intention of the Act. This is to be evidenced by the written statement of an officer of the member bank. Commencing with January 15, however, the member banks will be required to affix by stamped endorsement upon the note or by some other simple method an indication that the note conforms to the requirements of the Act and the definitions of the Reserve Board, and that credit information about the maker is available if called for. This again places upon the member bank, and not upon the Reserve bank, the obligation to determine the eligibility of the paper. By authorizing this method the Federal Board has recognized the unwisdom of attempting revolutionary changes in business practice.

Assuming, however, that by later regulation the Reserve banks are themselves required to determine the eligibility of paper offered for discount, the third question arises, How shall the Reserve banks distinguish between that portion of the borrowings of a merchant which may have been applied to the building of factories, the purchase of machinery, or to some other fixed investment, and that portion which has been invested in the purchase of goods for re-sale or which represents a sale of goods to a customer? Borrowed dollars are not earmarked in their journeys through the accounts of the borrower, and it therefore would necessitate an examination of the financial statements of borrowers to ascertain whether, in fact, borrowings are confined to an amount representing the business turnover, or whether such borrowings, if representing fixed investments, may not result in a condition in the merchant's affairs which would make it impossible to discount the paper without violation of the provisions of the law.

By some means yet to be fully devised, it must become possible to readily determine the eligible character and quality of paper of the various classes which may be offered to the Federal Reserve banks. I do not wish to suggest that the present system of mercantile credits should be generally abandoned. The discount allowed for such settlement is an important factor in our business system. But much of the trade of the country which is now conducted against book credits of thirty, sixty, or even ninety days may properly be represented by mercantile paper if the inducement is attractive. Our vast domestic trade should not be disorganized or hampered by a sudden and radical departure from methods which are now satisfactory to merchants, and which are approved by many bankers. The elimination from our money market of the single-name note may not be necessary or desirable, but, on the other hand, it is undoubtedly desirable that the paper in which our banks invest should more largely represent the purchase and sale of commodities, and not permanent capital. The inducement to the making of double-name paper, representing in fact commercial transactions, will lie in a preferential rate, rather than in a regulation. Gradual changes in trade methods will aid in bringing this about. The

best guide to a safe course will be experience. Our new system may at first appear to have been devised for the service and protection of the banks. They own the stock, the reserve deposits belong to them. The benefits of the system, however, will, in fact, be realized by the merchant who borrows money. It has already erased the word "panic" from our financial lexicon. Its purpose is to safeguard your credit, and ultimately to enlarge the field of your business enterprise.

Mr. Jay referred to the period of co-operation following the outbreak of the war, which marked the formation of the syndicate by New York City bankers to pay in gold the city's foreign debts; the creation of the Gold Pool of \$100,000,000, the co-operation of the Northern and Southern bankers to assist in the marketing of the cotton crop, &c. He pointed out that the new Act contains one unsatisfactory element—the involuntary membership of the national banks. This, he said, "was undoubtedly a necessary element at the outset, but if the system is to become really successful, these compulsory members must be not only content and glad to stay in it, but its advantages and services to them and to the country generally must be such as to attract into it most of the eighteen thousand State banks and trust companies which the law could not compel and which are standing on the side lines watching its development with the greatest interest." An explanation as to how the new Federal Reserve notes are issued, and what relation they bear to re-discounts was offered by Mr. Jay; in declaring that the new system has laid the foundations for a really elastic currency, he said:

Under the new system, the foundations have been laid for a really elastic currency. It is true that its elasticity will not be called much into play until the volume of outstanding national bank notes has been considerably reduced, for this volume represents more nearly our maximum than our minimum currency requirements. But such Federal Reserve notes as are issued will be subject to an automatic redemption which has been unknown in this country since the National Bank Act taxed the Suffolk Bank and other State systems out of existence.

For example, if a New York national bank ships \$100,000 of Federal Reserve notes out to its Kansas correspondent in order that they may be put in circulation there at harvest time, they will gradually be deposited in the local banks, which in turn will deposit them in the Kansas City Federal Reserve Bank. Once there they may not be paid out again, under penalty of a tax of 10%. Consequently, the Reserve Bank of Kansas City will send them at once to the Reserve Bank of New York for credit of its account, and they will be immediately retired from circulation.

By this provision of law, and this tax to make it effective, inflation of our bank currency will be impossible, for the notes will only stay out as long as people want to use them. As soon as their work is done and they are no longer needed they will be returned to the bank which issued them, and the credit they represent will automatically change from a note credit to a deposit credit. The volume of this currency will increase and decrease with currency requirements, and will bear no relation, as our national bank currency does, to the price of Government bonds. This happy transformation, however, will not be completely accomplished under the law for thirty years; for the retirement of national bank notes is to take place very gradually. But there is always a possibility of amendment, and if after a few years both the system and retirement are proceeding well, we may reasonably hope that Congress will grant permission to accelerate the operation materially.

Such an amendment, as well as other needed amendments to a law which bears many marks of compromise on its face, will naturally follow recommendations of the Federal Reserve Board, and will carry the weight which goes with the recommendations of such a body.

In the opinion of Mr. Bush the opening of the Federal Reserve banks came at a most opportune time; in his remarks to this effect he said:

I do not know which book—the "White" or "Blue" or "Yellow"—is responsible for starting this war, but whoever was responsible picked out the psychological moment when, if we had to have a war, this country was best prepared to bear its share of the burden. We were not in the throes of a speculative boom. We were pretty well liquidated. The cereal crops of the world were small and ours were large and unsold, available for market at war prices. The war began Aug. 1 and the Panama Canal opened Aug. 15, guaranteeing our trade an open route to the Orient, and—most important of all—our new banking system was ready to throw in the clutch. We cannot escape our share of the world's financial burden due to the war, nor can we escape prosperity. It would have come anyway, war or no war, but after the first shock of the conflict is over, the wheels of industry will turn again with increasing speed, and the orders of those at war and the needs of those who are not, will give new stimulus to American industry.

Mr. Towne in addressing the gathering said in part:

We business men have a profound interest in what this movement stands for. Banking and business are partners, whether they wish it or not. One cannot prosper without the other; both are vital to the commerce and industry of our country. Heretofore our industries and our commerce have suffered periodically from violent fluctuations in financial conditions, which have in some cases wiped out almost over night the fruits of a lifetime of work.

All of us older men can remember many of these crises through which the country has passed. What were they due to? In large part, to the lack of co-ordination of our financial system, to the fact that each bank stood by itself, without adequate means of co-operation and aid from one to the other. If the new Federal Reserve Bank Act stands for anything, it stands first in my opinion for the co-ordination of our banking system and the co-operation of our banks. It means that when money is needed in one part of the country it will flow naturally through organized channels to where it is needed and will do most good. If this machinery is as adequate as we hope it will be we may fairly hope that never again in our history shall we see such violent shocks and disturbances to our industry and commerce as we have witnessed in the past.

Those seated at the speakers' table, in addition to the above, were William Woodward, Deputy Governor; Charles Starek, Deputy Federal Reserve Agent; William B. Thompson, of the Executive Committee; James F. Curtis, Secretary; R. H. Treman and L. R. Palmer, directors of the bank; William A. Marble, President of the Merchants' As-

sociation; J. Ward Warner, President of the Produce Exchange; William Bayne, President of the Coffee Exchange; George W. Lawrence, Vice-President of the Coffee Exchange; Martin Vogel, Assistant Treasurer of the United States; William P. Malburn, Assistant Secretary of the Treasury; Eugene Lamb Richards, State Superintendent of Banks; R. W. Bonyng, Lewis E. Pierson, J. Howard Cowperthwait, Professor Joseph F. Johnson, Edward D. Page and F. I. Kent, Vice-President of the Bankers Trust Company.

ANOTHER CALL IN CONNECTION WITH NEW YORK CITY LOAN.

J. P. Morgan & Co. and Kuhn, Loeb & Co., managers of the \$100,000,000 New York City loan syndicate issued call for payment yesterday (November 27) by members of \$3,699,325, payable in Clearing-House checks. This is the tenth call for funds and makes the amount provided to date \$69,526,766.

THE FEDERAL RESERVE BANKS.

Regulations dealing with the reserves of national banks, which are to apply with the creation of the Federal Reserve banks, were issued by the Comptroller of the Currency this week. Under the latest instructions no deposits will hereafter be exempt from reserve requirements, reserve being now called for against all United States deposits, including postal savings funds, deposits of United States disbursing officers, Canal Zone and Philippine deposits and all other Government funds. The instructions which are issued in explanation of the requirements for filling out the form for calculating reserve, are as follows:

1. This form is for your guidance in calculating reserve under Section 19 of the Federal Reserve Act, as amended, which went into effect upon the opening of the Federal Reserve banks on November 16 1914.

2. Section 5191 U. S. R. S. requires reserves to be held by national banks against the aggregate amount of their deposits. Section 14 of the Act of May 30 1908 which amended this Section and exempted the deposits of public moneys of the United States in designated depositories from the reserve requirements, was repealed by Section 27 of the Federal Reserve Act. Therefore the national banks are now required to carry reserve against such deposits, and in calculating the reserve all deposits of public moneys must be included in item 4 of the aforesaid circular sent you by direction of the Secretary of the Treasury under date of November 16 1914.

In other words, no deposits are now exempt from reserve requirements, and the lawful reserve must also be maintained against all United States deposits, including postal savings funds, deposits of United States disbursing officers, Canal Zone and Philippine deposits and all other Government funds.

3. Section 19 of the Federal Reserve Act provides that in estimating reserve the net balance of amounts due to and from other banks shall be taken as the basis for ascertaining the aggregate deposits against which reserves shall be maintained.

4. If the amount carried with reserve agents exceeds the amount which the law permits to be counted as reserve with such agents, such excess may be counted as "due from banks" and added to the amount due "from banks other than reserve agents" as a deduction from the amount "due to banks" in calculating the reserve. This necessitates, of course, a further computation.

5. The 5% redemption fund deposited by your bank with the Treasurer of the United States cannot be counted as part of your lawful reserve. (Section 20, Federal Reserve Act.)

6. National bank notes are not to be treated as an offset and are not to be taken into consideration in any way in the computation of your reserve.

A change in the re-discount rate for the Boston Federal Reserve Bank was announced by the Federal Reserve Board on the 20th inst.; the Boston rate, which had been originally fixed at 6% for all maturities, has been changed to agree with the rates for New York and Philadelphia, namely 5½% for bills and notes having a maturity of not over thirty days and 6% for paper with a longer maturity. It was stated on the 23d that no further modification of the re-discount rates will be made at the present time.

The Board made public on the 21st inst. the first consolidated statement of the Reserve system; the statement covered the operations of the banks for the first five days; the total cash holdings at the close of the five days reached \$240,723,000; the re-discounts aggregated \$5,607,000 and the reserve deposits amounted to \$227,138,000. In submitting these figures the Board said:

"Re-discounting privileges have been availed of to a considerable extent in New York, Chicago, St. Louis and Kansas City. Elsewhere the showing is much smaller. Federal Reserve notes to meet local demand have been issued principally in Chicago, New York and Minneapolis, but every bank has been supplied with an adequate quantity of notes to meet its needs. The relatively small amount of re-discounts as compared with the resources of the system is due to the policy of the Federal Reserve Board in encouraging the payment of reserve deposits in actual money instead of in re-discounted paper.

"Rates of re-discount established a week ago were fixed with this policy in mind, as outlined in Circular No. 10, issued by the Board some time ago. Reports from all districts are of the most encouraging nature, and the

outlook for business is stated as satisfactory. The establishment of the system has already had an important effect in increasing the lending power of the member banks in addition to the loan power of the Federal Reserve banks.

"The following consolidated statement shows in one total as nearly as available figures will permit the condition of the twelve Federal Reserve banks at the close of business on November 20 1914.

"Statement of cash on hand, re-discounts, reserve deposits and capital paid in of the twelve Federal Reserve banks at the close of business November 20 1914:

Cash on hand—Gold coin and certificates.....	\$203,415,000
Legal tender, silver certificates and subsidiary coin.....	37,308,000
Total.....	\$240,723,000
Re-discounts.....	5,607,000
All other assets.....	95,000
Total.....	\$246,425,000
Capital paid in.....	\$18,072,000
Reserve deposits.....	227,138,000
Federal Reserve notes in circulation.....	1,215,000
Total.....	\$246,425,000
Gold reserve against all liabilities.....	89%
Cash reserve against all liabilities.....	105%
Cash reserve against all liabilities, after setting aside 40% gold reserve against Federal Reserve notes in circulation.....	105%

On another page we give the returns made by the Federal Reserve banks of the several districts.

The Board announced on the 23d inst. that each Federal Reserve Agent will be required to furnish a bond of \$250,000, and each deputy Federal Reserve Agent a bond of \$150,000.

Reports of dissensions in the Federal Reserve Board, rumored to have arisen because of the alleged opposition of Messrs. Warburg, Delano and Harding to the proposal of Secretary of the Treasury McAdoo to distribute national bank funds amounting to \$135,000,000 in Southern banks for the purpose of aiding the cotton situation, were denied on Tuesday by Messrs. Warburg and Harding in the following statement:

"The story printed in a morning paper to the effect that there was a rift in the Federal Reserve Board is absurd upon its face and without the slightest foundation. As the story purports to have come from members of the Federal Reserve Board in New York on Friday last, and as we are the only two members who were there at that time, having been in that city on that date to attend a meeting of the Cotton Fund Committee, we feel it our duty to make this positive and unequivocal denial."

J. P. Morgan was elected a member of the Federal Advisory Council of the New York Federal Reserve Bank at the regular weekly meeting of the directors on Wednesday. A committee composed of Chairman Pierre Jay, Henry R. Towne and George Foster Peabody notified Mr. Morgan of the action of the Board and received his acceptance. The Federal Advisory Council is to be composed of one member from each Federal Reserve district, to be elected annually by the directors of each of the twelve Reserve banks. The members receive no compensation, but may be reimbursed for actual necessary expenses.

The Philadelphia Federal Reserve Bank (District No. 3) was admitted to clearance privileges of the Clearing-House Association on the 24th inst. Action on the question of amending the by-laws of the Clearing House so as to reduce the reserve requirements from 20% to 15% was deferred on the 24th for ten days.

Levi L. Rue, President of the Philadelphia National Bank, was chosen by the directors of the Federal Reserve Bank of Philadelphia on the 25th as its representative in the Federal Advisory Council at Washington.

According to the Philadelphia "Press," around \$100,000 of the new Federal Reserve Bank notes were issued by the Federal Reserve Bank of Philadelphia on the 23d. The notes were issued to five institutions which re-discounted a total of \$325,000 of commercial paper with the Reserve Bank, and notification was given Governor Charles J. Rhoads that additional re-discounts would be sought the following day, which would bring the total to \$500,000. The first re-discount was for the Penn National Bank, which offered \$50,000 of commercial paper. The Penn National was given a credit on the books of the Reserve Bank of \$50,000, and had the privilege of checking against all or a part of this credit; before the end of the day it drew on the Bank, receiving in payment the new Federal Reserve notes.

Daniel G. Wing, President of the First National Bank of Boston, has been chosen to represent the Boston Federal Reserve Bank (District No. 1) on the Federal Advisory Council for the first year.

THE NEW YORK CLEARING-HOUSE STATEMENT IN ITS NEW FORM.

The New York Clearing House issued last Saturday its first statement under the changed conditions of reduced reserve requirements incidental to the establishment of the Federal Reserve banks. On Thursday, however, the figures of some of the items were revised, the reason for this being contained in the following announcement made by Albert H. Wiggin, Chairman of the Clearing-House Committee:

The change in the method of compiling the bank statement and in the amended forms used by the banks for the first time last week was the cause of more or less confusion. Some members failed to include in the item of "Loans, &c.," the real estate holdings; and in the item "Reserve in Other Depositories" the excess on deposit over the amount allowed as reserve was included.

Amended returns show that the item "Loans, &c.," should have been about \$18,000,000 larger and that the item "Reserve in Other Depositories" should have been about \$39,000,000 less.

With these corrections the excess in reserve in the published statement of Nov. 21 was \$137,890,540 instead of \$176,830,540.

Herewith is a statement as published and a statement as amended. The Committee believes it important that the amended statement of the average returns for the week ending Nov. 21 be on record and thus form a correct basis of comparison with subsequent statements. Such excess reserve as may appear in the statement to be published Saturday of this week should be compared with the excess of \$137,890,540 shown in the amended statement and not with the figures as published Saturday, Nov. 21.

It is believed by the Clearing-House Committee that the matter is now understood and that no further confusion will exist.

We give both the original and the revised figures:

	Original Figures.	Revised Figures.
Loans, &c.	\$2,146,189,000	\$2,164,651,000
*Reserve in own vaults	350,462,000	(No change)
*Reserve in Federal Reserve Bank	96,060,000	(No change)
*Reserve in other depositories	64,424,000	25,484,000
Net demand deposits	1,936,023,000	(No change)
Net time deposits	91,932,000	(No change)
Circulation	92,652,000	(No change)
* Aggregate reserve	510,946,000	472,006,000
Excess reserve	176,830,540	137,890,540

RETIRING EMERGENCY CURRENCY AND CLEARING-HOUSE CERTIFICATES.

Somewhat over \$100,000,000 of emergency currency has been retired throughout the country, according to statements from Washington yesterday. In New York the total amount retired aggregates over \$76,855,300 out of a total of \$133,000,000.

The Clearing-House loan certificates issued in Philadelphia will all be retired before Dec. 1. The Philadelphia "Ledger" of the 25th says:

It was learned yesterday that the few banks which still had such certificates outstanding had been quietly requested by the Clearing-House Committee to pay them off by the end of this month. Less than \$2,000,000 such certificates were still outstanding when this notice was given a few days ago, being distributed among ten or eleven banks, and the bulk of these has been retired, a considerable volume being paid off yesterday. No official figures of the total amount issued have been given, but it is estimated the issue approximated \$11,300,000. This would compare with \$13,695,000 in 1907, with \$11,470,000 in 1893, with \$9,655,000 in 1890 and \$6,285,000 in 1873, when resort was first had to this substitute for cash. The attitude of the Clearing-House Committee was that the necessity which called forth the loan certificates no longer exists.

The last of the Clearing-House certificates issued in Boston were retired on the 24th. The Boston banks took out a total of \$11,385,000 of these certificates. The Boston "Transcript" states that "the Boston banks are now in a position to resume the regular weekly statement, which has been suspended since Aug. 11, or the longest period in the history of the Boston Clearing House. The exact form of the new statement here has not yet been determined upon, but it will follow in a general way the outline of the New York bank statement, with allowances for certain fundamental differences, due to the fact that Boston is not a central reserve city."

OUR FOREIGN TRADE, WHERE THE LOSS IS OCCURRING.

The detailed statement of the country's foreign trade for the month of October, segregated by countries, was issued on Thursday, Nov. 25, and the figures possess great interest. While the loss in the exports has been mainly in the shipments to Germany, Belgium, the Netherlands and France, it is noteworthy that our trade with South American countries, which every one is engaged in promoting at the present time, also shows marked contraction. For instance, the exports to Argentina were valued at only \$1,683,693 in October 1914, against \$5,168,450 in October 1913 and to Brazil \$1,362,246, against \$3,866,191. There were practically no exports to Germany against 48½ millions last year; while to Belgium the shipments were valued at \$446,650,

against \$6,420,833; to France \$17,037,469, against \$26,194,861, and to the Netherlands \$3,975,057, against \$6,974,291. There was a decided shrinkage, too, in the movement to Canada, this year's exports to the Dominion being valued at only \$23,586,256, against \$33,102,217. The following gives full details of the exports and imports:

Imports from—	Month of 1914.	October 1913.	10 Mos. end. 1914.	with October 1913.
Grand divisions:	\$	\$	\$	\$
Europe	57,691,255	64,134,125	679,203,186	703,877,879
North America	33,746,418	28,768,983	384,798,976	323,413,193
South America	20,597,638	15,180,939	193,903,912	154,253,817
Asia	20,220,875	21,771,370	230,552,830	229,430,014
Oceania	5,024,953	2,393,889	43,332,817	28,240,121
Africa	799,381	699,996	16,739,673	21,119,349
Total	138,080,520	132,949,302	1,548,531,394	1,460,334,373

Principal countries:	1914.	1913.	10 Mos. end. 1914.	with October 1913.
Argentina	5,870,171	1,244,372	50,040,088	17,754,334
Australia	1,486,313	807,396	17,106,935	8,485,095
Belgium	653,719	2,079,223	29,758,028	35,542,121
Brazil	8,885,954	9,514,403	77,073,248	76,486,365
Canada	15,288,830	15,040,458	136,568,889	107,364,156
China	2,984,267	2,832,793	31,215,732	32,560,899
Cuba	7,861,059	6,372,478	136,053,593	115,500,622
France	7,802,719	9,503,777	90,930,064	109,339,126
Germany	6,168,058	14,815,675	128,788,258	151,682,274
India, British	2,366,530	4,620,277	58,024,255	58,398,148
Italy	5,627,310	4,345,846	46,272,939	44,313,933
Japan	9,723,903	8,632,366	89,295,022	78,022,440
Mexico	6,957,008	6,361,129	73,812,283	65,166,313
Netherlands	2,942,450	1,781,248	32,495,609	31,794,527
Russia	127,883	1,764,874	14,413,460	20,014,545
United Kingdom	25,057,590	20,243,649	251,912,237	221,747,116

Exports to—	Month of 1914.	October 1913.	10 Mos. end. 1914.	with October 1913.
Grand divisions:	\$	\$	\$	\$
Europe	130,854,297	181,657,940	1,004,753,756	1,176,741,068
North America	38,827,317	50,552,125	413,070,470	512,554,986
South America	6,735,605	14,358,067	80,428,152	124,602,862
Asia	8,796,076	13,848,241	77,642,188	100,656,052
Oceania	7,442,336	9,123,797	64,852,756	66,629,000
Africa	2,748,999	2,321,294	22,059,297	24,099,654
Total	195,404,630	271,861,464	1,662,806,619	2,005,283,622

Principal countries:	1914.	1913.	10 Mos. end. 1914.	with October 1913.
Argentina	1,683,693	5,168,450	24,387,260	46,129,166
Australia	4,770,317	4,823,032	37,457,620	35,799,998
Belgium	446,650	6,420,833	33,890,925	54,577,788
Brazil	1,362,246	3,866,191	20,152,866	35,144,279
Canada	23,586,256	33,102,217	268,756,833	346,829,303
China	994,414	2,010,092	18,365,797	21,808,988
Cuba	6,937,966	6,933,471	56,456,556	60,482,150
France	17,037,469	26,194,861	111,653,783	116,471,751
Germany	17,508	48,433,396	156,058,815	270,647,472
India, British	1,388,434	1,527,753	8,345,814	8,969,182
Italy	11,119,476	7,463,491	54,737,758	61,793,968
Japan	4,784,852	7,808,412	32,146,988	47,723,114
Mexico	3,001,154	3,768,616	27,673,226	41,627,405
Netherlands	3,975,057	6,974,291	81,291,917	103,768,717
Russia	3,980,160	2,407,738	22,222,289	18,984,366
United Kingdom	72,474,221	70,991,350	446,756,693	459,379,463

SIR GEORGE PAISH AND THE FOREIGN EXCHANGE PROBLEM.

Sir George Paish and Basil B. Blackett, who as representatives of the British Treasury had been in this country since the middle of October, returned on Wednesday on the steamship "Adriatic", in company with H. P. Davison, of J. P. Morgan & Co. The English representatives are returning in response to instructions from London in order that a clearer understanding may be had of the proposals submitted to the British Government as a result of the conferences which have been held at Washington. Announcement of the proposed departure of the visitors was made by Secretary of the Treasury McAdoo on the 21st. inst., as follows:

Sir George Paish has just informed me that he had received a cable from England saying that the suggestions submitted by the committee of New York bankers, composed of James Brown, A. H. Wiggin and Benjamin Strong Jr., are under consideration by the London bankers, but as some points are not clear and a full explanation is needed, the Chancellor of the Exchequer has requested Sir George Paish and Mr. Blackett to return to England to explain the situation more fully. They expect to leave, therefore, within the next few days.

It is thought inadvisable to publish the recommendations and suggestions of the New York bankers until the London bankers have had an opportunity to consider them fully and to act upon them. As soon as a conclusion is reached, the facts will be given to the public.

The situation here has materially improved since Sir George and Mr. Blackett came to America, and their visit has been exceedingly valuable in bringing about a clearer understanding on both sides of the water of existing conditions. The commercial and financial relations between Great Britain and this country are so large and intricate that a fuller understanding of the problems caused by the war is mutually beneficial to the interests of each country.

The visit of Sir George and Mr. Blackett has accomplished this. It was a very gracious act on the part of the Chancellor of the Exchequer to let them come to Washington.

It is understood that the plans developed as a result of the Washington conferences called for the establishment of a credit of \$100,000,000 by the Bank of England or the British Government against which American securities, which are expected to be sold in large volume when the Stock Exchange reopens. It is as to this point that the British Treasury seems particularly concerned. It is stated that Mr. Davison goes abroad with the British representatives at the request of the bankers who were parties to the Washington conferences, for the further discussion of the matter abroad. Mr. Davison was one of the bankers who took part in these conferences; James Brown of Brown Brothers & Co., another of those

who participated in them, is now in London and will also enter into the further proceedings abroad. Before his departure, Sir George was interviewed by a representative of the New York "Sun", which has the following to say concerning the interview:

"As for the opening of the stock exchanges here and in London," he said, "I would say that London is feeling its way, as you are. I think London is not likely to open until the new year. Your Exchange will open when ready. I consider it ready for opening in bonds, for instance, when the demand exceeds the offers to sell. It is the same with stocks. Money is accumulating here very fast, making the time for opening apparently not far off. The Exchange should open, as it is doing, little bit by little bit."

Sir George took up the matter of the \$100,000,000 credit extension by Great Britain to the United States, which is the central feature of the financial protection for the two countries now under discussion. He said that misunderstanding had arisen among bankers here and abroad, but that this was now being cleared.

"The proposal is a contingency against the future," he went on. "There is no real need at the moment for exceptional measures of this kind."

"While the war is going on there are many uncertainties that may arise, many of which will affect the financial situation. This proposal is purely a war provision. We may never have to resort to it. I don't think we shall. When the proposal is fully understood by British bankers as a matter for future utilization, I feel sure it will not be opposed. It has been impossible to communicate by cable the features of the plan in the clear way it could be done in personal conference, and the resumption of the conferences in London will give a general understanding there of the scope of the matter under consideration."

"I am pleased with the way things are going in this country. The opening of the Federal Reserve banks has given you plenty of banking resources. You have now a great deal of money available for your needs. The banks should be of great helpfulness."

"I believe that financial conditions in your country are now founded on solid strength. I can see no basis for financial apprehensions in this country. You have plenty of money available for productive purposes and you will be enabled also to pay off some of your long-term obligations. Of course, you will want to pay off your short-term notes and will do this as they come due."

"Your foreign trade is moving favorably. Exports are large and this is helping the general situation greatly. The opening of the cotton exchanges has had an undoubtedly beneficial effect, and I look for a considerable movement of cotton in the next few months."

"The demand for bonds is now exceeding the offers to sell, indicating that property is accumulating and seeking employment. If this continues, the demand will later take care of stocks, demand for these exceeding the desire to sell."

"This is especially true in the event that the Inter-State Commerce Commission gives a favorable decision in the rate case. Confidence in the railroads would be greatly restored and their stocks strengthened in equivalent degree. The industrial stocks will be benefitted by the large growth in foreign trade going on, which will undoubtedly affect all industries."

"The results of our mission here have been quite satisfactory. The idea in coming was to talk about the general situation between the two countries and establish a mutual understanding. The improvement both here and in London from many causes has been quite marked in the period of our stay."

GEORGIA STATE BANKS ORGANIZE CLEARING HOUSE.

An organization, the purpose of which, it is stated, is to put the Georgia State banks which are not members of the Federal Reserve system on an equal footing as regards clearing facilities with Georgia national banks in the new system, has been formed under the name of the Georgia Clearing-House Association. The organization was brought into being at a meeting in Atlanta on the 10th inst., and in explanation of the purpose of the Association, the Atlanta "Journal" said:

When the Federal Reserve Bank in Atlanta begins operations, with its subsidiary banks throughout the Atlanta district, the checks of these member banks will be cleared at par at any point in the United States with other national reserve member banks; the organization formed Tuesday aims to give equal facilities to Georgia State banks.

Atlanta is to be the headquarters of the Association, which will begin operations about the first of the year. It has been agreed, it is said, that all Georgia banks, State, national and private, shall be eligible for membership in the organization. The following committee has been named to complete the details for the establishment of the association: Rufus H. Brown, L. G. Council, George H. Smith, R. O. Pitts, F. T. Hardwick, J. E. Dunson, S. B. Brown, Asa G. Candler, C. H. Humphrey, A. P. Coles and C. H. Lewis. J. E. Dunson of La Grange presided at the organization meeting and Carl H. Lewis was Secretary.

THE COTTON LOAN FUND.

A. H. Wiggin, President of the Chase National Bank, is reported as saying, with reference to the reports that a number of applications for loans had been received by the Cotton Loan Committee, that these applications had not yet come to hand. Mr. Wiggin stated that the Committee was working over various matters and he did not believe that they would be in proper shape to allow an announcement for several days.

Recent additions to Philadelphia's subscriptions to the Cotton Loan Fund raise the amount to \$5,200,000. Last week Secretary of the Treasury McAdoo announced the fund as completed, giving Philadelphia's portion at that time as

\$4,640,000. Since then a number of institutions which at first refused to join the movement reconsidered the proposition, and the additional amounts received are from these sources.

Henry D. Lindsley, President of the Dallas Cotton Syndicate of the Dallas Chamber of Commerce, announces that as the \$135,000,000 Cotton Loan Fund has been completed, this releases the subscriptions to the original fund made by the citizens of Dallas. The Dallas Cotton Syndicate—see our issue of Oct. 10—was organized in October before the present Cotton Loan Fund and with the same objects, except it was to apply only to Texas and Oklahoma cotton. With the projection of the more comprehensive plan, the local scheme was held in abeyance awaiting the outcome of the larger plan. The success of the latter now being assured, the Dallas Syndicate will be abandoned.

President Andrew Querbes of the Louisiana State Bankers' Association has called a meeting of the bankers of the State, to be held at Alexandria on Dec. 15, to discuss, among other things, reduction of cotton acreage.

THE MISSISSIPPI VALLEY AND LATIN-AMERICAN TRADE EXPANSION.

Important action toward broadening the scope of trade and banking relations with Latin-America was taken in Memphis last week at the International Trade Conference of the Mississippi Valley and Central West. The call for the conference, as heretofore noted, was issued as the result of a meeting of Chicago and New Orleans business men held in the first-named city on Sept. 25. The conference took place on the 19th and 20th inst. and was attended by over one hundred delegates from seventeen States, namely Ohio, Indiana, Illinois, Iowa, Minnesota, Wisconsin, Missouri, Arkansas, Oklahoma, Texas, Kentucky, Tennessee, Georgia, Louisiana, New York, Pennsylvania and the District of Columbia. A resolution was adopted at the conference, in which the Federal Reserve Board is requested to authorize the Federal Reserve banks serving the Mississippi Valley territory to join in establishing branches in Central and South America, Mexico and the West Indies; the conference also went on record as favoring the organization by manufacturing, commercial, investment and banking interests, of a corporation to co-operate with business interests and the branches of the Federal Reserve banks in promoting commerce and affording opportunities for investment and the exchange of credit between the United States and the Latin-American countries. The appointment of a committee of seven to work out plans for the organization of the institution was authorized under the resolution. The appointment of a committee of fifteen to develop a plan for a co-operative trading company to encourage and foster trade between the Mississippi Valley and Central West, and Central and South America was likewise authorized. The following are the resolutions as reported in the "Commercial Appeal" of Memphis:

"Whereas, The great forces of production and distribution in the different countries comprising the American continents are not operating with economic efficiency as to the interchange of commodities and securities, owing to the inadequacy of facilities for the direct exchange of credits arising from commercial and investment transactions; and

"Whereas, The interdependence of the republics, shown by present conditions suggests action to fully protect and advance the commercial and financial relations between them; and

"Whereas, This conference believes the bankers of the Mississippi Valley and the Central and Southern States represented desire to be mutually helpful both to the business interests of this section and of the Latin-American countries easily accessible from the Gulf ports; Therefore be it

"Resolved, First, That the Federal Reserve Board be requested to authorize the Federal Reserve banks, serving this territory, to join in establishing branches in Central and South America, Mexico and the West Indies.

"Second, That the manufacturing, commercial, investment and banking interests organize a banking corporation to co-operate with business interests and the branches of the Federal Reserve banks in efficiently promoting commerce, affording opportunities for investment and the exchange of credits between the different countries.

"Third, That the Chairman of this conference within ten days appoint a committee of seven, the duties of such committee being to consult with the banking and commercial interests of the Mississippi Valley and Central West, and with their co-operation work out a plan for the organization of said bank, the business of which shall include the financing of trade with Central and South America, Mexico and the West Indies and the operation of branches in such South and Central American, Mexican and West Indies trade zones as may be particularly developed by the Mississippi Valley and Central West interests, such bank, however, not to compete for the domestic business of other American banks and to work in the closest possible harmony with the foreign branches of the Federal Reserve banks.

"Be it further resolved, That whereas, the work of the Bureau of Foreign and Domestic Commerce of the Department of Commerce, through its American consul service, its commercial attaches and special agents stationed in all foreign countries, has proven itself of so great value to American

manufacturers, importers and exporters, we heartily indorse the splendid work which is being done.

Therefore, be it resolved, That we commend the Bureau of Commerce for the splendid service and pledge our co-operation and support to the end that even a larger appropriation may be secured, so that this work can be enlarged and made more effective.

"Be it further resolved, That a copy of this resolution be transmitted to the Chairman of the Appropriation Committee, House of Representatives.

"Resolved, That the Mississippi Valley International Trade Conference favors closer and more friendly trade relations with our sister republics in South and Central America, Mexico and the West Indies, to promote a larger exchange of our products.

"To this end we recommend the appointment, by the Chairman of this conference within ten days, a committee of fifteen to consider ways and means and work out a plan for co-operative trading company, existing or to be formed, to encourage and foster trade between the Mississippi Valley and Central West, and Central and South America, Mexico and the West Indies; and report to the executive committee of this conference as early as possible.

"It is the view of the committee that between the territory in and adjacent to the Mississippi Valley and points in South America, Central America, Mexico and the West Indies, that the natural course of travel and the line of least resistance is through Gulf ports, and that the problem of supplying adequate transportation is composed of three leading factors:

"First, inland transportation to and from Gulf ports; second, storage and handling at ports; and, third, ocean transportation.

"With respect to the first proposition, it is felt that existing rail transportation is adequate to present needs and is readily adjustable to increased demands.

"With respect to the second proposition, it is felt that the matter of storage and handling at Gulf ports is one in which the port interests are also vitally concerned and the co-operation of municipal and vested authorities at the ports is considered highly important in perfecting an improved and enlarged foreign service.

"With respect to ocean transportation, it is felt that an adequate and regular steamship service depends largely upon cargoes being supplied in both directions.

"It is therefore resolved, That the exporters and importers handling commodities moving between the Mississippi Valley and points in South America, Central America, Mexico and the West Indies be earnestly urged to co-operate with the inland and ocean carriers in systematic efforts to provide sufficient cargo traffic to warrant additional and dependable, direct and regular steamship service in both directions.

"And whereas, the development of river traffic will have an influence on the growth of North and South commerce in the United States, and can be an important factor in the growth of our foreign trade:

"Therefore, it is urged that, where practicable, Mississippi River cities and towns build modern river terminals, connecting with rail carriers.

"Further resolved, That Congress be urged to enact maritime legislation looking towards placing the American shippers and ship-owners upon a basis more nearly equal with those of competing nations, thereby enabling American exporters and ship-owners to meet the competition of other nations in the ocean-carrying trade.

"Resolved, That a permanent committee of five be named within ten days, by the Chairman, to promote commercial use of the Mississippi River and its navigable tributaries, as a potential factor in developing the natural North and South trade route through the Mississippi Valley.

"Be it resolved, That the conference urge the Congress of the United States to provide adequate continuing appropriations for the development of the navigability of the Mississippi River and its tributaries as a central system of national water trade routes.

"Be it further resolved, That this conference extend its most cordial greeting to the members of the Pan-American Union and that its Director-General at Washington, D. C., be requested to convey to the Government members of the union the greetings and good wishes of this conference and express the desire and hope for closer personal and business relations.

"Resolved, That a permanent executive committee, consisting of seven members, be appointed by the Chairman of this conference within ten days, with authority to receive the reports of the various committees of this conference and to act thereon; and that upon the completion of their work in connection with the committee so appointed that the work of this conference be deemed to be at an end and that the Chairman adjourn this conference without delay."

John Barrett, Director-General of the Pan-American Union, was one of the speakers at the conference; Mr. Barrett characterized it as a most unfortunate tendency in the United States to segregate Central and South America under one head; he declared that the term "Spanish-American" should be eliminated—that the only term approaching it is "Latin-America." In portraying Mississippi Valley's opportunity in Latin-America Mr. Barrett said in part:

The Mississippi Valley and its tributary sections between the Alleghanies and the Rockies have a remarkable and peculiarly advantageous relationship to the Latin-American commercial opportunity which is not generally appreciated.

For practical study and action let it be understood that the Mississippi Valley has a particular sphere of territory in Latin-America which is in many respects different from those open to the Atlantic and Pacific coasts. This sphere includes: First, the coast line of 11 Latin-American countries bordering upon the Gulf of Mexico and the Caribbean Sea. This commercial area bears essentially the same relationship in proximity, shipping routes and markets to the Mississippi Valley that the countries of Northern Africa and Western Asia bear to the European countries of the Mediterranean Sea. This coast line of 11 countries—Mexico, Guatemala, Honduras, Nicaragua, Costa Rica, Panama, Colombia, Venezuela, Dominican Republic, Haiti and Cuba—has debouching upon it a population of 25,000,000, and last year, according to figures just at hand, bought and sold products valued at the surprising total of approximately \$700,000,000. With the new impetus coming from the opening of the Panama Canal this commerce will surely grow to \$1,400,000,000 during the next 10 years, and there is every reason why the Mississippi Valley should control two-thirds of that total in both volume and value.

This sphere includes, secondly, the Pacific slope of Western South America, which reaches for 4,000 miles from Panama south to Puntas Arenas on the Straits of Magellan; includes Western Colombia, Ecuador, Peru, Bolivia and Chile; supports a population of 15,000,000, and conducts an annual foreign trade valued at approximately \$400,000,000. This total, which is large, considering that it was built up before the canal was opened, represents a remarkable increase over 10 years ago and bids fair, with the actual and growing use of the canal, to increase to \$1,000,000,000 in another 10 years. Again, here the Mississippi Valley has an extraordi-

nary opportunity to supplant with its own exports and imports those of Europe, which heretofore have held the field against the United States because of shipping advantages around South America and through the Straits.

This sphere also includes, third, the western or Pacific coast of Central America and Mexico, to which the canal gives the Mississippi Valley direct access for the first time. Here we have 3,000 miles of coast line, including Panama, the five Central American countries and Mexico, upon which debouch nearly 10,000,000 of people and a foreign trade of approximately \$200,000,000, which will double itself in the next 10 years and make corresponding demands on the Mississippi Valley.

To sum up, the Mississippi Valley's special sphere of opportunity and activity in Latin-America comprises portions of 16 countries, a population of nearly 50,000,000 and a present foreign trade of \$1,400,000,000, which must, with no exaggeration of possibilities, grow to \$2,800,000,000 within the next 10 years. These figures do not include the direct foreign commerce, valued at \$1,600,000,000, of Brazil, Argentina, Uruguay and Paraguay, which form the special sphere of opportunity for the Atlantic Coast and the eastern section of the United States.

Now, what is to be done in the premises?

First, special credit and attention should be given to those persons, firms and organizations which have for many years been working successfully in this field. What they have done and are doing should be carefully studied and followed.

Second, the whole situation must be approached from the Latin-American, as well as the United States, standpoint, and from the side of imports of raw products for our manufacturing plants as well as of exports of our finished manufactured goods and that surplus of our agricultural products that are suited to their markets. Ships must have return as well as outgoing cargoes.

Third, Latin-America at the moment needs the money as much as the merchandise of the Mississippi Valley and the country at large. If the financial institutions of the Mississippi Valley could lend Latin-America \$500,000,000 during the next five years, they would by that agency alone and in that period increase the Mississippi Valley trade with Latin-America \$1,500,000,000. Some method must be devised by the Federal Reserve Board and private banking and trust companies to meet the situation, for Europe can supply only a small amount of money to Latin-America for the next decade.

Fourth, a great and immediate need of the hour are well recognized and developed banking and credit facilities for the commercial and financial transactions of Latin-America and the Mississippi Valley, especially in the spheres of influence of the Caribbean Sea and the western coast of Latin-America. The banking, commercial, manufacturing, exporting and importing interests of the principal industrial centres and ports of the Mississippi Valley should therefore at once set themselves to working out this vital problem.

Fifth, as soon as possible regular and permanent mail, passenger and freight steamship service under the United States flag must be established between the gulf ports of the Mississippi Valley and those of its sphere of opportunity in Latin-America—one going through the canal and down the west coast of South America as far as Valparaiso and another through the canal and up the west coast of Central America and Mexico to California. Latin-America to-day realizes the need of this service and calls as eagerly for it as does the Mississippi Valley.

E. F. Sweet, Assistant Secretary of the Department of Commerce, speaking with reference to the movements of the Government toward the development of foreign trade, is quoted as follows:

Without reference to the European war, a year ago Mr. Redfield and I talked over our foreign trade bureau. We found the Government was not doing enough to justify the existence of that bureau. Foreign countries had commercial attaches. We had not. Foreign countries had special agents. We had not.

We asked Congress to give us \$150,000 with which to send out commercial attaches. We sought as those emissaries business men of long vision, speaking the language of the countries to which they were assigned. We have sent four of these attaches to South America—to Rio Janeiro, Buenos Aires, Santiago and Lima. We have not begun to receive results yet, but we will soon.

Our department also is sending out more commercial agents. These men are specialists in machinery, boots and shoes and other commodities. It is their business to go all over the world where those commodities are used and to send in all information obtainable.

Formerly our Government had only one means to get that information—through the consular service. But our consuls were diplomats, rather than business men. Our commercial attaches are business men.

We had been limited in distributing information, so we established four domestic agencies as receptacles into which should pass information. The business of these agencies is to digest and disseminate information from foreign countries and to get into close personal touch with exporters.

This service was an experiment, but has proved successful. It seemed to fill a long-felt want. We established four more agencies, and will continue to establish more until the Department of Commerce will have a representative in every large American city.

The war in Europe has re-arranged our business program. The problems of a year ago are not the problems of to-day. We have to shift and re-adjust our business. We are all looking to South America to buy goods we expected to sell to Europe.

Unfortunately, the same conditions which apply here apply also in South America. Their exports and imports are cut off. They are hard up. The war has not affected us so much as it has Latin-America, because we are bigger and stronger than they. They look to us to help them. There is sentiment in it, as Mr. Barrett said. We are going to put them on their feet if we can and we intend to impress upon them an obligation they cannot soon forget.

But let us not take advantage of their necessity. Every step should be a step forward, never to take a step backward. The same condition may prevail five or ten years and we must have an outlet for our goods. Let us give our customers a fair deal.

The war will have two results in the United States. We will be the peacemaker. This nation will be called upon, if we maintain our neutrality, to act as mediators. President Wilson's advice will be sought and we will be the country to settle the difficulties of the warring nations of Europe. That position will elevate us as a nation. This war has a tendency to elevate us in every way.

We have another opportunity—the trade opportunity. It is up to us as men, as thinkers, to work out ways to increase our trade with Latin-America. I wish I had a workable practical plan to offer, but I have not. Neither has any other man. We must work it out in such meetings as this. It will be an evolution. Some man will suggest the right plan. All we know is that we will succeed. We must succeed.

How are we going to finance South America? A New York bank has established two branch banks in South American cities. American banks are reaching out to establish others if these first prove successful. It cannot be done all at once.

At the closing session of the conference, Walter Parker, representing the New Orleans Association of Commerce, explained to the delegates what the port of New Orleans is doing to aid the Mississippi Valley and Central West to reach the world markets left unprovided for by the war. In part he said:

No plan for the continuing development of Mississippi Valley commerce and industry can hold the element of complete and well-balanced potentiality unless it include provision for the development of a world market of deposit at the mouth of the Mississippi River. Such a market of deposit must, of course, provide adequately for quick and economic handling, warehousing and interchange of commodities between railroads, boat lines and ocean-going vessels. It must also provide for the financing of such commerce under conditions at least as favorable as can be found at other ports. Commercial use of the Mississippi River and its tributaries is an important factor.

Such a market of deposit will enable producers and shippers in the valley to move their commodities into cheap storage at ship-side, whenever they so desire, without reference to the condition of the foreign consuming markets, and to finance such commerce pending favorable demand from foreign markets. It also will enable foreign producers and shippers to assemble and finance the commodities they ship, and hold them off the consuming markets of the valley until need and demand arise. With such facilities available no producer, exporter or importer need ever force his consuming markets, as is now frequently done, and it is only through the establishment of such a market of deposit at the mouth of the Mississippi River that the commerce creators, both import and export, of the Mississippi Valley can hope to enjoy full scope for their enterprises, independence of action and a wide open opportunity to reach and trade with all the markets of the world without paying tribute in any form to any section or to any set of business men.

This is true because the valley's natural trade channel is north and south and the interchange of valley imports and exports should be made at the mouth of the Mississippi, provided natural conditions of least resistance be permitted to rule.

From the mouth of the Mississippi River splendidly developed ocean trade routes reach all the important markets of the world.

To utilize these ocean routes to the fullest extent should be the desire of every handler of commerce in the valley.

Therefore the proper and scientific development of the port facilities at the mouth of the Mississippi, facilities which will bring into play self-perpetuating economies in behalf of Mississippi Valley commerce, is as important to the manufacturer of Pittsburgh, the exporter of the Middle West and the importer of Chicago as it is to the business men of the lower valley, and, being a matter that affects their business welfare, merits their interest and best endeavor.

Realizing the advantage to be gained from the application of scientific economy in equipping their port for the handling of Mississippi Valley commerce, New Orleans thus far has done these things:

1. Obtained from the State on Nov. 3 changes in the organic law making Louisiana's attitude toward business and investment capital of all kinds as favorable as exists anywhere, and opening water frontage to ownership and development into warehouse facilities by private enterprise and capital.

2. Through public enterprise New Orleans has equipped the harbor with steel-receiving and discharging sheds, built and is operating an efficient belt railroad system, is erecting a series of economic warehouses and concentration plants on the river front for valley imports and exports, and has practically finished a complete sewerage, drainage and pure water system.

Thus the three great problems that a successful port market of deposit must solve for itself have been fully solved by New Orleans—that of health, economic facilities for the handling of commerce and the supply of money required to finance commerce at low cost.

These things have only just been done by New Orleans, consequently the valley does not yet realize that changed economic conditions at New Orleans open an easy and independent channel to the markets of the world, which, in the new trade era now dawning, must draw more heavily on the products of the Mississippi Valley than ever before.

The New Orleans gateway is now fully prepared to extend its facilities as need arises. Manufacturers and shippers who require specialized concentration facilities at ship-side can get them at New Orleans, through the New Orleans Dock Board, without having to purchase costly river front property, and as this commerce increases there will be money at New Orleans to finance it because the law relating to money in all its forms is now highly favorable.

Revived commercial use of the Mississippi River and its navigable tributaries has recently been given great impetus through the building at New Orleans of a new type of shallow draft flat bottom self-propelled steel barges, and by the approved plans of the New Orleans Dock Board to build terminals so designed as to completely co-ordinate river, rail and ocean traffic, and to so improve port charges as to encourage the movement of commerce by river boats and the coming of additional ship lines.

Shippers of the valley should fully inform themselves as to what New Orleans, their natural port of least resistance, is doing to better the conditions under which Valley commerce is handled.

BRITISH TREASURY PROPOSALS FOR HELPING STOCK EXCHANGE.

The British Treasury's statement embodying its plan for providing Government assistance in dealing with account-to-account loans on the London Stock Exchange, to which brief reference was made in our issue of November 7, is printed as follows in the London "Financial News" of the 2nd inst.:

With a view to avoiding the necessity for the forced realization on a large scale of securities held as cover for account-to-account loans, His Majesty's Government has agreed to arrange with the Bank of England to make advances to certain classes of lenders, in order to enable them to continue their loans until after the end of the war. The arrangements agreed upon are as follow:

(1) The application of the scheme will be confined to account-to-account loans made to members of the Stock Exchange by lenders other than banks to which currency facilities are open. It will not apply to lenders who are themselves members of the Stock Exchange.

(2) All banks to which currency facilities are open, whether clearing banks or not, have agreed not to press for repayment of such loans or

require the deposit of further margin, until after the expiry of a period of twelve months from the conclusion of peace, or after the expiry of the Courts (Emergency Powers) Act, 1914, whichever shall happen first, provided that this agreement shall not prejudice the right to immediate repayment if and when a receiving order in bankruptcy (or the corresponding order in Scotland) is made against the borrower. The rate of interest to be charged on loans continued under this arrangement shall not exceed the rate chargeable by the Bank of England to other lenders under Paragraph 4.

(3) Subject to the following conditions, the Government will arrange with the Bank of England to advance to lenders to whom the scheme is applicable 60% of the value of the securities at present held by the lenders against any loans which they had outstanding on July 29 1914. Such securities to be valued for the purpose of the advance at the making-up prices of the July 29 settlement—[Note: In the case of Consols and other securities settling at the Consols account, the mean price of the Official List of July 27 will be taken.]

(a) The Bank of England may at their discretion refuse any application, but in the exercise of this discretion due regard shall be had to the object of this scheme, viz.: To prevent as far as possible the forced realization of securities, and before a final decision is arrived at in regard to any application the Bank will, if the applicant so desires, submit it to the Treasury.

(b) Both the lender and the immediate borrower from the lender shall be jointly and severally responsible to the Bank of England for the repayment of the advance and interest thereon.

(c) All applications for loans under the scheme giving the particulars required by the Bank of England shall be made on or before January 31 1915 and no application will be entertained which is received after that date.

(4) Loans by the Bank of England under the scheme are to bear interest at 1% above Bank rate, with a minimum of 5% in all. Interest will be repayable fortnightly or, when the Stock Exchange is reopened, at each settlement, and the borrowers will be entitled to coupons and dividends, provided that such interest is duly paid.

(5) The Bank of England will not press for the repayment of advances made under the scheme until after the expiry of a period of twelve months from the conclusion of peace or after the expiry of the Courts (Emergency Powers) Act, 1914, whichever shall happen first, nor will the Bank in the meantime require the deposit of further margin, provided that this agreement shall not prejudice the right to immediate repayment if and when a receiving order in bankruptcy is made against the borrower.

(6) The borrower may at any time repay the advance in whole or in part. In the case of part repayment the securities to be released will be settled by agreement between the borrower and the Bank of England, or, in default of agreement, will be such proportion of each security as the amount of the repayment bears to the whole advance, provided that where any of the securities held by the borrower against a loan made by him the Bank of England shall release those particular securities upon replacement of an amount equal to the value of the securities at the prices of the July 29 settlement, less the amount of the margin (if any) deposited with such borrower.

(7) When any of the securities against which advances are outstanding, either under Paragraph 2 or Paragraph 3, reaches the above-mentioned prices of the July 29 settlement, the bank concerned, or the Bank of England, as the case may be, shall have the right of calling for the borrowers for the replacement of their loans to the extent of the value of such securities, and should such request not be complied with the bank shall have the right of selling such securities for account of the borrowers; but not under the above-mentioned prices.

(8) Lenders taking advantage of the scheme shall be bound by the same conditions as the banks under Paragraph 2. In the event of any lender who might take advantage of the scheme not doing so, but seeking to realize his securities, the Stock Exchange as a body shall oppose the application on the borrower's behalf under the Courts (Emergency Powers) Act 1914. The Stock Exchange Committee undertake to make rules to secure that where any loans have been used for the purpose of making other loans on the Stock Exchange, or for the purpose of carrying over stock, the advantages of the scheme shall extend so far as practicable to the clients and other parties concerned.

(9) The Stock Exchange Committee will not reopen the Stock Exchange without submitting the proposed date and conditions of such reopening to the Treasury and obtaining their consent.

Treasury Chambers, S. W.

October 31 1914.

The General Purposes Committee of the Stock Exchange issued the following:

Committee Room, Stock Exchange,
October 31 1914.

The Committee for General Purposes desire to draw the attention of members to the Government scheme, framed with a view to avoiding the necessity for the forced realization on a large scale of securities held as cover for account-to-account loans. The alterations to the rules necessary to give effect to this scheme are in preparation, and will be issued shortly. The Committee are happy to be able to announce that in the event of any member having to seek the protection of the Courts (Emergency Powers) Act, 1914, the trustees and managers have agreed to be responsible for the legal expenses. Any member who seeks the protection of this Act is required to communicate with the secretary before taking or defending any proceedings.

By order,

EDWARD SATTERTHWAITE,
Secretary C. G. P.

THE STOCK AND OTHER EXCHANGES.

A start towards a general resumption of business on the New York Stock Exchange was made this week, when the Governors of the Exchange at a meeting on Tuesday unanimously adopted the following resolution:

Resolved, That the Committee of Five is hereby empowered to permit dealings in bonds on the Floor of the Exchange under restrictions prescribed by it.

Acting under this resolution, the Special Committee of Five voted to permit the beginning of trading on the Exchange on Saturday, Nov. 28, in bonds, under restrictions.

The plan provides for the fixing of minimum prices from time to time for bonds and their sale for "cash" or "regular way" only. Bonds sold on the floor of the Exchange "cash", under the rules of the Exchange, are delivered the same day,

and those sold "regular way" are delivered next day. This arrangement accordingly excludes transactions which provide that delivery is to be deferred for any length of time. It is understood that present current prices on bonds being traded in are above the minimum prices that are to be fixed by the Committee. Additional regulations issued yesterday provide that sales may be made at minimum prices or higher without submission to the Committee, but sellers must report every transaction, whether executed on the Exchange or elsewhere. All trades for foreign account must be so designated. This will be the first trading on the floor of the Exchange since the announcement made just before the opening hour on July 31 last that the Exchange would be closed indefinitely.

The following is the ruling of the Committee of Five:

31.
November 24 1914.
Dealings in Bonds.

The special Committee of Five rules that so much of Rule 21 as applies to dealings in listed bonds through the Clearing House be rescinded, to take effect at the close of business on Friday, November 27 1914.

Beginning on Saturday, November 28 1914, dealings in bonds listed on the Exchange will be permitted on the floor of the Exchange between the hours of 10 and 3 o'clock each day except Saturday, when dealings shall cease at 12 o'clock noon.

Such dealings to be under the supervision and regulation of the Committee and to be for "cash" or "regular way" only, and not below the minimum prices as authorized by the Committee from time to time.

Transactions at prices other than those allowed by the Committee or in evasion of the Committee's rules are prohibited.

All rules of the Exchange governing delivery and default on contracts covered by this resolution shall be in force on and after Saturday, November 28 1914, but the closing of contracts "under the rule" shall be subject to the foregoing provisions.

Further regulations for dealing in bonds were issued yesterday as follows:

All transactions must be for "Cash" or "Regular way."

Minimum prices will be posted before 10 o'clock a. m.

Trades may be made at the minimum prices or higher, without submission to the Committee for confirmation, but sellers must report every transaction to the Committee promptly, whether executed on the Floor or elsewhere, and if sold for foreign account must be so designated.

The Committee considers this course necessary in order that it may be fully advised as to the breadth of the market and thus enabled to pass more intelligently upon the level at which to permit trading.

All trades where the minimum price is not posted must be submitted to the Committee for approval.

Orders in bonds, where the minimum prices are not posted, must be filed through the floor representative with the Committee "G. T. C.," and the Committee will continue its efforts to consummate transactions through such representative. Each order must be written on a separate slip.

Houses not directly represented on the Bond Platform will please indicate on their orders the name of the specialist acting for them. This does not apply to clearance orders.

Unrestricted trading in listed municipal and State bonds, and in bonds and notes maturing prior to Nov. 1 1917, and equipment trust certificates of any maturity, is permitted as heretofore.

Members or firms accepting orders from customers should advise them that they are accepted to be executed under the Rule No. 31 and subject thereto and in reporting purchases or sales should add "as per Rule No. 31."

The special Committee of Five which has been in charge of trading since the Exchange closed had had plans for resuming trading in bonds on the Exchange under consideration for some time. The latest plan had been so far completed last week that it was supposed the Exchange would open on Saturday, November 21. An announcement was, however, made on Thursday, November 19, that unforeseen difficulties would prevent re-opening at that time. The obstacles, whatever their nature, were quickly overcome, and the Committee made the following statement on Saturday, Nov. 21:

The Special Committee of Five announces that having consummated its plan for the bond transactions on the Exchange under certain specified restrictions, the same will, in accordance with the constitution of the Exchange, be submitted to the Governing Committee at the regular meeting to be held on November 24.

If the recommendations of the Special Committee are adopted by the Governing Committee, the plan will go into operation at an early date.

The ticker will be used in recording transactions and members will again receive the sales sheets. The Committee of Five, through a sub-committee of three, will be on the floor constantly to solve any problem that may arise.

At a meeting of the board of managers of the New York Coffee Exchange on Wednesday it was decided to reopen the Exchange for trading at 10:30 a. m. on Monday, Nov. 30.

Regarding the situation in Baltimore, the "Sun" of that city says:

The Committee of Five now in control of the operations at the Baltimore Stock Exchange says there is no immediate intention here of following the lead of New York and opening the floor of the Exchange for bond trading or otherwise. Members of the Committee assert that the local operations are now as free as those which will be permitted in New York under the method just adopted, and there is no reason why the conditions here should be altered at this time. The members of the Exchange are now practically given free rein in their bond dealings, the only restriction the Committee imposes being a minimum price, which is what the New York Exchange has done. The lists of the daily operations here are opened to the members twice a day and New York will do no more.

The following notice has been sent to the members of the Boston Stock Exchange:

In order to reduce the chance of error, the Special Committee of Five will consider all orders as canceled at the close of business Saturday, Nov. 28 1914.

Only good until canceled orders will be received and all that are given by telephone must be immediately confirmed in writing.

The Committee assumes no responsibility on the reports and no transactions should be considered as complete until the buyer and seller have compared.

Where orders are submitted at different prices on the same security it will facilitate the work of the Committee if all are on the same card, but under no circumstances should orders for different securities be on the same card.

A resolution was also adopted that stamp tax (when necessary) in the State of New York and that imposed by Massachusetts, effective Dec. 1, and that imposed by Congress, effective Dec. 1, must be added to the regular commission.

We quote the Boston "Advertiser" regarding any extension of trading on the Boston Stock Exchange as follows:

The Boston Stock Exchange will not follow the lead of the New York Exchange in reopening for restricted trading in bonds for cash, as the amount of business done locally in this class of securities is very small, and to open the Exchange for this purpose alone would entail too great an expense for the amount of business transacted.

The Boston Stock Exchange Committee, however, is working out a plan for the early reopening of the local Exchange on a broader scale than that of bond trading, the details of which may be announced in a few days.

The Chicago Stock Exchange resumed business on Monday (Nov. 23), having been closed since July 30. Trading was begun in all listed securities, both stocks and bonds, also unlisted stocks, but at not below the closing prices of July 30, except in cases where a dividend has been paid in the interim. A ruling made this week, however, permits, beginning with Friday (Nov. 27), trading without price restrictions in all listed securities except securities also listed on the New York Exchange.

In the case of bonds listed on the Chicago Exchange trading has been permitted at a minimum price of four points below the July 30 closing in a number of the more active issues. Record of transactions will be found on another page.

The Cleveland Stock Exchange re-opened for business on Nov. 23. The last regular session was on July 31.

The New Orleans Stock Exchange re-opened on Monday, Nov. 23, but trading was restricted to bonds only. Last week we reported the Exchange as having opened on Nov. 19, but this was incorrect. The New Orleans Stock Exchange has been closed nearly three months and a half (since Aug. 1), having suspended active trading a few days after the Cotton Exchange closed.

The Philadelphia Stock Exchange will reopen on Monday, Nov. 30, for trading in all securities on the listed and unlisted departments at minimum prices to be established by the committee. Permission is not given, however, to trading in such securities as are listed on the N. Y. Stock Exchange, and which have heretofore been traded in on the Philadelphia Exchange. The following announcement was made after a special meeting of the Governing Committee on Nov. 27:

Pursuant to resolution adopted at a special meeting of the Governing Committee, held to-day, the Philadelphia Stock Exchange will be reopened on Monday, Nov. 30, at 10 o'clock a. m., for transactions in all securities listed on the regular and unlisted departments of the Exchange, transactions to be made at not less than the minimum prices established by the special committee on each individual security. Minimum prices will be posted on the board room of the Exchange each morning. On bonds on which no minimum prices are established minimum prices will be fixed by the special committee upon application. On stocks on which no minimum prices are established, transactions may be made without restriction. Transactions will be permitted only in the securities listed on the regular and unlisted departments of the Exchange, deliveries to be made in accordance with the established rules of the Exchange.

The Clearing House of the Exchange will remain closed until further notice.

The special committee of five appointed by the President Aug. 3 is continued with full authority until discharged by the President of the Exchange.

It will be noted that permission is not granted at present to trade in securities listed on the New York Stock Exchange and heretofore dealt in on the Philadelphia Stock Exchange by virtue of being listed on the New York Stock Exchange.

The Pittsburgh Stock Exchange voted to open the Exchange on Dec. 2 to trading, without price restrictions, in stocks listed on the Exchange and not listed on other exchanges which closed at \$15 per share or lower on July 30. Following is the notice:

By order of the board of directors of the Pittsburgh Stock Exchange, the Exchange will open for business at the regular hour on Dec. 2 1914, when members will be permitted to trade without price restrictions in securities listed on the Exchange and not listed on other exchanges which closed at \$15 per share or lower on July 30 1914. In all other listed stocks

no trading will be permitted at less than the closing prices of July 30 1914, less one dividend. This includes all stocks listed on New York, Boston, Philadelphia or Chicago stock exchanges.

The control of trading and quotations remains in the hands of the committee on securities.

The "Pittsburgh Gazette" says:

The restrictions contained in the foregoing will not permit of dealings in Pure Oil, the most active stock in the local market before the suspension, inasmuch as its final price on July 30 was 16½%, and no change has been officially recognized, although the company deferred the dividend three months ago. Unofficial quotations have been reported recently at a fraction above 15, which would eliminate it from the dealings under the restriction. There are five listed stocks which are now quoted above the July prices which will be open to dealings under the rule. These are American Window Glass preferred, Pittsburgh Plate Glass, Caney River Gas, Manufacturers' Light & Heat and Pittsburgh Brewing preferred. There are 12 stocks in which unrestricted dealings are permitted, as follows, the prices being those quoted on July 30:

Columbia Gas & Electric.....	9	Ohio Fuel Oil.....	12
Consolidated Ice.....	7	Pittsburgh Brewing.....	9
Crucible Steel.....	14½	Pittsburgh Oil & Gas.....	7
National Fireproofing.....	7½	San Toy Mining.....	16
Independent Brewing.....	4	Pittsburgh Silver Peak.....	25
Interior Mining.....	5	West Penn Power.....	12½

Dealings in bonds will be conducted as usual, through the Committee on Securities, but it is assumed that when prices recover to or above the July level, transactions will be permitted and quotations made public the same as listed stocks which are at or above the last official prices.

It is stated that the San Francisco Stock and Bond Exchange has resumed unrestricted trading in listed bonds. The report says that only listed stocks are now under restriction. The status of the Exchange was given by Harry Schwartz, Secretary of the Exchange, in a letter dated Oct. 15 as follows: "For your information I will state that our Exchange is not formally open; the transactions as published are informal trades between members of our Exchange passed upon by our executive committee."

The Toledo Stock Exchange resumed trading on Nov. 23, having been closed since July 30.

A dispatch from Washington says the Washington Stock Exchange will resume trading Monday, Nov. 30.

RAILROAD REGULATION BUT NOT STRANGULATION.

In an address before the Men's Church Club of New Brunswick on the 20th inst. Ivy L. Lee, Executive Assistant of the Pennsylvania RR., had something to say concerning Federal and State legislation and the resultant gradual strangulation of the railroads. In part he said:

The railroads in this country are caught in a vise which is being screwed tighter and tighter. Railroads do not oppose proper regulation, but is it not time to inquire whether regulation is not gradually becoming strangulation? Many are the signs now that the grip of cumulative regulation is slowly but surely squeezing out the life blood of what President Wilson has called "the one common interest of our whole industrial life"; that it is scotching initiative and enterprise, and that it is undermining the ability of the railroads to provide for future public needs.

In our treatment as a people of the railroad question we are obeying literally the scriptural injunction, "Take no thought for the morrow." "The railroad is here," we reason. "It cannot run away; let us get all we can out of it now, because—may be—its stock is watered."

Mr. Prouty said before the National Association of Railway Commissioners in Washington on Wednesday: "Grave doubts exist as to whether rates must not be generally increased." And then he added: "The question cannot be satisfactorily answered until there is a national valuation of these properties." And Mr. Prouty himself predicted that this valuation would not be arrived at until 1919.

Regulation of railroads—so eminently desirable, when proper and not merely political—was originally to prevent discrimination and oppression. In no respect is anything else intended now, but the cumulative effect of laws and commission activities is that this device of statesmanship is being converted into an instrument of torture. In what manner that is true may be realized from the following:

Many States insist upon approving the terms of security issues.

New Jersey insists that grade crossings shall be removed at the sole expense of the railroad. At the meeting of the National Association of Railway Commissioners in Washington on Thursday, Commissioner Hall of Nebraska is reported to have urged that "a concerted effort should be made by all Commissioners in all States that grade crossings should be eliminated at no matter what cost to the railroads." To remove all the grade crossings in the United States would probably cost \$5,000,000,000—one-third of the present total investment in our railroads.

Commissions may order improved stations and the installation of signals; they may tell you where you must and when you cannot stop a passenger train.

They pass upon the quality of the locomotive boiler; they prescribe the character of headlight; they stipulate the kind of ash-pan, and the State of Indiana has now decreed that an automatic door be used on the locomotive firebox.

The law sets forth where the ladders, bars and other safety devices shall be placed on freight cars.

Commissions decree whether on mountain grades you shall use hand brakes, holding the air brakes in reserve, or air brakes holding the hand brakes in reserve.

Federal laws stipulate the number of hours men shall work; States tell you how often you must pay your men, and many State laws fix the number of men in a train crew.

The process of manufacture of steel rails and the kind of ties used are still matters for which railroad officers are responsible, but at the meeting in Washington an Inter-State Commerce Commissioner called attention, as to an omission requiring repair, to the fact that "railway material is in

general notable for its exemption from all supervision of any kind, State or Federal."

There is pending in Congress a law limiting the number of freight cars which may be hauled with one locomotive. At the meeting of Commissioners in Washington a committee recommended that the Inter-State Commerce Commission be given full authority to prescribe "the character of equipment to be used in inter-State commerce, also authority to prescribe the manner of using or hauling same."

And the most amazing feature of this whole process is that actual experience in the successful conduct of railroad affairs apparently disqualifies a man from appointment to a railroad commission.

In 1913 nearly 1,400 laws regulating railroads were introduced in 42 State legislatures. In 1914 only 14 legislatures were in session, but 236 new railway bills were proposed. Of these, 112 provided for some mandatory concessions to employees.

Arbitration commissions establish the rates of wages which shall be paid to employees, but assume no responsibility for obtaining the money with which to pay them.

Local authorities assess railway taxes, but these authorities have no power to help the railroads assess charges out of which to pay these taxes. On the Pennsylvania RR. in the past 14 years total wage payments increased 160% and taxes increased over 200%.

Perhaps expenditure for all these purposes is desirable, but it is certain that it cannot be made unless the railroads receive higher charges for the services they render—and the railroad company is concerned only that returns as a whole shall be adequate.

Nevertheless, a non-political Congressional committee reports that the railroads are underpaid for carrying the mails; but Congress takes no steps to provide the additional money.

Many States arbitrarily limit both freight and passenger rates. But even where that is not done, higher rates can only be obtained with the sanction of railway commissions.

Thus hemmed in between Scylla and Charybdis, the railroads have run aground on a long-charted and well-known rock known as the arithmetical table. In concrete form this is how the danger has manifested itself:

During the four years from June 30 1910 to June 30 1914 the thirty-five railroad systems east of the Mississippi and north of the Ohio River expended for improvements nearly \$900,000,000. Yet such was the increased expense of handling business that in the fiscal year 1914 these railroads earned net operating income less by \$90,000,000 than in 1910, before that cash investment had been made.

Must it not be apparent that had investors in the past realized the treatment they would to receive, they would not have provided the money for the building and development of our railroads?

And as the money for future railroad development must be supplied by private capital, is it not time that we took some thought for the morrow?

PRESIDENT HAS NO POWER TO PUT COLORADO MINES IN RECEIVER'S HANDS.

President Wilson let it be known on the 24th that the Administration will not adopt the proposal of the American Federation of Labor that a Federal receiver be appointed for the Colorado coal mines involved in the strike with a view to their operation by the Government. In making the announcement the President stated that he had been informed by Secretary Wilson of the Department of Labor that the Solicitor of that Department has given it as his opinion that there would be no legal warrant for the operation of the mines by the Government. The President also stated that he had so far received no suggestions from Governor Ammons of Colorado that the Federal troops be withdrawn. A State report into the strike situation, made by the Burriss Legislative Investigating Committee and filed by it on the 22d, calls upon Governor Ammons to "prepare to accept for the people of this State the responsibility of again being a State." The Committee says:

"We recommend that you issue a proclamation that every person within the State is commanded to obey the law and to refrain from all incendiary utterances. Make it clear that each able-bodied man between the ages of 18 and 45 is in fact a member of the militia and that if it becomes necessary he will be called into active service."

A request made by Governor Ammons and Governor-elect Carlson that the Federal Industrial Relations Committee defer its proposed investigation into the Colorado mine strike, scheduled to begin Dec. 1, has been declined by Frank P. Walsh, Chairman of the Committee. The postponement of the inquiry was asked for in the following telegram addressed by Messrs. Ammons and Carlson to President Wilson and Mr. Walsh:

"We have had within the last year more than a score of investigations of industrial conditions in our coal fields, including one by a special Congressional committee and others by the Federal Bureau of Labor. We seriously question whether an investigation at this time can bring out any new information.

"The undersigned are working in harmony and in the interests of law, order and peace, with an earnest desire to have no further expense or bloodshed in Colorado. We have a feeling of good will toward all, but a fixed determination to preserve the present status of peace in this State.

"The entrance into Colorado of your estimable body at about the time of the withdrawal of the Federal troops and at approximately the date fixed for the present administration to retire and the incoming administration to take up its new duties might greatly embarrass us in the administration of our program of government, and the hearings conducted by your Committee might serve to inflame passions and endanger the peace maintained by the troops in the past. We therefore respectfully request and urge that the date of your proposed investigation be postponed."

In answer to the above Mr. Walsh said:

"Your telegram received. It will be impossible to postpone the hearing of the United States Commission on Industrial Relations set for Dec. 1 at Denver. Please be assured that no action will be taken subversive of the maintenance of peace and order, or which is not in full accord with the public welfare. I trust that the Commission may have the privilege of co-operating with you to that end."

*INDUSTRIAL DEPRESSION ASCRIBED TO
"GOVERNMENTITIS."*

"Governmentitis" is given by Louis W. Hill, President of the Great Northern RR., as the cause of the depression which the railroads, the steel and other industries are at present experiencing. Mr. Hill, in holding the Federal Government largely responsible for present conditions, is quoted to the following effect in the Denver "News" of the 14th inst.:

Nothing can keep this country back, but we are having a period of depression which will be felt for a long time in business circles, although the movement of crops and the certain European demand for American products which will follow the present war will ameliorate the condition somewhat.

The Federal Government is largely responsible for present conditions. Railroads, the steel industry and other big industries are suffering from governmentitis. Too much or too little has been done. There is much fault-finding without suggesting remedies; too little actual aid given for the unrest caused.

The people have lost their faith in the securities of the railroads and other great industries of the country.

There is little wonder at this when the prices of the stocks have dropped to their present low figure. That being the case, it is impossible for the railroads to sell their bonds, or to borrow money except at exorbitant rates of interest. That can mean only that the coming year will be one of stagnation so far as railroad development and extension is concerned.

I am sorry to see it; I do not like a year of inactivity, of barely holding our own, but wish to go ahead and help develop the nation. We have no alternative under existing conditions but to reduce our operating expenses, and that means reduced pay-rolls and idle men.

Instead of buying our bonds or loaning us money for needed development work, which would mean the employment of thousands of men, the public will take up European war loans because of the high rates of interest paid.

We need more immigrants, more settlers in the West, but the nations of Europe have barred railroads and steamship companies and private individuals with land to sell from carrying on a campaign across the water to induce immigration from Europe. Another nation, or any governmental unit of a nation from a State down to a small community can conduct such a campaign across the water. That is where this great nation falls short of requirements.

Unless something is done to induce it, immigration from the warring nations of Europe will be light for many years to come, as there will be a deal of rebuilding to be accomplished over there and the natives will remain at home to do that work for small wages.

Another thing is that this nation, as a nation, must undertake a campaign to encourage the home purchase of goods made in this country, and in making that campaign must first set a good example. Up my way, in Montana, the Government purchases practically all its supplies—including meat, oats, salt, &c.—from Canada and ships them into this country.

I believe Government and politics are being divorced to a certain extent and that the time will come when business conditions and individuals rather than party will govern the Government.

RAILWAY COMMISSIONERS DO NOT WANT COMMERCE COMMISSION TO INTERFERE WITH STATE RATES BUT FAVOR DOUBLE REGULATION OF SECURITY ISSUES.

The annual convention of the National Association of Railway Commissioners was brought to an end on the 20th inst. after the Commissioners, by a divided vote, recommended to Congress the enactment of a law providing that the Inter-State Commerce Commission should not interfere with the operation of any State-made rate or regulation until such rate regulation had been declared by the courts to be unreasonable. The recommendation, to which we referred last week, was embodied in a resolution proposed by Commissioner W. D. Williams of Texas. It induced a discussion of the principle involved in the Shreveport rate case. It was held by a majority of the convention that the decision of the United States Supreme Court in that case seriously curtailed the rate-making powers of State commissions. An effort was made to refer the whole matter, involving State rights, back to the committee, with directions to report to the convention next year. On a roll-call of States the motion was defeated, 22 to 11. By an aye and no vote Commissioner Williams' resolution was then adopted.

The following resolution in which the Association declared its position on the question of governmental regulation of railway securities was also adopted:

That it is the sense of this Association that the issue of stocks and bonds by common carriers and other public service corporations shall be regulated and controlled by governmental authority, but that the regulation and control of issues of stocks and bonds by the Federal Government shall not be in lieu of but in addition to the authority of the several States in such matters.

The convention continued for another year the Committee on Railway Valuation, with Commissioner Milo R. Maltbie of New York as Chairman. In the report of this committee presented at last week's meeting the belief was expressed that the work mapped out in the statute directing the valuation of the railroads "is impossible to be accomplished in its entirety." On this point the report said:

It may well be expected that nothing will be left undone by the representatives of these great enterprises to bring about a valuation as favorable to their contentions as is possible. It is plainly apparent that the carriers do not consider that the effect of this valuation work will be seen alone in rates but it is also quite likely that a basis of valuation for possible sales to the Government may be contemplated.

It is our belief that the work mapped out in the statute directing the valuation is impossible to be accomplished in its entirety, but we further believe, proceeding under this statute, the Inter-State Commerce Commission will develop the difficulties of the plan. While we are not pessimistic as to the value of this work, still we believe it will not meet with the expectations of those who framed the statute under which work was undertaken. And we most strongly urge the necessity, both on the part of the Inter-State Commerce Commission and the States, of being awake to the program of the carriers involved to lay a foundation for proceedings in court which may ultimately vitally affect both regulation, while regulation exists, and public ownership should the Government find it necessary to enter into ownership of the railroads of this country.

A report of the Committee on Shippers' Claims presented by Commissioner James S. Harlan showed that steam carriers having annual revenues exceeding \$1,000,000 and representing 220,062 miles, or approximately 90% of the total mileage of the United States, reported a grand total of 2,424,996 claims presented, of which 1,895,432 were adjusted during a period from Jan. 1 to June 30 1914. The period of adjustment varied from 15 to 180 days. At the end of the six months' period there remained unadjusted 529,564 claims, or 22% of the claims received. The majority of the unadjusted claims were presented in the last thirty days of the period under consideration. This shows that 78% of the claims received were adjusted, and of those adjusted, 88.6% were paid, 9.8% declined and 1.6% withdrawn. These percentages, Justice Harlan pointed out, "tend to refute to some extent the assertion so often made that carriers purposely evade payment of a large proportion of claims." In calling attention to the increase in loss and damage claims for freight, the report said:

In recent years there has been an abnormal increase in the payments for loss and damage to freight. In 1900 the amount paid on this account was \$7,055,622, while in 1913 it was \$30,885,454—an increase of 337%. During the same time freight earnings have increased 109%, showing that the increase in payments for loss and damage is entirely out of proportion to the increase in freight business.

The report, in assigning causes for this disproportion, refers to the tendency of shippers to use a cheaper and frailer grade of shipping containers.

Railway Commissioners representing Iowa, Nebraska, Washington, California, Montana, North Dakota, South Dakota, Minnesota, Oregon, Missouri, Kansas, Texas and Oklahoma petitioned the Inter-State Commerce Commission on the 21st to suspend increases in freight rates proposed by Western railroads, effective Dec. 15.

The roads operating west of the Mississippi River have filed freight tariffs with the Commission, effective Dec. 15, making advances in commodity rates. The increases are not flat on all freight, as was the case of the Eastern lines, but vary in amount according to the commodity. The advances range, it is estimated, from 2% to approximately 12%. They affect all the commodities that ordinarily enter into inter-State transportation.

THE DANBURY HATTER'S CASE.

The so-called Danbury Hatters' case has been advanced for hearing by the United States Supreme Court on Dec. 7. The defendants, the United Hatters of North America, seek a reversal of the judgment of \$252,131 awarded to the plaintiffs, D. E. Loewe & Co., hat manufacturers, of Danbury, by the U. S. District Court at Hartford in October 1912, and sustained by the U. S. Circuit Court of Appeals last December. In the argument filed on behalf of the defendants in the Supreme Court it is contended that most of the 186 defendants did not participate in the slightest degree in the boycott of the hats of D. E. Loewe & Co. for which they were convicted. "They were made defendants," the brief asserted, "because they were members of local hatters' unions, in the respective places where they lived, which were affiliated with the United Hatters, and because they owned property." It is urged that the laborers could not be held liable for the campaign against Loewe & Co. carried on by the President of the National United Hatters' Union, and its advertising agents, because, if the officers engaged in illegal acts, they exceeded their authority. The Connecticut laboring men, it is further argued, through their conventions, merely authorized their agents to advertise the union label and not to boycott any one; consequently responsibility for any unlawful acts should rest upon the officers and agents of the national union and the officers and members of the unions in Virginia and on the Pacific Coast, which placed the Loewe hats on the unfair list. The attorneys for the defendants declare that the attitude of the trial Judge injured the cause. "Just as the trial Court was niggardly in giving instructions requested by the defendants, and hostile to the defendants in the instructions which were given," they said, "so it was prodigal in its liberality in admitting evidence offered by the plaintiffs."

WOOL EMBARGO TO STAND.

Advices to the effect that Great Britain has declined to modify, in favor of American manufacturers, the embargo on exportations of wool from Australia and other British dominions, were reported from Washington on the 20th inst. It had been hoped, it is stated, that after the needs of the British army had been satisfied Americans might be permitted to buy the Australian surplus, giving guaranties that neither the wool nor goods made from it would reach Austria or Germany; the State Department, however, was informed on the 20th that, for the present at least, no exceptions would be made. It is understood that the decision of the British Privy Council as to wool applies also to rubber. On the 23d inst. it was reported that Ambassador Page had informed the State Department that the embargo applies in equal force to meat, wool and woolskins, all of which England desires to conserve for the use of its armies and navies. As soon as there is a surplus above its requirements, exportation to the United States will be permitted, we learn from the "Journal of Commerce," if a proposed arrangement now under discussion is acceptable to both governments." Reports on the 19th inst. stated that Great Britain's embargo on wool does not prevent the shipment of mohair and spun wool to the United States.

COTTON SHIPMENTS TO GERMANY.

Announcement was made at the State Department on the 23d of the receipt of advices from the American Legation at The Hague that the Foreign Office of the Netherlands Government states that no difficulties will be presented to consignments of cotton in transit to Germany or to transshipment of cotton consigned to Dutch firms, and that before or upon arrival of shipments consigned to Dutch firms, transit permits may be obtained by them from the Netherlands Government.

GERMAN DECREES REGARDING POTATO PRICES, BILLS OF EXCHANGE, GOLD SPECULATION, &c.

The following cable advices were received from Berlin, via The Hague and London, on the 24th inst., concerning the decrees issued on that date by the German Bundesrath prohibiting gold speculation, fixing the price, which growers are to charge for potatoes throughout the Empire, extending the time for protesting bills of exchange, &c.

The Bundesrath to-day fixed the price which growers are to charge for potatoes throughout the Empire.

For purposes of classification the country has been divided into four sections. The first consists approximately of the territory to the east of Elbe, and here the price is fixed at 2.75 marks (66 cents) per decalitre (9.08 quarts). The second section is the Kingdom of Saxony and the district of Thuringia, where the price is 2.85 marks (68½ cents) per decalitre. In the third section, which is northwestern Germany, the price is 2.95 marks (71 cents) per decalitre, and in the fourth section, comprising the western and southern portions of the Empire, the price is 3.05 (73 cents) per decalitre. These prices are for the best qualities. For inferior qualities the price is 25 pfennigs (6 cents) less.

Another measure adopted by the Bundesrath was to prolong by thirty days the time for protest on bills of exchange in Alsace, Lorraine, East Prussia and a few cities in West Prussia. The regular time of protest taken with this extension gives at present a protest period of 150 days.

The Bundesrath decreed also that every attempt to buy or sell the gold coins of the Empire at prices above their nominal value, or the aiding in such transaction, would be punished by imprisonment for one year and a maximum fine of 5,000 marks (\$1,250). At the same time the coins destined for such transactions will be confiscated.

A decree has been issued for the city of Berlin and the Province of Brandenburg which sets forth that it is the duty of everybody to supervise with care the use of wheat flour. Bakeries, hotels and restaurants using wheat flour must finish their baking before 2 p. m. every day, and they may not begin preparations for baking before 8 p. m. Wheat bread may not be placed freely at the disposal of guests in inns, cafes and restaurants.

AMERICAN FEDERATION OF LABOR UPHOLDS CLAYTON ANTI-INJUNCTION PROVISION.

On the 21st, the concluding day of the two-weeks' convention of the American Federation of Labor, a resolution was adopted pledging its support to the labor-injunction provision embodied in the Clayton Anti-Trust Law. The resolution states:

Whereas, the Federal Court at Indianapolis has granted a temporary injunction against the members of the Amalgamated Association of Street and Electric Railway Employees of America, forbidding them the right of exercising their Constitutional liberty as provided under the recent Clayton bill, passed by the United States Congress, which guarantees to the workers the right to suspend labor in order to protect their interest as wage-workers without interference by injunction, the President and executive council of the American Federation of Labor are hereby instructed to co-operate with and give all the assistance possible to bring about and secure a satisfactory decision in this case, in order to establish clearly and without question the Constitutional right of the workers and thereby put an end to injunctions against wage-workers struggling for their lives.

Secretary of Labor Wilson, speaking at the convention on the 20th inst., characterized the new Clayton Anti-Trust anti-injunction bill as "the most important forward step

made by and for labor in the last two generations." In part Secretary Wilson said:

During the forty-three years of my experience in labor unions, most of it active, I have never understood that the trade union movement meant anything but justice to the wage-earners and never understood that the movement aimed to impose an injustice on any one. There can be no industrial peace that is not based upon industrial justice to labor. You men are fighting for industrial justice. My Department is doing its best to bring it about—industrial justice for labor and for its employers at one and the same time.

Secretary Wilson said there were still extremists who look upon the workmen only as part of the machinery of an establishment. When a piece of machinery is crowded and breaks down from strain, it costs the employer something to repair or replace it. "Not so with the human being," declared Mr. Wilson. "When the human machine is crowded and breaks down from strain, it costs nothing to replace it. We contend that the human machine should be treated differently from inanimate machinery. The human machine is entitled to the same consideration as the human being that is not employed." In the Clayton law, he said, we have given the right viewpoint on labor. Labor at last, the Secretary said, has been placed where it ought to be, as a part of the community. "We recognize that the employers have the right to own land, plants, and machinery," he said, "but we contend that they do not own the man, and for the first time in the history of this country labor is declared not to be a commodity or an article of commerce."

A resolution calling for the establishment of an arbitration and mediation department of three members, to have final power in solving all the disputes which come up between the international unions composing the Federation, was offered by Chairman O'Connell of the Adjustment Committee, and a member of the Federal Commission on Industrial Relations. According to the Philadelphia "Ledger," the proposal will be taken under consideration for one year by all the union men of the country, and especially by the Federation's executive council; it will be definitely decided by the 1915 convention. The convention refused to endorse the proposal for a universal eight-hour law on the Pacific Coast, and a proposition of the Bridge and Structural Ironworkers for the establishment of a labor bank was also voted down. With regard to the Federation's action in the eight-hour matter, Ernest Bohm, Secretary of the Central Federated Union of New York City, is quoted in the "Sun" as saying:

Wherever the eight-hour workday rules, it has been brought about by the unions. The development of labor-saving machinery may require us to agitate for a seven-hour or a six-hour workday. With an eight-hour workday on private work established by law, the unions would be hampered in their efforts to further reduce the working hours.

Samuel Gompers was re-elected President of the Federation for the thirty-third time and Frank Morrison was re-elected Secretary.

TRADING WITH THE ENEMY.

The London Board of Trade issued the following notice on the 7th inst. bearing on the King's proclamation of Sept. 9 (published in these columns Oct. 24) dealing with trading with the enemy:

(1) The attention of importers and exporters is directed to the provisions of His Majesty's Proclamation dated Sept. 9, relating to Trading with the Enemy. By paragraph 5 (7) of this Proclamation all persons resident, carrying on business, or being in His Majesty's Dominions, are warned "not directly or indirectly to supply to or for the use or benefit of, or obtain from an enemy country or an enemy, any goods, wares or merchandise; nor directly or indirectly to supply to or for the use or benefit of, or obtain from any person, any goods, wares or merchandise for or by way of transmission to or from an enemy country or an enemy; nor directly or indirectly to trade in or carry any goods, wares or merchandise destined for or coming from an enemy country or an enemy." It is further provided by paragraph 3 that the expression "enemy" in the Proclamation means "any person or body of persons of whatever nationality resident or carrying on business in the enemy country, but does not include persons of enemy nationality who are neither resident nor carrying on business in the enemy country. In the case of incorporated bodies, enemy character attaches only to those incorporated in an enemy country."

(2) With a view to preventing breaches of this Proclamation, it is hereby notified that the Commissioners of His Majesty's Customs and Excise have been authorized by His Majesty's Government to require Certificates of Origin or Declarations of Ultimate Destination, respectively, to be presented in respect of all goods, wares or merchandise imported into or exported from the United Kingdom in trade with any foreign place in Europe or on the Mediterranean or Black Seas, with the exception of those situated in Russia, Belgium, France, Spain and Portugal.

(3) Declarations of Ultimate Destination will consequently be required until further notice in respect of all exports, without regard to value of consignments, to all the foreign places referred to above.

(4) For the present, however, Certificates of Origin will not be required in respect of imports of foodstuffs, of timber of any kind (including pit-props), strawboard, wood pulp, iron ore, granite, ice, tar, or carbide of calcium, or in respect of any imports from places other than those situated in Norway, Sweden, Denmark, Holland, Switzerland and Italy, or in respect of individual consignments not exceeding £25 in value.

(5) Any goods, wares or merchandise imported from the above-mentioned foreign places, except as provided in paragraph 4, unaccompanied by Certificates of Origin, will be detained by the Commissioners of Customs and Excise until the requisite certificates are produced. The Commissioners are, however, authorized in such cases, and at their discretion, to

allow delivery of the goods on the security of a deposit or of a bond to the amount of three times the value of the goods, with a view to the production of the necessary certificates within a prescribed period, provided that they see no reason for suspecting that the goods emanate from an enemy country.

(6) Goods, wares or merchandise sought to be exported to any foreign places in Europe, or on the Mediterranean or Black Seas, with the exception of those situated in Russia, Belgium, France, Spain and Portugal, will not be allowed to be shipped until Declarations of Ultimate Destination in the form prescribed have been lodged with the proper Customs authority.

(7) A single Declaration of Ultimate Destination may be used to cover any number of consignments by the same exporter from the same port by the same ship at the same time.

(8) Declarations of Ultimate Destination must be made by the actual exporter or by some responsible representative of the actual exporter (or in the case of a Limited Company by a Director, Secretary, Manager or other responsible officer) having a personal and first-hand knowledge of the inquiries made and of the facts stated in the Declaration. Carrying Agents are not regarded as competent to make the Declaration.

(9) The following goods will be exempt from these requirements: (a) Goods imported under license; (b) goods shipped for the United Kingdom on or before Nov. 19 and hitherto exempted; (c) goods in respect of which Customs export entries have been accepted before the publication of this Notice.

Board of Trade, Nov. 7 1914.

Attorney-General Sir John Simon introduced in the House of Commons on the 20 inst. an amendment to the Act covering trading with the enemy. He said his aim was to stop the transmission of credits which would be advantageous to the enemy. He stated that everybody holding property in trust, such as dividends, profits, &c., belonging to enemies of the British Empire in Germany, Austria and Turkey, would henceforth be required under penalty to pay these profits to a public trustee. The Attorney-General explained that indiscriminate confiscation was not intended. "We are preserving the enemy's property until the end of the war," he said. "What will happen to it at the end of the war can very properly be decided then."

ESTABLISHMENT OF THE DOLLAR EXCHANGE.

The proposal to make the American dollar the basis of foreign exchange formed the topic of discussion at the monthly luncheon of the American Manufacturers' Export Association on the 18th inst. David Penny, Vice-President and manager of the foreign exchange department of the Irving National Bank, in his remarks on the subject, declared that "all of us who have any business relations with South America should take such steps as are possible to permanently establish the dollar exchange, and the American banks down there will compel their competitors to quote sight and 90-days New York, which has not been done hitherto." Mr. Penny in his further remarks on the subject said:

It must be borne in mind that America is a comparatively new country. Importers and exporters here wishing to trade abroad have heretofore had to adapt themselves to the financial customs as they were found, and conduct their trading operations in foreign moneys, of which the English pound sterling takes the lead. The one thing apart from the breaking down of European credit machinery due to the war, which will have the greatest permanent effect in advancing the importance of the dollar and tending to make it the basis of international exchange, is the establishment of the Federal Reserve system, which will regulate and support a free discount market for prime bank acceptances. Mr. Warburg very aptly called the opening day the 4th of July in finance.

When our importers have had to pay over \$6 per pound sterling and 25c. per franc to cover purchases based on normal rates, and were actually engaging passage on European steamers to personally discharge their obligations in American gold coin, (as was actually done at the beginning of August), and exporters are selling their German and Russian funds at 21½c. per mark and 40c. per rouble, it is time that they should get together and take steps to give the dollar the place it deserves in international transactions. I cannot see, however, that we can become the clearing house for the world until our people invest freely in foreign enterprises as well as foreign State loans, and there will, no doubt, be many attractive propositions offering along this line, needing only a careful discernment of merit.

Alba B. Johnson, President of the association and President of the Baldwin Locomotive Works of Philadelphia, made known at the luncheon that a committee of the National Foreign Trade Council, of which he is a member, has been engaged in a study of the question of dollar exchange, and that it is shortly to lay before the Federal Reserve Board a proposal looking to the carrying out in a practical way "the work of establishing permanently exchange between the United States and South America, and later with other countries, on the basis of the dollar, without having to incur the double loss of exchange by reason of conversion into sterling and subsequent conversion into money of this country." Mr. Johnson added:

The difficulty of the whole problem is the establishment of credits in the other country to be good, notwithstanding an adverse balance in favor or against either country. How can that be accomplished? One of the suggestions to that end which will be made to the Federal Reserve Board is this: That the State Department of the United States, through its accredited representatives in foreign countries, will be asked to accept a deposit from the nations of South America large enough to cover the transactions between them and the United States for a given period. So that those banks will be guaranteed—practically guaranteed—in accepting bills from the United States upon the basis of dollar exchange, and similar guaranties will be made through the Federal Reserve banks in the United States. So that both our own bankers and those of foreign countries can, under the rates of discount which shall be established by the rulings of the National

Reserve Board, be able instantly to accept bills drawn by the other country at the established rate of discount, so that under the auspices of those countries, from time to time the balance of trade can be adjusted. It seems to me that this is a perfectly direct and practical suggestion to be made, by which this difficult problem can be solved at once, and solved upon such a permanent basis that the return to normal conditions will not affect it.

THE PIPE LINES AND THE COMMERCE COMMISSION.

The Inter-State Commerce Commission announced on the 18th inst. that investigation into the reasonableness of the rates and practices of the pipe lines will be resumed on a new basis; its announcement said:

Since the Supreme Court in the early summer decided the so-called pipeline case, holding that the respondents were common carriers and subject to the Act to regulate commerce the Commission has received numerous inquiries relative to its future action under docket No. 4199, which covers the original order of investigation into the reasonableness of the rates, rules, regulations and practices of pipe lines which are subject to the Act. The jurisdictional question now having been settled, the proceeding has again been taken up and is now being actively prosecuted in accordance with its original terms which bring into question the reasonableness of the rates, rules, regulations and practices of the pipe lines.

GERMANY PROTESTS AGAINST GREAT BRITAIN'S DISREGARD OF LAW OF CONTRABAND.

A protest made to the United States by Germany, in which England and France are charged with violating the Declaration of London relative to the Law of Naval Warfare, was made public on the 23d inst. In its protest Germany complains that the most vital modifications of the Declaration of London are contained in the rule concerning conditional contraband. The United States, in setting out its stand in the matter, as called for in the protest, indicates that it has withdrawn its support of the London Declaration. With this week's publication of the protest, publicity was given to a cablegram sent to Ambassador Gerard at Berlin on Oct. 14, which made clear the attitude of the United States; this cablegram was published as follows in the "Times" of the 26th:

Please inform the German Government that the Department's suggestion made to the belligerent countries for the adoption, for the sake of uniformity, of the Declaration of London as a temporary code of naval warfare for use in the present war, has been withdrawn because of the unwillingness of some of the belligerents to adopt the Declaration of London without modification. The United States Government, therefore, will insist that its rights and duties and those of its citizens in the present war be defined by the existing rules of international law and the treaties of the United States with the belligerents independently of the provisions of the Declaration, and this Government will reserve the right to enter a demand or protest in every case in which the rights and duties mentioned above are defined by existing rules of international law are violated or their free exercise hindered by the authorities of the belligerent Governments.

The protest declares that the additions and modifications which Great Britain has made to the London Declaration "are of such a nature that they obliterate the said Declaration in several vital points, and at the same time encroach on the accepted rules of international law." It adds:

Article 33 of the Declaration of London defines that there can be no question of conditional contraband except in the case where cargo is destined for the use of the administrative departments or the military force of the hostile Power. Moreover, according to Article 35, the question whether goods are conditional contraband or not can under no circumstances arise when the vessel is sailing for a neutral port. * * * The more lenient regulation with regard to conditional contraband established by the Declaration of London is simply set aside with the result that conditional contraband is virtually on the same footing as absolute contraband. In consequence, the supply by neutrals of objects of conditional contraband, especially of foodstuffs, destined only for the consumption of the inhabitants of a belligerent country, which is universally considered legitimate in international law, is practically rendered illusory, whereby the interests of the belligerents, as well as of the neutrals, are violated in a manner contrary to the law of nations. As events at the theatres of naval warfare prove, England proceeds in this respect in the most high-handed manner, even enforcing a control over the supplies destined for the countries adjacent to Germany, and thereby endangering their victualing. * * *

It is thus evident that the regulations issued by Great Britain and France and even more so their respective naval forces, are disregarding in the most wantonly way the provisions embodied in the Declaration of London relative to the law of naval warfare. It is their acknowledged aim to hit not only the military but also the commercial power of their adversaries by way of paralyzing neutral trade and in pursuing this purpose they encroach in an unjustifiable manner not only upon the legitimate commerce between the neutrals and the enemy, but also upon the commerce among the neutral countries themselves. It is true that thus far the Declaration of London has not been ratified. However, in its preamble it has been specially acknowledged by the delegates of all its signatory Powers, including those of Great Britain and France, that in the main the provisions of the Declaration of London are in accordance with the general acknowledged principles of international law, which must be considered so much more serious because in the course of former wars, in which she was neutral, notably in the Russo-Japanese war, Great Britain has always protested most emphatically against violation of international law of the indicated order.

The Imperial German Government must now study the question whether it will be able to continue to maintain the above attitude if the enemy Powers abide by the procedure observed by them, and if the neutral Powers allow such violations of the principles of neutrality to go on, to the detriment of German interests.

The Imperial German Government considers it, therefore, of interest to learn which position the neutral Powers intend to take towards the attitude adopted by Great Britain and France, contrary to international law and particularly whether it is their intention to take measures against the violence committed on board their merchant vessels against German subjects and German property.

GOLD EXPORTS FORBIDDEN BY TURKEY.

A decree is said to have been issued at Constantinople by which the exportation of gold is absolutely forbidden. All foreigners are ordered to deliver up the keys to their strong boxes in the banks. The object is to prevent the removal of gold deposited with the banks for the payment of coupons on the Ottoman public debt.

APPEAL TO BAR BELLIGERENTS FROM AMERICAN WATERS.

The principal nations of South America have asked the co-operation of the United States in negotiations with the warring powers of Europe to bring about the exclusion of all belligerent warships from the waters of North and South America and safeguard the trade of Pan-American countries with each other. Argentina, Chile, Peru and Uruguay, it is stated, have laid their suggestions before the Washington Government, while the Brazilian Government is considering the advisability of taking a similar step. Practically all the Central and South American countries have been circularized by some of the principal nations, resulting in a series of diplomatic conferences in Washington and the capitals of South America which are now in progress. While the proposals are different in character and scope, they all seek the same end—the restoration of the trade between North and South America, paralyzed by the European war. The movement also has for its object the removal of possible causes of serious friction between the countries of this hemisphere and the European belligerents on questions of neutrality.

None of the nations is committed to any particular plan, but all seek the co-operation of the United States.

The various plans thus far formally communicated to the United States are as follows:

1. The establishment of neutral zones on the Atlantic and Pacific coasts of North and South America within which the belligerents shall be asked to agree not to engage in hostilities, or interfere with commercial vessels. A meridian would be designated as the limit in each case.
2. The convocation of a general conference of diplomatic representatives and commercial delegates of all the countries of this hemisphere with powers to vote on steps which can be taken to protect and restore Pan-American trade.
3. The appointment by the Pan-American Union of a commission to recommend steps that would remove dangers to Pan-American trade.
4. Prohibition by all nations of the two Americas of the privilege hitherto exercised by belligerents of coaling in neutral ports, or the issuance of only a sufficient quantity of coal to enable a belligerent vessel to reach the nearest port of another country.

It is stated that already some of the Powers of Europe have been sounded on these propositions and it is understood that Great Britain is ready to deny her warships entry into Central and South American ports to coal if the United States approves the proposal and other belligerents agree.

The entire movement is as yet in a formative state and depends very largely for its progress on the attitude of the United States toward it. This Government, it is believed, is particularly anxious to take no steps which possibly would impair its influence with any of the belligerents in the eventual settlement of the war. South American diplomats, realizing this, have been seeking some common ground on which to act, so that practical results may be obtained without embarrassing the neutrals in their relations with the belligerents.

THE COTTON PROBLEM IN EGYPT.

Mr. Costi Pilavichi, of Pilavichi & Co., Ltd., Alexandria, Egypt, whose communication to the "Egyptian Gazette" on the "Crisis in Egypt" was given in these columns on Sept. 26 1914, page 864, has furnished us a copy of a second letter, which is given in full below. This second letter, which is practically a sequel to the first one and, in part, replies to criticisms thereon, is very interesting, but being self-explanatory requires no comment.

To the Editor, "Egyptian Gazette":

Sir—It was natural that a startling innovation such as the compulsory reduction of cotton acreage by the Government should arouse widespread criticism and disapproval. I regret to see, however, that all the adverse criticism leveled at the Government for taking the above step seems to be conceived solely from self-interested points of view, regardless of the reasons of vital importance which inspired the Government.

Critics like the "Manchester Guardian" have attacked the "reduction" decree from the theoretical point of view of the spinner's future supplies of the raw material necessary to his industry. Critics like the "Statist" commented adversely on my proposal merely as to the advisability of replacing cotton by cereals; passing lightly over the other questions. Finally your Liverpool correspondent, attacking the subject from all sides except the right one, declares that Egypt will be ruined unless we go on growing our usual crop, oblivious of present circumstances.

It would take up too much of your valuable space to go into the specious arguments of your Liverpool correspondent; the spirit of self-interest is only too apparent under the garb of anxiety for Egypt's welfare, which seemingly inspires the article. Let it suffice to say that not once in the whole of this lengthy impeachment has he attempted to see through the

Government's eyes or suggest some other measures to remedy the abnormal situation.

Review of the Situation.

For the benefit, however, of more impartial critics who, living abroad, might be unaware of the state of affairs which prompted the taking of such an unusual step, I will describe the situation in brief.

Egypt's sole cash asset wherewith to meet its numerous obligations is cotton. In normal times this product found a ready sale or at least was considered sufficient collateral for a loan of from three to three and a half pounds Egyptian per cantar. To-day not only has the value of cotton depreciated to two pounds Egyptian, but furthermore, owing to the scarcity of buyers and the absence of demand from abroad, its value as collateral is insignificant.

In countries normally constituted and of a homogeneous whole, the leading banking, financial, commercial and agricultural interests of the nation would have met, discussed the situation and taken common action to relieve the country. But the situation in Egypt is so complex—what with its different nationalities, lack of initiative and organizing power, the inherent inertia of its Oriental mind, the instinctive mistrust of neighbors' intentions, and especially the total lack of any financial organization managed and inspired by local magnates alone, who would be willing to take action for the benefit of this country without being hampered by the whims of foreign boards of directors—that ordinary measures could not be looked for or expected to prove efficient.

This Year's Inextricable Difficulty.

Only people who have lived long in Egypt and are aware of the difficulty of obtaining concerted action of private interests can appreciate the inextricable difficulty in which the Government found itself.

A crop of 7 millions was about to be marketed; the value of this crop had to pay, not only the taxes but all the numerous other obligations of the country; owing to the state of war not only were half the markets for this cotton totally closed to it, but the consuming power of the rest was severely impaired; no buyers were forthcoming for this cotton, consumers being content for the while to use up their old stocks; even investing buyers kept off, owing to the lack of financial facilities; to cap the climax, in two months the country would start preparations for another crop of equal dimensions.

The situation was extremely serious and all eyes were turned to the Government; from that quarter alone could salvation come. The Council of Ministers had to supply not only the financial means whereby the crop could be moved, but further offer some inducement to buyers. Yet how could any one reasonably expect traders or spinners to purchase otherwise than hand to mouth? There lay before them the certain prospect of declining prices, due, not only to the burden of a heavy surplus from this crop, but also the impending menace of another such huge supply from the crop to be sown. Something had to be done to relieve buyers of this menace of seeing their to-day's cheap purchase turning out dear and the value of their stocks dwindling slowly with every fresh arrival of unsalable cotton.

The Fellah and the New Law.

And what were the prospects facing the fellah? Cotton at its value of to-day was barely remunerative; add to which it was proving to be totally unsalable. How were they to meet all their numerous and urgent obligations? Some other more easily salable crop had to be grown; but it was doubtful whether they would overcome their inertia of mind and mistrust of their neighbors sufficiently to take upon themselves each one and all the voluntary initiative of such a step.

No; it was expecting too much from the Egyptian, and the Ministers knew their countrymen only too well when they advocated the compulsory reduction in acreage. Even as it is, I doubt the efficiency of the means employed to ensure the enactment of the decree; each one will try all in his power to steal a march on his neighbor.

As for the Government, they knew only too well that their taxes could only be paid if the fellah's cotton was sold and the unsalability of Egyptian cotton means the non-payment of their Public Debt obligations; not only had they to remedy the condition of things but they had to prevent its recurrence next year.

Such were the motives which inspired the Government to issue this much criticized decree. They are asked why other interests were not consulted; we can affirm that they were, and the result of this consultation only confirmed the Government's idea that a reduction of acreage was imperative.

Yet, drastic as the measures taken by the Government may seem to some, those living in the country seem to consider them incomplete. Projects of cotton valorization are continually being put before the Government, happily without result, for any attempt to interfere with the normal course of supply and demand would bring further disasters to this unfortunate country.

Avoiding Responsibility.

Although not attempting to criticize the Government, yet I must admit that everyone expected it in this grave crisis of Egypt's existence to shoulder certain responsibilities and to assume certain risks which, while not amounting to considerable, would relieve the situation and give the necessary impetus to the stagnating business world. The ideas outlined in my letter of Aug. 26 in re a Government guarantee to banks, might easily have fulfilled its necessary purpose if put into execution. The risks involved were not an atom of those incurred by the British Government in guaranteeing the Bank of England against loss in the discount of pre-moratorium bills. Yet look at the far-reaching effects of that courageous decision. The Government of Egypt issued £8,000,000 Treasury bills to provide the necessary finances for the moving of this season's crop. This sum will be advanced to the banks in the form of a loan to enable them to pay their deposits and resume active business. Yet how much has the knowledge of impending relief steadied the cotton market or reassured holders. Cotton is being sold to-day \$2 cheaper than the day the Government intentions were known and there is every evidence that it will not stay at that.

To-day, with the knowledge of one of the poorest crops grown, of a reduced acreage next year, of Government money to finance the crop movement, and of the avowed intention of all the large landowners to hold for better prices, cotton keeps on getting cheaper.

And who is being affected by this continual melting away of prices? Is it the large dairas, the land companies, the rich owners of Upper and Lower Egypt? No, it is the small holder, the one-feddan fellah, the man for whom the five-feddan law was made, the man Kitchener tried to save. He forms the vast majority of cotton growers. He cannot hold his cotton, pressed as he is on every side by tax-gatherers, the banker and the usurious army of lenders in every shape and form; cotton has to be sold at any price it will fetch, in the nearest market, and to provide for the deficit in his meagre budget his cattle will have to go next, and we know what that means.

The Lack of Confidence.

Surely such a state of affairs justifies us in believing that a grave flaw exists in the Government plan which seriously impairs its efficiency in achieving the results hoped for. There is lack of confidence in the value

of cotton on the part of everybody connected with it; from grower to banker and spinner. To the absence of official markets to indicate exactly what the value of cotton will be three and five months hence must be imputed this lack of confidence; and since these markets cannot be opened without bringing about a complete commercial cataclysm, it is the Government's duty to provide an alternative.

I think that it is not too late even at this eleventh hour to elaborate the idea expounded in my letter on the 26th August, of a Government guaranteed *minimum* price at which cotton can be taken as collateral. I repeat that all that is lacking is confidence, and confidence must be restored at any price.

Yours truly,

COSTI PILAVACHI.

Alexandria, Oct. 19.

We give in our Cotton Department to-day the announcement by the Egyptian Government of its decision to authorize the buying of cotton extensively from small proprietors on Government account.

The Government's decree limiting the planting of cotton in 1915 and encompassing a reduction of over 50% in area was issued under date of Cairo, Sept. 22. As translated it reads as follows:

Cairo, Sept. 22 1914.—Decree.—Cultivation of Cotton: Considering that under present circumstances it is of the utmost interest for the country on one hand to limit the production of cotton in conformity with the reduction of the requirements of the market and thus maintain a reasonable price for the crop. On the other hand, in order to offset by overproduction of cereals any probable rise in prices on imported ones, or even to be in such a position as to profit by the exportation of any surplus of such local crops; upon the proposition of our Minister of Agriculture after duly consulting the Board of Agriculture and in conformity with the opinion of our Council of Ministers, we decree:

Article 1. The total area to be cultivated in cotton during the agricultural year 1915 is hereby limited to 1,000,000 feddans as a maximum.

To this effect: (1) The planting of cotton in the Upper Egypt basin is entirely prohibited; (2) it is also prohibited that any owner or lessee should cultivate more than one-quarter of the area of one and the same estate.

Art. 2. By exception to the above dispositions the proportion of land which may be planted in cotton may be brought up to one-third by the Minister of Agriculture's decision, provided he considers any such district or estate not suitable for the raising of cereals, without, however, the stipulated maximum of 1,000,000 feddans be exceeded.

Art. 3. The lands situated in the low areas which are divided into "Hochas" and which benefit by summer irrigation either directly from the Nile or from canals (by special authorization granted by the irrigation services), or by artesian or other wells, will be excluded from the application of paragraph 1, Article 1, and will be considered under paragraph 2 of the same Article as forming distinct estates.

Art. 4. In estimating the area of an agricultural estate for paragraph 2 of Article 1, no account will be taken of uncultivated land, nor of such land which is not adapted to normal cultivation. Further land situated in two or several villages will be considered as forming distinct estates unless a special authorization has been made.

THE PROPOSED CREATION OF A MARKET COMMISSION.

The centralization of the market functions now resting with various city departments is urged by the Executive Committee of Mayor Mitchel's Committee on Food Supply in a report submitted to the Mayor under date of the 20th inst. by George W. Perkins, Chairman of the Committee. The committee, which came into being at the outset of the European war, when an unwonted advance occurred in food prices, announces in its latest report (an earlier one was referred to in these columns September 5) that it is drafting a bill providing for a Market Commission; only by the establishment of some such board or commission, it believes, can the question of terminals, public markets, market conditions, market regulations, &c., be put on a basis that will be efficient and helpful. The issuance of market bulletins for the benefit of the retail dealer and the consuming public is suggested as a means of more or less regulating the food supply, and the establishment of municipal cold storage plants is also advocated by the committee. Its report in full follows:

November 20 1914.

Hon. John Purroy Mitchell, Mayor of the City of New York, New York City.
Dear Sir.—The Executive Committee of your Food Supply Committee submits its fourth report as follows:

Market Commission.

Referring to the several conversations that members of this Committee have had with you during the past few weeks on the subject of a Market Commission, we beg to report that we are drafting a bill which we will submit for your consideration very soon. Your Committee believes that only by the establishment of some such Board or Commission can the question of terminals, public markets, market conditions, market regulations, &c., be put on a basis that will be efficient and helpful to the citizens of New York. At present there is no centralized bureau responsible for food supply conditions in New York City. Some market functions are under the respective Borough Presidents, some under the Comptroller, some under the Board of Aldermen, the Dock Commission, the Superintendent of Markets, the Bureau of Weights and Measures, the Department of Health, &c.

We strongly recommend that these functions be centralized as speedily as possible in some one board or department that would be responsible and invested with broad enough powers to eradicate existing antiquated methods and install new, up-to-date, more economical and efficient methods, along the lines of the reports of this committee and the many excellent recommendations made in the report heretofore submitted by the Mayor's Market Commission, of which Mr. Cyrus C. Miller was Chairman.

Market Bulletins.

Your committee finds that one cause of the high cost of living is lack of information on the part of the purchasing public as to when certain

articles of food are to be had in abundance in this market and when they are scarce. Vast quantities of food are often wasted and thrown away because they cannot be sold for enough to pay transportation charges; and yet our great purchasing public is ignorant of the fact that the supply has reached the city.

Your Committee believes that producer, dealer and consumer could all be materially benefited if a market commission as above suggested were empowered to issue bulletins—one for the benefit of the retail dealer and the consuming public in this city and another for the benefit of producers and shippers who consign food supplies to this city. To be made effective, the first-named bulletin would doubtless have to be issued daily through the newspapers, in a block of space assigned especially for this purpose, so that every housewife and purchaser of food supplies as well as every retail dealer would know exactly where to look for this bulletin, would consult it daily and would rely upon it as a guide. Such a bulletin would also greatly help our vast number of retail dealers through broadening the market for the goods they carry.

The bulletin for the benefit of producers and shippers should be issued for the purpose of informing them as to the demands in New York and as to the condition each day of the market in New York from the standpoint of scarcity or oversupply—an official statement that would enable shippers to know the exact conditions each day in New York on all items of food supply. Under present conditions, many producers and shippers have ceased sending supplies to New York because of their experience in the past in being told that their goods reached New York at a time when the market was glutted with similar goods and that their consignment had to be sold at ridiculously low prices or else be thrown away.

Such a bulletin, to which purchasers and shippers could subscribe, giving official information each day on this whole subject would be not only a help to the many thousands of producers who ship to New York, but it could gradually be made the means of more or less regulating the supply of foodstuffs coming into New York and could be issued by a bureau that would co-operate in establishing a more uniform system than now exists in the matter of packing and grading goods. Under our present market system a large waste and expense now exists because of a lack of knowledge on the part of many shippers as to the requirements of the New York market.

The first bulletin would be an expense to the city, but the second bulletin could doubtless be made a paying proposition. The bureau that issued these bulletins could also answer any telegraphic requests from distant points as to the demand in this city for any given article that was to be had in abundance at any distant point. In this way the bureau would gradually develop and promote broader markets from which to gather our food supplies.

Cold Storage.

Terminal facilities and markets cannot be made efficient these days without cold storage accommodations. This city has spent many millions of dollars building reservoirs in Greater New York in which to store water for future use. It has not spent a dollar for cold storage in which to store food for future use. Cold storage has come to be a great and important factor in saving the waste and in equalizing the distribution of food throughout the year. The cold storage plants in New York are privately owned. Had it not been for the private cold storage plants in and about New York at the time of the floods in Ohio several years ago, this city would have been greatly inconvenienced in connection with its food supply, as these cold storage plants were heavily drawn on at that time. The same thing occurred during our heavy storms of last winter.

The cold storage facilities of New York are not sufficient for present needs. At this time there is not an inch of available cold storage space to be had in Greater New York or Jersey City.

Cold storage facilities could be made of very great advantage to retail dealers throughout the city and save an enormous amount of food that is now wasted. If municipally controlled or owned, they could be so administered as to have a most salutary effect on such tendency as may exist in any quarter to monopolize or improperly control the food supply of this great city. The City at this time ought to very seriously consider whether municipal cold storage plants should not be established. This is being tried in other cities, and a properly established market commission could speedily determine the practicability of this suggestion.

Fish Markets.

There is perhaps no city in the world so backward and destitute in the matter of anything that resembles proper fish markets as New York. At the same time, there is probably no city in the world that ought to have as good fish markets as New York, where fish can be supplied so abundantly and, with proper markets, so economically. Thousands of tons of fish that might be used are thrown away in our very harbor and thousands of tons of fish are sent to Barren Island to be converted into fertilizers, because of the lack of proper facilities for reaching consumers. Many carloads of fish are shipped from New York to other cities that ought to be consumed here. The lack of knowledge among our people of the value of fish as an article of food and the lack of ability to get fish that is fresh and get it at reasonable prices is little short of a disgrace to a city like ours. Immediate attention should be given to this matter. It is a fair question whether New York as a city ought not to take up the question of handling and regulating its fish supply and do it promptly.

Retail Dealers.

Your Committee feels that the retail dealers of Greater New York, in matter of all food supplies, are at a great disadvantage and seriously handicapped in their efforts to supply their customers with good goods and fresh goods at reasonable prices. In most cases they have to pay large rents, go a long distance for their supplies, and deliver them to their customers at considerable cost, and inconvenience. These retail dealers, however, are indispensable in our system of distributing supplies to consumers. Every facility should be rendered them so that they can obtain their goods in a fresh condition and at the lowest possible cost. A great many of them make just a bare living and do that only through the hardest sort of work, very long hours of work, and with constant anxiety and risk.

City Delivery.

After our retail dealers receive their food supplies from such crude, inadequate and inconveniently located centres as now exist, the expense of delivering them to the consumer is not only very large but very wasteful. Lines cross each other in every direction. Work is duplicated time and time again. It is no uncommon thing to find as many as twenty grocery wagons calling in a day at a given apartment house to receive and later on deliver orders. The expense of this is, of course, borne by the ultimate consumer and is estimated to be 10% of the average groceryman's expense.

Not a great while ago, the city of Rochester made an exhaustive study of the cost of supplying itself with milk and found that if it were to establish three separate milk depots in different parts of the city, and all the milk for the city as it came from the farmers was delivered to these three depots and then delivered to the consumers through one delivery organization, a saving of approximately half a million dollars a year, simply in the item of delivering milk, could be effected. In Emporia, Kansas, delivery

of meat, vegetables and groceries by individual dealers has been abandoned and one company organized that picks up all these articles at given hours in the day and delivers them.

Your Committee feels this is such an important question that it should be studied exhaustively; that the co-operation of the retail dealers should be obtained in an effort to establish a zone system, if possible, or some sort of co-operative delivery that would materially save the waste and reduce the cost of this important item of transportation. The question of utilizing the parcel-post should be studied in this connection, and a properly organized market commission having a grasp of the needs of the entire city could doubtless solve this important problem, at least in part.

Respectfully submitted on behalf of the Executive Committee of the Mayor's Food Supply Committee.

Very truly yours,

GEORGE W. PERKINS,

Chairman.

MUTUALIZATION OF METROPOLITAN LIFE INSURANCE COMPANY.

Plans for the mutualization of the Metropolitan Life Insurance Company, which have already been approved by the directors, have been presented to the policy-holders for ratification. A majority of the stockholders, it is understood, have signified their approval of the proposal, but a stockholders' meeting is to be held on Dec. 4, when formal action will be taken in the matter. The policy-holders are asked to meet at the company's offices at 1 Madison Avenue on Dec. 28 to pass on the proposition. A letter addressed to the policy-holders by President John R. Hegeman, outlining the proposal, says:

The capital of the company is \$2,000,000, divided into 80,000 shares of \$25 each, and the dividends to the shareholders are limited to 7% per annum. The charter provides that the net surplus derived from the business of the industrial department shall be added to the capital stock as additional security to the policy-holders.

The laws of New York make provision for the mutualization of stock insurance companies under a plan for the acquisition by the company of its capital stock, which shall be approved, first, by a majority of the directors; second, by a majority of the capital stock at a meeting of the stockholders called for the purpose; third, by a majority vote at a meeting called for the purpose of policy-holders each insured in at least \$1,000, and whose insurance shall then be in force and shall have been in force for at least one year prior to such meeting, and fourth, by the Superintendent of Insurance.

The plan provides for the acquisition of the capital stock at the price of \$75 per share. Its adoption will call for the return to the stockholders of \$2,000,000, the share capital, from the assets of the company, and \$4,000,000 from the surplus. The total surplus at the end of September 1914 was estimated at over \$40,000,000.

The advantages to be derived by the policy-holders from the adoption of the plan include:

First—The absolute control of the management by the policy-holders. At present under the charter two-thirds of the membership of the board of directors must be stockholders owning together a majority of the stock.

Second—The safeguarding of the company for all times against schemes for obtaining stock control and for using such control to exploit the assets and income of the company. It is a grave peril to the interests of the policy-holders that the control of the stock may, through the death of those who are now stockholders and deeply interested in the welfare of the company and otherwise, be acquired by men who would seek to manage the company in their own interests and against the interests of the policy-holders and the public. The retirement of the stock avoids that peril.

Third—The conversion of all non-participating policies, except those excluded in accordance with provisions of the law, into participating policies. The savings and surplus will belong to the policy-holders, and their distribution, except the part held for the security of the policy-holders, will, under mutualization, be equitably made for the benefit of the policy-holders.

The company has in force over fourteen and a half millions of policies. Of these, over fourteen and a quarter millions are non-participating; that is, the policy contracts give no rights to the holders to share in the savings and surplus. The remaining policies, about 220,000 in number, are either intermediate policies issued between 1895 and 1907, or special class policies issued between 1898 and 1907, or policies issued by other companies assumed by the Metropolitan, all of which are kept in separate classes and which share in the savings and surplus earned by the respective classes, but do not share in the general savings and surplus.

No dividends or bonuses have ever been declared upon policies issued in the ordinary department since 1891, except upon policies comprised in the classes mentioned above, and there are no participating policies issued by the company outstanding issued prior to 1891. There are over a million of policies in the ordinary department which have never shared in the savings and surplus and have no right by their terms to share in them. There are over thirteen and a quarter millions of industrial policies which depend for any benefits out of the savings and surplus upon the voluntary action of the company in distributing bonuses and not upon the contract rights of the policy-holder. If the plan proposed be adopted, all these policies will participate in the savings and surplus under equitable rules prescribed by the directors, who will be elected by the policy-holders.

The letter further says:

The directors of the company believe that the price proposed to be paid for the stock is a fair one. The following are some of the elements that constitute the value of the stock in the hands of the present holders: The payment of the dividend of seven per cent is assured from year to year beyond peradventure. The stock is, therefore, practically speaking, a permanent seven per cent investment, which gives it a market value much above par. It has an additional value because of the control which it gives of the constitution of two-thirds of the membership of the board of directors. Another additional element of value is the provision of the charter which adds the net surplus of the industrial department to the capital, even though it is added as security to the policy-holders. Under these circumstances, an addition of \$50 to the par value of each share as a consideration of surrender would seem to be entirely fair, just and reasonable. There is no doubt that a larger price could have been obtained by the present stockholders if they had been willing to sell to men seeking to control the company for their own benefit; but that they have refused to do.

Under the plan proposed, payment to the stockholders is to be made on Jan. 5 next, provided the plan is approved by all those whose assent is necessary. The \$6,000,000 to

be returned to the stockholders is to be deposited by the company with the New York Trust Co. at its office, 24 Broad Street, where the stockholders will surrender their shares and receive payment. In the contemplated movement, it is stated, the stockholders will relinquish control of over \$547,000,000 of assets and their claims upon nearly \$40,000,000 of surplus or unassigned funds.

INCOME TAX REGULATIONS.

Under a Treasury decision of the 12th inst. it is held that dividends are vested in a stockholder on the date on which they are declared, whether distributed or not, and when so declared are to be accounted for in full in returns of income of individuals for the year in which they became due and payable. The following is the ruling in full:

DIVIDENDS TO BE ACCOUNTED FOR IN RETURNS WHEN DECLARED, WHETHER DISTRIBUTED OR NOT.

(T. D. 2048.)
INCOME TAX.

Taxable status of dividends paid on the capital stock from the current net earnings or established surplus created from the net earnings of corporations, joint-stock companies or associations and insurance companies taxable upon their net income.

Treasury Department,
Office of Commissioner of Internal Revenue.

Washington, D. C., Nov. 12 1914.

To Collectors of Internal Revenue:

Dividends from the net earnings or established surplus created from the net earnings of any corporation, joint-stock company or association and insurance company are vested in the stockholder on the date on which such dividends are declared, whether distributed or not, and regardless of the time when the surplus or undivided profits from which such dividends are declared were earned and entered on the books of the corporation as such. Dividends so declared should be accounted for in full in the returns of income of individuals for the year in which they became due and payable, whenever the amount of income is sufficient to require the inclusion of dividends, as provided in paragraph D of the income tax law and T. D. 1945, and should be included in the gross income of corporations, &c., regardless of the amount of income.

All decisions and regulations which are in conflict herewith are hereby revoked.

W. H. OSBORN,

Commissioner of Internal Revenue.

Approved: W. G. McADOO, Secretary of the Treasury.

KROONLAND FINED AT NAPLES.

The Red Star Line steamer Kroonland, which had been detained by the British Government at Gibraltar because of its copper cargo, but was released on the 8th inst., was fined \$2,200 by the Italian Government when reaching Naples on the 11th. The steamer carried Italian immigrants, and the fine, it is understood, was imposed as a penalty for its delay in reaching the Italian port. It is expected, however, in view of the circumstances attending the delay, that the fine will be remitted. According to the "Sun," the Kroonland was properly entitled to carry Italian passengers to Italian ports, and got her license before the Italian Government recently decided to make liners other than Italian pay \$4,000 and \$20 additional for each steerage passenger carried.

BANKING, FINANCIAL AND LEGISLATIVE NEWS.

A membership on the New York Coffee Exchange was reported sold yesterday for \$1,275.

It is reported that Chicago Board of Trade memberships have recently been sold for \$2,200, net to buyer, an increase of \$200 over last reported transaction.

Announcement is made of the appointment of Patrick F. Trower as Cashier and Chief Clerk of the Sub-Treasury at New Orleans, succeeding Milton W. Bell, who has become Assistant Cashier of the Atlanta Federal Reserve Bank. Mr. Trower has been identified with the Sub-Treasury about twenty years. He recently held the position of Vault Clerk.

Efforts to adjust differences in rural credits bills pending in Congress will be made at a conference of the United States Rural Credits Commission called for December 2 by its chairman, Senator Fletcher. The original bill, drawn under direction of the Commission, proposed that the system be administered by a land commissioner under supervision of the Secretary of the Treasury. After a joint hearing on that measure, Senator Hollis and Representative Bulkeley introduced bills proposing to incorporate the rural credits system into the Federal Reserve bank establishment.

At next week's conference the Commission will attempt to decide whether it will insist upon its original bill or approve the later proposal.

David Lamar, who was indicted in July 1913 by the Federal Grand Jury of New York on a charge of having

impersonated Congressmen Riordan and Palmer, will be placed on trial on Monday next the 30th. Ever since the indictment he had fought the proceedings for his removal from Washington, until the 6th inst., when he was arrested at the Waldorf. With his arrest it became known that a new indictment had been returned against him charging him with conspiracy, and naming as co-defendant Edward Lauterbach. The conspiracy charge, it is understood, is based on an alleged attempt of Lamar to get J. P. Morgan & Co. and the United States Steel Corporation to hire Lauterbach to call off the investigation of the Steel Corporation several years ago. Mr. Lauterbach pleaded not guilty to the charge on the 9th inst. and was released under a bond of \$1,000. An application for a writ of habeas corpus made by Lamar on the ground that the indictments were insufficient was denied by Judge Sessions of the U. S. District Court, this city, on the 17th inst. His demurrer to the indictments was overruled on the 19th by Judge Sessions, and November 30 was set as the date for the trial. After two weeks in the Tombs Lamar was released under bonds of \$30,000 on the 21st inst.

During the convention at Richmond, the Executive Council of the American Bankers' Association authorized the establishment of a Department of Public Relations—or a publicity department. The Administrative Committee, acting under authority vested with it by the Executive Council, has selected as Manager of the new department Arthur Welton of Chicago. Mr. Welton is also to assume the editorial management of the "Journal-Bulletin", the bulletin of the American Bankers' Association. The "Bulletin" states that the necessity for the new department has been apparent for some time, and recent developments have but emphasized the necessity for such a phase of Association activity. Concerning Mr. Welton, it says:

Mr. Welton has had wide experience in newspaper work in various capacities and was the managing editor at different periods of two prominent daily papers in large cities in the Middle West. During the existence of the organization, he was manager of the National Citizens' League in Chicago and at that time made a special study of banking and finance. He has a large acquaintance with the various press agencies, newspaper men and correspondents generally; also an extensive acquaintance among public men and bankers. He is an able writer.

Mr. Welton will at once assume the editorial management of the "Journal-Bulletin," and that periodical will become a more valuable monthly visitor to bankers than ever before.

At the Richmond meeting the Executive Council approved of the enlargement of the scope of the "Journal-Bulletin"; and while the "Journal-Bulletin" will not go into the field of general bank news, personal items and many other features which are now embodied in the financial journals, it will contain, in each issue, matter of decided interest to its subscribers in the way of instructive information on current topics of banking and currency legislation, the activities of the Federal Reserve banks, &c.

Mr. Welton's duties will also include general publicity work for the Association and items of interest to banks, bankers and business men will be prepared in an endeavor to furnish a broader knowledge of the workings of the Federal Reserve system and the functions of a bank, respectively.

The application of the war-tax to investment dealers and brokers is the subject of a bulletin just issued by the Investment Bankers' Association of America, containing a letter from Caldwell, Masslich & Reed, counsel for the association, with a copy of Treasury Decision 21152 of the year 1899. This decision held that bond and stock brokers were subject to the tax as brokers and not to the tax as bankers. The brokers' tax under the present law is \$30 a year, and the bankers' tax is \$1 a thousand on capital and surplus. Caldwell, Masslich & Reed also cite the case of Selden v. Equitable Trust Co., 94 U. S. 419, decided by the Supreme Court in 1876, construing substantially the same language used in the Civil War tax Act as that used in the present tax applying to bankers, and holding that it did not apply to a company whose business is in the investment of its own money in mortgage securities and selling such mortgage securities with the company's guaranty. As applying to investment houses and trust companies who also have a banking department, they cite the case of Central Trust Co. v. Treat, 171 Federal 301, affirmed 185 Federal 360, "holding that the bankers' tax under the Spanish War tax Act of 1898 only applies to so much of the 'capital and surplus' as is used in the banking business, and does not apply to capital and surplus invested in securities." In this case it was found that the trust company's banking department was entirely conducted with the depositors' money and that its "capital and surplus" were wholly represented by investments and were held not to be taxable under the law.

John B. Dillon, President of the State Agricultural Society, was appointed by Governor Glynn on the 20th inst. as Commissioner of the Department of Foods and Markets,

created under an Act of the Legislature to assist in the distribution of farm products and to aid in the organization of co-operative societies among producers and consumers. The salary of the commissioner is \$6,000 a year. Commissioner Dillon is empowered to establish local markets wherever he deems them necessary and to make rules and regulations for the grading, packing, handling, storage and sale of all foodstuffs.

Joseph A. Broderick was the guest at a testimonial dinner given in his honor by the thirteen past presidents of the New York Chapter of the American Institute of Banking last Tuesday night at the Transportation Club. Mr. Broderick was recently appointed Chief of the Audit and Examination Department of the Federal Reserve system and served the New York Chapter as President several years ago. His hosts presented him with a handsome solid gold watch fob, on one side of which is the Chapter pin, the other side bearing the inscription "To Joseph A. Broderick in appreciation of his long and unselfish service for the bank men of New York."

New York State Superintendent of Banks, Eugene Lamb Richards, has appointed Arthur J. Van Pelt of Brooklyn and Benjamin Fairbanks of Bronxville, as State bank examiners. The appointments were made necessary by the increased volume of business, due to the exaction of additional duties imposed by the revised banking law. Mr. Van Pelt up to the time of his appointment was in charge of one of the branches of the State Bank of New York City and had been in the employ of that bank over twelve years. Mr. Fairbanks for fifteen years was employed by the National Bank of Commerce in various capacities, having handled loans, discounts, stocks and bonds, and general correspondence of every kind. Mr. Fairbanks left the employ of the National Bank of Commerce in December last to accept a position with the International Paper Co. as Assistant Auditor, and later was transferred to the Treasury Department of that company, where he had since been employed.

Superintendent Richards has notified several temporary employees of the Private Bankers' Bureau of the State Banking Department that their services will no longer be required after December 1st next. These employees were engaged in July last under authority granted by the State Civil Service Commission. Although Superintendent Richards was authorized to employ them for a period of six months he has decided that the work connected with the Private Bankers' Bureau is now in such shape that he can dispense with their services on the first of next month.

The resignation of Matthew T. Horgan as Chief of the Liquidation Bureau of the New York State Banking Department tendered to State Superintendent Richards, to take effect November 15, was accepted by the latter on the 13th inst. Mr. Horgan's fitness for the post was under discussion in the recent election; his letter of resignation written under date of the 5th and Mr. Richard's acceptance were made public on the eve of Mr. Horgan's withdrawal last week as follows:

Eugene Lamb Richards, Superintendent of Banks of the State of New York, New York City.

Dear Sir.—I hereby resign my position in the Liquidation Bureau of the Banking Department, to take effect the 15th day of November, 1914. I do so fully conscious that there can be no possible criticism of the work that I have performed in the department. I am governed entirely by what I regard as the welfare of the Department and my own welfare.

During my connection with the Liquidation Bureau the Department and myself have been severely criticized for matters in no way concerned with my official work. Although such criticisms are unreasonable, malicious and untruthful, I can no longer consent to a continuation of these attacks upon my family, myself, and upon your department.

As you know, I voluntarily expressed my willingness to resign when these attacks were made last summer, and I certainly would have done so had my work in the Liquidation Bureau been the subject of the slightest criticism; but, inasmuch as there was no criticism of that work and as I felt that there could be no reasonable criticism, I continued my work until the present time. However, for the reasons above given, I now feel that it is due to you personally, to the Department, to myself and to my family that I be relieved immediately of my duties in the Department.

Respectfully yours,

MATTHEW T. HORGAN.

Matthew T. Horgan, Brooklyn, N. Y.

Dear Sir.—Your letter of November 5 resigning your position in the Liquidation Bureau of the Banking Department, to take effect on November 15 1914, has been duly received.

I note your expressed desire to avoid further criticism of this department and of yourself by longer continuing your connection here, and it is for that reason that I accept your resignation. I feel bound to say, in justice to yourself, that in all matters pertaining to your official duties you have been both diligent and efficient. While you have been severely criticised for events claimed to have occurred long ago, you have at no time been charged with incapacity or misconduct in the performance of your official duties in connection with this department, nor can any one familiar with the facts make such a charge.

Realizing, however, the importance of keeping this department free from public criticism, unjust or otherwise, and conceding your right to protect your name and your family from a further continuance of such criticism, your resignation is accepted.

Very truly yours,

EUGENE LAMB RICHARDS,
Superintendent of Banks.

Henry Siegel, of the failed private bank of Henry Siegel & Co., operated in connection with the Fourteenth Street Store, was found guilty on the 23d by a jury in the Supreme Court at Geneseo, N. Y., of a misdemeanor in obtaining credit on false financial statements and was sentenced by Justice Clark to pay a fine of \$1,000 and to serve ten months in the Monroe County Penitentiary at Rochester. So far as the prison term is concerned judgment is suspended until the second Monday in June, when the accused is to appear before Judge Clark. Bail to the amount of \$25,000 was furnished by the convicted man's bondsmen yesterday. The specific charge in the indictment on which he was tried accused him of having obtained \$684.05 for the Fourteenth Street Store from the National Bank of Commerce, by reason of false statements. Siegel's partner, Frank E. Vogel, who had also been named with him in the indictments, died suddenly of heart failure last month.

Eugene D. Greenleaf, formerly a member of the Boston Stock Exchange, died on the 16th inst. after several years' illness. He was at one time a member of the Governing Board of the Exchange, and for many years had offices at 53 State Street.

Edward T. Stotesbury, head of the firm of Drexel & Co. of Philadelphia, whose resignation from the board of the Philadelphia National Bank was announced last week, has also resigned as a director of the Franklin National Bank of Philadelphia.

C. Clymer Brook, also a partner in Drexel & Co., has retired as a member of the board of the Central National Bank of Philadelphia.

Charles W. Pickering Jr., Assistant Trust Officer of the United Security Life Insurance & Trust Co. of Philadelphia, died on the 17th inst. following an attack of acute indigestion. Mr. Pickering was forty-three years old; he entered the services of the trust company in 1901.

A charter has been issued to the proposed State Bank of Philadelphia. The organizers are Senator Samuel W. Salus, Gerson Dannenberg, Morris Polin, David Netter and Edward M. Brash and they have decided not to push the organization until financial conditions improve. The bank will be formed with a capital of \$50,000. Previous reference to the project was made in our issue of August 1.

The banking firm of Lewis Johnson & Co. of Washington, D. C., was placed in the hands of receivers on the 16th inst. The receivers were appointed in response to the petition of two creditors, who presented a letter to the court signed by the members of the firm, in which the latter admitted their inability to settle with their creditors in full. The petitioning creditors are G. W. Weber, a member of the stock exchange here, who has a claim of \$4,500, and Arthur M. Travers, \$1,000. The firm of Lewis Johnson & Co. was started in 1857 by Lewis Johnson; after his death the original firm name was retained. Charles T. Williams retired from the firm about two years ago, and William A. Mearns retired early in the present year. The two remaining members of the firm were J. William Henry and Benjamin W. Woodruff. Mr. Woodruff is a member of the New York Stock Exchange. The firm has always enjoyed a high standing. The conditions brought about by the war—the closing of the Exchange and the loss in trading—are said to be responsible for its embarrassment. The receivers are J. Miller Kenyon, a lawyer, and W. Morris Lammond, a bookkeeper of the firm.

A consolidation in the Greater Pittsburgh district of the First National Bank with the Second National Bank of Allegheny, Pa., has been effected this week by the Dollar Savings & Trust Co., which owns the Second National. The First National will be liquidated and the Second National will move to the former's new building, where the business of both institutions is to be conducted under the name of the Second National Bank. The Dollar Savings &

Trust Co. is to continue in its present location, taking over the offices occupied by the Second National Bank. The combined capital and surplus of the First and Second banks are about \$3,750,000, deposits \$7,500,000 and assets over \$13,000,000, while the capital of the new consolidated institution will probably be \$500,000, surplus and profits \$1,250,000. This merger will eliminate one of the three banks holding a national charter in the Pittsburgh district bearing the title "First." The officers and directors have not been announced as yet.

A. E. Masten has recently been elected a director of the Pittsburgh Trust Co. of Pittsburgh, Pa. Mr. Masten, who is senior member of the firm of A. E. Masten & Co., is also President of the Pittsburgh Stock Exchange. John G. Pew has also been elected a director.

Conrad Reeb was elected President of the Southern Illinois National Bank of East St. Louis, Ill., on the 12th inst., succeeding the late Henry B. Sexton. Mr. Reeb was First Vice-President of the bank. G. A. Miller, who was Cashier, is promoted to the first vice-presidency, and H. H. Jost, Assistant Cashier, succeeds Mr. Miller as Cashier. J. A. Harszy has been named Assistant Cashier. S. B. Sexton, a brother of the late President, was elected a director.

A consolidation of the Scandinavian American National Bank and the National City Bank of Minneapolis has been effected, following the purchase of the Scandinavian-American National by interests in the National City. The negotiations to this end were entered into as a result of the withdrawal of Theodore Wold from the presidency of the Scandinavian American National with his election as Governor of the Minneapolis Federal Reserve Bank. The consolidated institution operates under the name of the Scandinavian-American National, and has as its President H. R. Lyon, who was President of the National City. The latter was established on May 12 last as successor to the Commercial National Bank; the National City started with a capital of \$500,000; George F. Orde, formerly Vice-President of the First National Bank of Minneapolis, who was actually identified with the formation of the National City and was made a vice-president with its creation, has become a Vice-President of the enlarged Scandinavian-American National; Charles B. Mills, also a Vice-President of the National City is likewise identified with the consolidated bank as a Vice-President; Andreas Ueland, Vice-President and E. L. Mattson, Cashier, of the Scandinavian-American National, are also both vice-presidents of the new organization; E. V. Bloomquist, Assistant Cashier of the Scandinavian-American National is Cashier, and A. E. Lindhjem, remains as Assistant Cashier of the Scandinavian-American, but with his authority extended by reason of the enlarged business; A. J. Hogan, Assistant Cashier of the National City, continues in that capacity with the Scandinavian-American National. With the consolidation the capital of the Scandinavian-American National has been increased from \$500,000 to \$1,000,000. The National City Bank had deposits on October 31 of \$1,683,619, while the Scandinavian-American National reported deposits of \$4,778,645 on the same date.

J. Z. Miller, Jr., recently appointed Federal Reserve Agent and Chairman of the board of directors of the Federal Reserve Bank at Kansas City, has sold his bank stocks and resigned as Vice-President of the Commerce Trust Company of Kansas City. R. C. Menefee, heretofore Treasurer of the company, has been elected Vice-President to succeed Mr. Miller, and J. Zach Miller, son of J. Z. Miller Jr., has been elected Treasurer, succeeding Mr. Menefee.

John Rothenheber, Secretary of the Easton-Taylor Trust Co. of St. Louis, Mo., died at his home in that city on the 12th inst. after several years' illness. Mr. Rothenheber became Secretary of the institution at the time of its organization in 1911. He was in his 53d year.

A dividend of 16 2-3% was distributed to the depositors of the Traders & Truckers' Bank of Portsmouth, Va., which failed in 1909. This is the first and, it is reported, the final dividend to be paid.

A merger of the Tidewater Trust Company and the Citizens' Bank of Wilmington, N. C., was effected on the 17th

inst. under the name of the Citizens' Bank. The directorate consists of C. D. Weeks, T. E. Sprunt, T. F. Bagley, W. H. Brown, Richard Bradley, W. M. Cumming and H. F. Wilder. The officials are H. F. Wilder, President; T. E. Sprunt, Vice-President, and Richard Bradley, Cashier.

Colonel Daniel R. Wilkie, President and General Manager of the Imperial Bank of Canada and President of the Canadian Bankers' Association, died in Toronto on the 17th inst. Mr. Wilkie was in the banking business over fifty years and was well known both in this country and abroad. He entered the employ of the Quebec Bank as a junior clerk in 1862 and five years later became manager of the St. Catharines, Ont., branch. He became manager of the Toronto branch of the Quebec Bank in 1872. He was made General Manager of the Imperial Bank, with its organization in 1875, and since 1906 has been the bank's chief executive. Mr. Wilkie had been re-elected President of the Canadian Bankers' Association at the annual meeting held on the 12th inst. He also served as President of the Toronto Board of Trade and President of the Niagara Falls Suspension Bridge Co. At the time of his death he was a director of the Confederation Life Assurance Co., Toronto General Trusts Corporation, the General Accident, Fire & Life Assurance Corporation and other similar organizations. Mr. Wilkie was in his sixty-seventh year.

BOOK NOTICE.

TRADE MORALS, THEIR ORIGIN, GROWTH AND PROVINCE: by Edward D. Page. Pp. 288; price \$1.50. New Haven: Yale University Press, 1914.

"This book [says the preface] is the outgrowth of a course of lectures delivered to the graduating class at the Sheffield Scientific School of Yale University in the spring of 1911; their object was to show in some consecutive form the growth of trade morals from the social and mental conditions which form the environment of business men, and to illustrate their meaning and purpose in such a way as to clarify, if not to solve, some difficulties by which the men of our time are perplexed."

By trade morals would naturally be understood the ethics and moral standards recognized, and measurably followed, in the practice of trade. A concise analysis of these, historically changing from the times of the book of Genesis to this century, when an obsession that all trade is bad and grows worse in proportion to its volume has been made the unspoken basis of a series of restrictive laws, would have value, but we do not find this in the work of Mr. Page, although he regards morals as "the rules of right conduct recognized as valid at any given time by any group." In his last chapters he does succeed in giving some sketch of changes in this country; how transportation broke up the early bartering and what are not inaptly called "the self-sufficing" ways of the early part of the last century; how the factory system came in and the pace of trade became accelerated; how standardizing and concentration followed; how margins of profit shrank and volume had to make good their shrinking. The chapters on the moral conditions of success, and on competition and contract, indicate that honesty is the best policy and publicity the best curative, and do seem to convey a belief in the author that trade is not behind other human work in moving towards higher planes.

In these chapters we find what valuable substance the book contains, but it is marred, as it seems to us, by the author's desire to talk metaphysically. This makes his style stilted. He actually supplies a sort of glossary of definitions, of even such familiar words as love, subject, vanity, nation, pity, conduct, &c. We are told in this glossary that hunger is "a feeling derived from tropisms, the stimulus of the alimentary instincts," and when we seek tropisms we find a tropism "a mode of behavior which is the direct response of an organism to its environment," a definition which may be correct yet has no particular relation to trade morals. In this glossary are folkways, folkspeech, folkweal, folkwill and other compounds of the word folk. These made-up terms are scattered all over the book, and the expression "a humanistic" is encountered several times, as thus: "The folkcustom expressed in a law may have died, that is, become maladjusted to folkgroup welfare; or it may have been supplanted by another folkcustom or by a humanistic." This reaching after strange and impressive phraseology is a drawback in what is nevertheless a valuable contribution to the discussion of the subject.

IMPORTS AND EXPORTS OF GOLD AND SILVER AT SAN FRANCISCO.

The Collector of Customs at San Francisco has furnished us this week with the details of the imports and exports of gold and silver through that port for the month of October, and we give them below in conjunction with the figures preceding, thus completing the results for ten months of the calendar year 1914.

IMPORTS OF GOLD AND SILVER AT SAN FRANCISCO.

Months.	Gold.			Silver.		
	Coin.	Bullion.	Total.	Coin.	Bullion.	Total.
1914.	\$	\$	\$	\$	\$	\$
January	8,583	97,285	105,868	5,254	87,405	92,659
February	252,700	132,450	385,150	---	35,505	35,505
March	2,690	112,308	114,998	---	48,677	48,677
April	1,535	98,295	99,830	700	66,856	67,556
May	4,704	134,851	139,555	480	91,766	92,246
June	1,478	90,395	91,873	2,344	31,326	33,670
July	---	60,236	60,236	---	16,784	16,784
August	2,755	88,503	91,258	---	43,523	43,523
September	---	39,431	39,431	---	115,672	115,672
October	2,855,860	107,934	2,963,794	---	203,272	203,272
Total, 10 mos.	3,130,305	961,659	4,091,964	8,778	740,786	749,564
10 mos. 1913.	1,639,444	1,551,808	3,191,252	138,284	2,105,913	2,244,197

EXPORTS OF GOLD AND SILVER FROM SAN FRANCISCO.

Months.	Gold.			Silver.		
	Coin.	Bullion.	Total.	Coin.	Bullion.	Total.
1914.	\$	\$	\$	\$	\$	\$
January	---	457,050	457,050	27,027	---	27,027
February	---	---	---	220	346,177	346,397
March	200	---	200	320	69,011	69,331
April	1,500	---	1,500	---	953,489	953,489
May	700	---	700	---	1,032,922	1,032,922
June	---	---	---	1,196	663,713	664,909
July	---	---	---	---	669,833	669,833
August	2,500	---	2,500	13,730	254,653	268,383
September	---	---	---	504	348,621	349,125
October	45	---	45	---	224,908	224,908
Total, 10 mos.	4,945	457,050	461,995	42,997	4,563,327	4,606,324
10 mos. 1913.	1,965	4,043	6,008	150	10,915,449	10,915,599

IMPORTS AND EXPORTS FOR OCTOBER.

The Bureau of Statistics at Washington has issued the statement of the country's foreign trade for October, and from it and previous statements we have prepared the following interesting summaries:

FOREIGN TRADE MOVEMENT OF THE UNITED STATES. (In the following tables three cipher (000) are in all cases omitted.)

	Exports			Imports		
	1914.	1913.	1912.	1914.	1913.	1912.
January	204,067	\$227,033	\$202,446	\$154,743	\$163,063	\$143,586
February	173,920	193,997	198,844	148,045	149,914	134,188
March	187,499	187,427	205,412	182,555	155,446	157,577
April	162,553	199,813	179,300	173,762	146,194	162,571
May	161,733	194,607	175,380	154,282	133,724	155,698
June	157,072	163,405	138,234	157,529	131,246	131,031
July	154,139	160,991	148,885	159,677	139,062	148,667
August	110,367	187,909	167,845	129,768	137,652	154,767
September	156,052	218,240	199,678	140,090	171,085	144,820
October	195,284	271,861	254,634	137,979	132,949	177,988
November	---	245,539	278,244	---	148,236	153,095
December	---	233,196	250,316	---	184,026	154,095
Total	---	\$2,484,018	\$2,399,218	---	\$1,792,596	\$1,818,074

	Exports			Imports		
	1914.	1913.	1912.	1914.	1913.	1912.
January	\$6,914	\$17,238	\$1,915	\$10,442	\$6,210	\$5,141
February	9,079	12,373	10,589	3,209	5,357	2,937
March	2,632	18,077	7,454	7,842	4,381	4,336
April	407	3,010	1,817	3,460	4,014	4,139
May	16,835	12,467	4,451	1,973	4,561	3,347
June	48,107	569	7,171	3,817	3,387	5,611
July	33,669	8,654	7,265	3,922	7,859	3,748
August	18,126	1,195	2,498	3,045	5,804	5,577
September	21,887	496	568	2,762	4,627	4,201
October	50,342	484	330	5,935	5,391	11,887
November	---	6,683	2,710	---	7,041	4,474
December	---	10,573	657	---	5,073	11,397
Total	---	\$91,799	\$47,425	---	\$63,705	\$66,54

	Exports			Imports		
	1914.	1913.	1912.	1914.	1913.	1912.
January	\$4,010	\$6,436	\$6,028	\$2,318	\$4,201	\$4,358
February	3,592	5,315	5,122	1,914	2,481	3,781
March	3,882	5,537	5,806	2,567	3,134	3,712
April	4,543	5,972	4,941	2,214	2,808	4,139
May	4,845	5,329	6,726	1,755	3,093	4,345
June	4,639	4,732	5,046	1,822	2,365	4,880
July	3,953	4,936	6,591	1,240	2,799	3,436
August	3,627	4,908	6,077	2,097	3,401	3,952
September	5,390	5,856	6,011	1,864	3,098	3,649
October	3,972	4,874	6,172	2,549	2,538	4,684
November	---	4,423	5,834	---	3,089	3,417
December	---	4,458	7,608	---	2,810	3,998
Total	---	\$62,776	\$71,962	---	\$35,867	\$48,401

	EXCESS OF EXPORTS OR IMPORTS.					
	Merchandise			Gold		
1914.	1913.	1912.	1914.	1913.	1914.	1913.
January	+\$49,324	+\$63,970	+\$58,860	-\$3,528	+\$11,028	+\$1,692
February	+25,875	+44,083	+64,656	+5,870	+7,016	+2,235
March	+4,944	+31,981	+47,835	-5,210	+13,696	+1,314
April	-11,209	+53,619	+16,729	-3,053	-1,004	+2,329
May	-2,549	+60,883	+19,682	+14,862	+7,906	+3,090
June	-457	+32,159	+7,203	+44,290	-2,818	+2,817
July	-5,538	+21,929	+218	+30,278	+795	+2,713
August	-19,401	+50,257	+13,088	+15,081	-4,609	+1,507
September	+15,962	+47,155	+54,858	+19,125	-4,131	+3,526
October	+57,305	+138,912	+76,646	+44,407	-4,907	+1,423
November	---	+97,303	+125,149	---	-378	---
December	---	+49,170	+96,221	---	+5,500	---
Total	---	+\$691,422	+\$581,145	---	+\$28,094	---
+ Exports.	---	---	---	---	---	+\$26,909
- Imports.	---	---	---	---	---	---

Totals for merchandise, gold and silver for ten months:

Ten Months (000s omitted)	Merchandise.			Gold.			Silver.		
	Ex-ports.	Im-ports.	Excess of Exports	Ex-ports.	Im-ports.	Excess of Exports	Ex-ports.	Im-ports.	Excess of Exports
	\$	\$	\$	\$	\$	\$	\$	\$	\$
1914	1,662,686	1,548,430	114,256	207,999	45,877	162,122	42,453	20,341	22,112
1913	2,005,283	1,460,334	544,949	74,563	51,591	22,972	53,897	29,969	23,928
1912	1,870,851	1,510,883	359,775	44,058	50,677	6,619	58,520	40,986	17,534
1911	1,665,867	1,265,523	400,344	22,247	49,279	27,032	54,615	37,101	17,514
1910	1,430,636	1,296,409	134,227	56,068	49,932	6,136	46,034	36,652	9,382
1909	1,361,722	1,196,268	165,454	106,652	38,139	68,513	47,343	37,289	10,054

a Excess of imports.

Similar totals for the four months since July 1 for six years make the following exhibit:

Four Months (000s omitted)	Merchandise.			Gold.			Silver.		
	Ex-ports.	Im-ports.	Excess of Exports	Ex-ports.	Im-ports.	Excess of Exports	Ex-ports.	Im-ports.	Excess of Exports
	\$	\$	\$	\$	\$	\$	\$	\$	\$
1914	615,843	567,514	48,329	124,024	15,133	108,891	16,943	7,750	9,153
1913	839,001	580,747	258,254	10,828	23,681	12,853	20,575	11,837	8,738
1912	771,042	626,231	144,811	10,662	25,413	14,751	24,851	15,721	9,130
1911	678,046	501,777	176,269	8,996	15,507	6,511	20,172	15,140	5,032
1910	625,877	496,985	128,892	6,552	30,544	23,990	18,980	14,751	4,229
1909	573,748	478,270	95,478	42,817	18,004	24,813	17,983	14,417	3,566

a Excess of imports.

THE ENGLISH GOLD AND SILVER MARKETS.

We reprint the following from the weekly circular of Samuel Montagu & Co. of London, written under date of November 12 1914:

GOLD.

The influx of gold, which has been extremely heavy during recent weeks, is less pronounced. The following receipts are announced by the Bank of England:

Nov. 5	£654,000	in bar gold.	Nov. 9	£35,000	in U. S. A. gold coin.
5	43,000	" U. S. A. gold coin.	10	128,000	" U. S. gold coin, &c.
6	7,000	" bar gold.	11	57,000	" bar gold.
9	20,000	" bar gold.	11	155,000	" U. S. A. gold coin.

Yesterday the sum of £1,000,000 was set aside on account of the Treasury Currency Note Redemption Account, making the net influx during the week £99,000.

The net import of gold into India for the month of October 1914 was £79,900, approximately.

The total import of gold bullion and coin into Great Britain during the first ten months of this year approximated closely that during the similar months of 1913. The figures are £49,362,977 and £49,846,369.

The total exports, however, differ widely, being £29,712,990 and £40,238,692 during the respective periods. That is to say, about ten millions more gold has been retained this year than during the first ten months of 1913. The net import up to the end of October of this year was £19,649,987.

In order to obtain a correct view of the gold position in regard to this country, the extremely large sums of gold held elsewhere in the British Empire on behalf of the Bank of England should be taken into account, for they are an equivalent, *qua* gold reserves, to gold actually imported into this country, and figure as a portion of the Bank of England gold holding specified in the weekly statement.

SILVER.

The rally in the price of silver to 23d. per oz. standard, which was chronic last week, was not sustained beyond the 7th inst. After that date, the market showed less animation and the price fell away daily 1/8d., until to-day, when the fall was 1-16d.

A certain amount of demand continued to be received from the Indian Bazaars, but not with the same ardor as last week.

It remains to be seen whether the capture of the Emden will reduce the rate of insurance from the East in a sufficient degree to encourage buying orders from that quarter on a more substantial scale than has obtained of late. Meanwhile, the market is somewhat heavy in tone, and sensitive to the pressure of supplies, which are rather more generous in quantity than so sluggish a market can digest.

The stock in Bombay consists of 33,000 bars, which is slightly less than that of last week.

An Indian currency return on the 7th inst. consisted as follows:

Note circulation	Rs. 60.79
Reserve in silver coin	Rs. 31.94
Gold coin and bullion	Rs. 7.20
East Indian securities	Rs. 10.00
Gold in England	Rs. 7.65
Securities in England	Rs. 4.00

No shipment has been made from San Francisco to Hongkong during the week. The quotation to-day for cash delivery is 11-16d. below that fixed a week ago.

Quotations for bar silver, per ounce standard:

Nov. 6	23	cash	No	Bank rate	5%
7	23	"	quotation	Bar gold per oz. standard	77s. 9d.
9	22 1/2	"	fixed	French gold per oz. standard	Nominal
10	22 3/4	"	tor	German gold coin per oz.	Nominal
11	22 1/2	"	forward	U. S. A. gold coin per oz.	Nominal
12	22 5-16	"	delivery.		

Average for the week... 22.700 cash

Commercial and Miscellaneous News

Breadstuffs Figures brought from page 1610.—The statements below are prepared by us from figures collected by the New York Produce Exchange. The receipts at Western lake and river ports for the week ending last Saturday and since August 1 for each of the last three years have been:

Receipts at—	Flour.	Wheat.	Corn.	Oats.	Barley.	Rye.
	bbbls. 196lbs.	bush. 60 lbs.	bush. 56 lbs.	bush. 32 lbs.	bush. 48lbs.	bu. 56 lbs.
Chicago	204,000	2,657,000	2,367,000	706,000	61,000	
Milwaukee	93,000	353,000	575,000	359,000	335,000	135,000
Duluth		3,343,000	298,000	298,000	768,000	334,000
Minneapolis		2,822,000	467,000	429,000	727,000	168,000
Toledo		192,000	144,000	45,000		4,000
Detroit	8,000	56,000	94,000	65,000		
Cleveland	12,000	55,000	232,000	96,000	80,000	10,000
St. Louis	63,000	908,000	275,000	189,000	57,000	1,000
Peoria	38,000	20,000	189,000	168,000		
Kansas City		2,235,000	347,000	270,000		
Omaha		529,000				
Total wk. '14	418,000	13,200,000	5,696,000	4,621,000	2,673,000	713,000
Same wk. '13	352,000	9,555,000	3,587,000	4,065,000	2,859,000	306,000
Same wk. '12	429,941	11,255,545	3,180,978	4,888,808	3,266,316	652,039
Since Aug. 1	7,090,000	213,726,000	56,896,000	123,320,000	40,892,000	10,583,000
1914	6,447,000	145,626,000	57,659,000	92,346,000	43,842,000	7,075,000
1913	5,984,429	181,462,877	49,080,335	99,650,146	40,314,859	8,352,640

Total receipts of flour and grain at the seaboard ports for the week ended Nov. 21 1914 follow:

Receipts at—	Flour, bbls.	Wheat, bush.	Corn, bush.	Oats, bush.	Barley, bush.	Rye, bush.
New York	303,000	1,824,000	724,000	372,000	413,000	111,000
Boston	39,000	855,000	115,000	212,000	2,000	58,000
Philadelphia	72,000	577,000	324,000	1,110,000	73,000	396,000
Baltimore	49,000	142,000	31,000	31,000		
New Orleans	61,000	1,140,000				
Newport News	6,000					
Galveston		1,283,000				
Montreal	63,000	714,000		432,000	41,000	
St. John	4,000	53,000				
Port Arthur		232,000				

Total week 1914	597,000	6,820,000	1,194,000	2,259,000	529,000	563,000
Since Jan. 1 1914	21,135,000	220,619,000	24,612,000	66,176,000	13,582,000	6,545,000
Week 1913	447,000	4,987,000	464,000	657,000	131,000	36,000
Since Jan. 1 1913	11,203,000	182,723,000	47,750,000	49,197,000	18,040,000	2,844,000

*Receipts do not include grain passing through New Orleans for foreign ports on through bills of lading.

The exports from the several seaboard ports for the week ending Nov. 21 are shown in the annexed statement:

Exports from—	Wheat, bush.	Corn, bush.	Flour, bbls.	Oats, bush.	Rye, bush.	Barley, bush.	Peas, bush.
New York	1,235,876	100,234	95,409	176,418	220,561	133,790	3,389
Boston	192,234	10,950	14,848			35,000	
Philadelphia	761,000		72,000	581,000			
Baltimore	408,228			1,321,675	317,662		
New Orleans	1,196,000	20,000	4,000	2,000			
Newport News			6,000				
Galveston	195,000		4,000				
Mobile							
Montreal	928,000		96,000	103,000			
St. John	53,000		4,000				
Port Arthur	232,000						

Total week	5,201,338	120,234	292,359	2,184,093	553,071	168,790	3,389
Week 1913	4,598,319	25,134	285,595	184,925	269,886	1,397	

The destination of these exports for the week and since July 1 1914 is as below:

Exports for week and since July 1 to—	Flour		Wheat		Corn	
	Week.	Since July 1.	Week.	Since July 1.	Week.	Since July 1.
	bbls.	bbls.	bush.	bush.	bush.	bush.
United Kingdom	175,433	2,296,697	2,224,188	63,287,667		45,490
Continent	91,644	1,568,072	2,916,650	64,453,048	94,494	1,430,264
So. & Cent. America	6,984	628,843	60,000	2,385,077		76,800
West Indies	16,048	619,774	500	21,633		89,400
Brit. No. Am. Colonies	2,250	33,560				4,618
Other countries		122,445		25,510		13,950
Total	292,359	5,269,391	5,201,338	130,172,935	120,234	3,021,583
Total 1913	285,595	4,834,171	4,598,319	92,681,539	25,134	1,616,501

The world's shipments of wheat and corn for the week ending Nov. 21 1914 and since July 1 1914 and 1913 are shown in the following:

Exports.	Wheat.			Corn.		
	1914.		1913.	1914.		1913.
	Week. Nov. 21.	Since July 1.	Since July 1.	Week. Nov. 21.	Since July 1.	Since July 1.
North Amer.	8,376,000	170,690,000	130,114,000	167,000	2,353,000	639,000
Russia	*	12,074,000	70,214,000		4,813,000	6,660,000
Danube	*	2,347,000	16,340,000	*	9,431,000	6,711,000
Argentina	80,000	3,930,000	11,066,000	5,228,000	65,001,000	105,675,000
Australia		8,800,000	12,960,000			
India	440,000	14,632,000	23,712,000			
Oth. countr's	200,000	3,801,000	3,890,000			
Total	9,096,000	215,274,000	268,296,000	5,395,000	81,598,000	119,685,000

*Not available since Aug. 1.

The quantity of wheat and corn afloat for Europe on dates mentioned was as follows:

	Wheat.			Corn.		
	United Kingdom.	Continent.	Total.	United Kingdom.	Continent.	Total.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
Nov. 21 1914			32,952,000			23,002,000
Nov. 14 1914			30,816,000			21,766,000
Nov. 22 1913	12,592,000	20,440,000	33,032,000	6,426,000	7,650,000	14,076,000
Nov. 23 1912	21,120,000	18,856,000	39,976,000	12,640,000	21,233,000	33,873,000

Canadian Bank Clearings.—The clearings for the week ending Nov. 21 at Canadian cities, in comparison with the same week in 1913, shows a decrease in the aggregate of 24.5%.

Clearings at—	Week ending Nov. 21.				
	1914.	1913.	Inc. or Dec.	1912.	1911.
	\$	\$	%	\$	\$
Canada—					
Montreal	50,429,224	60,767,596	-17.0	59,362,145	55,289,286
Toronto	39,114,568	44,277,847	-11.7	44,846,227	41,985,831
Winnipeg	33,305,168	51,215,253	-35.0	46,652,937	36,372,723

Auction Sales.—The following securities were sold at public auction this week in New York and Philadelphia:

By Messrs. Adrian H. Muller & Sons, New York:

Table with columns: Shares, Stocks, Per cent., Bonds, Per cent. Includes items like Atlantic Refining Co., Southern Pipe Line Co., Standard Oil Co. of California.

By Messrs. Barnes & Lofland, Philadelphia:

Table with columns: Shares, Stocks, \$ per sh., Bonds, Per cent. Includes items like Provident Life & Trust Co., Prudential Loan Society of Philadelphia, Real Est. T. I. & Trust Co.

By Messrs. Samuel T. Freeman & Co., Philadelphia:

Table with columns: Shares, Stocks, \$ per sh., Bonds, Per cent. Includes items like Auxiliary Fire A. & Tel., Blooming Grove H. & F. Club, Catawissa RR., Egyptian Mills Club.

DIVIDENDS.

The following shows all the dividends announced for the future by large or important corporations.

Dividends announced this week are printed in italics.

Main table of dividends with columns: Name of Company, Per Cent., When Payable, Books Closed, Days Inclusive. Includes Railroads (Steam), Street and Electric Railways, Manufacturers-Citizens', Miscellaneous.

Table of company financials with columns: Name of Company, Per Cent., When Payable, Books Closed, Days Inclusive. Includes Miscellaneous (Concluded), Electric Properties Corporation, Federal Mining & Smelt., etc.

a Transfer books not closed for this dividend. b Less British income tax. c Correction. e Payable in stock. f Payable in common stock. g Payable in scrip. h On account of accumulated dividends. i Payable in dividend certificates maturing Nov. 1 1914 and bearing interest from Nov. 1 1914 at rate of 4% per annum, payable semi-annually, said certificates to be mailed on Dec. 10.

The Federal Reserve Banks.—The Federal Reserve Board gave out on Saturday a consolidated statement of condition of the Federal Reserve banks comprising the system at the close of business Nov. 20. In reply to a request for separate statements for the individual banks, Governor Hamlin states:

In view of the fragmentary character of the reports received from several banks last week, the Board decided to give out last Saturday only a consolidated statement for the entire system, and to defer for another week the publication of the statements by individual banks.

It is hoped that next Saturday's reports, showing conditions at the close of business on Friday, Nov. 27, will be sufficiently complete to warrant the publication of data by banks.

It is our present plan to give out each Saturday, about noon, a weekly consolidated statement, showing condition of the Federal Reserve Bank System at the close of business on the preceding day, and to give out a like statement by banks on the following Monday.

The daily papers have printed figures and telegraphic dispatches purporting to show some of the items of assets and liabilities of the twelve separate Federal Reserve banks. These it has been impossible to verify for the reasons enumerated in the above, but we reprint them below subject to the qualification that they are not official, and the reader can accept them for what they may be worth.

FEDERAL RESERVE DISTRICT BANK STATEMENTS.
At close of business Nov. 20 1914.

	Total for 12 District Banks.	Dist. No. 1 at Boston.	Dist. No. 2 at New York.	Dist. No. 3 at Philadelphia.	Dist. No. 4 at Cleveland.	Dist. No. 5 at Richmond.
Liabilities.						
Capital paid in.	\$ 18,072,000	\$ 1,619,000	\$ 3,321,950	\$ 2,088,114	\$ 2,025,924	\$ 1,089,317
Reserve deposits.	227,138,000	15,151,000	107,529,994	17,706,858	14,457,272	6,780,394
Fed. res. notes in circulation.	1,215,000	10,000	224,875	-----	-----	-----
Total Liabilities.	246,425,000	16,780,000	111,076,819	19,794,973	16,483,276	7,869,711
Assets.						
Gold coin & cts.	203,415,000	-----	-----	17,832,943	-----	7,423,403
Legal-tender, silver cts., &c.	37,308,600	-----	-----	1,934,668	-----	434,145
Cash on hand	240,723,000	16,580,000	108,314,674	19,767,611	16,464,486	7,857,548
Re-discounts.	5,607,000	200,000	3,023,500	-----	-----	-----
All other assets.	95,000	-----	Excl. off R. notes on hand, earnings, expenses & accr'ls.	23,617	18,790	12,163
Total assets.	246,425,000	16,780,000	111,076,819	19,794,973	16,483,276	7,869,711

	District No. 6 at Atlanta.	District No. 7 at Chicago.	District No. 8 at St. Louis.	District No. 9 at Min'n'gts.	District No. 10 at Kan. City.	District No. 11 at Dallas.	District No. 12 at San Fran.
Liabilities.							
Capital paid in.	\$ 786,555	\$ 2,195,188	\$ 800,000	\$ 500,000	\$ 957,001	\$ 1,295,033	\$ 1,295,033
Reserve deposits.	3,073,989	38,127,866	5,500,000	175,000	4,636,878	7,347,840	7,347,840
Fed. res. notes in circulation.	-----	819,315	No report obtainable.	6,475,000	-----	5,593,879	-----
Total Liabilities.	3,860,544	41,142,369	6,475,000	6,475,000	5,593,879	5,593,879	7,347,840
Assets.							
Gold coin & cts.	2,550,000	36,687,925	-----	6250,000	-----	-----	-----
Legal-tender, silver cts., &c.	1,303,985	33,303,790	-----	-----	5,574,746	-----	-----
Cash on hand	3,853,985	39,991,715	-----	-----	220,000	19,133	-----
Re-discounts.	-----	1,130,522	-----	-----	-----	-----	-----
All other assets.	6,599	20,132	-----	-----	-----	-----	-----
Total assets.	3,860,584	41,142,369	6,475,000	6,475,000	5,593,879	5,593,879	7,347,840

Gold reserve against all liabilities. 89%
Cash reserve against all liabilities. 105%
Cash reserve against all liabilities, after setting aside 40% gold reserve against Federal Reserve notes in circulation. 105%

Statement of New York City Clearing-House Banks and Trust Companies.—The weekly New York City Clearing-House bank statement was issued on Saturday last, and an "amended statement", with corrected figures, was given out on Friday of this week. The explanation accompanying the "amended statement" will be found in a preceding column of to-day's "Chronicle." Special interest attaches to this statement of last Saturday because it is in an entirely new form, made necessary by the inauguration the previous Monday of the Federal Reserve banking system, under which part of the reserves of the banks are transferred to the Federal Reserve regional banks. In preparation for the change amendments to the Clearing-House constitution were adopted on Nov. 13. These amendments appeared in the "Chronicle" of Nov. 14, page 1420. The most important change, the lowering of reserve requirements, may be explained as follows: All bank members of the association were formerly required to keep in their own vaults a cash reserve of 25% of their net deposits. This has been changed so that national banks are required to maintain a reserve of 18% of demand deposits and 5% of time deposits and State banks a reserve of 18% of aggregate demand deposits. Trust companies, which were required to maintain a cash reserve of 25% of their "legal net deposits" (of which, however, only 15% had to be kept in their own vaults, the other 10% being optionally on deposit with C.-H. members carrying full 25% cash reserve in their own vaults) are now permitted to reduce their reserve holdings to 15% of "aggregate demand deposits." These "aggregate demand deposits" must include deposits secured by bonds of the State or City of New York which were deducted in arriving at "legal net deposits" on which reserve was formerly based. The proportion of these reserves which must be kept on hand and the percentage which may be on deposit with other institutions is fixed by the Clearing-House to coincide with the provisions of the Federal and State laws governing the maintenance of reserves by the institutions under their respective jurisdictions. Briefly, these laws provide that of the 18% on demand deposits and 5% on time deposits required of a national bank six-eighths must be in its vaults, seven-eighths in the Federal Reserve bank and the remainder, optionally, either in own vaults or in the Federal Reserve bank. The 18% of aggregate demand deposits which State banks must hold as

reserve may consist of not less than 12% of such deposits as reserves on hand and remainder on deposit. Trust companies carrying 15% reserve against aggregate demand deposits must maintain at least 10% of such deposits as reserve on hand, remainder on deposit.

The new statement shows "Reserve in own vaults" \$350,462,000 and "Reserve in Federal Reserve bank" \$96,060,000—a total of \$446,522,000 (corresponding to item of "Aggregate cash reserve" reported the preceding week at \$442,799,000). To this is added "Reserve in other depositories" \$25,484,000 (formerly "Trust companies' reserve with C.-H. members carrying 25% reserve"—Nov. 14 \$57,840,000), making "Aggregate reserve" \$472,066,000, against a total reserve preceding week of \$500,639,000.

The surplus reserve of \$7,413,900 shown Nov. 14 represented cash over required reserve of 25% for banks and 15% for trust companies. If to this we add the \$57,840,000 trust companies' reserve carried on deposit the total surplus reserve would have been \$65,253,900, comparing with the similar item, under lessened reserve requirements, this week reported at \$137,890,540.

Another change is in the method of stating deposits. Deposits secured by bonds of the State or City of New York formerly deducted by banks and trust companies in stating "Legal net deposits" under the old form of statement are now included in "Net demand deposits." Time deposits of national banks, which had been included in "Legal net deposits," are now deducted in arriving at "Net demand deposits"; they appear, however, as a separate item in "Net time deposits" shown in the new statement. The item "Net time deposits" includes, also, State banks' and trust companies' deposits not payable within 30 days which were not reported heretofore, although they were always deducted from the gross amount of deposits in making up the item "Legal net deposits." These several changes appear to be the reason why the total of net deposits now (time and demand combined) amounts to \$2,027,960,000, against only \$1,925,354,000 the previous Saturday.

We give below the statement as issued by the Clearing-House, but, on account of the changes set forth above in the method of computing the results, we omit all comparisons with preceding dates. The figures are the revised totals given out yesterday, not those originally made public last Saturday.

SUMMARY OF WEEKLY STATEMENTS.
Clearing-House Members—Banks and Trust Companies.
Daily Average Week Ending Nov. 21 1914.

Loans, &c.	\$2,164,651,000
*Reserve in own vaults	350,462,000
*Reserve in Federal Reserve Bank	96,060,000
*Reserve in other depositories	25,484,000
Net demand deposits	1,936,028,000
Net time deposits	91,932,000
Circulation	472,066,000
*Aggregate reserve	137,890,540
Excess reserve	-----

*Aggregate reserve.

The State Banking Department continues to report the weekly figures showing the condition of State banks and trust companies in New York City not in the Clearing-House, and these are shown in the following table:

SUMMARY OF STATE BANKS AND TRUST COMPANIES IN GREATER NEW YORK, NOT INCLUDED IN CLEARING-HOUSE STATEMENT.
(Figures Furnished by State Banking Department.)

Loans and investments	\$561,111,700	Inc.	\$732,600
Gold	41,739,200	Inc.	249,800
Currency and bank notes	12,399,000	Dec.	977,500
Total deposits	636,683,500	Dec.	1,199,900
Deposits, eliminating amounts due from reserve depositories and from other banks and trust companies in New York City and exchanges	553,451,200	Inc.	126,900
Reserve on deposits	140,895,600	Dec.	2,091,700

RESERVE.

	State Banks	Trust Companies
Cash in vault	\$12,231,300 13.13%	\$41,996,900 9.70%
Deposits in banks and trust co's.	11,554,100 12.40%	75,203,300 17.40%
Total	\$23,785,400 25.53%	\$117,110,200 27.10%

Aggregate reserve on deposits, \$140,895,600; decrease, \$2,091,700. Per cent of legal reserve, 26.80.

The averages of the New York City Clearing-House banks and trust companies, combined with those for the State banks and trust companies in Greater New York City outside of the Clearing House, compare as follows for a series of weeks past:

COMBINED RESULTS OF BANKS AND TRUST COMPANIES IN GREATER NEW YORK.
We omit two ciphers in all these figures.

Week Ended—	Loans and Investments.	Deposits.	Money in Own Vaults.	Other Reserve.	Total Reserve.
Sept. 19	\$ 2,819,169.5	\$ 2,564,916.9	\$ 463,665.1	\$ 125,334.3	\$ 589,099.4
Sept. 26	2,812,345.1	2,559,999.7	470,302.5	125,793.1	600,095.6
Oct. 3	2,771,974.2	2,529,836.4	479,725.9	135,519.7	615,265.6
Oct. 10	2,739,404.1	2,493,189.0	484,086.3	137,159.3	621,245.6
Oct. 17	2,734,094.1	2,489,016.7	489,240.0	135,137.1	624,377.1
Oct. 24	2,721,140.7	2,477,065.3	496,763.1	136,799.1	633,562.2
Oct. 31	2,718,080.6	2,472,481.5	503,256.1	142,489.1	645,745.2
Nov. 7	2,705,062.3	2,478,226.5	505,058.8	147,597.4	652,656.2
Nov. 14	2,693,549.1	2,478,678.3	497,664.9	145,961.4	643,626.3
Nov. 21	2,725,762.7	2,489,479.2	404,600.2	208,301.4	612,901.6

In addition to the returns of "State banks and trust companies in New York City not in the Clearing-House" furnished by the State Banking Department, the Department also presents a statement covering all the institutions of this class in the whole State. The figures are compiled so as to distinguish between the results for New York City (Greater New York) and those for the rest of the State, as per the following.

For definitions and rules under which the various items are made up, see "Chronicle," V. 98, p. 1661.

STATE BANKS AND TRUST COMPANIES.

Week ended Nov. 21.	State Banks in Greater N. Y.	Trust Cos. in Greater N. Y.	State Banks outside of Greater N. Y.	Trust Cos outside of Greater N. Y.
Capital as of Sept. 12	\$24,550,000	\$67,300,000	\$10,758,000	\$11,300,000
Surplus as of Sept. 12	39,119,300	151,148,900	13,894,100	11,702,800
Loans and investments	322,247,000	1,103,917,000	132,744,500	192,722,700
Change from last week	+1,905,900	+3,991,800	+232,300	+316,600
Gold	47,048,900	80,975,600	-----	-----
Change from last week	-1,609,200	-1,288,700	-----	-----
Currency and bank notes	37,261,700	22,436,200	-----	-----
Change from last week	-1,512,600	-1,240,000	-----	-----
Deposits	409,228,400	1,199,174,700	135,338,800	196,430,800
Change from last week	-1,039,800	+7,065,600	+196,300	-699,100
Reserve on deposits	103,889,900	241,162,100	23,426,700	23,730,900
Change from last week	-2,256,900	-1,826,000	-142,700	-1,511,500
P. C. reserve to deposits	29.5%	25.4%	18.9%	14.4%
Percentage last week	29.3%	25.3%	19.1%	15.3%

+ Increase over last week. - Decrease from last week.

Boston and Philadelphia Banks.—Summary of weekly totals of Clearing-House banks of Boston and Philadelphia:

We omit two others (00) in all these figures.

Banks.	Capital and Surplus.	Loans.	Specie.	Legals.	Deposits.	Circulation.	Clearings.
Boston.	\$	\$	\$	\$	\$	\$	\$
Oct. 3.	No state	ment issu	ed.	-----	-----	-----	130,921.8
Oct. 10.	No state	ment issu	ed.	-----	-----	-----	124,433.2
Oct. 17.	No state	ment issu	ed.	-----	-----	-----	134,223.1
Oct. 24.	No state	ment issu	ed.	-----	-----	-----	144,652.1
Oct. 31.	No state	ment issu	ed.	-----	-----	-----	123,014.8
Nov. 7.	No state	ment issu	ed.	-----	-----	-----	168,268.1
Nov. 14.	No state	ment issu	ed.	-----	-----	-----	138,952.7
Nov. 21.	No state	ment issu	ed.	-----	-----	-----	146,429.3
Phila.							
Oct. 3.	103,684.3	401,699.0	94,029.0	*434,394.0	15,504.0	154,615.9	
Oct. 10.	103,684.3	401,912.0	90,049.0	*428,208.0	15,683.0	143,371.3	
Oct. 17.	103,684.3	400,840.0	92,549.0	*435,866.0	15,902.0	140,830.3	
Oct. 24.	103,684.3	399,731.0	92,023.0	*429,604.0	15,985.0	146,031.8	
Oct. 31.	103,684.3	397,346.0	93,423.0	*424,779.0	16,178.0	126,758.2	
Nov. 7.	103,684.3	395,705.0	96,430.0	*432,391.0	16,233.0	148,524.4	
Nov. 14.	103,684.3	395,058.0	95,099.0	*428,512.0	16,069.0	152,173.6	
Nov. 21.	103,684.3	393,182.0	90,251.0	*428,989.0	15,210.0	158,692.1	

* Includes Government deposits and the item "due to other banks."
 ** "Deposits" now include the item "Exchanges for Clearing House," which were reported on November 21 as \$12,938,000.

Imports and Exports for the Week.—The following are the imports at New York for the week ending Nov. 21; also totals since the beginning of the first week in January:

FOREIGN IMPORTS AT NEW YORK

For Week.	1914.	1913.	1912.	1911.
Dry goods	\$2,554,351	\$3,052,844	\$3,230,100	\$2,666,195
General merchandise	14,305,619	14,810,380	20,695,415	13,677,861
Total	16,859,970	17,863,224	23,925,515	16,344,056
Since January 1.				
Dry goods	\$154,867,000	\$141,128,682	\$137,335,337	\$127,249,676
General merchandise	726,550,192	744,943,434	785,497,417	666,990,819
Total 47 weeks	\$881,417,192	\$886,072,116	\$922,832,754	\$794,240,495

The following is a statement of the exports (exclusive of specie) from the port of New York to foreign ports for the week ending Nov. 21 and from Jan. 1 to date:

EXPORTS FROM NEW YORK.

	1914.	1913.	1912.	1911.
For the week	\$19,835,938	\$13,219,049	\$17,954,986	\$19,778,172
Previously reported	773,390,811	773,100,407	735,695,737	687,310,861
Total 47 weeks	\$793,276,749	\$786,319,456	\$753,950,723	\$707,089,033

The following shows exports and imports of specie at port of New York for week ending Nov. 21 and since Jan. 1 1914, and for corresponding periods in 1913 and 1912:

EXPORTS AND IMPORTS OF SPECIE AT NEW YORK.

	Exports.		Imports	
	Week.	Since Jan. 1	Week.	Since Jan. 1
Gold.				
Great Britain	-----	\$37,971,960	\$750	\$18,116
France	-----	85,540,015	-----	124,195
Germany	-----	1,018,913	-----	3,602
West Indies	-----	937,201	242,460	1,910,576
Mexico	-----	1,106,014	6,054	1,438,109
South America	\$41,470	1,280,508	96,678	3,459,624
All other countries	-----	355,300	33,300	1,808,866
Total 1914	\$41,470	\$1,282,099.11	\$379,302	\$8,761,178
Total 1913	32,500	68,896,146	2,860,103	23,734,225
Total 1912	25,470	33,235,551	811,494	27,244,862
Silver.				
Great Britain	\$1,001,943	\$32,283,087	\$3,461	\$12,766
France	-----	3,204,408	-----	13,226
Germany	-----	-----	-----	18,413
West Indies	-----	405,600	3,035	69,008
Mexico	-----	91,346	451,540	5,248,323
South America	\$4,876	1,590,144	17,830	2,548,752
All other countries	-----	1,648,334	2,171	1,325,653
Total 1914	\$1,086,819	\$39,222,919	\$478,037	\$9,237,141
Total 1913	817,567	44,330,057	596,483	9,830,768
Total 1912	979,645	51,654,890	241,957	8,877,542

Of the above imports for the week in 1914, \$241,350 were American gold coin and \$1,661 American silver coin.

New York City Bonds.—Prices are as follows:

	Bid.	Asked.		Bid.	Asked.
4 1/8, March 1963	102 1/2	103 1/2	4s, Nov. 1956	93 1/2	94 1/2
4 1/8, May 1957	102 1/2	103 1/2	4s, Nov. 1955	93 1/2	94 1/2
4 1/8, Nov. 1957	102 1/2	103 1/2	4s, Nov. 1936	94 1/2	95 1/2
4 1/8, May 1917	99 1/2	100 1/2	4s, Nov. 1918-19	98 1/2	99 1/2
4 1/8, Nov. 1917	99 1/2	100 1/2	3 1/8s, Nov. 1954-55	84 1/2	85 1/2
4 1/8, March 1964	97 1/2	98 1/2	3 1/8s, May 1954	84 1/2	85 1/2
4 1/8, March 1962	97 1/2	98 1/2	3 1/8s, 1950-51	4.40	4.35
4 1/8, Sept. 1960	97 1/2	98 1/2	3 1/8s, 1940-50	4.40	4.30
4 1/8, March 1930-1960	97 1/2	98 1/2	3 1/8s, 1930-40	4.40	4.30
4s, May 1959	94 1/2	95 1/2	3 1/8s, 1920-30	4.40	4.25
4s, Nov. 1958	94 1/2	95 1/2	3 & 3 1/8s, 1915-20	4.50	4.30
4s, May 1957	94 1/2	95 1/2			

Sales of Philadelphia Company scrip were made this week (Nov. 25) at 90.

Boston Prices.—The Boston "Transcript" reports securities dealt in through the Committee of Five of the Boston Stock Exchange and prices as follows:

Stocks—	Nov. 21.	Nov. 23.	Nov. 24.	Nov. 25.
Anaska Gold Mines (par \$10)	\$24 1/2	\$24 1/2-24 1/4	\$24-24 1/4	\$24-24 1/4
Amalgamated Copper Co.	-----	-----	91	49
Amer Agric Chemical, pref.	-----	-----	-----	-----
Amer Pneu Serv, pf (par \$50)	\$17	-----	-----	-----
American Sugar, common	109 3/4	103	103 1/2-104	104-104 1/4
Preferred	-----	-----	-----	-----
Amer Telephone & Telegraph	116	116 1/2-116 1/4	116 1/4	116-116 1/4
American Woolen preferred	77	77-77 1/4	77	77
American Zinc Lead Inc (\$25)	-----	\$12 1/2-12 1/2	\$13	-----
Amoskeag Mfg, common	-----	-----	60	-----
Anaconda Cop Min (par \$25)	-----	-----	-----	\$24 1/4
Arizona Commercial (par \$5)	\$3 1/4	\$3 1/2	\$3 1/2	\$3 3/4
Boston & Albany	-----	-----	-----	180-180 1/4
Boston Elevated	89 1/4-90	90	89 1/4-90	90-90 1/4
Butte & Maine, common	-----	33 1/2-34	-----	34
Butte Super Cop (par \$10)	\$28	\$28	\$28 1/2-29	\$30-30 1/2
Calumet & Ariz Min (par \$10)	-----	-----	\$31 1/4	-----
Chino Copper (par \$5)	\$31 1/4	\$31 1/4	-----	31 1/4
Copper Range Con Co.	29	29	-----	-----
Edison Electric Illuminating	-----	240-240 1/4	240	240
General Electric	137 1/2	137 1/2-138	137 1/2-137 1/4	138
Kerr Lake Mining (par \$5)	\$4 1/2-5	\$5	\$5	56 1/2
Massachusetts Elec Cos, pref.	-----	-----	56 1/2	56 1/2
Massachusetts Gas, common	-----	-----	79 1/2	79 1/2
Preferred	87	87	87	-----
Mayflower Mining (par \$25)	-----	\$4 1/2	-----	-----
McLellan (W. H.) 1st pref.	-----	-----	100	-----
Merenthaler Linotype	-----	210	-----	-----
Mobawk Mining (par \$25)	-----	-----	-----	\$30
Nevada Con Cop (par \$5)	\$10 1/2	\$10 1/4	\$10 1/4	\$10 1/4
New England Telep & Teleg	-----	128	-----	-----
N Y New Haven & Hartford	-----	50	50 1/2-50 1/4	-----
Nipissing Mines (par \$5)	-----	5 1/2	-----	-----
North Butte Mining (par \$15)	-----	\$20	-----	-----
Old Colony RR	140 1/4	-----	-----	141 1/4
Old Colony Mining (par \$25)	-----	\$3 1/4	-----	-----
Pond Creek Coal (par \$10)	-----	\$13	\$13-13 1/2	\$14
Pullman Company	148	148	148	-----
Shannon Copper (par \$10)	-----	\$4	-----	-----
Superior & Bos. Cop (par \$10)	\$1 1/4	\$1 1/2	-----	-----
Superior Copper (par \$25)	-----	-----	-----	22
Swift & Co.	101 1/2	102	-----	103
Torrington Co, com (par \$5)	-----	\$28	-----	-----
Trinity Copper (par \$25)	-----	\$2 1/4	-----	-----
United Fruit	128	-----	128	128
Un Shoe Mach, com (par \$25)	-----	\$53 1/2	\$53 1/2-54	\$53 1/2
Preferred (par \$25)	\$28 1/2	\$28 1/2	-----	\$28 1/2
U S Smelt, Ref & Min, pf (\$50)	\$43	\$43	\$43 1/4	\$43
United States Steel Corp, com	50 1/4	50 1/4	50 1/4	50 1/4
Preferred	104 1/4	-----	104 1/4	104 1/4
Utah Apex Mining (par \$5)	\$1 1/2	-----	-----	\$1 1/2
Utah Consol Cop (par \$5)	-----	\$10	\$10	\$10
Utah Copper (par \$10)	\$45	\$45 1/2-45 1/4	\$45 1/2-45 1/4	\$45 1/4
West End St, com (par \$50)	\$66 1/2-66 1/2	-----	\$66	-----
Western Union Telegraph	-----	56 1/4	-----	58
Wlmona Copper (par \$25)	-----	\$1 1/4	-----	-----
Wolverine Copper Min (\$25)	\$35	-----	\$35	-----
Bonds—				
Amer Telep & Telconv 4 1/2s '33	94	94	-----	94 1/4
Col 4s 1929	87 1/4	-----	87 1/4	87 1/4
Chic Junct Rys & UnStk Yds	-----	-----	-----	-----
Col tr 4s 1940	84	-----	-----	-----
New Eng Telep & Teleg 5s	-----	90-99 1/2	99	-----
Western T & S 1932	96	-----	-----	-----

G. M. Haffords & Co. of Fall River under date of Nov. 25 quote Fall River mill stocks as follows:

	Bid.	Asked.		Bid.	Asked.
American Linen	50	60	Luther Mfg	-----	125
Arkwright Mfg	-----	65	Mechanics Mills	70	76
Barnard Mfg	-----	60	Merchants Mfg	-----	80
Border City Mfg	93	-----	Narranset	-----	102
Chase Mills	-----	102 1/2	Osborn Mills	-----	98 1/2
Conant Mills	-----	95	Pocasset Mfg	-----	100
Cornell Mills	140	-----	Richard Borden Mfg	118	-----
Davol Mills	85	-----	Seaconnet Mills	-----	55
Flint Mills	95	-----	Shove	-----	75
Granite Mills	100	-----	Stafford Mills	-----	75
King Philip Mills	102	-----	Tecumseh Mills	100	105
Laurel Lake Mills	105	-----	Union Cotton Mfg	-----	170
Lincoln	75	-----	Wampanoag Mills	-----	77 1/2
			Weetamoe Mills	-----	80

Last sales—Border City Mfg., 95; Cornell

Street's Western Stable Car Line (par \$100)—Nov. 25, 100 at 4 1/4. Swift & Co. (par \$100)—Nov. 23, 188 at 102@103; Nov. 24, 31 at 103@103 1/2; Nov. 25, 198 at 103@104; Nov. 27, 101 at 104 1/2@104 1/2.

Cleveland Stock Exchange.—The Cleveland Stock Exchange re-opened on Nov. 23. Sales from Nov. 23 to Nov. 25 both inclusive, follow:

U. S. Telephone 5s of 1919—Nov. 23, \$4,000 at 80. Cleveland Worsteds Mills par (\$100)—Nov. 25, 10 at 115 1/4. Cleveland Ry. (par \$100)—Nov. 23, 105 at 103; Nov. 24, 30 at 103.

Detroit Stock Exchange.—Following are official quotations of the Detroit Stock Exchange as of Nov. 25:

Table with columns: Bonds, Bid., Asked. Includes items like Consumers' Power 5s, 1936, Detroit Elec. Ry. 5s, 1916, etc.

Table with columns: Active Stocks, Bid., Asked. Includes items like Acme White Lead & Color Works, common, Amer. Pub. Util., etc.

Table with columns: Banks and Trust Companies, Bid., Asked. Includes items like American State, Central Savings, Detroit Savings, etc.

The following sales were reported since Nov. 10 to Nov. 25, inclusive:

Stocks—Acme White Lead & Color, pref., at 17 1/4; Amer. Light & Trac., common, at 274, 293, 310, 313 1/2; preferred, at 100 1/4, 101 1/4; Amer. Public Utilities, common, at 40, 45 1/4; preferred, at 63 1/4; Cities Service, common, at 46; preferred, at 55 1/4; Commonwealth Power, Ry. & Lt. common, at 56 1/4; preferred, at 74 1/2; 77 1/2; Detroit Creamery at 21 1/2, 21 1/2; Detroit Edison at 105 3/4, 106, 106 1/4, 106, 106 1/2, 106 1/2, 107 1/2, 108 1/2; Detroit Valve & Fittings, at 7; General Motors common at 103 1/4, 107 1/2, 108 1/2, 108 1/2, 107 1/2, 67 1/2; preferred at 82 1/2, 82 1/4, 85 1/4, 86 1/4, 86 1/2; Maxwell Motor, common at 14, 10 1/4, 14; Mexican Crude Rubber at 5 1/2, 5 1/2; Niles-Detroit Theatre, at 9; Michigan Sugar, common at 38 1/4, 40, 40 1/2; Minnesota Sugar, preferred at 45; Reo Motor Car, at 21 1/2, 22, 21 1/2, 22; Reo Motor Truck, at 11 1/2; Scotten-Dillon Co. at 107 1/2, 108; White Star Line, at 50, 50 1/4.

Recent changes in prices as reported under date of Nov. 21 by the H. P. Wright Investment Co., Kansas City, Mo., are as follows:

Table with columns: Stocks, Bid., Asked. Includes items like J I Case Thresh Mach, pref., 70, 85; Deere & Co pref., 84, 86; K C Ry & Light pref., 43, 46; etc.

Louisville Stock Exchange.—The Exchange re-opened Nov. 16 for unrestricted trading in bonds. Following sales were reported:

Bonds. Louisville Ry. gen. 5s of 1950—Nov. 18, \$1,000 at 93 1/2; Nov. 19, \$1,000 at 97; Nov. 24, \$1,000 at 96 1/4. Louisville City 4 1/2s—Nov. 18, \$13,000 at 102; Nov. 19, \$2,000 at 102. Rochester Ry. & Light 5s of 1954—Nov. 24, \$1,000 at 95 3/4.

Table with columns: Quotations Nov. 25, Bid., Asked. Includes items like Louisville Ry. gen. 5s, 1930, Blrm Ry & Lt, etc.

J. S. Rippel, 756 Broad St., Newark, N. J., under date of Nov. 21 quotes as follows:

Table with columns: Bonds, Bid., Asked. Includes items like Erie RR-N Y Susq&W 5s 37 90, Gen 5s 1940, Midland of N J 5s '40, etc.

New Orleans Stock Exchange.—The New Orleans Stock Exchange re-opened for trading in bonds on Nov. 23. Following sales were reported:

Bonds. American Cities Co. coll. tr. 5-6s of 1919—Nov. 23, \$1,000 at 87 1/4. Birmingham Ry L & P 4 1/2s of 1954—Nov. 24, \$1,000 at 86 1/4. Louisiana State 4 1/2s, 1964—Nov. 24, \$1,000 at 100 1/2.

Philadelphia Prices.—While transactions in the main in Philadelphia are still subject to the approval of the Stock Exchange Committee, the Philadelphia daily newspapers have reported dealings and prices as follows:

Bonds—Sales. Lehigh Coal & Navigation 4 1/2s—Nov. 18 at 96; Nov. 19 at 96 1/2. Stocks—American Railways, common (par \$50)—Nov. 25 at \$36. Cambria Steel dividend scrip—Nov. 24 at 96; Nov. 25 at 40.

Quotations. Allegheny Valley Ry. gen. 4s of 1942—Nov. 25, 92 1/2 bid. Bergner & Engel Brew. 6s of 1921—Nov. 25, 90 3/4 bid. Easton Consol. Elec. 5s of 1949—Nov. 25, 97 1/2 bid. Interstate Rys. 4s of 1943—Nov. 19 offered at 55 1/2.

San Francisco Stock and Bond Exchange Transactions.—The following are the sales reported from Nov. 14 to Nov. 21, both inclusive. Like records will be found in previous issues.

Bonds. Associated Oil 5s of 1922—Nov. 16, \$1,000 at 95 1/2; Nov. 18, \$1,000 at 95 1/2. Bay Counties Power 5s of 1930—Nov. 17, \$1,000 at 98 1/2. California Gas & Electric s. f. 5s of 1933—Nov. 18, \$4,000 at 98 1/2; Nov. 19, \$1,000 at 98 1/2.

Stocks. Associated Oil (par \$100)—Nov. 16, 50 at 33; Nov. 17, 50 at 33. Bank of California (par \$100)—Nov. 16, 37 at 175; Nov. 17, 35 at 175; Nov. 18, 20 at 175.

Toledo Stock Exchange.—The Toledo Stock Exchange re-opened Nov. 23. Sales Nov. 23 to Nov. 25, both inclusive, were as follows:

Stocks. Dime Savings Bank (par \$50)—Nov. 23, 20 at 136; Nov. 25, 10 at 140.

Current Bond Prices

Railroad.		Bid.	Asked.
Atchison Topeka & Santa Fe general gold 4s, 1995	A-O	90 1/4	91 1/4
Adjustment gold 4s, 1995	Nov	81	82 1/2
Convertible 4s (issue of 1910), 1960	J-D	90 1/4	91
Atlantic Coast Line 1st gold 4s, July 1952	M-S	86 1/2	88
Louisville & Nashville collateral gold 4s, Oct 1952	M-N	84	86
Baltimore & Ohio gold 4s, July 1948	A-O	88	89
20-year convertible 4 1/2s, 1933	M-S	84 1/4	84 3/4
P L E & W Va System ref 4s, 1941	M-N	80	82
Southwest Division 1st gold 3 1/2s, 1925	J-J	87 1/4	88 1/2
Central of Georgia 1st gold 5s, Nov 1945	F-A	102	---
Chesapeake & Ohio			
First consolidated gold 5s, 1939	M-N	100 1/2	102
General gold 4 1/2s, 1992	M-S	84	86
Convertible 4 1/2s, 1930	F-A	67 1/2	68 1/2
Chicago Burlington & Quincy general 4s, 1958	M-S	88	89
Chicago Milw & St Paul gen gold 4s, Ser A, May 1989	J-J	90	92
General gold 3 1/2s, Series B, May 1989	J-J	77	80
General 4 1/2s, Series C, May 1989	J-J	97 1/2	98 1/2
Convertible 4 1/2s, 1932	J-D	96	96 1/2
General and refunding 4 1/2s, Jan 2014	A-O	89	90
Chicago & North Western general gold 3 1/2s, 1987	M-N	78	79
General 4s, 1987	M-N	90	91
Chicago Rock Island & Pacific general gold 4s, 1988	J-J	78 1/2	80
Refunding gold 4s, 1934	A-O	63	64 1/2
20-year debenture 5s, 1932	J-J	52	53
Cleveland Short Line 1st guar 4 1/2s, 1961	A-O	90	91 1/2
Colorado & Southern 1st gold 4s, 1929	F-A	84	87
Refunding and extension 4 1/2s, 1935	M-N	72	77
Delaware & Hudson 1st and refunding 4s, 1943	M-N	91 1/2	93 1/2
Denver & Rio Grande 1st consol gold 4s, 1936	J-J	72 1/2	80
First and refunding 5s, 1955	F-A	42	45
Erle 1st consolidated gold 4s, prior, 1996	J-J	72	80
First consolidated general lien gold 4s, 1994	J-J	64	66
50-year convertible 4s, Series A, 1953	A-O	59 1/2	61
50-year convertible 4s, Series B, 1953	A-O	60	62
Great Northern			
Chicago Burlington & Quincy coll trust 4s, 1921	J-J	94 1/4	94 3/4
First and refunding 4 1/2s, Series A, 1961	J-J	97 1/2	100
Illinois Central 1st gold 4s, 1951	J-J	93	98
First gold 3 1/2s, 1951	J-J	81	81
First refunding 4s, 1955	M-N	86 1/2	87 1/2
Chicago St Louis & New Orleans			
Joint 1st and refunding 5s, 1963	J-D	96 1/2	98 1/4
Kansas City Southern 1st gold 3s, 1950	A-O	67	68 1/2
Refunding and improvement 5s, April 1950	J-J	88	90
Lehigh Valley (Pa) general consolidated 4 1/2s, 2003	M-N	95 1/4	96
Louisville & Nashville unified gold 4s, 1940	J-J	90 1/4	91 1/2
South & North Ala gen cons gu 50-year 5s, 1963	A-O	99 1/2	100 1/2
Missouri Pacific 1st and refunding conv 5s, 1959	M-S	34	36
General lien gold 3s, 2047	J-J	80	80
New York Central & Hudson River g 3 1/2s, 1997	J-J	87 1/2	88 1/2
Debtenture gold 4s, 1934	M-N	85 1/2	85 1/2
Refunding and improvement 4 1/2s, 2013	A-O	85	86
Lake Shore collateral gold 3 1/2s, 1998	F-A	76	78 1/2
Debtenture gold 4s, 1928	M-S	90	90 1/2
25-year gold 4s, 1931	M-N	89 1/2	90
West Shore 1st 4s, guar, 2361	J-J	88	90
Norfolk & Western Ry 1st consol g 4s, 1996	A-O	90	90
Convertible 4 1/2s, 1938	M-S	98	99 1/2
Northern Pacific prior lien gold 4s, 1997	O-J	89 1/2	90
General lien gold 3s, 2047	O-F	63	65
Pennsylvania RR consol gold 4s, 1948	M-N	97 1/2	98 1/2
Reading Co general gold 4s, 1997	J-J	92	92 1/2
Seaboard Air Line gold 4s, stamped, 1950	A-O	77	80
Adjustment 5s, Oct 1949	F-A	60	62
Southern Pacific Co			
Gold 4s (Central Pacific collateral), Aug 1949	J-D	82	84
20-year convertible 4s, June 1929	M-S	80 1/2	81
Central Pacific 1st refunding gold 4s, 1949	F-A	86	87
Southern Pacific RR 1st ref 4s, 1955	J-J	86 1/2	87
Southern—1st consolidated gold 5s, 1994	J-J	99	99 1/2
Development and general 4s, Series A, 1956	A-O	62	63 1/2
Union Pacific			
First railroad and land grant gold 4s, 1947	J-J	93 1/4	94 1/4
20-year convertible 4s, 1927	J-J	85 1/4	86 1/4
First and refunding 4s, June 2008	M-S	88	90
Oregon Short Line guar refunding 4s, 1929	J-D	86 1/2	88
Manufacturing and Industrial.			
American Smelters' Securities sinking fund 6s, 1926	F-A	100	102
Bethlehem Steel 1st and ref 5s, guar A, 1942	M-N	83	84
Central Leather 20-year gold 5s, 1925	A-O	96 1/4	97
Distillers' Securities Corp conv 1st g 5s, 1927	A-O	55	56
General Motors 4 1/2s, 1915—See Short-Term Notes.			
Indiana Steel 1st 5s, 1952	M-N	98	99
The Texas Co convertible debentures 6s, 1931	J-J	95 1/2	96 1/2
United States Rubber 10-year coll trust 6s, 1918	J-D	100 1/2	102
United States Steel Corp sink fund 10-60-year 5s, 1963	M-N	99 1/2	100
Western Electric 1st 5s, Dec 1922	J-J	99 1/4	100 1/4
Westinghouse Elec & Mfg 5s, 1917—See Short-Term Notes.			
Street Railway.			
Brooklyn Rapid Transit 6-year secured notes 5s, 1918	J-J	98 1/4	99
Detroit United 1st cons g 4 1/2s, 1932	J-J	63	65
Interboro-Metropolitan collateral 4 1/2s, 1956	A-O	71 1/2	72 1/2
Interboro Rapid Transit 1st and refunding 5s, 1966	J-J	96	97
Manhattan Ry (N Y) cons g 4s, stamped tax-ex, 1990	A-O	86	88
New York Rys 1st real estate and refund 4s, June 1942	J-J	71 1/2	72 1/2
30-year adjustment income 5s, 1942	A-O	47 1/2	48
Third Avenue 1st refunding 4s, 1960	J-J	78 1/2	80
Telegraph & Telephone.			
American Teleph & Teleg 20-year conv 4 1/2s, 1933	M-S	94 1/4	94 3/4

Inactive and Unlisted Securities

All bond prices are "and interest" except where marked "i."

Standard Oil Stocks—Per Share		Stand Oil Stks (Concl)		Per share	
Par	Bid. Ask.	Par	Bid. Ask.	Par	Bid. Ask.
Anglo-Amer Oil new	*14 1/2 15	Prairie Oil & Gas	100 427 433		
Atlantic Refining	100 535 545	Solar Refining	100 230 240		
Borneo-Serampour	100 270 280	Southern Pipe Line Co.	100 196 199		
Buckeye Pipe Line Co.	50 109 112	South Penn Oil	100 272 277		
Chesapeake Mfg Cons.	100 625 645	Southwest Pa Pipe Lines	100 115 120		
Colonial Oil	100 90 100	Standard Oil (California)	100 300 303		
Continental Oil	100 218 223	Standard Oil (Indiana)	100 475 480		
Crescent Pipe Line Co.	50 40 43	Standard Oil (Kansas)	100 345 355		
Cumberland Pipe Line	100 255 60	Standard Oil of Kentucky	100 240 250		
Eureka Pipe Line Co.	100 228 233	Standard Oil of Nebraska	100 330 340		
Galena-Signal Oil com.	100 170 174	Standard Oil of New Jer.	100 392 394		
Preferred	100 140 145	Standard Oil of New York	100 191 193		
Indiana Pipe Line Co.	50 95 98	Standard Oil of Ohio	100 410 420		
National Transit Co.	25 36 38	Swan & Finch	100 155 165		
New York Transit Co.	100 227 233	Union Tank Line Co.	100 82 85		
Northern Pipe Line Co.	100 96 99	Vacuum Oil	100 198 202		
Ohio Oil Co.	25 181 183	Washington Oil	10 37 41		
Pierce Oil (new)	25 14 15				

Tobacco Stocks—Per Share		Elec. Gas & Power Cos—	
Par	Bid. Ask.	Par	Bid. Ask.
American Cigar common	100 120	Am Gas & Elec com	50 78 82
Preferred	100 92 98	Preferred	50 45 48
Amer Machine & Fdry	100 70 85	Am Lt & Trac common	100 310 315
British-Amer Tobac ord	£1 *15 1/4 16 1/2	Preferred	100 105 107
Ordinary, bearer	£1 *16 1/2 17 1/2	Amer Power & Lt com	100 54 61
Conley Toll	100 275 300	Preferred	100 80 83
Johnson Tin Foil & Met.	100 120 160	Amer Public Utilities com	100 35 45
MacAndrews & Forbes	100 150 185	Preferred	100 62 66
Porto Rican-Amer Tob.	100 220 240	Bay State Gas	50 *100 110
6% scrip	115 125	Buffalo City Gas stock	100 39 41
Reynolds (R J) Tobacco	100 263 270	Cities Service Co com	100 48 51
Preferred (when issued)	108 115	Preferred	100 54 1/2 56 1/2
Tobacco Products com	100 100 150	Columbia Gas & Elec	100 81 91 1/2
Preferred	100 82 85	1st 5s, 1927	J-J 62 67
United Cigar Stores com	100 92 1/2 94	Elec Bond & Share pref.	100 95 99
Preferred	100 107 110	Indiana Lighting Co	100 35 40
United Cigar Stores (new)	100 *94 98	4s, 1958 optional	F-A 67 71
Young (J S) Co	100 120 140	Pacific Gas & El com	100 39 41
		Preferred	100 70 81
Short Term Notes—Per Cent.		Preferred	100 89 91
Amal Cop 5s, Mar 15 '15 M S	100 100 100 1/4	Standard Gas & El (Del)	50 *6 7 1/2
Amer Locomotive 5s, '15 J-J	99 1/2 100 1/4	Preferred	50 *17 19
5s, July 1916	J-J 98 1/2 99 1/2	United Gas & Elec Corp	100 20 25
5s, July 1917	J-J 98 1/4 99 1/4	1st preferred	100 55 58
Am T & T 6% scrip, Sep 1 '15	100 100 100 3/4	2d preferred	100 20 25
Am T & T Sub Cos 5s, 1916	99 1/2 99 3/4	Utah Securities Corp	100 15 1/2 16 1/2
Balt & Ohio 4 1/2s, 1915 J-D	99 1/2 99 3/4	6% notes—See Short-Term Notes	
BethSteels, J'ne 11 '15 J-D	99 1/2 100	Western Power common	100 13 14 1/2
Chic & N Ohio 5s 1915	J-D 89 1/2 90 1/2	Preferred	100 53 55
Chic Elev Ry 5s, 1916	J-J 99 1/2 99 3/4		
Chic & W Ind 5s, 1915	M-S 99 1/2 99 3/4	Industrial and Miscellaneous	
Confol Gas 6s, June 25 '15	100 100 100 1/2	Adams Exp col tr 4s '47 J-D	/65 69
Erle RR 5s, April 1 1915 A-O	99 99 1/2	Alliance Realty	100 30 35
5s, Oct 1 1915	A-O 96 7/8 97 1/2	Amer Bank Note com	50 *46 49
5 1/2s, April 1 1917	A-O 95 1/4 96 1/2	Preferred	50 150 160
General Motors 6s, 1915 A-O	100 100 100 3/4	Amerian Brass	100 125 129
General Rubber 4 1/2s, '15 J-J	99 99 1/2	Amerian Chicel com	100 97 100
Har Riv & Pt Ch 5s, '15 M-N	90 90 93	Preferred	100 93 98
Hocking Valley 6s, '15 M-N	99 1/2 99 3/4	Am Graphophone com	100 17 17
Int Harv 5s, Feb 15 '15 F-A	100 100 100 1/4	Preferred	100 60 60
Iack Steel 5s, 1915	M-S 98 99	Amerian Hardware	100 98 98
Lake Sh & Mich So, J'ne 15	84 85 4.50	Amer Maltng 6s 1914 J-D	99 1/2 100 1/2
Mch Cent 4 1/2s, 1915	M-S 98 98 1/2	Amerian Surety	50 165 175
New Eng Nav 6s, 1917 M-N	88 88 1/2	Amer Typefounders com	100 35 38
N Y C & H Riv 5s, '15	A-O 99 1/2 99 3/4	Preferred	100 85 90
4 1/2s, May 1 1915	99 1/2 99 3/4	Amer Writing Paper	100 84 1
5s, Sept 15 1915	98 1/4 99 1/4	Bliss (E W) Co com	50 98 98
5s, Oct 1 1915	A-O 98 1/2 99 1/4	Preferred	50 115 115
N Y N H & H 5s, 1915 M-N	94 96	Bond & Mtge Guar	100 270 290
Pac G&E 6s, Mar 25 '15 M-S	99 1/2 99 3/4	Borden's Cond Milk com	100 108 109
Penna 3 1/2s, Oct 1 1915 J-D	98 1/4 99	Preferred	100 102 103
Pub Ser Corp N J 5s, '16 M-S	97 1/4 98 1/2	Braden Copper Mines	50 *6 1/2 6 1/2
Schwarz & Sulzb 6s, '16 J-D	99 100	Casualty Co of America	100 127 130
Seaboard A L 5s, 1916	M-S 97 1/2 99	Celluloid Co	100 15 20
Southern Ry 5s, 1916	F-A 97 1/2 99	City Investing Co	100 100 100
5s, Mar 2 1917	M-S 97 1/2 98 1/2	Preferred	100 70 80
SulzSons Co 6s, J'ne 1 1916 M-S	99 100	Consol Car Heating	100 65 70
UnTypep 5s, Jan 15 '16 J-J	97 1/2 99	Davis-Daly Copper Co	100 *3 1/2 1
United Fruit 6s, May 1 '17 M-N	100 100 100 1/2	du Pont (E D) de Nemours	100 150 157
Gold notes 5s 1918	M-N 96 1/2 97 1/2	Powder	100 81 1/2 83 1/2
Utah Co 6s, 1917	A-O 97 1/2 99	Preferred	100 5 15
UtahSecur Corp 6s, 22M-S15	77 79	Emerson-Brantingham	100 20 20
Westhsh Elm&Mfg 5s, '17 A-O	97 1/4 98 1/2	Preferred	100 11 11
		Goldfield Consol Mines	100 *1 1/2 5 1/2
New York City Notes		Havana Tobacco Co	100 5 8
6s, Sept 1 1915	101 1/4 101 1/4	Preferred	100 57 63
6s, Sept 1 1916	102 1/2 102 1/2	1st g 5s June 1 1922 J-D	100 41 1/2 51 1/2
6s, Sept 1 1917	103 1/2 103 1/2	Intercont Rib com	100 95 105
		Internat Banking Co	100 95 100
RR Equipments—		International Nickel	100 95 100
Baltimore & Ohio 4 1/2s	4.95 4.80	Preferred	100 13
Buf Roch & Pittsburgh 4 1/2s	5.00 4.75	International Salt	A-O 75 60
Equipment 4 1/2s	5.20 4.90	International Silver pref	100 95 100
Chicago & Alton 4s	---	1st 6s 1948	J-D 103 106
Chicago & Eastern Illinois 5s	---	Kelly Springfield Tire	100 62 65
Equipment 4 1/2s	---	1st preferred	100 75 80
Chic Ind & Louisv 4 1/2s	5 1/2 5.10	2d preferred	100 90 95
Chicago & N W 4 1/2s	4.95 4.70	Kerr Lake Mining	50 *4 1/2 5

Bankers' Gazette.

Wall Street, Friday Night, Nov. 27 1914.

The Money Market and Financial Situation.—A good deal of interest has been manifest throughout the week in plans for opening the bond market on Saturday at the Stock Exchange. In anticipation of this event, and stimulated, perhaps, by the hope that it foreshadows an early opening of the stock market, sales of bonds and stocks have been larger than at any time since the Exchange closed. The fact that the Chicago and several smaller exchanges have been opened, that restricted trading at Philadelphia and Boston has steadily broadened, leaves little room for doubt that before very long a way will be found for some sort of an opening of the New York Exchange. The volume of business now being done—it is said that sales of 25,000 shares were approved at the Stock Exchange Clearing House on Wednesday—seems to make the matter of a much less restricted market here quite feasible, if not absolutely necessary. Moreover, the second week of banking under the new system has been marked by satisfactory progress in its establishment and by declining discount rates, which will make such an opening easier than it probably would have been under the old regime. It is reported, but so far as we know not officially confirmed, that the call loan market will open for business in usual form on Monday at the Stock Exchange, and a cable to-day from Paris announces that the Bourse there will be opened for cash trading a week later, on Dec. 7.

Reports of exports during the week show liberal shipments of cotton, and it is known that large orders from abroad for manufactured goods of various kinds have been booked in New England and elsewhere. In the iron and steel trade there is, however, much to be desired. Pig iron is said to be in somewhat better demand, and there is a little more inquiry for structural steel, but actual orders for finished products are still exceptionally limited.

Foreign exchange was higher early in the week, but declined later. It is an interesting phase of the present market that exchange on Germany is considerably below the normal rate. Evidently our trade with that country is at such a low ebb that there is practically no demand for the small amount of bills offered.

The open market rate for call loans on the Stock Exchange on stock and bond collaterals has ranged from 4½ to 6%. Commercial paper closed at 5½@6% for sixty to ninety-day endorsements and prime four to six months' single names. Good single names 6@6½%.

The Bank of England weekly statement on Thursday showed a decrease of £347,210 in gold coin and bullion holdings, and the percentage of reserve to liabilities was 31.60, against 34.04 the week before. The rate of discount remains unchanged at 5%, as fixed Aug. 13. The Bank of France issued no statement.

The New York City Clearing-House bank statement for last week was issued in an entirely new form, which makes a comparison of the figures with those for the preceding week or former years inaccurate and unsatisfactory. We have therefore discontinued the publication of the table usually shown in this column. The complete statement with explanatory remarks will be found on a preceding page.

Foreign Exchange.—The market for sterling exchange has ruled irregular this week. Commercial bills have been in rather better supply, but rates as a rule have been maintained.

To-day's (Friday's) actual rates for sterling exchange were 4 86½@4 86¼ for sixty days, 4 88¼@4 89¼ for cheques and 4 89¼@4 90 for cables. Commercial on banks nominal and documents for payment nominal. Cotton for payment nominal and grain for payment nominal.

There were no rates for sterling posted by prominent bankers this week. To-day's (Friday's) actual rates for Paris bankers' francs were nominal. Germany bankers' marks were nominal. Amsterdam bankers' guilders were nominal.

Exchange at Paris on London not quotable.		
Exchange at Berlin on London not quotable.		
The range for foreign exchange for the week follows:		
<i>Sterling, Actual—Sixty Days.</i>	<i>Cheques.</i>	<i>Cables.</i>
High for the week... 4 86½	4 89¼	4 91¼
Low for the week... 4 85	4 88¼	4 88¾
<i>Paris Bankers' Francs—</i>		
High for the week... ----	5 09½	5 08½
Low for the week... ----	5 12	5 10¼
<i>Germany Bankers' Marks—</i>		
High for the week... ----	86	86
Low for the week... ----	85¼	85¾
<i>Amsterdam Bankers' Guilders—</i>		
High for the week... ----	40¾	40¾
Low for the week... ----	40 9-16	40 11-16

Domestic Exchange.—Chicago, 35c. per \$1,000 premium. Boston, par. St. Louis, 20c. per \$1,000 premium bid and 30c. premium asked. San Francisco, 20c. per \$1,000 premium. Montreal, 62½c. per \$1,000 premium. Minneapolis, 50c. per \$1,000 premium. Cincinnati, 40c. per \$1,000 premium.

Outside Market.—Trading on the "curb" this week centered chiefly in the mining shares, with prices generally firm throughout. Considerable interest was also displayed in the so-called Whelan group, and these, with the Standard Oil shares, became more active and stronger as the week progressed. Atlantic Refining lost 10 points to 535. Buckeye Pipe Line sold down from \$112½ to \$108 and was traded in to-day at \$110. Northern Pipe Line rose from 91 to 100. Ohio Oil, after a loss of over 3 points to \$171, ran up to \$182 and ends the week at \$181. Prairie Oil & Gas was conspicuous for a rise of 51 points to 430, the final figure to-day being 429. South Penn Oil was irregular, advancing at first some 20 points to 285, then dropping to 253 and showing a final recovery to 270. Standard Oil (California) was active and advanced from 292 to 304, ending the week at 303. Standard Oil (Indiana) moved up from 468 to 476, sold off to 465 and then recovered to 480. The close to-day was at 478. Standard Oil (Nebraska) on few transactions advanced 20 points to 340. Standard Oil of N. J. displayed decided strength, moving up from 376 to 393. Vacuum Oil gained 7 points to \$195. In Tobacco shares, United Cigar Stores new stock advanced from 8¾ to 9¾ and United Cigar Stores of America common from 91 to 93¼, the latter closing to-day at 93¼. United Profit Sharing sold up almost 5 points to 16½, with the close to-day at 15¾. Riker & Hegeman weakened from 8¾ to 7¾ and recovered to 8. Sterling Gum, after an early loss of about half a point to 4¼, rose to 5¾ and ended the week at 5. Kelly-Springfield Tire moved up a point to 62. A feature was the first trading in bonds since the reopening. Consolidated Gas conv. 6s sold in large volume down from 112½ to 111¾. The "rights" were off from 3¼ to 2¾. Mining shares were active, with Jumbo Extension the particular feature. It advanced from 93 cents to \$2¾, the close being at \$2 3-16. Braden Copper sold up from 5¾ to 6¾, the final figure to-day being at 6½. Outside quotations will be found on page 1587.

We furnish to-day on preceding pages quotations for a large number of unlisted securities and also a considerable number of Stock Exchange bonds of the better class.

In the Nov. 7 issue of our "Bank and Quotation Section" will be found the July 30 prices of every stock and bond quoted on the New York Stock Exchange.

Investment and Railroad Intelligence.

RAILROAD GROSS EARNINGS.

The following table shows the gross earnings of every STEAM railroad from which regular weekly or monthly returns can be obtained. The first two columns of figures give the gross earnings for the latest week or month, and the last two columns the earnings for the period from July 1 to and including the latest week or month. We add a supplementary statement to show the fiscal year totals of those roads whose fiscal year does not begin with July, but covers some other period. The returns of the electric railways are brought together separately on a subsequent page.

Main table of Railroad Gross Earnings with columns for Road, Latest Gross Earnings (Week of Month, Current Year, Previous Year), and July 1 to Latest Date (Current Year, Previous Year). Includes sub-tables for 'Various Fiscal Years' and 'AGGREGATES OF GROSS EARNINGS—Weekly and Monthly'.

AGGREGATES OF GROSS EARNINGS—Weekly and Monthly. *Weekly Summaries. **Monthly Summaries. Includes detailed breakdowns of weekly and monthly earnings for various railroads, with columns for Current Year, Previous Year, Increase or Decrease, and %.

a Mexican currency. b Does not include earnings of Colorado Springs & Cripple Creek District Ry. from Nov. 1 1911. c Includes the New York & Ottawa, the St. Lawrence & Adirondack and the Ottawa & New York Ry., the latter of which, being a Canadian road, does not make returns to the Inter-State Commerce Commission. f Includes Evansville & Terre Haute and Evansville & Indiana RR. g Includes the Cleveland Lorain & Wheeling Ry. In both years. n Includes the Northern Ohio RR. p Includes earnings of Mason City & Fort Dodge and Wisconsin Minnesota & Pacific. s Includes Louisville & Atlantic and the Frankfort & Cincinnati. t Includes the Mexican International. u Includes the Texas Central and the Wichita Falls Lines. v Includes not only operating revenues, but also all other receipts. z Includes St. Louis Iron Mountain & Southern. z Includes the Northern Central beginning July 1 1914. * We no longer include the Mexican roads in any of our totals.

Latest Gross Earnings by Weeks.—In the table which follows we sum up separately the earnings for the third week of November. The table covers 26 roads and shows 23.45% decrease in the aggregate under the same week last year.

Table with 5 columns: Road, 1914, 1913, Increase, Decrease. Rows include Alabama Great Southern, Ann Arbor, Buffalo Roch & Pittsburg, Canadian Northern, etc.

For the second week of November our final statement covers 37 roads and shows 19.43% decrease in the aggregate under the same week last year.

Table with 5 columns: Road, 1914, 1913, Increase, Decrease. Rows include Previously reported (25 roads), Alabama Great Southern, Ann Arbor, etc.

Net Earnings Monthly to Latest Dates.—The table following shows the gross and net earnings of STEAM railroads and industrial companies reported this week:

Table with 5 columns: Road, Gross Earnings, Net Earnings, Current, Previous. Rows include Atch Topeka & S F, Buffalo Roch & Pittsburg, Canadian Northern, etc.

INDUSTRIAL COMPANIES.

Table with 5 columns: Company, Gross Earnings, Net Earnings, Current, Previous. Rows include American Power & Light, American Power & Light (includes), Mt Whitney P & El, etc.

a Net earnings here given are after deducting taxes. b Net earnings here given are before deducting taxes. c After allowing for uncollectible revenue and taxes, operating income for Oct. 1914 was \$242,213, against \$272,916; and from July 1 to Oct. 31 was \$823,517 in 1914, against \$1,113,853 last year.

Interest Charges and Surplus.

Table with 5 columns: Roads, Int., Rentals, &c., Current, Previous, Bal. of Net Earnings, Current, Previous. Rows include Buffalo Roch & Pittsburg, Chic & North Western, etc.

INDUSTRIAL COMPANIES.

Table with 5 columns: Company, Current, Previous, Current, Previous. Rows include American Pow & Light, Mt Whitney Pow & El, San Joaquin Lt & Pow, etc.

ELECTRIC RAILWAY AND TRACTION COMPANIES.

Table with 5 columns: Name of Road, Latest Gross Earnings, Jan. 1 to latest date. Rows include American Rys Co, Atlantic Shore Ry, Chic & North Western, etc.

Table with 5 columns: Road, Gross Earnings, Net Earnings, Current, Previous. Rows include American Power & Light, American Power & Light (includes), Mt Whitney P & El, etc.

a Includes since May 1 1913 the earnings on the additional stocks acquired on that date. b Represents income from all sources. c These figures are for consolidated company. f Earnings now given in milreis.

Electric Railway Net Earnings.—The following table gives the returns of ELECTRIC railway gross and net earnings reported this week.

Table with 5 columns: Road, Gross Earnings, Net Earnings, Current, Previous. Rows include Commonwealth Pow & La, Duluth-Superior Trac, etc.

Union Pacific Railroad.

(Report for Fiscal Year ending June 30 1914.)

Below are the principal traffic statistics and comparative income account for several years, compiled for the "Chronicle." Further data will be given another week.

TRAFFIC STATISTICS.

	1913-14.	1912-13.	1911-12.
Average miles operated.....	7,597	7,349	7,150
Equipment—			
Locomotives.....	1,476	1,501	1,331
Passenger cars.....	1,170	1,110	1,026
Freight cars.....	37,817	32,692	30,224
Road service equipment.....	3,637	3,817	3,958
Passenger Traffic a—			
No. of revenue passengers carried....	8,566,493	8,563,262	8,194,026
Passengers carried one mile.....	888,375,847	903,046,763	886,336,274
Recls. pass. trains per rev. train mile.	\$1.33	\$1.45	\$1.40
Freight Traffic c—			
Tons commercial freight cars.....	17,155,390	16,456,182	14,709,164
Tons carried one mile. b.....	616,879,317	628,302,209	556,162,375
Tons company freight carried.....	7,656,442	7,466,831	7,424,334
Average revenue per ton mile (cts.)..	.975	.971	1.005
Receipts per revenue train mile.....	\$4.18	\$4.17	\$4.10
Tons per revenue freight train mile. d	553.51	559.29	552.38

a Mixed train statistics included, except under train and locomotive miles; also motor cars and special train service excluded.
 b Based on way-bill tonnage, commercial freight only.
 c Mixed trains included in freight-train performance; special train service not included.
 d Based on conductor's tonnage, including company freight.

EARNINGS AND OPERATING EXPENSES.

	1913-14.	1912-13.	1911-12.	1910-11.
Passenger.....	\$21,070,802	\$21,322,493	\$20,207,257	\$20,981,405
Mail and express.....	5,150,723	5,034,212	4,859,879	4,637,739
Freight.....	62,434,292	63,773,804	57,433,558	59,984,364
Switching, rentals, &c.....	1,652,935	1,679,798	1,629,403	1,618,464
Outside oper.—revenue.....	1,806,581	1,828,152	1,797,512	1,781,136
Total revenues.....	\$92,115,333	\$93,638,459	\$85,977,609	\$88,983,108
Maint. of way & struct.....	\$10,785,783	\$10,688,564	\$9,594,538	\$10,445,203
Traffic expenses.....	2,282,596	2,107,146	2,119,603	2,021,492
General expenses.....	2,874,292	2,530,727	2,251,895	2,241,017
Maint. of equipment.....	12,123,174	10,694,011	9,812,175	9,208,725
Transportation expenses.....	25,325,975	26,077,120	24,755,109	23,991,335
Outside oper.—expenses.....	2,018,432	1,932,649	1,856,087	1,900,062
Taxes.....	5,078,867	4,666,277	4,368,789	3,464,147
Total exp. and taxes.....	\$60,489,119	\$58,696,493	\$54,758,196	\$53,271,981
Rev. over exp. & taxes.....	\$31,626,214	\$34,941,966	\$31,219,413	\$35,711,127
Other Income—				
Int. on bonds owned.....	\$2,883,791	\$2,647,583	\$1,834,020	\$1,392,509
Divs. on stocks owned.....	9,258,794	13,151,422	14,651,247	14,596,702
Bal. of int. on loans, &c.....	4,209,339	1,951,210	2,131,975	*2,016,542
Rent for lease of rd., &c.....	1,330,349	1,360,038	1,332,167	*243,361
Rents from steamships.....			101,600	304,800
Net income from lease of unpl. lds., &c.....			35	27
Miscellaneous income.....	113,227	97,718	97,626	89,650
Total other income.....	\$17,795,500	\$19,207,971	\$20,148,671	\$18,643,590
Total net income.....	\$49,421,714	\$54,149,937	\$51,368,085	\$54,354,716
Deduct—				
Int. on bds. held by pub.....	\$14,062,108	\$14,201,658	\$14,068,704	\$12,623,282
Sink. fund requirements.....	11,973	11,980	12,013	12,013
Hire of equipment—bal.....	771,886	1,825,988	1,930,118	1,742,563
Rent for lease of rd., &c.....	1,466,537	1,332,303	1,292,009	*
Miscellaneous expenses.....	15,266	903	25,247	1,097
Prof. dividends (4%).....	3,981,740	3,981,740	3,981,744	3,981,744
Common dividends.....	19,780,778	21,663,370	21,664,739	21,659,571
Rate % common divs.....	(9%)	(10%)	(10%)	(10%)
Total deductions.....	\$40,090,288	\$43,017,942	\$42,974,574	\$40,020,270
Balance, surplus.....	\$9,331,426	\$11,131,995	\$8,393,511	\$14,334,446

* Comparisons of the item so marked is inaccurate, the figures having been slightly changed in later years; the final result, however, remains unchanged.—V. 99, p. 895, 818, 749.

Missouri Kansas & Texas Ry.

(Report for Fiscal Year ending June 30 1914.)

On subsequent pages will be found the report of Chairman Frank Trumbull and President C. E. Schaff, also the detailed income account, balance sheet and profit and loss account. Below we give comparative income account and statistics for several years and comparative balance sheet.

OPERATIONS AND FISCAL RESULTS.

	1913-14.	1912-13.	1911-12.	1910-11.
Miles operated, average.....	3,825	3,677	3,398	3,377
Passengers carried.....	7,334,836	6,238,049	5,692,238	6,044,154
Pass. carried 1 mile.....	404,034,141	401,082,344	349,180,896	391,065,334
Rate per pass. per mile.....	2.25 cts.	2.34 cts.	2.35 cts.	2.28 cts.
Tons freight carried.....	9,121,554	8,744,462	8,732,847	8,165,406
Tons fr't cr'd 1 mile.....	1,850,591,630	1,830,519,759	1,675,674,860	1,605,999,502
Rate per ton per mile.....	1.09 cts.	1.14 cts.	1.08 cts.	1.13 cts.
Gross earnings per mile.....	\$8.241	\$8.796	\$8.295	\$8.607

EARNINGS, EXPENSES, &c.

(Including Wichita Falls Lines from Nov. 1 1912.)

	1913-14.	1912-13.	1911-12.	1910-11.
Passenger.....	\$ 9,105,242	\$ 9,402,967	\$ 8,220,409	\$ 8,923,259
Freight.....	20,228,337	20,912,978	18,100,906	18,184,664
Mail, express, &c.....	2,187,609	2,030,313	1,865,404	1,957,370
Gross oper. revenues.....	31,521,188	32,346,258	28,186,719	29,065,293
Maint. of way, &c.....	4,574,726	4,637,748	4,129,256	3,900,643
Maint. of equipment.....	3,934,119	4,100,819	3,745,233	3,550,393
Traffic expenses.....	737,766	755,120	738,928	742,628
Transportation expenses.....	12,255,499	12,255,845	11,647,573	11,409,361
General expenses.....	1,217,009	1,058,880	944,859	1,003,490
Total.....	22,722,119	22,808,412	20,605,549	20,606,515
Per cent of exp. to earnings.....	(72.09)	(70.51)	(75.23)	(70.90)
Net operating revenues.....	8,799,069	9,537,846	6,980,870	8,458,778
Taxes accrued.....	1,499,521	1,287,903	1,060,181	1,005,649
Operating income.....	7,299,548	8,249,943	5,920,689	7,453,129
Hire of equipment.....	92,504	411,307	69,437	127,911
Int. on investments, &c.....	92,064	128,490	159,170	303,782
Sundry receipts.....	125,215	126,815	127,789	
Gross income.....	7,516,827	8,916,554	6,277,085	7,884,822
Interest on bonds.....	6,124,370	5,965,362	5,670,078	5,300,780
Other interest.....	195,502	12,832	75,465	
Hire of equipment.....	18,544			
Rentals r'd. jt. trks., &c.....	523,807	565,749	579,048	662,184
Discount on securities.....				141,548
Other deductions.....	115,377	55,626	35,326	6,604
Total deductions.....	6,977,600	6,599,569	6,259,918	6,111,116
Net income.....	539,227	2,316,985	17,168	1,773,760
Prof. divs. (see note).....	(2)260,000	(4)520,000	(4)520,000	(4)520,000
Texas Central divs.....	1,407	1,010	1,635	1,020
Divs. on sub. cos. not owned.....	21	42		

Roads.	Gross Earnings		Net Earnings	
	Current Year.	Previous Year.	Current Year.	Previous Year.
Illinois Traction a.....	718,855	729,533	298,663	325,791
Jan 1 to Oct 31.....	6,772,779	6,458,095	2,632,286	2,621,553
Interborough Rap Tran a Oct	2,936,217	2,854,894	1,691,637	1,597,167
July 1 to Oct 31.....	10,436,428	10,142,228	5,621,403	5,304,364
Kentucky Sec Corp. b.....	79,191	64,309	33,828	30,659
July 1 to Oct 31.....	304,560	280,556	145,175	136,303
Louisville Railway b.....	268,080	281,486	117,304	122,582
Jan 1 to Oct 31.....	2,661,966	2,690,011	1,141,729	1,141,779
N Y Railways a.....	1,133,466	1,214,051	344,788	383,301
July 1 to Sept 30.....	3,413,349	7,573,790	1,024,723	1,077,485
Philadelphia Company—				
Nat'l Gas & Oil depts. Oct	443,027	527,235	137,523	218,566
Apr 1 to Oct 31.....	3,425,202	3,654,371	1,403,210	1,803,671
Consol Gas of Pitts.....	10,595	16,628	def3,587	def9,005
Apr 1 to Oct 31.....	72,112	90,270	def15,455	def30,180
Duquesne Light.....	403,910	407,422	177,113	147,234
Apr 1 to Oct 31.....	2,693,004	2,602,026	1,073,983	915,398
Penna Light & Power.....	16,584	18,091	6,346	5,453
Apr 1 to Oct 31.....	110,933	118,644	38,331	37,222
Pittsburgh Rys.....	1,031,988	1,031,698	283,751	306,248
Apr 1 to Oct 31.....	7,152,377	7,118,628	2,083,207	2,168,888
Beaver Valley Trac.....	29,291	29,325	12,751	9,821
Apr 1 to Oct 31.....	210,716	206,646	66,900	71,498
Third Ave Ry System a.....	949,429	954,386	265,982	292,563
July 1 to Oct 31.....	3,844,275	3,800,829	1,218,874	1,280,221
Twin City Rap Tran b.....	800,097	765,160	407,725	390,004
Jan 1 to Oct 31.....	7,746,726	7,333,922	3,751,123	3,622,548

a Net earnings here given are after deducting taxes.
 b Net earnings here given are before deducting taxes.

Interest Charges and Surplus.

Roads.	Int., Rentals, &c—		Bal. of Net Earns—	
	Current Year.	Previous Year.	Current Year.	Previous Year.
Commonw Pow Ry & Lt. Oct	50,516	52,890	190,087	183,657
Jan 1 to Oct 31.....	556,474	291,451	1,730,431	1,404,829
Duluth-Superior Tract.....	24,767	25,163	17,196	19,036
Jan 1 to Oct 31.....	252,813	249,847	220,774	187,014
Interborough Rap Tran.....	906,966	1,049,786	r830,609	r648,464
July 1 to Oct 31.....	3,638,921	3,847,114	r2,162,538	r1,686,054
Kentucky Secur Corp.....	2,802	3,398	r32,390	r28,670
July 1 to Oct 31.....	10,944	15,142	r140,184	r126,183
Louisville Railway.....	73,250	70,167	r60,411	r68,189
Jan 1 to Oct 31.....	720,166	697,500	r576,425	r610,658
N Y Railways.....	280,583	275,124	r104,323	r137,640
Jan 1 to Sept 30.....	841,020	830,515	r296,527	r339,458
Third Ave Ry System.....	214,590	212,524	r61,124	r83,330
July 1 to Oct 31.....	853,637	851,840	r396,674	r445,087
Twin City Rap Tran.....	231,438	238,135	176,286	151,869
Jan 1 to Oct 31.....	2,278,509	2,349,531	1,472,614	1,273,017

z After allowing for other income received.

EXPRESS COMPANIES.

Canadian Express Co.—	Month of July	
	1914.	1913.
Total from transportation.....	\$ 318,758	\$ 303,467
Express privileges—Dr.....	163,167	141,779
Revenue from transportation.....	155,591	161,688
Operations other than transportation.....	5,142	7,787
Total operating revenues.....	160,733	169,475
Operating expenses.....	142,751	148,582
Net operating revenue.....	17,982	20,892
Uncollectible revenue from transportation.....		
Express taxes.....	4,000	2,750
Operating income.....	13,982	18,142

ANNUAL REPORTS.

Annual Reports.—The following is an index to all annual reports of steam railroads, street railways and miscellaneous companies which have been published since Oct. 31.

This index, which is given monthly, does not include reports in to-day's "Chronicle."

Railroad—	Page.	Electric Railways (concl.)	Page.
Alabama & Vicksburg Ry.....	1293	Spokane & Inland Empire RR.....	1292
Atlantic Coast Line RR.....	1523, 1536	Third Ave. Ry., N. Y.....	1447, 1526, 1534
Baltimore & Ohio RR.....	1358, 1373	United Light & Railways.....	1362
Bangor & Aroostook RR.....	1290	Virginia Ry. & Pow. Co., Richmond	1363
Chicago Burl. & Quincy RR.....	1359, 1379	Industrials—	
Chicago Rock Island & Pacific Ry.....	1523	Algoma Steel Corp., Sault Ste. Marie	1526
Cinc. New Ori. & Texas Pac. Ry.....	1527	American Cotton	

Note.—Dividends in 1913-14, 1912-13 and 1911-12 were charged against profit and loss; in previous years they were deducted from the income accounts of the respective years.

CONDENSED GENERAL BALANCE SHEET JUNE 30.

1914.		1913.		1914.		1913.	
\$		\$		\$		\$	
Assets—				Liabilities—			
Road & equipm.	224,229,154	221,569,389	M. K. & T. com. stk.	63,300,300	63,300,300	M. K. & T. pd. stk.	13,009,000
Secur. pledged			Stk. of sub. cos.	25,700	25,400	Funded debt	171,613,500
Prop. & ass'd.	1,544,993	698,461	Leans and bills payable	3,281,336	1,516,386	Traffic, &c., bals.	571,095
Issued or ass'd.	28,217,600	25,420,000	Vouch. & wages	4,391,095	3,931,183	Matur. int., &c.	663,175
Misc. investments	959,628	185,712	Misc. accounts	148,191	335,508	Unmat. int., &c.	1,136,186
Spec'l depos. acct equipm't trusts		1,062,558	Taxes accrued	430,881	390,767	Acct of provident funds	
Cash	1,458,801	1,502,733	Other def. credit items	305,528	82,162	Add'ns to prop'ty	1,563,430
Loans & bills rec.	9,096	883,512	Sinking funds	236,846	221,167	Profit and loss	4,832,457
Traffic, &c., bals.	461,498	817,810	Total	265,508,680	260,191,454		
Miscellaneous	2,020,805	1,840,093					
Agents, &c.	298,868	260,855					
Mat'r. & suppl'es.	2,987,136	3,137,207					
Secur. in treas.	846,299	797,548					
Unmatur'd int., divs., &c.	16,993	15,202					
Sinking funds	1,902,507	1,460,001					
Provident funds		111,284					
Other def. debit items	556,502	430,089					
Total	265,508,680	260,191,454	Total	265,508,680	260,191,454		

a After deducting accrued depreciation on existing equipment, \$1,219,888.
 b After deducting depreciation prior to July 1 1907 on equipment destroyed, \$347,408; uncollectible accounts charged off and reserve, \$165,550; side tracks, &c., property abandoned, \$109,812, and miscellaneous items (net) aggregating \$45,718.—V. 99, p. 1451, 1366, 1052.

Pere Marquette Railroad.

(Report for Fiscal Year ended June 30 1914.)

The 60-page report published in pamphlet form by receivers Frank W. Blair, Dudley E. Waters and Paul H. King, contains a great amount of information, mostly in tabular form, regarding the operation of the property, the rentals in detail, the outstanding obligations, and the interest payments met and in default thereon. The text of the report, dated Sept. 1, says in substance:

Mileage Operated.—The decrease of 8.40 miles embraces: Ottawa Beach branch, sold July 2 1913, 5.25 miles; Finch Creek branch, taken up, 3.15 miles. The purchase price of the Ottawa Beach branch, \$50,000, was collected from B. S. Hanchett and deposited with New England Trust Co., trustee under Chicago & West Michigan first mortgage.

General Results.—Operating revenues decreased \$1,092,519, while operating expenses increased \$3,570,140, consequently there was a net operating deficit of \$1,118,977, as against net earnings of \$3,543,683 in 1912-13. After deducting all charges, including interest, rentals and hire of equipment, the deficit for the year was \$7,152,895, an increase of \$5,557,345.

(The interest charges actually paid during the year amounted to \$1,319,940, against \$2,795,587 in 1912-13 out of total interest charges of \$4,062,907 and \$3,565,117, respectively.)

The freight revenues decreased \$897,788, or 7.52%. The revenue tonnage carried one mile decreased 171,104,851 tons, or 8.64%. The loaded freight-car mileage decreased 10,650,884 miles, or 10.18%. Empty freight-car mileage increased 5,186,046 miles, or 14.02%. The average rate per ton per mile was 6.11 mills, as compared with 6.03 mills in 1913.

Passenger Revenues and Comments.—Passenger revenue figures show a decrease of \$95,558, or 2.38%. The average rate per passenger mile for 1914 was 1.800c, as compared with 1.841c in 1913; the number of passengers carried one mile decreased 4.92%.

The total passenger-train revenues for the year were \$4,818,323; deducting estimated oper. expenses assignable to passenger traffic, \$5,404,938, leaves estimated deficit from such traffic, \$586,616, with no allowance for the proportion of taxes, rentals and interest charges assignable to passenger traffic. If the average passenger rate for the period Jan. 1 1900 to June 30 1907 of 2.108c. could have been applied to the 1914 passengers carried, it would have added \$450,504 to the passenger revenue—and it is estimated that since the adoption in 1907 of the Michigan 2-cent fare law, the passenger revenues have suffered to the extent of \$4,266,232 in consequence thereof.

The revenues from outside operations decreased \$117,703, while the expenses increased \$50,439. Upon instructions from the court, accumulated depreciation of \$104,024 on steamers, &c., was charged to expenses.

Operating Expenses.—The ratio of expenses to gross operating revenues for the year was 106.62%, as compared with 80.32% for the previous year. Maintenance of way and structures increased \$34,605; maintenance of equipment increased \$2,076,734, and maintenance of equipment (depreciation) increased \$1,201,571.

Included in the maintenance expenses are these items, aggregating \$356,254, which were charged upon instructions from the court, viz.: Adjustment of salvage, &c., \$28,419; adjustment of apparent shortage in materials evidently used and not charged to maintenance, prior to Oct. 31 1913, \$262,835; deferred maintenance to right-of-way fences, \$65,000.

Special Items Aggregating \$1,819,387 Charged to Maintenance of Equipment.

Under rulings of the I. S. C. Commission to represent amount charged on account of equipment retired from service—\$409,936
 Heavy repairs made at outside plants to 2,632 bad order cars and 26 bad order locomotives—855,391
 Under order of court, to represent estimated cost of heavy repairs to 2,131 bad order cars, May 31 1914, in excess of normal number—554,060

The maintenance of equipment (depreciation) increased \$1,201,571. Prior to the receivership, and up to Aug. 31 1913, an arbitrary rate of depreciation of 1/2 of 1% per annum on the original cost of equipment was in effect and from Sept. 1 1913 to April 30 1914, a rate of 1/4 of 1% was used. In order to make the rates in effect during the entire receivership period conform more nearly with the actual current loss from depreciation, these annual rates were changed during May 1914, upon instructions from the court, to the following rates, viz.: Locomotives, 1.79%; passenger cars, 2.33%; freight cars, 3.90%; work equipment, 2.79%; river boats, 1.31%. Transportation expenses embrace an item of \$42,249, which represents payments to engineers—to cover additional compensation for period May 1 1912 to June 1 1913, which, prior to May 1 1914, was in suspense.

During the year 1905 06 the ratio of labor charges to operating revenues was 38.61%—and for the late year 47.84%, which proves conclusively that wages have materially increased. The ratio of material and supply charges to operating revenues in 1906 was 11.75%, as against 15.64% in 1914.

Hire of Equipment.—The debit balance on this account amounted to \$771,573, an increase of \$331,838, or 75.46%.

New equipment is badly needed to handle the freight traffic to advantage and to replace such equipment as may have been retired from service during past years. On June 30 1914 there were 2,949 bad order cars on hand and unfit for service, which should be repaired as soon as possible. [On June 30 1914 the rolling stock available for service included: 431 locomotives, 380 cars in passenger service and 16,558 cars in freight service.]

Profit and Loss Debit.—This debt was increased to \$22,559,538 as of June 30 1914, or a net debit of \$8,115,367 during the year, due chiefly to \$7,152,895 balance from income account on June 30 1914 and \$711,143 depreciation prior to July 1 1907 on equipment destroyed, sold, etc.

Bonded and Secured Debt.—The amount of this debt in hands of public increased \$1,015,339, as follows:

Issued during year: (a) Receivers' 5% certificates, dated June 1 1912, due June 1 1915, to retire equipment obligations and for improvements, \$2,000,000; (b) receivers' notes, bearing interest at rate of 6% per annum, payable at maturity of notes, \$750,000; (c) 6% equipment notes, covering cost of 5 Pacific type passenger locomotives purchased under agreement dated April 23 1914, \$112,790; total, \$2,862,790

Retired: (a) Receivers' 6% notes paid, \$425,000; (b) 5% equipment obligations, due July 15 1913 (Equitable Tr. Co.), paid from proceeds of 5% receivers' certificates, \$4,680; (c) paid from current funds: C. H. & D. Ry.—Kleybolte equipment 4 1/2% notes, due Oct. 1 1913, \$34,372; Baldwin Locomotive Co. 6% notes, due May 16 1914 and June 16 1914, \$9,399; (d) matured prior to July 1 1913, but paid during year from proceeds of 5% receivers' certificates: P. M. RR. 6% equipment gold notes, due March 1 1913, extended to Sept. 1 1912, \$650,000; Amer. Car & Fdy. Co. 6% notes, due April 1 1912, Oct. 1 1912 and April 1 1913 (\$20,000), \$100,000; R. Winthrop & Co. 4 1/2% notes, due April 1 1912, Oct. 1 1912 and April 1 1913, \$228,000; P. M. RR. Pullman Co. 5% notes, due April 1 1912, Oct. 1 1912 and April 1 1913, \$396,000; total, \$1,847,451

In addition to the principal obligations paid as aforesaid during the year there was left unpaid and therefore transferred on the books to heading "Matured mortgage, bonded and secured debt unpaid" viz.: Amer. Car & Foundry Co. 6% notes, due Oct. 1 1913 and April 1 1914, \$80,000; R. Winthrop & Co. 4 1/2% equipment notes, due Oct. 1 1913 and April 1 1914, \$152,000; Pullman Co. 5% notes, Series "C," due Sept. 15 1913, Dec. 15 1913, March 15 1914 and June 15 1914, \$48,801; C. H. & D. Ry. (see V. 99, p. 1451), Kleybolte equipment 4 1/2% notes, due April 1 1914, \$34,372; P. M. RR. Pullman Co. 5% notes, due Oct. 1 1913 and April 1 1914, \$264,000; Equitable Trust Co. 5% notes, due Aug. 15, Sept. 15, Oct. 15 and Nov. 15 1913, \$18,720; P. M. RR. 5% Equipment Gold Notes, due Dec. 1 1913 and June 1 1914, \$88,000; total, \$685,893.

[As to plan for protection of certain equipment trusts, see V. 99, p. 539.]

Property.—There were constructed 12.14 miles of side and yard tracks and 7.76 miles of passing tracks; 6.58 miles of side and yard tracks were taken up; a net increase of 13.32 miles. There were 692,378 cross ties used in main track renewals; 86,000 tie plates were applied; 35 miles of track were ballasted with cinders and 63 miles with gravel. There were laid 10,875 tons of new 90-lb. and 521 tons of new 85-lb. rail on main tracks.

Automatic block signals were erected on 112.13 miles of road. New steel bridges were installed, replacing old, light structures, as follows: (a) At Wayne, one 70-ft. deck plate girder; (b) At Ionia, six 66-ft. and two 76-ft. deck plate girders; (c) At Hartford, one 70-ft. through plate girder and two 30-ft. approach spans of eye beams; (d) At Pearl, one 18-ft. eye-beam span.

Equipment.—During the year 85 additional gasoline motor cars were purchased for use of trackmen. There were also purchased five new Pacific type and ten Mikado engines from the Baldwin Locomotive Works.

There were written out of service because of age, &c., or were destroyed: 42 locomotives, 12 cars for passenger service and 1,684 freight and service.

Net Credits to Additions and Betterments \$429,184—Year 1914.

Description—	Debits.	Credits.	Net.
Bridges, trestles and culverts	\$77,107	\$36,002	\$41,105
Increased weight of rail	240,737		240,737
Sidings and spur tracks	107,910	68,404	39,506
Block and other signal apparatus	127,976	450	127,526
Other additions and betterments on roads	302,879	203,887	98,992
Additions and betterments—equipment	506,969	2,484,019	1,977,050

Total additions and betterments—\$1,363,578 \$1,792,762 c/\$429,184

z Represents original cost of equipment, which was retired from service during year ended June 30 1914, and previous to that time. Upon instructions from the court, the value of 1,489 condemned cars and 42 condemned locomotives was credited to additions and betterments during May 1914.

Financial Program for 1914-15.—During the latter part of the year the court issued instructions to receivers to the effect that payment of all interest charges on funded debt, with the exception of the interest on Canadian bonds, be discontinued. The receivers have outlined a financial program for the ensuing year—which is contingent upon earnings, and provides for the expenditure of \$780,000 to be used for heavy repairs to bad order cars; \$60,000 for repairs to bad order fences along the right of way; \$123,600 to cover safety appliances to be placed upon equipment, and \$694,603 to be applied in payment of equipment obligation maturities, \$294,511 of which matured prior to June 30 1914 (V. 99, p. 539), and the balance is to be applied upon maturing obligations during the ensuing year. The receivers have also provided in their financial plan for payment of Michigan State taxes due in April 1915, amounting to approximately \$546,000, and have set aside a monthly fund for this purpose.

Receivers' Certificates.—The receivers applied to the court during the year for permission to issue certificates amounting to \$11,000,000. The court on July 14 1914 ordered (V. 98, p. 1460; V. 99, p. 121, 970): that the receivers be authorized to issue certificates as follows:

\$2,000,000 Series A, 1914: (a) \$605,000 to retire present outstanding issue of receivers' certificates issued for the payment of that amount now in default, and to be used for no other purpose; (b) the balance solely to pay the taxes due April 30 1914, together with the interest and penalties thereon, and also the receivers' notes heretofore issued for taxes and pay-rolls. That said issue of \$2,000,000 of certificates be a first and paramount lien upon all of the Michigan property of the Pere Marquette RR. Co.

\$2,000,000 Series B, 1914, solely to pay indebtedness of the receivers for materials and supplies and other necessary expenses in the operation of said railroad. That said additional amount of certificates be a lien upon all the property of the company (1) subordinate to the following divisional mortgages, to wit: (a) Flint & Pere Marquette RR. mortgages dated, respectively, Oct. 1 1880, March 1 1889, May 17 1889 and Aug. 27 1897; (b) Sag, Tuscola & Huron RR. Co. dated Feb. 1 1900; (c) Chicago & West Mich. Ry. Co. dated Nov. 1 1881; (d) Chicago & North Mich. RR. Co., dated May 1 1891; (e) Det. Gr. Rapids & West. RR. dated Dec. 15 1896; (f) Pere Marquette RR. Co. of Indiana dated May 22 1903; (g) Grand Rapids Belding & Sag, RR., dated March 1 1889. (2) and on a parity with the present outstanding issues of receivers' certificates for \$3,500,000, maturing June 1 1915; and (3) except for the liens of said divisional mortgages and receivers' certificates, Series A, 1914, hereby authorized, be a first and paramount lien upon all of the property of the defendant within the State of Michigan (and if suitable orders shall be made by the U. S. District Courts, then also on all the property of the defendant within the States of Ohio and Indiana.)

That both of said issues of certificates, aggregating the total amount of \$4,000,000, payable on or before June 1 1915, with interest at 5% per annum, payable Dec. 1 1914, and at maturity both principal and interest to be payable to the Guaranty Trust Co. of N. Y., in N. Y. City.

That said receivers be authorized, from time to time in their discretion, to sell or dispose of any or all of said certificates in furtherance of the execution of this order at not less than par, and may apply for further directions in the premises not inconsistent with the foregoing provisions.

That all of the objections made by any of the respondents to the issuing of said certificates are hereby overruled.

That said petition, except as to the relief hereby granted, be and the same is hereby dismissed, but without prejudice to the making of any further application to provide for equipment obligations, or for any other purpose.

Operating Results—Group No. 3.—During the year ended June 30 1914 returns of 67 roads comprising I. S. C. Commission Group No. 3, located in Ohio, Indiana, Michigan and that portion of New York and Pennsylvania west of Buffalo and Pittsburgh, indicate that the gross earnings decreased \$23,981,364, or 5.41%, and that the net earnings decreased \$34,275,769, or 29.44%. The decrease of 29.44% in net earnings in the group referred to, and in which the Pere Marquette RR. is situated, was the highest per cent of decrease in the country. As it is impossible for the railroads to reduce expenses without impairing efficiency and safe operation, it is evident that the only relief from existing conditions is a substantial increase in freight and passenger rates. In so far as the Pere Marquette RR. is concerned, the proposed freight rate increase of 5%, if granted by the I. S. C. Commission, would be wholly inadequate for its needs.

OPERATIONS, EARNINGS, EXPENSES, &C.

	1913-14.	1912-13.	1911-12.	1910-11.
Average miles operated.	2,324	2,330	2,331	2,333
Passengers carried	5,569,426	5,666,058	5,905,044	5,745,124
Pass. carried one mile	206,954,347	217,655,744	224,750,787	222,096,660
Earns. per pass. per mile	1.890 cts.	1.841 cts.	1.800 cts.	1.774 cts.
Earns. per pass. train m.	\$0.9805	\$0.9110	\$0.9569	\$0.9272
Revenue tons carried	10,867,428	11,401,029	10,420,770	10,346,272
Rev. tons carried 1 mile	1808504819	1979609,670	1749267,067	1858421,382
Earn. per rev. ton p. m.	0.611 cts.	0.603 cts.	0.643 cts.	0.579 cts.
Tons per fgt. train mile.	430.90	419.33	335.45	320.32
Earn. per fgt. train m.	\$2.63139	\$2.52957	\$2.15847	\$1.85558
Gross earnings per mile.	\$7.279	\$7.728	\$7.362	\$7.082

INCOME ACCOUNT.

Table with 4 columns: 1913-14, 1912-13, 1911-12, 1910-11. Rows include Freight, Passenger, Mail and express, Other transp. revenue, Rev. other than transp., Outside operations, Total oper. revenue, Maint. of way & struc., Maint. of equipment, Traffic expenses, Transportation expenses, General expenses, Outside operations, Total expenses, Per cent exp. to earnings, Net operating revenue, Taxes, Operating income, Int., divs., &c., received, Total net income, Interest on bonds, Interest on bills payable, Int. on rec. cts. & notes, Rentals, Hire of equipment, Total deductions, Balance, deficit.

x The total interest actually paid by the receivers during the year 1913-14 was \$1,319,940, against \$2,795,587 in 1912-13.

BALANCE SHEET JUNE 30.

Table with 4 columns: 1914, 1913, 1914, 1913. Rows include Assets (Road, equip., &c., Other owned, Int. on rec. cts. & notes, Rentals, Hire of equipment, Profit and loss) and Liabilities (Common stock, Preferred stock, Stock of sub. eos., L. & E. D. R. Ry., common stock, Mtge., bond, &c., debt, Vouch. & wages, Traffic balances, Matur. int., & rents, unpd., Matur. mtge., bonded & sec., debt unpd., Misc. accounts, Acc. int., divs., &c., Accrued taxes, Oper. reserves, Other deferred credit items).

a Road, franchises and equipment (incl. leasehold estate), \$89,457,304 in 1914, incl. investment to June 30 1907, \$81,873,241; investment since June 30 1907, \$9,584,066; less reserve for accrued depreciation, \$1,957,943. b Includes in 1914 and 1913 securities of proprietary, affiliated and controlled companies, pledged, \$3,782,856, and unpledged, \$2; also securities issued or assumed, pledged, \$9,058,000. c Other investments include in 1914 physical property, \$199,787; securities pledged, \$818,401, and securities unpledged, \$460,382.—V. 99, p. 1529, 1301, 970.

Norfolk Southern Railroad.

(4th Annual Report—Year ended June 30 1914.)

Pres. & Gen. Mgr. J. H. Young, Norfolk, says in subst.:

Mileage.—The 22 miles of new line between Varina and Colon, N. C., were opened for traffic on July 1 1913. The extension from Mt. Gilead to Charlotte, 51.77 miles, was placed in operation on Dec. 1 1913.

Previous to Jan. 1 1914 all new mileage was operated as a part of the system of the Raleigh Charlotte & Southern Ry. Co. On that date the accounts of that company were consolidated with those of the Norfolk Southern RR. Co. and the operation of its 291.88 miles of road assumed by your company. The operated mileage (all lines) June 30 was 900.04 miles.

Results.—The total operating revenues exceeded those of 1912-13 by \$119,556, or 3.09%, freight revenue showing an increase of \$71,837, or 2.70%, and passenger-train revenue an increase of \$63,492, or 5.86%, while other revenue decreased \$15,774, or 12.26%. The tons handled one mile increased 15.78%, but yielded an increase of only 2.70% in freight revenue, which condition reflected itself in the net earnings.

Both the operating revenues and expenses were adversely affected first, by a severe storm in Eastern North Carolina during Sept. 1913, followed by a tidal wave which washed away approximately 1 1/2 miles of bridges, one being nearly a mile long, causing a suspension in the movement of traffic on a large portion of the system for a period of ten days, or more, and severe damage to the cotton crop in Eastern North Carolina, and, second, by the almost unprecedented amount of rain and snow during Feb. and March 1914, which so softened a large part of the track, especially the 74 miles of new line just put in operation during that fiscal year, as to severely handicap the operation of the property, causing frequent derailments, with the resultant damage to freight and company's property, slow movement of traffic, and other unsatisfactory and expensive operating conditions. The excessive period of dry weather in April and May also affected the revenue by reducing the size of the vegetable crops then growing, which prior to that time had given every evidence of a large yield.

Maintenance of way expenses showed an increase of \$95,950. Maintenance of equipment increased \$80,561. Transportation expenses showed an increase of \$236,714, due chiefly to (a) interruption of traffic by the Sept. 1913 storm and the expenses incident thereto; (b) abnormal weather conditions in Feb. and March 1914; (c) increased wages paid organized labor; (d) increased cost of fuel, and (e) opening up of 74 miles of new lines on which the revenue was not commensurate with the service necessary in order to aid in upbuilding the territory served.

Other income, exclusive of credits account hire of equipment, decreased \$318,867, due to the fact that the John L. Roper Lumber Co., on account of depression in the lumber market, failed to declare a dividend this year on its \$1,000,000 stock, which your company holds.

Hire of equipment increased \$123,742, due to the additional mileage operated, delay in delivery to your company of new freight equipment ordered, increase in the per diem rate from 30 and 35 cts. to 45 cts. per day, conditions produced by the Sept. 1913 storm and tidal wave and the unusually severe weather experienced in Feb. and March 1914.

Interest on funded debt increased \$174,482, due principally to there having been charged in this year's accounts six months interest on the bonds sold to provide funds for the purchase and construction of lines west of Raleigh.

Table with 6 columns: 1914, 1913, 1912, 1911, 1910, 1909. Row: Gross Oper. Revenues per Mile of Road (Steam Lines) for Past 6 Fiscal Years.

The figures for the year 1914 include the new lines west of Raleigh, which yielded much lower gross revenues per mile of road than the old line east of that point, while the figures for the previous years included the gross revenues of only the original Norfolk Southern system.

Maint. Arg. Cost—'13-'14, '12-'13, '11-'12, '10-'11, '09-'10. Per locomotive, \$1,967.53, \$1,779.97, \$1,723.39, \$1,650.60, \$1,502.92. Per pass. car, 436.43, 467.01, 467.01, 467.01, 467.01.

Number of cross-ties used in renewals, 292,339, against 221,882 in 1912-13; 1,787 miles of new 80-lb. rail and 4,86 1/4 miles of new 70-lb. rail were laid in the main line track, replacing a like amount of 60-lb. rail; 88,500 bushels of oyster shells were placed as ballast.

Bonds.—\$600,000 First & Ref. M. 5% bonds were issued and sold during the year to reimburse the treasury for additions, betterments, purchases of equipment, &c. (V. 98, p. 523).

Dividends.—Dividends of 1/2 of 1% each were paid on Oct. 1 1913 and Jan. 1 1914. Your directors on Mar. 27 1914 decided to suspend further dividends (V. 98, p. 1072, 1000).

Industrial Spur Tracks.—There were placed in operation 5.96 miles of new industrial tracks, reaching 10 new lumber manufacturing plants, 10 new logging operations, 1 cotton mill, 2 oil mills, 1 new fertilizer factory, 2 tobacco factories, 2 tobacco storage warehouses, 1 tobacco stemmery and 31 brick plants, coopeage plants, cotton gins, ice factories, fish scrap factories, &c. The estimated annual gross revenue to be derived by your company from these various industries is \$206,000, which, when compared with the estimated income from industries mentioned in the previous year's report, namely, \$113,000, indicates a more rapid development of the territory served by your lines.

With the opening of your lines west of Raleigh there has been a broadening of interest in new manufacturing locations. New wood-working plants, cotton mills, fertilizer factories and oil mills are negotiating for definite locations, with every evidence of a still further increase of like concerns.

New Equipment.—On Jan. 2 1914 your company executed an equipment trust agreement providing for the lease to it by the Commercial Trust Co. of Philadelphia of the following new equipment, being a part of that ordered in 1912-13 (V. 97, p. 1201), viz.: 6 passenger cars, 6 caboose cars and 463 steel underframe cars (3 mail and baggage, 160 flat and 300 box). Your company guaranteed the principal and dividend of \$500,000 5% trust certificates (Series A, dated Jan. 1 1914) issued under said agreement; \$25,000 matured and was paid (July 1 1914).

Agricultural Development.—There has been a marked increase in inquiries in respect to the agricultural possibilities of the territory tributary to your line, particularly as to new development projects, prospective or under way. Wonderful crop results are being obtained on the newly developed lands in Eastern North Carolina, while better farming methods are securing increased farm returns per acre throughout the entire territory.

Add'ns and Betterm'ts for Year ended June 30 1914, Aggregating \$1,112,505.

Table with 2 columns: 1914, 1913. Rows include Right of way, stations, &c., Grade reductions and changes of line, Additional main tracks, sidings and spur tracks and terminal yards, Additions and betterments, Equipment.

Digest of Report of C. I. Millard, Pres. of John L. Roper Lumber Co.

On Sept. 3 1913 the saw mill plant and stock of lumber on hand at Belhaven, N. C., were seriously damaged by wind and flood, causing a loss for repairs of about \$15,000, and this also enforced the closing of the plant for about six weeks, causing a further loss of at least as much more. The same storm adversely affected the operation at New Bern. On Mar. 4 1914 the dry kilns at Roper were destroyed by fire, causing considerable delay and extra expense in operating. The curtailment of the cut during the summer and fall of 1913, owing to the slack demand for lumber, reduced the production and added materially to the cost. The enforced cancellation of the contract to log the Belhaven plant increased the cost of the logs. The cost of labor, which has increased during the last three or four years, did not fall with the price of the product of the mills, which steadily declined throughout the year. No dividend action was taken during the year.

CLASSIFICATION OF TONNAGE—STEAM DIVISION—Products of—

Table with 6 columns: 1913-14, 1912-13, 1913-14, 1912-13, 1913-14, 1912-13. Rows include Year—Agriculture, Animals, Mines, Forests, Manufactures, Misc.

TRAFFIC STATISTICS—STEAM DIVISION.

Table with 4 columns: 1913-14, 1912-13, 1913-14, 1912-13. Rows include Average miles, *Equipment, Locomotives, Passenger cars, Freight cars, Work, &c., cars, Traffic—Passengers carried.

* Equipment as above on June 30 1914 includes 15 locomotives leased and 341 cars in passenger, freight and company's service. The company also owned 9 barges, 5 ear floats and 1 tug. Equipment on hand June 30 1914 (electric line). Cars owned or leased in passenger service, 39; others in freight service, 6; in company's service (caboose cars), 1.

INCOME ACCOUNTS (a) Norfolk Southern RR. Steam Division.

Table with 4 columns: 1913-14, 1912-13, 1913-14, 1912-13. Rows include Revenues (Freight, Passenger, Mail, exp. & misc., Oth. rev. from oper.), Expenses (Maint. of way, &c., Maint. of equip., Traffic expenses, Transport'n exp., General expenses), Total, Net revenue, Taxes accrued, Oper. income, Hire of equipm't., Other income, Gross corp. inc., Deduct (Rent, lease of road, Int. on bonds, &c., Hire of equipment, Miscellaneous), Total deduct'ns, Bal., sur. or def. net.

(b) Norfolk & Southern Electric Division (Miles operated)—Operating Net (after Other Interest, Dividends, Balance, Fiscal Year—Revenue, Taxes), Income, Rents, &c. Paid, Sur. or Def.

(c) Combined Steam and Electric Divs. (900 miles in 1914 vs. 825 in 1913).

(d) John L. Roper Lumber Co.—1913-14, 1912-13.

BALANCE SHEET JUNE 30.

Table with 4 columns: 1914, 1913, 1914, 1913. Rows include Assets (Road & equip't., Real est. not used in operation, Leased rail, Adv. to proprie-tary, &c., cos., Secs. of under-lying & other cos., Cash, Depos. with trus., Material & supp., Loans & notes rec., Misc. accts. rec., Unexting. disc., Special deposits, Oth. def. deb. items) and Liabilities (Capital stock, Funded debt (see "Ry. & Indus." Section), Traffic, &c., bals., Vouchers & wages, Interest, &c., due, Miscell. accounts payable, Accrued interest, rents, &c., Taxes accrued, Der. credit items, Surplus).

d Includes road, \$24,133,785, and equipment, \$3,531,519, and \$480,586 for general expenditures, less reserve for depreciation, \$192,959. e Includes deposits for additions and betterments, \$27,638; sinking fund, \$13,032; sale of property, \$8,326; and equipment destroyed, \$510. c Both pledged and unpledged. f After adding adjustments aggregating \$114,322.

Note.—The N. & S. RR., with the Virginia Ry., guarantees the authorized issue of \$2,000,000 1st M. 50-year 4s of the Norfolk Terminal Ry. due May 1 1961. The co. also guarantees \$73,190 Carolina RR. bonds.—V. 99, p. 1300.

St. Joseph & Grand Island Railway.

(18th Annual Report—Year ended June 30 1914.)

Pres. Graham G. Lacy, St. Joseph, Sept. 16, wrote in subst.

Results.—Gross transportation revenue increased \$54,726 and the total deficit, after charge, was \$198,841, a decrease of \$27,449.

The freight business was the greatest of any year in the history of the road, the actual tons handled showing an increase of 11.7% over last year and the ton miles an increase of 5.3% over last year, which in its turn was greater than any previous year. This increase was due to a traffic arrangement made with the Union Pacific RR. for handling Union Pacific freight traffic between Marysville, Kansas, and Hastings, Nebraska, which brought a revenue of \$186,713, and increased the tonnage and earnings sufficiently to overcome the losses due to a total failure in the corn crop.

Additions, &c.—There was expended \$14,162 for additional passing track facilities, enlarging station buildings and new water tanks; \$6,615 of this was chargeable to operating expenses and \$7,547 to additions, etc.

The expenditure of \$913,124 is needed for improvements of roadbed, bridges, &c. (1) Referred to in former reports: (a) Line from Carden, Kan., to Hastings, Neb. 118 miles, \$409,566 (ballasting, \$261,443; rectifying grades, \$61,440; passing tracks, &c., \$86,683); (b) grade adjustment, &c., Carden to Marysville, \$27,104, and coal and water station, Hanover, Kan., \$20,100; (c) 8 freight and 5 passenger locomotives, \$190,500. (2) Additional to previous requisitions: (a) further passing track facilities, enlarging station buildings and new water tanks, \$35,598; (b) replacing 48.4 miles 60-lb. and 52-lb. rail with 75-lb. rail between Manville and Price, Kan., and Hastings and Grand Island, \$167,600; (c) renewing telegraph pole line, Seneca, Kan., to Hastings, Neb., \$28,200; (d) steel underframes to 43 box cars, \$9,211; shear boom and rip-rap, Missouri River bridge, \$9,045; improvement to other bridges, \$1,900.

During the fiscal year 113 freight and outfit cars, 1 pile driver and 1 locomotive which had been condemned were destroyed. In addition, 7 freight cars were destroyed by accident. There were 3 freight cars built at company shops and 2 converted to be used in company service. This leaves only 576 serviceable freight cars for commercial service and will explain the large payment for hire of equipment.

Suit.—The litigation instituted by certain stockholders, referred to in the last two annual reports, has not been finally disposed of. A decision therein was rendered May 27 1914 by the U. S. District Court for the Dist. of Neb., holding that the Union Pacific RR. Co. and this company were competitors for inter-State traffic amounting to some \$48,000 in annual revenue to this company and some \$18,000 in annual revenue to the Union Pacific RR. Co.; that although the whole amount of this traffic carried by both roads was less than 1-10 of 1% of the total revenue of the Union Pacific RR. Co. and was only 3.88% of the total revenue of this company, it constituted a substantial amount of traffic subject to competition; and that, therefore, the ownership by the Union Pacific RR. Co. of a majority of the capital stock constituted a violation of the Federal Anti-Trust law.

The decree of the Court enjoined any control, direction or supervision by it over the affairs of this company, enjoined this company from making any further expenditures for the reconstruction of that portion of its line lying between Upland, Kan., and Hastings, Neb., or acquiring by purchase or lease the railroad of the Hastings & Northwestern Ry. Co. extending from Hastings to Gibbon, Neb., except upon authority of a board of directors chosen by stockholders other than the Union Pacific RR. Co., and provided that unless within 60 days from the entry of the decree the management and control of this company should be surrendered to a board of directors chosen by stockholders other than the Union Pacific RR. Co., a receiver of this company and of all its property and franchises would be appointed by the Court. An appeal from this decree to the U. S. Circuit Court of Appeals was taken both by this company and by the Union Pacific RR. Co. and the decree was superseded and its enforcement stayed pending the appeal. The appeal has been perfected and is set for argument in the Court of Appeals on Jan. 19 1915. (V. 99, p. 1695, 1768, 1847, 1994.)

OPERATIONS, EARNINGS, EXPENSES, &c.

	1913-14.	1912-13.	1911-12.	1910-11.
Miles operated June 30.	319	319	319	319
Oper. revenue per mile.	\$5,049	\$4,872	\$4,846	\$5,343
Freight (tons) carried.	853,333	763,645	726,293	733,062
Fr't(tons) carried 1 mile	105,253,955	99,896,721	85,667,522	97,153,809
Av. rate per ton per mile	1.07 cts.	1.03 cts.	1.16 cts.	1.14 cts.
Aver. train-load (tons)	233	217	189	199
Aver. earnings per mile of each freight train.	\$2 50	\$2 23	\$2 20	\$2 27
Passengers carried.	607,829	711,147	788,771	857,384
Pass. carried 1 mile.	16,362,057	17,764,916	19,764,772	21,922,158
Rate per pass. per mile.	2.12 cts.	2.17 cts.	2.05 cts.	2.08 cts.

INCOME ACCOUNT.

	1913-14.	1912-13.	1911-12.	1910-11.
Freight.	\$1,129,677	\$1,024,264	\$996,848	\$1,109,259
Passenger	347,504	385,686	405,478	455,800
Mail, express, &c.	132,879	143,515	143,499	139,256
Total oper. revenue.	\$1,610,060	\$1,553,465	\$1,545,825	\$1,704,315
Outside operations.	2,198	4,067	5,566	5,521
Total revenue.	\$1,612,258	\$1,557,532	\$1,551,391	\$1,709,836
Maint. of way & struct.	\$326,115	\$353,567	\$274,732	\$363,925
Maint. of equipment.	261,106	232,204	280,465	243,113
Traffic expenses.	60,181	58,537	59,708	76,937
Transportation	696,054	698,712	691,661	732,726
General expenses.	83,808	68,617	77,104	77,518
Total oper. expenses.	\$1,427,264	\$1,411,637	\$1,383,670	\$1,494,219
Outside operations.	2,177	4,981	4,286	5,032
Total expenses.	\$1,429,441	\$1,416,618	\$1,387,956	\$1,499,251
P. c. of oper. exp. to rev.	(89.66)	(90.95)	(89.47)	(87.86)
Net earnings.	\$182,817	\$140,914	\$163,435	\$210,585
Other income.	*42,725	41,395	40,757	41,278
Total income.	\$225,542	\$182,309	\$204,192	\$251,863
Taxes.	\$86,482	\$73,987	\$80,858	\$70,458
Int. on 1st M. 4% bds.	160,000	160,000	160,000	160,000
Rents for joint facilities.	77,753	76,869	79,128	62,917
Hire of equip. balance.	90,516	95,113	91,662	77,655
Interest on notes.	9,632	2,631	-----	-----
Total deductions.	\$424,383	\$408,599	\$411,649	\$371,030
Balance, deficit.	\$198,841	\$226,290	\$207,457	\$119,167

* Other income includes \$41,493 rents received from joint facilities in 1913-14 and in 1912-13 \$39,589; also interest on loans, \$1,232 in 1913-14 against \$1,806.

BALANCE SHEET JUNE 30.

	1914.	1913.	1914.	1913.
Assets—	\$	\$	Liabilities—	\$
Cost of road, equip- ment, &c.	18,335,877	18,440,554	First pref. stock.	5,499,400
Cash.	118,513	136,464	Second pref. stock	3,500,000
Due from agts., &c.	26,978	33,278	Common stock.	4,600,000
Due from individ- uals & companies	115,758	110,165	Bonds outstanding	4,000,000
Due from U.S.P.O.	3,088	3,457	Audited vouchers.	269,205
Materials & supp.	200,887	223,316	Pay-rolls.	62,931
Bills receivable.	24,640	24,640	Due to other cos.	59,098
Unadjusted accts.	28,921	37,526	Notes payable.	274,900
Miscellaneous.	1,524	1,431	Interest on bonds.	82,490
			Accrued taxes.	37,660
			Miscellaneous.	4,803
			Profit & loss, surp.	421,699
Total.	18,856,186	19,013,831	Total.	18,856,186

—V. 99, p. 817.

Cincinnati New Orleans & Texas Pacific Ry.

(Lessee of the Cincinnati Southern Ry.)

(32nd Annual Report—Year ended June 30 1914.)

Pres. Fairfax Harrison, Nov. 17, wrote in substance:

Results.—Operating revenues increased \$427,522, while operating expenses increased \$670,238. Of this latter increase, \$375,455, or 56.02%.

was in maintenance. New ballast was placed aggregating 105,690 cu. yds.; 268,470 cross-ties were used in renewals; 7,876 tons of new 85-lb. steel rail, representing 58.97 miles of track, were laid. Maintenance of equip- ment increased \$315,877, due principally to the necessity of greater ex- penditures in the maintenance of wooden freight cars. Transportation expenses increased \$253,021, or 7.69%, due principally to the necessary handling of empty foreign car equipment routed home, the increase in the empty movement for the year being 63.39%.

The decrease of \$76,829 in other income was due to decrease in the receipts from per diem rental of freight train cars. During the year addi- tions and betterments costing \$1,324,563 were made, and included in income account, an increase of \$299,914 compared with 1912-13. Of these additions and betterments, improvements costing \$1,234,947 will revert to the City of Cincinnati at the expiration of the lease. [The balance of income after deducting additions and betterments, but not dividends, was \$589,779, against \$1,227,904 in 1912-13.]

Dividends.—The usual dividends, aggregating 5%, declared out of in- come for the year, were paid on the pref. stock. Dividends aggregating 6%, declared out of accumulated surplus and charged to profit and loss, were paid on the common stock. Extra dividends aggregating 5% were also paid on the common stock and charged to profit and loss (just as in the two preceding years).

Terminals.—The trustees of the Cincinnati Southern Ry. are expending in improvement of the terminal facilities in Cincinnati the proceeds of the \$100,000 of bonds of the City of Cincinnati referred to in the last report, being a part of the \$500,000 authorized in 1911 to be issued for said pur- pose at not exceeding \$100,000 per annum. Under the lease, your com- pany assumes the interest upon these bonds and contributes 1% per annum to a sinking fund for their payment at maturity. The improvements made with the proceeds of these bonds will revert to the City of Cincinnati upon the expiration of the company's lease.

Property Investment.—Our investment in equipment increased during the year \$223,010. [Additions, 100 automobile freight cars, 100 box cars, 150 coal cars, 5 dining cars, &c., \$530,901, less equipment retired, 310 cars, \$207,891. Other property increased \$120,491 (shops at Ferguson, Ky.) Equipment trust obligations paid amounted to \$294,000.]

Additional Facilities.—Second main track between Erlanger and Will- lamstown, Ky., 28.46 miles, was completed and put in service; total double track June 30 1914, 119.15 miles, or 35.5% of the total main-track mile- age. 18.15 miles of side and yard tracks were constructed. The yards at Cincinnati, O., Lexington, Ky., Danville, Ky., and Oakdale, Tenn., have been improved and enlarged. Considerable work in the widening of cuts and fills is being done, with a view to bringing all cuts and fills up to standard. A number of bridges were renewed or replaced with concrete culverts. An overhead viaduct at McCallie Ave., Chattanooga, was completed, and another at East End Ave., is under construction.

Industrial Progress and Traffic Conditions.—During the year there were located on or contiguous to the road 27 new industrial plants, representing an investment of \$953,000 and employing 1,277 persons. The inbound and outbound freight tonnage from these new industries is estimated at 4,483 cars per annum. The total estimated value of improvements adja- cent to the line (exclusive of the City of Cincinnati, but including municipal and industrial improvements of all kinds) made during the year is \$3,000,483. In the cities and towns between Cincinnati and Chatta- nooga 653 new dwelling houses were erected.

Our passenger service is adjusted to meet the demands upon an initial road from the Ohio River to the Gulf, to the Southeast, and to Eastern Tennessee and the Carolinas, and the passenger train service is closely followed by the movement given to freight traffic in both directions. The inauguration of the "Carolina Special" from Cincinnati to Charleston, S. C., and later of the "Royal Palm" from Chicago, Ill., to Jacksonville, Fla., has opened up a means of communication between the Middle West and the South Atlantic seaboard superior to any previously afforded.

Advances have been made in the development of mineral, clay and tim- ber resources. Large deposits of shale and fire clay have been discovered at a number of points in Kentucky and Tennessee. A new and large ter- ritory of hardwoods has been opened up tributary to Oneida, Tenn.

TRAFFIC STATISTICS FOR YEAR ENDING JUNE 30.

	1913-14.	1912-13.	1911-12.	1910-11.
Operations—				
Miles operated.	335	335	335	335
No. passengers carried.	1,512,997	1,495,728	1,451,010	1,403,384
Pass. carried 1 mile.	96,885,503	86,619,647	82,784,199	79,492,273
Rev. pass. per mile.	2.11 cts.	2.13 cts.	2.1 cts.	2.10 cts.
Tons rev. freight moved	5,373,066	5,631,134	5,241,311	4,906,920
Tons fr't moved 1 mile	1,102,522,131	1,072,034,160	996,917,794	931,626,139
Rev. fr't per ton per mile.	0.75 cts.	0.75 cts.	0.75 cts.	0.76 cts.
Av. train-load (rev.) tons	411	419	403	400
Earns. per pass. tr. mile	\$1.37	\$1.36	\$1.36	\$1.41
Earns. per fr't tr. mile.	\$3.10	\$3.16	\$3.03	\$3.02
Gross earnings per mile.	\$32,411	\$31,137	\$29,083	\$27,441

INCOME ACCOUNT FOR YEARS ENDING JUNE 30.

	1913-14.	1912-13.	1911-12.	1910-11.
Freight revenues.	\$8,303,851	\$8,078,157	\$7,503,581	\$7,043,373
Passenger revenues.	2,043,306	1,848,423	1,746,678	1,668,145
Mail, exp. and miscell.	456,363	459,188	451,864	446,912
Other rev. from oper.	69,170	59,401	54,142	46,975
Total oper. revenue.	\$10,872,690	\$10,445,169	\$9,756,266	\$9,205,405
Maint. of way & struc.	\$1,116,637	\$1,057,059	\$1,006,493	\$1,006,435
Maint. of equipment.	2,745,835	2,429,958	2,165,571	1,916,375
Transportation expenses	3,263,566	3,209,545	2,835,008	2,729,481
Traffic expenses.	307,406	281,571	246,443	245,383
General expenses.	273,282	237,349	230,394	218,517
Total oper. expenses.	\$7,706,720	\$7,036,482	\$6,483,909	\$6,116,191
Net operating revenue.	\$3,165,970	\$3,408,687	\$3,272,357	\$3,089,214
Outside oper.—net def.	9,447	7,877	6,493	16,443
Total net revenue.	\$3,156,523	\$3,400,810	\$3,265,864	\$3,072,771
Taxes accrued.	368,000	345,600	271,600	254,483
Operating income.	\$2,788,523	\$3,055,210	\$2,994,264	\$2,818,288
Hire of equip. balance.	320,105	436,207	218,170	361,514
Income from invest. &c.	157,501	118,228	95,821	78,587
Total gross income.	\$3,266,129	\$3,609,645	\$3,308,255	\$3,258,389
Rental to Cincinnati.	\$1,231,431	\$1,227,742	\$1,228,742	\$1,229,990
Miscell. int. & rentals.	120,356	129,350	132,315	123,209
Permanent impts.	1,324,563	1,024,649	579,342	606,671
Divs. on pref. stk. (5%)	122,670	122,670	122,670	122,670
Divs. on com. stock *.	(11)328,900	(11)328,900	(11)328,900	(5)150,000
Total deductions.	\$3,127,920	\$2,833,311	\$2,392,002	\$2,232,360
Balance, surplus.	\$138,209	\$776,334	\$916,253	\$1,026,029

* Deducted by the company from profit and loss, but here shown for the sake of simplicity.

BALANCE SHEET JUNE 30.

	1914.	1913.	1914.	1913.
Assets—	\$	\$	Liabilities—	\$
Road & equipmt.	9,792,321	9,553,438	Common stock.	3,000,000
Misc. securities.	1,033,790	1,033,790	Preferred stock.	2,453,400
Physical property.	4,515	4,515	Vouchers & wages	904,352
Material & suppl.	582,782	597,543	Misc. accounts.	91,146
Cash.	2,207,625	2,729,283	Accrued taxes.	313,069
Securs. in treasury	10,000	10,000	Equip. obligations	1,086,000
Marketable secur.	217,328	1,035	Rent & int. acct'd	315,269
Agents & conduc.	151,124	239,004	Traffic balances.	293,156
Bills receivable.	140	909	Operating reserves	405,708
Traffic, &c., bals.	328,813	369,651	Oth. def. cred. items	103,825
Misc. accounts.	454,344	442,450	Approp. surplus.	144,005
Def. deb. items.	312,403	197,308	Profit and loss.	6,075,255
			Total.	15,185,185
Total.	15,185,185	15,178,926		15,178,926

a After deducting \$2,738,383 reserved for accrued depreciation of equi- ment.—V. 99, p. 1527.

Aurora Elgin & Chicago (Electric) Railroad.

(Report for Fiscal Year ending June 30 1914.)

Pres. L. J. Wolf, Cleveland, Oct. 21, wrote in substance:

[Compare map, &c., pages 29 and 30 of "Electric Railway Section."]
Property.—On the Chicago division 15 miles of track from Des Plaines River west were raised, widened and ballast added, and 30,000 ties were renewed; 3 1/2 miles of double track between Central Ave., Chicago, and the Des Plaines River were re-ballasted with new crushed stone. The track and roadbed of the Fox River interurban lines have been maintained at a higher standard than ever before; during the past year 20,000 ties were renewed; at six points open culverts and trestles have been replaced with permanent concrete construction. At Aurora a city new passing track was constructed 700 ft. in length, and 8,400 ft. of track was entirely reconstructed with new material, including new pavement. In Elgin, also, 4,919 ft. of the St. Charles St. line was entirely reconstructed.

The new high-tension steel pole line between Ingalton and Elgin lighting sub-stations was put in service on Dec. 1 1913 with entirely satisfactory results. A high-tension line of similar character is contemplated between Wheaton and Lombard sub-station.

Great effort has been made toward the better protection of highway crossings and elimination of danger to passenger, to public and to property.

The 8,300 kva. high-pressure steam turbine mentioned in last year's report has been installed and is in operation. Two additional 500 h.p. boilers were installed, together with the necessary stokers, coal and ash-conveying apparatus, bunkers, &c., thus making a total installation of 9,500 h.p. At Lombard sub-station a 450 k.w. oil-cooled transformer has been installed as a spare unit in connection with the lighting sets.

Six new Chicago division cars of the latest type of semi-steel construction were put in service early in 1914. Four new double-truck, pay-entry city cars of semi-steel construction were put in service.

Business.—A new five-year contract has been signed with the Elmhurst-Chicago Stone Co. for the power requirements of their quarry and stone-crushing plant, the current to be delivered from our Lombard sub-station. The Stone Company has added 150 h.p. to their plant this year, making a total of approximately 550 h.p. connected. A new five-year contract has also been executed with the Western United Gas & Electric Co., covering their requirements for the village of Glen Ellyn and the city of Wheaton. Our business in Elgin, West Chicago and Ardmore has shown a healthy growth and extensions of our lines have been made where warranted.

There has been an unusually large amount of excursion business during the past year and our various picnic parks continue to be very popular.

Owing to the dissolution of the United States Express Co. we have lost the revenue from that source. However, under traffic arrangement with the Arrow Transfer Co., which transports express and freight matter from the downtown district of Chicago to our freight terminal at Laramie Ave. near the city limits, we are undertaking to build up a local freight and express business between Chicago and various villages along our line.

Financial.—The company now has in its treasury \$1,119,000 of its First & Ref. M. bonds, certified against construction, improvements and betterments heretofore made. Market conditions have not been favorable to their sale, and the company is therefore carrying its present obligations as notes and accounts payable. When market conditions are again normal, the sale of the treasury bonds will liquidate the notes and accounts payable and leave a substantial cash balance.

RESULTS FOR YEARS ENDING JUNE 30.

	1913-14.	1912-13.	1911-12.	1910-11.
Gross RR. earnings	\$2,094,157	\$2,013,030	\$1,780,637	\$1,672,278
Gross earnings, light dept.			111,750	102,714
Total gross earnings	\$2,094,157	\$2,013,030	\$1,892,388	\$1,774,992
Expenses & taxes, R.R.	\$1,396,791	\$1,238,642	\$1,002,690	\$1,002,690
Exp. & taxes, light dept.			53,157	50,658
Total oper. expenses	\$1,396,791	\$1,238,642	\$1,137,172	\$1,053,348
P. c. oper. exp. to earnings	(66.69)	(61.53)	(60.09)	(59.35)
Net earnings, all depts.	\$697,366	\$774,388	\$755,216	\$721,644
Other income	2,026	1,814	8,240	15,493
Total net income	\$699,392	\$776,202	\$763,456	\$737,137
Deductions from income	\$418,759	\$395,223	\$386,127	\$423,373
Div. on pref. stock (6%)	186,000	186,000	186,000	186,000
Div. on com. stock (3%)	93,000	93,000	93,000	93,000
Total deductions	\$697,759	\$674,223	\$665,127	\$702,373
Balance, surplus	\$1,633	\$101,979	\$98,329	\$34,764

BALANCE SHEET JUNE 30.

1914.		1913.		1914.		1913.	
Assets—	\$	\$	Liabilities—	\$	\$	\$	\$
Prop., plant, &c.	12,595,398	12,598,881	Preferred stock	3,100,000	3,100,000		
Construction, improvements, &c.	2,590,569	2,222,666	Common stock	3,100,000	3,100,000		
Elgin & Aur. improvements under leases	10,963	15,145	First & ref. bonds	4,198,000	3,486,690		
Investments	15,601	15,280	First mtge. bonds	2,800,000	2,850,000		
"First & refund" bonds in treasury	1,110,000	450,000	E. & A. S. Trac. cons. 1st M. bds.	2,000,000	2,000,000		
Sinking funds	389,118	346,443	Salaries and wages	32,292	31,643		
Material, supplies & prepaid accts.	172,420	163,086	Vouchers & accts.	245,139	350,337		
Cash on hand, &c.	49,757	72,432	Notes payable	846,279	345,037		
Accts. receivable	115,722	121,442	Acer. int. & taxes	63,677	59,574		
Deferred accounts	7,334	6,576	Accrued dividends	69,750	69,750		
Total	17,065,882	16,011,951	Outstanding tickets, &c.	19,838	29,630		
			Reserves	\$33,188	32,586		
			Profit and loss	557,719	557,394		
			Total	17,065,882	16,011,951		

* Includes \$24,064 for replacements and renewals and \$9,124 for accounts receivable and for damages.—V. 99, p. 1213, 968.

Cudahy Packing Co., Chicago.

(Report for Fiscal Year ending Oct. 31 1914.)

INCOME ACCOUNT YEARS ENDED OCT. 31.

	1913-14.	1912-13.	1911-12.	1910-11.
Total sales	Not stated	\$104,408,789	\$90,443,970	\$87,803,856
Profits before repairs, &c.	\$1,923,742	1,850,682	1,651,686	330,334
Repairs, &c.	521,726	521,504	522,221	451,027
Net profits for year	\$1,402,016	\$1,329,178	\$1,129,465	\$379,307
Preferred div. (6%)	\$120,000	\$120,000	\$120,000	\$120,000
Common dividends	(4)400,000	(7)700,000	(4)400,000	-----
Balance, surplus	\$882,016	\$509,178	\$609,465	\$259,307

BALANCE SHEET OCTOBER 31.

1914.		1913.		1914.		1913.	
Assets—	\$	\$	Liabilities—	\$	\$	\$	\$
Plants, &c.	8,045,178	7,852,369	Preferred stock	2,000,000	2,000,000		
Branch houses	3,011,591	2,128,849	Common stock	10,000,000	10,000,000		
Car line	1,637,534	1,491,777	First mtge. bonds	3,780,000	4,020,000		
Cash	2,204,524	1,806,873	Acer. int. & taxes	13,792,834	10,501,663		
Bills & accts. rec.	6,299,640	5,553,755	Surplus and profits	58,022,289	25,593,873		
Inventory	14,079,201	11,995,019					
Investments	887,155	883,895					
Total	35,595,123	32,115,537	Total	35,595,123	32,115,537		

z The "surplus and profits" are stated in the balance sheet before deducting any dividends.—V. 99, p. 819.

New England Cotton Yarn Co., Boston.

(Annual Statement of Oct. 1 1914.)

President C. Minot Weld, Boston, Nov. 17, wrote in subst.

During the past year this company has suffered, with other textile corporations, through business depression. It has made a manufacturing profit, but quite insignificant in amount.

In the last year's statement, stockholders were notified of the sale of the Union Mills stock carried on the books of the company at \$1,333,333, for

\$1,000,000 cash and \$200,000 in 2d pref. stock of the Union Mills. This has led to a bookkeeping loss of \$133,333. The directors also deemed it wise to charge off from their inventory \$113,319.

During the year, when many of the mills have shut down from time to time by reason of lack of orders, they were thoroughly renovated, new machinery was put in to a large extent, and they are now as a manufacturing proposition in better shape than heretofore. In addition to this the company has been able to cut down its current loss from excess labor costs where it now is manufacturing on an economical basis.

Orders to the amount of 19,000,000 pounds of yarn are now on the books, which show a good profit per pound and per spindle.

BALANCE SHEET SEPT. 1914 AND 1913.

Sept. 26 '14.		Sept. 27 '13.		Sept. 26 '14.		Sept. 27 '13.	
Assets—	\$	\$	Liabilities—	\$	\$	\$	\$
Real estate and machinery	8,673,073	8,688,345	Preferred stock	2,000,000	2,000,000		
Merchandise	1,736,217	3,009,835	Common stock	3,900,000	3,900,000		
Notes and accounts receivable	1,226,860	1,573,049	Bonded debt	4,713,000	4,777,000		
Cash	564,275	405,164	Notes payable	995,850	2,760,150		
Investments	902,493	1,864,326	Accts. payable	153,871	144,683		
Suspense account	10,922	9,023	Reserve for insur.	10,000	10,000		
Renewal account	104,838	20,612	do suspense	-----	821		
Total	13,218,678	15,570,354	do deprecia'tn	498,020	462,811		
—V. 98, p. 1320.			Profit and loss	947,907	1,514,819		
			Total	13,218,678	15,570,354		

Ford Motor Company, Detroit, U. S. A.

(Report for Fiscal Year ending Sept. 30 1914.)

The "Chronicle" has been favored with the following:

Our output from Sept. 30 1913 to Sept. 30 1914 was 265,006 cars. From Aug. 1 1913 to Aug. 1 1914 we sold and delivered 221,888 cars. During August, September and October we sold at retail 59,507 cars, as against 29,821 cars for the same months in 1913—about 100% increase.

We are very confident of selling over 300,000 cars during the year ending Sept. 30 1915, since the volume of sales for Aug., Sept. and Oct. is 100% larger this year than it was in Aug., Sept. and Oct. 1913. The present output is 1,000 cars per day of 8 hours. We can increase this output 200% without adding anything to the mechanical equipment of the factory, simply supplying material and two more shifts of men, 8 hours each.

On Sept. 1 1914 there were in commission in excess of 585,000 Ford cars. To-day there are more than 650,000 of them. To enable the owners at all times to obtain prompt repairs, there is in stock at our various branches and with Ford agents, parts to the aggregate value of more than \$12,000,000.

The proposed profit-sharing with retail buyers is in harmony with the desires of Pres. Henry Ford that the owners of Ford cars shall receive the pleasure and profit that his product brings at the minimum expense. It is in line with the increase of wages in the factory to a minimum of \$5 per day established Jan. 1 1914, and which is working out so beautifully.

Data from Official Circular of Aug. 1 1914.

Prices effective Aug. 1 1914, guaranteed against a reduction up to Aug. 1 1915, but not guaranteed against an advance. All cars fully equipped f.o.b. Detroit. Prices (for the U. S. of Am. only): Roadster, \$440; touring car, \$490; town car, \$690. This is a cut of \$60 on each car.

Retail buyers of new Ford cars from Aug. 1 1914 to Aug. 1 1915 will be allowed to share in the profits earned by the company during that period to the extent of from \$40 to \$60 per car on each car they buy, to be paid some time during Aug. 1915, provided we sell and deliver 300,000 or more new cars during this period. This means that if we sell and deliver 300,000 new Ford cars in said period, we will hand back to the retail buyers between \$12,000,000 and \$18,000,000 in profits. When we buy on a basis of a 300,000-car production, we can purchase materials at a lower cost than we could for a production of 221,888 cars. So if we sell and deliver 300,000 new cars (or more) we will be able to return to each retail buyer of a new Ford car from \$40 to \$60 as his share of the profits. The number of cars sold and delivered each month will be published monthly in the "Ford Times." This profit-sharing plan is entirely distinct and separate from the reduction of \$60 in the price.

BALANCE SHEET SEPT. 30.

1914.		1913.		1914.		1913.	
Assets—	\$	\$	Liabilities—	\$	\$	\$	\$
Plant & machinery	3,821,465	2,832,907	Capital stock	2,000,000	2,000,000		
Tools, patents, &c.	1,365,539	1,064,673	Accts payable	3,335,139	3,049,587		
Cash on hand, &c.	27,441,469	13,225,711	Contract deposits	1,452,623	-----		
Municipal bonds (cost)	1,330,547	1,283,944	Acer. salaries, &c.	581,720	216,110		
Other investments	9,200	7,433	Accrued expenses	218,141	266,119		
Inventory (cost)	9,284,449	9,046,172	Contract rebates	621,381	25,960		
Prepaid expenses	437,090	215,259	Reserves for	-----	-----		
Accts receivable	3,233,583	448,224	Employer's bonus	-----	135,000		
Real estate	2,227,568	1,540,483	Bad debts	-----	3,511		
Bldgs. & bldg. fix.	10,714,928	4,615,157	Buyers' profit-sharing	2,557,080	-----		
Office fixt. & furn.	105,264	77,358	Deprec'n of fixed assets	1,935,440	1,061,805		
Factory equip't	1,661,155	676,589	Depr. of patents	59,767	57,224		
Total	61,632,257	35,033,920	Fire ins. prem.	43,934	34,060		
			Unearned profits (branches)	-----	60,370		
			Surplus	48,827,022	28,124,174		
			Total	61,632,257	35,033,920		

The "Detroit Free Press" Nov. 14 said: "With the profit-sharing system by which it is planned to distribute about \$10,000,000 this year among the employees in operation during nine months of the period (see V. 98, p. 158, 233), the balance sheet on Sept. 30 1914 presents total assets of \$61,632,257, an increase of \$26,598,337, while of these total assets, cash amounted to \$27,441,469, representing nearly one-half, and an increase of \$14,215,758 over a year ago. Surplus is given as \$48,827,032, being \$20,702,858, or more than 40% greater than in 1913. [Par of shares \$100].—V. 99, p. 346

American Linseed Company.

(Report for Fiscal Year ending Sept. 30 1914.)

Pres. R. H. Adams, Nov. 10, wrote in substance:

Beginning with February, your business began to show a falling off, and this continued each month until the beginning of the general European war on Aug. 1, when all business, as well as your own, became demoralized; Aug. and Sept., which should be our best months, were our worst. Nevertheless, we were able to pass to the credit of profit and loss the sum of \$306,647 and increase the surplus to \$1,570,797. Normal conditions, we fear, will not obtain until the great European conflict has been terminated.

RESULTS FOR YEAR ENDING SEPT. 30.

	1913-14.	1912-13.	1913-14.	1912-13.
Gross earnings, less short'g's, shrink. & inv. deduc'ns.	\$1,924,948	\$2,655,973	Operating gain	\$406,497
Operating expenses	1,518,451	2,111,948	Interest paid on borrowed money	99,850
Operating gain	\$406,497	\$544,025	Balance, surplus	\$306,647
				\$496,182

BALANCE SHEET SEPT. 30.

1914.		1913.		1914.		1913.	
Assets—	\$	\$	Liabilities—	\$	\$	\$	\$
Plants, equip. and inventory	33,131,277	33,036,281	Common stock	16,750,000	16,750,000		
Traffic imp. acc't.	18,467	18,256	Preferred stock	16,750,000	16,750,000		
Investments	662,162	502,608	Bonds payable	315,000	315,000		
Cash & cash items	2,370,657	1,179,331	Current accounts	18,423	37,419		
Accts & notes rec.	622,965	562,691	Notes payable	1,545,000	260,000		
Cap. stk. in treas.	54,322	54,322	Accident reserve	362	-----		
Naval stores	58,608	-----	Surplus	1,570,797	1,264,150		
Miscellaneous	31,129	23,080					

Virginia Iron, Coal & Coke Co., Roanoke, Va.

(12th Annual Report—Year ended June 30 1914.)

Pres. John B. Newton, Roanoke, Sept. 5, wrote in subst.:

The general depression in business throughout the country during the past year is reflected in the statement of business done during the year by your company, in so far as the department of pig iron manufacture is concerned. In spite of the business depression, the coal-mining department has shown steady growth, with satisfactory results.

On July 1 1913 your stock of pig iron on hand amounted to 59,564 tons. During the year the furnaces produced 127,941 tons, but the demand was so limited and the prices offered so low that we were not justified in shipping over 103,310 tons. The stock of pig iron, therefore, increased 24,631 tons. One of the furnaces at Roanoke, therefore, was put out of blast on April 1 last, leaving only two of furnaces, using coke as fuel, and one furnace, using charcoal as fuel, in blast.

With a view to reducing the cost of manufacturing pig iron, it was decided to expend about \$100,000 in new equipment at your Roanoke furnaces. This equipment has been delivered and is being rapidly installed.

The mines have produced 1,988,000 tons of coal at a profit of \$449,775 as against \$440,213 tons at a profit of \$353,655 the preceding year. The modern all-steel tippie at Toms Creek colliery has been completed and in every way fulfills our expectations in improved facilities for handling a steadily increasing production. Further to increase the efficiency of this colliery, we are constructing a washery with a capacity for washing 2,000 tons of slack coal per day to wash the slack from which your coke is manufactured, thereby improving substantially the quality of same. We expect to complete this plant by Dec. 1.

We have retired by purchase during the year \$48,000 of our 1st M. bonds, costing \$45,058, and \$14,000 Carter Coal & Iron Co. bonds, costing \$14,682, and have purchased real estate to the amount of \$28,676.

The plants and equipment have been fully maintained, we having charged \$349,737 against operating expenses and through income account for depreciation of plants, ore lands and coal lands, and expended \$277,145 for additional equipment and permanent improvements.

EARNINGS FOR YEAR ENDING JUNE 30.

Operation of—	Year 1913-14		Year 1912-13	
	Gross.	Net.	Gross.	Net.
Furnaces	\$1,743,405	\$11,075	\$1,936,679	\$185,828
Foundries and shops	95,293	def. 7,689	102,555	1,182
Coal mines	1,815,190	449,775	1,616,465	353,655
Coke ovens	428,341	28,561	444,729	35,861
Saw mills	150	—	296	—
Grist mills	180,129	6,689	180,539	5,304
Total	\$4,262,508	\$488,411	\$4,331,263	\$581,830

INCOME ACCOUNT.

	1913-14.	1912-13.	1911-12.	1910-11.
Net earnings from operation	\$488,411	\$581,830	\$278,517	\$336,235
Farms and farm rentals	3,351	16,145	9,822	6,187
Miscell., mdse., &c.	20,348	18,922	23,820	29,318
Total net income	\$512,110	\$616,897	\$312,159	\$371,740
Deductions—				
Taxes	\$61,225	\$57,337	\$57,069	\$50,500
Bond interest	259,856	262,688	264,513	265,638
Insurance	34,049	28,191	23,792	22,348
Expenses of idle plants	68,317	71,439	65,490	51,758
Depreciation of idle plants	122,516	126,359	91,155	60,691
Depreciation of active plants	—	—	29,048	53,594
Interest and discount	73,484	103,160	112,809	90,519
Dead rents and contracts	2,433	2,674	13,411	14,190
Miscellaneous	75	302	168	245
Development	7,761	2,838	28,044	25,044
Total deductions	\$629,716	\$654,988	\$685,199	\$634,527
Loss for the year	\$117,606	\$38,091	\$373,040	\$262,787

Operating, &c., accounts were charged during the year with \$349,737 for depreciation, viz.: Depreciation of coal lands, \$120,729; deprec. of ore lands, \$4,066; deprec. of impts. to leased properties, \$53,730; deprec. of impts. to owned properties, \$171,108; deprec. of quarries, \$104; also with furnace repairs, \$31,985.

There was spent \$211,594 during the year for additions and improvements to owned and leased properties, viz., impts. to owned properties, \$179,571; impts. to leased properties, \$32,023; repairs to furnaces, \$20,765.

BALANCE SHEET JUNE 30.

1914.		1913.		1914.		1913.	
Assets—	\$	\$	Liabilities—	\$	\$	\$	\$
Real est. & plant	12,420,405	12,595,009	Capital stock	10,000,000	10,000,000		
Equipment	476,738	411,147	First mtge. bonds	4,787,000	4,835,009		
Securities owned	197,363	197,363	Prior lien bonds	334,000	398,000		
Sales ledger bal'ce	351,118	747,169	Unpaid vouchers	249,281	251,898		
Bills receivable	82,055	104,142	Unpaid pay-rolls	54,887	89,132		
Cash	50,302	57,346	Accounts payable	8,509	9,859		
Materials	2,169,939	1,753,755	Bills payable	1,633,855	1,522,056		
Miscellaneous	86,832	95,401	Interest accrued	84,517	85,292		
Profit and loss	1,378,517	1,229,804	Furnace-repair id.	11,220	—		
Total	17,213,269	17,191,136	Total	17,213,269	17,191,136		

Lehigh & Wilkes-Barre Coal Co., Wilkes-Barre, Pa.

(Report for Fiscal Year ending June 30 1914.)

Pres. Charles F. Huber, Wilkes-Barre, Sept. 24, wrote:

Results.—From the surplus for the year, \$3,343,478, dividends Nos. 9 and 10 were paid Dec. 22 1913 and June 23 1914 (\$3 25 per share, or 6 1/2% each, making 13% for the year), aggregating \$1,197,300, and leaving a balance from the year's operations of \$2,146,178. Of this last amount there was appropriated for new breaker, new general shops and supply store \$500,000, and for sundry adjustments \$42,977, making the balance carried to profit and loss \$1,603,200.

Coal.—We mined and shipped during the year 5,222,343 tons of coal, an increase of 34,122 tons, and 98,059 tons were purchased, a decrease of 443,499 tons over previous year. The tonnage of prepared sizes sold, including lump, equaled 65.93%, and of pea and smaller 34.07%.

Changes in Property Account.—Surface land sold, &c. (\$25,879), and depreciation of yards and wharves, marine equipment, colliery improvements and culm banks aggregated \$156,720; less coal property purchased, &c., \$36,068; net decrease, \$120,851.

Sinking Fund for the Consolidated Loan.—The amount on deposit was increased by payment June 1 1914 of \$460,000 and by \$60,561 interest received from investments. Amount in fund June 1 1914, \$1,947,390, viz.: Invested in interest-bearing bonds, \$1,945,974; cash, \$1,416.

Leases.—The payments under coal leases for rentals in excess of coal mined during the current year amounted to \$7,786, which has been charged to operating expenses.

Improvements.—The Buttonwood Colliery, acquired under purchase from the Parrish Coal Co. (V. 97, p. 882), has been thoroughly rehabilitated and modernized, both as to outside and inside operation. The two collieries, Parrish and Buttonwood, have been connected by a tunnel and the output of Parrish will be handled through the Buttonwood breaker. The track between Inman and Buttonwood collieries has been completed and the output of Inman will also be taken to Buttonwood.

Development and improvement work has been carried on at all collieries to a large extent, so that the operations generally are in position to maintain output at a reasonable cost.

Plans are now under way for the construction of a new breaker and a general rehabilitation of the plant at Wanamie colliery. The present undersized breaker was erected in 1868.

Taxes.—Taxes for the year have shown a further increase, and amounted to 20c per ton of output. The appeals from time to time in the local courts are still pending, and no decision has yet been handed down in a case tried in the Jan. 1913. In the interim, taxes have been paid under protest, in the hope that we may some time reach an equitable and definite basis of valuation on coal lands. In the matter of the so-called tonnage tax, levied pursuant to Act of Assembly passed June 27 1913, appeals have been filed and no payment will be made until the validity of the Act has been finally passed upon by the courts.

TONNAGE, EARNINGS, EXPENSES, ETC.

	1913-14.	1912-13.	1911-12.	1910-11.
Tonnage shipped—	1913-14.	1912-13.	1911-12.	1910-11.
From co.'s fee l'ds by co.	3,598,523	3,686,394	2,836,117	3,042,486
Leased lands, by co.	1,390,418	1,361,521	1,087,199	1,104,545
Washeries, by co.	233,402	140,306	62,198	137,411
Co.'s fee l'ds by ten'ts	756,974	844,998	844,888	967,933
Leased l'ds, by ten'ts	13,522	103,372	161,001	115,024
Washeries, by tenants	8,121	66,731	107,237	171,943
Total of all	6,000,961	6,243,321	5,098,552	5,539,345
Earnings—	\$	\$	\$	\$
Coal sales	17,930,990	20,085,620	18,271,001	16,390,244
Coal mined by tenants	240,948	316,850	306,928	350,032
Miscellaneous	272,875	226,094	164,695	139,299
Total	18,444,813	20,628,564	18,742,624	16,879,575
Expenses—				
Mining coal and repairs	8,260,921	7,881,079	6,450,714	6,297,131
Colliery improvements	317,125	337,137	261,181	209,743
Royalty leased prop'ties	401,822	395,257	341,089	341,156
Coal purchased	1,420,060	1,246,470	1,691,392	1,756,014
Transp., yard & ag'y exp.	3,828,542	4,451,284	3,885,289	3,876,863
General expenses	131,384	126,701	119,219	124,562
Taxes, State and local	1,018,340	691,706	689,535	631,887
Taxes, Federal	49,083	35,373	29,934	17,193
Insurance	20,484	19,781	16,386	16,180
Maintenance of prop'ty	3,952	7,676	28,058	—
Val. of coal sold from stk.	Cr424,528	Cr172,732	1,469,465	152,657
Total	13,749,185	15,019,733	14,982,263	13,423,386
Net earnings	4,695,628	5,608,831	3,760,361	3,456,189
Deduct—				
Fixed interest on bonds	679,840	724,690	814,390	814,390
Depletion funds	1,672,311	461,090	460,000	460,000
Dividends (13%)	1,197,300	1,197,625	1,197,625	1,197,625
Total deductions	2,549,450	2,383,405	2,472,015	2,472,015
Surplus	2,146,178	3,225,426	1,288,346	984,174

CONDENSED BALANCE SHEET JUNE 30.

1914.		1913.		1914.		1913.	
Assets—	\$	\$	Liabilities—	\$	\$	\$	\$
Property & equip.	28,915,895	29,036,546	Capital stock	9,210,000	9,210,000		
Advanced royalties for coal	1	1	Funded debt (see "Ry. & Ind." Sec.)	16,996,000	16,996,000		
Cash	507,929	299,562	Depletion fund—				
Cash for coup. &c.	12,265	6,531	coal lands	2,134,711	1,466,252		
Bills & accts. rec.	2,237,661	5,393,640	Vouch. & pay-rolls	1,051,812	908,150		
Coal on hand	707,288	282,760	Coup. &c. unpaid	13,665	10,006		
Land contracts not due	8,092	10,076	Int., mine rents, &c., not due	1,009,964	564,991		
Insur. adv. pay'ts	36,337	48,605	Reserve for—				
Materials & supp.	428,502	407,116	New collieries—	1,597,682	1,781,408		
Securities of companies owned	371,001	281,001	do breaker and shops	500,000	—		
Marketable secur.	5,539,616	372,596	Land susp. acct.	11,860	14,810		
Sinking fund	1,947,390	1,426,829	Suspense accounts	79,145	59,015		
Suspense accounts	398,733	240,648	Sink. fund income	107,390	—		
Total	41,110,710	37,805,912	Profit and loss	8,398,481	6,795,280		

GENERAL INVESTMENT NEWS.

RAILROADS, INCLUDING ELECTRIC ROADS.

Birmingham Ensley & Bessemer (Electric) RR.—Time for Deposits Limited.—The committee of holders of 1st M. 5% 30-year gold bonds, Charles H. Zender, 140 Cedar St., N. Y., Chairman, has fixed Dec. 15 as the limit of time within which the holders of undeposited bonds may deposit the same with the Empire Trust Co., the depository, or its agents, and thereby become parties to any plan of reorganization which may be adopted by the committee. More than a majority of the outstanding bonds has been deposited. See V. 99, p. 1526, 1365, 894, 814.

California Street Cable RR.—Mortgage.—The company has filed a new first mortgage with the Union Trust Co., San Francisco, as trustee, to secure \$900,000 bonds.

The present \$900,000 1st M. will mature on Jan. 1 1915, but \$516,000 of same are in the sinking fund, leaving only \$384,000 of the issue to be refunded by the sale of an equal amount of bonds (said to bear 6% int.) secured by the new mortgage. The new issue, it is said, will be subject to call at 105 within the first five years and at 103 at any time thereafter. Annual payments to sinking fund will range from \$24,000 in 1916 to \$46,000 in 1927. See V. 99, p. 1527.

Chicago & Eastern Illinois RR.—Deposits.—The committee of holders of Chicago & Indiana Coal Railway Co. 1st M. 5% bonds, James B. Mabon, Chairman, announces that after Dec. 1 next no further deposits of bonds will be accepted without the special action of the committee and on such terms as it decides to impose. There have been deposited \$3,343,000 bonds out of \$4,626,000. See adv. on another page and compare V. 99, p. 195, 269.

The committee consists of James B. Mabon, R. H. Carleton, Edwin S. Hunt, J. S. Farlee and Ward W. Jacobs, Chairman, with Sullivan & Cromwell, counsel. Central Trust Co. of New York, depository, 54 Wall St.; Charles E. Sigler, Secretary, 54 Wall St., N. Y.

Separate Receivers for Coal Properties.—The U. S. District Court at Chicago has appointed Francis S. Peabody of Hinsdale, Jackson K. Dering of Lake Villa and Jabez Wooley of Evansville, Ind. This was done at the request of receivers of the road, who wish to be relieved of charge of the coal properties, as they are not conversant with the coal business.—V. 99, p. 1299, 1213.

Chicago & Indiana Coal Ry.—Deposits.

See Chicago & Eastern Illinois RR. above.—V. 99, p. 269, 195.

Chicago Milwaukee & St. Paul Ry.—Electrification.—The company has closed a contract with the General Electric Co. for the equipment with which to electrify the first 113-mile section of its main-line Puget Sound division in the Rocky Mountains, between Three Forks and Deer Lodge, Mont. The following has been published:

It is estimated that the labor and equipment for the first 113-mile division will cost about \$3,000,000, and that the complete electrification, 440 miles, will cost \$12,000,000. Work on the overhead construction is to be started as soon as field crews can be organized. Practically all poles are already on the ground and the overhead-line material is available for use as needed. The contract calls for delivery of the first sub-station equipment on May 1 1915, and the first locomotive October 1 1915. The first electrified division will be ready for operation, it is expected, by Jan. 1 1916. The present contract, it is said, covers 12 electric locomotives of the heaviest type, total weight 519,000 lbs. each, the overhead line material and the equipment for the five sub-stations to be built.

Hydro-electric energy will be supplied under long-term contracts from the systems of the Montana Power Co. and its subsidiary the Thompson Falls Power Co. at, it is said, about $\frac{1}{2}$ cent per k. w. hour. The electrified section will cross three mountain ranges and at the summit of the Rockies will reach an elevation of 6,322 feet above sea level. The highest grade to be ascended is 2% and over this it is proposed to haul freight trains of 2,500 tons at a speed of from fifteen to eighteen miles an hour and passenger trains at a speed of from 25 to 30 miles an hour. See also V. 96, p. 135 and pages 1153 to 1155 of "El. Ry. Journal" of N. Y.—V. 99, p. 1450, 831.

Chicago Railways.—Earnings.—Pres. Henry A. Blair on Nov. 10 was quoted as saying in substance:

Our traffic is now breaking about even compared with last year. It will vary from day to day a fraction of 1% according to special conditions. This record we consider fine, since 1913 was the banner year for the company. Our fiscal year will end on Jan. 31 next. Our gross income will be slightly lower than the previous year.

But owing to a decrease in operating expenses our net profits are ahead of last year and will so show for the fiscal period. Furthermore, we have spent over \$4,000,000 in building twenty miles of track and in new equipment, the latter amounting to about 200 cars. These latter cost \$6,000 a piece, so that the new car item totals around \$1,200,000.

We have been enabled to meet and overcome the increased interest charge of 5% on capital expenditures and we still shall show a small gain in net. If traffic had shown normal improvement the results for the year would have been highly satisfactory.

Meanwhile, the city's share of 55% of the net receipts will show no diminution, since, as I indicated, the net profits will be slightly larger than the previous year.—V. 99, p. 1213, 673.

Chicago Rock Island & Pacific RR.—Opinion.—The prevailing opinion of the U. S. Circuit Court of Appeals holding that the Amster interests are entitled to be made a party defendant in the foreclosure suit, written by Judge Ward, was handed down on Tuesday. It states that the Court expresses no opinion as to the merits of Amster's claim. Judge Rogers concurs. Judge Lacombe rendered a dissenting opinion, holding that the orders appealed from were not appealable. N. L. Amster says:

The confusion that some seem to be laboring under that the decision of the Circuit Court of Appeals did not mean the reversal of the lower courts and a setting aside of the sale is absolutely unfounded. The lower court has been reversed and the sale has been set aside, as will be seen from the following extract from the opinion of the Court of Appeals:

"The circumstances of this case are such as to cause us to think that the intervention should have been allowed. Very substantial rights are involved and serious objections made. The attitude of the trustee is ambiguous. The property is railroad stock. The value of it depends largely upon the purchasers getting control of the railway company. The interest of the protective committee is to buy stock as cheaply as possible, while it is the interest of the non-depositing bondholders that it be sold at as high a price as possible. If the sale be confirmed the mortgaged stock may be dissipated."

Sale Adjourned.—The sale of the C. R. I. & P. Railway stock deposited under the mortgage has been adjourned two weeks to Dec. 8.

Deposits.—The deposits of collateral trust bonds with Central Trust Co., under agreement of Wallace committee, aggregated to and including Nov. 27 \$49,936,000; add some \$7,600,000 deposits in Holland en route to U. S.; total under committee's control, \$57,536,000 out of \$71,353,500. The committee will continue to receive deposits for the present, although the time previously set for the same expired on Saturday last.—V. 99, p. 1527, 1450.

Cincinnati Dayton & Toledo Traction Co.—Mortgage.—The company on Nov. 24 filed a mortgage to the Fidelity Trust Co., Phila., trustee, to secure not exceeding \$7,500,000 bonds, of which a sufficient amount will be reserved to retire the \$5,000,000 existing bonds due 1916 to 1922.

The remainder, \$2,500,000, of the new bonds will not be issued at present but will be held by the trustee to provide for future improvements and additions as from time to time required. The bonds are to be 30-year 5% bonds of \$1,000 each, dated Oct. 1 1914, and will be known as "General Refunding and Gold Mortgage bonds."

Reduction in Common Stock to \$2,000,000.—The common shareholders are notified to present their stock to the company, 907 Traction Bldg., Cincinnati, for exchange under the plan of May 1913 (V. 96, p. 1556), for new certificates of half of the present par value.

Official Statement Dated at Cincinnati, Nov. 23.—The common capital stock has been reduced from \$5,000,000 to \$2,000,000. The resolutions provide that this reduction shall be accomplished by the surrender for cancellation of \$1,000,000 par value of common stock owned by The Ohio Electric Ry. Co. [which leases the property] and the exchange of one share of the [remaining] common stock as so reduced for two shares of the present outstanding common stock.

The Ohio Electric Ry. Co. has deposited the aforesaid \$1,000,000 of common stock with the Central Trust & Safe Deposit Co. of Cincinnati, for surrender and cancellation, and your company is now prepared to issue one share of the new common stock for each two shares of the present common stock, properly indorsed. Half-share certificates will be issued where required by holdings of odd numbers of shares. The stock transfer books will close Dec. 1 1914, and no transfer of the present stock will be made after that date, except in exchange for shares of the new stock.

[The outstanding preferred stock, amounting to \$250,000, is not disturbed by the plan.]—V. 98, p. 838.

Cincinnati Hamilton & Dayton Ry.—Troy & Piqua Coupons Paid.—The Union Savs. Bank & Trust Co. of Cincinnati, over whose counter these coupons are paid, says:

The semi-annual interest due Nov. 1 on the \$250,000 guaranteed 1st M. 4% bonds of the Piqua & Troy RR., has been paid promptly, and we know of no reason why the interest should not be paid regularly.

Foreclosure.—Suit is pending for the foreclosure of the first and ref. M. of the Cin. Ind. & Western, under which \$4,722,000 bonds are outstanding, with July 1914 coupons in default.—V. 99, p. 1451, 1365.

Commonwealth Power, Ry. & Light Co.—New Director.—D. E. Pomeroy of the Bankers' Trust Co. has been elected a director to succeed Benjamin Strong Jr., who resigned.—V. 99, p. 1366, 1130.

Consumers' Power Co. (of Maine)—Merger Authorized.—The Michigan RR. Commission on Nov. 27 authorized the merger of the eleven controlled companies mentioned last week on page 1528.—V. 99, p. 1528.

Cumberland Co. Power & Light Co.—Sub. Co. Bonds.—See York County Pow. Co. under "Industrials" below.—V. 99, p. 1451.

Denver & Salt Lake RR.—Mr. Erb Not to Withdraw.—Touching the report that he had lost control of the property and would soon resign as President, the "Sun" Nov. 18, said:

Newman Erb, President of the company, denied yesterday the reports in circulation in this city and in Denver, Colo., that he was preparing to resign from the presidency of the road. Mr. Erb said that the property was in the best of condition, that it had just paid [Nov. 1] the semi-annual interest on its 1st M. 50-year gold bonds and that aside from the fact that the development of the tunnel under James Peak, Colo., had been held up through an adverse court decision and the lack of the necessary capital owing to the war, the outlook for the property was a most cheerful one.

Mr. Erb added that the \$1,000,000 which he and other Eastern capitalists had agreed to put into the property under the plan of reorganization formulated somewhat more than 18 months ago had been paid in and spent for the purposes for which it had been set aside.

Statement Issued by President Newman Erb, N. Y., Nov. 27.—The statements which have appeared in the press, coming from Denver, are ridiculously misleading. Certain interests who have sought to obtain a large or controlling interest in the property have been referred to Denver, who refused to consider it. There the matter rests. The property will be developed on the original lines as laid down by the people who became associated with Mr. Erb in the enterprise.

The entire capital stock is deposited under a voting trust agreement which does not expire until May 1 1918. It is controlled by seven trustees, of whom Newman Erb is one, and who designated three of the other trustees, whose successors he has the sole right to appoint. There can be no change in the management or control of the property except through the voting trustees. Newman Erb cannot, if he would, and would not if he could, dispose of the control without the concurrence of the Denver interests.

The road is a purely Denver enterprise, whose people are largely interested directly and indirectly in the property, and no transfer of it could be considered which might be inimical to their interests.

["N. Y. Times" on Nov. 26 had a press dispatch from Denver to the effect that there had been a break between Mr. Erb and Frederick H. Prince of Boston, as a result of which Mr. Prince had been seeking to arrange for the acquisition of the control of the company with the Gould interests or a Denver syndicate.]—V. 99, p. 119.

Dominion Power & Transmission Co., Ltd., Hamilton, Ont.—Preferred Dividends.—A dividend of 2% has been declared on the \$5,100,000 limited preference stock, payable Dec. 15 to holders of record Nov. 30.

This makes the second dividend of this amount paid in the current year, the former having been disbursed on June 15 1914. On Dec. 15 1913 2% was also paid, and on July 15 and Jan. 15 1908 and July 15 1907. $\frac{1}{2}$ of 1% making total payments to date 7 $\frac{1}{2}$ %. When the dividends paid on this stock aggregate 10%, it will become ordinary stock, of which \$2,614,500 is now outstanding (the total authorized issue of the latter being \$9,900,000). It is expected that the remaining payment of 2 $\frac{1}{2}$ % will be made in June 1915, provided operations continue as at present.—V. 99, p. 119.

Erie RR.—Again Adjourned.—The special meeting of stockholders to act on the new refunding mortgage has again been adjourned until Dec. 1, and will be further postponed from time to time until the details of the new mortgage have been worked out.—V. 99, p. 1366, 1300.

Illinois Southern Ry.—Bonds.—The company has applied to the State P. S. Commission for authority to issue \$284,000 1st M. 40-year 5s of 1911, making, it is understood, \$2,014,000 of the \$3,000,000 outstanding.—V. 99, p. 1300.

Kansas City & Memphis Ry. & Bridge Co.—Decision.—The Arkansas Supreme Court on Nov. 16, according to press dispatches, ordered a trial of the suit brought by the State of Arkansas for back taxes aggregating over \$700,000.

The "Dallas News" says: "Two years ago Attorney-General Moore brought suit against the company, alleging that since 1892 taxes assessed against the bridge, one-half of which is in Crittenden county, Ark., had been only one-sixth the amount the assessment should have aggregated. The suit was brought in the Crittenden Chancery Court, but was thrown out when the company proved the Act under which the suit was brought did not cover the facts in the case. The Act provided that back taxes could be collected when no assessments had been made, but contained no provision when only inadequate assessments had been made and collected. The last Legislature passed an amendment to the Act causing it to cover inadequate assessments. The suit was re-filed under the amended Act.—V. 78, p. 1549.

Kansas City Mexico & Orient RR.—Directors, &c.—The board, as increased from 11 to 20, includes:

W. W. Colpitts, W. V. King, C. H. Jones, C. L. Sanderson, J. B. Nevin of New York; E. Dickinson, W. T. Kemper, H. T. Hall, D. J. Haff of Kansas City; F. K. Hurdle, Lord Monson, Cecil Braithwaite, D. Tuckett of London, Eng.; B. F. McLean, C. H. Smythe of Wichita, Kan.; James Couzens, E. D. Stair of Detroit; Thomas Best, Medicine Lodge, Kan.; John R. Mulvane, Topeka, Kan., and George Tyson, Boston.

Lord Monson, who represents the English bondholders, has been elected Chairman of the Board, and Willard V. King, President of the Columbia Trust Co., Chairman of the Executive Committee; Edward Dickinson, V.-Pres. and Gen. Mgr. of the old (railway) company, President; and Neal S. Doran, Secretary and Auditor.

The executive committee consists of W. V. King, E. Dickinson, C. L. Sanderson and J. B. Nevin, of New York; W. T. Kemper, H. T. Hall, D. J. Haff and W. W. Colpitts of Kansas City; George Tyson of Boston, and E. D. Stair of Detroit.—V. 99, p. 894, 748.

Kansas City Railways.—Prospects.—Arthur S. H. Jones, 20 Broad St., has this from a reliable source:

The change in the money market indicates that before Jan. 7 the Metropolitan St. Ry. of Kansas City will finance their new franchise.—V. 99, p. 816.

Kansas City Terminal Ry.—Application.—The company on Nov. 19 applied to the Missouri P. S. Comm. for authority to issue \$1,600,000 notes and to secure the same by deposit of \$2,000,000 1st M. 4% bonds.

The cost of the station to date is stated to be \$35,778,000 and the estimated total cost is about \$43,500,000.—V. 99, p. 1130.

Lacombe & Blindman Valley Electric Ry.—Guaranteed Bonds Offered.—W. L. McKinnon & Co., Toronto, will receive bids up to 3 p. m. Nov. 30 for \$206,700 5% bonds due Oct. 22 1943 (interest semi-annually), guaranteed by the Province of Alberta as to both principal and interest.

Denom. \$1,000, and one bond for \$700. Payable at the agency of Merchants' Bank, London, N. Y. or Montreal. Present line, most of which is understood to have been graded is to extend from Lacombe, westerly via Gull Lake, Bentley and the Blindman River Valley to Rimbe, 36 $\frac{1}{2}$ miles, mostly on a private right-of-way, gradient 1% compensated, maximum curvature, 6 deg., rail 60-lb. The road will require a wooden trestle, 700 ft. long and 60 ft. high across Outlet Creek. Branch, Bentley to Brownlow's Landing, 2.6 miles.

Incorporated under Act of Province of Alberta with \$500,000 auth. capital stock, in \$100 shares, to build a railway in the Province of not over 75 miles between termini. V.-Pres. Allan B. Taylor, Sec., J. Boyd McBride. Present plans include 39.1 miles of railway, estimated to cost \$14,000 per mile on which the Province may guarantee bonds (or deb. stock) to a total not exceeding 50%, or \$7,000 per mile. Mortgage dated March 12 1914; trustee, Canada Trust Co. Interest A. & O. 22. In case of de-

fault for three months, a receiver may be appointed, the property sold, &c., the holders of more than one-half the bonds having the right to require the trustee to declare the principal due or to waive the default. His Majesty the King is made a party to the deed of trust and the bonds are guaranteed under provisions of Provincial Act assented to Oct. 22 1913, authorizing the guaranty of securities of light railways. Form of guaranty for endorsement on bonds if required: "By virtue of the powers conferred by the Legislature of the Province of Alberta, Canada, and of an order of the Lieutenant-Governor-in-Council, the Province of Alberta does hereby guarantee to the holder of the within bond for the time being payment of the principal and interest thereof according to its tenor. [Signed by Provincial Treasurer.]"

Lake Shore & Michigan Southern Ry.—Amended Terms.—See New York Central & Hudson River RR. below.—V. 99, p. 1528, 1451.

Lehigh Traction Co., Hazleton, Pa.—Default—Deposits.—It was announced on Nov. 14 that the company will not meet promptly the Dec. 1 coupons on its \$500,000 1st M. 5s. As was done also six months ago in the case of the June coupons, Pres. Alvan Markle individually offers to purchase these coupons if presented on or before Jan. 1 1915 at the Markle Banking & Trust Co., Hazleton.

The bondholders' committee disapproving said Nov. 14: Your committee believes it distinctly unwise to accept this proposition of Mr. Markle's, as existing conditions do not warrant continued default on the first mortgage bonds of the Lehigh Traction Co., on which the semi-annual interest due Dec. 1 amounts to only \$12,500. The improving financial situation, together with the settlement some months ago of the company's labor troubles, makes us feel strongly that any further delay in meeting the interest when due is unnecessary and uncalled for. Acting in your interest, we will therefore make tender on Dec. 1 of the December coupons deposited with us, and, if payment is refused, we will promptly lay before you our recommendations as to the course most likely to be protective of your interests.

Committee: W. Frederick Snyder, Pres. of Northern Trust Co., Phila., the depository; Henry M. Watts, of Robert Glendinning & Co., and George P. Bissell.—V. 99, p. 894.

Lorain Street Ry.—Notes.—The company on Nov. 24 applied to the Ohio State P. U. Commission for authority to issue \$200,000 3-year 6% notes to be sold at not less than 92½%, to provide with treasury cash for the payment of \$200,000 1st 6s due Jan. 1 1915.—V. 83, p. 1171.

Michigan Ry.—Operation.—President Crowell on Nov. 18 announced that accommodation service between Grand Rapids and Kalamazoo will be begun on Jan. 1 and limited service on or before April 1 and between those dates an accommodation service between Grand Rapids and Battle Creek will be inaugurated.—V. 99, p. 1451.

Middlesex & Boston Street Ry.—Appeal.—George B. Willard as President of the Waltham Board of Trade has petitioned the Mass. Supreme Judicial Court to review, modify, amend or annul the order of the P. S. Commission dated Oct. 28, authorizing the company to raise its car fare in Waltham from 5 to 6 cents.

It is claimed that the order of the Commission affords more than reasonable compensation to the company and is, therefore, illegal. Furthermore, it is stated that the order puts an unfair burden on the city to support unprofitable lines of the company.—V. 99, p. 1366, 788.

Nevada-California-Oregon Ry.—Earnings.

	Oper.	Net	Outside	Other	Int.	Balance.
	Revenue.	Earnings.	Oper.	Tax.	Sur.	or Def.
1913-14	-----\$367,260	\$69,065	\$1,025	\$4,098	\$90,044	def. \$15,856
1912-13	-----403,979	120,347	def. 359	3,442	87,426	sur. 36,004

—V. 99, p. 1366, 346.

New York Central & Hudson River RR.—Proposed Leases.—The Ottawa & New York Ry. and St. Lawrence & Ottawa Ry. give notice that they will apply to the Canadian Parliament for authority to lease the roads to the New York Central & Hudson River RR. or its corporate successor.

The Ottawa & New York Ry. extends from Ottawa, Ont., to International Boundary, 56.9 miles, all of its 1,000,000 stock and \$1,600,000 bonds being owned by the New York Central. The latter also owns the entire stock of the St. Lawrence & Adirondack Ry. and has operated the road under an agreement dated June 1 1898, terminable on sixty days' notice, by which the net earnings are turned over to the St. Lawrence & Adirondack Ry.

Amendment Asked.—The New York P. S. Commission will hear on Dec. 2 the petition for an amendment of its order, made on Oct. 9, under which the Lake Shore company will be allowed to purchase the guaranteed pref. Michigan Southern & Northern Indiana RR. stock (\$533,500 in amount) at \$500 per share, being the same price as the dissenting minority holders of the regular stock are entitled to receive on demand under the provisions of the Ohio law.

This will obviate the necessity of continuing the guaranty as well as the objections made by the Commission to the original application, and is stated to be substantially the last remaining difficulty in the way of the consolidation (V. 99, p. 1131). Compare Lake Shore & Mich. Southern Ry. items, V. 99, p. 1528, 1451, 1366, 1214.—V. 99, p. 1528, 1452.

New York Central Lines.—Equipment Trusts Offered.—The Guaranty Trust Co., Kissel, Kinnicutt & Co. and White, Weld & Co. are offering on a 5¼% basis the unsold part of \$1,862,000 4½% gold equipment trusts of 1913, due \$133,000 annually on Jan. 1 from 1916 to 1928, being part of the \$2,730,000 which it was announced last week the company had just sold. A circular says in substance:

These trust certificates are part of a total authorized \$24,000,000, of which there is now outstanding, including the present issue, \$23,202,000, due \$1,600,000 yearly. Interest J. & J. Denom. c* \$1,000, and r \$5,000, \$10,000 and \$50,000. The following six companies jointly and severally covenant to pay the principal and semi-annual dividend warrants in gold coin: N. Y. Central & Hudson River RR. Co., Lake Shore & Michigan Southern RR. Co., Michigan Central RR. Co., Cleve. Cin. Chic. & St. L. RR. Co., Pitts. & Lake Erie RR. Co., Toledo & Ohio Central RR. Co. The amount of certificates cannot at any time exceed 90% of the actual cost of equipment delivered to and held by the trustee, the Guaranty Trust Co. of N. Y., as security for the certificates and the semi-annual dividend warrants appertaining thereto.

The present issue of \$2,730,000 equipment trusts is for the purpose of purchasing the following additional equipment costing \$3,049,000, of which \$319,000, or over 10%, has been paid in cash, viz.: 1,000 40-ton steel underframe box cars and 2,500 50-ton all-steel gondola crop-bottom cars.—V. 98, p. 1845.

Northern Pacific Ry.—Listed.—The New York Stock Exchange has listed \$2,597,000 additional prior lien 4% bonds due 1907, making the total amount listed \$111,652,500.

The proceeds of the bonds have been used to reimburse the treasury in part for expenditures in constructing double track, betterments, real estate, line changes and grade revision.—V. 99, p. 1529, 1452.

Oakland Antioch & Eastern Ry.—Funding.—The company, it is reported, is circulating among bondholders an agreement providing for the payment of bond interest for 3 years in company notes secured by 200% bonds.—V. 99, p. 1131, 408.

Ottawa & New York Ry.—Proposed Lease.—See New York Central & Hudson River RR. above.—V. 72, p. 339.

Pacific Electric Ry., Los Angeles.—Application.—The company has filed an application with the California RR. Comm. for authority to sell \$2,942,000 Refunding Mtge. 50-year gold bonds to provide for improvements already completed or under way.

These expenditures include: For bridges and paving, \$1,050,000; rolling stock, \$800,000; additions and betterments, \$471,000; extensions and branches, \$250,000; station and shop improvements, \$177,000; power plants, sub-stations and transmission lines, \$100,000; real estate purchases, \$2,500. Of the total issue \$1,213,000 will be used to pay for work long completed, such as the construction of Lincoln Ave. line, Pasadena, purchase of steeple cars for Pasadena lines, and laying of trackage at Torrance. The application states that in five years the company has not paid any dividends but has spent large amounts of borrowed money for improvements.—V. 99, p. 1367, 467.

Pennsylvania RR.—Enforced Economies.—Pres. Rae on returning from an inspection of the system on Nov. 20 said:

The tracks and facilities were found in good condition, but owing to necessary economy much improvement and replacement work has been deferred. Business is depressed and railroad earnings continue to fall materially as compared with last year. As a result, many men are out of work, train mileage and shop operations are curtailed and purchases of materials and supplies are reduced to a minimum. This enforced economy on nearly all railroads means very many millions lost to manufacturing and business establishments. There is an eagerness among all classes for some action by the Inter-State Commerce Commission, and the hope is generally expressed that the Commission will help the railroads. The belief is widespread that such constructive action by the Commission would restore confidence and that it would turn the tide of business uncertainty now that the Government has established the reserve banks and measurably provided for carrying this year's cotton crop. It is felt that the Government is doing a great deal to stimulate business, but that the condition of the railroads is still the chief drawback to manufacturing and commercial activity, and that this serious obstacle can be removed by promptly allowing freight-rate increases.

A statement in regard to the company's dividend and wage payments was given in the "Chronicle" last week on page 1506.—V. 99, p. 1529, 748.

Pere Marquette RR.—Report.—See "Annual Reports."

Appeal.—The trustees of the various underlying bond issues have appealed to the U. S. Circuit Court of Appeals from that part of the order of Judge Tuttle of the U. S. District Court dated July 14 1914, authorizing the issue of \$4,000,000 receivers' certificates which provided that \$2,000,000 of the certificates shall have a first lien on the property within the State of Michigan.

It is contended that the Michigan Court did not have jurisdiction and that in giving the certificates priority over the mortgage liens the action was equivalent to depriving the trustees and bondholders of their property without due process of law.—V. 99, p. 1529, 1300.

Philadelphia Rapid Transit Co.—Status of City Plan for Subway and Elevated Extensions.—City Director of Transit, A. Merritt Taylor in a speech on Nov. 23, said in part:

Philadelphia is now prepared, legally and financially, to proceed with the construction of the recommended rapid transit lines. All that is needed is appropriate action by the people, City Councils and P. S. Commission. An election should be ordered at once in order that the people may authorize an increase in the city's indebtedness to an extent necessary to provide for construction. The city has a borrowing capacity of about \$40,000,000 available for transit development under the terms of the personal property tax Act, without including the general borrowing capacity. Formal action should also be taken by City Councils definitely establishing the routes, and submitting the routes and plan to the State P. S. Commission.

The cost of constructing the recommended lines will be approximately \$46,000,000. In borrowing that amount the city will incur an annual fixed charge of only \$2,990,000 for 30 years. The annual fixed charge includes, in addition to the interest, the sinking fund payments necessary to extinguish the entire debt during the 30 years. To offset this annual fixed charge, the city will have the annual net income produced by the recommended lines over and above the reasonable payments which will be allowed the operator. No burden will be placed upon the city or upon the taxpayers in establishing the system, and Philadelphians who pay more than \$500,000 a year for exchange tickets, will save that money.

If the needed money be made promptly available, the department will be prepared to let contracts for the construction of certain sections of the delivery loop early in 1915. If the existing system fails to co-operate with the city, as contemplated, there is no reason whatever why the city should not proceed with the construction of Broad St. subway and delivery loop.

[Mr. Taylor has also said: "We expect the existing companies to welcome the adequate protection which the program for rapid transit development affords their stockholders against loss to their present net income by reason of their co-operation (V. 98, p. 1000, 1695, 1920).—V. 99, p. 1529.]

Pittsburgh Railways Co.—Decision of Arbitrators.—The arbitrators in the dispute between the company and the motormen and conductors in Pittsburgh and Washington, Pa., in regard to wages and conditions on Nov. 2, handed down a decision holding that there should not be any change in the wage scale, either upward or downward, as demanded by the men and the company, respectively.

The board was composed of Attorney James C. Gray, representing the company; Congressman Stephen G. Porter, the employees, with Judge Buffington of the U. S. Circuit Court of Appeals as umpire. Congressman Porter filed a dissenting opinion. The men asked for changes in conditions, a flat wage rate of 35 cents an hour, the present plan of fixing the rate by length of service to be discontinued. The present rate is 23½ cents an hour for the first 6 months, 26 cents for the second, 26½ cents for the second year, 28 for the third, 29 for the fourth and 30 for the fifth and all years thereafter. Mr. Porter finds that the men should have an increase of at least 5 cents an hour. In the matter of the dispute about Sunday pay, the company asked for a decrease and the men for an increase and both were refused. In other respects the decision was for the most part adverse to the claims of the men.

The "Electric Railway Journal" of Oct. 17 contained an extended reference to the letter of President Callery to Mayor Armstrong in reply to the latter's communication regarding conditions in Pittsburgh.—V. 97, p. 666.

Rapid Transit in New York City.—Contracts.—Tenders are asked by advertisement for section No. 4 of routes 4 and 36 of the Broadway-Fourth Ave. Rapid Transit RR. up to Dec. 11. The line is to be a 2, 4 and 6-track subway extending from near the southerly line of 51st St. under 7th Ave., Manhattan, to 59th St., with a spur under 59th St. and Central Park; also up to Dec. 1 for reconstruction of section 9-C-1, route 9 of the Broadway-Fourth Ave. Rapid Transit RR. extending under Flatbush Ave. Extension between Willoughby and DeKalb avenues, Brooklyn. The railroad at this point has 6 tracks and the reconstruction is to provide for the installation of additional crossovers.

A settlement, it is announced, has been made by the city with the Pierpont estate under which construction, which was halted for a time on the two under-river tubes to Brooklyn will be resumed. Justice Maddox of the Supreme Court on Nov. 17 decided that the estate had title to the land at Montague and Furman Sts. (where the city had already erected construction fences), and had never dedicated the property for street use. Arrangements may be made for a court test of Section 14 of the Labor Law, prohibiting employment of aliens on public works. While work has been stopped on some of the construction contracts, particularly in the Bronx, it is hoped that no serious delays will be encountered.—V. 99, p. 1053, 895.

Rhode Island Co.—Status of Lease.—See United Traction & Electric Co. below.—V. 99, p. 1452.

St. Lawrence & Adirondack Ry.—Proposed Lease.—See New York Central & Hudson River RR. above.—V. 93, p. 1669.

St. Louis Southwestern Ry.—Temporary Injunction.—The Circuit Court, City of St. Louis, on Nov. 9 granted a temporary injunction on application of a number of conductors, restraining the declaration of a strike on the vote taken on Sept. 2 last on the ground that the strike vote or ballot does not contain the full and fair statement it should. The injunction does not interfere with the taking of another vote if desired. Compare V. 99, p. 817.

President Britton has had reprinted in a pamphlet of 161 pages, under date of Nov. 21, the testimony taken at the hearing of the injunction suit in St. Louis, together with a copy of the opinion of the Court. A copy of the pamphlet has been given to all employees in the train, yard and engine service.

Injunction Refused.—Judge Kenneth Foree in the Fourteenth District Court of Texas, on Nov. 21, denied the application of J. A. Underwood and others, suing as members of the Switchmen's Union, to restrain the company, International & Great Northern, Gulf Colorado & Santa Fe and Houston & Texas Central from refusing to employ men as trainmen merely because they were not members of the Brotherhood of Railway Trainmen.

The petition in the suit alleged that the plaintiffs and others had been refused employment by the defendants for the sole reason that they were not members of the Brotherhood of Railway Trainmen and testimony was given that the men had been told that they would otherwise be acceptable if they were members in good standing of the Brotherhood. The defendants' witnesses testified that the arrangements were not exclusive and that in the cases of some railroads not more than 60% of the trainmen in service are members of the Brotherhood. The answers of the roads exhibited the contracts between the roads and the trainmen's order, calling for employment of members by the roads to the extent of 85% of all trainmen on the Mo. Kan. & Texas, with preference as to others, and of 75% on the Texas & Pacific Ry.

The attorneys for the plaintiffs in their arguments maintained that the contracts were practically, although not entirely, exclusive, the difference being only in degree. The first question asked of a man seeking employment of a Texas road as a switchman or trainman would, it was stated, be whether or not he was a member of the Brotherhood of Railway Trainmen, and this was in effect a restriction of competition of labor and a monopoly, closing the door of opportunity to non-members and, especially at present, at a critical time. Reference was made, among other cases, to the decision in the suit of the Chicago American League Club against Hal Chase, ball player, in which it was held that baseball contracts such as had existed were illegal and monopolistic. The plaintiffs, it was argued, asked simply to have the railroads restored to their freedom of contract, so they could make efficiency their test in employment of labor. An appeal will be taken to the Court of Civil Appeals for the Fifth Judicial District and the case, it is stated, will be carried to the U. S. Supreme Court if necessary.—V. 99, p. 1215, 1127.

San Francisco-Oakland Terminal Rys. Co.—Bonds, &c.—The original application for authority to issue \$10,000,000 bonds has been indefinitely postponed by the California RR. Commission (V. 98, p. 611). See F. M. Smith Securities Co. under "Industrials" below.—V. 99, p. 1529, 895.

Southern Pacific Co.—Equipment Trusts.—Kuhn, Loeb & Co. have purchased and re-sold an issue of \$1,170,000 4½% equip. trusts, Series "C," due annually for ten years.

The proceeds are to be used to purchase 20 passenger locomotives, 10 switching locomotives, 50 steel passenger coaches, 22 electric motor coaches and 2 combination coaches and express cars. The certificates have been authorized by the Cal. RR. Commission.—V. 99, p. 1446, 1452, 1457.

Southern Pacific R.R.—Authorized.—The Arizona Corporation Commission on Nov. 14 authorized the company to issue \$5,324,804 additional First and Ref. M. 4% bonds, to provide for expenditures for improvements between Dec. 1, 1912 and June 30 1914. The bonds were previously approved by the Cal. RR. Commission.—V. 99, p. 1301, 970.

Temiscouata Ry.—Income Interest.—The bondholders' Committee, Ltd., give notice that the interest payment of 1¼% for the year ended June 30 1914, less income tax, on the provisional certificates issued by the Committee (being the same as last year), will be made on and after Dec. 15 at the Bank of Montreal, 47 Threadneedle St., E. C., on presentation of Coupon No. 8 attached to the certificates. Compare V. 99, p. 1132.

Underground Electric Ry. of London.—Extension.—The extension to Queen's Park, where platform exchange with L. N. W. R. suburban train service to Watford will be effected, will open Dec. 15.—V. 99, p. 468, 408.

United Properties Co. of Calif.—Liquidating Co.—See F. M. Smith Securities Co. under "Industrials" below.—V. 99, p. 895, 750.

United Traction & Electric Co. (of N. J.), Providence.—Status Unchanged.—As to the effect on this company of the transfer to trustees, under order of court, of the entire \$9,685,500 capital stock of the Rhode Island Co. (V. 99, p. 1452) with instructions to use their best efforts to complete the sale of said shares before July 1 1919 and in the meantime to operate the properties, Secretary C. S. Sweetland of Providence, in circular dated at Jersey City on Nov. 19, says in substance:

On June 24 1902 the Union RR. Co., the Pawtucket St. Ry. Co. and the Rhode Island Suburban Ry. Co., the entire capital stock of each of which companies belongs to the United Traction & Electric Co., leased all their properties for 999 years to the Rhode Island Co. In addition to the annual rentals of \$850,000 which are paid to the United Traction & Electric Co. in the form of dividends on the shares of the stock of the three lessor companies, the Rhode Island Co. agreed to pay all taxes and assessments lawfully imposed, to provide all further equipment and make all improvements and betterments that might be necessary, all such equipment, improvements and additions to become forthwith the property of the three lessor companies, respectively, to keep the property properly insured; to pay the interest on the mortgage debt of the Rhode Island Suburban Ry. Co. and to pay the annual organization expenses.

The rentals, aggregating annually \$850,000, enable the United Traction & Electric Co. to pay the interest on its \$9,000,000 5% bonds and the 5% annual dividends on its \$8,000,000 capital stock.

The leases provide that if the Rhode Island Co. shall, after written notice, (a) fail for 30 days to pay any installment of rent, or any other money provided to be paid by it, or (b) fail for 6 months to keep any other of its covenants, the leases shall, after said period of 30 days or six months terminate, at the option of the lessor companies, and the lessor companies may resume possession. In such event, the stockholders of the United Traction & Electric Co. would have the benefit, at no cost, of all the expenditures of more than \$7,000,000 made on the leased properties by the Rhode Island Co. up to the present time.

By a decision of the Supreme Court of Rhode Island rendered this year, the owners of the stock and bonds of the United Traction & Electric Co. are exempt from taxation in this State thereon.

Thus, while the control of the stock of the Rhode Island Co. and the management of the company have been transferred to the trustees, there has been no change in the relations of the Rhode Island Co. to the United Traction & Electric Co. or to the three lessor companies, so that the stability of the income is assured.—V. 89, p. 105.

Virginia Railway & Power Co.—Changes.—

Coleman Wortham of Richmond, Va., Finley J. Shepard and Arthur W. Kelly of New York have been elected directors to succeed Guy Phillips, Victor Cumberston and J. L. Sellman. Mr. Shepard also becomes a member of the executive committee in place of Mr. Phillips.—V. 99, p. 1453, 1367.

Wages.—Arbitration on Western Wage Scale.—

See item on page 1506 in last week's "Chronicle."—V. 99, p. 408, 344.

INDUSTRIAL, GAS AND MISCELLANEOUS.

Algoma Steel Corporation, Ltd.—Interest Payments.—Holders of First & Ref. M. 5s and of 6% 3-Year Notes are informed that after further discussion between the committee and the President of the company, the latter has agreed to pay from Oct. 1 1914 to April 1 1916 interest in cash at 6% per annum half-yearly on the scrip to be issued in exchange for coupons to be funded under the scheme proposed in the letter from the President dated Oct. 31 1914.

The bonds delivered in exchange for the scrip will carry interest payable in cash from April 1 1916. Compare V. 99, p. 1368, 1216.

The bondholders yesterday authorized the various propositions referred to in V. 99, p. 1368.—V. 99, p. 1368, 1216.

American Maltng Co.—Bonds Extended.—

At the close of business on Nov. 25 the holders of \$1,983,000 of the \$2,353,000 outstanding 1st M. 6% bonds had agreed to the extension of their bonds to June 1 1917 per plan V. 99, p. 818, 971, and the company, it is stated, has arranged for the extension of the remainder of the (\$370,000) bonds without the payment of the \$40 per bond or any other expense except the payment of interest at the rate of 6% per annum thereon until date of the new maturity on June 1 1917.—V. 99, p. 1294, 971.

Armour & Co., Chicago.—Changes.—

A. Watson Armour and G. B. Robbins have been elected directors. Under an amendment in the by-laws, Messrs. Armour and Robbins and F. Edson White have been made Vice-Presidents, increasing the number from 3 to 6.—V. 98, p. 1002.

Austin, Nichols & Co., Inc., N. Y.—Wholesale Grocers.

This well-known house, reported to be the largest in this line in the world, has recently had completed for it by Havemeyer & Elder, on the East River front at the Brooklyn Eastern District Terminal, Kent Ave. and North Third St., a combined warehouse, factory and office building with trackage to accommodate sixty cars, and wharfage facilities.

The building is a reinforced concrete structure, 440 by 179 feet, six stories and basement, and is believed to have cost about \$1,000,000. It will be occupied under a long-term lease, enabling the lessors to effect considerable economies as to taxes, and, through the elimination of duplicate cartage and double handling in storage, as compared with the old headquarters at 61 Hudson St., Manhattan.

The business was established about 1854 under name of Fitts, Martin & Clough, and, having changed its name several times, was incorporated as now at Albany, N. Y., on Nov. 29 1912. Authorized capital stock, \$6,000,000, in \$100 shares, of which \$3,000,000 is common stock and \$3,000,000 7% cum. pref. (p. & d.) stock, callable at 120. Of these amounts at organization only \$2,000,000 each of common and preferred was issued, having been taken at par and paid for in cash by members of the firm without a public offering. Bonded debt, none. On May 31 1913 the company took over the business of Stoddard, Gilbert & Co., New Haven, Bridgeport, Norwich and Waterbury, Conn., issuing \$590,000 of its 7% treasury pref. stock at par, equal amount of cash assets in the transaction.

Directors.—Pres., Lewis E. Pierson; V.-P. & Gen. Mgr., Harry Balfie; Sec., Ericsson F. Bushnell; Treas., Thomas M. McCarthy; Asst. Treas., Walter B. Timms; John C. Mahlan, Louis C. Owens, of New York, and E. G. Stoddard, New Haven, Conn.

Bethlehem Steel Corporation.—Resumption.—

The rail mills and the ordnance plant are, it is stated, running full blast as a result of the orders, said to amount to \$50,000,000, brought back from Europe by President Schwab, which will keep the plants busy for a long time to come. The 3,000 steel workers, who were either laid off entirely or put on half time during the slack season last summer, are being taken back in batches of hundreds. It is stated unofficially that the company has received an order from a South African railroad that will keep their rail mill busy until next April.—V. 99, p. 1301, 896.

Bigelow-Hartford Carpet Co.—Merger Completed.—

On Nov. 20 the Bigelow Carpet Corporation, having changed its name as above, took over the property and business of the Hartford Carpet Corporation per plan in V. 99, p. 750. The capital stock, all outstanding, is now \$8,050,000 common stock and \$5,500,000 6% cum. pref.

Directors (and officers): President, Robert P. Perkins, N. Y. City; V.-Pres., Alvin D. Higgins, Thompsonville, Conn.; Sec., G. S. Squire, Mt. Vernon, N. Y.; Treas., George E. Perkins, Thompsonville, Conn. Neal Rantoul, Wm. Endicott Jr., F. G. Webster, Robert Winsor and Thomas P. Beal, Boston; Thomas L. Manson, Thompsonville, Conn.; Henry H. Skinner, Charles W. Bosworth, Springfield, Mass.; Harry P. Fairbanks, Washington, D. C.

The Bigelow Carpet Corporation (a Massachusetts corporation) in July last (V. 99, p. 344) succeeded the Bigelow Carpet Co., which was one of the oldest and most flourishing concerns in the carpet industry, its two modern mills at Lowell and Clinton, Mass., manufacturing Brussels, Wilton and Axminster carpets and rugs. As Brussels and Wilton carpets, which composed a large part of its product, were not made by the Hartford Carpet Corp., while tapestries and velvets, which were manufactured by the Hartford Carpet Corp., were not products of the Bigelow mills, the two concerns largely supplemented each other. (See Hartford Co., V. 72, p. 90, 139, 285, 440; V. 90, p. 562).

The earnings of the Bigelow Carpet Co. were reported in September last to have averaged for the last five years about \$600,000 (without allowance for depreciation), being substantially the same as those of the Hartford Carpet Corporation. The plants of the Bigelow Co. were considered worth at least as much as, if not more than, the plant of the Hartford Co., and for insurance purposes are valued at a much higher figure. The net quick assets of both companies were approximately the same in amount. It was also said Sept. 10 that if the earnings should continue as theretofore, they would justify dividends at the rate of 5% upon the common stock from the start, while it was probable the amount applicable to dividends would be substantially increased by the consolidation.—V. 99, p. 750.

Brady Estate.—Appraisal—Leading Assets.—The appraisal made by Charles M. Friend for the State Comptroller and filed at Albany on Nov. 19 places the net value of the estate at \$72,125,863 (after reservation for debts, &c.), and the gross value at \$77,042,443, the latter including:

Cash, \$1,163,852, and real estate, \$140,255.....	\$1,304,107
Stocks and bonds.....	67,307,301
Personal chattels, bonds and mortgages, promissory notes, claims, accounts receivable and miscellaneous investments.....	8,431,035

After making several small bequests and having provided that the home at Albany, \$1,000,000 outright and an annuity of \$60,000 should go to the widow, she will divide the remaining \$71,000,000 into six parts, two parts going to Nicholas F. Brady and James C. Brady, sons; three parts to be placed in the hands of the executors and trustees for the benefit of his daughter, Mrs. James C. Farrell, Mrs. Francis P. Garvan and Mrs. Carl Tucker, and the other part to Mr. Brady's granddaughter, Miss Marie A. Gavit, whose mother was killed in an accident.

Principal Holdings of Anthony N. Brady at Death July 22 1913.

No.	Shrs.	Stocks—	Appraisal.
6,800		Amalgamated Copper Co.	\$449,825
1,000		American Meter Co.	100,000
6,311		American Snuff Co., common.	990,827
12,844		American Tobacco Co., new preferred	1,155,960
32,344		American Tobacco Co., common.	6,792,240
12,400		Anaconda Copper Mining Co.	421,600
2,445		Bridgport Gas Light Co., common.	317,850
288,335		British-American Tobacco Co., Ltd.	5,190,030
3,600		Bronx Terminal Corp.	360,000
22,029		Brooklyn Rapid Transit Co.	1,935,798
210		Central Trust Co.	205,800
3,960.80		Commonwealth Edison Co.	566,394
411		Conley Tool Co.	110,370
9,200		Consolidated Gas Co. of New York.	1,205,200
6,501.60		Consolidated Gas, Elec. Lt. & Pow. Co. of Balt., pref.	209,150
5,439.20		do do do do common.	516,724
5,323		Consumers' Lt., Heat & Power Co. of Topeka.	None
2,000		Cuba Railroad Co., preferred.	200,000
4		Cuba Co., \$50,000 per share.	200,000
4,803.20		Dayton Power & Light Co., pref.	336,224
10,324.80		do do do common.	103,248
2,920		Delaware & Hudson Company.	452,600
250		Delaware Lackawanna & Western Coal Co.	32,500
1,150		Delaware Lackawanna & Western R.R. Co.	221,375
9,614		Electric Storage Battery Co., common.	432,630
1,857.44		General Motors Co., preferred.	143,022
1,668.80		Harway Improvement Co.	233,632
2,200		Helme & Co. W. Co., common.	209,150
800		Industrial Trust Co.	188,800
7,392		Interborough-Metropolitan common.	116,424
589.60		Intercontinental Rubber Co., preferred.	58,960
40,809.60		Intercontinental Rubber Co., common.	306,072
36,185		Kings County Electric Light & Power Co.	3,799,425
6,989		Kings County Lighting Co. voting trust certificates.	384,395
955		Lawyers' Title Insurance & Trust Co.	157,575
3,933		Liggett & Myers Tobacco Co., preferred.	393,300
16,795		do do do common.	3,442,975
2,773		Lorillard (P.) Co., preferred.	77,300
12,680		do do common.	1,922,000
1,783		MacAndrews & Forbes Co. common.	289,245
14,150		Memphis Consolidated Gas & Electric Co.	920,400
6,240		Merchants' Power Co.	405,600
3,667		Municipal Gas Co.	1,081,765
400		New York State National Bank (Albany).	120,000
8,000		Ogden Gas Co.	600,000
58,208		Osaka Gas Co., Ltd.	1,746,240
5,662		People's Gas Light & Coke Co.	639,806
1,100		Porto Rican-American Tobacco Co.	214,500
1,034.40		Providence Gas Co.	103,440
4,149		Reynolds (R. J.) Tobacco Co.	975,015
25		Thomson Hill Land Improvement Co.	162,500
1,155		Troy Gas Co.	259,875
8,800		Union Bridge Co.	1,425,600
4,000		United Drug Co. of Massachusetts, common.	400,000
2,561		U. S. Cast Iron Pipe & Foundry Co., preferred.	121,647
45,020.40		U. S. Rubber Co., first preferred.	4,276,938
75,754.20		U. S. Rubber Co., first common.	3,787,710
11,200		Utica Gas & Electric Co.	1,680,000
3,600		Universal Gas Co.	252,000
2,290		Weyman-Bruton Co., common.	504,120
Amount.		Bonds (Including Interest)—	Appraisal.
\$2,385,000		Brooklyn Rapid Transit Co. 4% bonds.	\$2,101,383
535,000		Consumers' Light, Heat & Power Co. 5% bonds.	429,560
169,600		Dayton Power & Light Co. 5% bonds.	136,831
200,000		Durham Coal & Iron Co. 5% bonds.	120,583
1,080,000		Georgia & Florida Ry. 5% bonds.	199,150
1,088,000		Indiana Natural Gas & Oil Co. 5% bonds.	719,440
629,800		Kings & Pow. Co. 6% bonds.	698,133
1,010,400		Memphis Cons. Gas & El. Co. 5% bonds.	791,150
312,000		Merchants' Power Co. 5% bonds.	266,110
152,000		Norfolk & Portsmouth Traction Co. 5% bonds.	124,196
Interest in Chattanooga & Tennessee River Power Co.			3,200,000
Equities in brokers' accounts.			2,757,441
Due from N. F. Brady participation account.			3,719,014
Also \$500,000 interest in Piedmont Syndicate (capital \$7,500,000), listed at \$450,000, and the following interest in the U. S. Motors Syndicate: 4,960 shares Maxwell Motor Co. 1st pref., \$124,000; 3,370 shares Maxwell Motor Co. 2d pref., \$20,220; 4,780 common, \$11,950, and \$23,879 cash.			

At the hearing before the appraiser the following information was brought out regarding the Chattanooga & Tennessee River Power Co., which was organized by Mr. Brady to build a power plant in the Chattanooga River at Hale's Bar, to furnish power in Chattanooga. (See V. 81, p. 1377; V. 82, p. 989; V. 97, p. 1506.) Work on the plant began in 1907, at which time the estimated cost was \$960,000, and the plant was to be ready for business in two years. The project cost him and his estate more than \$6,000,000, and one witness testified that when completed the plant will not be worth more than \$2,500,000. The excessive cost is attributed largely to the fact that the rock bottom of the river was unsound, necessitating a great amount of excavating and concrete work. Nicholas F. Brady has a fifth interest in the plant, and the amount charged against him for his share of the construction expense is \$1,893,914. The appraiser fixed the value of Anthony N. Brady's interest at \$3,200,000 in view of testimony that the company will make money if it gets sufficient customers to use its power. When the project was undertaken Mr. Brady thought that he had arranged to purchase control of the Chattanooga Railway & Light Co. (Compare p. 73 of "Electric Railway Section.")

Canadian Elevator Co., Ltd.—Stock Increase.

This company, incorporated under the Dominion Companies' Act, has increased its authorized capital stock from \$1,000,000 to \$3,000,000, par value \$100 a share.

Canadian Northern Pacific Fisheries, Ltd.—Receiver.

A press dispatch from Vancouver, B. C., on Nov. 21 said that the Yorkshire Guaranty & Securities Corp., Ltd., has been appointed receiver. See V. 99, p. 1217.

Canadian Sardine Co.—Foreclosure.

A Canadian paper says: "The Bank of Nova Scotia has foreclosed the mortgage on the company's property at St. Andrew's, N. B. This company was incorporated in 1911. It has \$500,000 common and \$543,250 pref. stock outstanding. There is also a bond issue of \$300,000 deposited as collateral for a loan. In May this year a receiver was appointed at the request of the bondholders."

Chattanooga & Tennessee River Power Co.—

See Brady Estate above.—V. 97, p. 1506.

City Water Co. of East St. Louis & Granite City, Ill.

The East St. Louis City Council on Nov. 16 passed over the veto of Mayor Chamberlin by a vote of 12 to 3 a repeal of the franchise granted to the company on July 6. The company several days before brought a suit in the U. S. District Court asking for an injunction to prevent taking action on the repeal. Compare V. 99, p. 1369, 610.

Coast Valleys Gas & Elec. Co., San Fran.—Application.

The company has applied to the Cal. RR. Commission for authority to issue \$100,000 1st M. 6% 40-year gold bonds to reimburse itself for money expended from income for betterments to its system, amounting to \$69,392, the balance to be used for further construction work.—V. 99, p. 1470.

Consolidated Gas Co. of New York.—Authorized.—The P. S. Commission on Tuesday directed its counsel to prepare an order granting the application made in May 1914 for permission to issue \$25,000,000 5-year 6% convertible

debentures and also \$25,000,000 stock as required to redeem the same, making the total amount of stock authorized \$125,000,000. It is expected that the final order will be made on Monday next. Compare V. 98, p. 1540, 1610.

The debentures are to be in denominations of \$500 or multiples, to be payable in 5 years, to bear interest at 6% and convertible at the option of the holders into stock three years from date, or any subsequent interest day within five years, on the basis of one share of stock for each \$100 par value of debentures.—V. 99, p. 1217, 540.

Cudahy Packing Co.—Officers.—(Report, see above.)

Joseph A. Cudahy has been elected President to succeed Edward A. Cudahy, who resigned. G. C. Shepard, chief of provisions dept., and H. F. Wilkins, chief of fresh meat dept., have been elected vice-presidents. Compare V. 99, p. 819.

Denver (Colo.) Union Water Co.—Deferred.

Counsel for the New York Trust Co., mortgage trustee, on Nov. 6, which has filed a suit to foreclose the mortgage, stated that the application for the appointment of a receiver has been deferred and that his client would be content to await developments in the general corporate situation. He said: "The water company's finances are being handled properly. A satisfactory account of the disbursement of its funds is being made. The trust company is being kept advised of the details of the management and there is no reason why the additional expense of a receivership should be incurred, for the present at least."—V. 99, p. 1454, 52.

Diamond Light Co., Cincinnati.—Decision.

Judge Gorman in the Common Pleas Court on Nov. 11, in the suit brought by the city, denied the application for an injunction restraining the company from crossing the streets of the city of Cincinnati and selling electrical power for commercial use, and dissolved the temporary restraining order previously granted.

The Court says that it was never contemplated that "a monopoly of the lighting business for commercial purposes should be given to any one individual, partnership or corporation; that an abutting owner upon a street of a municipality has the right to use the streets and highways for any purpose he may deem proper, not inconsistent with the use of it as a street; that he may lay water mains or electric light conduits and wires, provided he does not interfere with the use of the street as a street, and that he may grant the right to connect his property with the property on the opposite side of the street to any person, partnership or corporation desiring to make the connection, providing it is done without affecting the rights of the municipality in the street." In regard to the contention that a consent from the city authorities is necessary, it is stated that "if it should be adjudged necessary to secure the naked consent of the city authorities to further lay conduits and wires across the streets or alleys of the city by the defendant company, the Court is of the opinion that upon refusal to give the consent it may be enforced by proceedings in mandamus against the proper city authorities or by mandatory injunction to require the consent to be given to lay the conduits and wires in accordance with the provisions of the city ordinance heretofore referred to under Section 647."

The case will be appealed to the Supreme Court. H. C. Fricke of Pittsburgh, head of the Turner-Fricke Co., is said to be the principal stockholder. Rud. K. Hynicka is also reported to be a stockholder.

(E. I.) du Pont de Nemours Powder Co.—Vice-Pres.

William du Pont has been elected Vice-President to fill a vacancy.—V. 99, p. 1302, 345.

Ecuadorian Corporation, Ltd.—Postponement of Int., &c.

Holders of 6% First Debentures were to vote Nov. 24 on (1) sanctioning the postponement of the payment of the half-yearly installment of interest payable Oct. 1 1914, until June 1 1915, and (2) releasing the company from payment to trustee due Jan. 1 1915.

Balance sheet of July 31 1914 showed: Debit—Share capital issued, \$282,806; shares to be allotted on presentation of talons attached to debentures, \$33,240; 6% First Debentures, less \$3,150 install. unpaid, \$319,350; bills payable, \$20,306; deb. interest accrued, \$6,310; sundry creditors, \$411; reserves, \$1,123; profit and loss, \$260; total, \$633,806. Offsets—Cash, \$14,228; dividends and int. accrued, \$945; debtors—Ecuadorian Breweries Co., \$17,828; Quito Tramways Co., \$12,853; sundry, \$409; properties and investments at cost, \$501,715; deb. discount, commission, &c., \$115,828. See V. 96, p. 1492.

Electric Properties Corp., N. Y.—4 Months' Dividend.

A dividend of 2% has been declared on the \$4,000,000 pref. stock for the 4 months ending Sept. 30, payable Dec. 10 to holders of record Dec. 1. Previous payments were 1½% each on Dec. 10 1913 and March 10 and June 10 1914, covering the quarters ending Nov. 30 1913 and Feb. 28 and May 31 1914. The change is due to the fiscal year having been made to correspond with the calendar year. The next declaration will be made after the close of the year and will probably cover the 3 months ending Dec. 31 1914.—V. 98, p. 841.

Fayette County Gas Co.—On 7% Basis—Earnings.

A quarterly dividend of 1¼% has been declared on the \$1,600,000 stock. Previous disbursements were 1½%. This increases the yearly rate from 6% to 7%. For year ending Sept. 30 1913 gross revenue was \$452,456; net, \$143,613; dividends, \$96,000; surplus for the year, \$47,613; total accumulated surplus Sept. 30 1914, \$140,460. The company, it is stated, has no debts of any kind.—V. 90, p. 1493.

First National Copper Co.—New Directors.

E. M. Buchanan and James A. Young have been elected directors to succeed T. M. Raborg, who resigned, and the late H. Mason Raborg.—V. 90, p. 979.

Improved Property Holding Co. of New York.—Plan.

The committee of holders of "B" bonds, consisting of Edward F. Clark, Chairman, 165 Broadway, N. Y., Elbert S. Barlow and Charles D. Cooke, has issued a report and plan of reorg. dated Nov. 14, saying in subst.:

A separate committee having been formed for the "A" bonds, and the Court having ordered the cancellation of the "M" bonds, this committee represents solely the "B" bondholders. Negotiations for joint action which would assure us some equity in the "A" property failed. Nos. 2-4-6 East 34th St. and 56 Madison Ave. were lost through legal proceedings. Of the other properties, it was deemed practicable to save only No. 505 5th Ave., and to do this \$37,000 was furnished by some of the bondholders and an extension of time was obtained for meeting the large arrears due on the property, including a postponement till Jan. 1 1915 of payment of the \$30,000 due Jan. 1 1913 on the \$250,000 5% mortgage held by the William Barclay Parsons estate. This property is excellently located on 5th Ave., 2½ ft. north of 42d St., and the plan contemplates its purchase at foreclosure on Dec. 15. It includes a modern 18-story office building built by the company on a plot 37 ft. by 108 ft., held under lease (made by Parsons Estate) expiring Jan. 31 1929, with rights to four renewals of 21 years each, the last expiring Jan. 31 2013. At the sale the purchaser must pay off the receivers' certificates (\$37,000 and int.), pay \$5,000 for fees of trustee, &c. To acquire the property, pay expenses, &c. (incl. taxes due Jan. 1 1915 on the mortgage, will require \$50,000 cash.

The committee has adopted and filed with the Equitable Trust Co. a plan of reorganization which provides that the aforesaid \$30,000 shall be provided by depositing bondholders and that the successor corporation shall have an authorized issue of \$100,000 pref. stock and \$300,000 common stock (par \$100 per share), subscribers to receive one share of pref. stock and two shares of common stock for each \$100 of their respective subscriptions. The balance of the stock will be placed in the treasury for future corporate purposes. Subscriptions must be filed with committee, 165 Broadway, on or before Dec. 1 1914, accompanied by a check for 25% of same to order of "Edward F. Clark, Chairman," the balance is to be paid on demand. Particulars from Receiver Jos. J. O'Donohue Jr. as to 505 Fifth Ave. 1929 and if renewed not less than \$40,000 thereafter. Parsons mortgage, \$250,000, due \$30,000 Aug. 1 1915; \$30,000 Jan. 1 1917; \$30,000 Jan. 1 1919; \$30,000 Jan. 1 1921; \$30,000 Jan. 1 1923; \$30,000 Jan. 1 1925; \$30,000 Jan. 1 1927; \$30,000 Jan. 1 1929, but if ground lease be renewed for 21 years by Aug. 1 1928, then the \$100,000 due Aug. 1 1928 shall be payable as follows: \$25,000 Jan. 1 1933, \$25,000 Jan. 1 1937, \$25,000 Jan. 1 1945 and \$25,000 Jan. 1 1949. Estimate for one year, based on present condition of property: (a) Rents receivable for year, \$74,100; schedule rental value of vacancies, \$32,950. (b) Fixed charges: Ground rent, \$33,500; interest on mtge., \$12,500; taxes 1914, \$13,350; total, \$59,350. (c) General operating, including insurance, water, pay-roll, coal, electric current, &c., \$13,000. Cash on hand Oct. 27 1914, \$730; rents to be collected to Oct. 27, \$1,631. Unpaid charges to and including Nov. 1 1913, \$23,220.—V. 95, p. 300.

International Educational Pub. Co.—Divd. in Notes.—

The company, which is the foreign branch of the International Text Book Co. of Scranton, Pa., has paid its quarterly dividend of 1 1/4% on the \$9,014,800 7% cum. pref. stock due Nov. 1 in 2 years 6% notes.

International Harvester Co. of N. J.—Suit Dismissed.—

The Kentucky Court of Appeals on Nov. 17 dismissed the proceedings against the International Harvester Co. of America, which was charged with conspiracy in restraint of trade in Taylor, Green, Nicholas, Mercer, Washington, Pendleton, Lincoln, Robertson, Marion, Harrison, Christian, Ohio, Gallatin, Carroll, Owen, Grant, Boone, Clinton and Garrard counties. In cases appealed to the U. S. Supreme Court the company contended that the Crecelius Act, exempting growers' pools from the prohibition of the anti-trust law violated the Federal Constitution and the contention was upheld by that Court.

The Court of Appeals in seeking to harmonize the original measure and amendments, had taken the view that with the Crecelius amendment, it was necessary to allege that the concerns accused had entered into an agreement to inflate prices above or depress them below their true value. At the hearing before the Court of Appeals in the present suit the Commonwealth insisted that the Crecelius Act could be treated as void and still leave the old Act in effect, and that so much of the accusation as alleged the purpose of deflating or depressing prices beyond their real value could be treated as surplusage.

Chief Justice Hobson, who wrote the opinion, says: "The petitions in these cases fail to state facts constituting a cause of action under the opinion of the United States Supreme Court."—V. 99, p. 1133, 1054.

International Steam Pump Co.—Request.—

Hawkes & Hoppin, attorneys-at-law, state that they have been retained by the owners of preferred stock to represent such ownership. They notify "actual owners of preferred stock that there will be a meeting of owners of said preferred stock to-day at 12 o'clock, in Room 915, 9th floor, 32 Liberty St., N. Y., to consider what course it is advisable to follow to protect the interest of the preferred stockholders."—V. 99, p. 1455, 1302.

International Text Book Co.—Subsidiary Co. Div.—

See International Educational Publishing Co. above.—V. 98, p. 1922.

La Belle Iron Works.—Preferred Dividend Reduced.—

A quarterly dividend of 1% has been declared on the \$9,915,400 8% cum. pref. stock payable Dec. 24. Payments at the full rate of 2% quarterly were made from the time of issuance of the stock in 1912 to Sept. 1914. Distributions on the \$9,915,400 common stock were discontinued in July last. Compare V. 98, p. 1697.—V. 99, p. 1455.

Madison (Wis.) Gas & Electric Co.—Bonds, &c.—

The Marshall & Ilsley Bank, Milwaukee, on July 7 1914 offered, at 98 and int., First Refunding M. 5% gold bonds dated 1910, due Oct. 1 1940. Auth. \$3,000,000, out \$363,500.

The mortgage securing these bonds, while made as of Oct. 1, 1910 is a new mortgage filed for record last July to replace the original First Ref. M. of 1910. Of the new bonds, it was provided that \$363,500 should be applicable to retirement, by exchange or sale, at not less than 89.95% of the \$327,000 old outstanding First Ref. M. 6% (all of which have been called) and \$44,500 are held to retire at or before maturity, by exchange or sale, at not less than 89.98% of the outstanding 1st M. 30-year 6s due 1926. The remaining \$2,192,000 are applicable to future extensions and improvements. Denom. \$1,000 and \$500. Bankers Trust Co., trustee. Redeemable as a whole or in part by lot at 110 and int. on any interest date. Company agrees to pay the 1% normal Federal income tax.

A direct mortgage lien upon all property now owned or hereafter acquired, subject to \$400,000 prior bonds, due 1926. Company does the entire commercial gas and electric light and power business of Madison, serving a population of approximately 25,000. Operates under a perpetual franchise, exclusive as to gas. Valuation of company's physical property by the Wisconsin R.R. Commission as of Dec. 31 1908, together with subsequent betterments and extensions, aggregates \$1,582,000.

Earnings for the Past Three Calendar Years.

	1913.	1912.	1911.
Gross earnings	\$499,211	\$457,263	\$412,602
Net earnings	218,502	215,761	199,038
Interest charges	42,902	42,640	38,832

Surplus \$175,600 \$173,121 \$160,206
 Entire capital stock is owned by American Light & Traction Co., which also controls and operates the Milwaukee Gas Light Co.—V. 93, p. 534.

Massachusetts Gas Companies, Boston.—Earnings of

Controlled Companies.—Net earnings of the subsidiary companies for October and the four months ending Oct. 31:

	October	4 Mos. end. Oct. 31.
	1914.	1913.
Boston Consolidated Gas	\$119,803	\$102,775
New England Gas & Coke	50,667	57,945
New England Coal & Coke	42,939	32,870
Newton & Watertown Gas Light	7,898	6,121
East Boston Gas	6,679	11,020
Citizens' Company of Quincy	4,699	1,700
Federal Coal & Coke	6,012	7,119
Boston Towboat	4,083	1,231
Total	\$242,780	\$220,781
	Increase in Gas Output.	
Boston Consolidated Gas Co.	1.62%	3.68%
East Boston Gas	6.02%	5.33%
Citizens' Company of Quincy	4.19%	18.01%
Newton & Watertown	6.61%	10.99%

—V. 99, p. 1455, 1370.

Minneapolis General Electric Co.—Interest Payment.—

Wm. P. Bonbright & Co., Inc., have been appointed agents for the payment of the 3-year 6% gold notes. Payment of the coupons will, therefore, be made at their New York office on Dec. 1. See advertisement.—V. 99, p. 472.

Moline Plow Co.—2nd Pref. Div. Omitted.—

The regular quarterly dividend of 1 1/4% has been declared on the \$7,500,000 7% cum. pref. 1st pref. stock, payable Dec. 1 to holders of record Nov. 17. The usual quarterly distribution on the \$1,500,000 6% non-cum. pref. stock will, however, be omitted. Payments were made on the latter from June 1913 to Sept. 1914, both incl.—V. 99, p. 1363.

North Packing & Provision Co.—Bonds Oversubscribed.

Hornblower & Weeks and William A. Read & Co. announce that the issue of \$1,000,000 first M. 30-year s. f. gold 5s, due Jan. 1 1945, to refund the \$1,000,000 bonds due Jan. 1 1915, which were offered by them last Wednesday, have been oversubscribed. A large number of the old bondholders will exchange their holdings for the new bonds. The bonds are non-taxable in Massachusetts and are being offered at 97 1/2, or practically a 5-1/2% basis. The company pays the normal Federal income tax. Earnings for past 5 years, after depreciation, have, it is stated, averaged 5 times int. charges on bonds. Preliminary circular says:

The bonds are callable as a whole or for sinking fund at 105 and int. Coupon bonds, \$1,000 and \$500. May be registered as to principal. Old Colony Trust Co., trustee. The bonds will be a direct obligation of the North Packing & Provision Co. and will be secured by a closed first mortgage on land and buildings located principally in Somerville, Mass., assessed for over \$1,250,000. The company has outstanding \$3,000,000 capital stock, upon which annual dividends have been paid for a number of years. The sinking fund provisions require an annual cash investment in these bonds of at least \$10,000. Bonds must be drawn by lot at 105 and int. if not obtainable at a less price, and as purchased will be kept alive and the income therefrom used for sinking fund purposes. Thus the operation of the sinking fund will retire by maturity approximately \$600,000 out of the \$1,000,000 issue.—V. 83, p. 34.

Ocean Falls (Pulp & Paper) Co., Ltd.—Successor.—

See Pacific Mills Co. below.—V. 98, p. 693.

Ohio Light & Power Co., Tiffin, Ohio.—New Securities.

Harris, Forbes & Co. of New York, Harris Trust & Savings Bank, Chicago, N. W. Harris & Co., Inc., Boston, and

Perry, Coffin & Burr of Boston and New York have concluded negotiations for the purchase of \$1,200,000 1st M. 5% bonds, which will shortly be issued and will be the initial block of an authorized issue of \$30,000,000. The bonds are dated May 1 1914 and are due May 1 1944. It is anticipated that the bonds will presently be offered to investors at 90 and int.

Guaranty Trust Co., trustee; interest, M. & N. Subject to call on and after May 1 1919 at 105 and int. Sinking and improvement fund beginning May 1 1919, first 6 years, 1/2%; 2d six years, 1%; 3d 6 years, 1 1/2%; last 8 years, 2%.—V. 99, p. 473.

Ohio & Texas Sugar Co.—Property Sold.—

The property was bid in at foreclosure sale in Brownsville, Tex., on Nov. 10 for \$60,000 by J. M. Butler of Columbus, O., representing three-fourths of the bondholders. There were five bidders.—V. 99, p. 473.

Onomea Sugar Co., Hawaii.—Extra Dividend.—

An extra dividend of 80 cents per share (4%) has been declared, payable Dec. 21. The directors have, it is stated, under consideration a new monthly rate for next year, beginning with the January payment. The dividends in 1914 have been equal to a monthly rate of 30 cents, but it is understood that some of the directors believe that the company can safely pay in 1915 a monthly rate of 35 cents, or at the annual rate of \$4.20. Compare V. 99, p. 820.

Pacific Coast Borax Co.—Stock Reduced.—

The capital stock was reduced on Oct. 23 from \$2,000,000 to \$300,000. A San Fran. paper says that practically the company's entire holdings, consisting of stock of the Borax Consolidated of London, was virtually owned by Frank M. Smith and pledged for loans made to him and his corporations. This stock during the last few months has passed into other hands as the result of the liquidation of debts by the Smith advisory committee, and the Pacific Coast Borax Co. will be kept alive, owning at least \$300,000 of property until the \$300,000 obligations of Borax Consolidated Ltd. of London which it endorsed are paid off within three years, and will then be entirely dissolved (V. 97, p. 1902).—V. 99, p. 898.

Pacific Mills Co., Vancouver, B. C.—Successor Co.—

The company has, it is reported, been incorporated with \$9,500,000 authorized stock as successor to the Ocean Falls (Pulp & Paper) Co., Ltd., which was sold at auction some time ago (V. 98, p. 693).

People's Water Co., Oakland, Cal.—Plan.—

At a meeting of the Refunding M. committee on Nov. 17 a conference committee was appointed, consisting of the Chairmen of the underlying bondholders' and noteholders' committees, all the members of the People's Water bondholders' committee and the Refunding committee (V. 99, p. 274, 123) to consider the plan of reorganization. See V. 99, p. 1455.

F. W. Van Sicken, Chairman of the committee for Contra Costa 1st M. bonds, suggested that (1) The accrued and unpaid interest for 1914 should be paid in cash, and not funded, as in the plan. (2) The rate of interest on the new 1st M. bonds should be 6% and not 5%. (3) The first M. should authorize some sum less than \$12,500,000. Compare V. 99, p. 1455.

A press dispatch from San Francisco on Nov. 23 quoted Rudolph Spreckels as announcing that several banks and individuals owning Contra Costa Water Co. 1st M. bonds. Contra Costa Gen. Mtge. bonds, Oakland Water Co. bonds and Alameda Artesian Water Co. bonds had asked him to represent them in opposition to the plan submitted by the refunding committee. Mr. Spreckels says: "I have prepared a tentative outline of a plan which I believe is entirely just to all concerned and I will gladly discuss my views with all underlying bondholders."—V. 99, p. 1455.

Pioneer (Sugar) Mill Co., Ltd., Hawaii.—Extra Div.—

An extra dividend of 90 cents a share (4 1/2%) has been declared on the \$4,000,000 stock (par \$20), payable Dec. 15, in addition to the regular monthly dividend of 20 cents (1%), payable Dec. 1.—V. 94, p. 702.

Quincy Mining Co.—Dividends Resumed.—

A dividend of 50 cents a share (2%) has been declared on the \$2,750,000 stock, payable Dec. 21 to holders of record Nov. 28. This is the first distribution since Sept. 29 1913, when \$1 (4%) was paid.

Annual Dividend Record (Per Cent) Since 1899.

'00.	'01.	'02.	'03.	'04.	'05.	'06.	'07.	'08.	'09.	'10.	'11.	'12.	'13.	'14.	1915.
36	36	28	22	20	24	50	54	18	16	20	16	20	15	0	2

Compare V. 97, p. 1667, 669.—V. 99, p. 535.

Realty Associates of Brooklyn.—

Year—	Total Income.	Real Est. & Gen. Exp.	Int. on Bonds.	Profit-share Reserve.	Divs. (6%)	Balance. Surplus
1913-14.	\$937,848	\$376,073	\$206,375	\$12,253	(8)	\$319,992
1912-13.	1,329,180	363,326	224,282	60,560	(6)	239,994

Dividend in 1913-14 includes 2% extra in addition to the regular 6% yearly rate. See V. 97, p. 1588.—V. 98, p. 71.

St. Louis Breweries, Ltd.—Control.—

R. W. Cairns, who in recent years has obtained control of the boards of a number of Anglo-American brewing companies, is, it is stated, seeking to turn out the board of the company with a view to the election of a new board named by the "shareholders' protective committee," of which he is Chairman. The present board is said by others to have managed the property "extremely well, with the full confidence of the larger shareholders."—V. 98, p. 767.

San Antonio Land & Irrigation Co., Ltd.—Bankruptcy.

The Empire Trust Co. of N. Y., which as mortgage trustee obtained in August last the appointment of a receiver for this foreign corporation, filed for the same in N. Y. City on Nov. 4 a voluntary petition in bankruptcy. This petition, it is reported, showed nominal assets of \$758,354, including accounts, \$412,417, of Medina Valley Irrigation Co. and Medina Town Site Co.; interest due, \$339,397 on bond of the Medina Valley Irrigation Co.; machinery and fixtures, \$4,581; cash, \$1,959, and right to an accounting in 57,137 acres of land in Texas when sold by the trustee, in whom the legal title is invested, after the 1st M. of \$8,000,000 held by the Empire Trust Co. to secure an issue of bonds has been paid. The liabilities aggregate \$9,039,934, of which \$7,704,217 are secured and \$1,326,717 unsecured. Among the secured creditors are, it is stated, Bank of Scotland of London, \$312,046; Canadian Bank of Commerce of Toronto, \$540,000, and Keystone Land & Cattle Co. of San Antonio, \$99,479. Among the unsecured creditors, it is said, are J. H. Dunn of London, \$847,660; Dunn, Fischer & Co., London, \$252,367; the Guaranty Insurance & Investment Co., London, \$103,253, and the Canadian Bank of Commerce, \$93,713.—V. 99, p. 542, 473, 411, 124.

San Diego (Cal.) Cons. Gas & Elec. Co.—Stock—Bonds.

The Cal. RR. Commission on Nov. 23 authorized the company to issue \$250,000 6% deb. bonds, payable Dec. 1 1922, and \$240,000 common stock, to be sold at less than 95 and 100, respectively. The proceeds are to be used to discharge obligations amounting to \$472,296.—V. 96, p. 1777.

San Jose (Cal.) Water Co.—Authorized.—

The California RR. Comm. has authorized the company to issue \$160,000 promissory notes for refunding purposes.

Sealshipt Oyster System.—Receiver Discharged.—

Judge Morton in the U. S. District Court at Boston has discharged Pierre H. Brown and William H. Raye as receivers. The Court in July last confirmed the sale to the reorganization committee. The new management on July 23 last took official charge of the property, which has been reorganized per plan V. 98, p. 1004.—V. 99, p. 124.

(F.M.) Smith Securities Co., San Fran.—Liquidating.

This company was incorporated in California on Nov. 9 with \$5,000,000 of auth. capital stock in \$100 shares, of which \$2,500,000 will be preferred. Directors, A. L. Whittle, Edwin Schwab, F. B. Lorigan, all of San Fran.; R. B. White of Berkeley and George J. Hatfield of Oakland. The attorneys for the corporation are Morrison, Dunne & Brobeck, Crocker Bldg., San Fran. A San Francisco paper states that the company is formed to pay off the \$2,000,000 balance of F. M. Smith's \$6,000,000 debt, which the advisory committee in charge of his affairs took over 18 months ago. The plan is to issue notes to the holders of the Smith securities in addition to such pledges as they now hold, guaranteeing the interest on the indebtedness and its final redemption in full. (See United Properties Co. of Calif., V. 99, p. 895, 750; V. 98, p. 306; V. 97, p. 118; V. 96 p. 1425; and Pacific Coast Borax Co. above.)

For other investment news see page 1604.

Reports and Documents.

PUBLISHED AS ADVERTISEMENTS.

MISSOURI KANSAS & TEXAS RAILWAY COMPANY

ANNUAL REPORT—FOR THE YEAR ENDED JUNE 30 1914.

St. Louis, Missouri, November 4 1914.

To the Stockholders:

The directors and officers of your Company submit herewith their report for the fiscal year ended June 30 1914.

The operations of the Lines named

Missouri Kansas & Texas Railway Company	1,744.41
The Missouri Kansas & Texas Railway Company of Texas	1,791.98
The Wichita Falls & Northwestern Railway Company	328.68

Total miles operated June 30 1914.....3,865.07

were as follows:

RESULTS FOR THE YEAR.

(Includes two months' operation of the Beaumont & Great Northern RR., from May 1 1914. Inter-corporate income items are excluded.)

Operating Revenues were	\$31,521,188 35
(Decrease, \$825,070 04, or 3%)	
Operating Expenses were	22,722,119 24
(Decrease, \$86,293 15, or 0.4%)	
Net Operating Revenue was	\$8,799,069 11
(Decrease, \$738,776 89, or 8%)	
Taxes were	1,499,520 89
(Increase, \$211,617 60, or 16%)	
Operating Income, Taxes deducted, was	\$7,299,548 22
(Decrease \$950,394 49, or 12%)	
Miscellaneous Income was	217,278 55
*(Decrease, \$449,332 51, or 67%)	
	\$7,516,826 77
Rentals and Other Payments were	657,728 34
(Increase, \$36,354 79, or 6%)	
Income for the year available for Interest was	\$6,859,098 43
(Decrease, \$1,436,081 79, or 17%)	
Interest (92% of amount available) amounted to	6,319,871 69
(Increase, \$341,676 94, or 6%)	
Net Income for the year amounted to	\$539,226 74
(Decrease \$1,777,758 73, or 77%)	
Dividends declared during the year:	
M. K. & T. Ry. Co. Preferred Stock	\$260,000 00
Texas Central RR. Stock Outstanding	1,407 51
Subsidiary Companies Stock Outstanding	21 00
	261,428 51

* For details see income account.

MILEAGE.

The average mileage operated during the year was \$3,-824.82, an increase over the previous year of 147.35 miles.

The total mileage operated June 30 1914 increased 48.3 miles, as compared with the mileage operated June 30 1913, as follows:

The Beaumont & Great Northern Railroad, Weldon to Livingston, Texas, 48.3 miles.

The acquisition by your Company of the capital stock of The Beaumont & Great Northern Railroad was mentioned in the annual report to Stockholders for the fiscal year ended June 30 1913. On May 1 1914 the property was leased to The Missouri Kansas & Texas Railway Company of Texas, since which date it has been operated by the latter Company, and its assets and liabilities have been included in reports.

OPERATIONS.

Revenues from traffic and expenses of operation were adversely affected by rate reductions, and by drought and floods, unprecedented in their severity, and never before occurring in combination during the period of a single year.

The enforcement of the two-cent per mile passenger fare in the States of Missouri and Oklahoma caused a loss in revenue of approximately \$676,500, and reductions in freight rates, made effective during the year, induced further losses approximating \$165,000, such losses reducing the net earnings correspondingly. Drought prevailed over nearly the whole of your Company's territory during the critical time of growth of grain and forage crops, resulting in almost complete failure of crops in many sections. The cotton crop of Texas was reduced in quantity and impaired in quality, first by drought and later by rains and floods. The unsatisfactory crop production naturally induced a recession in general business conditions. The loss of transportation revenue attributable to the extraordinary floods, which interrupted traffic movement for various periods during July, October, December, April and May in Texas, and during May in Oklahoma, is estimated at \$775,000. The increased expenses of operation caused by the floods is estimated at \$1,-281,000.

FINANCIAL.

The changes in outstanding capital stock during the year, as shown by the balance sheet, were as follows:

	Increase.	Decrease.
Boonville Railroad Bridge Co	\$100 00	
Missouri Kansas & Texas Terminal Co. of St. Louis	400 00	
Wichita Falls & Southern Railway Co	100 00	
The Beaumont & Great Northern Railroad	\$900 00	
Net Increase	\$300 00	

The changes in funded debt in the hands of the public during the year were as follows:

	Decrease.
M. K. & T. Ry. Co. 5% Equipment Notes	\$190,000 00
Boonville RR. Bridge Co. 1st Mortgage 4% Bonds	11,000 00
Southwestern Coal & Improvement Co. 1st Mortgage 6% Bonds	18,000 00
W. F. & N. W. Ry. Co. 1st Mortgage 5% Bonds	23,000 00
W. F. & N. W. Ry. Co. 1st Lien Collateral Trust Mortgage 5% Bonds	8,000 00
W. F. & N. W. Ry. Co. Equipment Trust Notes	56,490 97
W. F. & S. Ry. Co. 1st Mortgage 5% Bonds	8,000 00

Total decrease.....\$314,490 97
(in addition to which \$555,000 General Mortgage 4½% Gold Bonds purchased for the Sinking Fund are held by the Trustee.)

Other changes in funded debt, as shown by condensed balance sheet of June 30 1914, published on pages 18 and 19 hereof, were:

	Increase.
M. K. & T. Ry. Co. Consolidated Mortgage 5% Bonds	\$3,256,000 00
The B. & G. N. RR. 1st Mortgage 5% Bonds	883,000 00
Total increase	\$4,139,000 00

\$3,256,000 Missouri Kansas & Texas Railway Company Consolidated Mortgage 5% Gold Bonds were authenticated under the mortgage, and delivered to your Company during the year as follows:

In reimbursement of expenditures made for additions and betterments	\$2,150,000 00
Against M. K. & T. Ry. Co. General Mortgage Bonds retired by Sinking Fund	555,000 00
Against Boonville Railroad Bridge Company First Mortgage Bonds retired by Sinking Fund	11,000 00
Against the pledge of First and Refunding Mortgage Bonds of the Wichita Falls & Northwestern Railway Company acquired during the year	103,000 00
Against the pledge of Capital Stock of the Houston & Brazos Valley Terminal Company acquired during the year	333,000 00
Against M. K. & T. Ry. Co. Equipment Notes of 1913 retired	104,000 00

Total.....\$3,256,000 00

Of the above-mentioned Consolidated Mortgage bonds, \$643,000 were on June 30 1914 in your Company's treasury and \$2,613,000 were pledged as collateral for loans.

ROLLING STOCK.

The equipment inventory as of June 30 1914 was as follows:

Locomotives	656	Decrease 26
Passenger-Train Cars	511	Increase 18
Freight-Train and Miscellaneous Cars owned and leased	26,798	Decrease 74

Thirty heavy Mikado locomotives and two hundred ballast cars ordered during the year were not delivered by June 30 and are not, therefore, shown in the above inventory.

The average amounts expended for repairs to equipment in service were:

	Increase.	Decrease.	PerCt.
Locomotives	\$2,128 95	\$293 13	12.10
Passenger-Train Cars	694 83	82 84	10.65
Freight-Train and Miscellaneous Cars	56 53	\$2 82	5.25

121 locomotives, or 18.4% of the number owned, and 831 freight cars, or 3.3% of the number owned, were undergoing or awaiting heavy repairs at the close of the year.

The average tractive power of locomotives in service increased 408 pounds, or 1.5%. The average capacity of freight cars in service increased 318 pounds, or .5%.

There was expended during the year for the purchase of equipment, less the value of equipment retired, a net amount of \$607,345 80.

The equipment records of your Company are being rewritten in very complete and detailed form, and these records will be a valuable aid in showing the cost or book value of equipment vacated. Under previous administrations, several million dollars was charged to income account and operating expenses for new equipment purchases. Independently of this, the credit on the general books as of June 30 1914 for equipment retired was \$1,750,608 44, and the debit to additions and betterments account (as required by rules of the Inter-State Commerce Commission) for new equipment purchased or built and for improvement of existing equipment, for which no capital issues were made, amounted to \$1,471,-523 26, a difference of \$279,085 18, which value will be replaced as rapidly as practicable, notwithstanding the very liberal charges to income account and operating expenses just referred to.

For some time it has been the policy of your Company (and considered by many prominent companies in previous years to be correct practice) to charge operating expenses with the value, less salvage, of equipment retirements, just as ties, rails, bridges, etc., are charged to expenses. Any charge in addition to this is guesswork, and, strictly speaking, not accurate

accounting, but the charge of an additional percentage for depreciation has the advantage of distributing the business risk. The "depreciation" credit on the books of your Company as of June 30 1914 amounted to \$1,219,888 24. The policy for the coming fiscal year is now under consideration, and the re-writing of equipment records will permit a more intelligent determination of the whole subject.

ROADWAY AND STRUCTURES.

Satisfactory progress has been made in the work of repairing the damage resulting from the floods, and the property is now in condition to handle the traffic of the coming year without delay, although there is considerable work yet to be done in Texas to bring the roadbed and track up to the standard of economical maintenance and operation.

Considerable improvement work has been carried out during the year. The expenditures for permanent additions and betterments, exclusive of equipment, were \$1,232,019 03. This includes 100 miles of new 85-lb. rail, which was used to replace lighter rail in the main line south of Hillsboro.

New steel and concrete bridges have been installed at several points, and a number of other bridges were renewed.

Embankments were widened on twenty miles of right-of-way, and thirty-two miles of ditching was done.

New ballast was applied on 143 miles of track, and 146 miles were re-ballasted.

There were thirty-two miles of yard and industrial tracks built.

1,061,673 cross ties and 360 sets of switch ties were used during the year.

New fencing was done on seven miles, and 605 miles of fencing re-built.

The new passenger stations at Parsons and Houston, work on which was in progress last year, have been completed and put in operation.

New stations were built at Osage, Leonard, Sealy and Dixon, and several others have been re-built and extended.

The new Union Station at Kansas City is nearing completion, and will be ready for service about November 1 1914.

Contract for the construction of the Union Station at Dallas has been let, and work will be started within a short time.

GENERAL REMARKS

Semi-annual dividends on the preferred capital stock of your Company, which had been paid at the rate of four per cent per annum since May 1906, were discontinued last spring. Your Directors concluded that the unsatisfactory traffic conditions, together with the depressed and uncertain conditions in the financial markets, made the suspension of dividend payments essential to the future welfare of your property.

In March 1913 the Legislature of the State of Texas enacted a law authorizing The Missouri Kansas & Texas Railway Company of Texas to purchase or lease and operate the lines of The Beaumont & Great Northern Railroad, Texas Central Railroad Company, The Denison Bonham & New Orleans Railroad Company, The Dallas Cleburne & Southwestern Railway Company, The Wichita Falls & Northwestern Railway Company of Texas, Wichita Falls & Wellington Railway Company of Texas, The Wichita Falls Railway Company and Wichita Falls & Southern Railway Company. The Attorney-General of Texas brought suit to prevent the lines mentioned from carrying into effect the terms of said legislation, and also alleged certain violations of the laws and Constitution of the State of Texas by the Companies referred to, for which he sought to collect vast sums in penalties and to forfeit the charter of The Missouri Kansas & Texas Railway Company of Texas. A satisfactory settlement of the suit was effected on February 6 1914, without payment of penalties and by the recording of an agreed judgment which fixed the status of the Companies mentioned, and disposes finally of the questions which have been raised by the Texas authorities at intervals in the past regarding the legality of the manner in which the capital stock of The Missouri Kansas & Texas Railway Company of Texas is held and of the ownership by your Company of the capital stock of the various Texas Railway Companies, whose lines have now been, since May 1 1914 leased to and operated by The Missouri Kansas & Texas Railway Company of Texas. This consolidation of operations will improve the service and should effect a substantial reduction in expenses.

The litigation in the States of Missouri and Oklahoma, involving the reduced freight and passenger rates prescribed some years ago by legislative bodies of those States, has not been concluded. This litigation, if decided adversely to your Company, may require the refund of charges collected from passengers and shippers in excess of the amount established by the State laws. In the opinion of counsel, the maximum amount of such refunds, if made, would not exceed the amount of the bonds filed by your Company in the litigation, namely, \$260,000.

Mr. James Campbell, a Director of your Company and a member of its Executive Committee, died on June 12, 1914. He was a man of unusual force, and his death is a severe loss.

Mr. Horace E. Andrews was elected a member of the Executive Committee.

Mr. C. N. Whitehead, formerly Assistant to the President, was appointed Vice-President, effective Feb. 16 1914.

Statements and tables of accounts and operations are appended to this report.

The officers and employees are especially commended for their faithful and efficient service during the past year.

By order of the Board of Directors.

C. E. SCHAFF,
President.

FRANK TRUMBULL,
Chairman.

DELOITTE, PLENDER, GRIFFITHS & CO.

Accountants and Auditors.
49 Wall Street, New York.

Francis F. White, Sir William Plender, F. C. A.
F. Palmer Page, F. C. A. Percival D. Griffiths, F. C. A.
Thomas R. Clark, A. C. A.

Vivian Harcourt.

September 21 1914.

The Executive Committee, Missouri Kansas & Texas Railway Company, New York City.

Gentlemen—In accordance with instructions conveyed to us under authority of a resolution passed by you at a meeting held May 13 1914, we have made an examination of the books at New York City; St. Louis, Missouri; Parsons, Kansas; Denison, Texas; Dallas, Texas, and Wichita Falls, Texas, of the Missouri Kansas & Texas Railway Company and allied Companies, forming the Missouri Kansas & Texas Lines, for the fiscal year ended June 30 1914.

The Securities on hand at the terminating dates have been examined, and those pledged have been confirmed by Certificates obtained from or by examination of the books of the respective depositories. The Cash at Banks has been verified by letters from the respective bankers.

All Capital Expenditures have been examined by us and found to be proper, and we have verified that all equipment dismantled in the period has been written off.

Subject to the question of the charge for Depreciation of Equipment referred to in the President's remarks, we hereby certify that the attached Condensed General Balance Sheet and accompanying Income and Profit and Loss Accounts, in our opinion, correctly set forth, respectively, the financial position of the Company at June 30 1914, and its earnings for the twelve months ended that date.

We are, gentlemen,

Yours very truly,
DELOITTE, PLENDER, GRIFFITHS & CO.

MISSOURI KANSAS & TEXAS LINES.

GENERAL INCOME ACCOUNT, FISCAL YEAR ENDED JUNE 30 1914, COMPARED WITH YEAR ENDED JUNE 30 1913.

	1914.	1913.	Increase (+) or Decrease (-).
Average Mileage Operated	3,824.82	3,677.47	+147.35
Operating Revenues—			
From Freight Traffic	20,228,337 20	20,912,978 29	-684,641 09
From Passenger Traffic	9,105,241 86	9,402,966 60	-297,724 74
From Transportation of Mails	667,532 42	632,610 75	+34,921 67
From Transportation of Express	960,026 83	882,604 26	+77,422 57
From Other Transportation	288,969 58	273,151 24	+15,818 34
From Non-Transportation	271,080 46	241,947 25	+29,133 21
Total Operating Revenues	31,521,188 35	32,346,258 39	-825,070 04
Operating Expenses—			
For Maintenance of Way and Structures	4,574,726 37	4,637,747 68	-63,021 31
For Maintenance of Equipment	3,934,118 75	4,100,819 25	-166,700 50
For Traffic	737,766 02	755,120 22	-17,354 20
For Transportation	12,258,499 43	12,255,845 47	+2,653 96
For General	1,217,008 67	1,058,879 77	+158,128 90
Total Operating Expenses	22,722,119 24	22,808,412 39	-86,293 15
Operating Ratio	(72.09%)	(70.51%)	+(1.58%)
Net Operating Revenue	8,799,069 11	9,537,846 00	-738,776 89
Income from Other Sources—			
Hire of Equipment		411,306 64	-411,306 64
Interest from Investments	24,273 75	52,183 32	-27,909 57
Interest, General Account	67,789 53	76,306 30	-8,516 77
Sundry Items	125,215 27	126,814 80	-1,599 53
Total	217,278 55	666,611 06	-449,332 51
Gross Income	9,016,347 66	10,204,457 06	-1,188,109 40
Deductions from Income—			
Interest on Funded Debt	6,124,370 12	5,965,362 42	+159,007 70
Other Interest	103,668 24	10,544 88	+93,123 36
Hire of Equipment	18,544 29		+18,544 29
Interest on Equipment Trust	91,833 33	2,287 45	+89,545 88
Taxes	1,499,520 89	1,287,903 29	+211,617 60
Rentals, Leased Roads, Joint Tracks, &c.	523,807 31	565,748 40	-41,941 09
Other Deductions	115,376 74	55,625 15	+59,751 59
Total Deductions	8,477,120 92	7,887,471 59	+589,649 33
Net Income	539,226 74	2,316,985 47	-1,777,758 73

PROFIT AND LOSS ACCOUNT.

Balance to Credit of Profit and Loss June 30 1913	\$5,223,147 39
Additions—	
Balance for Year Brought Forward from Income Account	539,226 74
Miscellaneous Credits	52,745 82
Total	\$5,815,119 95
Deductions—	
Depreciation prior to July 1 1907 on equipment destroyed	\$347,408 51
Side tracks and other property abandoned	109,812 24
Expenses in connection with various surveys, account projects abandoned	46,839 01
Uncollectible accounts charged off and reserve	165,549 54
Refunds to Corporation Commission of Oklahoma, account of overcharges under various orders of the Commission	34,521 17
Expenses of security issues	1,425 00
Dividends on capital stock	261,428 51
Southwestern Coal & Improvement Co. sinking fund transferred to "Appropriated Surplus"	15,678 67
Total	\$982,662 65
Balance to credit of Profit and Loss June 30 1914	\$4,832,457 30

MISSOURI KANSAS & TEXAS LINES.
CONDENSED GENERAL BALANCE SHEET JUNE 30 1914.

ASSETS.		LIABILITIES.	
<i>Property Investment—</i>		<i>Capital Stock—</i>	
Cost of Road and Equipment.....	\$225,449,042 72	Common Stock M. K. & T. Ry. Co., held by the public.....	\$63,283,257 00
Less Accrued Depreciation on existing Equip- ment..... (Credit)	1,219,888 24	Preferred Stock M. K. & T. Ry. Co., held by the public.....	13,000,000 00
	\$224,229,154 48	Common Stock M. K. & T. Ry. Co., held by the Com- pany.....	17,043 00
Securities of Proprietary, Affiliated and Controlled Companies—Pledged (\$589- 085 71—under Bills Payable).....	\$1,544,993 01	Stock, Subsidiary Companies.....	25,700 00
			\$76,326,000 00
<i>Miscellaneous Investments—</i>		<i>Funded Debt—</i>	
Physical Property.....	\$199,028 33	Bonds and Notes.....	140,783,500 00
Securities Pledged under Bills Payable.....	760,000 00		\$217,109,500 00
	959,028 33	Consolidated Mortgage Bonds.....	\$28,217,000 00
		Consolidated Mortgage Bonds in Treasury.....	643,000 00
<i>Securities Issued or Assumed, Pledged—</i>		General Mortgage Bonds in Sinking Fund.....	1,970,000 00
Consolidated Mortgage Bonds (under 2- Year Notes).....	\$24,516,000 00		30,830,000 00
Consolidated Mortgage Bonds (under Bills Payable).....	3,701,000 00		\$247,939,500 00
	28,217,000 00	<i>Working Liabilities—</i>	
<i>Cash and Securities in Sinking and Redem- ption Funds.....</i>	1,902,507 32	Loans and Bills Payable.....	\$3,281,385 55
	\$256,852,683 14	Traffic and Car service Balances due to other Companies.....	571,095 24
<i>Working Assets—</i>		Audited Vouchers Unpaid.....	3,313,512 38
Cash.....	\$1,458,800 87	Audited Wages Unpaid.....	1,077,583 13
Loans and Bills Receivable.....	9,096 02	Miscellaneous Accounts Payable.....	91,137 31
Traffic and Car Service Bal- ances due from Other Com- panies.....	461,498 32	Matured Interest, Dividends and Rents Unpaid.....	663,175 15
Net Balance due from Agents, Train Auditors and Con- ductors.....	298,868 24	Matured Mortgage and Secured Debt Un- paid.....	4,000 00
Miscellaneous Accounts Re- ceivable.....	1,970,860 47	Other Working Liabilities.....	52,964 13
Material and Supplies.....	2,987,135 78		9,054,852 89
Other Working Assets.....	49,944 46		
	\$7,236,204 16	<i>Deferred Liabilities—</i>	
<i>Securities in Treasury, Unpledged—</i>		Unmatured Interest, Dividends and Rents.....	\$1,136,185 58
Securities of Proprietary, Affiliated and Controlled Companies.....	\$185,042 71	Taxes Accrued.....	439,880 86
Securities Issued or Assumed.....	660,043 00	Other Deferred Credit Items.....	305,527 94
Marketable Securities.....	1,212 79		1,881,594 38
	846,298 50	<i>Appropriated Surplus—</i>	
		Additions to Property since June 30 1907, through Income.....	\$1,563,429 84
<i>Deferred Assets—</i>		Reserves Invested in Sinking and Redem- ption Funds.....	236,845 62
Unmatured Interest, Dividends and Rents Receivable.....	\$16,992 60		1,800,275 46
Working Funds—Advanced.....	7,226 95	<i>Profit and Loss Balance.....</i>	\$4,832,457 30
Rents and Insurance Paid in advance.....	48,903 06		6,632,732 76
Other Deferred Debit Items.....	500,371 62		
	573,494 23		
Total.....	\$265,508,680 03	Total.....	\$265,508,680 03

The Company is also guarantor—
Of Kansas City Terminal Railway Company First Mortgage Bonds, due 1960 (jointly with eleven other Railway Companies).....\$39,761,000 00
Of Union Terminal Company (of Dallas, Tex.) First Mortgage Bonds, due 1942 (jointly with eight other Railway Companies)..... 2,193,000 00
Of Joplin Union Depot Company First Mortgage Bonds, due 1940 (jointly with three other Railway Companies)..... 650,000 00
Of Houston & Brazos Valley Railway Company First Mortgage Bonds, due 1937..... 210,000 00
Of Galveston Houston & Henderson R.R. Co. Note (jointly with The International & Great Northern R.R. Co.)..... 75,000 00

Note.—There exists a possible liability in connection with State rate cases under appeal. See general remarks on a preceding page.

Southern Aluminum Co., New York.—Work Suspended.

The company, whose stockholders on June 2 last authorized an issue of \$7,000,000 6% bonds, is, it is stated, owing to the European war, unable to obtain the necessary funds at present to prosecute the work and will sus- pend operations at Badin, N. C., until the general conditions in the finan- cial and industrial world are better. Since August there has been remarka- ble progress made on the project; foundations and steel superstructure of the power house are up, with work under way on the brick work. Over 35,000 cubic yards have been placed of the concrete for the power dam, and the electrode factory is nearly completed. Portions of the structural steel framework are erected for both the furnace plant and the storage house of the alumina purification plant. The company is controlled by Frenchmen, and with the mobilization of the French army has lost temporarily 3 of its technical staff.

M. Barendson and J. Bordelange were on June 2 elected directors.— V. 98, p. 1923.

Supplee-Biddle Hardware Co., Phila.—Pref. Stock.

Henry S. Morris, Inc., 868 Drexel Bldg., Phila., purchased, and recently offered, \$200,000 of the company's \$400,000 authorized and issued 7% cum. pref. (p. & d.) stock (tax-free in Penn.) at \$95 per share (par \$100), netting 7 3/8% in- come. Dividends Q.-J.

Data from Pres. J. E. Baum, Philadelphia, Oct. 13 1914.

Incorporated in Penn. Dec. 31 1913 and acquired the business, merchan- dise and good-will of Supplee Hardware Co. and Biddle Hardware Co., the latter having been in business since 1837, the former over 50 years. Trans- acts a general wholesale hardware business, and also consumes the entire output of the Pennsylvania Lawn Mower Co., and is a distributor of Monel metal and Monel products (a non-corrosive composition chiefly of nickel and copper produced by the International Nickel Co.) by virtue of im- portant selling rights and contracts. Seventy travelling salesmen are employed. Annual business aggregates upwards of \$3,000,000. More than 30 of the employees are stockholders, and the controlling common stock is held by the officers.

	Authorized.	Outstanding.
7% cumulative preferred stock.....	\$400,000	\$400,000
Common stock.....	600,000	400,000

The average annual profits of the two concerns for the ten years last passed were \$88,861 and in 1913 were \$102,900.

The preferred stock may be increased at par for cash up to but not exceeding 60% of the entire paid-up capital at any time that the quick assets are 150% of the pref. then outstanding, and then being issued. The pref. is redeemable as a whole (a) on any dividend date upon vote of 60% of the common stock or (b) upon dissolution at \$105 and divs., or on prior to Jan. 1 1918 and at \$110 and divs. thereafter. After the payment in full of the cumulative pref. divs., at least 10% of the surplus income of each calendar year shall, for three months of each ensuing year, be applied, if possible, to the purchase of pref. shares at or below \$105 and accrued divs. To the extent not so invested, said 10% shall be carried to accumulated sur- plus, which shall never be distributed as divs. on the common stock until the total aggregate surplus so accumulated equals 60% on the pref. stock issued and then outstanding in addition to the sum so distributed. No mortgage shall be created without the consent in writing thereto of the holders of 66 2/3% of the pref. shares then outstanding. The right of the pref. stock to vote shall arise only whenever three successive defaults occur, and shall be extinguished whenever such defaults cease to exist.

Assets per Balance Sheet, Jan. 1 1914 Aggregating 1,064,305.

Cash.....	\$116,929	Catalogues, &c.....	\$24,483
Merchandise.....	730,238	Furniture and fixtures.....	44,787
Prepaid note interest.....	4,578	Good-will.....	143,290
Offsets: Notes and accounts payable, \$264,305; pref. stock, \$400,000; common stock, \$400,000.			

Thousand Oaks Land Co.—Bonds.—William R. Staats

Co. of San Fran., Los Angeles, &c., is offering at 97 \$200,000-5-year 6% sinking fund bonds.

The security, it is said, has been appraised as follows: List price of unsold lands, \$975,900; appraised value for purposes of this issue, \$649,191 amount due on contracts, \$190,503; quick-selling value of assets, \$339,694;

Tonopah-Belmont Development Co.—Div. Reduced.

A quarterly dividend of 12 1/2% has been declared on the \$1,500,000 stock (par \$1), payable Jan. 1 to holders of record Dec. 15, comparing with 25% quarterly from April 1911 to Oct. 1914 inclusive. The reduction is stated to be due to the general conditions and also on account of there being no market for silver.

	06.	07.	08-09.	10.	11.	12.	1913.	1914.
Regular.....	20	20	None	30	90	100	100	100
Extra.....							10 (Nov.)	10 (May)

—V. 98, p. 1248.

United Paperboard Co., N. Y.—Annual Meeting.

At the annual meeting on Nov. 19 Thomas R. Cotter, of the law firm of Weeds, Conway & Cotter, Plattsburgh, N. Y., a stockholder owning 56 shares of pref. and 450 shares of common stock, presented a motion calling for the appointment of a committee of five stockholders who should at a cost to the company of not over \$3,500 make a thorough examination of its affairs, accounts, &c., from organization to Oct. 1 1914. This resolu- tion was lost, owing, Mr. Cotter says, to the opposition of the directors. In a circular dated Nov. 10 Mr. Cotter insists that the information con- tained in the annual report is unjustifiably meagre and urges that the shareholders are also entitled to have "apparent discrepancies" in the report cleared up. Compare V. 99, p. 1213.

Washington Oil Co.—Dividend Reduced.

A dividend of \$3 (30%) has been declared on the \$100,000 stock, payable Dec. 31 to holders of record Nov. 30. This compares with \$4 (40%) in Dec. and Feb. 1913 and \$2 90 (29%) in 1911.—V. 97, p. 1120.

Watertown (S. D.) Water Co.—1st M. Bonds Called.

Twelve bonds, Nos. 33, 155, 161, 162, 172, 173, 174, 175, 259, 281, 309 and 311, for payment at par and int., on Jan. 2 at Empire Trust Co., 65 Cedar St., N. Y. City.—V. 97, p. 1597.

West Kootenay Power & Light Co., Ltd.—Earnings.

Aug. 31	Gross	Net	Int. Stk.	Pf. Dis.	Common	Balance.
Year.	Earns.	Earns.	Fund. &c.	(7%).	Dividends.	Surplus.
1913-14.....	\$424,262	\$304,544	\$123,184	\$24,500	(5)	\$100,000
1912-13.....	415,414	300,134	124,215	21,000	(4)	80,000

—V. 98, p. 154.

York County Power Co.—Further Data.

Of the \$500,000 bonds which have been certified and guaranteed by the Cumberland County Power & Light Co., \$315,500 are outstanding in the hands of the public, \$150,000 are in the treasury of the Cumberland County Power & Light Co. and \$34,500 are in the treasury of the York County Power Co. The \$315,500 outstanding includes \$100,500 bonds which have been exchanged for an equal amount of underlying liens and which are in the treasury of the company; \$719,500 are reserved for underlying liens, in- cluding the \$100,500 already exchanged, and the remaining \$1,280,500 are issuable only for extensions and additions. There has been no offering of these bonds. See V. 99, p. 1456.

—White & Co., bankers, of 30 Pine Street, announce that John R. Sofio, who has been associated with their London house, White, Fellner & Co., for a number of years, was ad- mitted as a partner of White, Fellner & Co. on Nov. 1.

The Commercial Times.

COMMERCIAL EPITOME.

Friday Night, Nov. 27 1914.

Though domestic trade continues quiet, there are some signs of an increase here and there. Collections are somewhat better, except at the South, where the low price of cotton is a drawback. For a time cold weather at the West helped retail trade, though latterly higher temperatures have hurt business. Money is easier. Commercial paper sells much more readily. Stocks and bonds have been more active at prices in many instances above those of July 30. The fact that the New York Stock Exchange will open tomorrow for bond trading within restricted limits has had a good effect. The Coffee Exchange will reopen on Nov. 30. Various exchanges are reopening in different parts of the country. Pacific Coast trade is better, though the depression in lumber is a bad feature. Large sales of wheat, corn and oats to Europe are still noted and exports of manufactures are large. Exports of cotton, too, are the largest thus far this season, and of late cotton prices here and at the South have been steadier. On the other hand, the business in iron and steel is disappointing and prices have declined. The textile trades are also rather slow. The scarcity of dyestuffs hampers textile manufacturers. It does not look as though the Christmas trade will be anything like as large as it was last year. The jewelry trade reflects the bad times, though the business is somewhat better than it was recently. On the whole, then, although there are signs here and there of improvement of trade, both foreign and domestic, business is still under the shadow of the great war which is devastating Europe.

LARD has been in somewhat better demand; prime Western 10.65c., showing an advance; refined for the Continent 12.30c., South America 12.50c., Brazil 13.50c. Lard futures have not shown marked changes. At times they have been somewhat easier, with large receipts of hogs and lower prices for them. On a single day the receipts at Western points reached 106,200, against 95,100 on the same day last year. Packers have been selling. To-day prices advanced slightly on covering of shorts, and despite some continued selling by packers.

DAILY CLOSING PRICES OF LARD FUTURES IN CHICAGO.

	Sat.	Mon.	Tues.	Wed.	Thurs.	Fri.
November delivery cts. 10.50	10.45	10.12	10.12	Holi-	10.12	
January delivery	10.15	10.00	9.90	9.82	day.	9.87
May delivery	10.30		10.12	10.07		10.10

PORK quiet and steady; mess \$20 50@21, clear \$21@25, family \$24 50@25. Beef steady; mess \$21@23; packet \$23@24, family \$24@26, extra India mess \$36@38. Cut meats steady; pickled hams, 10 to 20 lbs., 13 1/4@14c.; pickled bellies, 6 to 12 lbs., 16@16 1/2c. Butter, creamery extras, 34 1/2@34 1/4c. Cheese, State whole milk colored specials, 16c. Eggs, fresh-gathered extras, 41@43c.

COFFEE has been quiet with No. 7 Rio 6 1/4c.; No. 4 Santos 9 3/4c. to 10c.; fair to good Cucuta 10 1/2 to 11c. Coffee futures have fluctuated within comparatively small limits. Certainly prices have shown little change. Quite a little switching has been done from December to more distant months on the basis of 39 points for March, 59 for May and 139 for July. December at one time sold up to 5.35c., but later reacted to 5.25c., with sales still later at 5.30 to 5.31c.; March at 5.65 to 5.70c.; May at 5.78 to 5.86c., and July at 6.67 to 6.72c. Rio exchange, after receding a little, advanced to 13 11-16d. The Coffee Exchange here will reopen on Nov. 30. December notices on Wednesday are said to have reached 50,000 bags, which, it is said, practically completes the December liquidation.

SUGAR quiet and steady; centrifugal, 96-degrees test, 4.01@4.07c.; molasses, 89-degrees test, 3.36@3.39c. Advices from Cuba state that the weather there is favorable for the crop. It is said that trading in sugar futures might be delayed here for about a month, owing to conditions existing in regard to the British embargo. Refined quiet at 5.10c. for granulated.

OILS.—Linseed steady; City raw American seed 47c.; boiled 48c.; Calcutta 70c. Coconut steady; Cochin 14@14 1/2c.; Ceylon 10 1/2@11c. Olive \$1@1 10. Castor 8 1/4@8 1/2c. Palm steady at 8 3/4@9c. for Lagos. Cod domestic steady at 33@35c. Cottonseed oil steady at 5.60c. for winter and 5.85c. for summer white. Corn in good demand at 5.35@5.40c. Spirits of turpentine 47 1/2c. Common to good strained rosin \$3 75.

PETROLEUM steady; refined in barrels 8 to 9c., bulk 4.50 to 5.50c., cases 10.50 to 11.50c. Naphtha, 73 to 76-degrees, in 100-gallon drums, 23 1/2c.; drums \$8 50 extra. Gasoline, 89-degrees, 26c.; 74 to 76-degrees, 25c.; 67 to 70-degrees, 22c. Crude prices continue unchanged. Advices come from Pittsburgh that the work of development is lagging and that there is little interest manifested in the wells drilling and starting.

Pennsylvania dark	\$1 45	Corning	85c.	Somerset, 32 deg.	85c.
Second sand	1 45	Woolter		Ragland	65c.
Tiona	1 45	North Lima	\$1 15	Illinois, above 30	
Cabell	1 05	South Lima	88c.	degrees	89c.
Mercer black	1 02	Indiana	88c.	Kansas and Okla-	
New Castle	1 02	Princeton	88c.	homa	55c.

TOBACCO has been quiet but steady. But consumers are not carrying big stocks, and the early part of 1915 it is believed will see some revival of business. Wisconsin 1914 is rather neglected, as holders are very firm and the quality of most offerings is said to be none too attractive. Connecticut Havana seed is meeting with some demand, but not

enough to excite comment. Sumatra is not selling very freely. The remaining assortments of that kind do not seem greatly to attract buyers.

COPPER has advanced, with a better demand. Yet it is said that supplies in Europe are very large and that Italian ships are declining to take copper for European markets. The Norwegian steamer "Sif" has been taken by the English into Glasgow and 400 tons of electrolytic copper seized which was consigned to Gothenberg, Sweden. The Norwegian steamer Tier, with 400 tons of copper ore, has also been detained at Glasgow. At the same time there is a better demand in this country for wire, sheets and finished shapes from interior and Atlantic seaboard markets. Railroads are expected to take considerable copper for the electrification of lines, as for instance, the mountain division of the Chicago Milwaukee & St. Paul RR. Lake 12 1/2c., electrolytic 12 3/4c. Tin has advanced to 34c. on the spot here and where the stock is controlled by a few houses; later 33 3/4c. Lead here 3.90c. and spelter 5 1/4c. Pig iron has been firm. A better inquiry is reported in the Central West; No. 2 Eastern \$13@13 50; No. 2 Southern Birmingham \$10. Steel products have been weaker, as sellers are numerous and competition sharp. Easing prices, however, do not seem to hold trade much. Still, it is a fact that increased steel orders have been placed for export to Europe, including plates, billets, shapes and sheets. And Australia has placed with American mills a contract for 15,000 tons of steel plates for a pipe line. Sales of pig iron within a fortnight at Buffalo are put at 250,000 tons. In the Cincinnati district sales of pig iron have also been large.

COTTON.

Friday Night, Nov. 27 1914.

THE MOVEMENT OF THE CROP, as indicated by our telegrams from the South to-night, is given below. For the week ending this evening the total receipts have reached 360,439 bales, against 359,216 bales last week and 338,055 bales the previous week, making the total receipts since Aug. 1 1914 2,690,158 bales, against 5,545,070 bales for the same period of 1913, showing a decrease since Aug. 1 1914 of 2,854,912 bales.

	Sat.	Mon.	Tues.	Wed.	Thurs.	Fri.	Total.
Galveston	24,114	30,094	44,512	32,114	23,326	21,056	175,216
Texas City	1,954	712	6,703	6,703		1,654	11,023
Port Arthur							
Aran. Pass. &c.						350	350
New Orleans	7,823	11,634	17,000	10,382	12,378	2,505	61,722
Mobile	645	704	614	391	1,400	1,080	4,834
Pensacola							
Jacksonville, &c.						1,517	1,517
Savannah	8,384	9,458	9,173	7,789			12,209
Brunswick							47,013
Charleston	3,705	2,384	3,820	2,191	2,428		5,000
Wilmington	1,142	793	709	798	621		2,696
Norfolk	2,864	4,028	1,982	3,022			17,224
N'port News, &c.							1,859
New York		50					5,922
Boston	150			100	50		11,216
Baltimore			65		125		200
Philadelphia	10		6				340
Totals this week	50,791	59,857	77,881	63,490	40,328	68,092	360,439

The following table shows the week's total receipts, the total since Aug. 1 1914 and the stocks to-night, compared with last year:

Receipts to November 27.	1914.		1913.		Stock.	
	This Week.	Since Aug 1 1914.	This Week.	Since Aug 1 1913.	1914.	1913.
Galveston	175,216	1,285,036	146,538	1,936,695	446,633	310,474
Texas City	11,023	117,707	28,991	215,272	28,769	29,511
Port Arthur		400		11,918		
Aranas Pass. &c.	350	9,720	6,896	105,342	7,035	3,718
New Orleans	61,722	345,695	80,914	631,988	196,956	228,311
Mobile	4,834	56,108	11,945	219,215	37,029	49,434
Pensacola		4,066	25,184	90,250		
Jacksonville, &c.	1,517	19,002	1,821	18,653	1,324	1,782
Savannah	47,013	450,638	46,987	1,176,767	183,328	169,992
Brunswick	5,000	28,308	5,500	196,442	10,745	19,990
Charleston	17,224	129,336	19,070	328,383	85,807	65,513
Georgetown						
Wilmington	5,922	61,016	14,252	273,921	41,591	37,478
Norfolk	16,687	124,224	26,371	258,188	48,934	49,248
N'port News, &c.	11,216	36,247	3,106	23,283		
New York	200	744	102	876	71,555	44,822
Boston	340	4,214	627	5,822	4,082	4,002
Baltimore	2,108	17,295	4,682	51,581	3,471	8,304
Philadelphia	67	402	399	474	6,676	4,533
Totals	360,439	2,690,158	423,795	5,545,070	1,173,935	1,027,112

In order that comparison may be made with other years, we give below the totals at leading ports for six seasons:

Receipts at—	1914.	1913.	1912.	1911.	1910.	1909.
Galveston	175,216	146,538	184,164	130,580	108,565	85,404
Texas City, &c.	11,373	35,887	38,303	57,103	15,461	9,382
New Orleans	61,722	80,914	94,420	73,631	101,132	35,292
Mobile	4,834	11,945	9,472	13,585	18,261	7,068
Savannah	47,013	46,987	48,088	71,510	71,843	7,068
Brunswick	5,000	5,500	12,800	10,950	16,250	27,024
Charleston, &c.	17,224	19,070	11,814	19,495	18,630	1,240
Wilmington	5,922	14,252	17,359	20,494	20,216	4,219
Norfolk	16,687	26,371	24,950	32,379	35,431	13,767
N'port N., &c.	11,216	3,516	2,461	2,014	487	763
All others	4,232	32,815	10,481	26,552	26,353	28,526
Total this wk.	360,439	423,795	454,342	458,293	432,629	216,389

Since Aug. 1. 2,690,158 5,545,070 5,612,217 5,618,882 4,687,570 4,397,381

The exports for the week ending this evening reach a total of 249,901 bales, of which 131,291 were to Great Britain, 16,093 to France and 102,517 to the rest of the Continent. Below are the exports for the week and since Aug. 1 1914.

Exports from—	Week ending Nov. 27 1914. Exported to—				From Aug. 1 1914 to Nov. 27 1914. Exported to—			
	Great Britain.	France.	Continent.	Total.	Great Britain.	France.	Continent.	Total.
Galveston	54,275	13,000	43,714	110,989	275,981	55,753	293,870	625,604
Texas City	24,205	—	51	25,056	73,174	—	16,765	89,939
Pt. Arthur	—	—	—	—	—	—	400	400
Ar. Pass. &c	—	—	—	—	—	—	310	310
New Orleans	38,652	2,593	18,512	59,757	108,530	6,339	61,705	176,574
Mobile	—	—	—	—	2,875	—	301	3,086
Pensacola	—	—	—	—	4,245	—	—	4,245
Savannah	—	—	16,998	16,998	21,345	—	92,287	113,632
Brunswick	—	—	—	—	11,900	—	—	11,900
Charleston	8,200	—	—	8,200	22,790	—	2,200	24,990
Wilmington	—	—	3,000	3,000	—	—	5,600	5,600
Norfolk	—	—	—	—	7,001	—	—	7,001
New York	2,710	500	9,708	12,918	29,431	2,555	48,604	80,590
Boston	—	—	400	400	11,679	—	916	12,595
Baltimore	3,249	—	—	3,249	3,549	—	100	3,649
Philadelphia	—	—	490	490	18,342	—	1,690	20,032
San Fran.	—	—	5,286	5,286	—	—	37,682	37,682
Pt. Twn's'd	—	—	3,558	3,558	—	—	39,451	39,451
Total	131,291	16,093	102,517	249,901	590,752	64,647	601,881	1,257,280

Total 1913 137,847 53,181 194,777 385,805 1,466,158 616,342 1,923,070 4,005,570

Note.—New York exports since Aug. 1 include 1,531 bales Peruvian and 25 bales West Indian to Liverpool, 50 bales Egyptian to Mexico.

In addition to above exports, our telegrams to-night, also give us the following amounts of cotton on shipboard, not cleared, at the ports named. We add similar figures for New York.

Nov. 27 at—	On Shipboard, Not Cleared for—						Leaving Stock.
	Great Britain.	France.	Germany.	Other Foreign.	Coast-wise.	Total.	
New Orleans	5,525	1,956	3,683	24,986	153	36,303	160,653
Galveston	58,774	9,988	—	68,105	7,000	171,867	274,766
Savannah	18,367	—	—	—	900	19,267	164,061
Charleston	3,000	—	—	3,000	—	6,000	79,807
Mobile	835	—	338	—	250	1,423	35,606
Norfolk	—	—	—	—	21,432	21,432	27,502
New York	300	—	—	2,500	—	2,800	68,755
Other ports	9,000	—	—	10,000	—	19,000	84,693
Total 1914	123,801	11,944	4,021	108,591	29,735	278,092	895,843
Total 1913	85,431	55,785	94,502	84,054	23,560	343,382	683,730
Total 1912	80,755	56,432	119,264	48,662	23,636	328,749	983,367

Speculation in cotton for future delivery has continued dull and prices have been irregular. December and other near months have been the best sustained. In fact they have advanced to some extent, but more distant deliveries like May and July have declined. Fluctuations, however, as a rule, have not been within wide limits. On the contrary, the trading has been as a rule generally of a professional sort and the market really lacks striking features. Last Tuesday, to be sure, Liverpool bought December quite heavily, but accompanied its purchases of that month by sales of May. On the other hand, large spot houses which sold December freely bought May. Others again who had sold December cotton obtained from the Cotton Exchange Trading Corporation at 7 1/2c., bought October. At times October has been the steadiest month on the list. But the market, as a whole, has been monotonous. Everybody appears to be waiting for further developments. Most commission houses do not seem especially anxious as yet to do a large business. They are unusually strict about margins on the basis of \$3 to \$5. Some misapprehension has existed in regard to the tax that might be levied in trading in new contracts. But the New York Cotton Exchange contract conforms strictly with the requirements of the law and therefore there is no danger of the trader incurring a tax of \$10 a bale. The United States Government has imposed a special war tax which will go into effect on Dec. 1 of 1 cent per \$100 of value on all sales. This tax will be chargeable to the customer with cotton on the basis of 7 cents per pound, and would amount to 35 cents per 100 bales. This is the only tax to which the customer is liable. The South has sold here as a hedge, but on nothing like a large scale as some had feared. The price is down pretty low, many maintain below the cost of production, and for once the South does not seem especially anxious to hedge. It can borrow money at 6 cents. Requirements as to margins are also, as already intimated, very strict, something which of itself may have had some tendency to restrict Southern hedging. Meantime the evidence multiplies that this is a very large crop. Certainly the ginning as announced on Nov. 21 for the period up to Nov. 14 was so large as to surprise everybody. In fact, the total given out on that day was some 400,000 bales larger than had been expected. It proved to be 11,624,708 bales, against 10,445,290 in the same time last year, 10,299,846 in 1912 and 11,313,000 in 1911. So that it was 312,000 bales larger than even in the big crop year of 1911-12. Opinions differ as to just what this ginning means. Some think it points to a crop of 16,250,000 bales; others that it is somewhere between 16,000,000 to 16,250,000 bales, and some extremists go as high as 16,500,000 bales. Some think that it would be easy to form an erroneous idea of the size of the crop from this to form an erroneous idea of the size of the crop from this ginning, because they believe that it has been done with extraordinary rapidity; that labor in the towns and villages of the South has been largely engaged in gathering the crop may be, the consensus is that it is one of the largest crops on record, if indeed it does not considerably exceed any crop ever before raised. Liverpool's spot sales have been rather small, usually only 7,000 to 8,000 bales a day, and to-day only 4,000. Spot markets at the South have been quiet. A renewed agitation against the cotton exchanges has sprung up at Houston, Tex., and Vicksburg, Miss., where there has

been severe comment on the fact that prices have recently declined. The fact seems to be ignored that an extraordinary war, an extraordinary crop and great prostration of trade the world over militate against the cotton market and anything like a marked advance in prices. Savannah people charge Texas with causing a big decline while the exchanges were closed, Middling at Savannah falling from 9 1/2c to 7c. On the other hand, exports are increasing. On Tuesday last they were the largest of any day since the war began, reaching approximately 65,000 bales. There is believed to be a large short interest in December for Liverpool straddle account. At the same time the certificated stock here amounts to only about 39,000 bales, with some 16,000 bales of expirers in December and January. Arrangements are being made to export cotton to Bremen. The Holland Government is encouraging shipments to Germany through Holland. So great is the demand for ocean freight room to Bremen that rates have advanced to extraordinary figures. It is said that \$2 to \$3 per hundred pounds is bid for freight room to that port, in sharp contrast with the rates prevailing just before the war of 40 to 45 cents. It is believed that the exports from now on will increase materially. Recent colder weather has favored retail trade in dry goods. New England is said to be rather more disposed to buy at this level of prices. Under the new contract the spinner gets merchantable cotton here. The outlook seems to point to a better spinning business at New York than for many years past, when trade really begins in earnest. To-day prices advanced on covering of shorts in December. That month was bought by Liverpool, spot interests and others. Also the December notices amounted to only about 1,000 bales, whereas some had looked for twenty times that total. An interesting rumor, too, was that one large spot house had sold to another anywhere from 10,000 to 20,000 bales of spot cotton from the stock here at a premium of five points over December. Differences on the higher grades were increased by the Revision Committee on Wednesday, but those on the lower grades remain unchanged—something which, it is believed, will prevent shipments of such grades to New York and thereby tend to strengthen December. The market showed some signs of broadening. Galveston is shipping heavily to Europe and to some extent to Japan. Southern spot markets were generally steady or higher. It was easier to trade here to-day and the market showed some signs of widening out and getting into a more normal condition. Later in the day distant months weakened under selling by those who bought December and May. Spot cotton ended at 7.75c. for middling uplands, showing an advance for the week of 15 points.

The official quotations for middling upland cotton in the New York market each day for the past week has been:

Nov. 21 to Nov. 27—	Sat.	Mon.	Tues.	Wed.	Thurs.	Fri.
Middling uplands	7.75	7.75	7.75	7.75	7.75	7.75

NEW YORK QUOTATIONS FOR 32 YEARS.

1914 c.	7.75	1906 c.	11.40	1898 c.	5.50	1890 c.	9.44
1913	13.30	1905	12.00	1897	5.81	1889	10.25
1912	13.10	1904	9.70	1896	7.69	1888	9.81
1911	9.30	1903	11.35	1895	8.62	1887	10.50
1910	15.15	1902	8.55	1894	6.00	1886	9.19
1909	14.75	1901	8.00	1893	8.06	1885	9.44
1908	9.45	1900	10.12	1892	10.00	1884	10.44
1907	11.45	1899	7.81	1891	8.12	1883	10.56

MARKET AND SALES AT NEW YORK.

	Spot Market Closed.	Futures Market Closed.	SALES.		
			Spot.	Contr't	Total.
Saturday	Quiet 15 pts. adv.	Barely steady	---	---	---
Monday	Quiet	Barely steady	---	---	---
Tuesday	Quiet	Steady	600	---	600
Wednesday	Quiet	Steady	---	---	---
Thursday	Quiet	HOLIDAY	---	---	---
Friday	Quiet	Steady	---	---	---
Total			600	---	600

FUTURES.—The highest, lowest and closing prices at New York for the past week have been as follows:

	Saturday, Nov. 21.	Monday, Nov. 23.	Tuesday, Nov. 24.	Wed'day, Nov. 25.	Thurs'day, Nov. 26.	Friday, Nov. 27.	Week.
New Contract							
December—							
Range	7.45-60	7.47-51	7.37-42	7.36-49			7.52-55 7.30-60
Closing	7.45-47	7.47-48	7.40-42	7.49-51			7.52-54
January—							
Range	7.54-69	7.53-65	7.49-55	7.52-63			7.60-69 7.46-69
Closing	7.57-58	7.59-60	7.52-53	7.59-60			7.63-64
March—							
Range	7.74-88	7.69-82	7.61-70	7.60-65			7.70-80 7.60-88
Closing	7.75-76	7.75-76	7.63-64	7.70-71			7.75-76
July—							
Range	7.94-05	7.90-99	7.81-87	7.79-93			7.87-93 7.79-05
Closing	7.94-95	7.93-95	7.81-82	7.88-89			8.11-91
October—							
Range	8.06-16	8.04-14	7.99-05	8.01-14			8.11-18 7.99-18
Closing	8.10-11	8.07-09	8.03-05	8.10-11			8.12-13
Old Contract							
December—							
Range	7.17-40	7.23-38	7.20-26	7.19-35			7.30-43 7.19-43
Closing	7.26-27	7.29-30	7.23-24	7.31-32			7.37-38
January—							
Range	7.43	7.39	7.37	@			7.38-50 7.37-50
Closing	7.37-39	7.40-42	7.34-36	7.40			7.41-42
March—							
Range	@	@	@	7.38			7.49-51 7.38-51
Closing	7.37-40	7.42-44	7.36	7.43			7.47-49
May—							
Range	@	@	@	@			7.60
Closing	7.51-55	7.55	7.43	7.50			
July—							
Range	@	@	@	@			
Closing	@	@	@	@			

THE VISIBLE SUPPLY OF COTTON to-night, as made up by cable and telegraph, is as follows. Foreign stocks, as well as the afloat, are this week's returns, and consequently all foreign figures are brought down to Thursday evening. But to make the total the complete figures for to-night (Friday), we add the item of exports from the United States, including in it the exports of Friday only.

	1914.	1913.	1912.	1911.
Stock at Liverpool	694,000	746,000	927,000	609,000
Stock at London	22,000	5,000	3,000	4,000
Stock at Manchester	52,000	73,000	49,000	48,000
Total Great Britain stock	768,000	824,000	979,000	661,000
Stock at Hamburg	*10,000	13,000	12,000	9,000
Stock at Bremen	*85,000	315,000	361,000	241,000
Stock at Havre	188,000	325,000	288,000	157,000
Stock at Marseilles	3,000	2,000	2,000	2,000
Stock at Barcelona	20,000	12,000	15,000	12,000
Stock at Genoa	25,000	18,000	11,000	26,000
Stock at Trieste	*7,000	9,000	7,000	4,000
Total Continental stocks	338,000	694,000	696,000	451,000

	1914.	1913.	1912.	1911.
Total European stocks	1,106,000	1,518,000	1,675,000	1,112,000
India cotton afloat for Europe	101,000	111,000	25,000	13,000
Amer. cotton afloat for Europe	493,218	989,860	1,161,689	927,573
Egypt, Brazil, &c. afloat for Europe	56,000	76,000	101,000	84,000
Stock in Alexandria, Egypt	*126,000	341,000	279,000	185,000
Stock in Bombay, India	451,000	433,000	299,000	226,000
Stock in U. S. ports	1,173,935	1,027,112	1,312,116	1,256,110
Stock in U. S. interior towns	1,165,390	831,839	734,723	866,581
U. S. exports to-day	27,061	52,095	62,782	35,770

Total visible supply 4,699,604 5,379,906 5,650,310 4,706,034
Of the above, totals of American and other descriptions are as follows:

	1914.	1913.	1912.	1911.
Liverpool stock	427,000	541,000	784,000	524,000
Manchester stock	37,000	46,000	30,000	37,000
Continental stock	*247,000	658,000	659,000	418,000
American afloat for Europe	493,218	989,860	1,161,689	927,573
U. S. port stocks	1,173,935	1,027,112	1,312,116	1,256,110
U. S. interior stocks	1,165,390	831,839	734,723	866,581
U. S. exports to-day	27,916	52,095	62,782	35,770

Total American 3,570,604 4,145,906 4,744,310 4,065,034
East India, Brazil, &c.

	1914.	1913.	1912.	1911.
Liverpool stock	267,000	205,000	143,000	85,000
London stock	22,000	5,000	3,000	4,000
Manchester stock	*15,000	27,000	19,000	11,000
Continental stock	*91,000	36,000	37,000	33,000
India afloat for Europe	101,000	111,000	25,000	13,000
Egypt, Brazil, &c. afloat	56,000	76,000	101,000	84,000
Stock in Alexandria, Egypt	*126,000	341,000	279,000	185,000
Stock in Bombay, India	451,000	433,000	299,000	226,000

Total East India, &c. 1,129,000 1,234,000 906,000 641,000
Total American 3,570,604 4,145,906 4,744,310 4,065,034

	1914.	1913.	1912.	1911.
Total visible supply	4,699,604	5,379,906	5,650,310	4,706,034
Middling Upland, Liverpool	4.6d.	7.22d.	7.09d.	5.08d.
Middling Upland, New York	7.75c.	13.40c.	13.10c.	9.25c.
Egypt, Good Brown, Liverpool	7.65d.	10.60d.	10.60d.	10.00d.
Peruvian, Rough Good, Liverpool	8.75d.	9.25d.	10.25d.	9.50d.
Broach, Fine, Liverpool	4.15d.	6 1/2d.	6 3/4d.	5 3/4d.
Tinnevely, Good, Liverpool	4.00d.	6 15-16d.	6 9-16d.	5 5-16d.

*Estimated.
Continental imports for past week have been 56,000 bales. The above figures for 1914 show an increase over last week of 172,821 bales, a loss of 680,302 bales from 1913, a decrease of 950,706 bales from 1912 and a loss of 6,430 bales from 1911.

AT THE INTERIOR TOWNS the movement—that is, the receipts for the week and since Aug. 1, the shipments for the week and the stocks to-night, and the same items for the corresponding period of the previous year—is set out in detail below.

Towns.	Movement to November 27 1914.				Movement to November 28 1913.			
	Receipts.		Shp-ments.	Stocks Nov. 27.	Receipts.		Shp-ments.	Stocks Nov. 28.
	Week.	Season.			Week.	Season.		
Ala., Eufaula	681	15,129	900	10,296	700	16,951	500	3,724
Montgomery	6,782	116,333	3,377	78,505	6,477	118,958	3,716	32,173
Selma	7,279	77,734	4,782	47,312	6,538	98,987	2,966	19,217
Ark., Helena	3,486	35,973	3,684	22,069	3,717	35,637	2,363	19,093
Little Rock	7,468	77,285	5,230	42,948	10,401	91,663	7,242	47,203
Ga., Albany	717	24,467	540	19,431	1,000	24,085	900	3,384
Athens	3,914	57,717	1,050	29,142	3,308	80,717	730	19,617
Atlanta	7,825	66,336	8,142	16,204	5,700	146,461	4,491	25,264
Augusta	13,090	236,953	7,854	150,546	11,924	230,354	4,960	61,472
Columbus	5,255	53,641	1,135	40,496	2,420	33,767	1,150	8,793
Macon	1,092	28,589	660	23,085	2,163	33,159	1,757	3,856
Rome	3,626	31,869	2,816	9,327	3,121	42,109	2,500	8,217
La., Shreveport	7,622	90,972	3,151	73,925	11,925	107,863	7,779	33,449
Miss., Columbus	2,400	13,939	896	9,712	2,833	24,713	2,000	7,909
Greenville	5,115	48,334	2,432	30,736	5,341	43,419	2,890	20,987
Greenwood	8,000	70,249	3,000	39,809	8,000	72,873	5,000	32,032
Meridian	1,300	11,856	700	10,911	1,488	16,157	619	8,534
Natchez	600	13,180	400	10,200	900	10,778	300	3,600
Vicksburg	2,824	17,546	759	13,093	2,137	14,443	1,075	8,410
Yazoo City	2,803	24,871	922	20,864	2,282	22,066	20	13,431
Mo., St. Louis	19,617	162,067	18,429	30,805	27,248	167,319	8,692	15,740
N. C., Raleigh	467	2,619	475	254	559	24,024	7,763	15,053
O., Cincinnati	5,252	48,285	5,564	4,329	11,002	55,004	600	313
Okl., Hugo	36	8,910	823	2,975	3,347	29,779	1,692	5,940
S. C., Greenwood	662	7,917	6,967	800	800	8,715	700	617
Tenn., Memphis	45,238	443,735	31,569	241,062	69,611	493,738	41,789	187,374
Nashville	522	1,347	1,280	737	6,852	398	1,824	674
Tex., Brenham	402	10,328	398	4,225	700	21,455	600	2,081
Clarksville	1,541	29,756	1,870	5,368	3,854	36,063	2,639	9,365
Dallas	1,732	54,690	3,012	4,522	7,077	50,643	3,802	10,371
Honey Grove	906	16,145	615	6,297	3,070	27,105	2,649	5,960
Houston	117,489	1,201,881	102,321	154,829	142,175	1,741,710	134,058	185,718
Paris	3,321	46,976	3,626	5,192	5,829	67,686	6,270	11,418
Total, 33 towns	289,096	3,140,632	220,942	1,165,390	368,384	3,970,665	279,942	831,839

The above totals show that the interior stocks have increased during the week 68,154 bales and are to-night 333,551 bales more than at the same time last year. The receipts at all towns have been 79,288 bales less than the same week last year.

OVERLAND MOVEMENT FOR THE WEEK AND SINCE AUG. 1.—We give below a statement showing the overland movement for the week and since Aug. 1, as made up from telegraphic reports Friday night. The results for the week and since Aug. 1 in the last two years are as follows:

November 27— Shipped	1914		1913	
	Week.	Since Aug. 1.	Week.	Since Aug. 1.
Via St. Louis	18,429	148,387	24,024	163,824
Via Cairo	12,801	82,902	17,451	137,831
Via Rock Island		1,151	347	2,135
Via Louisville	4,628	33,125	4,812	38,748
Via Cincinnati	2,313	18,981	7,582	31,354
Via Virginia points	9,084	39,474	7,214	71,324
Via other routes, &c.	10,976	109,261	11,063	131,406

	1914	1913
Total gross overland	58,231	433,281
Deduct shipments—		
Overland to N. Y., Boston, &c.	2,715	22,655
Between interior towns	11,325	37,922
Inland, &c., from South	1,468	51,050
Total to be deducted	15,508	111,627
Leaving total net overland *	42,723	321,654

* Including movement by rail to Canada.
The foregoing shows the week's net overland movement this year has been 42,723 bales, against 52,774 bales for the week last year, and that for the season to date the aggregate net overland exhibits a decrease from a year ago of 131,861 bales.

In Sight and Spinners' Takings	1914		1913	
	Week.	Since Aug. 1.	Week.	Since Aug. 1.
Receipts at ports to Nov. 27	380,439	2,690,158	423,795	5,545,070
Net overland to Nov. 27	42,723	321,654	60,774	453,515
Southern consumption to Nov. 27	60,000	990,000	60,000	1,026,000

	1914	1913
Total marketed	463,162	4,001,812
Interior stocks in excess	68,154	1,045,251
Came into sight during week	531,316	633,011
Total in sight Nov. 27	5,047,063	7,712,966

Nor. spinners' takings to Nov. 27— 96,398 843,814 117,714 1,133,239

QUOTATIONS FOR MIDDLING COTTON AT OTHER MARKETS.—Below are the closing quotations of middling cotton at Southern and other principal cotton markets for each day of the week.

Week ending	Closing Quotations for Middling Cotton on—				
	Saturday	Monday	Tuesday	Wed. day	Thursday
Galveston	7 3/4	7 3/4	7 3/4	7 3/4	7 3/4
New Orleans	7 3/4	7 3/4	7 3/4	7 3/4	7 3/4
Mobile	7 3/4	7 3/4	7 3/4	7 3/4	7 3/4
Savannah	7 3/4	7 3/4	7 3/4	7 3/4	7 3/4
Charleston	7 3/4	7 3/4	7 3/4	7 3/4	7 3/4
Wilmington	7 3/4	7 3/4	7 3/4	7 3/4	7 3/4
Norfolk	7 3/4	7 3/4	7 3/4	7 3/4	7 3/4
Baltimore	7 3/4	7 3/4	7 3/4	7 3/4	7 3/4
Philadelphia	8	8	8	8	8
Augusta	7 3/4	7 3/4	7 3/4	7 3/4	7 3/4
Memphis	7 3/4	7 3/4	7 3/4	7 3/4	7 3/4
St. Louis	7 3/4	7 3/4	7 3/4	7 3/4	7 3/4
Houston	7 3/4	7 3/4	7 3/4	7 3/4	7 3/4
Little Rock	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4

NEW ORLEANS CONTRACT MARKET.—The highest, lowest and closing quotations for leading contracts in the New Orleans cotton market for the past week have been as follows:

	Saturday, Nov. 21.	Monday, Nov. 23.	Tuesday, Nov. 24.	Wed. day, Nov. 25.	Thurs. day, Nov. 26.	Friday, Nov. 27.
New Contract.						
December—						
Range	7.25					
Closing						
January—						
Range	7.32-42	7.35-41	7.32-36	7.30-39		7.31-40
Closing	7.36-37	7.39-40	7.33	7.37-39		7.37-38
March—						
Range	7.46-55	7.46-53	7.43-47	7.41-52		7.50-60
Closing	7.46-47	7.49-50	7.45-46	7.51-52		7.55-56
May—						
Range	7.66-74	7.67-73	7.61-66	7.60-69		7.69

Palestine, Tex.—We have had rain on three days of the week, the rainfall being two inches and six hundredths. Minimum thermometer 30.

San Antonio, Tex.—Rain has fallen on four days of the week, to the extent of one inch and sixty-four hundredths. Minimum thermometer 40.

Taylor, Tex.—Rain has fallen on three days during the week, to the extent of ninety-six hundredths of an inch. Minimum thermometer 34.

New Orleans, La.—There has been rain on two days of the week, the rainfall being thirty-two hundredths of an inch. The thermometer has averaged 55.

Shreveport, La.—Rain has fallen on two days of the week, the rainfall being eighty hundredths of an inch. The thermometer has ranged from 28 to 74.

Vicksburg, Miss.—There has been rain on one day during the week, the precipitation being thirty-one hundredths of an inch. Lowest thermometer 23, highest 71, average 53.

Mobile, Ala.—We have had rain on one day of the past week, the rainfall being five hundredths of an inch. The thermometer has averaged 53, the highest being 68 and the lowest 28.

Selma, Ala.—There has been a trace of rain on one day of the week. The thermometer has averaged 42.5, ranging from 18 to 62.

Madison, Fla.—There has been no rain the past week. The thermometer has ranged from 27 to 66, averaging 49.

Savannah, Ga.—Dry all the week. Average thermometer 46, highest 67 and lowest 24.

Charlotte, N. C.—There has been no rain during the week. The thermometer has averaged 43, ranging from 19 to 67.

Memphis, Tenn.—It has been dry all the week. The thermometer has ranged from 16 to 68, averaging 48.

NEW YORK COTTON EXCHANGE.—*Cotton and Cotton Products Exposition.*—President E. K. Cone of the New York Cotton Exchange, has appointed Messrs. S. T. Hubbard, A. R. Marsh, J. A. Hartcorn, H. D. Clearman and C. E. Rich Jr., a special committee, to co-operate with the National Association of Cotton Manufacturers and boards of trade and cotton exchanges in the First National Exposition of Cotton and Cotton Products to be held at the Grand Central Palace, New York City, from Jan. 23 to 31.

REVISION OF DIFFERENCE BETWEEN GRADES AT NEW YORK.—At the meeting of the Revision Committee of the New York Cotton Exchange held Wednesday, Nov. 25, several changes were made in the differences that will determine contracts. Four grades, namely, fair, strict middling fair, good ordinary and low middling tinged, were entirely eliminated. The following table gives the old and new scale of differences (the second column, giving the new differences being blank in cases where no change was made):

Grade—	Old.	New.	Grade—	Old.	New.
Fair	70 on Omitted		Fully Low Middling	.85 off	
Strict Middling Fair	62 " Omitted		Low Middling	1.25 "	
Middling Fair	56 " .80 on		Strict Good Ordinary	2.00 "	
Strict Good Middling	42 " .60 "		Good Ordinary		.20 on
Fully Good Middling	35 " .50 "		Strict Good Midd. Tinged	3.00 "	
Good Middling	28 " .40 "		Good Mid. Tinged. Val. of Mid.		.20 on
Barely Good Middling	21 " .30 "		Strict Middling Tinged	.40 off	
Strict Middling	14 " .20 "		Low Middling Tinged	1.25 "	
Fully Middling	7 " .10 "		Low Middling Tinged	3.00 "	Omitted
Middling		Basis.	Middling Stained	1.25 off	
Strict Low Middling	.50 off	Basis.			

Two revisions are slated for December, one according to Government standards and the other according to New York standards.

CENSUS BUREAU'S REPORT ON COTTON GINNING.—The Division of Manufactures in the Census Bureau completed and issued on Nov. 21 its report on the amount of cotton ginned up to Nov. 14 the present season and we give it below, comparison being made with the returns for the like period of the three preceding years.

	Counting Round as Half Bales			Counting Round as Full Bales		
	1914.	1913.	1912.	1914.	1913.	1912.
Alabama	1,263,430	1,181,232	961,313	1,239,211	1,181,232	961,313
Arkansas	735,228	606,388	547,644	563,115	606,388	547,644
Florida	65,993	53,217	42,263	65,236	53,217	42,263
Georgia	2,061,251	1,823,789	1,331,709	2,106,305	1,823,789	1,331,709
Louisiana	341,342	276,271	300,482	269,548	276,271	300,482
Mississippi	838,355	734,988	644,554	719,638	734,988	644,554
North Carolina	555,401	493,360	627,251	716,200	493,360	627,251
Oklahoma	840,634	666,736	725,006	657,497	666,736	725,006
South Carolina	1,091,289	995,398	883,535	1,163,984	995,398	883,535
Tennessee	238,401	233,663	158,161	264,777	233,663	158,161
Texas	3,511,138	3,313,443	4,020,939	3,473,702	3,313,443	4,020,939
All other States	82,336	66,044	56,789	74,023	66,044	56,789
Ginnings of Sea Island cotton prior to Nov. 14 by States:						
Florida	23,751	19,542	15,052	26,818	19,542	15,052
Georgia	28,478	29,355	22,873	41,730	29,355	22,873
South Carolina	1,646	3,053	2,464	2,656	3,053	2,464

Included in the ginnings were 32,454 round bales, compared with 74,167 last year, 62,768 in 1912 and 75,963 in 1911.

ALEXANDRIA RECEIPTS AND SHIPMENTS.

Alexandria, Egypt, October 28.	1914.		1913.		1912.	
Receipts (cantars)—						
This week	175,843		500,000		480,000	
Since Aug. 1	439,505		2,595,378		2,094,192	
Exports (bales)—	This Week.	Since Aug. 1.	This Week.	Since Aug. 1.	This Week.	Since Aug. 1.
To Liverpool	1,918	8,656	15,000	54,557	9,500	34,669
To Manchester	4,152	9,266	8,000	42,676	8,250	38,741
To Continent and India	3,637	16,107	14,250	83,188	5,750	54,095
To America	2,857	9,984	400	4,024	3,000	10,114
Total exports	12,564	44,013	37,650	184,445	26,500	137,619

Note.—A cantar is 99 lbs. Egyptian bales weigh about 750 lbs.

WORLD'S SUPPLY AND TAKINGS OF COTTON.

Cotton Takings. Week and Season.	1914.		1913.	
	Week.	Season.	Week.	Season.
Visible supply Nov. 20	4,526,783		5,172,628	
Visible supply Aug. 1		3,176,816		2,581,551
American in sight to Nov. 27	531,316	5,047,063	633,011	7,712,966
Bombay receipts to Nov. 26	86,000	121,000	88,000	452,000
Other India shipm'ts to Nov. 26	81,000	110,000	5,000	89,000
Alexandria receipts to Nov. 25	85,000	140,000	52,000	564,800
Other supply to Nov. 25*	2,000	43,000	5,000	108,000
Total supply	5,075,099	8,637,879	5,955,639	11,508,117
Deduct—				
Visible supply Nov. 27	4,699,604	4,699,604	5,379,906	5,379,906
Total takings to Nov. 27	375,495	3,938,275	575,733	6,128,211
Of which American	361,495	3,156,275	486,733	4,900,611
Of which other	14,000	782,000	89,000	1,227,600

* Embraces receipts in Europe from Brazil, Smyrna, West Indies, &c.
 a This total embraces the total estimated consumption by Southern mills, 990,000 bales in 1914 and 1,026,000 bales in 1913—takings not being available—and aggregate amounts taken by Northern and foreign spinners, 2,948,275 bales in 1914 and 5,102,211 bales in 1913, of which 2,166,275 bales and 3,874,611 bales American.
 b Estimated.

BOMBAY COTTON MOVEMENT.—The receipts of India cotton at Bombay and the shipments for the week ending Oct. 15 and for the season from Aug. 1 for three years have been as follows:

October 15. Receipts—	1914.		1913.		1912.	
	Week.	Since Aug. 1.	Week.	Since Aug. 1.	Week.	Since Aug. 1.
Bombay	3,000	50,000	30,000	150,000	5,000	61,000

Exports from—	For the Week.				Since August 1.			
	Great Britain.	Continent.	Japan & China.	Total.	Great Britain.	Continent.	Japan & China.	Total.
Bombay—								
1914			17,000	17,000	2,000	42,000	92,000	136,000
1913	1,000	20,000	13,000	34,000	3,000	170,000	101,000	274,000
1912		16,000	1,000	17,000	3,000	81,000	14,000	98,000

MANCHESTER MARKET.—Our report received by cable to-night from Manchester states that the market for yarns is firmer. Piece goods are slow of sale, however, as there is little disposition to anticipate future requirements.

SHIPPING NEWS.—Shipments in detail:

To conform to the desire of the Secretary of the Treasury, the names of vessels will be omitted until further notice.

NEW YORK—To Liverpool—Nov. 20—581—Nov. 25—785 up-land, 244 Peruvian	1,610
To Manchester—Nov. 25—1,100	1,100
To Havre—Nov. 24—500	500
To Bergen—Nov. 24—100	100
To Gothenburg—Nov. 24—4,000	4,000
To Genoa—Nov. 20—2,674—Nov. 25—2,684	5,358
To Naples—Nov. 20—50—Nov. 25—200	250
GALVESTON—To Liverpool—Nov. 20—3,756—Nov. 23—14,249	35,927
Nov. 24—17,922	18,348
To Manchester—Nov. 23—18,348	13,000
To Havre—Nov. 25—13,000	6,200
To Gothenburg—Nov. 20—6,200	24,214
To Genoa—Nov. 21—4,910—Nov. 23—7,800—Nov. 25—11,504	13,300
To Japan—Nov. 21—13,300	24,205
TEXAS CITY—To Liverpool—Nov. 20—12,564—Nov. 23—11,641	851
To Mexico—Nov. 25—851	
NEW ORLEANS—To Liverpool—Nov. 21—9,395—Nov. 25—29,257	38,652
To Havre—Nov. 26—2,593	2,587
To Gothenburg—Nov. 26—7,587	7,587
To Genoa—Nov. 21—10,425	10,425
To Mexico—Nov. 23—500	500
SAVANNAH—To Gothenburg—Nov. 21—4,348—Nov. 23—4,750	9,098
To Barcelona—Nov. 21—7,900	7,900
CHARLESTON—To Liverpool—Nov. 21—8,200	8,200
To Gothenburg—Nov. 19—3,000	3,000
WILMINGTON—To Gothenburg—Nov. 19—400	400
BOSTON—To Yarmouth—Nov. 21—3,249	3,249
BALTIMORE—To Liverpool—Nov. 20—490	490
PHILADELPHIA—To Rotterdam—Nov. 20—490	490
SAN FRANCISCO—To Japan—Nov. 21—5,286	5,286
PONT TOWNSEND—To Japan—Nov. 23—3,558	3,558
Total	249,901

LIVERPOOL.—Sales, stocks, &c., for past week:

	Nov. 6.	Nov. 13.	Nov. 20.	Nov. 27.
Sales of the week	55,000	48,000	41,000	
Of which speculators took	600	900	1,000	
Of which exporters took	1,400	3,300	3,000	
Sales, American	37,000	30,000	27,000	
Actual export	6,000	5,000	4,000	9,000
Forwarded	60,000	69,000	83,000	77,000
Total stock	724,000	734,000	711,000	694,000
Of which American	442,000	454,000	441,000	427,000
Total imports of the week	35,000	83,000	64,000	
Of which American	35,000	72,000	60,000	
Amount afloat	227,000	239,000	265,000	
Of which American	190,000	196,000	196,000	

The tone of the Liverpool market for spots and futures each day of the past week and the daily closing prices of spot cotton have been as follows:

Spot.	Saturday.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.
Market, 12:15 P. M.	Dull.	Fair business doing.	Fair business doing.	Fair business doing.	Fair demand.	Dull.
Mid. Up'ds	4.47	4.50	4.47	4.43	4.48	4.46
Sales	4,000	7,000	8,000	8,000	8,000	6,000
Spec. & exp.	400	500	1,000	800	800	800
Futures.	Quiet	Quiet	Quiet	Quiet		Quiet unch.
Market opened	2@4 pts. advance.	Quiet unchanged.	1/2@1 1/2 pts. advance.	1 1/2@4 pts. decline.		to 1 pt. advance.
Market, 4 P. M.	Quiet 1 1/2@2 1/2 advance.	Quiet 3 1/2@4 1/2 advance.	Quiet 4@5@6 pts. decline.	Steady 2@2 1/2 pts. decline.	Quiet 4 points advance.	Steady 2@3 1/2 pts. advance.

The prices of futures at Liverpool for each day are given below. Prices are on the basis of upland, good ordinary clause, unless otherwise stated.

The prices are given in pence and 100ths. Thus, 4 16 means 4 16-100d.

Nov. 21 to Nov. 27.	Saturday.	Monday.	Tuesday.	Wed. day.	Thursday.	Friday.
	12¼ p.m.	12½ p.m.	12¼ p.m.	12¼ p.m.	12¼ p.m.	12¼ p.m.
	4	4	4	4	4	4
May-June	d.	d.	d.	d.	d.	d.
July-Aug.	4 16½	19½	20	17	16	13½
Oct.-Nov.	4 23½	26½	27	23½	22½	20
Jan.-Feb.	4 32½	36½	37	33½	32½	29½
	4 39	43	43½	39½	38½	35½

BREADSTUFFS.

Friday Night, Nov. 27 1914.

Flour has remained quiet. The domestic traders show no disposition to take hold on any large scale, nor has the export demand shown, as a rule, any great life. The scarcity of freight room is a serious bar to foreign business. Meantime, stocks at New York are large. At the Northwest, according to the latest advices, some increase in business is reported. But, taken for all and all, the flour trade is devoid of real snap and activity. After a season of extraordinarily large business, there is now something of a reaction. Domestic buyers are keeping close to shore, and, for the time being at any rate, Europe for the most part is purchasing only on a moderate scale, when it buys at all. Chicago had a report early in the week that considerable flour had been sold to the Swedish Government for prompt shipment. But this was an exception which proved the rule, even if the reports of Swedish business were absolutely correct.

Wheat weakened at one time and then recovered. It has not fluctuated on a large scale. On the contrary the price movement has been within a contracted compass. Yet the export business has been on a scale which in other times would attract a good deal of attention. Daily transactions at times of 800,000 to 850,000 bushels for export certainly look interesting. Yet the market has taken big export sales rather phlegmatically for some little time past. And speculation has certainly subsided. The rank and file are afraid of wheat at the present level of prices. They are afraid that peace may come suddenly to Europe and precipitate a very sharp decline in the wheat markets of the world. The statistical news has not been stimulating. It is true that the supply in Canada decreased last week some 2,765,000 bushels, against a decrease in the same time last year of 836,000 bushels, and that the total supply of American wheat fell off nearly 400,000 bushels as contrasted with an actual increase in the same week last year of 253,000 bushels. But the upshot, after all, was that the world's supply of wheat last week increased something over 2,000,000 bushels, which was not very much less than the increase in the same time last year, i. e., 2,250,000 bushels. Then, too, in England the wheat crop is starting well and sowing continues; with the weather favorable. In France seeding and farm work have made good progress except in the war zone. In parts of France field work and autumn sowing have been completed and it is expected that the measures adopted by the French Government will insure the completion of sowing before hard winter weather sets in. The acreage is believed to be larger than was at one time expected. In Russia seeding had a good start and the weather has been favorable. The outlook there for the winter is generally satisfactory with the planted area protected by snow. In India weather and crop prospects are generally good. Portugal will not have to import wheat before next March. Also, the trade is suffering from the scarcity of ocean freight room. Many foreign ships have gone into the American registry, but not enough, it seems, to greatly relieve the situation. In this connection, it is remarked that President Wilson seems determined to press the merchant marine bill and is also said to be canvassing the possibility of an immediate purchase by the Government of numerous vessels now tied up in American ports. The scarcity of ocean freight room certainly acts as more or less of a damper. Also the weather in Argentina of late has been reported more favorable. In Roumania and Bulgaria the outlook for seeding is favorable and the acreage will be larger than that of last year. The Kansas crop was 181,000,000 bushels, against 87,000,000 last year. On the other hand, there has been, as we have seen, some export business done, and at times, it may be added, the weather in Argentina has been wet and unfavorable. Country offerings at Chicago have been small. Some decrease has been reported in the Kansas acreage, the total area being 8,870,000 acres, against 9,062,000 last year. The average condition of winter wheat in Kansas is put at 82.2%, against 100 in the December Government report last year. In Western Kansas dry weather is complained of. In some 32 Western Kansas counties such conditions are reported, and they have attracted considerable attention. And whatever may be said about favorable progress of sowing in France, it is none the less true that threshing returns from the old crop of that country are very disappointing and that continued large importations by France will be necessary. As for Russia, much damage has been done by the invading army in the war zone and large supplies have been confiscated. In Austria food supplies are very scarce and prices are very high. This is emphasized by the fact that spot wheat sold in Austria

recently as high as 80s. for 480 lbs. In Hungary very little farm-work has been done, as the army has been taking the labor and farming facilities, so that the prospects point to a very small acreage. Italy will require a further large quantity of foreign wheat. In other words, the situation in wheat is such that a good many of the trade are inclined to think that prices are not likely to decline much. Even if peace should come before it is generally expected, European crops next season are likely to be comparatively light, and if this idea should prove to be correct, prices might remain high for some time. Latterly, too, there has been more stress laid upon the export inquiry in American markets, and on the belief that if freight room could be had foreign purchases of American wheat would be even larger than they have been. A few days ago ocean freight engagements were made for about 2,000,000 bushels. Also the International Institute reports the production of the Northern Hemisphere at only 91.2% of last year, and Australia's probable outturn as 25,000,000 bushels, against 104,000,000 last year. And the Kansas report puts the condition in that State at 82.3%, against 96.3% a year ago. The United States has had three large crops in succession, and many think a fourth is unlikely. Curiously enough, too, rye, weight for weight, is higher than wheat. Some Western authorities insist that the condition of wheat is not up to the average for this time of the year. Prices advanced 13 cents during October and up to Nov. 10; then came a moderate reaction, but later on another rally. Today prices declined on very favorable weather in Argentina, estimates of an exportable surplus from that country of 144,000,000 bushels, and peace talk growing out of the request of the American Minister to the Netherlands for an early conference at Washington. This may or may not be significant, but it is a sensitive market at this level.

DAILY CLOSING PRICES OF WHEAT FUTURES IN NEW YORK.

No. 2 red.	Sat.	Mon.	Tues.	Wed.	Thurs.	Fri.
December delivery in elevator	125	125	126	125	Holi-	124¼
May delivery in elevator	123	123	122½	122½	day.	120½

DAILY CLOSING PRICES OF WHEAT FUTURES IN CHICAGO.

December delivery in elevator	Sat.	Mon.	Tues.	Wed.	Thurs.	Fri.
cts. 115	115½	115½	115½	Holi-	112	
May delivery in elevator	121½	121½	121½	129½	day.	117½

Indian corn declined a little and then rallied. In other words, it has shown no very striking features. Still it does not decline much. That fact is remarked upon. There has been a good demand for old corn from exporters. They also bought a good deal some little time ago and are now trying to get the corn. It seems that in parts of the West to buy is one thing and to get the corn is another. However, there have been sales of anywhere from 150,000 to 300,000 bushels a day, and no doubt business would have been larger but for the scarcity of ocean freight room. Still, it is true that foreign demand for new corn at the moment is small, and at times the selling of December by cash houses in Chicago has been large enough to have a more or less depressing effect. Liverpool prices have also suffered now and then from heavy arrivals in the United Kingdom and a poor spot inquiry. Wet weather in Argentina has tended to check the movement of the crop in that country. Yet on the whole the market here has been by no means aggressive on the bull side. The weather has been for the most part favorable. The crop movement has been liberal, speculation has been slack, country offerings have been increasing at Chicago and the Illinois crop is now put at 310,000,000 bushels, or 5,000,000 bushels larger than the October estimate by the Government. Stress is laid on the large crop movement, the fine weather and some pressure on December, due to country offerings and hedges. To-day prices were lower. Country offerings were larger at Chicago, especially from the Northwest. Hedging sales seem to be increasing. Yet 250,000 bushels were sold for export, and considerable covering was done. Some are buying corn against sales of oats.

DAILY CLOSING PRICES OF NO. 2 MIXED CORN IN NEW YORK.

No. 2 mixed	Sat.	Mon.	Tues.	Wed.	Thurs.	Fri.
cts. 75	75¼	75	73½	Holi	73	

DAILY CLOSING PRICES OF CORN FUTURES IN CHICAGO.

December delivery in elevator	Sat.	Mon.	Tues.	Wed.	Thurs.	Fri.
cts. 66¼	65½	65	64	Holi-	63¾	
May delivery in elevator	70¾	70½	70½	69½	day.	68¾

Oats receded in value a little and then, like other grain, recovered. Cash houses have been good buyers of December at Chicago, receipts have been small and the domestic and the export demand fair. Also, Canada has been bidding for oats in the American Northwest, while Australia has been trying to buy in Canada. Naturally, this has had a more or less steadying effect on prices. Besides, the country offerings have been next to nothing. In a word, while the export demand has not been quite up to its recent proportions, this fact has been offset by the smallness of the crop movement. Besides, latterly the export business has increased very noticeably. Last week interior receipts were 1,157,000 bushels smaller than in the previous week. Seaboard exports increased 101,000 bushels for the week and were 1,183,000 bushels larger than in the same week last year. The distribution of oats exceeded primary receipts by 3,161,000 bushels. Of late some 600,000 bushels have been sold at seaboard markets for export and at the same time buying of December at Chicago correspondingly increased. To-day prices declined in spite of purchases of December oats against sales of 500,000 bushels for export at Seaboard markets. Country offerings were small.

DAILY CLOSING PRICES OF OATS IN NEW YORK.

Standards	Sat.	Mon.	Tues.	Wed.	Thurs.	Fri.
cts. 52½-53	52½-53	52½-53	52½-53	Holi-	53-53½	
No. 2 white	53-53½	53-53½	53-53½	53-53½	day.	53½-54

DAILY CLOSING PRICES OF OATS FUTURES IN CHICAGO.

	Sat.	Mon.	Tues.	Wed.	Thurs.	Fri.
December delivery in elevator cts.	50 3/4	49 3/4	49 3/4	49 1/4	Holl- day	48 1/2
May delivery in elevator	53 3/4	53 3/4	53 1/2	53		51 3/4

The following are closing quotations:

GRAIN.

Wheat, per bushel—f. o. b.		Corn, per bushel—	Cts.
N. Spring, No. 1	\$1 26 3/4	No. 2 mixed, new	73
N. Spring, No. 2	1 24 1/4	No. 2 yellow	73
Red winter, No. 2	1 24 1/4	No. 3 yellow	71 3/4
Hard winter, No. 2	1 24 1/4	Argentina in bags	78
Oats, per bushel, new—		Rye, per bushel—	116 1/4
Standard	53 @ 53 1/4	New York	
No. 2, white	53 1/4 @ 54	Western	70 @ 80
No. 3, white	52 1/4 @ 53	Barley—Malting	

FLOUR.

Winter, low grades	\$4 00 @ \$4 50	Spring clears	\$5 25 @ \$5 35
Winter patents	5 60 @ 6 00	Kansas straights, sacks	5 20 @ 5 40
Winter straights	5 10 @ 5 35	Kansas clears, sacks	4 80 @ 5 10
Winter clears	4 75 @ 5 20	City patents	7 25
Spring patents	5 65 @ 5 90	Rye flour	5 25 @ 6 00
Spring straights	5 40 @ 5 60	Graham flour	5 15 @ 5 40

For other tables usually given here, see page 1582.

The visible supply of grain, comprising the stocks in granary at principal points of accumulation at lake and seaboard ports Nov. 21 1914 was as follows:

UNITED STATES GRAIN STOCKS.

	Amer. Bonded	Amer.	Amer. Bonded	Amer.	Amer. Bonded	Amer.	Amer. Bonded
	Wheat.	Wheat.	Corn.	Oats.	Rye.	Barley.	Barley.
In Thousands—	bush.	bush.	bush.	bush.	bush.	bush.	bush.
New York	3,082	846	484	1,375	270	252	464
Boston	342	774	23	3	2		15
Philadelphia	1,572	118	186	500	50		
Baltimore	1,802	116	137	1,802		749	152
New Orleans	3,207		27	151			
Galveston	1,775		5				
Buffalo	4,962	690	113	1,916	19	556	
Toledo	1,666		77	874	2	1	
Detroit	510		114	48	23		
Chicago	7,277		574	12,573	57	1,296	
" afloat	156		9	647	49	142	
Milwaukee	218		30	1,903	26	132	1,213
Duluth	11,558	106	35	485		154	116
Minneapolis	15,915		56	862			
St. Louis	3,669		33	1,297			
Kansas City	9,452		137	415			
Peoria	43		122	2,278	19	70	
Indianapolis	1,118		316	397	187	523	
Omaha	6,408		9	211		10	
On lakes	297						
On canal and river							
Total Nov. 21 1914	75,387	2,644	2,487	32,304	346	1,659	5,152
Total Nov. 14 1914	73,476	2,550	2,774	32,103	429	1,998	5,726
Total Nov. 22 1913	59,732	6,471	2,335	30,626	2,035	2,307	5,644
Total Nov. 23 1912	55,369	1,442	1,535	12,001	72	1,649	4,174

CANADIAN GRAIN STOCKS.

	Canadian Bonded	Canadian	Canadian Bonded	Canadian	Canadian Bonded	Canadian	Canadian Bonded
	Wheat.	Wheat.	Corn.	Oats.	Rye.	Barley.	Barley.
In Thousands—	bush.	bush.	bush.	bush.	bush.	bush.	bush.
Montreal	3,729		3	1,264			146
Ft. William & Pt. Arth.	5,907			2,173			
Other Canadian	6,853			1,428			
Total Nov. 21 1914	16,489		3	4,865			146
Total Nov. 14 1914	19,070		12	3,949			96
Total Nov. 22 1913	20,369		62	9,841		18	546
Total Nov. 23 1912	18,936		16	5,228			165

SUMMARY.

	Bonded	Bonded	Bonded	Bonded	Bonded	Bonded
	Wheat.	Wheat.	Corn.	Oats.	Rye.	Barley.
In Thousands—	bush.	bush.	bush.	bush.	bush.	bush.
American	75,387	2,644	2,487	32,304	346	1,659
Canadian	16,489		3	4,865		146
Total Nov. 21 1914	91,876	2,644	2,490	37,169	346	1,659
Total Nov. 14 1914	92,546	2,550	2,786	36,052	429	1,998
Total Nov. 22 1913	80,101	6,471	2,387	40,467	2,035	2,345
Total Nov. 23 1912	74,305	1,442	1,551	17,229	72	1,649

THE DRY GOODS TRADE.

New York, Friday Night, Nov. 27 1914.

Owing to the holiday, most departments of the drygoods trade have been quiet during the past week. Many buyers and department heads left town to spend Thanksgiving Day at home and will not return until the first of next week. Wholesale houses report a quiet but steady demand for goods to fill current needs and in some quarters a better business is being done for forward account. Jobbers state that demand from retailers is far below normal for this period of the year and blame the unseasonable weather for the slackness. Improvement is looked for from now on in preparation for the Christmas holidays; notwithstanding the fact retailers continue to operate on a hand-to-mouth basis. Many jobbers state that never within their recollection has retail buying been on such a narrow scale as it is to-day. Individual orders in many cases are ridiculously small and while they aggregate a fair volume, a great deal more work is necessary in filling them. Retailers no longer purchase a season's requirements ahead and draw on the goods as needed, but instead go over their stocks frequently and replenish any shortage with small purchases. Jobbing-house salesmen and mill agents out on the road in search of spring business are sending in mixed reports on the condition of business. In some sections the demand for spring goods is improving, but in most cases buyers are waiting until after the first of the year before making any purchases for spring account. Improvement is most noticeable in the South, where the recent favorable developments in the cotton situation has had a beneficial effect upon sentiment. In other sections of the country buying is reported to be quiet and mostly against current needs. Manufacturing conditions show little change. Mills continue to turn out goods only against actual bookings and are not taking chances regarding the future. The unsettlement of the raw material situation causes manufacturers to move cautiously in booking business very far ahead at current prices. Some improvement is reported in the export division of the market. Further sales of cotton sheetings have been

made for Red Sea account. Stocks are reported to be running low in that market, and as goods are no longer obtainable in any degree from Continental manufacturers, further sales are expected in the near future. Good orders continue to come to hand from the various countries at war, chiefly for flannels, blankets, knitgoods and hosiery.

DOMESTIC COTTON GOODS.—The exports of cotton goods from this port for the week ending Nov. 21 were 3,628 packages, valued at \$231,703, and for the period from Jan. 1 to Nov. 21 they reached 269,916 packages, valued at \$19,875,487. For the corresponding period of 1913 the totals were 298,803 packages and \$22,956,445. The usual details that we have heretofore given are withheld for the present under instructions of the Secretary of the Treasury.

Business in staple cotton goods is quiet but in the better known tickets a fair business is being done. Buyers are covering on goods as they are needed and in some instances where prices are considered attractive business has been done running through the first half of the new year. The finished goods trade is steadily working into a stronger position with the outlook much brighter than it was a few weeks ago. Most of the difficulties in the raw material situation have been overcome and prices are believed to have touched their lowest for some time. In the print cloth and gray goods market, prices continue firm in spite of buyer's offers of business at concessions from market quotations. Printers and converters are doing very little and buyers are holding off for lower levels. Business in colored cottons shows some improvement, as buyers are beginning to take some notice of selling agents warning that there will be a shortage of goods later in the season, owing to the scarcity of dyes. Brown and bleached goods are moving slowly. Gray goods, 38-inch standard, are steady at 4c.

WOOLEN GOODS.—In woolens and worsteds a fair business is being done for the dress goods trade and demand for men's wear lines for prompt delivery is improving. In the dress goods trade covert cloths are in demand for next spring season. These cloths in the medium and better grades are very popular for suiting purposes and for separate cloaks. Poplin is also good property and selling agents state that orders are being placed on a liberal scale. Wool and silk mixtures are in good demand from both cutters-up and piece goods buyers. Supplies of broadcloths are reported to be scarce in most quarters, but these continue popular. Manufacturers are very uneasy over the raw-wool situation but are hopeful that the embargo placed upon exports of wool by Great Britain will shortly be modified. Strong pressure is being exerted to accomplish this, if possible.

FOREIGN DRY GOODS.—Business in imported fabrics is quiet. Foreign selling agents are willing to book business in woolens and fancy goods, being influenced by the belief that they will be able to secure fair supplies of goods, particularly from Great Britain. Consumers, however, are very conservative in buying, as they are doubtful whether or not they will obtain the goods when needed. Linens are quiet and firm. Some forward contracts for spring dress goods are being placed, but are subject to confirmation by foreign manufacturers before being accepted. All mills have notified their representatives in this country not to contract for business until it has been submitted to the home office for verification as to whether or not the goods can be shipped. As regards burlaps the tendency of prices is downward with a moderate trade in light-weights. Heavy-weights rule dull. Lightweights are quoted at 4.10c., and heavyweights nominally at 5.50c.

Importations & Warehouse Withdrawals of Dry Goods.

The importations and warehouse withdrawals of dry goods at this port for the week ending Nov. 21 1914 and since Jan. 1 1914, and for the corresponding periods of last year, were as follows:

Imports Entered for Consumption for the Week and Since Jan. 1.

	Week Ending	Since Jan. 1 1914.	Since Jan. 1 1914.
	Nov. 21 1914.	Nov. 21 1914.	Nov. 21 1914.
	Pkgs.	Value.	Value.
Manufactures of—		\$	\$
Wool	1,696	285,301	80,161
Cotton	1,992	453,819	138,640
Silk	701	313,687	62,197
Flax	1,098	367,813	64,013
Miscellaneous	2,055	271,535	119,404
Total 1914	7,842	1,692,155	464,515
Total 1913	7,891	2,065,378	410,743

Warehouse Withdrawals Thrown Upon the Market.

Manufactures of—			
Wool	408	112,444	36,371
Cotton	581	189,148	34,322
Silk	255	97,385	13,426
Flax	254	71,169	23,657
Miscellaneous	941	122,954	80,609
Total withdrawals	2,439	593,100	188,385
Entered for consumption	7,842	1,692,155	464,515
Total marketed 1914	10,281	2,285,255	652,900
Total marketed 1913	11,346	2,772,814	609,573

Imports Entered for Warehouse During Same Period.

Manufactures of—			
Wool	681	182,093	30,846
Cotton	495	128,751	32,696
Silk	365	133,388	15,230
Flax	675	194,494	25,436
Miscellaneous	2,289	223,470	59,333
Total	4,514	862,196	163,541
Entered for consumption	7,842	1,692,155	464,515
Total imports 1914	12,356	2,554,351	628,056
Total imports 1913	12,084	3,052,844	635,438

STATE AND CITY DEPARTMENT.

News Items.

Etowah County (P. O. Gadsden), Ala.—Bond Election Contested.—Papers have been filed, it is stated, in the Circuit Court contesting the election held on Nov. 3, at which time \$200,000 road bonds were favorably voted (V. 99, p. 1547). The contest is the result of the failure of the election managers of Clear Creek and Brocks beats of this county to make proper returns. The case will be heard before Judge Blackwood on Dec. 7.

Florence, Ore.—Mayor Recalled.—According to Portland papers, Geo. W. Evans, Mayor of this city, was recalled, and C. W. Morey was elected to fill the office by a vote of 104 to 78, at an election held Nov. 14. It is stated that the Mayor was removed on the ground that he directed destruction of a building which was being moved without permission from Council, and when judgment was obtained by the owners of the building voted for the payment of the judgment and costs from city funds.

Harrisburg, Pa.—New Charter Adopted.—By a majority of 35 the voters on Nov. 17 adopted, it is stated, a new city charter giving greater power to the City Council.

Kansas.—Result of Vote on Proposed Constitutional Amendments.—The voters at the general election held Nov. 3 adopted, according to Topeka papers, an amendment to the constitution providing for the recall of public officials by a vote of 240,240 "for" to 135,630 "against," and defeated another proposal permitting a tax on franchises, privileges and occupations, by a vote of 156,969 "for" to 166,800 "against."

Los Angeles, Cal.—Charter Election.—The City Council, according to local papers, has provided for an election to be held Dec. 31 for the purpose of having the voters pass upon the following proposed amendments to the City Charter:

- No. 1. City Manager; abolition of boards and commissions; appointment of department directors; eight Councilmen, with Mayor President of Council.
- No. 2. Establishment of borough system for annexed territory to create market for surplus aqueduct water.
- No. 3. Authority of the city to issue investment, district and revolving fund bonds to handle the district bonds voted by the newly-formed irrigation district in San Fernando Valley and others.
- No. 4. Elevation of tracks to parallel streets as well as to cross.
- No. 5. Appointment of members of School Board by Mayor and Council.
- No. 6. Street railway subway under Silver Lake Park and others.
- No. 7. Consolidation of city and county tax offices, letting county do the work now done by both city and county tax assessment and collection service.
- No. 8. Minority representation, allowing groups of voters to have proportional representation on Council.
- No. 9. Donations for public parks to be handled by special commissions, thus doing away with such controversies as that between Griffith J. Griffith and the Park Commission.
- No. 10. Authorizing Harbor Commission to make emergency purchases.

Louisiana.—Result of Vote on Constitutional Amendments.—The official vote, as reported in New Orleans papers, polled "for" and "against" the seventeen proposed amendments to the constitution submitted at the general election Nov. 3, was as follows:

- Amendments Adopted.*
- 1. Providing for the extent and limitation of taxation on banks, banking associations, corporations or companies doing business in this State but domiciled in other States of the Union or in foreign countries. Vote, 24,615 "for" to 7,539 "against."
 - 2. Exempting from taxation all money in hand or on deposit; and loans secured by stock of said associations or societies. Vote, 23,714 "for" to 7,947 "against."
 - 3. Relative to the support of the public schools of the State of Louisiana and the levying of taxes thereon by parishes, cities, and towns, under certain conditions. Vote, 21,794 "for" to 8,386 "against."
 - 4. Increasing the Governor's salary from \$5,000 to \$7,500; providing this shall not disqualify any members of the General Assembly submitting this amendment. Vote, 17,772 "for" to 13,510 "against."
 - 5. Exempting from taxation for ten (10) years from the date of completion certain new canals for irrigation, navigation and power purposes, \$3,000,000. Vote, 14,429 "for" to 9,247 "against."
 - 7. Permitting the sale of drainage bonds at 90% of par. Vote, 19,368 "for" to 9,366 "against."
 - 8. Relative to pensions for Confederate veterans. Vote, 23,412 "for" to 8,012 "against."
 - 9. Relative to District Attorneys. Vote, 17,564 "for" to 11,962 "against."
 - 10. Permitting the levy of a special tax by parishes and municipalities in excess of limitation for fire departments and buildings. Vote, 17,671 "for" to 10,851 "against."
 - 11. Giving the power to the Board of Commissioners of the Port of New Orleans to dig, build, erect and operate or acquire and operate a navigation thereof, in the City of New Orleans, to connect Lake Pontchartrain and the Mississippi River. Vote, 20,916 "for" to 8,577 "against."
 - 12. For the registration of automobiles and motor vehicles and provide a license tax for the use thereof. Vote, 22,544 "for" to 7,723 "against."
 - 14. Act 262, of 1914, providing amendment authorizing issue of \$2,000,000 bonds by the Parish of Orleans to be styled "Public School Bonds of Orleans." Vote, 19,876 "for" to 8,489 "against."
 - 15. Relative to District Courts. Vote, 18,493 "for" to 11,550 "against."
 - 17. Providing for the recall of certain officers elected by the people. Vote, 23,208 "for" to 7,650 "against."

- Amendments Defeated.*
- 6. Permitting women to hold any office connected with the public educational system or with institutions of charity or correction. Vote, 12,537 "for" to 19,654 "against."
 - 13. Authorizing the City of New Orleans to issue not exceeding \$3,000,000 3% bonds secured by a special tax of six-tenths of one mill on the dollar, to create a Lake Shore Park. Vote, 7,667 "for" to 21,953 "against."
 - 16. Creating an additional Judge for the Thirteenth Judicial District. Vote, 7,519 "for" to 22,128 "against."

Missouri.—Official Vote on Propositions Submitted at General Election.—We give below the official vote cast "for" and "against," as reported in local papers for Nov. 19, the fifteen propositions and constitutional amendments, defeated at the general election on Nov. 3 (V. 99, p. 1545). A full description of these measures will be found on page 1239 in the "Chronicle" for Oct. 24.

No.	Measure	For.	Against.
1	Anti-single tax measure	138,039	334,310
2	Exemption of water-works bonds from debt limit in Kansas City	123,596	312,651
3	Mill tax for good roads	112,497	346,995
4	Changing pay of members of Legislature	89,629	355,326
5	Kansas City subway bonds	117,197	316,959
6	Special road district tax	117,041	333,576
7	Pension for deserving blind	214,951	255,717
8	Authorizing certain large cities to amend their charters	140,475	290,562
9	Full-crew law	159,892	324,384
10	County unit Act	172,909	311,285
11	St. Louis home-rule excise bill	134,449	303,757
12	St. Louis home-rule police bill	131,382	306,942
13	Woman suffrage	182,257	322,463
14	Fifty-million-dollar road bond issue by State	76,574	378,530
15	Authorizing 51% of the voters to order an unlimited bond election for roads	80,935	373,302

Municipal Bonds as Security for Postal Savings Deposits.—The Board of Trustees of the Postal Savings System at a meeting held Nov. 19th adopted a resolution amending the regulations which became effective July 1 1913 for the guidance of qualified banks and others concerned. The new law prohibits the acceptance as security, obligations of the general class commonly known as "revenue bonds," "temporary bonds," "temporary notes," "certificates of indebtedness," and "warrants," whether issued in anticipation of the collection of taxes, assessments or other revenues, or for similar purposes. Provided, however, that in applying this regulation, consideration will be given to the legal status of the obligations submitted rather than to the nomenclature employed in designating such obligations. We print below the sections as amended. Where additions are made to any of these, the same are printed in italics, while the portions eliminated are given in brackets. For previous items covering this subject see "Chronicle" for Feb. 14 and 21 1914, pages 538 and 626, respectively, and April 11 1914, p. 1179.

Section 6. The Third Assistant Postmaster-General will inform the Treasurer of the United States of the amounts of securities which the respective banks are required to deposit. Upon receipt of such securities, the Treasurer shall determine, as matter of fact, whether the securities conform to the requirements of these regulations. He shall then submit a statement of his findings to the [Assistant Attorney-General] Solicitor for the Post Office Department, who shall determine, as a matter of law whether such securities are legally acceptable under the Act of June 25 1910 and the regulations herein set forth; and who for that purpose shall have access to the securities. No securities shall be accepted until their legal acceptability has been determined by the [Assistant Attorney-General] Solicitor for the Post Office Department.

If such bonds are accepted the Treasurer shall issue his receipt therefor in duplicate, forwarding the original to the Third Assistant Postmaster General with advice of his action, and the duplicate to the bank depositing the securities. If the bonds are held not to conform to the requirements of the law or these regulations, they shall be retained subject to the order and at the risk of the bank for whose account they were tendered, and the bank so notified. If the bonds are insufficient in amount, the bank shall be requested by the Treasurer to furnish additional bonds.

Sec. 8. The Board of Trustees hereby prescribes and approves such security in public bonds or other securities, supported by the taxing power, as it deems sufficient and necessary to insure the safety and prompt payment on demand of postal savings deposits, and fixes the value at which the securities so prescribed and approved shall be accepted for the purposes named. Such securities, in the amount so specified, shall be deposited with the Treasurer of the Board of Trustees.

[The following-described securities at the respective values herein fixed, deposits, viz.]:
The Board of Trustees will accept as security for postal savings deposits, at the respective values herein fixed, negotiable interest-bearing bonds or securities of the following classes, viz.:

- (a) Bonds of the United States, of the Philippine Islands, of the District of Columbia, and of Porto Rico, will be accepted at their par value.
- (b) Bonds of any State of the United States and of the Territory of Hawaii will be accepted at their market value, but if such market value is above par, they will be accepted at their par value.
- (c) Bonds of any city in the United States having a population of over 30,000, as shown by the latest annual report of the Bureau of the Census, entitled "Official Statistics of Cities having a Population of over Thirty Thousand", which has been in existence for a period of 10 years, which for a period of 10 years previously has not defaulted in the payment of any part of either principal or interest of any funded debt authorized to be contracted by it, and whose net funded indebtedness does not exceed 10% of the valuation of its taxable property, to be ascertained by the last preceding valuation for the assessment of taxes, will be accepted at 90% of their market value, but if such market value is above par, they will be accepted at 90% of their par value.
- (d) Bonds of any other city, town, county, or other legally constituted municipality or district in the United States, which has been in existence for a period of 10 years, which for a period of 10 years previously has not defaulted in the payment of any part of either principal or interest of any funded debt authorized to be contracted by it, and whose net funded indebtedness does not exceed 10% of the valuation of its taxable property, to be ascertained by the last preceding valuation for the assessment of taxes, will be accepted at 75% of their market value, but if such market value is above par, they will be accepted at 75% of their par value.

The term "net funded indebtedness" for the purposes of paragraphs (c) and (d), is hereby defined to be the difference between the legal gross indebtedness of a city, town, county, or other municipality (including the demption upon taxes levied upon property within the municipality) and the aggregate of the following items:

- (1) The total of all sinking funds accumulated for the redemption of such gross indebtedness, except sinking funds applicable to bonds hereafter described in this Section.
- (2) The amount of outstanding bonds or other debt obligations made payable from current revenues.
- (3) The amount of outstanding bonds issued for the purpose of providing the inhabitants of a municipality with public utilities, including the supplying of water or the construction of subways and tunnels for railways. Provided, That evidence is submitted showing that the income from such utilities is sufficient for maintenance, for payment of interest on such bonds, and for the accumulation of a sinking fund for their redemption.
- (4) The amount of outstanding improvement bonds issued under laws which provide for the levying of special assessments against abutting property in sufficient amounts to insure the payment of interest on the bonds and the redemption thereof. Provided, That such bonds are direct obligations of the municipality and included in the gross indebtedness of the municipality.

The Board of Trustees reserves the right to re-classify the securities accepted. Under no circumstances will securities of other classes than those above named be accepted.

Section 8-a. Bonds of the several classes described in Section 8, paragraphs (b), (c) and (d) to be acceptable as security, shall be the general obligations of the States, Territories, counties, cities, towns, or other either directly or ultimately, (without restriction or limitation) without taxable real and personal property within the territorial limits of such political divisions.

Section 8-b. Obligations of the general class embracing what are commonly known as "revenue bonds," "temporary bonds," "temporary notes," "certificates of indebtedness," "warrants," and the like obligations, whether issued in anticipation of the collection of taxes, assessments, or other revenues, or of the sale of bonds or other obligations, or for similar purposes, will not be accepted

as security for postal savings deposits. Provided, That, in applying this regulation, consideration will be given to the legal status of the obligations submitted rather than to the nomenclature employed in designating such obligations.

Section 8c. Bonds which under the Postal Savings Act and these regulations will be accepted as security under the Postal Savings Act and these regulations will be construed, as a matter of law, to conform to those provisions of Section 8, Paragraphs (c) and (d), respectively, which relate to term of existence and nondefault, under the following conditions:

(1) Bonds issued by or in behalf of any city, town, county, or other legally constituted municipality or district in the United States which was, subsequently to the issuance of such bonds, consolidated with, or merged into, an existing political division which meets the requirements of these regulations, will be deemed to be the bonds of such political division under statutes and appropriate proceedings the effect of which is to make such bonds general obligations of such assuming political division, and payable, either directly or ultimately without limitation to a special fund, from the proceeds of taxes levied upon all the taxable real and personal property within its territorial limits.

(2) Bonds issued by or in behalf of any city, town, county, or other legally constituted municipality or district in the United States which was, subsequently to the issuance of such bonds, wholly succeeded by a newly organized political division, whose term of existence, added to that of such original political division, or of any other political division so succeeded, is equal to a period of 10 years, will be deemed to be bonds of such succeeding political division. Provided, That during such period none of such political divisions shall have defaulted in the payment of any part of either principal or interest of any funded debt authorized to be contracted by it. And provided, further, That such bonds were assumed by such new political division under statutes and appropriate proceedings the effect of which is to make such bonds general obligations of such assuming political division, and payable, either directly or ultimately, without limitation to a special fund, from the proceeds of taxes levied upon all the taxable real and personal property within its territorial limits.

(3) Bonds issued by or in behalf of any city, town, county, or other legally constituted municipality or district in the United States which, prior to such issuance, became the successor of one or more, or was formed by the consolidation or merger of two or more, pre-existing political divisions the term of existence of one or more of which, added to that of such succeeding or consolidated political division, is equal to a period of 10 years, will be deemed to be bonds of a political division which has been in existence for a period of 10 years. Provided, That during such period none of such original, succeeding, or consolidated political divisions shall have defaulted in the payment of any part of either principal or interest of any funded debt authorized to be contracted by it.

Municipal Bonds in the Light of Recent Developments.—A very interesting booklet bearing this title has been published by Baker, Watts & Co., bankers, of Baltimore, Md., for the benefit of their clients. In the introductory remarks it is pointed out that municipal bonds are one of the safest and wisest forms of investment to-day, and also that the present period of financial stringency and changed money values is an opportune one in which to observe the special merits of municipal bonds and to obtain full advantage of the unusual opportunities which they as a class now afford conservative investors. With a desire of better acquainting their clients not familiar with this class of bonds with some of the important features of such securities, they have issued this booklet giving a brief analysis of the subject referred to.

Nebraska.—Official Vote on Proposed Amendments to Constitution.—The three proposed amendments to the constitution defeated by voters on Nov. 3 (V. 99, p. 1545) received the following vote, according to local papers for Nov. 18. While the vote polled on all but three of the propositions shows in favor of the same, they did not receive the necessary majority required by the constitution.

	For.	Against.
No. 1—Uniform tax amendment	87,967	82,138
No. 2—Providing that five-sixths of jury may render verdict in certain cases	102,819	63,579
No. 3—Fixing salaries of State officers	90,408	75,937

For details of these amendments see "Chronicle" for Oct. 31, page 1313.

Other propositions submitted on Nov. 3 and the vote cast in each instance were:

	For.	Against.
No. 1—Workmen's compensation	92,426	85,651
No. 2—Memorial armory	40,674	130,493
No. 3—University removal	65,777	147,647
No. 4—Woman suffrage	90,036	99,036

New York State.—Official Vote on Question of Holding Constitutional Convention.—The question of holding a constitutional convention carried at the election held April 7 1914 by a vote of 153,322 to 151,969.

Norway (Kingdom of).—New \$3,000,000 6% Gold Loan.—The National City Bank of New York City is offering to the public, subject to prior sale, at par and interest, to yield 6%, \$3,000,000 6% gold notes of the Kingdom of Norway. These notes are dated Oct. 15 1914 and mature \$1,500,000 Oct. 15 1916 and \$1,500,000 Oct. 15 1917. Interest is payable April 15 and Oct. 15. Principal and interest is payable at the above-mentioned bank. Coupon notes are in denomination of \$1,000. In the circular issued by the bank it is stated that since 1886 the Government has been able to float its loans at a cost ranging from 3.09% for the 3% issue of 1896 to 4.11% for the 4% issue of 1911. Four of the Government issues are listed on the London Stock Exchange, and at the quoted market prices of July 30 1914 the yields on these issues range from 3.86% to 4.30%. The per capita debt of Norway amounted on June 30 1913 to less than \$40, its external debt at that date being \$91,331,908, and its internal debt \$5,883,349, a total of \$97,215,257, as against a population in 1912 of 2,439,309. In each of the seven fiscal years ended June 30 1913 the Kingdom of Norway had a surplus over ordinary expenditures amounting for the entire period to over \$13,382,616. While the fiscal system of Norway is predicated upon practically free importation of raw materials and a moderate protective duty upon finished and semi-finished products, the weight of taxation does not rest heavily upon the people, for the per capita revenue from taxation in Norway amounted in 1912 to only \$8 03, which is somewhat lower than in Sweden and Denmark, and compares with \$12 24 for Austria, \$16 35 for Great Britain and Ireland and \$16 67 for France.

The purpose of this loan is to supply the Kingdom of Norway with credits wherewith to finance purchases of various commodities in this country. In the ten years from 1903

to 1912 the ratio which the commerce of the United States with Norway bore to Norway's total foreign commerce has increased from 3.01% to 7.31%. Imports from the United States during that period increased from \$3,162,641 to \$9,060,195 and exports to the United States increased from \$648,587 to \$8,078,324. The Kingdom of Norway, exclusive of its taxing power, possesses national assets valued at about \$201,000,000, or more than twice the total national debt.

Ohio.—Vote Polled on Proposed Constitutional Amendments.—Of the four proposed amendments to the constitution submitted to the voters on November 3 only one was adopted providing for home-rule on the subject of intoxicating liquors. This received a vote of 559,872 "for" to 547,254 "against". The proposals defeated and the vote cast in each instance, follows:

	For.	Against.
Providing for the limitation of the tax rate and for the classification of property for purposes of taxation	223,873	551,760
Woman suffrage	335,390	518,295
State-wide prohibition	504,177	588,329

Bond Calls and Redemptions.

Hamilton County (P. O. Cincinnati), Ohio.—Bond Call.—Payment will be made on Dec. 1 at the County Treasurer's office of 5% court-house rebuilding bonds, Issue No. 3 and numbered from 1 to 70 incl. Denom. \$500 each and dated Dec. 1 1884, and due Dec. 1 1934, with the option on the part of Hamilton County to redeem said bonds on and after Dec. 1 1914.

Bond Proposals and Negotiations this week have been as follows:

ADA SCHOOL DISTRICT (P. O. Ada), Kent County, Mich.—BONDS AUTHORIZED.—According to local newspaper reports this district has authorized the issuance of \$10,000 building bonds.

ALBANY COUNTY (P. O. Albany), N. Y.—BOND OFFERING.—Bids will be received until 12 m. Dec. 9 by Isaac La Grange, Co. Treas., for \$300,000 4 1/4% reg. court-house-construction and equipment bonds. Denom. \$1,000. Int. semi-ann. Due \$100,000 on Jan. 15 1939, 1940 and 1941. These bonds are part of an issue of \$700,000, \$300,000 of which was sold to A. B. Leach & Co. of N. Y. on April 27 (V. 98, p. 1405).

ALCORN COUNTY (P. O. Corinth), Miss.—BOND SALE.—The \$14,800 6% 1-20-yr. (ser.) drainage bonds offered on Aug. 3 (V. 99, p. 212) have been awarded to W. C. McGinnis & Co. of Memphis, Tenn., contractors.

ALLEN COUNTY (P. O. Lima), Ohio.—BOND OFFERING.—Proposals will be received until 12 m. Dec. 15 by H. J. Lawlor, Clerk of Board of County Commrs., for \$6,840 6% coupon ditch-improvement bonds. Denom. \$760. Interest semi-annual. Due \$760 in 6 months and \$760 in 18 months and semi-annually thereafter. Certified check for 10% of bonds months and semi-annually thereafter. Bonds to be delivered bid for, payable to County Treasurer, required. Purchaser to pay accrued interest.

ALLENTOWN SCHOOL DISTRICT (P. O. Allentown), Lehigh County, Pa.—BOND OFFERING.—Proposals will be received until 4 p. m. Dec. 9 by T. P. Wenner, Dist. Sec., for the following 4% bonds: \$58,000 school bonds. Due in 25 yrs., subject to call in 20 yrs. or on any interest-paying date. 70,000 school bonds. Due in 30 yrs., subject to call in 20 yrs. or on any interest-paying date thereafter. 20,500 school bonds. Due in 20 yrs.

Denom. \$500. Int. J. & J. Cert. check for 5% of bid required. These bonds are the unstold portion of the issue dated July 1 1914.

ANGOLA, Stouben County, Ind.—BOND SALE.—On Nov. 16 \$3,400 4 1/4% tax-free refunding water-works bonds were awarded to William M. Brown at 100.50. Denom. \$100. Date Nov. 1 1914. Int. ann. on Nov. 1. Due \$500 Nov. 1 1916; \$400 1917 and \$500 yearly from 1918 to 1922, incl., subject to call after 2 years.

ARCADIA, Los Angeles County, Calif.—BONDS NOT SOLD.—No sale was made of the two issues of 5 1/4% bonds, aggregating \$281,250, offered on Nov. 19 (V. 99, p. 1239).

BAKER, Fallon County, Mont.—BOND SALE.—On Nov. 23 the \$25,000 6% 10-20-year (opt.) gold water-works bonds (V. 99, p. 1239) were awarded to the Security Bridge Co. of Minneapolis at par.

BATAVIA, Kane County, Ill.—BOND OFFERING.—Bids will be received until Dec. 14 by W. H. Reaney, City Clerk, for \$6,500 and \$3,500 4 1/2% city-well and equip. bonds. Auth. vote of 134 to 31 at election held Aug. 22 on \$6,500 issue (V. 99, p. 687) and vote of 834 to 473 on \$3,500 issue at election held April 21 (V. 98, p. 1474). Denom. (6) \$1,000. (8) \$500. Date May 1 1914. Int. M. & N. at Harris Tr. & Savs. Bank, Chicago. Due \$500 May 1 1915, \$1,000 yrly. on May 1 from 1916 to 1921 incl. and \$500 yrly. on May 1 from 1922 to 1928 incl. Successful bidder to provide for printing of bonds.

BEACON, Dutchess County, N. Y.—BOND OFFERING.—According to reports Moses Lamont, Commissioner of Accounts, will receive bids until 10 a. m. Dec. 7 for \$60,000 5% 1-30-year (ser.) school bonds. Int. semi-annual. Cert. check for 2% required.

BEAUMONT, Tex.—BONDS AWARDED IN PART.—Of the \$175,000 5% 20-40-year (opt.) gold wharf bonds offered without success on Sept. 15 (V. 99, p. 913), \$153,000 have been sold, it is stated, slightly below par.

BELLEVILLE SCHOOL DISTRICT (P. O. Belleville), St. Clair County, Ill.—BONDS VOTED.—At a recent election the question of issuing \$225,000 site-purchase and construction bonds carried, it is reported.

BERGEN, Genesee County, N. Y.—BOND SALE.—On Nov. 23 the \$4,500 5% 8-year (aver.) reg. electric-current-distributing-system bonds (V. 99, p. 1472) were awarded to the First Nat. Bank of Batavia at par and int. There were no other bidders.

BERKELEY, Alameda County, Calif.—BOND OFFERING.—Additional information is at hand relative to the offering on Dec. 15 of the \$500,000 5% gold coupon site-purchase-constr. and equip. bonds (V. 99, p. 1472). Bids for these bonds will be received until 10 a. m. on that day by W. J. Seaborn, City Clerk. Denom. (480) \$1,000, (40) \$500. Date Jan. 1 1915. Int. J. & J. at City Treas. office. Due \$12,500 yearly on Jan. 1 from 1916 to 1955 incl. Cert. check on a California bank for 5% of bid, payable to City Treas., required. Purchaser to pay accrued interest. Bids must be unconditional. Successful bidder will be furnished with a copy of the opinion of Thos. E. Haven of San Fran., declaring that the proceedings by which these bonds were authorized are valid. The official circular states that there is no controversy or litigation pending or threatened affecting the legality of these bonds, the corporate existence or the boundaries of this municipality or the titles of the present officials to their respective offices, or the validity of the bonds.

BILLINGS, Yellowstone County, Mont.—BOND ELECTION RESCINDED.—Local papers state that the City Council on Nov. 20 passed an ordinance calling off the election which was to have been held to-day (Nov. 28) to vote on the question of issuing the \$450,000 6% 10-year water bonds (V. 99, p. 1546).

BIRMINGHAM, Ala.—BOND SALE.—On Oct. 15 \$19,500 5% improvement bonds were awarded to the American Trust & Sav. Bank of Birmingham at par and int. Denom. \$500. Date Oct. 15 1914. Int. annually. Due 10 years, optional at 101.25 and int.

NO ACTION YET TAKEN.—The City Comptroller advises us under date of Nov. 23 that no action has yet been taken toward the offering of the \$4,500,000 4 1/2% 30-year water-works bonds voted Sept. 21 (V. 99, p. 913.)

BLACKFORD COUNTY (P. O. Hartford City), Ind.—BOND SALE.—On Nov. 20 \$60,000 Monroe St., \$39,000 Franklin St. and \$18,600 Trant road-improvement bonds were awarded to C. C. Shipp & Co. of Indianapolis at par and interest, it is stated.

BOONE COUNTY (P. O. Lebanon), Ind.—BOND OFFERING.—Bids will be received until 10 a. m. Dec. 7 by J. T. F. Laughner, Co. Treas., for \$57,600 4 1/2% J. Howard Riley et al. highway impt. bonds in Sugar Creek Twp. Denom. \$1,440. Date Sept. 15 1914. Int. M. & N. Due \$1,440 each six months from May 15 1915 to Nov. 15 1934 incl.

BRAZOS COUNTY (P. O. Bryan), Tex.—BOND ELECTION PROPOSED.—Reports state that a petition is being circulated for an election to vote on the question of issuing \$600,000 road bonds.

BRIDGEPORT, Conn.—BOND SALE.—This city recently completed the sale of the \$300,000 sewer bonds voted May 2. (V. 98, p. 1474.)

BRIDGEVILLE, Allegheny County, Pa.—BOND OFFERING.—Proposals will be received until 3 p. m. Dec. 1 by J. E. Franks, Borough Clerk, for \$10,000 4 1/2% 30-year building bonds. Certified check for 5% of bid, required. Price bid to include furnishing of bonds.

BURLINGTON, Des Moines County, Iowa.—BOND SALE.—Local investors have purchased \$36,000 5% sewer bonds, it is stated.

BUTLER, Butler County, Pa.—BONDS AUTHORIZED.—Reports state that an ordinance has been passed providing for the issuance of \$90,000 4 1/2% viaduct-constr. bonds. Date Dec. 1 1914.

CADIZ, Harrison County, Ohio.—BOND OFFERING.—Bids will be received until 12 m. Dec. 19 by W. H. Lucas, VII, Clerk, for \$10,000 5% street-improvement (assess.) bonds. Denom. \$500. Date Dec. 1 1914. Int. J. & D. Due \$500 each six months from March 1 1915 to Sept. 1 1924 incl. Cert. check (or other deposit) for \$500, required. Bonds to be delivered and paid for within 10 days from time of award. Purchaser to pay accrued interest.

CANTON, Stark County, Ohio.—BOND OFFERING.—Reports state that bids will be received until 12 m. Dec. 12 by W. F. Alt, Sec. of Sink Fund Trustees, for \$31,100 6% 2-year refunding bonds. Int. semi-ann. Cert. check for 5% required.

CAPE MAY COUNTY (P. O. Cape May Court House), N. J.—BOND SALE.—On Nov. 17 the \$20,000 5% 30-year coup. or reg. road-impt. bonds (V. 99, p. 1314) were awarded to Bull & Eldridge of N. Y. as follows: \$3,000 at 102.125; \$3,000 at 102.375; \$3,000 at 102.75; \$6,000 at 103.125; \$3,000 at 103.25 and \$2,000 at 103.75.

CARDINGTON, Morrow County, Ohio.—BOND OFFERING.—Bids will be received until 12 m. Dec. 21 by W. C. Lentz, VII, Clerk, for the following 5% No. Marion and Railroad streets paving bonds: \$6,460 bonds. Denom. (5) \$1,000, (1) \$1,460. Due \$1,000 yrly. on Nov. 1 from 1929 to 1933 incl. and \$1,460 Nov. 1 1934. 5,947 assess. bonds. Denom. \$594.70. Due yrly. from 1 to 10 yrs. incl. These bonds are subject to reduction in amount by whatever may be paid in by property owners prior to sale of said bonds.

Date Nov. 1 1914. Int. M. & N. Cert. check on a Morrow County bank for \$100 required.

CARROLL COUNTY (P. O. Delphi), Ind.—BOND SALE.—On Nov. 24 the \$6,600 4 1/2% road bonds (V. 99, p. 1546) were awarded to Wm. J. Guckien for \$6,625, making the price about 100.38. Bids were also received from the Fletcher Bank, J. F. Wild & Co. and Breed, Elliott & Co. of Indianapolis and E. O'Garra of Lafayette. Denom. \$330. Date Nov. 4 1914. Int. M. & N. Due part each six months for 10 years.

CHAMPAIGN COUNTY (P. O. Urbana), Ohio.—BOND SALE.—On Nov. 23 the \$3,000 (not \$2,000 as first reported) 5 1/2% 1 1/2-year (aver.) coupon Graham Ditch No. 396 bonds (V. 99, p. 1472) were awarded to the Champaign Nat. Bank of Urbana at par, it is stated.

CHEHALIS, Lewis County, Wash.—BOND SALE.—On Nov. 20 the \$23,000 refunding bonds offered on Nov. 16 were awarded to the State of Washington at par for 5 1/2%. Bonds due in 20 years, subject to call after one year. Other bids were:

Bidder	Discount for At-Rate Premium, tor'y's Fees, &c. of Int.	Rate
Lumbermen's Trust Co., Portland	\$440	5 1/2%
Carstens & Earles, Inc., Seattle	\$550 00	6%
	230	5 1/2%
	230 00	6%
Hoehler, Cummings & Prudden, Toledo	538 25	6%
Sweet, Causey, Foster & Co., Denver	302 00	6%
Weil, Roth & Co., Cincinnati	103 50	6%
Spokane & Eastern Trust Co., Spokane	23 00	6%
James N. Wright & Co., Denver	552	6%

CHICKASAW COUNTY (P. O. Houston), Miss.—BOND SALE.—The \$100,000 20-yr. coup. bridge bonds offered on Aug. 3 (V. 99, p. 213) have been sold to John Nuveen & Co. of Chicago.

CLAIBORNE COUNTY (P. O. Port Gibson), Miss.—BOND SALE.—The \$40,000 5% 20-year funding bonds (V. 99, p. 843) have been sold to local banks.

CLALLAM COUNTY SCHOOL DISTRICT NO. 38, Wash.—BOND SALE.—On Nov. 14 an issue of \$1,000 bldg. bonds was awarded to the State of Washington at par for 6%. Denom. \$100.

CLAY COUNTY (P. O. Spencer), Iowa.—BOND OFFERING.—Proposals will be received until 11 a. m. Dec. 10 by A. W. Chamberlain, Co. Aud., for \$28,551 Dist. No. 16, \$4,517 Dist. No. 23, \$2,600 Dist. No. 26, \$2,500 Dist. No. 27 and \$50,000 Dist. Nos. 14 and 42 5 1/2% drainage assess. bonds. Int. semi-ann. Due in seven equal annual installments, beginning Nov. 1 1917. Cert. check for 1% of bid, required. Purchaser to pay accrued interest and furnish bonds. The above amounts are estimated as the unpaid assessments that will be sold. The date of the bonds, time installments are due and number of installments may be changed by the successful bidder by agreement with Board of County Supervisors.

CLAYTON COUNTY (P. O. Elkader), Iowa.—BOND SALE.—An issue of \$50,000 6% road-impt. bonds has been taken up by local banks of Elkader, it is stated.

CLERMONT COUNTY (P. O. Batavia), Ohio.—BOND OFFERING.—Proposals will be received by W. H. Aikin, Co. Aud., until 12 m. Dec. 1 for \$25,000 5% 3-27-year (ser.) emergency bonds, it is stated. Cert. check for \$200 required.

CODINGTON COUNTY (P. O. Watertown), So. Dak.—NO ACTION YET TAKEN.—We are advised by the Co. Aud. that no action will be taken until about April 1915 towards the issuance of the \$25,000 poor-asylum-constr. bonds voted Nov. 3 (V. 99, p. 1547).

CODY CANAL IRRIGATION DISTRICT (P. O. Cody), Wyo.—BONDS VOTED.—Reports state that the question of issuing \$50,000 Red Hill tunnel-constr. bonds carried at a recent election.

COLUMBIANA COUNTY (P. O. Lisbon), Ohio.—BOND OFFERING.—Proposals will be received until 12 m. Dec. 21 by H. R. Dickey, Clerk Board of County Commissioners, for \$3,900 5% highway-improvement bonds. Denom. (1) \$400, (7) \$500. Date Dec. 1 1914. Int. J. & D. at office of County Treasurer. Due \$500 yearly on Dec. 1 from 1915 to 1921, inclusive, and \$400 Dec. 1 1922. Certified check on a bank other than the one making the bid, for \$500, payable to County Treasurer, required. Bonds to be delivered and paid for on Dec. 28. Purchaser to pay accrued interest.

CONVERSE COUNTY (P. O. Douglas), Wyo.—BONDS VOTED.—Local newspaper reports state that the question of issuing the \$40,000 court-house and jail bonds (V. 99, p. 914) carried at the recent election.

CORNING, Tehama County, Cal.—BONDS PROPOSED.—Reports state that this city is contemplating the issuance of \$30,000 water and sewer mains extension bonds.

CUMBERLAND, Md.—BOND SALE.—Alexander Brown & Sons of Balti. were awarded on Nov. 20 the \$150,000 4 1/2% coup. paving bonds mentioned in V. 99, p. 1547. The price is reported at 98 less a commission of \$180. Denom. \$1,000. Date Sept. 1 1914. Due \$15,000 yrly. on Sept. 1 from 1915 to 1924 incl. These bonds are exempt from taxation in Maryland and are now being offered to investors by above firm.

DAYTONA BEACH, Volusia County, Fla.—BONDS AWARDED IN PART.—OFFERING.—This city has disposed of \$14,000 of an issue of \$22,500 6% 20-year water bonds. Denom. \$500. Date July 1 1914. Int. J. & J.

BOND OFFERING.—The balance of the above issue (\$8,500) will be sold at par until Dec. 1. Chas. H. Williams is Chairman of Finance Com.

DEEP FORK DRAINAGE DISTRICT NO. 1, Lincoln County, Okla.—BONDS OFFERED BY BANKERS.—The Hanchett Bond Co. of

Chicago is offering to investors \$80,000 6% bonds of this district. Denom. \$1,000. Int. J. & J. at fiscal agency of State of Okla. (Chatham & Phoenix Nat. Bank), New York City. Due on Dec. 1 as follows: \$5,000 1917, \$12,000 1918, \$10,000 1919 and 1920, \$13,000 1921, \$12,000 in 1922 and 1923 and \$6,000 1924.

DELAWARE COUNTY (P. O. Muncie), Ind.—BOND OFFERING.—Bids will be received until 10 a. m. Nov. 30 by G. G. Williamson, County Treasurer, for \$6,200 4 1/2% Lafayette Roberts et al road-improvement bonds in Union Twp. Denom. \$310. Date Nov. 1 1914. Int. M. & N. Due \$310 each six months from May 15 1916 to Nov. 15 1925 incl.

DELRAY, Palm Beach County, Fla.—BOND SALE.—The \$20,000 6% 30-year coupon tax-free water and light bonds offered on Aug. 10 (V. 99, p. 360) have been sold to J. B. McCrary Co. of Atlanta at 95.

DE WITT, Saline County, Neb.—BONDS NOT SOLD.—No bids were received on Nov. 24 for the \$12,000 5-20-yr. (opt.) coup. taxable electric-light bonds at not exceeding 6% int. offered on that day (V. 99, p. 1393).

DONALDSONVILLE SCHOOL DISTRICT (P. O. Donaldsonville), Decatur County, Ga.—BOND SALE.—On Nov. 18 the \$15,000 6% 22-year (aver.) building and equipment bonds (V. 99, p. 1314) were awarded to Weil, Roth & Co. of Cincinnati for \$15,305 (102.333) int and blank bonds.

EAST CLEVELAND, Cuyahoga County, Ohio.—BOND OFFERING.—Proposals will be received until 11 a. m. Dec. 15 (date changed from Dec. 8) by the Library Board of City, Clara S. Parks, Secretary, for \$50,000 5% library site-purchase, construction and equipment bonds. (V. 99, p. 688). Authority election held Oct. 11. Denom. \$1,000. Date Sept. 1 1914. Int. M. & S. at Guardian Sav. & Trust Co., Cleveland. Due Aug. 31 1944. Certified check on a Cuyahoga County bank for 10% of bonds bid for, payable to Treasurer of Library Board, required. Bonds to be delivered and paid for within ten days from time of award. Purchaser to pay accrued interest.

Bids will be received until 11 a. m. Dec. 22 (date changed from Dec. 8) by E. L. Hickey, City Auditor, for \$171,155 5 1/2% assessment bonds. (V. 99, p. 688). Authority Sections 3939, 3922, 3923 and 3924. General Code. Denomination (341) \$500, (1) \$655. Date Oct. 15 1914. Int. A. & O. at Guardian Savs. & Trust Co., Cleveland. Due on Oct. 15 1919. Cert. check on a Cuyahoga County bank for 10% of bonds bid for, payable to City Treas., required. Bonds to be delivered and paid for within 10 days from time of award. Purchaser to pay accrued interest.

EAST FORK IRRIGATION DISTRICT (P. O. Hood River), Hood River County, Ore.—BOND OFFERING.—Bids will be received until 2 p. m. Dec. 1, it is stated, by Geo. R. Wilbut, Sec., for \$25,000 6% bonds. Denom. (47) \$500, (15) \$100.

EASTON, Northampton County, Pa.—BONDS PROPOSED.—An ordinance was introduced in City Council Nov. 20, it is reported, providing for the issuance of \$16,300 4% 5-20-yr. bonds dated Jan. 1 1915 for street-improvements, new playground and lighting extensions.

EDNEYVILLE TOWNSHIP, Henderson County, No. Caro.—BONDS OFFERED BY BANKERS.—The Hanchett Bond Co. of Chicago is offering to investors \$8,000 of an issue of \$12,000 6% road bonds. Denom. \$1,000. Date Jan. 1 1914. Int. J. & J. at Hanover Nat. Bank, New York. Due Jan. 1 1944. No other bonds outstanding. Assess. val. 1913, \$221,207. Total val. (est.), \$600,000.

ELIDA SCHOOL DISTRICT (P. O. Elida), Allen County, Ohio.—BONDS VOTED.—It is stated that the question of issuing \$10,000 school-completion bonds carried at the election held Nov. 25 by a vote of 46 to 45.

ESSEX COUNTY (P. O. Salem), Mass.—BOND OFFERING.—Proposals will be received until 10:30 a. m. Nov. 30, it is stated, by the County Treasurer, for \$50,000 4% bridge bonds. Date Dec. 1 1914. Due \$5,000 yearly from 1915 to 1924, inclusive.

LOAN OFFERING.—The County Treasurer will also receive bids until 10:30 a. m. Nov. 30 for a loan of \$50,000, dated Dec. 10 1914 and maturing April 10 1915.

FALL RIVER, Bristol County, Mass.—BOND SALE.—On Nov. 24 the \$25,000 4 1/2% almshouse bonds (V. 99, p. 1547) were awarded to Adams & Co. of Boston at 103.28. Other bids were:

B. M. C. Durfee Safe Deposit	Blodget & Co., Boston	102.75
& Tr. Co., Fall River	Estabrook & Co., Boston	102.95
Unity Lodge, I.O.O.F., Fall River	N. W. Harris & Co., Inc., Boston	102.18
C. S. Butler, Boston	Blake Bros. & Co., Boston	102.10
E. H. Rollins & Sons, Boston	Merrill, Oilham & Co., Bost.	102.679
R. L. Day & Co., Boston	Curtis & Sanger, Boston	102.69

Denom. \$1,000 or multiples thereof. Date Nov. 2 1914. Int. M. & N. Due \$2,000 yearly from 1915 to 1919 incl. and \$1,000 yearly from 1920 to 1934 incl.

FLORALA, Fla.—BOND SALE.—We are advised that the J. B. McCrary Co. of Atlanta have been awarded at par the \$20,000 water-works and sewerage-system bonds voted as reported in V. 99, p. 139.

FLOYD COUNTY (P. O. New Albany), Ind.—BOND OFFERING.—Proposals will be received until 10 a. m. Dec. 7, by Claude A. Sittson, County Treasurer, for \$4,200 4 1/2% James Lopp, H. A. Hartman, Louis Hartman et al. highway-improvement bonds in New Albany Twp. Denom. \$105. Date Dec. 7 1914. Int. M. & N.

FORT ATKINSON SCHOOL DISTRICT (P. O. Fort Atkinson), Winnebago County, Iowa.—BONDS VOTED.—The proposition to issue \$5,000 bldg. bonds carried, it is reported, at the election held Nov. 16.

FORT DODGE, Webster County, Iowa.—BOND SALE.—On Nov. 16 the \$80,000 5% city-hall bonds mentioned in V. 99, p. 557, were awarded to C. W. McNear & Co. of Chicago at par, it is stated.

FULTON COUNTY (P. O. Rochester), Ind.—BOND OFFERING.—Bids will be received until 3 p. m. Dec. 7 by L. E. Downey, County Treasurer, for the following 4 1/2% highway bonds: \$8,800 00 John F. Smith road-impt. bonds in Liberty Twp. Denom. \$440. \$1,400 00 J. J. Estabrook road-impt. bds. in Rochester Twp. Denom. \$520. \$6,000 00 A. L. Lowe road-impt. bonds in Rochester Twp. Denom. \$1,845. \$23,280 00 A. J. Barrett road-impt. bds. in Rochester Twp. Denom. \$1,164. \$1,999 20 Aaron Landis et al. road-impt. bonds in Henry Twp. Denom. \$99.96.

Date Nov. 15 1914. Int. M. & N. Due one bond of each issue each six months from May 15 1916 to Nov. 15 1925 incl.

GARDEN VALLEY HIGHWAY DISTRICT (P. O. Idaho City), Boise County, Idaho.—BOND SALE.—Keeler Bros. of Denver were awarded on Oct. 20 at par \$12,000 6% coupon highway and bridge bonds offered on Sept. 30. Denom. \$1,000. Date Oct. 20 1914. Int. A. & O.

GEORGETOWN, Copiah County, Miss.—BONDS CANCELED.—We are advised that the \$7,500 coup. water-works bonds at not exceeding 6% int. offered without success during August (V. 99, p. 843) have been canceled.

GRAND ISLAND, Hall County, Neb.—BOND SALE.—The \$14,000 7% coup. taxable Paving Dist. No. 12 bonds offered on Oct. 21 (V. 99, p. 1081) have been awarded to the Home Savs. Bank of Grand Island for \$14,025 (100.178) and int. Due Nov. 1 1924, subject to call.

GREEN CAMP TOWNSHIP, Marion County, Ohio.—BOND OFFERING.—Proposals will be received until 12 m. Dec. 24 by the Bd. of Trustees (care Conley & Johnson, P. O. Marion), for \$3,500 6% coup. town-hall bonds. Denom. \$500. Int. M. & S. at People's Bank, Green Camp. Due \$500 each six months from Mar. 1 1916 to Mar. 1 1919 incl. Cert. check on a Marion County bank for \$200, payable to Bd. of Trustees, required. Bonds to be delivered to purchaser on Dec. 24 or as soon thereafter as may be required for printing and preparing a transcript of proceedings of said board in reference to the issuance of said bonds. Purchaser to pay accrued interest.

GREENFIELD AND SPRINGWELLS TOWNSHIPS FRACTIONAL SCHOOL DISTRICT NO. 10, Wayne County, Mich.—BOND SALE.—On Nov. 23 the \$10,000 5% 15-year school bonds dated Oct. 1 1914 (V. 99, p. 1547) were awarded to Matthew Finn of Detroit at 102.88 and int.—a basis of about 4.74%. Other bids were:

Bumpus & Co., Detroit	\$10,217 50	Hanchett Bond Co., Chicago	\$10,136
Detroit Trust Co.	10,215 00	Geo. M. West & Co.	10,110
Bolger, Mosser & Willaman, Chicago	10,245 00	C. H. Coffin, Chicago	10,015
W. H. Noble & Co., Det.	10,115 00	Stellwager & McKay	10,000

In addition to the above, Bolger, Mosser & Willaman offered \$10,011 for 4 1/2% and J. F. McLean & Co. \$10,097 64 for 4 1/2%.

GUERNSEY COUNTY (P. O. Cambridge), Ohio.—BOND OFFERING.—Bids will be received until 11 a. m. Dec. 1 by T. C. White, Co. Aud., for \$6,000 5 1/2% coup. tax-free bridge bonds. Auth. Sec. 2434, Gen. Code.

Denom. \$500. Date Dec. 1 1914. Int. J. & D. in Cambridge. Due \$1,000 yrly. on Dec. 1 from 1917 to 1922 incl. Cert. check for 5% of bid, payable to Co. Aud., required. Bonds to be delivered and paid for within 10 days from time of award. Purchaser to pay accrued interest.

HAMILTON, Butler County, Ohio.—BOND OFFERING.—Proposals will be received until 12 m. Dec. 22 by Ernst E. Erb, City Auditor, for the following 5% bonds:
\$25,000 00 street-improvement (city's portion) bonds. Denom. \$500. Date May 1 1914. Due \$2,500 yearly on May 1 from 1915 to 1924 inclusive.

11,000 00 gas-improvement bonds. Denom. \$500. Date Oct. 1 1914. Due \$1,000 yearly on Oct. 1 from 1915 to 1925 incl.

5,971 60 sanitary sewer-improvement bonds. Date April 1 1914. Due from 1 to 10 years inclusive.

Interest semi-annual. Cert. check for 5% of bid, payable to City Treas., required. Bonds to be delivered and paid for within 10 days from time of award. Purchaser to pay accrued interest.

HARRIS COUNTY COMMON SCHOOL DISTRICT NO. 20, Tex.—BONDS REGISTERED.—The State Comptroller on Nov. 18 registered \$15,000 5% 20-40-year (opt.) school bonds.

HIGHLAND PARK, Wayne County, Mich.—BONDS VOTED.—The questions of issuing the \$10,000 high-school and \$90,000 playground bonds (V. 99, p. 1548) carried, it is stated, at the election held Nov. 24 by a vote of 663 to 224 and 604 to 289 respectively.

HILL COUNTY (P. O. Havre), Mont.—BOND OFFERING.—Bids will be received until 10 a. m. Jan. 5 for \$125,000 5% 18-20-year (opt.) court-house and jail bonds. Auth. vote of 1,038 to 1,027 at the election held Nov. 3. John H. Devine is County Clerk.

HOLLEY, Orleans County, N. Y.—BOND OFFERING.—Proposals will be received until 8 p. m. Nov. 30 by E. A. Cooley, Village Clerk, it is stated, for \$64,400 sewer bonds at not exceeding 5% interest. Cert. check for \$2,000 required. A like issue of bonds was reported sold to the Isaac W. Sherrill Co. of Poughkeepsie on June 29 (V. 99, p. 66).

HUDSON, Fremont County, Wyo.—BOND OFFERING.—Further details are at hand relative to the offering on Dec. 1 of the \$20,000 5% 15-30-year (opt.) coupon water bonds voted Oct. 6 (V. 99, p. 1548). Bids for these bonds will be received until 6 p. m. on that day by Leslie Davidson, Town Clerk. Denom. \$100. Date Jan. 10 1915. Int. J. & J. Certified check for 1% of bonds required.

HUDSON VILLAGE SCHOOL DISTRICT (P. O. Hudson), Summit County, Ohio.—BOND OFFERING.—Proposals will be received until 7 p. m. Dec. 9 by J. S. Walker, Clerk of Board of Education, for \$10,000 5% coup. school-building bonds. Denom. \$500. Date "day of sale." Int. M. & N. at Central Nat. Bank, Cleveland. Due \$1,000 each six months from Nov. 1 1940 to May 1 1945 incl. Certified check on a Cleveland or Hudson bank other than the one making the bid, for \$500, payable to District Treasurer, required. Bonds to be delivered and paid for within 10 days from time of award.

INDIANAPOLIS, Ind.—BONDS NOT SOLD.—No bids were received on Nov. 20 for the \$80,000 4% coup. safety-board bonds of 1914 offered on that day (V. 99, p. 1473).

INDIANAPOLIS SCHOOL DISTRICT (P. O. Indianapolis), Ind.—BONDS NOT SOLD.—No bids were received on Nov. 24 for the \$75,000 4% coupon tax-free real estate and improvement bonds offered on that day (V. 99, p. 1394).

IRONTON CITY SCHOOL DISTRICT (P. O. Ironton), Lawrence County, Ohio.—BOND OFFERING.—Bids will be received until 12 m. Dec. 4 by F. A. Ross, Clerk Bd. of Ed., for \$5,000 5% 20-year coup. school property imp. bonds. Denom. \$500. Date Dec. 4 1914. Int. J. & D. at City Treas. Cert. check for \$100, payable to Treas. of Bd. of Ed., required. Bonds to be delivered and paid for within 10 days from time of award. Purchaser to pay accrued int. Official circular states that the district has never defaulted in the payment of interest. Bonded debt \$56,500; no floating debt. Tax duplicate 1915, \$15,700,000.

JACKSON, Hinds County, Miss.—BONDS AUTHORIZED.—Reports state that a resolution was passed by the City Commissioners on Nov. 18 providing for the issuance of \$160,000 electric-light and power-plant-construction bonds.

JACKSON COUNTY (P. O. Brownstown), Ind.—BOND SALE.—On Nov. 23 the three issues of 4 1/2% highway-improvement bonds, aggregating \$13,440 (V. 99, p. 1548), were awarded to the Seymour National Bank of Seymour at par and interest.

JACKSONVILLE, Duval County, Fla.—CERTIFICATE SALE.—We have just been advised that the \$65,000 6% paving certificates offered but not sold on Aug. 1 (V. 99, p. 215) were disposed of the latter part of August.

JACKSONVILLE, Athens County, Ohio.—BOND SALE.—On Nov. 18 the \$1,000 6% 3 1/2-year (aver.) coup. fire-engine-purchase bonds (V. 99, p. 1241) were awarded to Howe Engine Co. at par and int. Purchaser to furnish bonds free. Tillotson & Wolcott Co. of Cleveland bid par and int.

JAMESTOWN, Chautauqua County, N. Y.—BONDS VOTED.—The question of issuing the \$25,000 sewer bonds at not exceeding 5% int. (V. 99, p. 1473) carried by a vote of 231 to 54 at the election held Nov. 21.

JASPER COUNTY (P. O. Rensselaer), Ind.—BOND SALE.—On Nov. 21 the \$3,500 4 1/2% 5 1/2-yr. (aver.) highway-impmt. bonds (V. 99, p. 1473) were awarded to the Fletcher-Amer. Nat. Bank of Indianapolis at par. Denom. \$175. Date Nov. 1 1914. Int. M. & N.

JAY COUNTY (P. O. Portland), Ind.—BOND OFFERING.—Proposals will be received until 10 a. m. Dec. 5 by John B. Ropp, County Treas. for the following 4 1/2% highway-improvement bonds in Wayne Township: \$10,000 S. J. King et al road-improvement bonds. Denom. \$500. 6,500 Chas. K. Watson et al road bonds. Denom. \$325.

Date Aug. 15 1914. Int. M. & N. Due one bond of each issue each six months from May 15 1915 to Nov. 15 1924, inclusive. These bonds were offered without success on Aug. 28 (V. 99, p. 688).

JEFFERSON COUNTY (P. O. Watertown), N. Y.—BOND SALE.—On Nov. 24 the \$200,000 5% 3 1-3-year registered highway-improvement bonds (V. 99, p. 1548) were awarded as follows: \$173,000 at 100-67 and int. to A. B. Leach & Co., New York, and \$27,000 at 101 and int. to local bidders. Other bids were:

E. H. Rollins & Sons, N. Y. 100.657 Remick, Hodges & Co., N. Y. 100.344
Nor. N. Y. Tr. Co., Watertown, 100.61 Geo. B. Gibbons & Co., N. Y. 100.29
Millett, Roe & Hagen, N. Y. 100.339 Farson, Son & Co., N. Y. 100.177
Estabrook & Co., N. Y. 100.375

JUANITA SCHOOL DISTRICT (P. O. Juanita), Blair County, Pa.—BOND OFFERING.—Bids will be received until 7.30 p. m. Dec. 14, it is stated, by J. W. Fleck, Secy. Bd. of Ed., for the \$25,000 5% 20-30-year (opt.) school bonds voted Nov. 3 (V. 99, p. 1473). Int. semi-ann. Cert. check for 5% required.

KANE COUNTY SCHOOL DISTRICT NO. 101, Ill.—BONDS VOTED.—At the election held Nov. 14 the question of issuing \$20,000 5% school bonds carried, reports state, by a vote of 306 to 84. Int. annual.

KISHAWAUKEE CONSOLIDATED SCHOOL DISTRICT NO. 124, Ill.—BONDS VOTED.—A Byron, Ill., newspaper reports that the issuance of \$5,000 bonds was authorized at a recent special election.

KLAMATH FALLS, Klamath County, Ore.—BOND SALE.—It is stated that J. H. Garrett has been awarded at par and int. the \$25,021 15 6% 10-year impmt. bonds offered on Nov. 12 (V. 99, p. 1315).

LA FOURCHE PARISH (P. O. Thibodaux), La.—BONDS VOTED.—The proposition to issue \$100,000 Road District No. 1 bonds carried, it is stated, at the election held Nov. 17.

LAKE CITY, Columbia County, Fla.—BONDS NOT TO BE OFFERED AT PRESENT.—We are advised that it is not likely that the \$79,000 5% bonds offered without success Aug. 24 (V. 99, p. 623) will be re-offered in the near future.

LAKE COUNTY (P. O. Crown Point), Ind.—NOTE OFFERING.—Proposals will be received until 10 a. m. Jan. 2 1915 (and from day to day thereafter until sold) by Ed. Simon, County Auditor, for \$200,000 6% current revenue promissory notes. Denom. \$1,000. Date Jan. 2 1915. Due July 2 1915.

BOND SALE.—According to reports two issues of road bonds, aggregating \$47,000 have been awarded at par as follows: \$25,000 to Peoples' State Bank and \$22,000 to the Commercial Bank, both of Crown Point.

LAMAR COUNTY (P. O. Purvis), Miss.—NO BONDS PROPOSED.—We are advised that the reports stating that this county is contemplating the issuance of \$5,000 road bonds (V. 99, p. 915) are erroneous.

LEBANON, Lebanon County, Pa.—BONDS PROPOSED.—Local newspaper dispatches state that this city is contemplating the issuance of approximately \$40,000 disposal-plant bonds.

LEWIS COUNTY (P. O. Lowville), N. Y.—NO BONDS VOTED.—Using newspaper reports, we stated in V. 99, p. 1474, that a proposition to issue tuberculosis hospital construction bonds carried at the election held Nov. 3. We now learn that no bond issue was authorized at this election, but the Board of Supervisors were directed to erect a hospital at a cost not to exceed \$10,000.

LICKING COUNTY (P. O. Newark), Ohio.—BOND OFFERING.—Proposals will be received until 1 p. m. Dec. 5 by J. W. Hursery, County Auditor, for the following 5% pike-improvement bonds:

\$27,000 Croton and Sunbury one-mile assess. pike bonds. Due \$2,500 each six months from June 1 1915 to Dec. 1 1917 incl. and \$3,000 each six months from June 1 1918 to Dec. 1 1919 incl.

22,500 pike-impmt. bonds. Due \$500 on June 1 and \$1,000 on Dec. 1 from June 1 1915 to Dec. 1 1929 incl.

7,000 Linnville ext. one-mile assess. pike bonds. Due \$1,000 each six months from June 1 1916 to Dec. 1 1917 incl., and \$500 each six months from June 1 1917 to Dec. 1 1919 incl.

10,000 Utica, Homer and Centerburg one-mile assess. pike bonds. Due \$1,000 each six months from June 1 1915 to Dec. 1 1919 incl.

15,000 road-impmt. bonds. Due \$500 each six months from June 1 1915 to Dec. 1 1929 incl.

Denom. \$500. Date Dec. 1 1914. Int. J. & D. at Co. Treasury. Cert. check (or cash) for 10% of bonds bid for, payable to President of Board of County Commissioners, required. Bids for the last four issues must be unconditional. The offering of the first two issues was reported in last week's "Chronicle," page 1548.

LINN COUNTY SCHOOL DISTRICT NO. 5, Ore.—BOND SALE.—Reports state that Morris Bros. of Portland have been awarded at par the \$50,000 5% 10-20-year (opt.) building Central school bonds offered without success on Oct. 1 (V. 99, p. 1161).

LOBAIN, Lorain County, Ohio.—BONDS AWARDED IN PART.—On Nov. 17 the \$11,000 5% 6-year (aver.) general sewer bonds (V. 99, p. 1241) were awarded to Seasonood & Mayer of Cincinnati at 100.30 and int. There were no bidders for the \$45,000 4 1/2% 8-year (aver.) water-works-impmt. bonds also offered on Nov. 17 (V. 99, p. 1241).

LORAIN SCHOOL DISTRICT (P. O. Lorain), Lorain County, Ohio.—BOND SALE.—Reports state that the Sinking Fund Commissioners has purchased an issue of \$10,000 school bonds.

LOWELLVILLE, Mahoning County, Ohio.—BOND OFFERING.—Proposals will be received until 12 m. Dec. 21 by C. W. Baker, Village Clerk, for the \$33,000 6% coupon water-works-construction bonds authorized by the Village Council on Oct. 19 (V. 99, p. 1394). Denom. \$1,000. Date Oct. 1 1914. Interest annually on Oct. 1 at office of Sinking Fund Trustees. Due \$1,000 yearly on Oct. 1 from 1917 to 1938, inclusive; \$2,000 yearly on Oct. 1 from 1939 to 1943, inclusive, and \$1,000 on Oct. 1 1944. Certified check for 10% of bonds bid for, payable to Village Treasurer, required. Bonds to be delivered and paid for within ten days from time of award. Purchaser to pay accrued interest. Bids must be unconditional.

LOWNES COUNTY (P. O. Haynesville), Ala.—BONDS WITHDRAWN FROM MARKET.—The \$150,000 5% 30-yr. road bonds refused by Steiner Bros. of Birmingham (V. 99, p. 844) will not be placed on the market, we are advised.

LUCAS COUNTY (P. O. Toledo), Ohio.—BOND OFFERING.—Proposals will be received until 10 a. m. Dec. 11 by Chas. J. Sanzenbacher, County Auditor, for the following bonds:

\$15,000 00 5 1/2% bonds to construct a heating, lighting and power plant at the Children's Home. Denom. \$1,000. Due \$2,000 in 2 years and \$1,000 yearly from 3 to 15 years incl.

7,984 52 5% Lockwood Ave. road-impmt. No. 60 bonds. Denom. (1) \$484 52. (15) \$500. Due \$984 52 in 1 year, \$1,000 yearly from 2 to 6 years incl. and \$1,000 yearly from 7 to 10 years inclusive.

Date Dec. 21 1914. Int. J. & D. at office of County Treas. Cert. check (or cash) on a Toledo bank for \$500 with first issue and for \$300 with last issue required. Bonds to be delivered Dec. 21. A complete certified transcript of all proceedings evidencing the regularity and validity of the issuance of said bonds will be furnished successful bidder. Official advertisement states that there has never been any default in the payment of principal and interest. These bonds with an issue of \$18,754 79 sewer bonds were offered without success as 5s on Oct. 6 (V. 99, p. 1082).

LYNN, Essex County, Mass.—BOND SALE.—On Nov. 24 the \$196,000 4% 15 1/2-year (aver.) registered tax-free water bonds (V. 99, p. 1548) were awarded to E. H. Rollins & Sons of Boston, it is stated, at 105.427. Other bids were:

White, Weld & Co. 105.38 Blake Bros. & Co. 104.65
Estabrook & Co. 105.27 Blodgett & Co. 104.63
R. L. Day & Co. 105.099 Curtis & Sanger 104.44
Adams & Co. 104.72 Perry, Coffin & Burr 104.25
Merrill, Oldham & Co. 104.659 N. W. Harris & Co. 104.14

LYNN CREEK CONSOLIDATED HIGH SCHOOL DISTRICT (P. O. Macon), Noxubee County, Miss.—BOND SALE.—An issue of \$5,000 6% school-building bonds was purchased on Sept. 12 by the "City of Macon" for \$5,056 67—equal to 101.133. Denom. (40) \$100, (2) \$500. Date Aug. 3 1914. Int. F. & A. Due \$200 yearly from 1915 to 1919, inclusive; \$300 yearly from 1920 to 1924, inclusive; \$500 in 1925, 1926 and 1927 and \$1,000 in 1928.

MADISON COUNTY (P. O. Huntsville), Ala.—BONDS VOTED.—The question of issuing the \$70,000 court-house and \$15,000 equip. 5% 20-year bonds (V. 99, p. 1161) carried at the election held Nov. 3.

MARLBOROUGH, Middlesex County, Mass.—LOAN OFFERING.—According to reports, bids will be received by the Treasurer until 12 m. Dec. 1 for the discount of a temporary loan of \$25,000, due \$10,000 on May 20 1915 and \$15,000 Nov. 20 1915.

MARION, Marion County, Ohio.—BOND OFFERING.—Proposals will be received until 12 m. Dec. 17 by Harry E. Mason, City Auditor, for the following 5 1/2% bonds:

\$13,900 street-improvement bonds. Denom. (1) \$400, (27) \$500. Due \$900 March 1 1916, \$1,000 each six months from Sept. 1 1916 to March 1 1918 incl., \$500 on March 1 and \$1,000 on Sept. 1 from March 1 1919 to March 1 1921 incl. and \$500 each six months from Sept. 1 1921 to Sept. 1 1925 incl. Certified check for \$700 required.

79,000 refunding bonds. Denom. \$500. Due \$4,000 each six months from March 1 1916 to Sept. 1 1925 incl., except that on Sept. 1 1924 and 1925, \$3,500 is due. Certified check for \$3,950 required.

Date Sept. 1 1914. Int. M. & S. Certified checks must be made payable to the City Treasurer.

MARSHFIELD SCHOOL DISTRICT NO. 9 (P. O. Marshfield), Coos County, Ore.—PRICE PAID FOR BONDS.—We are advised that the price paid for the \$10,000 bldg. bonds awarded to Keeler Bros. of Denver on Oct. 24 (V. 99, p. 1394) was par for 5 1/2%. Denom. \$500. Date Nov. 1 1914. Int. M. & N. Due in 20 years, subject to call after 10 years.

MARSHFIELD SCHOOL DISTRICT NO. 1 (P. O. Marshfield), Wood County, Wisc.—BOND SALE.—The Madison Bond Co. of Madison has just purchased \$20,000 5% bonds at par and interest. \$12,000 of the bonds are dated Mar. 1 1914 and due \$3,000 yearly, Mar. 1 from 1919 to 1922 incl., and \$8,000 of the bonds will be issued Jan. 1 1915 and due \$2,000 yearly from 1923 to 1926 incl.

MARTIN COUNTY (P. O. Martinsville), Ind.—BOND OFFERING.—Bids will be received until 12 m. Dec. 10 by W. W. Rosenbalm, Co. Treas., for the following 4 1/2% semi-ann. highway-impmt. bonds dated Nov. 15 1914: \$6,600 T. S. Voshall et al road-impmt. bonds in Ashland Twp. Denom. \$330. Due \$330 each six months from May 15 1916 to Nov. 15 1925 incl.

10,740 Henry Summers et al road-impmt. bonds in Adams Twp. Denom. \$537. Due \$537 each six months from May 15 1915 to Nov. 15 1924 incl.

MARYSVILLE, Union County, Ohio.—BOND OFFERING.—Proposals will be received until 12 m. Dec. 19 by L. J. Zwerner, Village Clerk, for \$10,000 6% refunding bonds. Auth. Secs. 3916, 3917 and 3925, Gen. Code. Date Oct. 1 1914. Int. A. & O. Due one bond each six months from 6 to 16 years, inclusive.

MIAMI COUNTY (P. O. Troy), Ohio.—BOND OFFERING.—Proposals will be received until 10 a. m. Dec. 4 by M. T. Staley, County Auditor, for the following 5% coupon flood-emergency bonds:

\$40,000 bridge bonds of an issue of \$451,000. Date Sept. 1 1913. Due on Sept. 1 as follows: \$12,000 1926 and \$28,000 1927.

Denom. \$500. Int. semi-ann. at office of County Auditor. Certified check for 3% of bonds bid for, payable to County Auditor, required. Bonds to be delivered and paid for within 5 days from time of award; purchaser to pay accrued interest. Bids must be unconditional.

BOND SALES.—The \$40,000 5% 13 3/5-year (aver.) coupon flood-emergency bonds offered without success on Oct. 23 (V. 99, p. 1315) have been purchased by the Piqua Nat. Bank of Piqua at par and int.

BOND SALE.—The First Nat. Bank of Troy has been awarded at par the \$14,000 5% coup. flood-emergency bonds offered without success on Oct. 23 (V. 99, p. 1315).

MIAMI, Dade County, Fla.—BONDS AWARDED IN PART.—Of the five issues of 5% gold coup. municipal-impt. bonds aggregating \$250,000 offered without success on Aug. 6 (V. 99, p. 491), \$210,000 have been sold to the Southern Bank & Trust Co. of Miami and Sidney Spitzer & Co. of Toledo at 95 and interest.

MICHIGAN CITY, Nelson County, No. Dak.—BONDS VOTED.—The question of issuing the \$7,000 4% electric-light-plant bonds (V. 99, p. 1474) carried by a vote of 66 to 4 at the election held Nov. 14. Denom. \$1,000. Date Jan. 2 1915. Int. ann. Due \$1,000 every two years on Jan. 2 from 1920 to 1932 incl. It is expected that these bonds will be purchased by the State of North Dakota.

MILAM COUNTY (P. O. Cameron), Tex.—BONDS NOT YET ISSUED.—According to local newspaper reports, the \$100,000 Road Dist. No. 8 bonds voted May 27 (V. 98, p. 1867) have not yet been issued.

MINERAL CITY VILLAGE SCHOOL DISTRICT (P. O. Mineral City), Tuscarawas County, Ohio.—BOND OFFERING.—Proposals will be received until 12 m. Dec. 11 by E. Bender, Clerk Board of Education for \$1,000 6% school bonds. Denom. \$250. Int. M. & S. in Mineral City. Due \$250 each six months from March 1 1916 to Sept. 1 1917, incl.

MINNEAPOLIS, Minn.—BOND OFFERING.—Proposals will be received until 2 p. m. Dec. 15 by Dan C. Brown, City Compt., for the \$100,000 high-school and \$250,000 grade-school 4 1/2% coup. bonds (V. 99, p. 1548). Denom. \$50, \$100, \$500 or \$1,000, as purchaser may desire. Date Dec. 1 1914. Int. J. & D. Due in not less than 1 year nor more than 30 years from date, to suit purchaser. Cert. check for 2% of bonds bid for, payable to C. A. Bloomquist, City Treas., required. No bids will be considered for less than 95% of par value and accrued int.

The official notice of this bond offering will appear next week among the advertisements elsewhere in this Department.

BOND SALE.—On Nov. 25 the three issues of 4% 30-yr. coup. bonds, aggregating \$250,000 (V. 99, p. 1548), were awarded to the Northwestern Nat. Bank of Minneapolis at 95.

NO ACTION YET TAKEN.—Under date of Nov. 25 the City Compt. advises us that no action has yet been taken looking towards the issuance of the \$100,000 bonds and \$300,000 certificates of indebtedness to be issued for a municipal ice plant voted Nov. 3 (V. 99, p. 1548).

MONTEBEEY COUNTY (P. O. Salinas), Calif.—BOND OFFERING.—Proposals will be received by T. P. Coy, Clerk Board of Supervisors, on and after Jan. 5 1915, for the \$570,000 6% road and bridge bonds voted Nov. 3 (V. 99, p. 1548). Denom. \$250. Date Jan. 2 1915. Int. ann. Due in not more than 10 years, provided that \$57,000 matures yearly on Jan. 2, beginning 1916. Certified check for not less than 1% of bid required.

MORNINGSIDE SCHOOL DISTRICT (P. O. San Fernando), Los Angeles County, Calif.—BONDS VOTED.—By a vote of 199 to 9, this district at a recent election voted in favor of the issuance of the \$55,000 bldg. bonds (V. 99, p. 1315).

MOTT, Hettinger County, No. Dak.—BOND ELECTION.—An election will be held Dec. 1 (postponed from Nov. 17), reports state, to submit to a vote the question of issuing water-works bonds (V. 99, p. 1474).

MOUNT VERNON, Westchester County, N. Y.—BOND SALE.—On Nov. 24 the \$110,000 tax-relief and \$65,000 school-tax-relief 3-year bonds (V. 99, p. 1549) were awarded to Geo. B. Gibbons & Co. of New York as 5s for \$175,800 (100.457) and int. Other bids were: Farson, Son & Co., New York.....\$175,757 00 Harris, Forbes & Co., New York.....175,701 75

MULTNOMAH COUNTY (P. O. Portland), Ore.—BOND OFFERING.—Proposals will be received, it is stated, until Dec. 14 by John B. Coffey, County Clerk, for \$1,000,000 5% coupon inter-State bridge bonds. The official advertisement will provide for two different tenders; one for the entire block of \$1,000,000 to be issued, bearing date of July 1 1914, and the other for \$250,000 to be dated and delivered within twenty days from the acceptance of the bid, and a like amount dated March 1, May 1 and July 1 1915 and delivered at date of issue. Denom. \$100, \$500 or \$1,000, at option of purchaser. Due \$40,000 annually beginning July 1 1918. The successful bidder will be furnished with competent opinions as to the legality of the issue and the committee will reserve the right to reject any and all bids. These bonds are part of an issue of \$1,250,000, \$250,000 of which were disposed of on Nov. 9 1914 (V. 99, p. 1549).

MUSKEGON HEIGHTS, Muskegon County, Mich.—BOND SALE.—On Nov. 20 the \$25,000 5% water-ext. bonds offered on Nov. 16 (V. 99, p. 1474) were awarded to J. F. McLean & Co. of Detroit at 100.75. Denom. \$500. Date Dec. 1 1914. Int. ann. on Jan. 1. Due \$5,000 yearly from 3 to 7 years incl.

MUSSELSHELL COUNTY (P. O. Roundup), Mont.—BONDS DEFEATED.—The questions of issuing the \$200,000 road and \$75,000 bridge bonds (V. 99, p. 1315) failed to carry, reports state, at the election held Nov. 3.

MUSSELSHELL COUNTY SCHOOL DISTRICT NO. 13 (P. O. Roundup), Mont.—BOND SALE.—On Nov. 14 an issue of \$1,500 6% 10-15-year (opt.) bldg. bonds was awarded to the State Board of Land Commissioners at par. Denom. \$500.

NAPOLEON, Henry County, Ohio.—BONDS AUTHORIZED.—The City Council has passed an ordinance providing for the issuance of \$6,835 5% sewer bonds, it is stated.

NAVARRO COUNTY (P. O. Corsicana), Tex.—BOND OFFERING.—Proposals will be received until 10:30 a. m. Dec. 10 by H. D. Johnson, County Auditor, for \$75,000 Road District No. 3 bonds. Denom. \$1,000. Date Sept. 1 1913. Int. M. & S. in N. Y. Due in 40 years, subject to call \$2,000 yearly after 1 year. Cert. check for \$1,000, payable to R. R. Owen, County Judge, required. These bonds were offered without success on May 15 (V. 98, p. 2011).

NELSON COUNTY (P. O. Lakota), No. Dak.—BONDS NOT SOLD.—No bids were received for the \$14,215 drainage bonds offered on Nov. 18 at not exceeding 7% int. (V. 99, p. 1394).

NEWARK, N. J.—TEMPORARY LOAN.—H. Lee Anstey of New York City has been awarded a \$600,000 temporary loan at 4 1/2% interest less a premium of \$120, it is stated.

NEWBURYPORT, Essex County, Mass.—LOAN OFFERING.—Reports state that the City Treasurer will receive bids until 8 p. m. Dec. 1 for a loan of \$50,000 in anticipation of taxes, maturing April 2 1915.

NEW CASTLE COUNTY (P. O. Wilmington), Dela.—BOND OFFERING.—Proposals will be received until 12 m. Dec. 8 by Benj. A. Groves, Chairman of Finance Committee, for \$150,000 4 1/2% gold coup. bridge-impt. bonds, first series. Denom. \$1,000. Date July 1 1913. Int. J. & J. at Farmers' Bank, Wilmington. Due \$5,000 July 1 1939, \$15,000 yearly on July 1 from 1940 to 1948 incl. and \$10,000 July 1 1949. Cert. check for 2% of bonds bid for, payable to County Treas., required. Bonds to be delivered to the purchaser at 11 a. m. Jan. 1 unless another date shall be mutually agreed upon. These bonds will be certified as to genuineness by the Columbia Trust Co. and their legality approved by Caldwell, Mass. & Reed of N. Y. C., whose favorable opinion will be furnished purchaser. Bonded debt (incl. this issue), \$2,068,000. Assess. val., \$75,000,000; actual (est.), \$100,000,000.

NEWFANE (TOWN) UNION FREE SCHOOL DISTRICT NO. 12 (P. O. Newfane), Niagara County, N. Y.—BOND OFFERING.—Bids will be received until 10 a. m. to-day (Nov. 28) by the Board of Ed. for \$18,000 school bonds at not exceeding 5% int. Denom. not to exceed \$1,000. Date May 1 1914. Int. ann. Due one bond ann. on Nov. 1 beginning in 1917. Cert. check (or cash) for 5% of bonds, payable to Clerk of Bd. of Ed., required.

NEW PRAQUE, Lesueur County, Minn.—BOND SALE.—On Nov. 9 the \$15,000 5% 8-year (aver.) coup. bonds to defray all contingent expenses (V. 99, p. 1162) were awarded to Carroll & Horn of Minneapolis at par and int. The Hanchett Bond Co. of Chicago bid par, less \$427.

NEW VIENNA, Clinton County, Ohio.—BOND SALE.—Reports state that the New Vienna Bank of New Vienna has been awarded the \$3,500 6% water-works bonds offered without success as 5s on Aug. 11. (V. 99, p. 492).

NILES, Trumbull County, Ohio.—BOND OFFERING.—Bids will be received until 2 p. m. Dec. 14 by Homer Thomas, City Auditor, for \$1,100 6% foot-bridge bonds. Auth. Sec. 3939, Gen. Code. Denom. \$550. Date Dec. 15 1914. Int. J. & D. Due Dec. 15 1925. Certified check for 5% of bonds bid for, payable to City Treasurer, required. Bonds to be delivered and paid for within 10 days from time of award. Purchaser to pay accrued interest.

NORCROSS, Gwinnett County, Ga.—BOND OFFERING.—We are advised that the Mayor is offering at private sale the \$4,000 5% bonds mentioned in V. 99, p. 68. Denom. \$1,000. Date July 15 1914. Int. J. & J. Due \$1,000 every five years.

NOWATA COUNTY (P. O. Nowata), Okla.—BOND SALE.—This county, reports state, has sold \$10,000 bonds to Rogers County.

OGDEN, Weber County, Utah.—WARRANTS OFFERED BY BANKERS.—The German-American Trust Co. of Denver is offering to investors \$28,800 6% tax-secured improvement warrants. Denom. \$900. Date Aug. 25 1914. Int. at office of City Treasurer or through this trust co. Due \$3,200 yearly on Aug. 25 from 1915 to 1923 incl.

ORANGE COUNTY (P. O. Paoli), Ind.—BOND OFFERING.—Bids will be received until 2 p. m. Nov. 30 by J. W. McCullough, Co. Treas., for \$5,600 4 1/2% tax-free road-impt. bonds in French Lick Twp. Denom. \$280. Int. semi-ann.

OWEN COUNTY (P. O. Spencer), Ind.—BOND OFFERING.—Proposals will be received until 2 p. m. Dec. 7 by Harry B. Williams, County Treasurer, for the following 4 1/2% highway-improvement bonds: \$8,473 40 Geo. W. Stutz et al highway-improvement bonds in Lafayette Twp. Denom. \$423 67. Due \$423 67 each six months from May 15 1916 to Nov. 15 1923, incl., and \$847 34 on May 15 and Nov. 15 1924.

.5100 John Brinson et al highway-improvement bonds in Clay Twp. Denom. \$425 50. Due \$425 50 each six months from May 15 1916 to Nov. 15 1923, incl., and \$851 on May 15 and Nov. 15 1924. Date Nov. 4 1914. Int. M. & N.

PAINESVILLE, Lake County, Ohio.—BOND SALE.—On Nov. 23 the \$10,000 5% 20-year coup. water-purification-works-construction bonds (V. 99, p. 1315) were awarded to Seasongood & Mayer of Cincinnati at 101.43—a basis of about 4.898% int. Other bids were:

Table with 2 columns: Name of Bidder and Premium. Includes entries for Breed, Elliott & Harrison, Tillotson & Wolcott Co., Wm. Guckenberger, etc.

PALATINE TOWNSHIP HIGH SCHOOL DISTRICT, Cook County, Ill.—BOND ELECTION.—An election will be held to-day (Nov. 28), it is stated, to vote on the question of issuing \$35,000 6% building bonds.

PARKE COUNTY (P. O. Rockville), Ind.—BOND OFFERING.—Proposals will be received until 2 p. m. Dec. 4 by J. H. Rush, County Treasurer, for the following 4 1/2% highway-improvement bonds: \$5,760 Geo. W. Burnside et al highway-improvement bonds in Greene Township. Denom. \$288.

4,214 Wm. Lamb et al highway-improvement bonds in Penn and Reserve Townships. Denom. \$210 70. Date Oct. 6 1914. Int. M. & N. Due one bond of each issue each six months.

PAYETTE, Canyon County, Idaho.—BONDS DEFEATED.—The propositions to issue \$6,000 filtration and \$6,000 water-works bonds failed to carry at the election held Nov. 14 by a vote of 57 "for" to 269 "against."

PIGEON SCHOOL TOWNSHIP (P. O. Evansville), Vanderburgh County, Ind.—WARRANT OFFERING.—Bids will be received until 10 a. m. Dec. 8 by Wm. Atkins, Twp. Trustee, for the \$17,000 school warrants mentioned in V. 99, p. 1549. Bids for these bonds are requested at 5%, 4 1/2%, 4%, 3 1/2%, 3%, 2 1/2% and 2% int. payable semi-ann. Denom. (14) \$1,100, (1) \$1,600. Due \$1,100 wry. on Dec. 8 from 1915 to 1928 incl. and \$1,600 Dec. 8 1929. Cert. check on an Evansville bank for \$500, payable to Township Trustee, required.

PLAINFIELD, Union County, N. J.—BOND SALE.—The following are the bids received for the \$92,000 19 1/2-year (average) sewer, Fifth Series, and \$75,000 18-year (average) joint-sewerage-system 5% gold coupon or registered bonds offered on Nov. 23 (V. 99, p. 1475):

Table with 3 columns: Name of Bidder, \$92,000 Issue, and \$75,000 Issue. Includes entries for Redmond & Co., E. H. Rollins & Sons, Estabrook & Co., etc.

* Successful bids. Purchaser to pay accrued interest.

PLEASANT RIDGE SCHOOL DISTRICT (P. O. Laurel), Jones County, Miss.—BOND SALE.—We are advised that the \$2,000 building bonds mentioned in V. 99, p. 845, have been sold to W. N. Montgomery and W. W. Hopkins, both of Jones County.

POMEROY VILLAGE SCHOOL DISTRICT (P. O. Pomeroy), Meigs County, Ohio.—BOND SALE.—On Nov. 20 the \$5,000 6% 5 1/2-year (av.) coupon equipment bonds (V. 99, p. 1395) were awarded to the Provident Sav. Bank & Trust Co. of Cincinnati at 102.73 and int. Other bids were: Brighton Germ. Bk., Cin. \$5,135 50; Field, Richards & Co., Cin. \$5,045 00; Otis & Co., Cleveland, 5,126 00; First Nat. Bk., Barnesville, 5,031 00; Breed, Elliott & Harrison, Cin. \$5,114 00; Terry, Briggs & Slayton, Tol. 5,027 50; Stacy & Braun, Toledo, 5,069 00; Hayden, Miller & Co., Cleve. 5,011 00; Well, Roth & Co., Cincin., 5,051 50; First City Bank, Pomeroy, 5,000 00.

PONTIAC, Oakland County, Mich.—BOND SALE.—On Nov. 16 the \$7,500 5% garbage-reduction-plant bonds (V. 99, p. 1475) were awarded, it is stated, to the Oakland County Sav. Bank of Pontiac for \$7,550—equal to 100.666. The city must pay for the printing of the bonds. Other bids were:

John F. McLean & Co., Detroit—\$7,531 21, city to print bonds. Hoehler, Cummings & Prudden of Toledo—\$7,530 75, city to print bonds. Spitzer, Rorick & Co., Toledo—Par. city to print bonds. Franklin Green of Pontiac (for \$3,500)—\$3,540, city to print bonds. Detroit Trust Co., Detroit—\$7,520 and lithographing bonds. Date Dec. 1 1914. Due March 1 1919.

PORTER COUNTY (P. O. Valparaiso), Ind.—BOND SALE.—On Nov. 23 the \$6,500 4 1/2% 5 1/2-yr. (aver.) highway-impt. bonds (V. 99, p. 1475) were awarded to the State Bank of Valparaiso for \$6,502 (100.03) and int. Other bids were:

Breed, Elliott & Harrison, Indianapolis, \$6,501 and interest. J. F. Wild & Co., Indianapolis, 1914 and interest. Denom. \$325. Date Oct. 16, 1914. Int. M. & N.

PORT OF SEATTLE, Wash.—BIDS REJECTED.—The Port Commission at a special meeting Nov. 21 rejected the bids received for several issues of bonds, aggregating \$422,100, offered recently. According to local papers the bids were as follows: Well, Roth & Co., Cincinnati, 98.56 for the \$275,000 of East waterway and \$100,000 of Central water-front bonds; N. W. Halsey & Co., A. B. Leach & Co. and Chapman, Mills & Co., all of Chicago, par less \$5,500 for East waterway and Central water-front bonds and par less \$1,300 for the \$46,100 worth of Smith Cove waterway bonds; E. H. Rollins & Sons, William A. Read & Co., Continental Commercial Trust & Savings Bank, all of Chicago, with Dexter Horton National Bank of Seattle, 99.08 for all the sewerage series sought to be sold. The Commission has announced that it will accept bids at par with accrued interest in amounts of not less than \$50,000 until Dec. 15.

PORTLAND, Ore.—BONDS NOT SOLD.—Owing to an error in the advertisement, no sale was made on Nov. 10 of the \$102,969 92 bonds offered on that day.

BOND SALE.—The following bids were received for the \$92,984 92 6% 10-year improvement bonds offered on Nov. 17 (V. 99, p. 1475):

Table with columns: Purchaser, Amt. Bid for, Price Bid. Lists bids from E. D. Rood, Sarah J. Buckman, David Dupee, Ludwig Hirsch, Jacob Kansler, Luella H. Wadsworth, John Holm, L. H. Wang, Fred Schreck.

And \$36 additional premium.

* Successful bids. The Lumbermen's Trust Co. was only allotted \$13,984 92.

POSEY COUNTY (P. O. Mt. Vernon) Ind.—BOND OFFERING.—Reports state that bids will be received until 2 p. m. Dec. 7 by Andrew A. Schenk, County Treasurer, for \$3,400 and \$6,000 4 1/2% highway-improvement bonds.

RITTMAN VILLAGE SCHOOL DISTRICT (P. O. Rittman), Wayne County, Ohio.—BOND OFFERING.—Bids will be received until 12 m. Dec. 15 by Roy E. Faber, Clerk of Bd. of Ed., for \$40,000 5 1/2% school bonds. Denom. \$500. Int. A. & O. Due \$1,000 each six months from Apr. 1 1916 to Oct. 1 1935 incl. Cert. check for \$500, payable to Clerk of Bd. of Ed., required.

ROCHESTER, N. Y.—NOTE SALE.—On Nov. 25 the \$33,200 park-improvement notes, to run for four months from Nov. 30 1914, and \$100,000 water-works-improvement notes, to run for four months from Dec. 1 1914 (V. 99, p. 1549) were awarded to Luther Robins of Rochester on his bid, interest 4.25%, premium \$5. Other bidders were

Table with columns: Name, Amt., Prem. Lists bidders: Bernhard, Scholle & Co., Salomon Bros. & Hutzler, T. J. Swanton, Farmers' Loan & Trust Co., Goldman, Sachs & Co., Equitable Trust Co., Bond & Goodwin.

ROGERS COUNTY (P. O. Claremore), Okla.—BOND SALE.—Local papers report the sale of \$10,000 refunding bonds of this county to Nowata County.

ROUND HILL, Loudon County, Va.—BOND SALE.—On Nov. 24 the \$900 (unsold portion of an issue of \$12,000) 5% coup. water and street-improvement bonds (V. 99, p. 1243) were awarded to J. C. Rojero at par.

ROYALTON TOWNSHIP, Cuyahoga County, Ohio.—BOND OFFERING.—Proposals will be received until 1 p. m. Dec. 26 by S. W. Thomas, Twp. Clerk (P. O. Brecksville, R. F. No. 2), for \$13,580 70 5% coup. highway-improvement bonds. Denom. (1) \$580 70, (1) \$1,000, (8) \$1,500. Date Dec. 1 1914. Int. A. & O. at office of Twp. Treasurer. Due \$580 70 Oct. 1 1916, \$1,000 Oct. 1 1917 and \$1,500 yearly on Oct. 1 from 1918 to 1925 incl. An unconditional certified check on a bank other than the one making the bid, for 10% of bonds bid for, payable to Township Treasurer, required. Bonds to be delivered and paid for within 10 days from time of award. Purchaser to pay accrued interest.

SALEM, Essex County, Mass.—BOND SALE.—On Nov. 20 \$120,000 4 1/2% coupon Loan Acts of 1914 bonds were awarded to Lee, Higginson & Co. of Boston at 106.67 and int. Other bids were: Blake Bros. & Co., Boston, 105.64; Jackson & Curtis, Boston, 105.61; N. W. Harris & Co., Inc., Bost., 105.53; Naumkeag Trust Co., Salem, 105.35; R. L. Day & Co., Boston, 105.099; Perry, Coffin & Burr, Boston, 105.02; Estabrook & Co., Boston, 104.68; Merrill, Oldham & Co., Bost., 104.099; Blodgett & Co., Boston, 105.75; N. W. Halsey & Co., Boston, 105.75.

Denom. \$1,000. Date Aug. 1 1914. Int. F. & A. at the Merchants' Nat. Bank of Boston. Due \$3,000 yearly Aug. 1 from 1915 to 1954, incl.

SALEM CONSOLIDATED SCHOOL DISTRICT (P. O. Macon), Noxubee County, Miss.—BOND SALE.—An issue of \$3,500 6% school-building bonds was purchased on Sept. 10 by the "City of Macon" for \$3,552 19—equal to 101.491. Denom. (15) \$100, (4) \$500. Date Aug. 3 1914. Int. F. & A. Due \$100 yearly Aug. 3 from 1915 to 1927, inclusive, and \$2,200 Aug. 3 1928.

SAN DIEGO, San Diego County, Cal.—BOND SALE.—Local newspaper dispatches state that the Harris Tr. & Savs. Bank of Chicago recently purchased \$408,000 4 1/2% permanent park impmt. bonds. Date Jan. 1 1914. Due serially from 1917 to 1951.

SAN FRANCISCO, Cal.—BOND SALE OVER THE COUNTER.—Local papers state that up to and including Nov. 17 the \$660,000 2 1/2% year (average) city-hall and \$857,500 19-year (average) municipal railway 5% gold coupon tax-free bonds were sold "over the counter" at par and int. Of the \$225,000 4 1/2% 32-year (average) water bonds, \$10,500 had been disposed of "over the counter at par and interest" up to and including the above date.

All of the above bonds were offered without success on Oct. 26 and were then ordered sold over the counter at par and int. (V. 99, p. 1395).

SCOTTS BLUFF SCHOOL DISTRICT (P. O. Scotts Bluff), Scotts Bluff County, Neb.—BOND OFFERING.—T. F. Kennedy, Secretary Board of Education, will receive bids until 6 p. m. Dec. 7, it is stated, for the \$18,000 6% 20-year site-purchase and construction bonds voted Sept. 8 (V. 99, p. 845). Certified check for \$1,000 required.

SEATTLE, Wash.—DELIVERY OF BONDS.—The \$829,500 5% 10-19-year (ser.) bridge bonds awarded at private sale on Nov. 16 to Carstens & Earles, Inc., of Seattle, at par and int. (V. 99, p. 1550) will be delivered as follows: The first delivery of \$400,000, under the terms agreed upon, will be Nov. 24, or earlier if it is possible for the lithographing to be done in that time; the second delivery of \$429,500 will be made Dec. 24 or earlier. The city agrees to sell no other municipal bonds except to Carstens & Earles or the State until Jan. 30.

BOND OFFERING RESCINDED.—The sale of the \$404,000 5% gold coup. light-extension bonds which was to have taken place to-day (Nov. 28) (V. 99, p. 1550) will not be held because of the agreement with Carstens & Earles.

SHELBY COUNTY (P. O. Shelbyville), Ind.—BOND SALE.—On Nov. 20 the four issues of 4 1/2% 5 1/4-year (aver.) highway-impmt. bonds, aggregating \$35,080 (V. 99, p. 1475) were awarded to C. C. Shipp & Co. of Indianapolis for \$35,109 50 (100.312) and int. There were no other bidders.

SILVERTON, Marion County, Ore.—BIDS REJECTED.—The following bids received on Nov. 16 for the \$14,000 6% semi-ann. paving bonds offered on that day (V. 99, p. 1476) were rejected because of demands for attorney fees: Sweet, Causey, Foster & Co., Denver, \$14,050; H. T. Holtz & Co., Chicago, 14,000; Lumbermen's Trust Co., Portland, 14,000.

SIoux RAPIDS CONSOLIDATED SCHOOL DISTRICT (P. O. Sioux Rapids), Buena Vista County, Iowa.—BOND SALE.—Reports state that the Bank of Sioux Rapids has been awarded at par the \$60,000 5% building bonds offered without success on Sept. 10 (V. 99, p. 845).

SOMERVILLE, Middlesex County, Mass.—TEMPORARY LOANS.—Reports state that loans of \$50,000, maturing April 2 1915 and \$25,000

maturing July 23 1915 have been negotiated with Blake Bros. & Co. of Boston at 4.03% discount and 4.08% discount respectively.

SOUTH FORK SCHOOL DISTRICT (P. O. South Fork), Cambria County, Pa.—DESCRIPTION OF BONDS.—We are advised that the \$15,000 4 1/2% coup. (not \$16,000 as first reported) bldg. bonds recently voted (V. 99, p. 1395) are in the denom. of \$500 and are exempt from taxes. Int. at First Nat. Bank, South Fork. Bonded debt (not incl. this issue), \$37,000; no floating debt. Assess. val. 1914, \$1,837,109. John C. Penrod is Secretary of Board of Education.

SPRINGFIELD, Hampden County, Mass.—LOAN PROPOSED.—According to local newspaper dispatches, this city is contemplating the negotiation of a loan of \$200,000 to be issued in anticipation of taxes.

STAMFORD, Conn.—BOND SALE.—On Nov. 23 the five issues of 4 1/2% coupon bonds, aggregating \$94,000 (V. 99, p. 1476) were awarded to the First Nat. Bank of Stamford at 102.349. Other bids were: R. L. Day & Co., 101.358; Clark, Dodge & Co., 100.5955; Merrill, Oldham & Co., 101.349; Estabrook & Co., 100.310; E. H. Rollins & Sons, 101.048; Richter & Co., 100.552; Jackson & Curtis, 100.957; Hincks Bros. & Co., 100.25; Kissel, Kinnicut & Co., 100.867; A. B. Leach & Co., 100.710; Curtis & Sanger, 100.710.

STILLWATER (Town), Saratoga County, N. Y.—BOND SALE.—On Nov. 24 the \$30,060 3-20-year (ser.) coup. funding bonds (V. 99, p. 1550) were awarded to Geo. B. Gibbons & Co., N. Y., at 100.70 and int. for 5s. The Isaac W. Sherrill Co. of Poughkeepsie bid 100.61 and the Manufacturers' National Bank of Mechanicville offered a flat premium of \$76.

STILLWATER (Village), Saratoga County, N. Y.—BOND SALE.—The \$18,500 Main St. impmt. bonds offered Nov. 24 (V. 99, p. 1476) were awarded to the Isaac W. Sherrill Co. of Poughkeepsie at 100.62 and int.

STRONGHURST, Henderson County, Ill.—BOND OFFERING.—Bids will be received until Dec. 4 by F. Lazear, Village Clerk, for the \$12,000 6% coup. water-works bonds voted Oct. 10 (V. 99, p. 1163). Denom. \$500. Date Jan. 1 1915. Int. J. & J. at Village Treasurer's office. Due \$1,000 yearly on Jan. 1 from 1918 to 1929 incl. No deposit required. No bonded or floating debt. Assessed valuation 1914, \$250,000.

SWATARA TOWNSHIP SCHOOL DISTRICT, Dauphin County, Pa.—BOND OFFERING.—Bids will be opened at 7:30 p. m. Dec. 14 by John M. Erb, Secretary of Board of School Directors (P. O. Harrisburg), for \$17,000 4 1/2% 10-30-year (opt.) school bonds. Certified check for 2% of bonds bid for, payable to R. A. Schulz, School Treasurer, required.

SYRACUSE, N. Y.—BOND OFFERING.—Proposals will be received until 1 p. m. Dec. 1 by M. E. Conan, City Compt., for \$20,000 4 1/2% reg. tax-free Delaware school bonds. Denom. to suit purchaser. Date Dec. 1 1914. Int. J. & D. at trust company mentioned below. Due \$1,000 yearly on Dec. 1 from 1915 to 1934 incl. Cert. check for 2% of bonds bid for, payable to City Compt., required. Bonds to be delivered to purchaser on Dec. 15 at 11 a. m. unless a subsequent date shall be mutually agreed upon, at office of U. S. Mtge. & Tr. Co., N. Y. These bonds will be certified as to genuineness by said trust company and the legality will be examined by the Corporation Counsel of Syracuse, whose favorable opinion will be furnished purchaser. Bids must be made on forms furnished by the City Compt. Purchaser to pay accrued int. Bids must be unconditional.

TAUNTON, Bristol County, Mass.—LOAN OFFERING.—Dispatches state that the Treasurer will receive bids until 4 p. m. Dec. 1 for the redemption of a temporary loan of \$100,000 due Nov. 10 1915 and issued in anticipation of the collection of taxes.

TOLEDO, Ohio.—BOND SALE.—The \$150,000 4 1/2% park-improvement bonds offered without success on Nov. 9 (V. 99, p. 1476) have been disposed of as follows: Stacy & Braun, Toledo, \$43,000; J. C. Bonner & Co., Toledo, \$100,000, and T. L. Clifford, for two clients, \$7,000.

TOMPKINS SCHOOL DISTRICT NO. 1 (P. O. Cannonsville), N. Y.—BOND SALE.—On Nov. 24 \$3,200 4% building bonds were awarded to Thos. S. Doig of Andes and J. B. Gardner of Cannonsville at par. C. M. Scott offered par for 5 1/2%. Denom. \$100. Date Nov. 1 1914. Interest annual. Due \$400 yearly.

TOOLE AND TETON COUNTIES SCHOOL DISTRICT NO. 54, Mont.—BONDS NOT SOLD.—No sale was made on Nov. 14 of the \$1,000 6% 6-10-year (opt.) coupon tax-free building bonds offered on that day. (V. 99, p. 1163).

TOWNSEND TOWNSHIP (P. O. Collins), Huron County, Ohio.—BOND SALE.—On Nov. 21 the \$6,000 6% 4 1/2-year (aver.) coup. road-improvement bonds (V. 99, p. 1243) were awarded to the Huron County Banking Co., Norwalk, at 103.17 and int. Other bids were: Seasegood & Mayer, Cin., \$6,140 00; Ods & Co., Cleveland, \$6,063 00; Hanchett Bond Co., Chic., 6,127 00; First Nat. Bk., Barnesville, 6,026 00; Hayden, Miller & Co., Cleve., 6,106 00; Terry, Briggs & Slayton, Holeton, Cummings & Prud., Toledo, 6,064 80.

TRENTON, N. J.—BONDS PROPOSED.—The City Commission on Dec. 2 will consider an ordinance providing for the issuance of 4 1/2% 30-yr. municipal-hospital-improvement bonds at not exceeding \$40,000. Denom. \$100 or multiples thereof. Int. semi-annual.

TUCSON, Pima County, Ariz.—BOND ELECTION.—An election will be held Dec. 14, it is stated, to submit to a vote the question of issuing bonds aggregating \$239,000.

TULLY TOWNSHIP SCHOOL DISTRICT (P. O. Martel), Marion County, Ohio.—BOND SALE.—On Nov. 25 the \$30,000 5 1/2% 5 1/2-year (aver.) coup. taxable school bonds (V. 99, p. 1395) were awarded to Spitzer, Rorick & Co. of Toledo, it is stated, for \$30,003 50—equal to 100.011.

UTICA, Onondaga County, N. Y.—BOND OFFERING.—Proposals will be received until 12 m. Dec. 1 by A. M. Burke, City Comptroller, for \$40,000 4 1/2% registered tax-free fire-station site-purchase and construction bonds. Denom. to suit purchaser. Date Nov. 1 1914. Int. M. & N. at office of City Treasurer, or upon request of registered holder will be remitted in N. Y. exchange. Due \$2,000 yearly on Nov. 1 from 1915 to 1934, inclusive. Certified check for 1% of bonds bid for, payable to City Treasurer, required. Purchaser to pay accrued interest. Bids must be unconditional and upon forms furnished by the City Comptroller. The favorable opinion of Caldwell, Masslich & Reed as to the legality of these bonds will be on file in the City Comptroller's office before delivery.

VANDERBURGH COUNTY (P. O. Evansville), Ind.—BOND OFFERING.—Proposals will be received until 10 a. m. Nov. 30 (and from day to day thereafter until sold) by C. P. Beard, Co. Aud., for \$3,226 20 5% coup. Flat drainage system bonds. Denom. (8) \$400, (1) \$26 20. Int. J. & J. at office of Co. Treas. Due \$26 20 July 1 1915 and \$400 yearly on July 1 from 1916 to 1923 incl. Cert. check for 10% of bid required.

VIGO COUNTY (P. O. Terre Haute), Ind.—BOND SALE.—On Nov. 21 the \$17,000 6% 6 1/4-year (ditch-impmt.) bonds (V. 99, p. 1477) were awarded to Breed, Elliott & Harrison of Indianapolis for \$17,050 (100.294) and int. The Fletcher-American Nat. Bank of Indianapolis bid \$17,005.

VISALIA, Tulare County, Calif.—RESULT OF BOND ELECTION.—Reports state that at a recent election the question of issuing \$12,000 fire-apparatus bonds carried, while the proposition to issue \$108,000 sewer bonds was defeated.

WAKHIALKUM COUNTY (P. O. Cathlamet), Wash.—BONDS VOTED.—The question of issuing the \$75,000 highway bonds at not exceeding 6% int. (V. 99, p. 1244) carried at the election held Nov. 3 by a vote of 404 to 259. Due on or before 10 years from date of issue.

WARRENTON, Clatsop County, Ore.—BONDS VOTED.—Reports state that at a recent election the proposition to issue \$150,000 water-system-constr. bonds carried. A similar issue of bonds was to have been offered on Aug. 3, but was postponed. See V. 99, p. 493.

WATERBURY, New Haven County, Conn.—BOND OFFERING.—Proposals will be received until 8 p. m. Dec. 21 by Wm. F. Moher, City Clerk, for the following 4 1/2% coup. or reg. taxable bonds: \$300,000 school bonds, second series. Date Jan. 1 1911. Due \$10,000 yearly on Jan. 1 from 1922 to 1951 incl. 100,000 school bonds, third series. Date July 1 1913. Due \$5,000 yearly on July 1 from 1934 to 1953 incl. 75,000 Brooklyn Bridge bonds. Date Jan. 1 1914. Due Jan. 1 1944. Denom. \$1,000. Int. J. & J. at First Nat. Bank, Boston. Certified check for 1% of bonds bid for, payable to City Treasurer, required. Bonds to be delivered on Jan. 11 at above bank. These bonds will be certified as to genuineness by the above Bank and their legality approved by Storey, Thorndike, Palmer & Dodge of Boston, whose opinion will be furnished purchaser.

WEST CREEK SCHOOL TOWNSHIP (P. O. Lowell), Lake County, Ind.—BOND SALE.—On Nov. 21 the \$11,500 5% 7½-yr. (aver.) school bonds (V. 99, p. 1550) were awarded to E. M. Campbell, Sons & Co. of Indianapolis for \$12,000 (104.347) and int.

WETZELL COUNTY, W. Va.—BONDS TO BE SOLD AT PRIVATE SALE.—L. E. Lantz, Secretary (care of Bank of Jacksonburg, Jacksonburg), will receive bids at private sale for the \$25,000 6% 10-30-year (opt.) Grant District Road bonds offered without success on Oct. 1 (V. 99, p. 1084).

WHITE COUNTY (P. O. Monticello), Ind.—BOND OFFERING.—Proposals will be received until 10 a. m. Dec. 5 by A. G. Fisher, Co. Aud., for the following 4½% road-improvement bonds: Denom. \$325. \$6,500 Gustavus Fewell et al gravel-road bonds. Denom. \$100. 6,000 David A. Scroggs et al gravel road bonds in Union Twp. Denom. \$300.

Date Nov. 5 1914. Int. M. & N. Due one bond of each issue each six months from May 15 1916 to Nov. 15 1925 incl.

WHITMAN COUNTY SCHOOL DISTRICT NO. 47, Wash.—BOND OFFERING.—Proposals will be received until 2 p. m. Dec. 15 by H. H. Wheeler, County Treasurer (P. O. Colfax), for \$2,000 1-5-year (opt.) building and improvement bonds at not exceeding 6% interest. Denom. \$500. Date Feb. 1 1915. Interest annually at office of County Treasurer or at fiscal agency of the State of Washington. Certified check or draft for 1% of bonds, payable to County Treasurer, required. Bidders to state whether or not they will furnish the necessary blank bonds. These bonds are issued under the 1909 Session Laws of the State of Washington, page 324, Secs. 1 and 2; also by vote of 68 to 56 at an election held Oct. 24. No bonded debt at present. Warrant indebtedness general fund, \$100. Assessed valuation, \$290,818.

WILKES-BARRE, Luzerne County, Pa.—BOND SALE.—On Nov. 19 \$5,100 5% paving bonds due July 1 1919, were sold, it is stated, at public auction to local investors. The total premium on the entire issue amounted to \$60 65, making the average price about 101.19.

WOOD COUNTY (P. O. Bowling Green), Ohio.—BOND SALE.—On Nov. 20 the \$16,000 6% 3-year (aver.) coup. bridge bonds (V. 99, p. 1477) were awarded, it is stated, to Tillotson & Wolcott Co. of Cleveland at 102.07—a basis of about 5.25% interest.

WOOSTER, Wayne County, Ohio.—BOND OFFERING.—Bids will be received until 12 m. Dec. 22 by Fred E. Faber, City Aud., for \$11,000 5½% water-works-ext. bonds. Auth. Sec. 3939 Gen. Code. Denom. \$500. Date Oct. 15 1914. Int. A. & O. at City Treas. office. Due \$2,000 Oct. 15 1916 and \$1,000 yearly on Oct. 15 from 1917 to 1925 incl. Cert. check for 2%, payable to City Treas., required. Purchaser to pay accrued interest.

WORCESTER, Worcester County, Mass.—BOND SALE.—On Nov. 24 the eleven issues of 4% bonds, aggregating \$881,000 (V. 99, p. 1551), were awarded to Estabrook & Co. of Boston at 100.65—a basis of about 3.89%. Other bids were: Kinsley & Adams, Worcester 100.449 Old Colony Trust Co. and White, Weld & Co., N. Y. 100.295 F. S. Moseley & Co., Jackson & Curtis, Boston 100.28 jointly, Boston 100.149 E. M. Farnsworth & Co., Bost. 100.26 N. W. Harris & Co., Inc., Bost. 100 All bids provide for payment of accrued interest.

YELLOWSTONE COUNTY (P. O. Billings), Mont.—BOND OFFERING.—Bids will be received until 12 m. Dec. 28 by F. E. Williams, County Clerk and Recorder, for \$45,000 Pompey's Pillar Creek bridge and \$32,000 Duck Creek bridge construction 5% 10-20-year (opt.) coup. bonds. Auth. vote of 1827 to 996 and 1836 to 1138, respectively, at the election held Nov. 3. Denom. \$1,000. Date Jan. 1 1915. Int. J. & J. at office of County Treasurer or at Amer. Exch. Nat. Bank, N. Y. Certified check for 5% of bonds, payable to C. H. Newman, Chairman, required with all bids except from the Board of State Land Commissioners. Official circular states that there is no controversy or litigation pending or threatened affecting the corporate existence or the boundaries of the county, or title of its present officials to their respective offices or the validity of its bonds, that the principal and interest of all bonds previously issued have always been promptly paid at maturity and that no previous issues of bonds have been contested. Bonded debt \$205,000. Assessed valuation 1914 (equalized), \$19,793,371.

YOUNGSTOWN, Ohio.—BOND SALE.—The following 29 issues of 5% coup. or reg. bonds, aggregating \$168,700, have been disposed of at par and interest:

Amount.	Purpose.	Purchasers.
\$15,000	City portion of improvement.	Local Firemen's Pension Fund.
\$15,500	Foster St. widening.	Hayden, Miller & Co., Cleveland, O.
\$3,440	Blaine Ave. paving.	Martin V. Hall, New Castle, Pa.
\$3,440	Jackson St. paving.	Local Firemen's Pension Fund.
13,290	Byron St. paving.	Sinking Fund Trustees.
3,775	Kensington paving.	Sinking Fund Trustees.
11,700	Truesdale Ave. paving.	Sinking Fund Trustees.
7,410	Lauderdale Ave. paving.	Miller Bros., contractors.
4,830	Hawthorne St. paving.	Sinking Fund Trustees.
1,155	Carlyle St. grading.	Sinking Fund Trustees.
1,420	Knox St. grading.	Sinking Fund Trustees.
*30,000	City Building.	Various local banks.
2,000	Street-repair bonds.	Local School Teachers' Pension Fund
3,000	Sidewalk and crosswalk bonds	Local School Teachers' Pension Fund
6,000	City portion of improvement.	The Bessemer Limestone Co.
8,000	City portion of improvement.	Firemen's Pension Fund.
2,135	Sherman St. paving.	Sinking Fund Trustees.
5,355	Pratt St. paving.	Sinking Fund Trustees.
2,025	Rigby St. paving.	Sinking Fund Trustees.
4,285	Belleview Ave. paving.	Otis & Co., Cleveland, Ohio.
1,625	Webb St. paving.	Firemen's Pension Fund.
3,090	Augusta St. paving.	Firemen's Pension Fund.
1,905	Ohio Ave. paving.	Youngstown Const'n Co., contractors
1,010	Simon St. paving.	Firemen's Pension Fund.
4,880	Thorn St. paving.	Otis & Co., Cleveland, Ohio.
3,005	Oklahoma St. paving.	Otis & Co., Cleveland, Ohio.
965	Cleveland St. sewer.	Sinking Fund Trustees.
520	Green St. sewer.	Sinking Fund Trustees.
3,850	Flint Hill et al. Sidewalk.	Policemen's Pension Fund.

*The sale of these bonds was previously reported in the "Chronicle." The first twelve issues were offered without success on Aug. 24 (V. 99, p. 626) and the remaining issues were offered without success on Sept. 21 (V. 99, p. 919).

Canada, Its Provinces and Municipalities.

BENITO SCHOOL DISTRICT (P. O. Benito), Man.—BOND OFFERING.—Proposals will be received at any time for the \$3,000 6% school-completion and equipment debentures authorized by vote of 31 to 1 at the election held Nov. 16 (V. 99, p. 1317). Due \$150 yearly for 20 years.

DAVIDSON, Sask.—DEBENTURES NOT SOLD.—Reports state that no sale has been made of the \$2,000 power and \$2,300 hospital 5½% coup. tax-free debentures mentioned in V. 98, p. 1189.

ESTEVAN, Sask.—DEBENTURES AUTHORIZED.—A by-law was passed on Nov. 9 providing for the issuance of \$4,000 sewer debentures, it is stated.

FOREST, Ont.—DEBENTURES AUTHORIZED.—It is stated that the local Council on Nov. 6 passed a by-law authorizing the issuance of \$3,000 electric-light-plant-improvement bonds.

LAMBERTH, Ont.—DEBENTURE ELECTION.—An election will be held Nov. 28, it is stated, to vote on the question of issuing \$4,000 hydro-electric-power debentures.

REDCLIFF, Alta.—DEBENTURES PROPOSED.—Reports state that this city is contemplating the issuance of \$2,300 storehouse and \$2,900 industrial-spur-track debentures.

ST. THOMAS, Ont.—DEBENTURE SALE.—It is stated that the issue of \$36,000 improvement debentures, of which \$28,000 was reported sold in V. 99, p. 1551, have all been sold to local investors.

WATROUS, Sask.—LOAN AUTHORIZED.—Reports state that the Town Council on Nov. 9 passed a by-law providing for the borrowing of \$7,000 from the Union Bank for school and current expenses.

WINDSOE, Ont.—DEBENTURE SALE.—Reports state that the Dominion Securities Corp., Ltd., of Toronto recently purchased \$75,000 hydro-electric power debentures.

YORK TOWNSHIP, Ont.—DEBENTURE SALE.—An issue of \$80,000 5% debentures, maturing in 20 years, has, according to reports, been awarded to Toronto bankers.

NEW LOANS.

\$25,000

Osawatomie City, Miami County, Kansas,
Street-Improvement Bonds

Proposals will be received until 12 o'clock noon of **NOVEMBER 30TH, 1914**, by J. W. Allard, City Clerk, for approximately \$25,000 10-year street-improvement bonds. Certified check for \$500 must accompany each bid. The mayor and Commissioners reserve the right to reject any or all bids.

J. W. ALLARD,
City Clerk.

MUNICIPAL AND RAILROAD BONDS

LIST ON APPLICATION

SEASONGOOD & MAYER
Ingalls Building
CINCINNATI

Accountants

PARK, POTTER & CO.
CERTIFIED PUBLIC ACCOUNTANTS.

New York, Chicago, Cincinnati and London, England
Watertown, N. Y., C. E. Scoville.

AUDITORS FOR FINANCIAL, INDUSTRIAL AND MINING CORPORATIONS.

Investigations, Financial Statements, Periodical Audits and Accounting.

MISCELLANEOUS.

LLOYDS BANK LIMITED

Chairman: R. V. VASSAR-SMITH.
Deputy Chairman: J. W. BEAUMONT PEASE.

(\$ 5 = £1.)

Capital Subscribed -	\$156,521,000
Capital paid up -	25,043,360
Reserve Fund -	18,000,000
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Premiums on such risks from the 1st January, 1913, to the 31st December, 1913.....	\$3,600,334 83
Premiums on Policies not marked off 1st January, 1913.....	767,050 94
Total Premiums.....	\$4,367,385 77
Premiums marked off from January 1st, 1913, to December 31st, 1913.....	\$3,712,602 51
Interest on the Investments of the Company received during the year.....	\$308,419 46
Interest on Deposits in Banks and Trust Companies, etc.....	39,877 94
Rent received less Taxes and Expenses.....	130,212 32
Losses paid during the year.....	\$1,790,888 32
Less Salvages.....	\$233,482 06
Re-insurances.....	320,813 71
Discount.....	47 58
	\$1,236,544 97
Returns of Premiums.....	\$105,033 85
Expenses, including officers' salaries and clerks' compensation, stationery, advertisements, etc.....	650,942 08

A dividend of interest of Six per cent on the outstanding certificates of profits will be paid to the holders thereof, or their legal representatives, on and after Tuesday the third of February next. The outstanding certificates of the issue of 1908 will be redeemed and paid to the holders thereof, or their legal representatives, on and after Tuesday the third of February next, from which date all interest thereon will cease. The certificates to be produced at the time of payment and canceled. A dividend of Forty per cent is declared on the earned premiums of the Company for the year ending 31st December, 1913, which are entitled to participate in dividend, for which, upon application, certificates will be issued on and after Tuesday the fifth of May next.

By order of the Board, G. STANTON FLOYD-JONES, Secretary.

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ASSETS.		LIABILITIES.	
United States and State of New York Bonds.....	\$670,000 00	Estimated Losses and Losses Unsettled in process of Adjustment.....	\$1,806,024 00
New York City and New York Trust Companies and Bank Stocks.....	1,783,700 00	Premiums on Unterminated Risks.....	654,783 26
Stocks and Bonds of Railroads.....	2,737,412 00	Certificates of Profits and Interest Unpaid.....	264,136 25
Other Securities.....	282,520 00	Return Premiums Unpaid.....	108,786 90
Special Deposits in Banks and Trust Companies.....	1,000,000 00	Reserve for Taxes.....	28,905 88
Real Estate cor. Wall and William Streets and Exchange Place, containing offices.....	4,299,426 04	Re-insurance Premiums.....	221,485 06
Real Estate on Staten Island (held under provisions of Chapter 481, Laws of 1887).....	75,000 00	Claims not Settled, including Compensation, etc.....	70,799 43
Premium Notes.....	475,727 45	Certificates of Profits Ordered Redeemed, Withheld for Unpaid Premiums.....	22,556 09
Bills Receivable.....	605,891 79	Certificates of Profits Outstanding.....	7,240,320 00
Cash in hands of European Bankers to pay losses under policies payable in foreign countries.....	177,891 39		
Cash in Bank.....	636,465 49		
Temporary Investments (payable January and February, 1914).....	505,000 00		
Loans.....	10,000 00		
	\$13,259,024 16		\$10,417,796 87

Thus leaving a balance of.....\$2,841,227 29
 Accrued interest on the 31st day of December, 1913, amounted to.....\$51,655 26
 Rents due and accrued on the 31st day of December, 1913, amounted to.....28,378 26
 Re-insurance due or accrued, in companies authorized in New York, on the 31st day of December, 1913, amounted to.....166,830 00
 Unexpired re-insurance premiums on the 31st day of December, 1913, amounted to.....55,903 22
 Note: The Insurance Department has estimated the value of the Real Estate corner Wall and William Streets and Exchange Place in excess of the Book Value given above, at.....450,573 96
 And the property at Staten Island in excess of the Book Value, at.....63,700 00
 The Market Value of Stocks, Bonds and other Securities on the 31st day of December, 1913, exceeded the Company's valuation by.....1,268,075 10
 On the basis of these increased valuations the balance would be.....\$4,926,338 09

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**EDITORIAL
SECTION**

THE PACIFIC COAST.

At a time when the columns of the press are so largely devoted to chronicling the events of a great war, and attempting to prognosticate its results; and when the financial journals are chiefly concerned in discussing, and striving to solve, the many and varied problems arising from conditions created by a world disturbance of such magnitude, there is no little satisfaction in presenting to our readers an issue devoted to so great an achievement of Peace as the Panama Canal, and to a territory so pregnant with possibility in peaceful pursuits as the Pacific Coast of the United States.

Departing from their usual custom, the publishers herein offer an edition which is, except for the statistical departments, composed entirely of contributed articles. In arranging for each of these articles dealing with conditions on the Pacific Coast the publishers have sought, and have been so fortunate as to secure, the co-operation of the individual to whom a consensus of opinion pointed as best equipped and qualified to deal with the special subject assigned to him. The opinions of these contributors are based on experience, not on theory.

As we have become familiar with these various articles, during the process of assembling, co-ordinating, and preparing the edition for the press, we have been particularly impressed by certain points of unanimous agreement in the opinions expressed. As the articles cover a broad range of activity, and emanate from minds working along widely diversified channels, such concordances are significant, and it seems pertinent to direct the reader's attention to them. It may also be well to emphasize the fact that where our contributors unite in a common opinion they are in entire accord with those leaders of commercial thought and activity who are directing the work of intelligent development and substantial progress throughout the entire West Coast territory.

The first of these points in importance is, generally speaking, the last to be brought out in the individual articles, namely: the secure confidence with which the future is awaited—the dominant note of optimism. It is not uncommon to hear, from those but vaguely familiar with conditions on the Pacific Coast, expressions of opinion to the effect that affairs there are in a sad way; that a revival of activity is remote, if not improbable. Such is not, in fact, the case. The Pacific Coast may pause to permit of a re-adjustment of fundamental conditions. In its periods of more strenuous activity, basic economic principles trail, breathless, in the wake of the impetuous optimism and headlong energy which characterize its progress. Re-adjustments are thus rendered necessary. Also, since no human energy is absolutely indefatigable, prodigal expenditures of vital force necessitate occasional recruiting intervals of relaxation. Thus, the Coast may pause—must, indeed—but let none be so fatuous as to believe that it will stop.

The Pacific Coast, in common with the rest of us, has made its mistakes and is suffering for

them; the more keenly in that, during a normal period of rehabilitation and adjustment, events conspire to bring about a time of stress, when the results of all mistakes are magnified, and made peculiarly obvious and painful. That such mistakes are fully appreciated, and that constructive minds are engaged in devising remedies, is the second point which will become apparent in the perusal of the subsequent pages.

The third is: the unanimous recognition of the fact that the future influx of population to the Pacific Coast must be diverted, to as great a degree as possible, onto the land. Commerce may be broadly classified in three elementary divisions: Production, Conversion, and Merchandising, the first including only the development of natural resources and the actual creation of wealth, the second comprehending the treatment of raw materials by manufacture, the third involving the transfer of commodities between men or nations. Activity in the first of these divisions distributes population over the agricultural lands, through the forest areas, and in the mountainous regions. The second and third divisions create cities, either as industrial centers or as logical points of transfer. Both of the latter divisions being wholly dependent upon the first, it is obvious that population should adjust itself accordingly. It is an economic error to rear large cities on the edge of a great potentially productive territory, only a small percentage of which is fully developed. The Pacific Coast logically falls into the first of the three divisions. From the standpoint of its ultimate possibilities, productive development of the Pacific Coast has only been fairly begun, while its cities have grown with an astounding and disproportionate rapidity. Census figures show a much larger percentage of urban population on the Pacific Coast today than in other essentially productive areas in the United States. The Coast may be termed, to coin a phrase, "over-cities," for the time being. The contemplated effort at diversion of population onto the land will gradually correct the error, and the result will be a sounder economic basis throughout the territory.

The fourth point of unanimity to be noted is: that land values on the Pacific Coast have advanced too far, and too fast. It is frequently remarked by those most actively engaged in the Coast's permanent and sane development that the incubus from which the territory has suffered most in the past has been the unscrupulous real estate promoter, colloquially (but aptly) termed "land shark." The operations of those that prey on the credulous were there made so easy and profitable by the alluring possibilities of high returns from irrigated land, that their business extended with such rapidity as to become a serious menace to the prosperity of the territory.

Illustrative of what is being done on the Coast to remedy the situation as regards land values, and to discourage the further activities of the "land shark," witness the sweeping reductions in the price of raw land, and the restrictions re-

garding its sale, which have been instituted by the railroads, and other large land holders, as cited in a subsequent article. A recent decision of Judge Bean in a United States district court in Oregon is likewise apposite for purposes of illustration. The case in point was a suit brought by land purchasers against the sellers, alleging misrepresentation of the productive possibilities of the land. In deciding for the plaintiffs the presiding judge ordered the return of all payments on the contract, together with the costs of the action, stating that the sellers "must know what the land is good for"; belief in its possibilities not constituting a sufficient defense against the charge of misrepresentation. The decision will tend to restrict wild exploitation and prevent sales at prices not based on actual productive value. The adoption of such drastic measures will do much to correct the mistakes of the past, and eliminate the possibility of their repetition.

Much of the publicity that has emanated from the Pacific Coast has been unfortunate in character. Consisting largely of the propaganda of the self-interested, it has been highly bombastic; teeming with hyperbole. It has exaggerated all the attractions, (inventing them when occasion demanded) and carefully avoided any mention whatsoever of any existing difficulties to be encountered. Its tendency has been to attract the invalid, seeking a salubrious climate where an exceptional fruitfulness of soil might offset impaired physical efficiency; the indolent, thinking to obtain a maximum of return for a minimum of effort; the incompetent, hoping that, where a benign nature dispenses special largess, lack of ordinary ability would not be so apparent, nor its results so painful. Such types are a benefit to no community, least of all, perhaps, to the Pacific Coast, where the tremendous amount of development yet to be accomplished demands a little more than an average man's-sized day's work from each inhabitant every twenty-four hours. The failures of such deluded ones have added no small quota to the disastrous results of the operations of the "land shark."

Commercial organizations, variously designated, abound on the Pacific Coast. Many of these owe their origin to the local activities of the traffic department of one of the transcontinental railroad systems, which has indirectly profited by fostering and encouraging them. While these organizations have been laudably energetic and enthusiastic, they are frequently ineffectual, either because badly managed, or because insufficiently informed as to the real needs of the community which they were attempting to serve, or both. Of late, a number of such organizations have undertaken to make a serious study of conditions and conduct development and publicity campaigns with intelligence and efficiency. These are performing a real service to their respective territories. They eliminate misrepresentation, in so far as is possible, and endeavor, by presenting the real facts to prospective settlers, to prevent an influx of indigents and undesirables. The Coast wishes to increase, not

only its population, but also its thought units, and units of energy per square mile.

The real work of development and progress was begun, and is being continued, by men of the largest physical and mental capacity. The hostile Red-man, the weary miles of unknown desert, the difficult mountain ranges, and other obstacles encountered and overcome by the pioneers, precluded the possibility of any but the sturdiest and most courageous reaching the Coast at all in the days of early settlement. Such men have developed the Coast, and, conversely, the Coast develops such men. Undoubtedly climatic conditions are partially responsible, but there is something deeper, more subtle, and more inspiring, at work at man-making on the Pacific Coast. The very vastness of the territory, its great distances, and the sense of limitless expanse which it engenders, seems to demand mental expansion and expansiveness. Magnitude is omni-present on the Pacific Coast. Its mountains are capped with eternal snows, while in its fertile valleys, millions of acres bask in eternal summer. The Coast mentions a chasm as worthy of note; it is thirteen miles wide and a mile deep; a waterfall; it has a sheer fall of half a mile. Trees grow four hundred feet high, and, through apertures made in their base the Coast drives its coach and four. Comparisons superimposing a considerable group of the European countries, with a number of our eastern states thrown in for good measure, on one of the Pacific Coast states, and still leaving a respectable margin, have been worn threadbare to odium. None the less the physical bigness of things is inspirational, and has its own peculiar effect on those to whom such wonders are the commonplaces of their immediate surroundings. Take at random some of the figures which will be found on the ensuing pages: six hundred continuous miles of high tension, steel towered, transmission line; five hundred and fifty thousand horse power; four billion, three hundred million barrels of oil; fifteen hundred and twelve billion, nine hundred million feet of standing timber. The business man of the Pacific Coast must not only deal constantly in such figures in the regular course of routine work; but, to transact his business intelligently, he must be able to comprehend them and their significance. Small wonder that he expands in imagination, looks far into the future, and falls into an expansive habit of mind. Nor can he be severely censured if he grows to be rather cavalier in his treatment of 1.3 inches, or tupence ha'penny.

Rome has sat for centuries on her seven hills, and seen the westward march of empire reach and pass her; Seattle, finding herself somewhat similarly located topographically, decided that hills were bad for business. Visioning an empire to come, she temporarily removed herself from her hills and proceeded to dispense with them by means of the most abundant available commodity—water. The hills were sluiced away onto the tide-flats, where they make excellent factory sites. In replacing herself on the leveled land, Seattle demands quarters so modern that they include a forty-two story office building.

On the hot ashes of one of the most dire municipal disasters in history, San Francisco began her rehabilitation, and in six years has completed it. It requires a search to discover traces of the fire in the bright, modern metropolis at the Golden Gate. These instances are cited only as typical, not as unique. The spirit is the same throughout the entire territory, and even the smallest communities are performing feats proportionately as startling.

The reticent and reserved may take exception to the easy familiarity and blatant local pride of certain types; the ultra-conservative may deprecate the proclivity of certain others to deal continually in extravagant figures and superlatives; there are extremes of every type, and there is logical reason for such idiosyncracies. Speaking by and large, the man that the Coast develops is lovable, stimulating, and wholly admirable. He lives in the open air and sunshine, does big things in a big way, as a casual matter of course, and *he is not afraid*.

Thus we find, through those who speak for it, that the Pacific Coast faces the future with confident optimism. Proud of itself and of its past achievements, it nevertheless fully realizes its mistakes and is endeavoring to rectify them in the most reasonable manner. It seems to be a generally accepted fact, that further immediate

development should be along the lines of production—the increasing creation of wealth. To those working intelligently, conscientiously, and persistently along this line, there is no section of our land that offers a more attractive field.

To the shirker there is nothing offered, west of the Rockies, other than the usual emolument accruing to the indifferent and inferior worker. To the average man, the Coast territory holds forth the certainty of a generous reward for earnest endeavor. But to him in whom lies, either latent or developed, the germ of true commercial greatness; who can think in more than eight figures, and build for more than a hundred years; the one man in ten thousand who may, perhaps, reclaim another Imperial Valley, or bridge another Great Salt Lake—to him there opens a field of limitless possibilities presenting problems and struggles to delight his soul. If he will go to the Coast and identify himself with it; permit the Coast to develop him along the lines that it does develop men; become inoculated with that indomitable spirit that fires those that dwell within its boundaries; make their people his people, and their God his God; take his share of the great work, and solve his share of the great problems; give to the Coast his best, unselfishly, and with true patriotism;—to him the Pacific Coast will return lavish measure of honor and gratitude, and, incidentally, the ransom of a hundred kings.



SEATTLE'S NEW SKYSCRAPER AND MOUNT RAINIER

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THE CANAL AND THE PACIFIC COAST.

FROM a commercial point of view, the main object of undertaking such a work as the Panama Canal is, of course, the shortening of distances for oversea traffic. It is obvious that, given a line of steamships running between two ports, great benefit will arise if the distance to be traversed is halved or considerably reduced. Here it is proposed to make an attempt to estimate the effect of the Panama Canal upon the trade of the Pacific coast of the United States and Canada with Great Britain. The following figures show the saving of distances which will be made by English vessels and vessels of the east coast of the United States when making voyages to Pacific ports. Seattle is, of course, a United States port, but, as it is close to Vancouver, the figures relating to it may be taken as applying to Canada also:—

	New York.	New Orleans.	Liverpool.
To Seattle by Magellan.	13,953	14,369	14,320
To Seattle by Panama.	6,080	5,501	8,654
Distance saved	7,873	8,868	5,666

	New York.	Orleans.	Liverpool.
To San Francisco by Magellan	13,135	13,551	13,502
To San Francisco by Panama.	5,262	4,683	7,836
Distance saved	7,873	8,868	5,666

Thus it will be seen that New York and New Orleans gain a much greater advantage than Liverpool. On the other hand, Jamaica and the other West Indian islands will be brought much nearer the Pacific coast, and, what is a far greater benefit, they will find themselves upon a main trade route instead of being, as hitherto, in a *cul-de-sac*.

From the commercial point of view, trade in the United States ports is the most important to Great Britain, not merely because of the volume of trade between the Western States and Great Britain which goes by sea, but because of the much larger population in the vast districts tributary to San Francisco compared with the population of Western Canada. The population of the three Pacific American States was over 4 millions in 1910, while more than 2½ millions were enumerated in the eight adjacent mountain States; whereas there were less than 1¼ millions in 1911 in the whole of British Columbia, Alberta, Saskatchewan, and the North-West territories. The following table shows, moreover, that though Canada's trade from the Pacific to this country is relatively large, it is now much smaller than from American ports:—

	Entered. Tons.	Cleared. Tons.
Canada—		
Atlantic ports	2,688,448	2,578,993
Pacific ports	93,850	57,618
U. S. A.—		
Atlantic ports	8,451,803	8,806,192
Pacific ports	184,013	115,088

Thus the Canadian Pacific shipping is a larger proportion of the whole, but is not so large as our trade with San Francisco and Puget Sound.

The critical point, however, is not the amount of shipping that now passes between this country and the Pacific, but the amount that will do so when the Canal is open. And in this connection it should be pointed out that there has been a marked decline in shipping between this country and American Pacific ports, and this for two reasons. In the first

place, the competition of trans-continental routes has no doubt diverted traffic from the slow journey round the Horn, and in the second, the export of Western American corn, which was the staple cargo of the old sailing ships from California to Liverpool, has been partially absorbed by the home market. In view of this latter consideration it is a very open question whether the shortening of the journey will succeed in attracting larger quantities of Californian wheat to Great Britain. Puget Sound is also the outlet for timber from the State of Washington, which produces more than any State of the Union, while California is easily the largest petroleum producer in the States. These two commodities are badly needed by this country, and though it is doubtful whether the tolls will be light enough to make it commercially feasible to bring lumber through the Canal, it is quite possible that California might send some of its oil *via* Panama. The trade, however, which is most certain to be stimulated by the shortening of the route is that in fruit, which is one of the chief products of the Pacific coast. The Canal will bring this fruit area as near by sea to the British market as is South Africa.

In the other hand, the growing population of these States affords a market for British goods which has been appreciably affected by the reduction of the tariff.

The effect that the Canal may have upon Canada is, naturally, of paramount interest to Englishmen. One of the main industrial features of the present time is the development of the western portions of Canada, and these are certain to make abundant use of the Canal. Recently, Dr. Vrooman read a paper before the Royal Colonial Institute in which he took a very sanguine view of the country and the advantages which it will derive from the Panama Canal. "Two thirds," he said, "of the future products of Canada are tributary to the western sea." There is no doubt that Alberta and Saskatchewan might easily produce five times as much grain as they are now doing, and may probably do so in the not distant future. Such an estimate is not merely an exercise of the imagination, as is too often the case in forecasts of alleged coming countries; the unoccupied lands are of exactly the same quality as the productive lands, and a stream of immigrants is pouring in; thus the production of Western Canada is certain to increase by leaps and bounds. It is estimated that Alberta has one hundred million of acres suitable for agriculture and less than three million are under cultivation. Saskatchewan, which is considerably larger than France, saw its population increase from 91,000 to 492,000 between 1901 and 1911. It has about eight million acres under cultivation. It is practically certain that these two provinces will ship their grain entirely from Pacific ports when the Canal is opened. Dr. Vrooman urges the people of Canada to be prepared for the vast increase of traffic which he believes is imminent. He estimates that to make adequate docks at Vancouver will take twenty years, and is anxious that works shall be at once begun of "sufficient dignity and importance." Unfortunately, the people of Vancouver do not seem to be awake to the situation. In contrast with this, the port of Los Angeles, which aims at be-

coming the leading port of the coast, has pledged itself to spend \$18,000,000 on its harbour by 1918. But, whether the main traffic passes through the ports of Canada or North America, there can be no doubt that a large proportion of it will pass through the Panama Canal. Another circumstance may be noted; in 1912 only one sailing ship called at Vancouver, and thus practically none of its shipping is inseparably tied to the Magellan route.

San Francisco exports to Great Britain produce valued at £1,500,000 and much of this is likely to go through the Canal, especially as a considerable proportion consists of fruit, salmon, and other canned goods, which will be the better for a quick passage. The figure given above, of course, only refers to sea-borne trade; by far the largest part of California's exports goes by land, and much of this will, in future, be railed to the Pacific and help to swell the Canal traffic. San Francisco will greatly benefit by the Canal. The last Consular Report says: "It is reported that various steamship companies—British, German, Japanese, and others—are making arrangements to run lines through the Panama Canal and make San Francisco one of their ports of call." It is also anticipated that a good many of the emigrants will arrive by Panama, thus avoiding the expensive railway journey from eastern ports. There is, in fact, every reason to expect that the Pacific coast of North America will contribute very largely to the traffic of the Panama Canal, which must inevitably depend for its success mainly upon San Francisco, Los Angeles, and Vancouver. At present the South American coast is not likely to do very much for it.

The competition of the Magellan route will remain, and doubtless will be formidable in the case of lumber and other bulky articles, but the distance is so enormous that Panama can hardly fail to have the preference in most cases, provided that the Canal tolls are reasonable. As regards Oriental ports, the Suez Canal will be, in some sort, a competitor. The Panama Canal will only bring New York 350 miles nearer to Hong Kong, while Great Britain is 1,600 miles nearer that port via Suez than via Panama. So far as the frozen meat trade from Australasia is concerned, shipowners declare that they will make no change in their arrangements in spite of the saving of distance by coming via Panama; for they prefer the colder, and consequently cheaper, route. The Canal route from the Antipodes involves a long slanting journey through the tropics, whereas the route from New Zealand via the Horn takes the shortest possible route across the equator. Since logs of most ships show that when water is entering the ship at 84 degrees F. the refrigerating machinery has to be kept going for 12 to 15 hours a day, against 9 hours a day when the water is entering at 57 degrees F., it is clear that the new route would involve additional expense in addition to the tolls levied for the use of the Canal itself.

Again, a formidable competitor will be the Tehuantepec Railway, which, opened in 1907, runs from Puerto, Mexico, in the Gulf of Mexico, to Salina Cruz, on the Pacific. The through traffic on this line is rapidly increasing, and now amounts to over 700,000 tons yearly. It carries more than double the freight of the Panama Railway, and the figures of the lat-

ter are swollen by Canal material, which will soon cease. The following figures show the difference between the Mexican and the Panama routes:—New York to San Francisco, *viâ* Mexico, 1,173 miles shorter; Liverpool to San Francisco, *viâ* Mexico, 609 miles shorter; New Orleans to San Francisco, *viâ* Mexico, 1,767 miles shorter. But as regards many kinds of merchandise, the Mexico route is likely to compete successfully with the Canal. A writer in the *Economic Journal* estimates the annual cost of the Canal, including sinking fund, at 21 million dollars. "A liberal estimate of receipts from tolls, based on the tonnage of vessels which might have used the Canal in 1909-10, had it then been in existence, places the revenue at something over \$6,000,000 per annum. Therefore, even without taking into account any increase in operating expenses with increased tonnage, the business of the canal must grow to three and a half times the estimated volume of 1919-10 before a profit can be realised." At one time a far more gloomy view was taken of the probable receipts. The eminent United States traveller, Colonel Church, speaking before the Royal Geographical Society, said: "I may say that, with a year of labour, I analysed all the commerce that would possibly go through the Canal if it were open to-day, and I could not make it a million tons." Certainly, this is an underestimate, but it is important to notice the contentions that only 6 per cent. of the area of South America lies on the Pacific slope of the Andes, and that the North American railways may be able to carry freight as cheaply as a ship can carry it from San Francisco to New York by way of Panama. The Canal also will be handicapped, and the United States will be handicapped in their use of it, as long as their mercantile marine continues on its present small scale. Mr. Vaughan Cornish has remarked: "There is at present some ground for the extreme opinion sometimes expressed in the United States that the Canal is being built with American money for the use of Europe—and, one may add, of Japan."

The Canal, in all probability, will disappoint many expectations, for it is such a great work that great results are expected from it, and these can hardly be expected under the present conditions; there must be material to work upon. It should be remembered that a mere saving of distance is not enough to make a waterway successful. To compare small things with great, the Corinthian Canal is little used, although it effected a very considerable saving of distance. But the Canal will have the advantage of serving, in Western Canada, a country which must be one of the chief granaries of the world, and cannot fail to grow very rapidly in population and productiveness. Whereas Panama is not now on a trade route, unless the comparatively insignificant one from San Francisco to Valparaiso may be so described, it will hereafter stand on the convergence of two routes—that from Europe and that from New York—and these two will radiate from Panama into the Pacific to the north and south coasts, and also to Japan, China, and Australasia. It may be long before the tolls become remunerative, but its immediate effect upon commerce will be stimulating, and eventually the Isthmus is likely to become one of the busiest resorts of shipping upon the face of the globe.

**THE PANAMA
CANAL**

The Panama Canal—Its History and Construction

By ISHAM RANDOLPH, C.E., D.E.

Member of the Board of Consulting Engineers for the Panama Canal. Member of the Advisory Board of Engineers 1909. Chief Engineer of the Chicago Drainage Canal During Entire Period of Construction 1893 to 1907. Consulting Engineer 1907 to 1913.

The Panama Canal is an accomplished fact! A section has been torn from the backbone of the Isthmus and the shores, which since time began have stayed the proud waves of the Atlantic of the North and held back the swelling tides of the Pacific on the South, have been cleft to receive the sweet waters of an inland sea, pent up by man and by him to be loosened at his pleasure. The Chagres River is a submissive captive and the way from ocean to ocean has been shortened for the toilers of the sea by eight thousand four hundred and nineteen miles.

Such is the fact but there remains an antecedent history to that fact, and a part of that history is dependent upon "the testimony of the rocks" which testimony the geologists assume to read and impart the facts to their lay brethren. But there are "faults" in rocks and it follows that if there be faults in the text, there must be faults in its rendering by the savant who undertakes it. I think that the rocks of Panama have baffled the geologists and kept their age old secrets and will keep them until time shall be no more. Only "He who knoweth all things" can tell when and how there came to be the narrow strip of land which serves as a bridge joining the two continents of America.

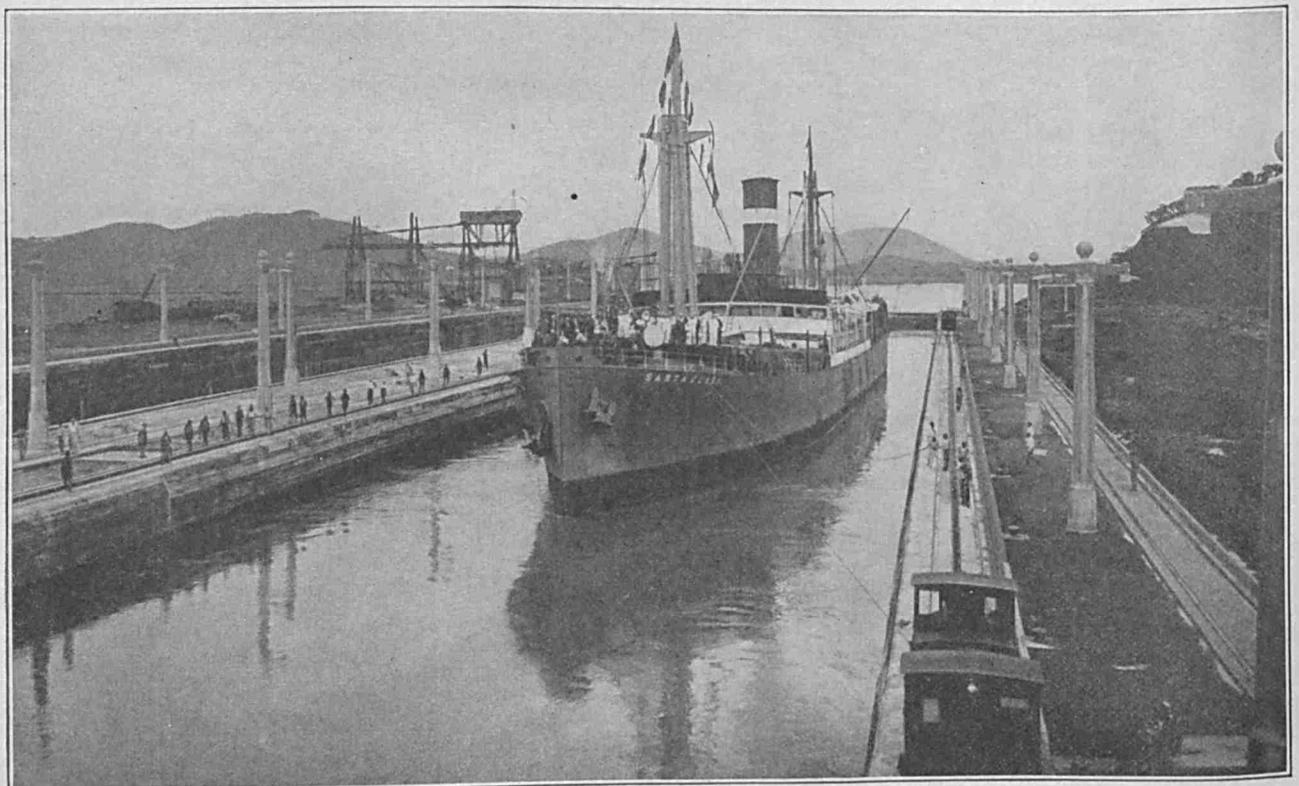
We know that it exists and white men found it out only 422 years ago. And when they found the Isthmus they found it inhabited by a people of different hue and different characteristics, and today we no more know how these people came

to be upon it than we know how the Isthmus came to be a barrier between the world's greatest oceans.

He who essays to write history which antedates his own existence, or if it be contemporaneous and not coming within his personal knowledge, is dependent upon what others have written or what they have told him, for what he accepts as historic fact and records as truth to be accepted by those who come after him. The historian should be a delver after truth; old archives should be studied and the weight of evidence carefully considered in the light of reason and of probability before ancient history is presented to modern credulity and modern history should stand the test of rigid cross-examination; its witnesses should have their veracity tested by the most rigorous standards.

But some who write of history need not be historians in the strict sense of the term, for the work has often been so well done by others that he can "reap where he has not sown" and gather of the harvest made ready for him, and that is my fortunate situation with regard to all the ancient and some of the modern history of Panama.

For the purposes of this paper, ancient history long drawn out is unessential but ancient history epitomized meets its needs fully; and most admirably have these needs been anticipated by the report of the Isthmian Canal Commission of 1899-1901, Chapter 2, pages 18 to 43. But much



THE FIRST STEAMER TO PASS THROUGH THE PACIFIC LOCKS.

of what is there recorded is irrelevant and beyond the scope of this paper.

Moreover, if the facts of the text can be presented in fewer words to meet our need, that economy in language will be practiced.

"When Columbus left Spain in 1502, on his fourth and last voyage, his intention was to go still further westward and endeavor to find a strait that would lead to India. He would thus complete his great discovery and demonstrate the correctness of the theories upon which his expeditions had been undertaken. He reached Honduras and followed the coast line to Darien, but long-continued and severe storms, the hostile attitude of the Indians, and the discouragement of his followers interfered with his plans and progress, and with sorrow and regret he turned toward Hispaniola with his shattered ships before he had accomplished the long-hoped-for result, in which, however, his faith was not abated. When he died on the 26th of May, 1506, he was still fully satisfied that his discoveries were in the eastern part of the Old World, and never fully realized the extent and grandeur of his achievements."

The early discoverers were all searching for a strait giving direct passage to the East (Cathay).

Finally they came to the realization of the fact that a new world had been discovered and the strongest confirmation of this fact was afforded "in September, 1513, by Vasco Nunez de Balboa, then governor of a province in Darien known as Castilla del Oro," who organized an expedition to go in search of a "great sea, beyond the mountains," of which the Indians had told him.

"He crossed from Santa Maria de la Antigua, the capital of his province, a city founded in 1509 or 1510, near the Atrato River, to a point near Caledonia Bay, where Acla was afterwards built; thence he proceeded with a considerable force of Spaniards and Indians across the divide, and on the 25th day of the month reached a high ridge above the gulf which he named San Miguel. Advancing beyond his companions to a favorable elevation, he was the first European to behold the great ocean to the south, which he called the South Sea, from the direction in which he viewed it." "Four days later he entered the sea and with great ceremony claimed it by right of discovery for his royal master, the King of Spain."

The narrative goes on to tell of Balboa's ambition to discover yet more lands; how he caused the timbers for four brigantines to be framed on the Atlantic coast; how he compelled the natives to transport these timbers to the Pacific Coast; how the first lot of timbers was swept away by flood; how he again caused the timbers for four brigantines to be framed on the Atlantic coast and transported by the natives to the Pacific to be successfully framed and launched. This was cruel and deadly work for the Indians and "Bishop Quevado testified before the Spanish Court that 500 poor wretches perished in this work, while Las Casas says the deaths were nearer 2,000 in number." But Balboa was superseded by Pedro Arias de Avila, better known as "Pedrarias." The jealousy of the supplanter caused him to charge Balboa with treasonable conduct and after a form of trial he was condemned and beheaded in the latter part of 1517. Thus was meted out to him the decree promulgated after the ark rested on Mount Ararat, "Whoso sheddeth man's blood by man shall his blood be shed."

The city of Panama was commenced in August, 1517, and in September, 1521, it was made a city by royal decree, with special privileges and a coat of arms. It became the Pacific terminus of a line of posts and a road was at once constructed via Cruces on the Chagres River to Acla, which was the Atlantic port until the distinction and the

profit was, in 1597, transferred to Porto Bello. This highway was paved and, according to some accounts, it was only wide enough for riders and beasts of burden, but Peter Martyr says that two carts could pass one another upon it.

"The value of this interoceanic communication increased every year. After the conquest of Pizarro vast quantities of gold and silver were brought from the mines of Peru to Panama, carried across the Isthmus on the King's horses, kept for that purpose, and transported from the eastern terminus of the paved way in royal galleons to Spain."

"The importance of a maritime connection and the discouraging results of the efforts to discover a natural channel between the two oceans suggested to many minds the idea of a ship canal. * * * According to one authority, Charles V. directed that the Isthmus of Panama be surveyed with this purpose in view as early as 1520. In February, 1534, a royal decree was confirmed directing that the space between the Chagres and the Pacific be examined by experienced men, and that they ascertain the best and most convenient means of effecting a communication between the navigable waters of the river and the ocean and the difficulties to be met in the execution of such a project. The Governor, Pascual Andagoya, reported that such a work was impracticable, and that no king, however powerful he might be, was capable of forming a junction of the two seas or of furnishing the means of carrying out such an undertaking."

Enough history has now been quoted to show that the seed of the Panama Canal was sown 394 years before the canal bloomed into existence. Was there ever another aquatic plant of such slow growth?

The City of Panama was captured by Sir Henry Morgan in February, 1671, and on the 24th day of that month it was burned. Two hundred and forty-one years and one day later the present writer saw the ruins and took pictures of some of them.

The present city of Panama occupies a site about seven miles west of the original city and it was commenced January 21st, 1673. This I learn from the "Canal Zone Pilot."

But to return to my text book. On page 28, I read:

"No actual progress in the way of establishing a maritime communication from the Atlantic to the Pacific had been made during the three hundred years of Spanish occupation. Baron Von Humboldt, who visited New Spain about this time and took a great interest in this subject, deplored the lack of accurate knowledge of the physical features of the isthmian country. * * * The publications of Humboldt were extensively read and revived the interest of the commercial nations of the world in this subject. The Spanish Cortes was aroused to action and in April, 1814, passed a formal decree for the construction of a canal through the peninsula for vessels of the largest size and provided for the formation of a company to undertake the enterprise, but it led to no results and Spain's opportunities to obtain the glory of opening this great highway for the commerce of the world terminated in 1823 when the last of her Central and South American provinces succeeded in establishing their independence."

I could go on quoting from the chronicles to which I have resorted for my ready made history many interesting statements but I do not think it well to burden this paper with a record of all of the abortive attempts to bring about the building of an Isthmian Canal between 1814 and 1869; and I only resume at the latter date because the data about that period gathered by Commander Selfridge and reported to the Congress of the United States were brought to my attention some time in the mid-nineties.

The demand for transportation facilities across the Isthmus became so imperative that capitalists determined to build a railroad and reap the harvest which their shrewdness foresaw. In May, 1847, one Mateo Kline secured

a franchise for such a railroad and in December, 1848, this franchise was transferred to Aspinwall, Stephens and Chauncy who, with their associates, organized the Panama Railroad Company, commenced work in 1849, and opened the road for traffic early in 1855. The Atlantic terminus on Limon Bay was Aspinwall—later the name was changed to Colon—and the Pacific terminus was Panama. The length of the road was $47\frac{3}{4}$ miles. Tradition has it that in building this railroad, a life was sacrificed for every cross tie in it, so great was the mortality among the workmen. Were this tradition true, it would mean that the road cost about 150,000 human lives in the six years spent in building it. In flat contradiction of the tradition is the fairly well authenticated fact that at no time were more than eight thousand men employed in building the road. It is interesting to note that the ties used in building the Panama Railroad were of *lignum vitae*, and that they were still in use after nearly sixty years' service when the rising waters of Lake Gatun buried them from sight.

In 1869 General Grant became President of the United States and in his first message to Congress "commended an American canal on American soil to the American people."

"Congress promptly responded to this sentiment by adopting a joint resolution providing for further explorations of the isthmus by officers of the Navy, and Admiral Ammen, as Chief of the Bureau of Navigation, was authorized to organize and send out expeditions for this purpose. In March, 1872, a further resolution was adopted for the appointment of a commission to study the results of the explorations and to obtain from other reliable sources all available information regarding the practicability of the construction of a canal across the American continent. The President appointed on this Interoceanic Canal Commission Gen. A. A. Humphreys, Chief of Engineers, United States Army; C. P. Patterson, Superintendent of the Coast Survey, and Commodore Daniel Ammen, Chief of the Bureau of Navigation of the Navy."

In February, 1876, "after long, careful and minute study of the several surveys of the various routes across the continent," this Commission reported

"that the route known as the 'Nicaragua route' beginning on the Atlantic side at or near Greytown; running by canal to the San Juan River; thence * * * to * * * Lake Nicaragua, from thence across the lake and through the valleys of the Rio del Medio and the Rio Grande to * * * Brito, on the Pacific coast, possesses, both for the construction and maintenance of a canal, greater advantages and offers fewer difficulties from engineering, commercial and economic points of view than any one of the other routes shown to be practicable surveys sufficient in detail to enable a judgment to be formed of their respective merits.

This report was not transmitted to Congress until April, 1879, when it was called for by a resolution of the Senate. It is in print as "Senate Ex. Doc. No. 15 46th Congress, First session."

Having back of him French support, Lieut. L. N. B. Wyse, in May, 1876, entered into a contract with the Columbian Government to build a canal across the territory of the Republic. In May, 1878 this contract was so modified and extended as to give the promoters the exclusive privilege, for a period of ninety-nine years, of constructing the canal covered by the original contract without any restrictive stipulations other than those safeguarding the rights and property of the Panama Railroad. The general

route of the proposed canal was to be determined by an international congress of engineers to be assembled not later than 1881.

Accordingly, the International Scientific Congress convened in Paris in May, 1879, with a membership of 139 and their decision was in favor of the route from Colon (Aspinwall) to Panama.

The Wyse concession was transferred to "La Compagnie Universelle du Canal Interoceanique de Panama," better known in the United States as the Panama Canal Company. Ferdinand de Lesseps was President. The Wyse concession was purchased from its holders by this new company with the high sounding name for 10,000,000 francs. The purchasers then proceeded to sell 600,000 shares of stock of 500 francs each.

Two years were devoted to surveys and examinations and preliminary work. The plan adopted was for a sea level canal 72 feet wide on the bottom and a navigable depth of 29.5 feet. The volume of excavation computed for this canal was 157,000,000 cubic yards. The center line elevation at the summit of the Culebra cut was 333 feet above the sea level. The cost of this plan as estimated by DeLesseps in 1880 was \$127,600,000.00 and the time required for construction was given as eight years. Work on this project continued until 1887. By that time DeLesseps had to admit a fact, which had long been manifest to others, namely; that with the resources available, the canal could not be carried through at the sea level. A provisional change was made to a lock type of canal for which the water for the summit level was to be provided by pumping. Work under this plan was carried on until 1889 when the company became bankrupt and was dissolved by a judgment of the "Tribunal Civil de la Seine" on February 4th of that year and a liquidator was appointed by the court to take charge of its affairs. The liquidator gradually reduced the force employed and suspended work May 15th, 1889.

He thereafter appointed a "Commission d'etudes" composed of eleven Frenchmen and foreign engineers with Inspector General Guillemin, director of the Ecole Nationale des Ponts and Chaussees, at its head. The Commission made a study of the entire project and on May 5th, 1890, submitted a plan for a lock canal which they estimated would cost \$112,500,000.00 to complete and suggested that to cover the cost of administration and financing, this estimate should be increased to \$174,600,000.00. The old company and the liquidator had by sale of stocks and bonds raised \$246,706,431.68. The face value of the securities issued to raise this money was \$435,559,332.80. The number of persons holding these securities was over two hundred thousand. There had been excavated in all about 72,000,000 cubic yards and there had been purchased and transported to the Isthmus an enormous quantity of machinery and other equipment valued at \$29,000,000.00. The scandals connected with the old company led to the prose-

cution and conviction of DeLesseps and other prominent persons.

In 1894, the New Panama Canal Company was organized and took over all of the canal property except the Panama Railroad shares which were held for its benefit. Work was resumed on a small scale and continued until June 30th, 1899, by which time the additional excavation amounted to about 5,000,000 cubic yards and the additional expenditures to about \$7,000,000.

The interest of the United States in an Isthmian Canal was manifested by an act of Congress, approved March 3rd, 1899, authorizing the President to appoint that Commission from whose report I have quoted. The men selected by President McKinley for this important task were: John G. Walker, Rear Admiral, United States Navy, President; Samuel Pasco; Alfred Noble; George S. Morrison; Peter C. Hains, Colonel United States Corps of Engineers; William H. Burr, O. H. Ernst, Lieut. Colonel, United States Corps of Engineers; Lewis M. Haupt; and Emory R. Johnson.

The members of the Commission convened in Washington on June 15th, 1899, and immediately began the work for which they were appointed. The scope of their investigations embraced the following subjects:

1. The Nicaragua route.
2. The Panama route.
3. Other possible routes.
4. Industrial, commercial and military value of an inter-oceanic canal.
5. Rights and privileges.

Later in the division of the duties, number one was assigned to Mr. Noble, Mr. Burr and Colonel Hains; number two to Mr. Burr, Mr. Morrison and Lieut.-Col. Ernst; number three to Mr. Morrison, Mr. Noble and Col. Hains; number four to Mr. Johnson, Mr. Haupt and Mr. Pasco; and number five to Mr. Pasco, Lieut.-Col. Ernst and Mr. Johnson.

To follow these gentlemen through the ramifications of their researches would be to transcribe their report which will not be attempted and only very prominent features of it will be noted.

At a very early stage of their activities, the Panama Canal became prominent. The new Panama Canal Company made overtures looking to a sale of their bankrupt enterprise. The Commission visited Paris, sailing from New York, August 9th, 1899. Upon reaching Paris, the Canal Company displayed its wares, giving the Americans free access and every facility for examining maps, plans, profiles and all other data relating to the Canal, of which it was possessed. Mr. Maurice Hutin, the Director General, and Mr. L. Choron, the chief engineer, as well as the other officers of the company, extended every courtesy to the visitors and afforded all needed assistance. A special meeting of the Comité Technique was also called to give the Commissioners such oral explanations as they might desire. After making all needed investigations the Commission returned to New York, sailing from an English port on September 29th, 1899.

On January 6th, 1900, the Commission sailed from New York for Greytown, Nicaragua.

As the outcome of its studies, the Commission submitted its report to the President under date of November 16th, 1901. This report presents estimates of quantities and cost of four "other possible routes" but concentrated its work on the Panama and Nicaragua routes. The other possible routes and their estimates of cost were:

The Sassaedi route.....	\$263,340,000.00
Aglaseniqua route	283,440,000.00
Caledonia route	320,040,000.00
San Blas route	289,770,000.00

I will digress here to make a few personal statements in regard to the San Blas route, or as it was first named to me prior to the submission of this report, the Darien Mandinga route. About the year 1896 during the construction period of the Chicago Sanitary & Ship Canal, a Chicago attorney, named Bliss, called on me and told me that he had become much interested in reading Commodore Selfridge's report on his Isthmian Canal investigations and he asked me if I thought a ship tunnel, such as Selfridge suggested, seven miles long was practicable. I told him that my answer would depend upon the character of the material through which the tunnel was to be bored. He could not tell me what material would be encountered.

Later on, Capt. Robert Wainwright of the First United States Cavalry, called on me one morning and introduced his father-in-law, General Charles Serrell, a retired engineer officer, who was desirous of seeing our work. I took them both over the work and they were greatly interested. As we were returning to Chicago, General Serrell said to me: "I will tell you now why I wanted to meet you. I wish to talk with you about a sea-level canal." "Yes," said I, "a sea-level canal with seven miles of tunnel on it." He seemed surprised and asked what I knew about it. I told him of my talk with Mr. Bliss. "Well," he said, "I can tell you what the mountain is made of; it is granite and the length of the tunnel will be only four and a half miles; and the distance from tide water to tide water only twenty-one miles." He went on to say that he had in his possession the notes of the survey made for and at the cost of Mr. Frederick Kelley of New York and these notes he wished to submit to me and have me examine them. He did submit them to me and they were in good preservation and had all the ear-marks of authenticity. I also went over estimates of quantities and unit prices applied to the work.

General Serrell enlisted the active sympathy of Senator Scott of West Virginia and Mark Hanna. I corresponded with Senator Scott in regard to the matter but had no communication with Senator Hanna. Both Senator Scott and General Serrell advised me that they had aroused President McKinley's interest in the project. The President died, Mark Hanna died, and the last time I saw Senator Scott he was still firm in his conviction that the government had made a mistake in not taking up this project.

To go back to the report of the Commission, from page 51, I quote:

"The Kelley examination, starting from the Pacific, was carried with level and transit up the Chepo and Mamoni rivers across the summit to a point on the Carti, following the valleys of these streams. The Selfridge surveys, starting from the Atlantic side, were carried with level and transit up the Mandinga River, across the divide, and up the Nercalagua River nearly to the divide, while barometrical reconnaissances were made up the Carti River overlapping the Kelley survey. This is the narrowest place on the Isthmus, it being less than thirty-one miles from shore line to shore line and only about two-thirds of this distance from the Atlantic to tide water in the Chepo River. Furthermore, the Pacific harbor is quite as good as that at Panama, while Mandinga Harbor, in the Gulf of San Blas, at the northern end of the route, is all that could be desired."

The Commission, in investigating the cost of the San Blas project, figured the tunnel at \$22,-500,000 per mile, an estimate far exceeding my own computations. They used a unit price of \$5.00 per cubic yard for excavation, which would be all right for headings, but the great bulk of the excavation should be done for about \$2.00 per cubic yard. They figured on lining the entire tunnel with concrete five feet in thickness, estimated to cost \$10.00 per cubic yard.

However, even at the excessive unit costs applied in the Commission's report, the cost of the San Blas route would have been close to \$100,-000,000 less than the cost of the Panama Canal has proven to be. The question would be debatable as to the comparative merits of 4.5 miles of ship tunnel and 1.54 miles of locks. If the world should need another canal across the American Isthmus, the San Blas route would be very tempting, and owners of a canal at sea level with a tunnel of 4.5 miles and a total length of twenty-one miles from tide water to tide water might justify a claim of superiority for their waterway over our waterway of thirty-five miles from tide water to tide water with an intermediate stretch of water elevated eighty-five feet above the sea level.

With this brief digression, I will resume the narrative derived from the report of 1899-1901. That report disposes of "other possible routes" and concentrates on Nicaragua and Panama. On page 173 of the Report, they make a comparison of these rival routes:

"The total length of the Nicaragua route from sea to sea is 183.66 miles, while the total length of the Panama route is 49.09 miles. The length in standard canal section and in harbors and entrances is 73.78 miles for the Nicaragua route and 36.41 miles for the Panama route. The length of sailing line in Lake Nicaragua is 70.51 miles, while that in Lake Bohio is 12.68 miles. That portion of the Nicaragua route in the canalized San Juan is 39.37 miles. The preceding physical features of the two lines measure the magnitude of the work to be done in the construction of waterways along the two routes."

On a previous page is this statement:

"The Nicaragua route has no natural harbor at either end. At both the Atlantic and Pacific termini, however, satisfactory harbors may be created by the removal of material at low unit prices and by the construction of protective works of well-established design. An excellent roadstead, protected by islands, already exists at Panama and no work need be done there, either for harbor construction or maintenance. At Colon, the Atlantic terminus of the Panama route, a serviceable harbor already exists.

On page 174, we find this summation of costs:

"The cost of constructing a canal by the Nicaragua route and of completing the Panama canal without including the cost of acquiring the concessions from the different governments is estimated as follows:

Nicaragua	\$189,864,062.00
Panama	144,233,358.00

For a proper comparison, there must be added to the lat-

ter the cost of acquiring the rights and property of the New Canal Company. This Commission has estimated the value of these in the project recommended by it at \$40,000,000.00."

In the chapter devoted to maintenance and operation, the Commission arrives at the conclusion that this charge will be for

Nicaragua route\$3,300,000 per annum
Panama route 2,000,000 per annum

Covering the negotiations with the officials of the New Panama Canal Company, this statement is presented:

"Much correspondence and many conferences followed, but no proposition naming a price was presented until the middle of October, 1901, and after a prolonged discussion, it was submitted to the Commission in a modified form, on the 4th of November, to be included in its report to the President. The itemized statement appears in an earlier chapter of the report. The total amount for which the company offers to sell and transfer its canal property to the United States is \$109,141,500.00. This added to the cost of completing the work makes the whole cost of the canal by the Panama route \$253,374,858, while the cost of the Nicaragua route is \$189,864,062, a difference of \$63,-510,796 in favor of the Nicaragua route. In each case there must be added the cost of obtaining the use of the territory to be occupied and such other privileges as may be necessary for the construction and operation of the canal in perpetuity. The compensation that the different states will ask for granting these privileges is now unknown."

The final recommendation is stated thus:

"After considering all of the facts developed by the investigations made by the Commission and the actual situation as it now stands, and having in view the terms offered by the New Panama Canal Company, this Commission is of the unanimous opinion that 'the most practicable and feasible route' for an isthmian canal to be 'under the control, management and ownership of the United States' is known as the Nicaragua route."

This report was transmitted to Congress December 4th, 1901.

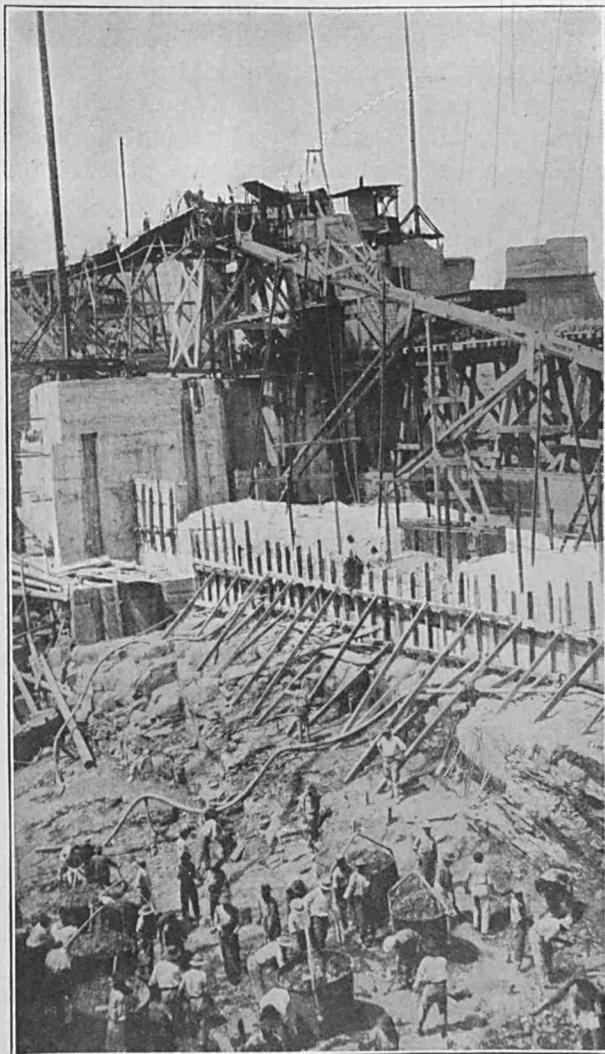
But there was to be a sequel to this report. The New Panama Canal Company realized that if the United States should build the Nicaragua Canal, the last chance of securing salvage from its wreck would be gone and its officers lost no time in opening up negotiations with the Commission, the result of which was that on January 18, 1902, the Commission addressed a further communication to the President of the United States, the first sentence of which reads: "Sir: The Isthmian Canal Commission has the honor to submit the following report upon the proposition of the New Panama Canal Company to sell and dispose of all of its rights, property and unfinished work to the United States for \$40,000,000." This was the salient feature of the supplemental report and it sealed the fate of the Nicaragua canal. The President transmitted the report to the United States Senate.

A description of the prominent features of the canal which this Commission proposed to build at Panama will be deferred until other historic events become a part of this narrative; but before taking leave of the report of 1889-1901, its value to the historian should be pointed out. With its text and its appendices, it fills a volume of 681 printed pages and it treats of such a variety of correlated subjects that it may well be regarded as exhaustive in its discussion of interoceanic canals.

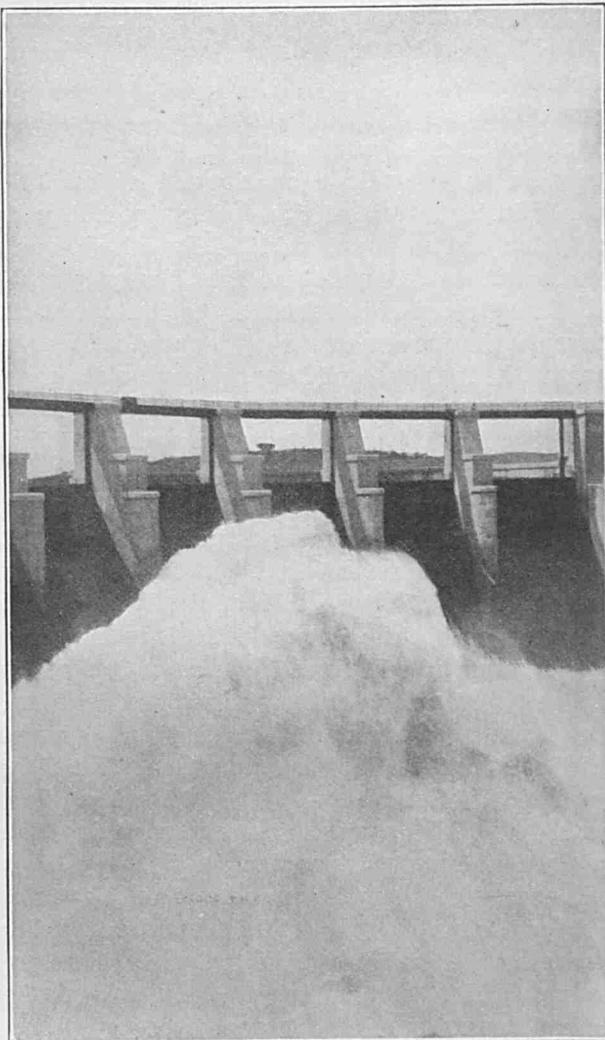
The act of Congress under which the commission, from whose report we have quoted so freely, was appointed was no doubt prompted by an event which aroused the American people to the need of an "American canal on American soil for

American people." That event was the voyage of the United States man-of-war "Oregon," which sailed from San Francisco on the 19th of March, 1898, and dropped anchor at Key West May 24th. She had steamed 14,000 miles in sixty-eight days, was in fighting trim at the end of the voyage and was able to take a prominent part in the destruction of the Spanish fleet under Cervera on July 3rd, 1898. Had the Panama canal been completed when the "Oregon" made this voyage, her distance travelled would have been reduced 8,415 miles and her time reduced thirty-eight days, but a splendid bit of naval history would not have been written.

An Act of Congress, approved June 28th, 1902, empowered the President to purchase from the New Panama Canal Company all of its rights and properties enumerated in the report rendered by the Commission on January 18th of that year at a cost not in excess of \$40,000,000, provided a satisfactory title could be obtained. The President was further authorized to acquire from the Republic of Colombia, upon reasonable terms, a strip of land across the Isthmus not less than six miles wide; "the control of this right of way by the United States to be perpetual and the right to construct the canal within the boundaries of this strip from the Caribbean sea to the Pacific Ocean." The proposed canal to be "of sufficient capacity and depth as shall afford convenient passage for vessels of the largest tonnage and greatest draft now in use, and such as may rea-



DETAIL OF CONSTRUCTION WORK.



CONE OF LEAPING WATER. GATUN SPILLWAY.

sonably be anticipated" with all necessary locks and other appliances as well as safe and commodious harbors at the termini and suitable provision for defense. The sum of \$10,000,000 was appropriated and the President was directed to "cause contracts to be entered into for the construction of the canal, its harbors and defenses, limiting the additional expenditure to the sum of \$135,000,000, to be met by future appropriations." The act also called for the creation of an Isthmian Canal Commission to be composed of seven members.

A treaty was negotiated by Mr. John Hay, Secretary of State, with Mr. Herran, representing the government of Colombia, under the terms of which the United States would acquire the right to construct the canal. This treaty was ratified by the United States, but on August 12th, 1903, was rejected by the Colombian Congress. The Department of State of Panama had long been straining at the tether which held it to Colombia, as frequent attempted revolutions had shown. The year 1902 had been one of internecine strife; one incident of which was the sinking in the Bay of Panama by the insurgents of the Colombian gun boat "Lautaro." The government's chief military representative on the Isthmus, General Carlos Alban, went down with the ship. One mast of this vessel was still visible above the surface in 1909. The strife of 1900-1902 terminated on the 21st of November 1902, when a treaty of peace between the government and the "Liberals" was signed on board the United States bat-

the ship "Wisconsin" in the harbor of Panama.

With such a history as a background, it is easy to understand the alacrity with which the citizens of Panama seized what seemed to be the psychologic moment to throw off the yoke of Colombia, as was done on November 3rd, 1903. The fullest account of the events preceding the secession of Panama to which I have had access, is found in the "Canal Zone Pilot" on pages 233-35. The names of the men in the junta who engineered the movement are given and it is stated that in the last days of August they held a meeting in New York. It is also stated that one of the junta, Mr. J. Gabriel Duque was sent to Washington and what purports to be an interview with Mr. Hay, Secretary of State, is given. Mr. Hay is reported to have said among other things, "Of course, you understand that if there is a revolution, the United States will keep the Isthmus open and allow no fighting near the railway. If there is to be any, it will have to be done before our marines get there." Whatever the precedent facts may have been, when the revolution occurred, the United States Navy was represented at Colon by the S. S. "Nashville"—Commander John Hubbard — which arrived November 3rd. One hundred and ninety-two men, said to be all he had, served to keep the peace and on November 5th the Colombia troops, five hundred strong, whose arrival on November 3rd on a chartered steamer and a Colombian gun boat is described in the "Canal Zone Pilot," evacuated the Isthmus. The officers in command of this repressive expedition went to the City of Panama directly after landing at Colon. These officers, Generals Tovar and Amaya, were received with military honors, disguising the trap into which they had hastened, and that afternoon they were arrested and imprisoned, but they were released in time for their return to Colombia with their commands. The new Republic was recognized by the United States on November 6th, 1903, just three days after the revolution was started.

Mr. Philippe Bunau-Varilla was designated by the new Republic as its envoy extraordinary and minister plenipotentiary to the United States, and a treaty known as the Hay-Bunau-Varilla treaty was negotiated, ratified by the Republic of Panama December 2nd, 1903, and by the United States on the 23rd of the following February. Under this treaty, the United States acquired in perpetuity possession of a zone of territory extending across the Isthmus, ten miles in width, five miles on each side of the center line of the canal. Like control and use was also granted for any other lands or waters outside of the zone which might become necessary or convenient for the work. For the property and rights so conveyed, the payment by the United States was \$10,000,000 and a further annual payment to begin nine years after the ratification of the treaty, of \$250,000.00. On April 23rd, 1904, the stockholders of the New Panama Canal Company formally authorized the sale of the Company's property to the United States for the sum of \$40,000,000. The transfer of this property was

made May 4th, 1904, to Lieut. Mark Brooke, Corps of Engineers, U. S. A., detailed for that duty.

The President appointed the Isthmian Canal Commission authorized by the act of June 28, 1902, and the Commission held its first meeting March 22, 1904. The members of this Commission were:

Rear Admiral John C. Walker, U. S. Navy (Retired),
Chairman.
Major General George W. Davis, U. S. Army (Retired).
Mr. William Barclay Parsons, C. E.
Mr. William H. Burr, C. E.
Mr. Benjamin M. Harrod, C. E.
Mr. Carl Ewald Grunsky, C. E.
Col. Frank J. Hecker.

On May 6th, Mr. John F. Wallace was appointed Chief Engineer. He assumed his duties June 1st.

On May 9th, the President, through the Secretary of War, placed the government of the Canal Zone in charge of the Commission with power to enact and enforce such laws as in its judgment were required to insure order and justice. He appointed Major General George W. Davis, Governor.

When the transfer of the New Panama Canal Company's properties was made that company had about seven hundred men at work. The Commission decided to continue the work then in progress and to increase the force gradually. The most vital question confronting the Commission was that of health. During the French occupation, the mortality among employees had been appalling.

Col. William C. Gorgas had been so successful in producing sanitary conditions in Havana during the American occupation that he was selected to carry on a like work in the Zone.

Omitting the details of alignment, the lock canal planned by the Commission of 1899-1901 may be concisely described as follows:

Total length from six fathom line in Limon Bay to deep water in Panama Bay, 49.09 miles.

Subdivision of Channel	Description	Miles	Cost
Colon entrance and harbor	500 ft. wide side slope 1 on 3	2.39	\$ 8,057,707
From Harbor to Bohio Locks	Width 150 ft.	14.42	11,099,839
Bohio Locks	2 lifts, double flight, 84' wide, 740' long, 35' deep over miter sill	.35	11,567,275
Lake Bohio	Elevation 85' above mean tide area 38.5 sq. mi.	13.61	2,952,154
Obispo gates	Designed for use in case of need to drain Culebra cut.		295,434
Culebra section	Bottom width 150' side slopes 1 on 1	7.91	44,414,460
Pedro Miguel Locks	2 lifts, double flight 84' wide, 740' long, 35' deep over miter sills	.35	9,081,321
Pedro Miguel Level	Elevation of water 28' above mean tide	1.33	1,192,286
Miraflores Locks	1 lift, 84' wide, 740' long, 35' deep over miter sill	.20	5,781,401
Pacific Level	For 4.12 mi. 150' wide, to LaBoca 200' wide, 4.41 mi	8.53	12,427,971
Bohio Dam	Earth dam with core wall, top 100' above sea level		6,369,640
Gigante Spillway	Concrete dam 2,000' long, crest at elevation 85'		1,209,419
Pena Blanca outlet	Artificial channel discharging into Aqua Clara swamp		2,448,076
Chagres diversion	Artificial channel		1,929,982
Gatun diversion	Artificial channel		100,000
Panama Railroad diversion			1,267,500
		49.09	\$120,194,465
	Engineering, police, sanitation and general contingencies, 20%		24,038,893
	Aggregate,		\$144,233,358

The Gigante Spillway scheduled above was to pass the surplus flood waters from Lake Bohio into the Pena Blanca swamp. From this swamp the surplus waters were to flow via the Pena Blanca outlet into the Aqua Clara swamp from which swamp they will flow on through other swamps and outlets to the sea.

The project thus epitomized in description was ready for adoption by the newly appointed Isthmian Canal Commission. This Commission seems to have been an inharmonious organization, judged by the resignations which were soon in order. Col. Hecker resigned November 16, 1904, and all the other members tendered their resignations to take effect at the pleasure of the President. A new Commission was appointed and entered upon its duties April 1st, 1905. The new members were: Mr. Theodore P. Shonts, Chairman; Mr. Charles E. Magoon, Governor of the Canal Zone; Mr. John F. Wallace, Chief Engineer; Rear-Admiral M. T. Endicott, U. S. Navy, Chief of the Bureau of Yards and Docks; Brig. General Peter C. Hains, U. S. Army (Retired); Col. O. H. Ernst, Corps of Engineers, U. S. Army; and Mr. Benjamin Harrod. Mr. Wallace and Mr. Harrod were the only hold-overs from the first board.

During the period between the appointment of the first board and the accession to power of their successors, a strong sentiment in favor of the sea-level type of canal had sprung up. This sentiment was fostered by the Chief Engineer, Mr. John F. Wallace, who had convinced himself of the practicability of constructing a seal level canal. Mr. Wallace resigned June 13, 1905. Mr. John F. Stevens was chosen to succeed him on July 1st, 1905, and immediately entered upon a vigorous discharge of his new duties.

Meantime, Colonel Gorgas had been most assiduous in his efforts to safeguard the health of the inhabitants of the Canal Zone. His war against every unsanitary condition and his effort to exterminate the deadly stegomyia mosquito, as well as the less deadly but still dreadful anopheles branch of the mosquito family, soon produced results. Waters troubled by mosquitos were oiled, swamps were drained, cisterns screened, until a plentiful supply of pure water, drawn from government reservoirs, was distributed over the isthmus through mains and laterals laid by government engineers. The domestic sources of water supply and disease were then done away with. Houses were fumigated, renovated and thoroughly screened. Yellow fever was stamped out and for many years the canal zone has been exempt from the scourge which was so merciless in the years of the French occupation.

The sea level idea appealed so strongly to the American people that a popular demand for it seemed imminent. While the President embraced the hope that a sea level canal was practicable, he decided that a change of plan should not be accepted until he had secured for himself and the Congress of the United States the wisest advice along engineering lines that was procur-

able. He decided to bring about the appointment of an international commission to make a study of the merits of both types of canal, and to that end he requested certain foreign powers to appoint eminent engineers to serve with the Americans whom he would select. King Edward appointed Mr. William Henry Hunter, Mem. Inst. C. E., Chief Engineer Manchester Ship Canal; Emperor William of Germany appointed Mr. Eugen Tincauzer, Koniglich Preussischer Regierungs- und Baurat, Mitglied der Regierung zu Konigsberg i. Pr., Germany; President Loubet of France appointed Adolphe Guerard, Inspecteur-General des Ponts et Chaussées, France; and E. Quellenec, Ingenieur en Chef des Ponts et Chaussées; Ingenieur Conseil de la Cie. du Canal de Suez, France; Queen Wilhelmina appointed J. W. Welker, Hoofdingenieur-Directeur van den Ryks-Waterstaat, the Netherlands. The American engineers appointed by the president to serve with these distinguished foreigners were: George W. Davis, Major General, U. S. Army, Retired, Chairman; Alfred Noble, Chief Engineer, East River Division P., N. Y. & L. I. R. R.; Mr. William Barclay Parsons, Chief Engineer, New York Subway; Mr. William H. Burr, Consulting Engineer, Board of Water Supply, New York City, Professor of Civil Engineering Columbia University, Engineering Expert, Aqueduct Commissioners, New York City; Henry L. Abbot, Brigadier General, U. S. Army, Retired; Mr. Frederic P. Stearns, Chief Engineer, Metropolitan Water and Sewage Board, Boston; Mr. Joseph Ripley, General Superintendent St. Marys Falls Canal; Mr. Isham Randolph, Chief Engineer Sanitary District of Chicago. John C. Oakes, Captain Corps of Engineers, General Staff, U. S. Army was appointed Secretary of the Board of Consulting Engineers for the Panama Canal.

This Board convened in the City of Washington on the first day of September, 1905. A letter from Chairman T. P. Shonts of the Isthmian Canal Commission advised us of the data placed at our disposal and of the arrangements made for our study and investigations. All of the maps, reports of investigations made on the Isthmus by both French and American engineers, and such collateral data as were deemed pertinent, had been assembled for our use. Our studies commenced at once and were pursued with assiduity. On September 11, 1905, on invitation of President Roosevelt, the Board made the pilgrimage to "Sagamore Hill," the President's home and summer capital at Oyster Bay. Our reception was cordial and we were first entertained by a substantial luncheon presided over by our host and enlivened by a flow of conversation and anecdote that was most agreeable. After luncheon we were assembled in a beautiful and spacious room (a recent addition to the home, added for reception purposes) and there addressed by the President.

His opening sentence was: "What I am about to say must be considered in the light of suggestion merely, not as direction. I have named you because in my judgment you are especially fitted to serve as advisors in planning the greatest en-

gineering work the world has yet seen; I expect you to advise me, not what you think I want to hear but what you think I ought to hear." This was followed by a strong plea for a sea-level canal. Many good reasons were advanced in support of that type of canal. (For this address, see page 12 of the report of the Board). We returned to Washington and resumed our studies. On September 27th, we visited the Wauchussetts dam and other important works constructed by the Metropolitan Water and Sewage Board of Boston.

On September 28th, we sailed from New York for Panama on board the S. S. "Havana," accompanied by Mr. T. P. Shonts, General O. H. Ernst, Rear Admiral Endicott and Mr. B. M. Harrod of the Commission. The tenth meeting of the Board was held on board at ten A. M. September 30th. All were present except Mr. Noble, who remained in New York: his familiarity with the Isthmus, gained during his connection with his studies of the Isthmian Canal Commission, 1899-1901, made further examination by him unnecessary. We landed at Colon on the morning of Wednesday, October 4th, and for the next week devoted our time to a study of the physical features of the chosen route and to obtaining the ideas of those engineers on the work whose experience and observation served to give value to their views upon the many questions on which we had to pass. We gave the Chief Engineer, Mr. John F. Stevens, a very exhaustive examination. At its close I asked if he had any suggestion, any plan of his own, that he would like to have embodied in our report. His reply was: "I suppose I am the only man in the United States who has not a plan for this canal. You gentlemen tell me what is to be done and I will do it." He is a man who does things and he did them in Panama.

Those few days spent in close contact with the actual conditions to be met with in doing the work and in study of materials to be encountered in its execution served to convince some of us that the sea level canal project ought not to be adopted. On the third day out from New York on our way down, the Chairman laid before the Board a letter he had received from Mr. C. D. Ward, enclosing a copy of his paper on the "Gatun Dam" which was read before the American Society of Civil Engineers, of which Mr. Ward was a member, on May 18th, 1904. The arguments in that paper appealed so strongly to Mr. F. P. Stearns of our Board that he became a strenuous advocate of its recommendations and, today, the Gatun Dam stands in evidence of the fact that some of man's most prodigious creations have been evolved from the "baseless fabric of a dream." No single feature of the project, as now constructed, was subjected to more persistent and hostile criticism than this earth dam which has now taken its place among the "everlasting hills."

Our time in Panama was almost wholly consumed by the studies for which we had come and the only relaxation enjoyed was at a breakfast given to the Board by Governor Magoon and a

formal call upon the President of the Republic, Dr. Amador. We were received at the Government building with distinguished consideration and our entrance was between files of soldiers in dress uniforms and officers clad in "all the pomp and circumstance of war," who saluted us and led the way to the reception room, where we met the President and his Cabinet. The President was a man of quiet and dignified manners and the brief interview left a pleasant impression.

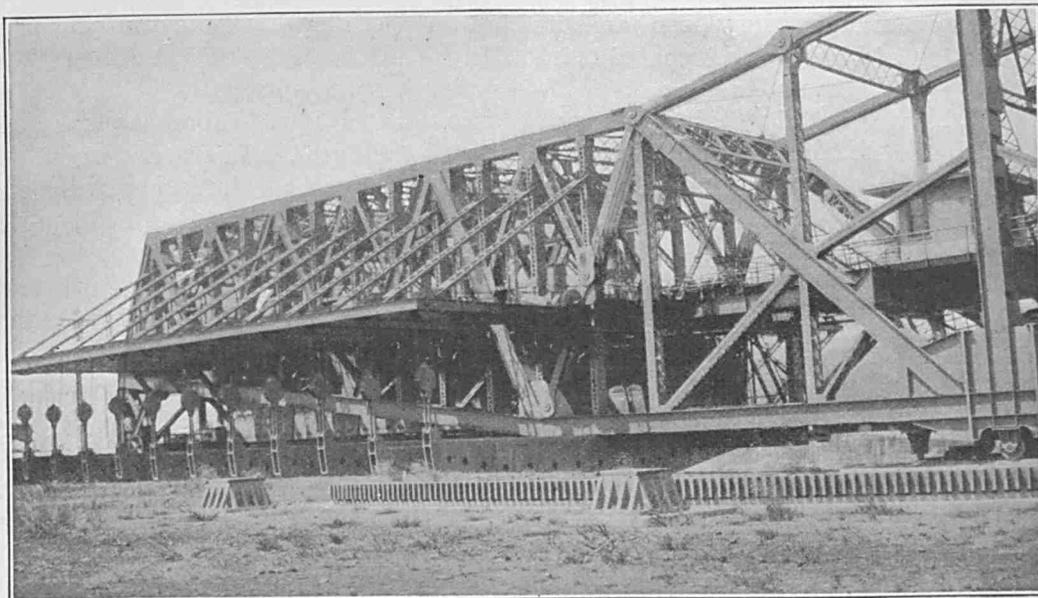
We sailed from Colon for New York on October 11th, on the ship on which we had come. With the crystalizing of our ideas and the strengthening of our convictions came vigorous discussions of the merits of the two types of canal. The five foreign members were a unit for a sea level canal. With them stood General George W. Davis, Chairman, Mr. William H. Burr and Mr. William Barclay Parsons.

Their contention and our counter arguments may be condensed into a brief statement, boiled down from very lengthy discussions indulged in by the advocates of each type of canal. For the sea level, the claim was made that the time of passage through the sea level channel would consume less time than passage through a lock canal. This, we admitted, would be true until the number of vessels reached fifteen per day at which time—as we demonstrated to our own satisfaction—the time would be equal for each type. In a channel of the dimensions which was proposed, no two large vessels would be allowed to pass with both in motion; one must tie up. This meant a loss of time equivalent to that lost in lockage. In the lock canal, moreover, for eighty-two per cent of the distance there would be deep, wide water in which the vessels could move at sea speed, while in the narrow sea level channel the speed must be reduced to six miles per hour or less. Illustrating this discussion, see the following table taken from the report:

Type of ship	Distance between passing places	Type of Canal	Time required for transit across the isthmus				
			10 ships per day	15 ships per day	20 ships per day	25 ships per day	30 ships per day
Type C. 540 ft. by 60 ft. by 32 ft.	Miles 5.0 2.5	Sea level.	8.9	9.6	10.5	11.5	12.9
		...do....	8.6	9.0	9.7	10.3	11.1
		Lock....	9.5	9.6	9.7	9.8	10.0
Type E. 700 ft. by 75 ft. by 37 ft.	Miles 5.0 2.5	Sea level.	11.6	12.8	14.3	16.2	18.9
		...do....	11.1	11.6	12.6	13.6	14.7
		Lock....	10.5	10.7	10.8	10.9	11.1

The capacity for traffic of the two types was discussed. We met the claim for greater capacity in the sea level by citing the fact that in the previous year, the Saulte Ste. Marie lock canal had passed 36,617,699 tons in eight months as against 11,500,000 tons through the Suez canal in the twelve months of 1904. Then the question of the vulnerability of the two types was discussed. The sea level advocates claiming that in time of war the locks could easily be destroyed by hostile agents. We contended that forces could be concentrated for the defense of the locks whereas in a jungle country, such as this canal would traverse, vessels would be at the mercy of guerrillas who could sink them easily. During this discus-

ONE OF THE
EMERGENCY DAMS.
NOTE MOVABLE
PARTS UNDER THE
BRIDGE
STRUCTURE.



sion, Mr. Quellenec received a telegram advising him that the British barque "Chatham" was sunk in the Suez canal, blocking traffic. On November 7th, the following cablegram was received and translated for us by Mr. Quellenec:

"Paris, November 4th, 1905.

Board of Consulting Engineers, Panama Canal, Washington:

Interruption to traffic occasioned by Chatham exactly ten days. Number of vessels having waited twenty-four hours or over to enter, 53 at Port Said and 56 at Suez. Number of vessels that entered canal within twenty-four hours after traffic had been established, 51. Maximum number of vessels that entered canal during twenty-four hours under normal conditions since opening of canal, 36.

(Signed)

BONNET."

So we had in this incident a demonstration, in time of peace, of what could much more easily happen in time of war.

Of course, all of the changes were rung on the danger to ships and locks both, in that type of canals and our condensed answer is found on page 91 of the report:

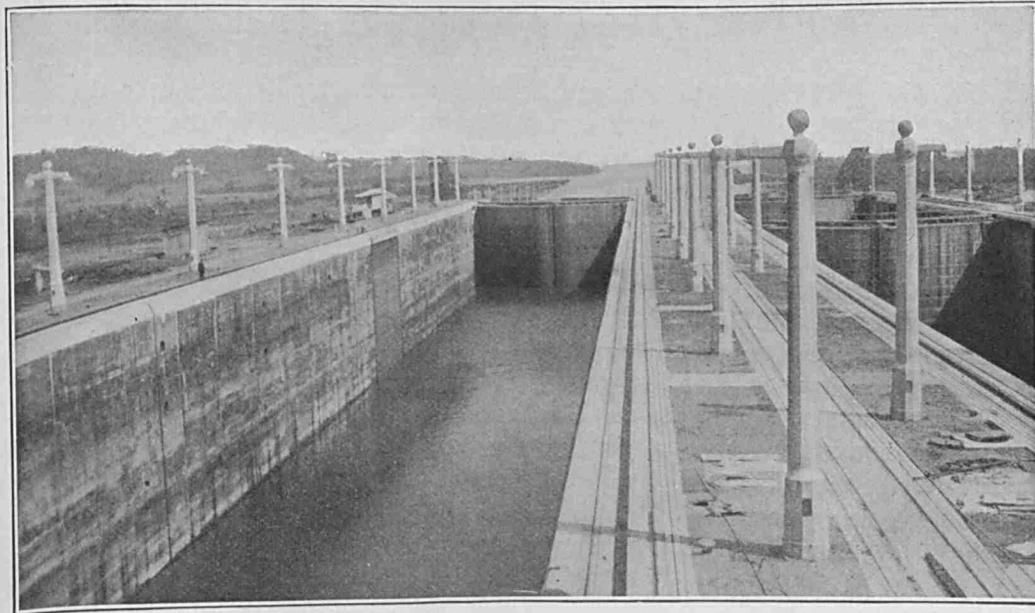
"This canal (St. Mary's Falls) has been in operation a little more than fifty years and a traffic aggregating about 360,000,000 tons, net register, has passed through it with no accidents seriously obstructing navigation."

The locks, as actually built, are equipped with

safe-guarding devices more elaborate and more perfect than were conceived of at the time of these discussions. Of course, the elements of cost and time involved in construction figured largely in the discussion. The majority report gives its estimated cost as \$247,021,200.00, and the time required to complete as twelve to thirteen years. The minority report placed the cost of the lock project at \$139,705,200.00, and the time required to build as nine years. This latter estimate of time has been justified by actual performance but the estimate of cost has been totally eclipsed.

Over the relations of the Chagres river to the problem, the differences of opinion between the proponents of the two types of canal were most radical. The minority could not accept the plans and estimates of the majority for the diversion and control of that river as being adequate. The Chagres river was, and ever would have been, an enemy, a perpetual menace, to the sea level canal; whereas it is the friend and ally of the lock canal, supplying the water which alone made the present construction possible.

The issues between the advocates of the two



SECOND LOCK
LEVEL AT GATUN.
CANAL AND OCEAN
IN THE
DISTANCE.

types of canal having now been presented, a brief description of what was advocated is in order.

Tabular Comparison

Bottom width of channel	Lock Canal with summit level at elevation 85		Sea Level Canal	
	Length Miles	Percent of route	Length Miles	Percent of route
1,000 feet	19.08	38.4	0.00	0.00
800 "	3.86	7.8	0.00	0.00
500 "	12.29	24.7	4.87	9.90
350 "	0.00	0.00	.77	1.60
300 "	7.21	14.50	3.05	6.20
200 "	4.70	9.4	19.47	39.60
150 "	0.00	0.00	20.39	41.50
Locks & approaches	2.58	5.20	0.59	1.20
Total	49.72	100.00	49.14	100.00
Excavation, cubic yards	95,955,000		231,026,477	
Estimated cost	\$139,705,200.00		\$247,021,200.00	
Estimated time required to build	9 years		12 to 13 years	

Owing to the fact that the range in tide in Limon Bay is about two feet between extreme high and low stages and that the extreme range in the bay of Panama is twenty-two feet, it was conceded that a tidal lock at the Pacific end of the canal would be a necessity and the majority provided for such a lock in their plans and estimates, thereby admitting that an absolute sea level canal was not a possible creation on the route chosen.

The minority departed from the project of the Isthmian Canal Commission of 1899-1901 in everything but the elevation of the summit level water-surface, which was established at elevation 85 ft. The Gamboa dam site was abandoned and the Gatun site adopted. The computed area of the Lake of Gamboa was thirty-eight square miles while the area of Gatun lake is 164 square miles. The locks at Gatun are in three flights, dividing the 85 feet of total lift into three lifts of 28.33 feet each. The lock dimensions recommended were: usable width 95 feet, usable length 900 feet, depth over miter sills, 40 feet. The first lock south of the Culebra Cut was located at Pedro Miguel with a descent of thirty-one feet—in a single lift—to Lake Sosa, the water surface of which was fixed at elevation 55 ft. above mid-tide. Lake Sosa was to have been created by building dams across the Rio Grande at LaBoca, joining Sosa hill on the east to San Juan hill on the west side of the river. Then Sosa hill was to be joined to Ancon hill by a dam, and a third dam was to be extended from Ancon hill in the direction of Corozal to high ground on the east side of the Panama railroad. The site selected for the Pacific locks was the west side of Sosa hill, two lifts of thirty-one feet each. All locks were to be in duplicate.

In regard to Lake Sosa and the Pacific terminal locks, the Minority report says: (see pages 78-79)

"If for military or other reasons, the location of the terminal locks on the Pacific at the shore line of Sosa should be deemed inadvisable and the location at Miraflores, three and six-tenth miles inland, be substituted, the cost of the canal would be increased about \$8,000,000.00."

Mention has already been made of Mr. C. D. Ward's communication to the Board recommending the construction of a dam at Gatun. A reprint of Mr. Ward's paper, presented to the American Society of Civil Engineers is given as Appendix I, page 279 of the report. In that paper he speaks of the Gatun dam site having been suggested by Ashbel Welch in 1880. Major Cassius E. Gillette, Corps of Engineers, U. S. A. also brought to the attention of the Board a paper

of his which was printed in the Engineering News, July 27th, 1905, entitled "The Panama Canal, some serious objections to the sea level plan." The most elaborate plans and proposals brought before the Board, and urged with much insistence, were those presented respectively by Mr. Lindon W. Bates and Mr. Philippe Bunau-Varilla. The latter project was for the "Straits of Panama." The Board gave patient attention to the elaboration of their projects by these two gentlemen with the result that the records of its twenty-fifth meeting contains this entry:

"Resolved, That after careful consideration, it is the sense of the Board that the adoption of the plan of either Mr. Bunau-Varilla or Mr. Bates is not expedient."

The Board completed its labors and the majority report favoring the sea level canal was signed by

George W. Davis
William Barclay Parsons
William H. Burr
William Henry Hunter
Ad. Guerard
Eugen Tincauzer
J. W. Welcker
E. Quellenec

Of these signatories, Messrs. Hunter, Tincauzer, Welcker and Quellenec were men who had had previous experience in canal construction and operation.

The minority report recommending the lock canal was signed by

Alfred Noble
Henry L. Abbott
Frederic P. Stearns
Joseph Ripley
Isham Randolph

Noble had built the Poe locks at Sault Ste Marie and had an intimate knowledge of canal requirements. Ripley was Noble's assistant and later, as superintendent of the St. Mary's Canal, had the lock under his charge; Randolph had built the Chicago Sanitary & Ship Canal, at that date the largest (not the longest) artificial waterway man had ever built.

The report of the majority is dated January 10th, 1906. The report of the minority is without date. The Board held its final meeting January 31st, 1906, in the office of Mr. Parsons, 60 Wall Street, New York. Present: The chairman, Messrs. Noble, Burr, Parsons, Abbot, Stearns, Ripley and Randolph. The foreign members had returned to their homes. Both reports were delivered to the Isthmian Canal Commission. That Commission in turn transmitted them to the Secretary of War under date of February 6th, 1906, accompanied by a communication which ends with this statement:

"It is our opinion that the plan proposed by the minority of the Board of Consulting Engineers is a most satisfactory solution of the problem of an Isthmian Canal, and, therefore, we recommend that the plan of the minority be adopted, subject, of course, to such changes as may be found desirable during construction and with the understanding that the works in Limon Bay be deferred for the present. The entrance now in use at that place must for the present be used in any event, in order to secure harbor room for the landing of supplies immediately needed. The question of whether or not it should be changed and what changes should be made can better be determined hereafter."

(Signed)

T. P. Shonts, Chairman.
Charles E. Magoon,
Peter C. Hains, Brig.-Gen. U. S. Army
(Retired).
O. H. Ernst, Col. Corps Eng.
B. M. Harrod.

A minority report favoring the sea level was submitted which ends with these words:

"Believing that a sea level canal substantially according to the project of the Consulting Board would best serve the present and future commerce of the world and the military necessities of this nation, I have the honor to recommend its adoption."

(Signed)

Mordecai T. Endicott.

Mr. John F. Stevens submitted a letter ending thus:

"I therefore recommend the adoption of the plan for an 85-foot summit-level lock canal as set forth in the minority report of the Consulting Board of Engineers."

The Secretary of War forwarded both reports and those of the Isthmian Canal Commission, and the letter of the Chief Engineer, to the President with a communication which concludes:

"We may well concede that if we could have a sea level canal with a prism from 300 to 400 feet wide, with curves that must now exist reduced, it would be preferable to the plan of the minority, but the time and cost of constructing such a canal are in effect prohibitory.

"I ought not to close without inviting attention to the satisfactory character of the discussion of the two types of canal by the greatest canal engineers of the world, which insures to you an to Congress an opportunity to consider all of the arguments, pro and con, reaching a proper conclusion."

(Signed)

William H. Taft,
Secretary of War.

Then comes the transmission by the President to the Congress of the reports accompanied by a message which ends with these words:

"The law now upon our statute books seems to contemplate a lock canal. In my judgment, a lock canal, as herein recommended, is advisable. If the Congress directs that a sea level canal be constructed, its direction will, of course, be carried out. Otherwise, the canal will be built on substantially the plan for a lock canal outlined in the accompanying papers, such changes being made, of course, as may be found actually necessary, including possibly the change recommended by the Secretary of War as to the site of the dam on the Pacific side."

(Signed)

Theodore Roosevelt.

The White House, February 19th, 1906.

Congress acted favorably upon the President's recommendation and the task undertaken by the minority of the Board of Consulting Engineers for the Panama Canal was accomplished. The majority of the Isthmian Canal Commission, the Secretary of War, the President of the United States, and Congress, were converted to the true faith of the lock canal and the tide of public opinion which had set so strongly toward the sea level project reached its flood and receded.

The construction work, wisely and efficiently organized, was being pushed with all the vigor that a born leader of men could inspire. The sanitary measures enforced by Col. Gorgas had banished the scourge of yellow fever and the fear of it. The work was carried on by forces directly employed by the Government, but building the canal under contract was considered advisable and was urged by Mr. Stevens, the Chief Engineer. The method under which bids were invited provided that the Government should supply the equipment and the contractor to supply the labor and supervision thereof and to be compensated on a basis of percentage of cost. On January 13th, 1907, the following bids were received:

George Peirce & Co.....	7.19 per cent
William J. Oliver and Anson M. Bangs.....	6.75 per cent
McArthur-Gillespie Co.	12.50 per cent
North American Dredging Co.....	28.00 per cent

On February 26, 1907, the Isthmian Canal Commission, under orders from the President, rejected all bids. The President gave his reasons

for this in considerable detail. In this letter, he says: "Less than two days ago I received a letter from Mr. Stevens in which he asks to be entirely relieved from work on the canal as soon as he could be replaced by a competent person and that person could become familiar with the work. I have accepted his resignation."

What were the reasons prompting this resignation? Two strong wills clashed and one of these strong wills had back of it the executive power which resides in the head of a great nation.

The Fourth Isthmian Canal Commission was appointed March 7th, 1907 and entered upon the discharge of its duties the ensuing first of April. Its membership embraced Lieut. Col. George W. Goethals, Chairman and Chief Engineer; Major David DuB. Gaillard; Major William L. Sibert; Civil Engineer H. H. Rousseau, U. S. N.; Col. W. C. Gorgas; J. C. S. Blackburn and Jackson Smith. Joseph Bucklin Bishop was made Secretary of the Commission. On July 14th, 1908, Col. F. H. Hodges succeeded Mr. Jackson Smith. Col. Hodges' designation was Assistant Chief Engineer. Avoiding details, it is sufficient to state that the work was segregated into three divisions: First, the Atlantic Division, extending from deep water in Limon Bay to and including the Gatun Locks and Dam, 7.7 miles, Major Wm. L. Sibert in charge; Second, the Central Division, Major D. DuB. Gaillard in charge; including the Culebra Cut, extending from Gatun to Pedro Migul, 31.7 miles; Third, the Pacific Division, including the Pedro Miguel and Miraflores locks and extending to deep water in the Pacific, 11 miles, in charge of Mr. S. B. Williamson, C. E. The efficiency of this organization is evidenced by the work accomplished; in 1907, the excavation was 15,765,290 cubic yards; in 1908, the volume taken out, 37,116,735 cubic yards and that was the maximum year's work. All previous records of accomplishment were broken and higher standards of efficiency established. In 1908, the plans for the canal underwent radical changes which enormously increased the volumes of material to be excavated and largely increased the volume of material involved in lock construction. On October 23rd, 1908, President Roosevelt addressed a memorandum to the Secretary of War authorizing him to have the bottom width of the Culebra cut increased from 200 feet to 300 feet. The report of the Chief Engineer for 1907, page five, says: "The locks are in pairs as now proposed with usable lengths of one thousand feet and widths of one hundred feet." From page seven of the annual report for 1908, I quote:

"The locks are in pairs and since the compilation of the last annual report the projected dimension have been increased so that the width in the clear will be 110 feet, the usable length remaining as heretofore, 1,000 feet. The question of increasing the width was raised by the General Board of the Navy in a memorandum to the Secretary of the Navy dated October 29th, 1907, setting forth that the width of the locks as now fixed, namely 100 feet, is insufficient for probable ships of future construction and that sound policy would dictate an increase to a clear width of 110 feet."

While the Commission, after due consideration was of the opinion that the width already adopted for locks—100 feet in the clear—was ample for

all commercial vessels, and sufficient for any battleship constructed, building or projected, it felt that the wishes of the Navy, as expressed by the General Board, should be followed, there being no insuperable obstacles, and it accordingly recommended that the project be modified as desired. This modification was approved by the President, under date of January 15th, 1908.

While the lock canal had back of it the approval of the Chief Executive and the sanction of Congress, the agitation for a sea level canal was still kept up by some of the newspapers and by one of the leading technical papers. The prodigious accomplishments in the way of excavation shown by the reports from the zone served the proponents of the sea level canal as an argument in its behalf. This agitation became so serious that President Roosevelt decided to meet it fairly and, with that end in view, he arranged with the President-elect to visit the Isthmus and take with him an advisory Board of Engineers. Those whom he appointed were: James R. Freeman, James D. Schuyler, Frederic P. Stearns, Capt. Henry Allen, Allen Hazen, A. P. Davis and Isham Randolph. The armored cruiser "North Carolina"—Capt Marshall—and her consort, the "Montana"—Captain Reynolds—were detailed to take Mr. Taft and his Advisory Board to Panama. Mr. and Mrs. Taft and our Board took passage on the "North Carolina" and the "Montana" acted as escort. The start was made from Charleston, S. C. on the morning of January 25th, 1909. En route for Charleston, I stopped over in Washington for a few hours and paid my respects to the President. He then said to me: "I do not think you will find anything on the Isthmus to change your mind about the type of canal, but if you do, I believe you will have the moral courage to say so; and you may be assured that both Mr. Taft and myself have the moral courage to make any change that is justified by the facts."

We arrived in the harbor of Colon, January 29th, and were met by Colonels Goethals, Gorgas and Hodges, and Majors Sibert and Gaillard and Secretary Bishop. We proceeded to Gatun and there effected a permanent organization by electing Mr. Frederick P. Stearns chairman and Mr. Allen Hazen secretary. We were on the Isthmus eleven days and made most critical and careful examination of every phase of the subject that was the cause of our being sent on this mission. The result was that we were each and every one convinced that no mistake had been made when the lock type of canal was adopted.

One incident occurring during our sojourn is of special interest; namely, the opportunity to get an idea of what the harbor of Colon needed in the way of breakwater protection. When the International Board of Engineers was on the Isthmus, Limon Bay was as smooth as a mirror, but on February 1st a Norther set in and on the next day Mr. Taft and his advisors saw a condition which carried conviction that breakwaters ought to be provided to make the harbor safe.

All of the vessels that were in port when the storm broke had to put to sea for safety.

Another item of interest for entirely different reasons was "un baile" given in honor of Mr. Taft (Presidente electo de los Estados Unidos de Norte America) and Mrs. Taft, by "El Presidente de la Republica y la Senora Obaldia." This function took place in the "Teatro Nacional" on the evening of February 5th. From my diary, I quote:

"Presidente and Mrs. Obaldia stood with Mr. and Mrs. Taft and endured a siege of hand-shaking. After the hand-shaking, all of the high dignitaries went over to the stage area and, to slow music, danced a very stately measure with which none of them seemed very familiar. Then dancing became general."

The National Theatre is one of the items in which the \$10,000,000.00 paid to Panama was invested. It is a very beautiful building and one well suited to such a function as the one of that evening. The feast was lavish and champagne was in flood like the Chagres.

The return voyage commenced in the late afternoon of February 7th. The home port was New Orleans. At Port Eads our party was transferred from the "North Carolina" to the scout steamer "Birmingham." We reached New Orleans on the afternoon of February 11th and, leaving Mr. and Mrs. Taft to enjoy the ovation tendered by the City of New Orleans, we hastened to Washington and on Tuesday, February 16th, we submitted our report to President Roosevelt. He read it over and promptly, in our presence, dictated a message of transmittal to Congress. The reports and message put a quietus on the hopes of sea level advocates.

We now come to a comparison of the estimated cost of a lock canal submitted by the Minority of the "Board of Consulting Engineers" with the actual cost thereof as shown by the report of the Isthmian Canal Commission for 1913, (see page 427 to 429.)

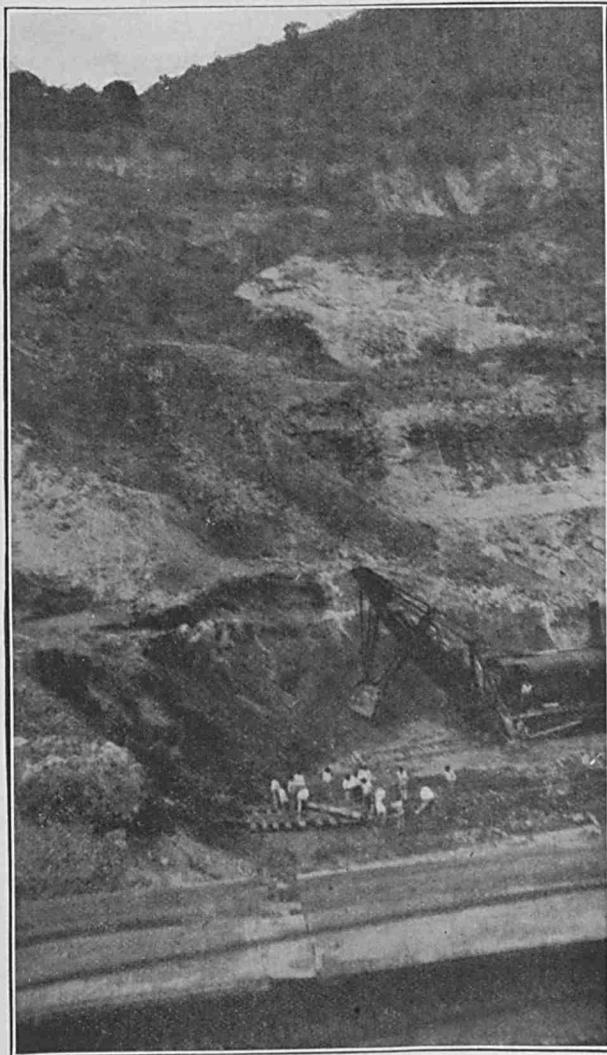
Comparable Items.	Estimates of Minority of Board of Consulting Engineers. Report of 1913.	
Construction account	\$134,965,200.00	\$185,316,095.75
Panama R. R. reconstruction..	4,440,000.00	8,656,061.20
Land damages	300,000.00	617,262.15
	<u>\$139,705,200.00</u>	<u>\$194,589,419.10</u>
Excess cost over estimate of of comparable items.....	54,884,219.10	
	<u>\$194,589,419.10</u>	
Cost of items not covered in the Minority Report:		
Payment to New Panama Canal Co.	\$ 40,000,000.00	
Payment to Republic of Pan- ama	10,000,000.00	
Civil administration	6,393,308.73	
Department of Law.....	44,982.27	
Department of Sanitation....	16,250,164.93	
Hotels & Buildings.....	10,233,182.16	
Water & Sewers.....	6,878,583.68	
Roads & Paving.....	2,726,932.32	
Operation & Equipment of Pan- ama Railroad	5,581,388.79	
Purchase, Improvement & Re- pair of Steamers.....	2,680,112.01	
Docks & Wharves.....	490,548.16	
Moving and Care of French Equipment	2,833.23	
Fortifications	3,114,357.52	
Total items not reported on by the Board of Consulting En- gineers		\$104,396,393.80
Total amount expended.....	\$298,985,812.90	
Total Bond issue authorized by Congress....	375,200,900.00	
Balance of issue available for work in Panama.	76,215,087.10	

These are enormous figures and the expenditures have been so made as to leave no shadow of reproach upon the administrators of the fund. No peasant class in any land laments the loss of the hoarded earnings of their lives of toil, as did

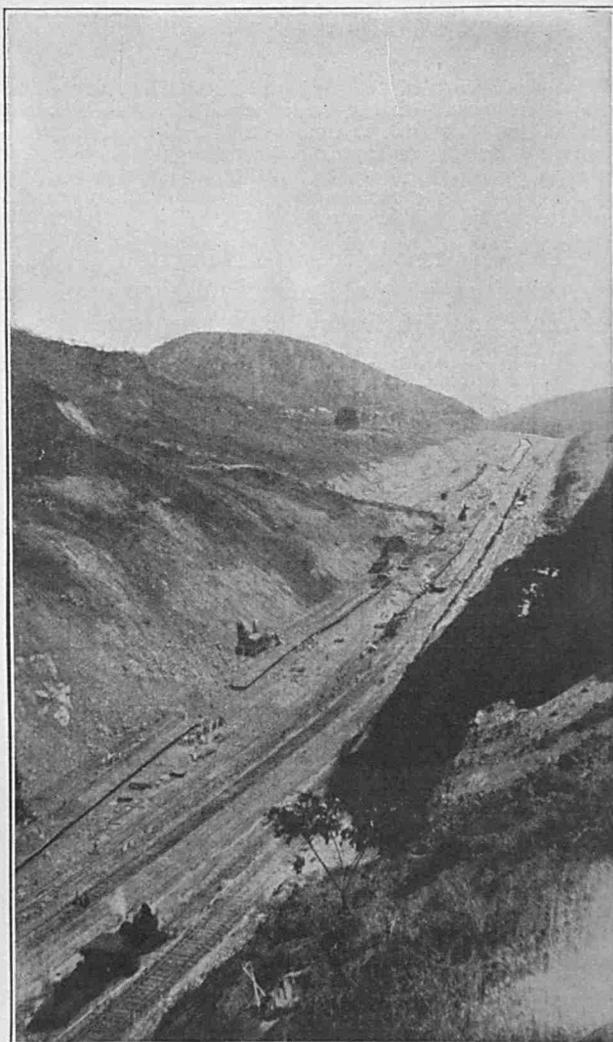
the peasantry of France after work was suspended in 1889. No proud names have been humiliated; and the strong hand of the law need not to be invoked to punish dishonesty on the part of any administrative officer.

The figures show that the actual cost of the work accomplished to June 30th, 1913, exceeded the estimates presented by the minority of the Board of Consulting Engineers by \$54,884,219.10. How is this discrepancy to be accounted for? Largely by the increased amount of excavation. The total yardage to June 30th, as shown by the reports, was 203,383,539 cubic yards. The total yardage estimated by the minority was 104,745,000 cubic yards, of this amount 95,955,000 was channel prism excavation. A part of this increased yardage was due to widening the Culebra Cut from 200 to 300 feet. This increase is stated to have been 13,000,000 cubic yards, which amount added to the 53,765,000 computed for the 200 foot width, gives a total of 66,765,000 cubic yards; but the excavation reported to June 30th, 1913, was 93,305,974, showing that the volume of slides to that date had been 26,540,975 cubic yards. The abandonment of the location of the locks and dams recommended by the minority for the Pacific end of the canal added nearly \$8,000,000.00 to the cost, and the increased length and width and modern equipment of the locks added about \$9,700,000.00.

In his report of 1909, Colonel Goethals gives



CLEARING THE SLIDE.



A SLIDE IN THE CULEBRA CUT.

quite an elaborate analysis of these differences and he ends that analysis with this statement:

"This estimate shows that nearly 50% more work is necessary to complete the canal than was contemplated by the original estimate and that the unit prices, due to labor conditions, cost of materials, and gratuities given the employes have been increased about twenty per cent."

But the end is not yet. The final reckoning with Culebra will only come when the last avalanche of mud, and stone engulfed in it, has been dredged away and what is left of Gold Hill and Contractor's Hill has reached the angle of repose. The report of the Board of Consulting Engineers contains 426 pages; of these pages fourteen are devoted to the geology of the Canal Zone, prepared by Mr. Marcel Bertrand, Professor in the National High School of Mines, Paris, in collaboration with Mr. Philippe Zurcher, Chief Engineer of Bridges and Routes of Communications, of France. This interesting item is taken from page 163, referring particularly to the Culebra Cut.

"The examination of these lands shows that they will stand extremely well, and this fact has been practically proved by the experience of the preparatory trench (cunette), the slopes of which have been exposed to the air for more than two years. Even the marl, which, when in separate pieces, disintegrates and splits easily, resists very well in a mass, and may require, at the most, some local supports to protect it from the action of the atmosphere."

The Isthmian Commission of 1899-1901 proposed to wall this cut and carry the railroad through it on a terrace formed by the wall on the east side. Events have shown that no wall that could have been built would have stood up against the slides.

In his report for 1913, page 23, Col. Goethals says:

"The predictions of the geologist in the last annual report with reference to the Cucaracha slide, that *'The end of activity of this slide is now well in sight, however, because all loose surface stones and clay have almost slid off, exposing several large dikes and flows of basalt which would successfully maintain in place most of the remaining material'* has not been realized."

While there was much to condemn in the business conduct of the French projectors of the Panama Canal, their engineers are deserving of high praise. It is my conviction that, if these engineers had been given the money that was raised ostensibly to build the canal, they would have accomplished that which they undertook, and the commerce of the world would have paid its tolls to the French Company and not to the American Government. These French engineers had to combat the physical problems that nature put up to them. They were handicapped by the rapacity of their own countrymen and they had to meet the "yellow death," against which the medical science of the day had found no defense. The triumphs of medical science made the canal possible and W. C. Gorgas was the great apostle of that science who carried its salvation to Panama.

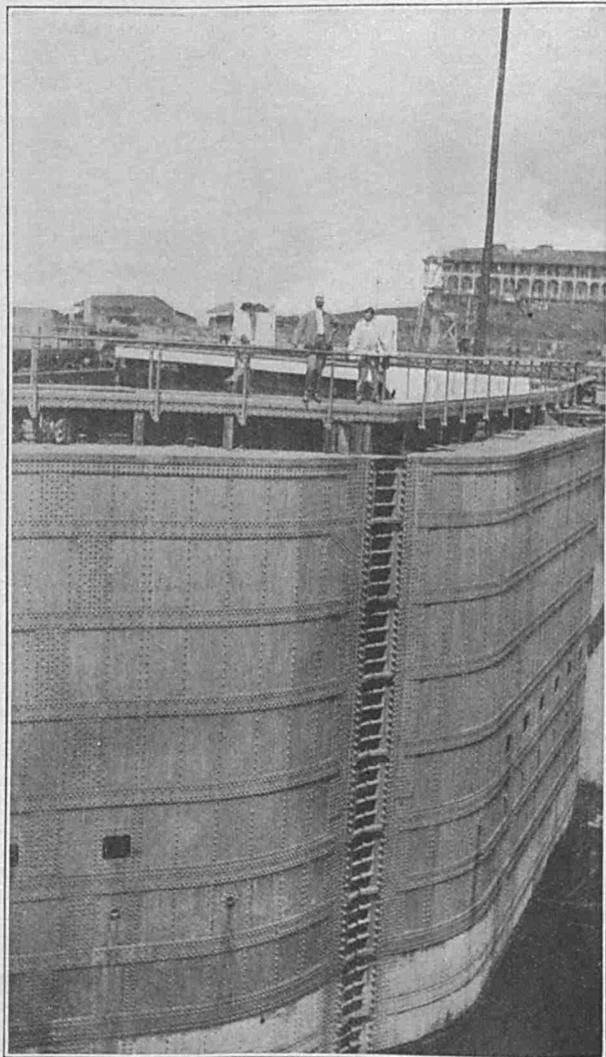
One thinks of the army of workers moving forward under the leadership of skilled and determined men to the final accomplishment of a great work and mayhap forgets that it demanded ability of a high order to keep this army properly

victualled and clothed; conditions so essential to the efficiency of the workers. How admirable these conditions have been under the Quartermaster's department as directed by Lieutenant Colonel C. A. Devol, U. S. A., and by Major Eugene T. Wilson, U. S. A., of the subsistence department, is a part of the proud history of America in Panama.

All American engineers glory, with the American people, in the achievements in Panama of the men of the Corps of Engineers of the United States Army. In many fields, that Corps has built up and sustained a reputation for ability, honor, and integrity, which is a glory to the service; but we civilian engineers would not have our countrymen forget the part that our unbrevetted fellows bore in the building of the Panama Canal. Goethals, Hodges, Sibert, Gaillard will always be foremost in the thought when the building of the great canal is under discussion; but I do not believe that they forget, or for one moment underrate, the support they had from Williamson, Goldmark, Schildhauer, Zinn, Saville, Nichols, Cornish and others, who supplemented their efforts from start to finish. The work stands as a triumph of American accomplishment; builded into it are American imagination, American creative genius, American brains, courage, perseverance and a tithe of the vast resources of our people; a work not for ourselves alone but for all the peoples of all the climes "who go down to the sea in ships and do business in great waters."



LOCK GATE IN COURSE OF CONSTRUCTION.



DETAIL OF FINISHED LOCK GATE.

THE USE AND BENEFITS OF THE PANAMA CANAL

BY EMORY R. JOHNSON, Ph. D., Sc. D.

Professor of Transportation and Commerce, University of Pennsylvania; Member of Public Service Commission of Pennsylvania; Special Commissioner on Panama Canal Traffic and Tolls, 1911-13.

The Panama Canal has been constructed to shorten the length and time of ocean voyages in order thereby to reduce the costs and rates of transportation, to increase the volume of possible shipments, and to enable industry to develop with the expansion of trade. The opening of the canal to the world's shipping makes this an opportune time to inquire what economies the waterway will effect, what use will be made of the new route via the Isthmus and how American commerce and industry will be developed.

The people of the United States are interested, first of all, in the shortening of distances by ocean routes between the two seaboard of the country and in the reduction of freight rates between Atlantic and Pacific ports. Up to the opening of the canal, heavy traffic between the east and west coasts of the United States continued to move via the Straits of Magellan, although from 1907 until stopped by the revolution in Mexico, package freight and some bulky articles were shipped by way of the Isthmus of Tehuantepec. The large fleet which the American-Hawaiian Steamship Company employed in the service via Tehuantepec and the vessels that were operated between the two seaboard of the United States through the Straits of Magellan (as well as numerous ships not previously in the intercoastal service) are now using the Panama route.

The distance between New York and San Francisco via the Straits of Magellan is 13,135 nautical miles as compared with 5,262 miles by way of the Panama Canal, the saving being 7,873 sea miles. The time saved in making the run from New York to San Francisco via Panama instead of by way of the Straits of Magellan is 32.3 days for a 10-knot freight steamer, and 26.8 days for a vessel of 12 knots speed. A passenger vessel of 16 knots average speed (which would, of course, not be operated via the Straits of Magellan) can make the voyage from New York to San Francisco in two weeks, or in fifteen days, if a day be spent at Panama to enable passengers to see the canal and the sights of the City of Panama.

The western section of the United States is hardly less interested in a shorter route to Europe than in a reduction in the distance by water to the eastern part of the United States. West coast products are exported largely to Europe and the transportation costs by way of the Straits of Magellan have been heavy. The Western States, moreover, import large quantities of iron and steel, textiles and other manufactures and have much to gain by the more active competition which European manufacturers, ship-

ping by way of the Panama Canal, will be able to maintain with producers in the eastern part of the United States for the trade of the Pacific seaboard and the section which gets its supplies in greater or less share from the west coast importers and jobbers. The distances via the Panama Canal to San Francisco are 5,666 miles less from Liverpool, and 5,528 less from Hamburg than by way of the Straits of Magellan, the reduction in time of voyage for 10- and 12-knot freight steamers being respectively 23 and 19 days.

The export trade of the west coast of South America is large in volume and of growing importance to the United States and to Europe. For a number of years, 2,500,000 tons of nitrate have been shipped annually from Chile, four-fifths of it being sent to Europe and one-fifth to the United States. There are large exports of Chilean grain and copper, and, after the opening of the canal, a heavy tonnage of high grade ore will be shipped from Chile to the United States and to Europe. At the present time, the west coast South American import and export trade accounts for some 4,000,000 tons of vessel entrances and clearances at the ports of Europe and the eastern seaboard of the United States. Europe has gotten six-sevenths of the west coast South American trade and the United States only one-seventh under conditions that have prevailed in the past. It is expected that the United States will, as the result of the opening of the canal, be able gradually to increase this percentage of the trade of western South America.

Practically all of the trade of the eastern part of the United States with that of western South America will be handled by way of the Panama Canal. The distance from New York to the principal nitrate port has been reduced 5,139 miles, and the time for 10-knot steamers has been shortened 21 days by the construction of the canal. Valparaiso has been brought 3,747 miles, and for 10-knot steamers 15 days, nearer New York by the opening of the canal. Europe naturally will be assisted less than the eastern part of the United States in trading with western South America, by the use of the Panama Canal; but Europe will be about 3,000 miles nearer the nitrate deposits and 1,500 miles nearer the grain fields of Chili in the future than she has been in the past. A 10-knot freight steamer will be able to make the run from Iquique to Liverpool and Hamburg in 11 days less time via the Panama Canal than by way of the Straits of Magellan. From Valparaiso to Liverpool the saving in time by the canal will be about 6 days.

In building the Panama Canal the people of the United States were concerned, first of all, with the reduction in the cost of transportation between the Atlantic and Pacific seaboard of the country. For several years prior to the opening of the canal, most of the freight shipped by water between the two seaboard of the United States was transferred across the Isthmuses of Tehuantepec and Panama, the larger share of the tonnage being shipped via Tehuantepec. The agreement which the American-Hawaiian Steamship Company made with the Mexican National Railway in 1907 provided that one-third of the through freight rate between the two sea-

boards should be paid to the railroad company for transferring freight from the vessel on one ocean across the Isthmus and into the hold of the vessel on the other ocean. It is reported that the Mexican National Railway received on the average, \$3.50 per ton of 2,000 lbs. for its service. The cost of transferring freight from vessel to vessel across the Isthmus of Panama probably has been about \$3.00 per cargo ton. This cost of \$3 to \$3.50 per ton of 2,000 lbs. for transferring freight across the Isthmus is equivalent to \$6 or \$7 per ton when calculated upon the net tonnage of the vessels employed in the trade, for the reason that modern freight steamers ordinarily carry two tons of cargo for each net vessel ton. The tolls fixed by President Taft in 1912 are \$1.20 per net ton, or about one-fifth of the saving effected by the canal in the cost of transportation between the two seaboard of the United States.

The carrier is interested in the reduction in the cost of transportation; the shipper is concerned with the freight rates. That the canal will largely reduce the cost of transportation between the two seaboard of the United States and will reduce the cost of handling freight between the United States and the western coast of South America, Australia and the Orient north of Honkong, is certain. As regards the freight rates on traffic from the United States to foreign countries, it is probable that competition will give shippers most of the benefit of the reduction in the cost of transportation; but in all ocean services, particularly in the line traffic between the two seaboard of the United States, the extent to which the shippers, instead of the carriers, gain from the reduction in the cost of transportation depends upon the ability of the carriers, by agreements, to maintain rates above the level to which the charges would be forced by unrestricted competition.

In this connection the fact is to be borne in mind that most manufacturers and traders shipping goods between the two seaboard of the United States, via the canal, will be served by regular steamship lines; only a comparatively small number of exceptionally large producers will dispatch goods in full vessel cargoes in ships which they own or charter. With the exception of lumber, east-bound, coal, west-bound, and occasional large shipments of heavy steel products, most of the traffic will be handled in units of less than vessel loads; and the service desired by shippers will be that afforded by the regular lines, of which there will, in all probability, be several between New York and San Francisco, and one or more from each of the "out ports," such as Boston, Philadelphia and Baltimore.

In so far as traffic is handled in chartered vessels or in ships belonging to the owners of the goods transported, shippers may be expected to get the entire saving in the cost of transportation resulting from the use of the canal; but the rates of the regular steamship lines will be fixed by agreements of the rival carriers; and the history of steamship conferences shows clearly that competing steamship lines will be able, by means of their conference agreements, effectively to regulate their competitive services and charges. The services of the several lines will be distributed among the various ports. The rates between any two termini may be expected to

be the same by all lines for similar services; and, in general, the rates fixed in the conference agreements may be expected to be maintained at such a level below the general schedule of transcontinental railroad charges as the managers of the steamship lines find by experience can be maintained, and yet secure the volume of traffic required to supply the vessels with the requisite traffic. Rates by water will not be all the traffic might bear, but will be what the shippers can and will pay for transportation by water instead of transportation by rail. Rates by water as well as by rail will be fixed with reference to what the traffic will bear.

If this be true—and it unquestionably is sound transportation economics—the people of the United States will be obliged, in order to secure the benefits of lower transportation charges to be obtained from the Panama Canal, to regulate the charges and services of the intercoastal carriers by applying to those carriers the general principles of regulation that have been successfully applied to rail carriers. The rules applicable to the regulation of carriers by water are not identical with the rules applicable to railroads, but the general principles to be followed are the same in both instances.

The most concrete measure of the commercial usefulness of the Panama Canal will be the volume or tonnage of shipping using the waterway each year. The probable traffic of the Panama Canal has been calculated with exceptional care. For six years, ending with 1898, the Panama Canal Company kept a record of vessel movements, from which the company was able to calculate the tonnage of ships that would have used a Panama Canal had one been in existence. Again, in the years 1899 to 1901, the Isthmian Canal Commission made an elaborate statistical investigation of the tonnage of available canal traffic. The tonnage figures arrived at by the French company and by the Isthmian Canal Commission showed that had an isthmian canal been in existence in 1899 the tonnage using the waterway would have amounted to 5,000,000 net (vessel) tons. This investigation by the Isthmian Canal Commission was made under the direction of the author who, eleven years later as special commissioner on Panama Canal traffic and tolls, made another equally careful statistical study of the tonnage of shipping that would have used the canal had one been in existence in 1910. During the eleven years intervening between the two investigations, the available traffic had increased from 5,000,000 to 8,328,000 tons. Inasmuch as it is doubtless safe to assume that the rate of increase that had prevailed from 1898 to 1910 will probably continue, it seems fairly certain that the tonnage of the Panama Canal during 1915 will amount to about 10,500,000 net tons. With an increase of only 60 per cent during the first decade, which is 12 per cent less than the rate of increase in the traffic of the Suez Canal during the decade ending in 1912, the tonnage of shipping using the Panama Canal in 1925, at the end of the first ten years of its operation, will amount to 17,000,000 net tons. Those to whom this seems to be a large tonnage may well compare it with the traffic of the Suez waterway, which, in 1912, was used by 5,373 ships having a net tonnage of 20,275,000. The traffic

of the Suez Canal in 1925 will doubtless exceed 30,000,000 net tons of shipping.

The tolls for the use of the Panama Canal—\$1.20 per net ton with 40 per cent reduction for vessels in ballast—were decided upon after careful consideration had been given to the effect of the tolls upon the traffic and usefulness of the canal. It would have been undesirable to have imposed tolls high

coast of North America and Europe, will be much greater than the tolls that have been established.

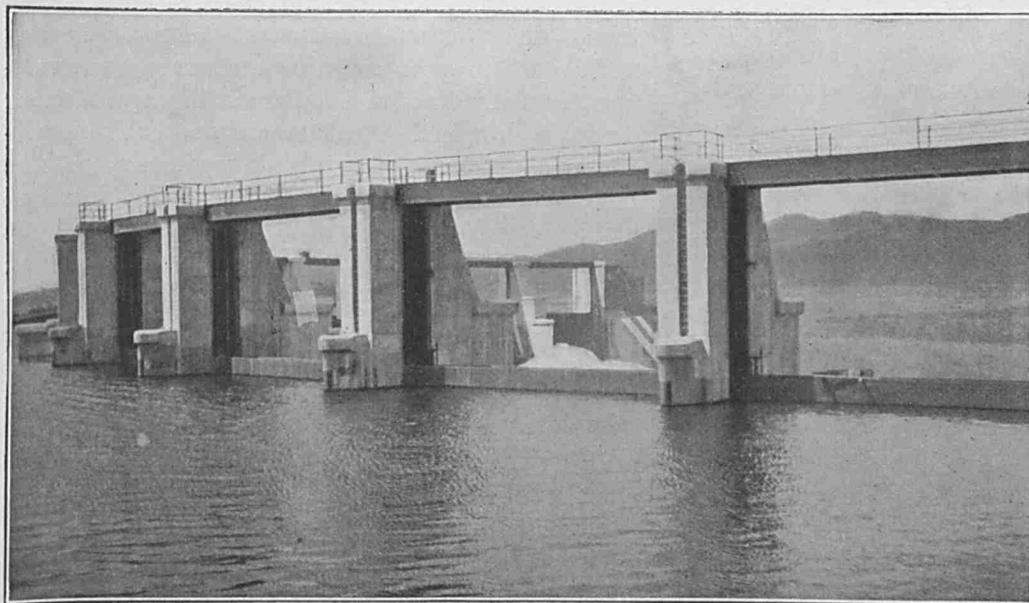
The payment made by vessels for the use of the canal, and consequently the revenues received by the United States Government from the canal, are determined by two factors—the rate of tolls and the tonnage upon which the charges are levied; accordingly, the Panama tonnage rules are of as much

TOWING RUNWAY
BETWEEN THE
LOCKS AT
GATUN.



enough to have diverted from the canal to the Straits of Magellan any considerable portion of the large tonnage moving between Chile and the United States and Europe. It would also have been a mistake to have placed the tolls at a figure that would have lessened the use of the canal by the vessels operating between the eastern seaboard of the United States and Australia, and also the ship-

importance to shipowners as is the rate of tolls. The Panama tonnage rules prescribed by the President were formulated after a thorough study had been made of the merits and defects of the several national tonnage rules and of those in force at the Suez Canal. As prescribed, the Panama rules are more nearly like those of the Suez Canal Company than those by which the registered tonnage of Amer-



UPPER
SIDE OF GATUN
SPILLWAY.
CONE OF WATER
IN DISTANCE.

ping engaged in the trade between the eastern seaboard of the United States and the Oriental ports from Manila and Hongkong northward. The saving effected by the canal for the traffic between the two seaboard of the United States and between the eastern seaboard of the United States and the west coast of South America, and between the western

ican ships is determined. It is unfortunate that the American, British, French, German, Suez and other tonnage rules are not uniform. As a matter of fact, they differ in important details, those of the British Government, under the influence of British shipowners, having provided for an especially low net tonnage as compared with gross tonnage.

The gross tonnage of a vessel, possibly it should be explained, is the measure of the entire closed-in capacity of the ship; the net tonnage is the entire closed-in capacity minus the spaces occupied by machinery, fuel, and housings for the crew. A vessel ton, gross or net, has nothing to do with weight, but is 100 cubic feet of space. A vessel of 5,000 tons, net, is a vessel of 500,000 cubic feet of capacity available for the storage of freight or for the accommodation of passengers.

The application of the Panama rules to the measurement of vessels will give vessels a somewhat smaller net tonnage than ships would have if measured by the Suez rules. The Panama net tonnage will be slightly in excess of the registered tonnage of American vessels, and considerably larger than the net tonnage of most vessels under the British or German flags. The Panama rules were drafted with a view to establishing for the Panama Canal as scientific a set of rules as could be formulated. It is to be hoped that the Panama rules will remain unchanged, and that they may have the effect ultimately of bringing about a greater degree of uniformity in the different tonnage rules now applied to the measurement of vessels.

The economies due to the use of the Panama Canal, especially for the traffic between north Atlantic countries and the countries of western South America, will result not only from the shortening of distance and time of ocean voyages, but also from reducing the fuel expenses of vessels engaged in the traffic. There is no coal in eastern South America, and that on the west coast is of poor quality. Vessels trading between Europe and the west coast of South America by way of the Straits of Magellan have to take on large quantities of fuel for the long run around to the west coast of South America, thereby reducing the space available for cargo and thus the earning ability of vessels. Coal will be relatively inexpensive at the Panama Canal, where it can be sold by the Government, without loss, at \$5 per ton. The coaling stations at the canal will be largely used by merchant vessels, and in the traffic with western South America the fuel expenses will thereby be much reduced. Indeed, the reduction in fuel expenses will cause the Panama route to be taken by vessels from Europe to Santiago, Chile, even though the tolls charged at Panama somewhat exceed the saving which vessels can make by taking the Panama route instead of the one via the Straits of Magellan.

It is interesting to note that vessels trading between New York and Australia, or between New York and Manila, will find fuel expenses via Panama appreciably less than by way of the Suez Canal. Coal can profitably be sold by the United States Government at Cristobol for \$1.25 less per ton than the price now charged at Port Said. The studies that have been made of fuel expenses via Panama indicate clearly that the lower fuel cost via the American isthmus will be of much assistance to the Panama route in competition with routes by way of the Straits of Magellan and the Suez Canal.

The studies that have been made of available canal traffic did not take into consideration the new traf-

fic that will be able to move as the result of the opening of the canal. In the past, the rich beds of Chilean iron ore have remained unworked because the cost of transporting the ore to Europe and the United States was prohibitive. The prospective opening of the canal caused the Bethlehem Steel Company to construct a fleet of large ore carriers which have already begun to bring the ore from Chile to the United States. Some of the Chilean ore will also be taken to Europe. All of this traffic will pass through the Panama Canal. Prior to the opening of the canal, only a small quantity of the lumber from Washington and British Columbia could be marketed in the eastern part of the United States; with the reduced cost of transportation via the Isthmus, it is expected that a large trade in west coast lumber will be carried on by merchants who distribute lumber from Philadelphia, New York and other Atlantic ports. To some extent, this west coast lumber will supplant the lumber from the Southern States, but in larger measure the west coast lumber will supplement that from the South.

The Panama Canal will enable both the inter-coastal and the foreign trade of the United States to be carried on under more favorable conditions than have prevailed in the past. It is too early to measure in detail the commercial effects of the Panama Canal; it is certain, however, that the influence of the canal will ultimately be far reaching. The American people, however, must not expect the canal to revolutionize the foreign trade of the United States. The canal will give the people of this country an opportunity to trade with western South America and with trans-Pacific countries under more favorable conditions as regards length of ocean routes and transportation costs, but economies in transportation will not alone determine whether the trade of Pacific countries will be mainly with Europe or with the United States. Europe has the lead of the United States in the commerce of Pacific countries. The exporters from Great Britain, Germany and other European countries are served by numerous steamship lines and by a vast tonnage of other available shipping. The financial and banking relations of Pacific countries are mainly with Europe. The merchants of Great Britain, Germany, Belgium and France have long established trade relations with the countries of the Pacific. European merchants have branch houses or agents in South American, Australian and Asiatic ports. It will take time to transfer the banking, merchandising and trading relations of South American and trans-Pacific countries from Europe to the United States.

In order to secure the benefits obtainable from the opening of the Panama Canal, it will be necessary for the American bankers, manufacturers and traders to be alert; and it will also be necessary for the United States Government to formulate a broader commercial policy than has thus far prevailed. The Federal Government must seek by practical measures to develop a larger American merchant marine in the foreign trade, to facilitate by liberal legislation the growth of international trade, and by favorable banking laws to strengthen the financial position of the United States among commercial nations.

THE PANAMA CANAL AND THE RAILROADS.

By John Maurice Clark

Among the many questions raised by the opening of the Panama Canal, not the least interesting will be the effect of this great new waterway on the greater common carriers, the railways, to which it will appear in the two-fold guise of teammate and competitor. It will develop some new traffic in which the railways will have a share; it will take some of their present traffic away from them, and some traffic will be shifted from its present course, and will run in new channels. All this will bring gains to some carriers, possibly losses to others, while to most it will bring gain and loss commingled.

We expect an increase in our export trade to the west coast of South America and the Orient. Exports, moreover, must be paid for with imports. Now the greater part of the exports and imports must be carried by rail, some distance at least, and the profits on this business will be one of the benefits which the Panama Canal will bring to the railroads. For much of this commerce, New Orleans is the natural port, and, in proportion as New Orleans comes thus into its own, the railroads which serve that port must share in its prosperity. Not only in foreign trade does New Orleans expect great growth, but in trade to the Pacific Coast of the United States itself, diverting traffic from the overland routes. Thus the Illinois Central and the Louisville and Nashville may become competitors of the Union Pacific or even of the Great Northern. The strictly north and south lines are not, however, the only ones to share in this traffic. The Rock Island controls a route from Chicago to Galveston, and the Frisco system also includes a Gulf connection. Thus these western transcontinental roads, which are exposed to the most direct losses from the competition of the canal route, have at least some small chance to participate in gains as well.

So much for the commerce of the Gulf ports. What of the transcontinental traffic and carriers? These roads are clearly liable to very definite losses from the opening of a great new waterway which must inevitably strengthen the competition for business from coast to coast—a waterway through which their own ships may not pass.

Aside from the general, normal growth of business, there will undoubtedly be some business which the canal itself will create. Indeed, there will be a sort of rough, natural compensation at work by which, the more traffic is taken from the roads, the more of other sorts of traffic will come in to them. The steamers cannot make serious inroads into the railways' business without a very considerable lowering of rates; a slight reduction will not do it. And if rates are lowered a great deal, the result will be more than a mere diversion of the existing traffic; it will mean a stimulus to industry and commerce which cannot fail to furnish some work for the well nigh universal common carrier, the railroad.

But the growth of new business is problematical and takes time, and in the meanwhile the canal route will be taking away from the railroads some of the business they already have, just at the time when the revival of the long-and-short haul clause seems threatening to deprive them of their customary freedom in meeting the inroads of competition. At present the boat lines carry something over one-tenth of the transcontinental freight tonnage. However, the so-called "transcontinental" traffic includes shipments from as far west as the Mississippi River, and goods destined to inland points throughout the Pacific slope. In fact, only about one ton in five of the westbound transcontinental traffic comes from farther east than Buffalo and Pittsburg. The Middle West has become dominant over the Atlantic seaboard in the commerce of the Pacific slope.

Now, obviously, it is the traffic from seaport to seaport that is most exposed to water competition, and half of this traffic the boat lines have already taken from the railroads.

In one sense, it would seem as if the railroads had already suffered the greatest damage to which they stand exposed. And yet, even so, there has been no absolute shrinkage of traffic by rail. The increase in the water-borne tonnage has come out of the normal growth of the total volume of business. The question, to which the future holds the answer, is: will the added advantage from the use of the canal be enough to take from the railroads the balance of the coast-to-coast freight, and make serious inroads on the business moving from the interior cities?

Compared to the present rail-and-water routes across the isthmus at Panama and at Tehuantepec, the canal route will, of course, be faster and substantially cheaper. The steamship lines will save an amount which may be roughly estimated not to exceed 13c per 100 lbs. of freight, or something like one-tenth of an average transcontinental freight rate by rail.

This is on the supposition that the boats travel with full cargoes, but the indications are that they will probably find it quite difficult to secure an east bound tonnage equal to the westbound. It is only the heavy eastward movement of Hawaiian sugar that keeps the tonnage fairly well balanced at the present time. If the freight passing through the canal has to pay expenses on a balance of empty cargo space, the economy of the Panama route will not be quite as great as it appears on paper.

It must be further taken into account that the freight rate is not the only consideration in competition between a railroad and a line of steamboats. The rates are now from 20 per cent to 60 per cent lower by water, and still the railroads keep nearly half of the coast-to-coast tonnage. Obviously, a great deal of the business is governed by other considerations than the mere freight rate. It hardly seems probable that another 10 per cent subtracted would be enough to overcome all these "other considerations" at one blow, and take all the remaining traffic away

from the railroads, even if the roads did not meet the cut in rates.

One of the reasons why the railroads can charge more and still keep a large share of traffic is the fact that the train-isthmian route demands so much handling en route. If a short rail haul is needed at each end, the goods must be loaded and unloaded at least ten times, into and out of three freight cars and two steamers, and all of this means a greater risk of injury to the goods calling for more expensive packing to protect them. With the Canal in use, this disadvantage would be cut approximately in half, though it would still remain a substantial handicap. In the matter of speed the new route will about equal the ordinary slow-freight service of the railways.

There are some things which the steamers can not wholly divert by any reduction in rates. California fruit, and all goods using the special fast freight service of the railroads, would probably continue to move largely as it does now, no matter what inducements the steamship lines might offer. The fruit growers' co-operative associations have enormously increased the value of their crops by following up the shipments on their way eastward, and diverting them by telegraphic orders to the most favorable market. This advantage they will probably not abandon, even if the other obstacles to the carriage of fruit by steamer through the tropics should be successfully overcome. There is doubtless other traffic which will still prefer the overland route, for one special reason or another. On the whole, then, with regard to the strictly coast-to-coast traffic, the situation would seem to be this: that the railroads will not lose all of it in any case; but that they carry less than half of it at present, and would probably come out of a defensive rate war with a still smaller percentage.

Will they lower their rates? If this strictly through traffic were a thing by itself, they would probably make a determined effort to retain it. But it is not a thing by itself. The whole eastern part of the country is given the same rates on transcontinental business, so that the railroads could not lower the New York rates without a similar loss of revenue on the vastly greater volume of shipments originating, or terminating, at inland points as far west as the Mississippi River. This would be a heavy price to pay to keep a small part of the traffic, already carried at far less than the normal margin of earnings. Indeed, this very fact may help to explain why the railroads have avoided rate wars in the immediate past, and have followed a "live and let live" policy toward the steamship lines connecting with the Tehuantepec and the Panama railways. The loss would have been greater than the prize was worth. Unless the steamers begin taking on so much traffic from far inland, as to make serious inroads on this, the main part of the railroads' transcontinental business, we need not expect to see a war of rates inaugurated.

For all of this traffic, especially for traffic which does not reach the seacoast at either end of its

journey, the railroads will continue to have advantages that should be almost decisive. They will avoid two transfers, with all the delay and chance of injury involved. They can carry the goods more quickly and more safely than can the steamers with rail connections at the terminals. And when the traffic goes by sea, either the shipper or the steamship company must pay the railroads for their part of the roundabout haul, thus increasing the expense of the ocean route. At present, some shipments move by water from as far west as Buffalo and Pittsburg, and from points a hundred to a hundred-and-fifty miles inland on the Pacific slope. The saving from the use of the canal may be equivalent, at a liberal estimate, to an extra haul of three hundred miles at the eastern end of the journey, or less than half as much in the Pacific coast states, where rates are higher. How formidable this widening of the steamers' sphere of influence will prove, is a matter that can only be conjectured. The railroads may be consoled, especially the eastern lines, by the fact that even such traffic as they may lose is not wholly lost. They will merely have exchanged a long haul at a low margin of profit for shorter hauls at more satisfactory returns, mile for mile. If the general growth of traffic is as great as is expected, the result may be no loss at all, but rather an improvement in the character of the traffic and an increase in ton-mile revenues.

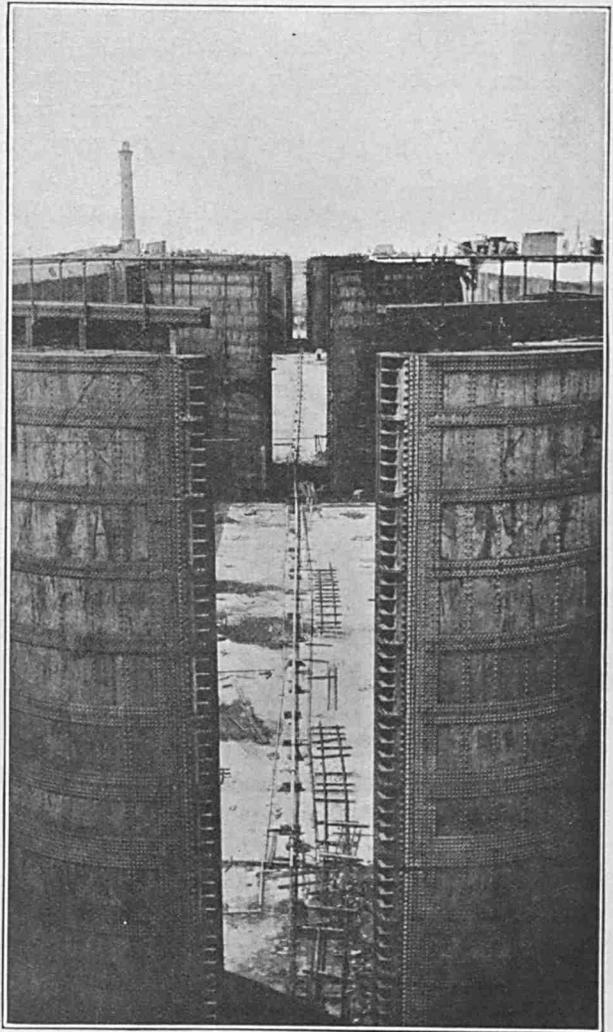
If the railroads are forced to fight for the middle-western traffic, they may find themselves somewhat hampered because the present orders of the Interstate Commerce Commission place certain limits on the practice of charging lower rates to Pacific seaports than to intermediate points. This fact should prove to be an interesting incidental problem, but not, necessarily, a terrifying one, even though the Supreme Court has upheld the rulings of the Commission. The idea of these rulings is to grant exemption from the long-and-short haul clause and allow the railroads to discriminate in favor of their terminal cities, just so far as they are compelled by genuine water competition, but no farther. Now that the force of competition by sea is to be considerably increased, it is entirely possible that the details of the Commission's plan may need to be reconsidered and extensive changes made.

In particular, it seems unnatural that Galveston should be classed with Omaha as a place enjoying no water competition, and that New Orleans should be treated as enjoying no more effective water competition than Madison, Wisconsin. Rates from Galveston may not be higher to intermediate points than to the coast, and rates from New Orleans may be only 7 per cent higher, while from Boston, New York, Philadelphia and Baltimore, the intermediate rates may be 25 per cent higher, the through rates being forced down by water competition. At present, no regular steamship lines run from the Gulf ports to the isthmus, but with the opening of the canal we may expect to see genuine and active water competition at these points. Accordingly, we may expect that the Interstate Commerce Commission, following the principle of its first ruling,

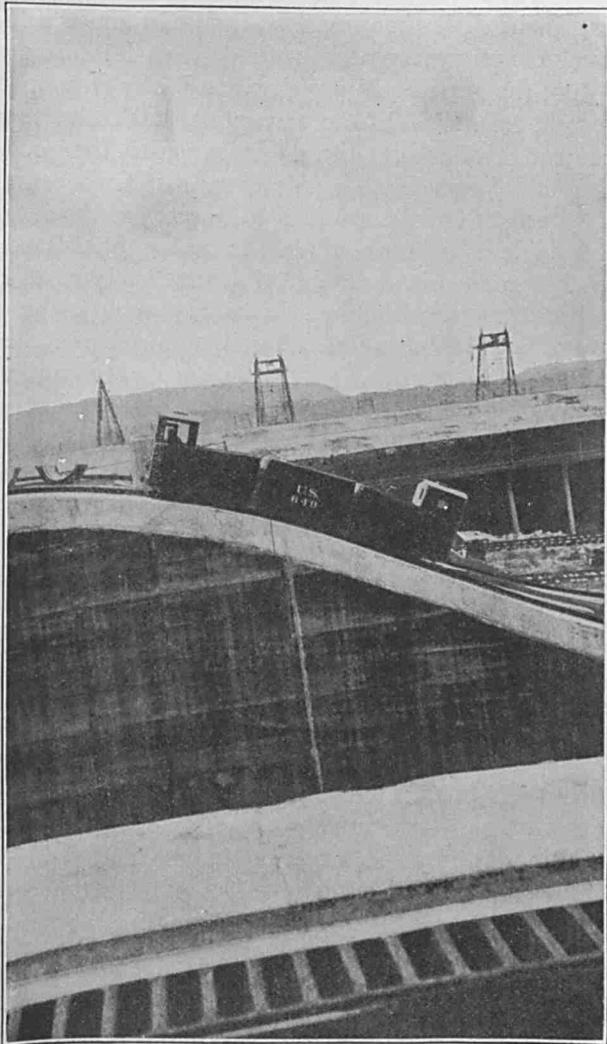
will grant more liberal dispensations from the long-and-short haul clause, especially to the railroads serving the Gulf Ports, provided that these carriers show that they need the revenue which higher rates to intermediate points would furnish.

So far, we have been viewing the more immediate effects of the canal, and we have seen that there will be both gains and losses. Will things bear a different aspect in the long run? Will the railroads ever reach that happy state in which they will not care how much through freight is carried by the steamers? There is good reason for believing that the time will come when railroading will not be a business of "increasing returns" to anything like the same extent that it has been in the past, if at all, and when extra tonnage, carried extra long distances at extra low rates, will not be regarded as a valuable prize, but as a very doubtful asset.

For some roads, indeed, that time seems to have arrived already. To the Pennsylvania Railroad, for example, the regular growth of traffic means the outlay of enormous sums for increased plant to handle the added tonnage, over \$64,000,000 having been spent thus in the last year alone. In recent years this Company has built what is virtually a separate double-track railroad to handle freight alone and relieve the main line of congestion. The expenses, for various reasons, (not all connected with increased traffic) are growing actually faster than the income. Under such conditions, it is far from true that added traffic always pays, so long as it brings in



LOOKING THROUGH GATUN LOCKS.



TOWING ENGINE CLIMBING RUNWAY.

anything above operating expenses. A road in this condition need not mourn if a competitor kindly relieves it of some of its least profitable business.

The condition of the lines east of Pittsburg can, in itself, hardly have much bearing on the question at issue, for these lines are comparatively indifferent to canal competition in any case. But we are looking into the future, to a time when lines farther west will be approaching a similar condition. At present, it is the western roads, rather than their eastern connections, which are chiefly responsible for the disregard of distance that characterizes our transcontinental freight rates.

When the plant was partly idle, more tonnage was a boon at almost any price. But as traffic becomes more dense, the motive to discriminate becomes weaker and weaker. Thus the western lines made low rates to fill their eastbound empty cars with lumber, with the final result that the policy was too successful. The cars were more than filled, and further shipments of lumber were chargeable with the cost of added rolling stock, and the haul of empty cars westward, as well. This is an extreme case, but typical.

The western roads have, of late, been spending many millions in enlarging the capacity of roadbed and rolling stock, while the moving of freight through Chicago, St. Louis, and other western cities is a great and growing problem, calling for huge capital expenditures. No traffic is self-

supporting which does not contribute its full share toward the interest on these outlays. When congestion turns railroading into a business of diminishing returns, the traffic that was once eagerly sought for at extra low rates, may become an actual burden, to be borne grudgingly, and only out of consideration for the many interests that are always dependent on an established adjustment of charges.

Across the arid and mountainous stretches of the West the tonnage will hardly grow to this extent, and the officials in charge of these divisions may never cease to cast covetous eyes at the water-borne traffic. But as the rest of the country grows up to its transportation facilities, we may expect that the carriers in general will soon cease to lament the business the canal has taken away, while they will continue to enjoy the more attractive business which the many-sided

growth of the country will bring with it.

Let us suppose that the canal has taken its place in our commercial system and our growing population and industry have adjusted themselves to it. The railroads will then, as now, be facing the problem of providing billions of capital to meet the transportation demands of our ever-growing country. What would they say then to a proposal to close the Panama waterway to all coastwise traffic, and throw upon them the responsibility of raising funds to provide facilities for a sudden increase of relatively low grade business? One can hardly imagine them actively advocating the passage of such a measure. On the contrary, if, in the year 1950, an earthquake should destroy the canal, it is quite possible that among those who would view the catastrophe with the most sincere grief would be the heads of the great railroad systems of the country.

THE REMOTE EFFECTS OF THE PANAMA CANAL.

BY JOHN BATES CLARK, PH.D., LL.D.

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What, after all, is the Panama Canal? Is it merely a ditch, forty-nine miles long, and are the two ends of it respectively at Panama and Colon? In a truer sense it is a connecting link between two vast systems of canals comprising the water routes which radiate from the two terminal harbors to every part of the earth. If we consider that every "steamship lane" is in effect such a line of water communication as a canal furnishes, though better than any artificial canal can be, we may say that the excavation across the narrow isthmus of Panama has at one stroke united some hundreds of channels lying eastward from America with an equal number lying on the western side. A myriad of long routes for travelling by water meet and intersect in the small canal zone.

It is a truism that commerce binds nations together and that the international bond is closer the more dependent on each other the nations come to be. The commerce between a country having much land and few people and one that has little land and many people is essential to both of them. England thus clothes other countries and is fed by them. The commercial bond is close between any two regions that in an economic way are as unlike as are temperate regions and tropical ones.

All trade is essentially barter. It pays New England to send cotton goods, paper, machinery, etc., to the West Indies in exchange for bananas and pineapples rather than to try to cultivate these fruits; and it pays the West Indian to acquire the manufactured goods thus indirectly rather than to attempt directly to make them. Densely peopled regions and sparsely peopled ones make similar gains by exchanging products. A land of shops and factories thrives by commerce with a land of flocks, herds and grain fields.

Usually countries of dense population are advanced in a technical way. They abound in mills and shops

and they use improved methods and machinery. China, however, is densely peopled and its industrial methods are still primitive. The sea that separates her from America is narrower than was once the English Channel, and it might seem that here were found the countries of the greatest commercial affinity between which incentives to trade would be at a maximum.

It is not so. The mere density of the population of China, by providing an unlimited supply of cheap labor, somewhat neutralizes the effect of American machinery, and unlike as in many ways the two countries are, there is more of similarity than of contrast in their products. In both of them the internal commerce greatly overbalances the foreign. Both of them are highly civilized and have developed the refinements of life to an extent that calls for a wide range of commodities. In America the goods are made for us by the deft fingers of tireless machines, while in eastern Asia they are, for the most part, made by trained hands. The amount of labor required for a given product is enormously greater in Asia; but the difference in cost between making the goods in Asia and making them in America is far less than it would otherwise be. It is the familiar rivalry of machine and cheap labor, and while the machine wins, yet so long as it is used by an American worker, it does not win by such a margin that it can immediately drive the Asiatic worker out of his trade. If used by an Asiatic worker, it can and will do this. It is foreordained that Asia shall go the way of western lands that have put machines in the place of trained hands, and when that happens the entire world must take note of it, and the canal will have a new work to do.

In estimating the effect of the canal on the relation of the United States to South America we do not have to assume that the industry of the latter continent is about to undergo such a sweeping transformation as is to be expected in Asia. The importance to America of lanes of commerce that intersect at Panama lies partly in bringing our eastern states into connection with the western part of South America. From the Pacific states of South America we can draw ores, fertilizers, and, in general, raw products, in exchange for some other raw

products and a variety of manufactured ones. By aid of the canal we can greatly increase the volume of such traffic, but the new connection is not likely to transform the industry of the southern continent.

With Eastern Asia the case is different. From the first there will be some exchanging of raw products and much exchanging of highly wrought ones. We shall bring thence tea, rice and raw silk, and from the neighboring islands at the south we shall bring hemp and sugar and tobacco; but we shall also bring from China and Japan art products and many highly wrought specialties. We shall send to them refined oil and agricultural produce, together with tools, machines, and a varied assortment of finished goods. Our importations from Asia will thus combine agricultural products with industrial ones; our exports to Asia will do the same, and the traffic at first will be much smaller than it would be if the products of the two regions were generally unlike. Between the two lists of goods produced in North America and in Eastern Asia respectively there is not, if we take each list in its entirety, as radical a difference as there might be.

The character of the traffic between these vast regions will change much with the rapid modernizing of Asiatic production. We have not merely to look at China and Japan as they are and try to see what special advantages are at present offered by the exchanging of one or another kind of goods. Our problem becomes far more interesting when we consider what China and Japan must and will become in the near future. The machine is nearly omnipotent and may be trusted to control the history of Asia. Man makes it, indeed, but it controls him and shapes the destiny of his race. The ingenuity of one inventor devises an engine of production, and the labor of a few mechanics constructs it; but it then multiplies like a prolific animal and in the end dominates men and shapes empires. All the while it serves men like a genie of the lamp. Machines have utterly transformed the economic shape of much of the world, and they will continue to do this on a grand scale as soon as the close connection of Eastern Asia with Europe and America shall have produced its natural effect.

Asia is bound to repeat the history of Europe and America in so far as the arts of industry are concerned. How many decades this will take it would be rash to prophesy. How many detailed processes now used in the West will be adopted in the East during each decade of the twentieth century no one can positively assert; but the general fact that hand labor will gradually yield to machine labor, in Asia as everywhere else, is surer than the average fact of history. Some prophecy is surer than some history and that which predicts the triumph of the machine is one of the prophetic certainties. On this point we can reverse Webster's familiar statement and say, "The future, at least, is secure." We know that Asia will introduce machinery on a great scale, that the whole world will be powerfully affected by this change and that our own relation to Asia will be dominated by it.

This will happen partly because machinery everywhere excels hand labor; but in this case there is a further and very decisive reason for it. Machinery

has its best field in a country of dense population. It takes time and a struggle to introduce the machinery of manufacturing into a new country where land is abundant and men scarce. Where land is scarce and is worked to the final limit of intensiveness, the produce per man is small and wages are necessarily low. Such a country is compelled to go into manufacturing and can afford to undersell the world in the products of it. The poverty of its agriculture is its key to success as a competitor in manufacturing. If the Chinese laborer can earn only fifteen cents per day on the farm, he can get only a little more than fifteen cents in a workshop; and when a mill with modern machinery has supplanted the workshop and is run by men who get twenty-five cents per day, it can undersell a mill in a richer land. China and Japan taken together have the capacity to become ultimately the great workshop of the world.

Does this mean a real "yellow peril" for the remainder of mankind? If the transformation came all at once, it might mean this, and it would certainly mean a violent overturning in China itself. If the change comes quite gradually, it may involve no peril but an assured gain for western countries and a greater one for China.

We need to know what parts of the world will be the natural customers of the manufacturers of the East. Strictly speaking, commerce is between occupations rather than between localities. The weaver and the tailor clothe the farmer and the farmer feeds them, though they may all happen to live in the same township; and it is only in a secondary way that one can speak of one country as being agricultural and of another as being industrial. Farmers buy more of the goods manufactured by their own countrymen than of goods manufactured by foreigners, and for an indefinite time—probably for centuries—this will hold true in Eastern Asia, though even a great region like this can never supply its wants altogether by its own direct production. Long before Asia will have developed its manufacturing as fully as it is now developed elsewhere it will begin to export some of the products of it, but the amount that will come to Europe and America will be restricted by several influences. Mere inertia—the slowness with which the transformation of an economic system proceeds—will protect the present generation of western producers. Japan has modernized itself with brilliant rapidity, but even she has made only a beginning in the introduction of western machinery. The question that can be intelligently asked is whether, in later generations, Western countries will encounter a real danger from this rivalry of eastern manufacturers, and whether, for fear of it, we shall suffer from a recedescence of extreme protectionism. Shall we ever need a Chinese wall to bar out the products of China?

It is conceivable that the "pauper labor" of the East, with machinery at its command, might play the part in discussion with which we have been made familiar in the case of the so called "pauper labor" of Europe, and a prohibitory tariff might be called for in the platform of some party. As bearing on this question there are a few more points on which known economic tendencies

enable us to form assured opinions. One is that, in Asia, the different productive arts will be modernized one by one, and not all together; and another is that, for many years, the principal markets supplied by every one of these modernized industries will be found within the boundaries of the Asiatic empires themselves. If we include with Japan that portion of the mainland in which she has lately become dominant, we may say that three vast oriental empires—those, namely, of Japan, China and Russia—with all of which the Panama Canal has brought our Eastern States into closer connection, will slowly remodel their economic systems and bring them into closer resemblance to those of the West. They will do this in the order in which they are here named, Japan being the first to accomplish it, Asiatic Russia the last and the Chinese Empire being between them in the succession. It will take time to transform even the industries of the first of the three empires, and a very long time to transform those of the last.

Again, when the exporting of manufactured products from one of these regions takes place on a large scale it will seek pre-eminently those parts of the earth which offer the greatest gain from the interchange, and that means agricultural and mining regions. Raw materials and food will be what the industrial populations of Asia will chiefly need. The strongest affinity, so to speak, of such centers of manufacturing will be with the interior districts of the Chinese empire and the limitless stretches of Manchuria and Siberia. Unless political obstacles intervene, traffic of great usefulness and equally great profit should exist between these regions. The Pacific states of North America will have something to offer to the developing industrial populations of Asia, and with them, as with Siberia, the connection will be made quite independently of the Panama Canal. With Atlantic states the case is quite otherwise. Brazil, the West Indies and the old "Spanish Main" will be brought commercially within reach of Japan by the Canal route. Argentina, however, is already reachable by way of Cape Horn and the Canal will not greatly affect her dealings with the East, which will be large in any case. The products of the new industrial centers of Asia will seek out such regions as markets and if commercial "buffer states" are needed to ward off from our industrial centers the impact of Asiatic competition, these and similar regions will furnish them.

We are chiefly interested in knowing how the eastern half of the United States will be affected. It is here that industrialism has its chief home and here, if anywhere, Asiatic rivalry will be dreaded. It is therefore in connection with what may happen to this region, with its vast production, that a broad and clear view is most needed. What I venture to predict is that there will be a large increase of traffic between eastern America and eastern Asia and that the exportation of manufactured goods to that great region taken as a whole will not be reduced by the modernization of Asiatic production. The time will doubtless come when we shall import goods from the workshops of Japan and China. They will consist

of special products for making which those countries are particularly well adapted. It would be strange if we should not import from that region products of silk. Thanks to the presence of machinery in America, the absence of it in Eastern Asia, and a high protective tariff, we now import from them relatively little manufactured silk; but with the tariff even as high as it is and modern machinery introduced into the East, the situation would be otherwise. It will be found, however, that every case of silk that shall come from those countries will create a demand for other manufactures in the making of which we shall for an indefinite time have the advantage. And we shall export them in greatly increased quantity because of the new and abounding wealth of the eastern lands.

The indirect effects of modernizing the industries of the East are too complex to be more than alluded to here; but it is a perfectly safe prediction that the general development which will take place in the East will make that vast region a better and better customer for the producers of the West and that an influx of riches measured and expressed in gold will be the only "yellow" incident in the case. Within the vast confines of the three great empires the "dynamic" movement that is going on will open more markets for American products than it closes. A narrow view might lead some men to think otherwise, and a narrow policy might lead a country to act otherwise than in the way that would secure for itself the largest benefit from this development.

There is an immigration problem too vast to be more than mentioned here; but it is evident that the modernization of Asia will, as far as it goes, reduce the incentives for emigrating from that continent. The richer Asia becomes, the higher will be the standard of living of its people; and this will make them better customers if they stay where they are, and will cause more of them to stay there.

In general, it is the common interests of mankind that will be promoted by the use of the Panama Canal, and the gains will be those in which all nations will participate. If we divide the world into two hemispheres by a meridian running through the Pacific and the Atlantic, the commercial center of one hemisphere will be at Panama and that of the other at Suez. At these points routes innumerable intersect, and through each of the artificial straits will pass an ever increasing volume of commerce. Relatively the increase of the traffic through the Panama Canal will be the greater, and long before the time when the full economic transformation of the Pacific countries will have been established, it will take more than one channel across the American isthmus to accommodate it. No traffic which the present generation will witness will constitute more than a tithe of that which will be seen in the future, and no figures that anyone would now dare to make will measure the wealth that will ultimately flow from it. The chief single fact about the canal is its aptitude for becoming a vital world asset, from the use of which under a far seeing policy, our land and all lands will thrive. It should be no cause of contention but a bond of fraternity and assured peace.

**THE PACIFIC
COAST**



SAN FRANCISCO REBUILT. IN THE FINANCIAL DISTRICT.

BANKS AND BANKING ON THE PACIFIC COAST.

By J. K. Lynch, President of the San Francisco Clearing House. Vice President of the First National Bank of San Francisco.

If asked to name the particulars in which banking on the Pacific Coast differs most widely from banking on the Atlantic seaboard, we must reply that it is in the larger proportion of capital to deposits in the banks of the Pacific Coast, and in the greater rigidity of the loans in which their funds are invested. Both conditions are the direct result of the newness of the country and the consequent scarcity of capital available for the development of the great natural resources of the region. Under-capitalized enterprises lean on their commercial depositaries for funds which should be supplied by shareholders, or through funded loans repayable over a long term of years. Thus the proceeds of loans nominally payable on demand are actually invested in plant and fixtures.

This is true not alone of manufacturing concerns but also of those engaged in merchandising, so that relatively few of them measure up to the standard set for firms that can issue saleable commercial paper. The favorite form of note obligation is therefore made payable "one day after date," which means in practice, at the pleasure of the maker and only then, unless the banker is ready to call the loan and (incidentally) to dislodge the account. The one-day-after-date note, which is the successor of the overdraft, has tended to diminish the balances which the banker has a right to expect from the accounts of borrowers. The evils of this system are fully recognized and the practice is being restricted year by year, but the underlying condition from which it has resulted can only be removed gradually, and after the lapse of considerable time.

The Pacific Coast witnessed the evolution of the bank from the merchandising concern, epitomizing in a few years a process that has consumed hundreds of years in developing throughout the world.

In the mining regions the early bankers were buyers and shippers of gold dust and gold bullion, which was exchanged for merchandise. In

the farming districts produce was handled in the same way and the final function of the banker, the loaning of credit resulting from the sale of produce (whether of the mines or of the fields), was an easy and natural step. In some of the more remote places the general merchant is still the banker, but the search for banking locations has been prosecuted so vigorously that there are today but few places that are not provided with a bank, the organizers frequently being willing to ignore profits for some years in order to be first in the field, and to secure that goodwill which comes from assisting in the development of the community. More rigid laws passed by the different States have also contributed to the elimination from banking of all those not exclusively in the business, and under the safeguards of either State or National laws.

The history of banking in California is typical of that on the entire coast, at least in the earlier stages of the business. Of the many private firms that began banking in the fifties but few survived the speculation and the fluctuations in trade which are characteristic of pioneer days. Failure removed the greater number; some retired in a more regular way; and the few who remained were absorbed by incorporated banks, or themselves incorporated.

From the fact that California, and the Pacific Coast generally, remained on a gold basis while the rest of the country kept the currency dollar as the unit of value, the National system made its way slowly. The first National bank incorporated in California was chartered in 1870 under the amendment to the banking Act authorizing banks to issue currency notes payable in gold. Altogether some ten banks were organized under this Act. When the Government resumed specie payments there was no further reason for the existence of the National-Gold banks, and the heavier penalties they were obliged to bear caused them to enter the National system on the same terms as the banks throughout the country. The majority of the banks in the central and northern portions of the State remained under the State system, and it was not until the passage of a severely restrictive Act known as the California Bank Act of 1909, that some of the largest banks changed to the National system.

San Francisco was recognized as an important

link in the chain of international exchange operations from an early date, and English and French banks established branches which had an important part in the development of the Coast. The Canadian joint stock banks also entered the field, and two of them still maintain flourishing branches in San Francisco.

In the southern part of California, with Los Angeles as the financial center, the National system made a beginning with The First National Bank of that city, converted from a State bank in 1880. Following the building of the trans-continental roads entering Los Angeles, and the consequent increase in population coming from the Middle West and from the Atlantic Seaboard, (made up largely of men familiar with the National system), it became a strong favorite in that part of the State.

While the principal commercial banks in California are now operating under the National laws, those laws have made but inadequate provision for the Savings business, which, from the beginning, had been well cared for under the State laws. In fact, one of the characteristic features of banking in San Francisco is the number of large Savings banks strongly capitalized and having deposits aggregating one hundred and eighty-five millions. Many of these deposits are not strictly savings, but represent, rather, idle funds awaiting investment by the owners. In this city the Savings banks have taken on a class of business which on the other side of the continent is in the hands of the Trust Companies.

It being generally recognized that the Bank Act of 1909 was too restrictive, and that it placed the State banks at a disadvantage in competing with the Nationals, amendments to the Act were passed at the last session of the legislature which have made the law much more flexible, and the effect has been to check the conversion of State banks to Nationals. One feature of Act which has proved popular is that permitting one institution to transact Commercial, Savings, and Trust business, a segregation of capital being required for each branch of the business. A sufficient time has not yet elapsed to determine whether or not this departmental banking will prove more efficient, and consequently more profitable, than the more specialized banking hitherto in force. In the smaller communities the departmental bank has manifest advantages, but it is not so clear that these advantages extend to banks in the large cities.

One feature of the Bank Act which is worthy of notice is the requirement to maintain a ratio of at least one to ten between the capital and surplus, and the deposits. This is no hardship in the case of a commercial bank but, in a prosperous community, it sometimes keeps the shareholders in a savings institution busy.

In spite of some features which are still regarded as unnecessarily restrictive, and which may be removed by future legislation, this Act is undoubtedly one of the best banking laws in the country, and its operations have done much to raise the standard of the State banks.

While Oregon went through the preliminary

stage of banking by merchandising firms, express companies, and private bankers, the National system was initiated by the incorporators of The First National Bank of Portland in 1866,—four years earlier than the incorporation of The First National (Gold) Bank of San Francisco. While the Portland bank remained the only National bank in the State until 1882, the Nationals are now well represented, and the State is amply supplied with banking capital. The pioneer bankers in both Oregon and Washington suffered from an excess of opportunity, or rather from the excess of natural resources, lack of transportation to market, and scanty population. The proper adjustment of these three factors in the production of wealth is a slow process, and while it is going on it requires a high order of banking skill to avoid ruinous loss. In a sense, this adjustment is always going on, but the process is particularly rapid while a country is being settled; and the bankers of the Northwest met the usual number of reverses. They have emerged from the period of settlement and experiment with the banks adjusted to the needs of the community, and themselves fully understanding those needs.

The States of Idaho, Nevada and Arizona began as mining territories, and then took on stock-growing and agriculture as rapidly as the population and transportation permitted. Utah had a special and unusual beginning in that it was settled by the Mormons, who were farmers, and not miners; but mining, though delayed, came later and is still a leading industry. The banks throughout this entire region developed as the needs of the country developed, being capitalized largely from the products of the mines and the pastures; the specialization of banking from merchandising proceeding in the manner that prevailed in the other States.

The region which we call the Pacific Slope, extending from Canada to Mexico, and from the Pacific Ocean to the Rocky Mountains, is practically all included in Federal Reserve District No. 12; the exceptions being the western portions of Montana and Colorado, and the south eastern strip of Arizona, which is included in District No. 11. The figures representing the capital, surplus and deposits of the State and National banks in District No. 12, taken from the latest available sources, will fairly represent the banking capital of the region we are considering.

State	Capital, Surplus and Profits		
	Combined Nat & State	National Banks	State Banks
California	\$203,148	\$100,211	\$102,937
Washington	40,911	18,601	22,310
Oregon	28,065	15,061	13,004
Utah	14,313	5,627	8,686
Idaho	10,416	5,396	5,020
Nevada	4,399	2,080	2,319
Northwestern part of Arizona	3,339	1,482	1,857
	\$304,591	\$148,458	\$156,133
Total Capital, Surplus and Profits		(hundreds omitted)	\$609,182,000
State	Total Deposits		
	Combined Nat. & State	National Banks	State Banks
California	\$943,229	\$347,542	\$595,687
Washington	192,343	96,698	95,645
Oregon	118,471	60,516	57,955
Utah	68,792	24,954	43,838
Idaho	39,697	21,029	18,668
Nevada	17,262	6,816	10,446
Northwestern part of Arizona	16,589	5,706	10,883
	\$1,396,333	\$563,261	\$833,122
Total Deposits		(hundreds omitted)	\$2,792,766,000

Bank Deposits (Not including "Due to Reserve Agents")			
	Combined Nat. & State	National Banks	State Banks
California	\$ 96,200	\$ 84,710	\$ 11,490
Washington	19,075	15,159	3,916
Oregon	12,907	9,744	3,163
Utah	15,173	6,335	8,838
Idaho	3,138	1,638	1,500
Nevada	848	748	100
Northwestern part of Arizona	1,244	692	1,000
	\$148,585	\$119,026	\$ 30,007
Total Bank Deposits.....		(hundreds omitted)	\$297,618,000
Individual Deposits			
	Combined Nat. & State	National Banks	State Banks
California	\$847,029	\$262,832	\$584,197
Washington	173,268	81,539	91,729
Oregon	105,564	50,772	54,792
Utah	53,619	18,619	35,000
Idaho	36,559	19,391	17,168
Nevada	16,414	6,068	10,346
Northwestern part of Arizona	15,345	5,014	9,883
	\$1,247,798	\$444,235	\$803,115
Total Individual Deposits.....		(hundreds omitted)	\$2,495,148,000

These figures, in a sense, measure the financial achievement of a region that had its beginning in the discovery of gold in California in 1849. They indicate the substantial foundation on which the resources of the Pacific Coast rest, at a time when the opening of the Panama Canal places it in a new relation to the rest of the world. The effect of this change in the currents of the world's commerce on particular places or special industries on the Coast is hard to predict, but when we consider the entire region there can be no doubt. The opening of a direct water-way to the Atlantic States, to the Eastern Coast of South America and to Europe, gives new markets for the products of the Coast and those products embrace almost every thing that can be grown in the temperate zones and many that belong to the tropics.

At the same time the immigration will come direct from Europe to the Pacific and the result must be the production of conditions favorable to manufacturing. The bar to these industries has hitherto been the lack of cheap power and the lack of cheap labor. The development of electric power from the unequaled water falls of the Sierras, and the production of fuel oil in large quantities (with enormous reserves in the ground), have already made power both cheap and efficient. Immigration and the natural increase in population will provide labor which should be efficient, and if so, must be cheap; for cheapness is always relative.

The experimenting which is a necessary accompaniment of pioneer days has been done; the region has been prospected; soils have been analyzed and tested; agriculture has become more scientific and efficient. This all means a larger and safer field for the banker. Increase in agricultural products; increase in manufactures; cheaper freights to larger markets, will give employment to increased banking capital with the prospect of surer net returns.

The Federal Reserve Bank, which is now in process of organization, will begin its operation almost at the time that the opening of the Canal will become effective. Under proper administration, this bank should increase the efficiency of the banking capital now in use, and should gradually raise the standard of commercial loans, by

discriminating in favor of those which are liquid in character. It may also help to give the Pacific Coast that share of the international business of the world to which it is rightly entitled. It is not to be expected that this country can at once secure even its fair share of the trade of the Orient. England has been studying and cultivating that trade for centuries, and financial affairs tend to persist in established channels. England has also bought and paid for her experience in the Orient and we will have to do likewise. The original capital investment of almost every bank operating there has been lost and made good, sometimes more than once, before the business was established and profitable. Only those banks which can contemplate heavy losses with equanimity should undertake the opening of branches in that part of the world. Nevertheless the Pacific Coast—the extreme West—fronts the Orient—the extreme East—and inevitably trade will grow, and banking must find a way to follow trade.

We can look forward to an increasing banking business with countries across the Pacific, and also with South America, a land of great natural resources, where conditions more nearly approximate those in our own country. If rightly used, the disastrous war, now involving the leading nations of Europe, is an opportunity which will enable us to make a beginning in securing this business.

While fully realizing that war is destruction, and ultimately benefits no one, we, on this shore of the Pacific, can congratulate ourselves on being as far removed as possible from the scene of the conflict, and on having abundant food supplies for which the war must create an active demand. One local result of the opening of hostilities is already apparent, and it has shown us that the common use of gold instead of paper money, on which we prided ourselves as a source of strength, is really a weakness in our financial system. Gold is the current money in San Francisco, and in a very large measure throughout the Coast, and the use of reserve money for counter payment leaves us particularly exposed at a time when the whole world is scrambling for gold. Fortunately the use of currency has been gradually increasing and the additional circulation provided by the Aldrich-Vreeland bill is being used in counter payments as far as practicable. The Federal Reserve notes will, in due time, add to the circulating medium and we may look forward to a time when circulating notes and silver will be the pocket currency, and gold will remain in the bank vaults as a reserve against real emergencies. While recognizing that there are no certainties in financial affairs, we have confidence that a country which produces gold as well as silver, copper, and many other metals; which has the world's finest merchantable standing timber within its borders, and which grows the grains and fruits most in demand, will be able to retain gold enough from international exchange to keep its finances on a sound basis.

THE PUBLIC UTILITIES OF THE PACIFIC COAST

C. L. Cory.

While it may not be true that many public utility corporations of the Pacific Coast have had as many or as serious problems to satisfactorily solve as similar companies in the eastern and middle western portion of the American Continent have had to consider, especially during the past few years, yet the conditions have been decidedly different in the West as compared with the East, and some of these differences are worthy of careful analysis. In this article it shall be my aim to set forth concisely and yet somewhat fully the immediate past as well as the present situation, and the conditions governing the principal public service utilities.

What I have to say refers primarily to the urban and inter-urban electric railways rather than either to the transcontinental or local steam railroads, but I have in mind practically all other public utilities operating under private ownership, such as electric light and power, telephone, gas—both artificial and natural—and water companies.

Excepting only the advent of public regulation and control, which has caused far-reaching changes in the methods of financing, construction and operation, the most important problem with which the majority of public service companies have had to deal has been that of keeping pace with the rapid growth of business caused by the abnormal increase in population within the districts served. The census of 1910, when compared with that of 1900 for the Pacific Coast states and cities, does not really indicate the present situation. The four years since 1910, due to the advent of public regulation and control, and changed financial conditions—decidedly worse as far as public service companies are concerned—has presented by far more difficulties than the previous decade, and the rate of increase in population has been for the most part at a greater rate since 1910 than immediately prior thereto over the larger part of the Pacific Coast.

To illustrate the conditions by a single instance coming under my own personal observation, I have in mind a gas company in the principal city of southern California which had an investment in its artificial gas properties in 1910 of approximately \$10,000,000, with about 90,000 customers. Three years later the total investment had been increased to \$13,000,000, or additional capital required amounting to 30 per cent or at an average rate of \$1,000,000 per year. During this same three-year period the number of customers had increased practically 50 per cent, or to nearly 130,000. And it was during this period of abnormal growth that the most rigid and searching rate investigations were being continuously made by the public regulation board or commission. Nevertheless, to keep up with the increased demands of the community, it was necessary for this company to procure \$1,000,000 under such conditions and restrictions as existed in the principal financial centers of the country.

To raise the necessary amount of money to

meet such expenditures for extensions and enlargements anywhere on the Pacific Coast is absolutely impossible, and more than one of the western public service companies that have been or are now in financial difficulties would have had no trouble whatsoever had it not been for the added financial burden resulting from what would always seem to be desirable, namely, a large, rapid and permanent growth of new business.

A notable exception is to be found in the telephone situation. The great advantage of a permanent, and practically unlimited, financial policy, founded upon truly ultimate economic principles, is here apparent. Exchanges, toll lines, and local service conduits and cables have been built in the minimum amount of time, and business and customers taken on as rapidly as the demand developed. But it must not for a moment be assumed that the necessary new capital in such large amounts could under any circumstances have been obtained in any of the most prosperous centers of population in which such increased demand for telephone service has developed.

In some cases western public service corporations have been pioneers. This is true of the generation of electrical energy with water power, and its transmission at high voltage over long distances to centers of use. Such systems may now be found in all parts of the globe. In many instances fuel is used as the source of energy, the large central stations being connected with local substations by high voltage transmission lines. But twenty years ago the West was just beginning to "get electric power for nothing" from falling water, and the conditions existing during the last few years have demonstrated some new engineering, economic, and financial principles which are decidedly more sound than the somewhat false idea that it is always cheaper to generate electric power with water than with fuel consuming devices as prime movers. Experience has in the West proven that for the requirements of the larger cities a combination of water power and steam driven generating stations is the best from the standpoint of economy, as well as reliability of service. Notwithstanding the introduction of fuel oil in place of coal, which has reduced the actual cost of fuel for steam plants to less than half, and in some cases to less than one-third the cost of coal, the great economic value of the modern large hydro-electric generating system is more apparent today in the West than ever before.

I do not wish to convey the idea that auxiliary steam or other forms of fuel consuming electric generating stations are not desirable and necessary. In the majority of cases they, in reality, increase the economy of operation as well as reliability of service. But the greatest ultimate economy, in prosperous as well as lean years, demands, when conditions are favorable, the development of water power systems for the generation of power.

Except in the change to larger sizes of machines, the equipment of the most modern hydro-electric generation station has approximately

the same efficiency as those installed ten years ago. The depreciation, or reduction of worth or value, as a result of age, is decidedly less for the hydraulic development and generating equipment of a modern electric station than for a steam plant of the same capacity. There is no doubt that the first cost of the hydro-electric system may be from two to three times the cost of a steam turbine plant of the same capacity, but the depreciation upon the former will be much less, as far as present experience goes, than upon the latter.

But it is during the lean years that the hydro-

electric system has a decided advantage over its competitor, the steam plant. If required, the cost of operating the hydro-electric plant for a few years can be reduced to a minimum, with no permanent injury resulting, or excessive future expenses demanded. On the other hand, however, the steam plant must be constantly provided with fuel which is permanently consumed, resulting in an ever lessening of our natural resources. In addition, the conservation and storage of water for the more uniform operation of the hydro-electric systems, not only makes possible the continuous generation of a



POWER HOUSE AND 2,000 FT. INCLINE, BIG CREEK DEVELOPMENT.

greater maximum amount of electric power, but, in the majority of cases, makes available large quantities of water for irrigation and domestic use which adds real wealth to the community.

In large electrical generating, transmission and distributing systems, both water power and steam power plants are usually desirable, each to supplement the other, but, as I not long ago heard one of the most eminent engineers on the Pacific Coast express it, the greatest economy will many times be brought about by the steam plant being operated so as to use the least possible amount of fuel. In other words, the operating engineer should strive to attain, if possible, the condition where the total amount of fuel burned is a minimum, rather than to obtain the maximum efficiency with which the energy of the fuel is converted into electrical energy; this, of course, to be the case only when the hydro-electric generating plants will supply the maximum demand without requiring excessive investments in water storage, or other hydraulic development.

The fundamental principles set forth above in reference to the generation of electric power in hydro-electric plants are becoming more and more important in connection with the production of power for all purposes on the Pacific Coast, and the public utility companies have, during the past few years, consistently planned future developments with this end in view. From the financial side this broader basis for meeting the needs of the future should not be allowed to go unrecognized. If wisely carried out it will increase, to a marked degree, the security which will, for all time, continue to exist in investments in hydro-electric systems.

The facts set forth above, in comparing the ultimate economy resulting from the development and construction of hydro-electric generation and transmission systems in place of, or as a substitute for, the generation of electrical energy from fuel, indicate but one instance of many that might be cited where the permanent investment of a comparatively large sum of money results in a great reduction in the maintenance and operating costs, and also decidedly improves the character of the investment itself. There can be no question, however, that to obtain such greater efficiency and economy in the end, requires investments sometimes many fold greater than would be absolutely necessary to accomplish the result desired, serious consideration not being given to the increased maintenance and operating costs.

As contrasted with Eastern cities, the domestic water supply systems of the West are, in most cases, what are known as gravity systems, meaning thereby that the necessary supply of water is diverted from the mountain streams, sometimes stored, and conveyed to the place of consumption through gravity conduits so that little, if any, pumping is required, even to supply the higher levels where the manufacturing plants and residences may be located. The investment in such gravity systems, however, notably the recently completed aqueduct of Los Angeles, is very large when compared with a water supply

system of the same total capacity, usually expressed in millions of gallons daily, where the water is pumped directly into the mains with comparatively small storage, as is the case in many of the large cities along the Great Lakes in the North Central and Eastern States.

In some instances, notably Los Angeles and Seattle, the bringing of domestic water from the mountains into the cities makes it possible to generate considerable quantities of electrical energy. When this is done it is, of course, apparent that additional wealth is thereby created, and but little reflection is required in such cases to convince one that the greatest ultimate efficiency and economy, and the greatest benefit to the people of the community, not only justifies, but demands, the large investments required for such extensive storage and conveying systems.

Based upon the above analysis, it is but a step to the important conclusion that, to provide for the necessities, let alone the conveniences and luxuries of centers of population, capital must be available in larger and larger amounts, as the size of the development is increased, due to the greater population and growth of industry in such communities. Rarely, is all of the capital required available, or to be obtained, in the West. Many such enterprises, whether publicly or privately owned, are financed in the East. Just at the present time there can be no question but that such enterprises, the development of which is absolutely demanded upon purely economic grounds, is being held back because of the impossibility of obtaining the necessary capital from heretofore available sources.

There are probably a number of reasons for such restriction in the financing of such permanent physical developments. Unquestionably the introduction of public service commissions, which have the power to regulate the financing as well as the rates for service rendered, has had much to do in diverting the investment of capital from such public utilities. It is to be hoped, however, that such conditions are only temporary, but at least one set of conditions which exist in some of the western states must be changed before there will be any improvement over the present most unsatisfactory situation. In some states, the regulation of all of the public utilities is not under the control of the state commission. Some of the public service companies are under such control, while others, principally in the cities, are under the supervision of the public utility boards of these different cities.

It is certainly most unreasonable to expect capital to be forthcoming from any source, if the rates of a large public utility in any city are subject to change as often as once a year, little consideration being given to the inevitable variations and increased investments, which not only may, but do occur in different years. In such instances, nothing can ever be settled, and it is foolish to presume that the public is being protected. Such is not the case. The public in reality suffers most. The stockholders in the public utility never know what is coming next,

and if there is anyone that is benefited, and I doubt if the benefit in this direction is material, it is the investment bankers, who, in order to protect themselves, increase interest rates to such public service corporations, with the result that the normal development of the industry as well as the community is retarded.

The President of the Public Utility Commission of one of the largest states on the Pacific Coast is responsible for the assertion that it is the object of the Commission to so do its work that any conservative business man will prefer to invest small sums that may be entrusted to him to invest for his immediate relatives and friends, in the securities of the public utility companies, rather than resort to the long considered safe and conservative investment in mortgages and deeds of trust.

There are many indications of a decided improvement in the attitude of mind of the investing public toward the honest, wise, and conservative public utility corporation. One of the largest hydro-electric, light, power and gas companies in the United States, which controls practically the entire business of the character carried on by it in Central California, has, within the past six months, sold in excess of \$10,000,000 of its preferred stock to its former stockholders, present employees, and existing customers. The guaranteed return upon the investment is somewhat in excess of 7 per cent per annum, and there seems no question whatsoever but that the money so invested is not only secure as regards the principal, but that the interest will be forthcoming promptly when due, and, in addition, the development of the community very materially advanced.

There are other similar companies of less magnitude that are being financed satisfactorily in the same way, but the greatest possible development of such methods of financing can only be brought about by the most hearty co-operation of the public utility commissions, in their actions in reference to the financing and regulation of rates of such public utilities, and the directors, financial managers and operators of the utility companies.

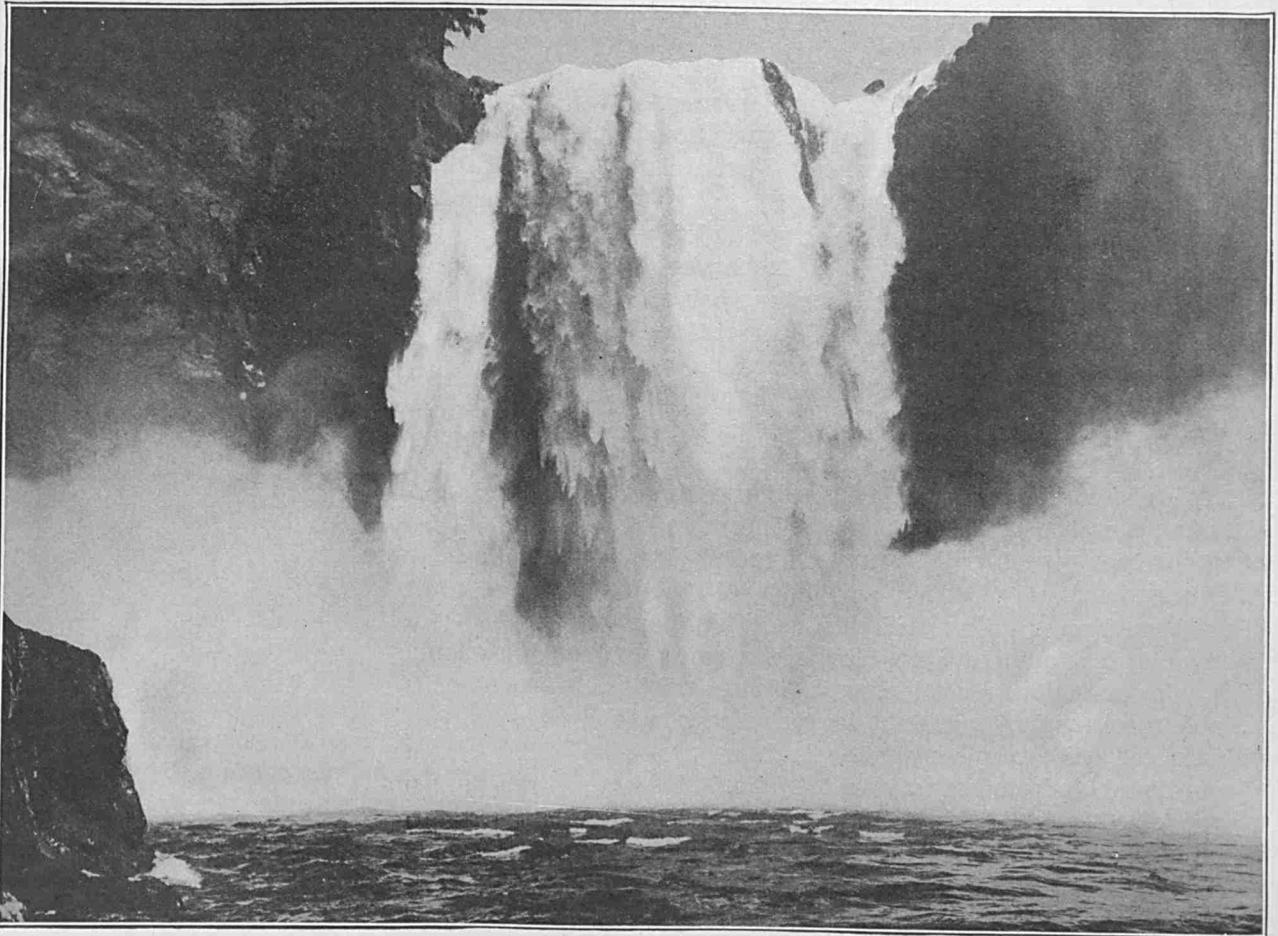
Under present conditions, however, it would seem practically impossible to assist new enterprises. While money may be available for extensions and improvements of the older, successful companies, new, and as yet untried, enterprises on the Pacific Coast are receiving little or no consideration from investors of any class. Serious as this situation may be, it has its advantages. It is unquestionably very much better, at the present time, to conservatively advance the interest of heretofore successful enterprises that have been wisely administered, than to run the risk of attempting to make successful the untried enterprise, with a new organization as regards its personnel, which organization may, or may not, have the ability to manage the enterprise wisely.

Among the many developments for which there is a crying need upon the Pacific Coast, is the application of the now well-known, suc-

cessful, and efficient methods of the corporation to deal with the production of wealth from what are now relatively non-productive lands. Unwise speculative individuals, with little or no ability as regards the development of land, have, within the past few years, made some monumental failures in the western states. In fact, it is somewhat of a question yet whether the United States Government itself, through its Reclamation Service, has made an unqualified success of many of its irrigation enterprises. The return upon such land projects will necessarily be slower than in transportation systems or other similar public service projects, but there seems no sound reason why, with proper management, a great land enterprise might not be operated successfully, the same as a transportation system, or large manufacturing company. In the West the development of water, either by storage, pumping, or the diversion of natural stream flow, is usually necessary in such land projects, and it has been in connection with the satisfactory supplying of such water that many false estimates as to the relation of the cost to the quantity of the water obtained have been made. This fact, coupled with the speculative character of many land schemes, has resulted in serious financial failures. The element of time must be taken into consideration, as it has not been heretofore, and the profit cannot be obtained in any other manner than from the land itself, as a result of its increased producing power. The usual plan of purchasing the raw land in great areas at low figures, the development of an adequate irrigation system, and the sale of such land on easy terms in small tracts at a large apparent profit, in most instances, has resulted in placing the burden of development upon the purchasers, who are not only the least capable of overcoming the inevitable difficulties involved, but are not able financially to provide the necessary funds to prosecute the work with the greatest efficiency.

Proper encouragement from the legislative and state regulation boards toward large land operating corporations, conducted upon a far-seeing and wise financial policy by capable administrators and managers, will unquestionably result, in the near future, in the success of such agricultural corporation enterprises.

In conclusion, it may be said that, for the most part, the public utility companies of the Pacific Coast are in a sound financial condition, with excellent prospects for the future. Some errors that have been made in the past must be corrected, not only within the management of the companies themselves, but in the attitude of the public towards such utilities. The elimination of unrestricted competition has been most beneficial, and a liberal policy toward public utility companies by the various State Commissions, coupled with a consistent effort on the part of the managers of the utilities to be scrupulously honest with all stockholders and to give the best possible service at a reasonable cost to their customers, will serve to attract the necessary capital required for the greatest ultimate efficiency and economy in operation.



THE WEALTH OF THE WEST.

THE PRESENT STATUS OF WESTERN IRRIGATION.

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No other important industry of the West has carried a heavier burden of adverse circumstances than irrigation. Since its inception in 1847, when the Mormons under Brigham Young raised the first American irrigated crop, the industry has been beset by an endless series of difficulties, the chief of which was ignorance. Though irrigation is one of man's oldest arts, the American settlers who ventured into the West's arid valleys and plains did not know its ABC. In the construction of dams and diversion works, in running the lines for the ditches, they had no engineering advice; no instruments. No precedents guided them in the preparation of the land for irrigation or in the application of water to the crops, and the accumulated experience fund of one district was inaccessible to nearly all others on account of isolation.

The miner's hand was raised against the irrigator. In the early years the law, in disputes over water, favored the miner at the expense of the farmer. After the miner abdicated as boss of the West the cattleman usurped the throne, and the cattleman's most precious possession was the water front; the right of exclusive control, by fair means or foul, over the streams of life-sustaining moisture crossing the parched range. This possession he defended against the

homesteader, who was the irrigator, during a war that lasted for thirty years.

The laws governing the disposition of the public domain, cut to fit conditions in the humid region, blocked the path of irrigation and encouraged speculation. Worst of all was the insecurity of water titles. The owner of a water right could never be certain of its continued possession. At any moment a newcomer might divert half of his water from the stream above. The enlargement of a ditch higher up might leave the stream dry, the farmer ruined. Against this robbery he had no redress except an appeal to the courts. The law considered a water-right to be personal property; there was no public supervision over the West's most precious possession. The acquisition of public land was regulated by ever more stringent provisions. Records were kept and every care was taken to protect the title of the freeholder. Water titles, however, through the utter lack of a comprehensive irrigation code, were as unstable as the element upon which they were based. Endless litigation over water-rights clogged all the courts in the irrigation states, but the decrees resulting from the law suits could not be enforced except through more litigation or by force of arms.

Despite these drawbacks, serious enough to choke a less vital industry, irrigation expanded. In 1899, when irrigation enterprises were first made the subject of detailed Census investigations, the West had become, in point of area, number of enterprises, length of canals and ditches and of capital invested, the third largest irrigated district in the world, yielding the palm

only to India and China. It contained 107,716 farms irrigating a total area of 7,527,690 acres, and the irrigation works represented an estimated capital outlay of \$67,482,261. This rank was attained in spite of the fact that, in the preceding decade, construction of new works had been almost at a standstill.

Between 1870 and 1890 canal construction kept ahead of settlement. From 1890 to 1902 when the Reclamation Act was passed, the number of new enterprises was small. In 1903 the revival began and by 1910 the total irrigated area had increased to 13,738,485 acres, the canal mileage had grown to 125,591, 6,812 reservoirs with a total storage capacity of 12 million acre-feet had been built, and the capital invested in irrigation enterprises had increased to \$307,866,369. The farmers themselves owned eighty per cent of all irrigation systems.

But these figures do not tell the whole of the remarkable development. In 1910 construction had again outstripped settlement. Water was available for almost 20 million acres, yet fourteen million acres only were irrigated. And the projects initiated and under way in 1910 included an area of 31 million acres, with an estimated final investment of \$424,281,000 in all projects reporting that year.

These statistics indicate a continuous, rapid growth in the development and utilization of irrigation water but they do not answer that most important question: Does irrigation pay? The correct answer to this question not only determines the safety of the money invested in completed and uncompleted irrigation enterprises; it must also have a tremendous influence upon the future growth and development of the entire Pacific slope and upon every investment made in this territory. The ratio of the West's industrial and commercial development must largely depend upon the density of the rural population. A minimum of forty million acres can be added to the present irrigated area. Divided into eighty-acre farms (the average unit will be nearer forty acres) this area will support a strictly rural population of three and a half million souls, plus an equally large additional urban population—if irrigation pays.

A population of seven millions is practically the equivalent of the entire population throughout the arid and semi-arid West in 1910.

The U. S. Census Office of Agriculture in 1910 estimated the average value of crops produced on irrigated land to be \$25.08 per acre; for crops grown throughout the country under humid conditions, without irrigation, the estimated value was placed by the Census office at \$17.54 per acre, showing a greater crop value per irrigated acre of 43 per cent.

These estimates, however, were based solely on the comparative yields of field crops; wheat, alfalfa, barley, oats, potatoes, sugar beets, timothy and clover. The high-priced crops such as orchard fruits, berries and small fruits, tropical and subtropical soil products, nuts, grapes and vegetables did not enter into the computations

at all. Had these high-priced crops been added, the crop value per irrigated acre would have been considerably higher. Nor should these products be omitted in a discussion of the present and future status of Western irrigation, as they constitute a far larger percentage of the total soil output in the irrigation states than in the rest of the country. In the North, according to the 1910 Census, the output of vegetables and potatoes, of fruits, nuts, grapes and berries aggregates 10.8 per cent of the total crop value; in the South the percentage is 9.8; in the West it rises to 24. For the three Pacific states, California, Oregon and Washington, the percentage of these high-value products climbs to 29.5, or almost one-third of the total value of all crops. As a result of this extensive specialization in crops of more than average value the yield per irrigated acre in the state of Washington reached \$49.82; in California \$43.50; in Texas \$45.43 as against a general average of \$25.08 for all irrigated land.

With systematized distribution, with energetic selling campaigns conducted by co-operative associations of the growers, with laid-down costs in the Eastern markets reduced to those districts located close to tidewater through water transportation via Panama, with Europe accessible through the Canal and with ample refrigeration capacity to handle the potential traffic in perishable products, the proportion of the West's high-value crops to the total yield can be raised to 35 or 40 per cent in the next ten years without filling domestic and foreign markets beyond the saturation point.

There is still another factor bearing on the profit of cultivating irrigated land which the Census enumerators did not, and could not, take into consideration. They could make no distinction between land having a full supply and that having only a partial supply of irrigation water. Though there were no statistical data available on the subject, the irrigated area which has only a partial, irregular supply of water must by far exceed a million acres. More than sixty per cent of the entire irrigated area depends upon the variable flow of the smaller streams for its water. Many ranches merely have a flood-water right. Late appropriators on fully developed streams—and their number is legion—must be content with one or two irrigations because the demands of prior appropriators absorb the entire available flow long before the end of the growing season. Of the 508,000 acres reported as irrigated from the San Joaquin River, for instance, 125,000 acres are merely unbroken pasture land flooded during periods of high water. The elimination of this partially irrigated land, most of which will eventually have a full supply through flood-water storage, would materially add to the average acre yield of the balance.

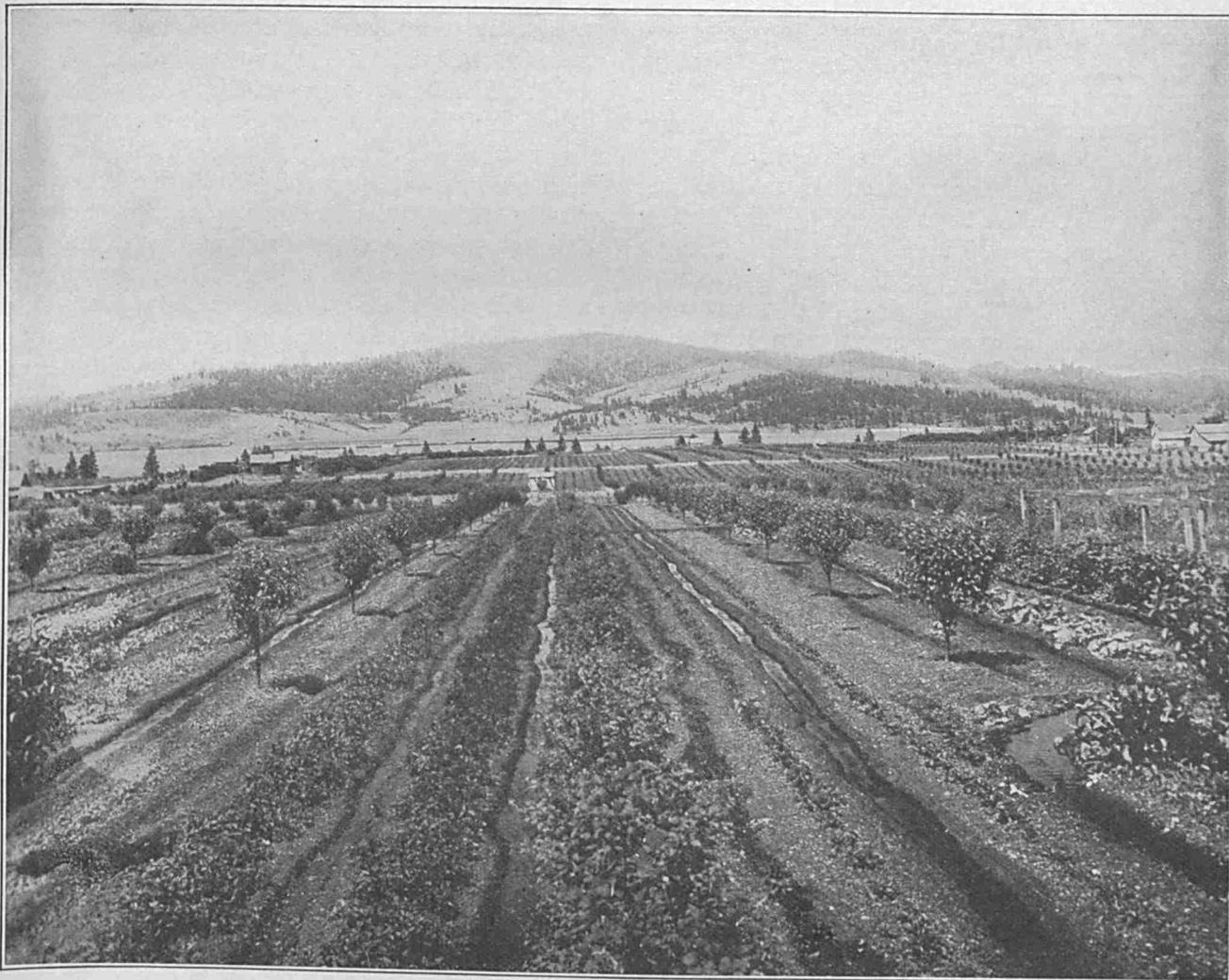
If irrigation pays, how does it happen that irrigation bonds to the amount of \$25,000,000 are in default; that approximately five million acres for which water is available lie idle and unproduc-

tive? What has caused the Eastern investor to lose faith in irrigation securities? Why did the stream of settlers shrink instead of broaden during the last three years?

The answer to the last question lies close at hand. The investment in the irrigation systems of the 7,500,000 acres watered in 1899 averaged \$8.89 per acre; the cost of the systems constructed in the following decade rose to \$37 an acre. Still, this increase alone could not have checked settlement. Far more serious than the higher cost of the water-right was the increasing price placed upon the irrigable land. Raw land which, dry, would not fetch \$10 per acre in the open market became the subject of speculation as soon as a supply of irrigation water was

tlers; the Southern Pacific Company cut the appraised value of its holdings under the Truckee-Carson project, Nevada, from \$30 to \$15 an acre and placed a similar restriction upon buyers; in the Rio Grande Valley the Water Users' Association obtained options on all the excess holdings of its members under the Elephant Butte project and is disposing of the land at prices forty per cent lower than those demanded by private owners or promoters of private enterprises two years ago.

Though the reduction in the price of raw irrigable land has been universal throughout the West in the past two years, except in those districts of suburban rather than rural character, this drop in the general price level is insufficient



IRRIGATED LAND IN THE "INLAND EMPIRE," NEAR SPOKANE, WASH.

in prospect and passed from one speculator to another until its price, exclusive of the water-right's cost, reached \$75, \$100, even \$150 per acre. In Idaho relinquishments of desert entries on land which *might* come under a Reclamation Service project sold for as high as \$40 an acre; lieu-land scrip entitling the owner to select and obtain patent to public land which was vaguely, tentatively included in the preliminary survey of a government project brought \$30 an acre.

This upward movement of land prices saw its culmination in 1912. Since then reason has returned and prices have come down. Lieu-land scrip has dropped to \$10. The Northern Pacific railway, for instance, cut the price of some of its land included in a government project from \$90 to \$35 and refused to sell except to actual set-

by itself to bring about the speedy, full utilization of the raw land for which water is now available, or will be within the next few years. It must be supplemented by a radical change in colonization methods.

The Reclamation Act was passed in 1902 after a five years' campaign financed by the Western railroads. One of the principal arguments used by its proponents was that the federal government would not be called upon to appropriate a dollar; that the receipts from the sale of public land would create the reclamation fund and that the settlers would perpetuate this fund by paying back into it the cost of every project within ten years from the opening. In other words, the proponents of the measure asserted that the homesteader would be able not only to trans-

form a piece of raw desert land into an improved, self-supporting farm within a year from the delivery of the first water, but that he would also be able to retire the entire construction cost within ten years. Following the lead of the Reclamation Act, the promoters of projects under the Carey Act likewise divided the payment of water-right charges into ten annual instalments and issued ten-year bonds against them. In undertakings on private land the repayment period was usually reduced to periods of five, six or seven years.

Costly experience has since shown that the average settler requires not one but five years merely to transform the desert land into an improved, self-supporting farm; that he cannot begin to repay the cost of the irrigation system until after the fifth year, and that the burden will be too heavy on him unless the total term of repayment is extended over a period of at least twenty years. On a majority of the surviving Carey Act and on all of the Reclamation Service projects the twenty-year extension in the time of payment has since been, or will be, made. But the hardships imposed upon the settlers through the lack of knowledge on the part of the promoters, the ill will and prejudice engendered through the numerous settlers who lost their land and improvements because they could not meet the payments, have made colonization difficult and slow. When there is added to the annual water-right instalment, to interest on deferred payments, to the charge for maintaining and operating the system, an annual instalment on the cost of the land itself, the task of the settler becomes almost impossible.

Colonization methods, however, are beginning to change in accord with the new conditions and the new experience. Promoters of irrigation enterprises have learned that their success and profit depend upon the settler's success. A number of the commercial irrigation undertakings owning both the land and the water are beginning to improve various units of their holdings out of their own funds, to level, ditch, seed and crop the land prior to the coming of the settler, thus producing an income whether the land is sold or not. In addition several concerns are assisting the settler by supplying him with dairy cows and stock on favorable terms. However, this change of the promoter's attitude toward the settler is sporadic only. The isolated instances of this practice merely indicate that the promoter is just beginning to see the relation of his own to the settler's success. From this phase of colonization to the ready-made irrigated farms of the Canadian Pacific Railway, or to the state loans made by Australian boards to new irrigation farmers is a long step. Advance in this direction is made difficult by the restricted market for irrigation securities.

The apparent inability of the engineering profession to furnish a reliable estimate of a project's ultimate cost is one cause of defaults in irrigation securities. Underestimating the cost of an irrigation system is an ancient fault. It almost disrupted the enterprise of the Greeley

colony, Colorado's irrigation pioneer. The colony's engineer estimated that four ditches would be needed to water 120,000 acres, and that their cost would run to a total of \$20,000. The first ditch cost \$30,000 and was too small to irrigate even 2,000 acres. When this ditch was finally enlarged and finished it watered 32,000 acres and cost \$112,000. Since that time inadequate cost estimates have ruined scores of enterprises with monotonous regularity. Financed in accordance with the engineer's figures—often dictated by the promoter, it must be admitted—construction is begun, settlers appear, make improvements and wait for the water that does not come because available funds are exhausted long before completion. Since the settlers receive no water or an intermittent, insufficient supply, they can pay neither interest nor principal. Both bondholders and settlers lose hope and the half-finished project is abandoned.

Such underestimating of cost is not at all infrequent. On the Twin Falls South Side project, the largest and most successful Carey Act enterprise in Idaho, the actual cost exceeded the estimate by almost one hundred per cent, and absorbed the entire profit expected from the sale of the water-rights. But the successful colonization of the 200,000-acre tract, together with the activity on nearby projects began under different auspices, raised the value of the townsite to such an extent that the promoters' profits attracted the attention and envy of other promoters and inaugurated the long succession of more or less speculative Carey Act projects whose collapse is largely responsible for the present odium attached to irrigation bonds. On nearly all of these projects not only the cost but the quantity of the available water was underestimated. On some of these enterprises the engineers made no measurements, had no records of the run-off. They surveyed the stream's drainage area, estimated the average precipitation over the watershed and from these data computed the run-off which, in turn, determined the area included in the project and the cost per acre. One project upon completion had water for only 36,000 acres, though water-right contracts had been sold to cover 65,000 acres. Upon investigation it was found that the engineer had included in the watershed a large area which drained into an entirely different stream, whose run-off did not reach the project's ditches at all. The bondholders and settlers paid heavily for this oversight.

A combination of insufficient capital and insufficient water ruined the Carey Act project which is now being completed jointly by the State of Oregon and the Reclamation Service. Another project in Idaho which had to be taken over and refinanced by the bondholders cost them a million dollars because the promoters had included in the total area of 60,000 acres a tract of 20,000 acres consisting of rough, broken lava scab land unsuitable for agriculture. Since the contract with the state called for \$50 per water-right the elimination of these 20,000 acres cost the bondholders a million.

Shoestring promotion played its part in the demoralization of the irrigation-bond market. The Twin Falls Land & Water Company had its project eighty per cent completed and paid for out of its funds before it issued bonds, and these bonds, owing to the success of the enterprise, were retired in short order. Several succeeding projects tried to make up for the promoters' lack of capital by financing the enterprise wholly through bonds and through the sale of water-right contracts to settlers almost before construction had begun, with disastrous results, of course. The only large shoestring promotion which succeeded of late in creating a prosperous irrigated district was the California Development Company, and this concern, despite the settlers' success, is in the hands of the receiver. But the project it initiated, the Imperial Valley, has added more than 300,000 acres to California's irrigated area in twelve years.

Underestimation of cost, overestimation of the available water, engineering mistakes, faulty and sometimes fraudulent financing, poor management, inflated land prices, higher cost of water-rights and wrong colonization methods are responsible for the present status of irrigation, for the bad odor of its securities and for the decline in the demand for irrigated land. Results from cultivation not at all up to the level of the rosy predictions likewise helped to cut down the number of settlers.

The worst has been said. It needed saying. Recognition of past mistakes and a sincere effort to avoid them in the future constitute the only basis upon which to renew building activities. Without this recognition of past errors in methods no correction is possible, and without this correction the task of reassuring investors, of restoring confidence in irrigation securities is practically impossible.

That at least some of the lessons contained in past mistakes have been learned is shown by the adoption of model irrigation codes in half a dozen Western states during the last ten years. Insecurity and instability of water titles constituted one of the most discouraging features of the situation. So long as no efficient public supervision over water filings, diversions, and distribution was exercised, water titles were in a chaotic condition, sound development was hampered and restricted and litigation was encouraged. During the last ten years Oregon, Washington, Utah, Nebraska, South Dakota have followed the lead of Wyoming and Colorado and adopted comprehensive irrigation codes providing for strict supervision of all water filings, for an efficient system of recording priorities and for an intelligent method of determining the extent and measure of every water-right on all streams. The California legislature likewise adopted a comprehensive irrigation code at its last session which aimed to place the state's entire water resources under the supervision of a special commission, but the opposition succeeded in sidetracking the law by means of the referendum petition. The act will be submitted to the voters in November and, if approved, will become opera-

tive immediately. Its passage will gradually diminish the astonishing volume of water litigation that has cost the Californian irrigators millions of dollars, and it will set free for use and development vast amounts of flood water now controlled by riparian owners, as the act makes the common-law doctrine of riparian rights inoperative in the state.

The gradual change in the attitude of the promoters toward irrigation projects is as important and as far-reaching in its effects as the adoption of comprehensive irrigation codes. In the early period of extensive ditch building, between 1880 and 1890 when English and Scotch capital was freely invested in new enterprises, the irrigation companies endeavored to make a profit both out of the sale of water-rights and of the water itself; to retain possession of the ditch system after the water-rights covering its full capacity had been disposed of. The majority of these water companies were disappointed in their expectations of profit from operation. The power to make rates for the delivery of water to the owners of water-rights was vested in local bodies, usually in the boards of county commissioners or supervisors elected by popular votes. The water users had the votes, the water companies did not. As a result rates were fixed at so low a point that the companies, as a rule, were glad to turn the ditch systems over to the farmers. One instance is on record in which the county commissioners fixed a rate of 20 cents per acre for water delivery despite the vehement protest of the water company. When the farmers took over this system they found that the actual cost of maintenance and operation the first year exceeded \$1.15 per acre. On the other hand, when the settlers under the Twin Falls South Side project assumed the management of the canal system they cut the water rate the first year from 90 cents to 15 cents per acre. The following year they had to spend \$300,000 to put their neglected ditches in order.

During the last fifteen years irrigation enterprises have ceased to expect profit from operation. The sale of the water-right, of the land, or of both, is the only source of profit in the modern undertaking. Hitherto, periods of five to ten years were considered ample for the repayment of capital investment plus profit, but the experience of the last six years has shown the fallacy of this assumption. A twenty-year period instead of five years is now accepted as the minimum. This change will shortly make itself felt in a stimulation of the demand for irrigated land, and there are indications showing that this increase in the time of payment will not remain the only concession to the settler. Financial assistance to the colonist, either in the form of improved land or in loans for improvements and the purchase of stock, is gaining favor, but it is always accompanied by a careful selection of the beneficiaries from the mass of the applicants.

A marked tendency toward stricter, more efficient public supervision over private and quasi-public irrigation enterprises is even more important in the ultimate restoration of confidence in



IRRIGATING ORANGES, LOS ANGELES COUNTY, CAL.

irrigation securities. A large share of responsibility for the failure of numerous Carey Act projects must be placed upon the shoulders of state officials who failed to protect the interests of both investors and settlers; who lent the name of the state to the enterprises and then allowed the promoters to do as they pleased. Adequate preliminary investigation of the engineering features; determined, vigilant supervision over both construction and finances; insistence upon adequate bonds; refusal to allow the sale of water contracts before water is ready, would have forestalled ninety per cent of the failures. Though the collapse of numerous projects has jarred the state officials into action and though a recurrence of the old *laissez-faire* conditions on a large scale is impossible, the change has come too late. In future large irrigation enterprises, the state, no matter how efficient its supervision, will have to lend more than its name; it will have to lend its credit as well and guarantee the bonds of the project to finance the enterprise, for the memory of the investor is longer than is usually supposed.

The California legislature in 1887 passed the Wright Act authorizing the formation of irrigation districts which were given the power to issue bonds for the construction, improvement or enlargement of irrigation systems. Forty-one districts were organized under this law. All of them issued and sold bonds; most of them defaulted in the payment of both interest and principal. Inexperience, mismanagement, politics, attacks upon the legality of the bonds by the large

landholders opposed to the formation of the district, all brought about the financial fiasco. That was twenty-five years ago. Since then the Wright Act has been strengthened, its weak places have been reinforced, two large districts have demonstrated the successful working-out of the new law, but nevertheless the memory of the initial failure still lingers and irrigation-district bonds are a drug on the market. Though the state has placed the district bond on a legal parity with municipal bonds, still these securities are unsalable except at a heavy discount.

It is an anomalous situation. In the Turlock-Modesto irrigation district, for instance, the prosperity, yea the very life of the two thriving towns is based on the success of the water system, on the prosperity of the district. Without the water supplied to the dense rural population by the district, the towns would revert to the condition of insignificant hamlets. The municipal and school bonds of these communities have always sold at par or better; the basic securities, the bonds of the district, supported by the power to levy taxes both on city and country property, have gone begging far below par.

Despite this deep-seated prejudice the irrigation-district plan of financing and carrying out irrigation projects will probably supplant private initiative in the larger enterprises of the future. There are two reasons in favor of the district plan. In the first place it will be impossible for years to come to market bonds issued by private

irrigation enterprises of large size, no matter how strict public supervision over these enterprises may become. Through proper legislation providing for stringent preliminary investigation by competent, non-political commissions of technical and legal experts, unsound district projects can be practically eliminated, and the various Western states can well afford to lend their credit to feasible, sound enterprises under the district plan, either by guaranteeing the interest on the district bonds or by making the issues incontestable before they are placed. This method presupposes rigid state supervision over all district projects from their inception to their completion.

The chief irrigation development of the future, however, is predicated upon an extension of Federal activities. It has been shown that the average cost per acre rose from \$9 for enterprises initiated prior to 1900 to \$37 for the projects completed in the subsequent decade. The bulk of the irrigable land as yet unreclaimed must depend for its water supply upon the West's large rivers; upon the Colorado, the Green, the Grand and their important tributaries; upon the Sacramento and the Columbia. The magnitude of the task involved in storing the flood waters of these rivers, of diverting the storage and placing it upon the high-lying irrigable lands makes the undertaking impossible either for private or state enterprise. To place water from the deep gorge of the Columbia river upon the two million fertile acres of the Horse Heaven plateau in central Washington, for instance, would require the construction of a main canal five hundred miles long. On the Colorado river water must be stored in Colorado and Wyoming for use in Arizona and California. Comprehensive development of the Sacramento river watershed is possible only through state and federal co-operation. It will be some time, though, before the scope of the U. S. Reclamation Service can be enlarged, before a method of co-operation between states, districts and the national government can be worked out.

In the meantime the most pressing problem before the irrigated West consists of the colonization and cultivation of the 6,000,000 acres for which water is now ready. Almost \$200,000,000 are tied up in these idle parts of the various enterprises. By extending payments over a minimum of twenty instead of five years, by relieving the settler of all charges except for maintenance and operation the first four years, by judicious loans for improvements or for the purchase of stock, the rate of settlement can be increased materially. The first part of this colonization program promises to be adopted almost generally on new enterprises throughout the West, and the example of the Canadian Pacific Railway is opening the eyes of irrigation managers to the need and effectiveness of a first-aid-to-the-new-settler plan. The prospect of a speedy settlement of the fallow, unproductive area under existing ditches is better than it has been for the past two years on account of deflated prices of raw land and a decided drop in speculation and speculative values.

Compared with the rest of the West, California has always occupied a place apart in its economic development. Two features distinguish the growth and development of Californian irrigation from the development of the industry in other parts of the West. One of the great obstacles in financing irrigation enterprises outside of California has been due to arid conditions and to the public ownership of the land. Arid land without water has no value as security, nor can it be given as security for a loan until title has passed from the United States to the entryman, and reclamation by irrigation is a condition preceding the granting of patent. In California, however, by far the largest part of the irrigable area is only semi-arid, will produce grain and forage crops without irrigation and therefore has earning power and value prior to irrigation. Again, the bulk of this land has been in private hands, producing revenue for fifty years. And where the land was both arid and in public ownership, as in the Imperial Valley, construction was so inexpensive that the notes and cash payment of the entrymen, averaging \$10 per acre, sufficed to build the canal system. Furthermore, California's climate made possible the cultivation of a tremendous range of high-priced products almost from one end of the state to the other, a distance of 800 miles. As a result of these favorable circumstances, and in the face of the chaotic conditions of water titles, California has been able to finance its irrigation projects without going far beyond its borders. The thousands of mutual water companies, for instance, always find a ready market for their securities within the state. Eastern bond buyers, judging the value of a bond by the net earnings of the concern issuing it, rarely touch these securities because the mutual water companies, being co-operative in their organization, show no earnings, their revenues being raised by assessments upon their shares. Experience has shown, however, that the moral security behind these bonds is excellent; namely, the earning power of fully developed ranches and orchards whose owners know that the mortgaged water is the basis of their prosperity.

Still, California has by no means been exempt from loss through speculative promotion of irrigation enterprises. It is only necessary to mention the Solano project, partially financed with funds taken from the treasury of the United Railroads of San Francisco, to illustrate conditions. But whatever loss has been occasioned through irrigation failures in California has fallen largely upon the promoters, their associates, and creditors and upon the purchasers of land; the Eastern market has been in no wise affected.

Nor has the Eastern investor been called upon to finance the large area that has been reclaimed by wells during the last ten years. In 1910 13,906 pumping plants and 5,070 flowing wells irrigated a total of 622,025 acres. Since then well irrigation, born and perfected in the southern third of California, has made remarkable strides. Where a lift of 30 feet was considered the practicable limit ten or twelve years ago, improvement in the efficiency of pumps and internal combustion en-

gines, reduction in the cost of liquid fuel, substitution of distillate and tops for gasoline, the advent of cheap hydro-electric power in the irrigation field have doubled the economic range of the lift even for field crops. Flowing artesian wells were discovered in numerous districts of Nevada, California, Arizona, New Mexico and Washington. Throughout the great interior valleys of California pumping plants began to water areas which, under gravity systems depending upon stored flood water, would have to wait years for their full development.

Judging from the performance in the past five years the most profitable employment of capital in irrigation enterprises within the immediate future will be in the outright purchase of water-bearing land, in the installation of well-irrigation systems watering small units which, seeded to alfalfa, will be colonized more speedily than large irrigated tracts without improvements. How large this potential field is may be judged from the fact that in India 16,000,000 acres are irrigated from wells.

From the foregoing it appears that the period of private, largely speculative irrigation enterprises in the West is almost over. The bulk of the new work must in the future be undertaken either by the state and the federal governments or by irrigation districts with federal or state aid and supervision. Not only does the condition of the bond market make such a change necessary in order to give the cautious investor and investment banker a guarantee against default, but the

very nature of the work points to the necessity of public rather than private enterprise. Most of the remaining large projects will at least be as costly per acre as the works so far put up by the Reclamation Service. Had the Reclamation Service work been financed through private channels, the bonds based on the settlers' promise to repay the construction charges in ten years would have been in default long ago. Even admitting that private work can be done at smaller cost than public work, the acre-charge of the greatest remaining projects must of necessity be so high and the unproductive period so long that private capital will hesitate in entering the field except under public guarantees, irrespective of the present position of irrigation securities. And the trend of all the agencies working for the development of the Pacific Slope's irrigation resources is directed toward the harmonizing of federal, state and district activities.

It must not be understood that private capital and enterprise without public guarantees will cease to participate entirely in future work. Far from it. In California the irrigated area was lifted to 3,250,000 acres without public aid or supervision of any kind and several million additional irrigated acres will be added solely through private undertakings. When it is considered, however, that the total area which will ultimately be irrigated in the state is close to ten million acres it will be seen that the commonwealth must inevitably play a most important role in the work before the task is finished.



COTTON IN THE IMPERIAL VALLEY, CAL., RECLAIMED BY IRRIGATION FROM DESERT WASTE.

WATER POWERS OF THE PACIFIC COAST.

By W. E. Herring, of Stone & Webster.

The Pacific Coast presents many unusual features in connection with water power developments. The Cascade mountains, starting at the British Columbia line and extending southerly through Washington and Oregon, giving place to the Sierra Nevada mountains extending southerly through California, parallel the Pacific Coast line at a distance of 100 to 125 miles. Streams rising in these ranges of mountains and flowing westward are fed by numerous glaciers and snow fields, and fall from average elevations of from six to ten thousand feet to the flat plateau country, the average elevation of which is about 500 feet. This fall takes place within comparatively few miles and an enormous head can be obtained on any of the streams. In the Pacific Northwest there is an average annual precipitation of approximately 100 inches along the Cascade Range, while in California the precipitation is very much less.

Owing to topographical and physical conditions, the Pacific Coast section naturally divides itself into several entirely distinct territories or zones. At the north end is the Puget Sound country, extending from Olympia on the south to the Canadian line on the north, a distance of approximately one hundred and seventy-five miles, all bordering on Puget Sound, and including the cities of Seattle, Tacoma, Everett, Bellingham and Olympia. To the south, and inland one hundred and twenty miles from the ocean, bordering the Willamette River, a few miles above the confluence with the Columbia, is Portland and the immensely rich land adjacent to it on the south, which supports several good sized cities. Farther south, still west of the mountains but yet not bordering on the ocean, is the famous Rogue River Valley, and to the south of this in California is the Sacramento Valley extending down to Sacramento. Beyond is the immense territory adjacent to San Francisco, and the San Joaquin Valley to the south. Cut off entirely from this section is the region in and around Los Angeles.

Economic reasons require that each of these sections be treated as a separate entity, and be supplied with its various public utilities, independent of the other communities. At first these various sections were entirely separated from one another, but as time elapsed, connecting railroads were found to be a necessity, and today they are well served in this respect. The distance between the different localities, however, prohibited their being served as a whole by any one public utility, and hence the present situation.

The Puget Sound country is served by the Puget Sound Traction, Light & Power Company, whose total installation is 107,907 horsepower, of which 73,667 horsepower is produced by water power plants and 34,240 horsepower by steam plants. The total capitalization is approximately \$71,000,000. The Portland Railway, Light & Power Company supplies the territory from Portland to Salem, Oregon. Its total installation is

81,907 horsepower and its total capitalization is approximately \$60,000,000. The California Oregon Power Company operates in the Rogue River Valley in Oregon, and in the northern part of California, with a total installation of approximately 20,000 horsepower. The Pacific Gas & Electric Company supplies all of central California, its total installation being 233,900 horsepower, of which 123,700 horsepower is generated by hydro-electric plants. The Southern California Edison Company supplies Los Angeles and vicinity and has a total installation of 119,800 horsepower, of which only 42,500 horsepower is generated by water. In California there are also a number of companies which supply power in large quantities to distributing companies. Among these are the Great Western and the Northern California Power Companies with plant capacities of approximately 90,000 and 50,000 horsepower; and the Pacific Power & Light Corporation with 156,000 horsepower of which 80,000 horsepower is hydro-electric. In addition to these companies there are others which supply both light and power to the smaller communities.

Across the western barricade of mountains from the immense territory just described, and reaching back inland to the East are numerous fertile areas, some well populated, others more sparsely settled, which are supplied by various operating companies. The territory in and around Spokane, Washington, is served by the Washington Water Power Company, whose total capacity is 108,250 horsepower, of which 89,250 horsepower is water power. The basin of the Columbia River, and the country extending east to the limits of the State of Washington, is supplied by the Pacific Power & Light Company, with a total installed capacity of 22,100 horsepower. Central Oregon is so thinly populated that no large operating company has attempted to supply it. In California, Truckee, and also the neighboring section of the western part of the State of Nevada, is covered by The Truckee River General Electric Company. Further south, the Southern Sierra Power Company supplies, from its various plants on Bishop Creek, the adjoining territory in California, and its transmission lines extend to various mining communities and into the Imperial Valley district. The Company has one of the longest transmission lines in the world.

The growth of the Pacific Coast States is so well known that not more than passing mention need be made of it. In the ten years from 1900 to 1910, the remarkably increasing demand for electric power could not be met by the operating companies. The earlier types of construction for the water power plants are not the recognized standard of construction at the present day, but at that time they fulfilled the purpose admirably, with exceptions that are now well known. Lack of storage facilities was one of the common causes of inability to supply the constantly increasing demand for electric power. This was overcome, in some measure, by the construction of steam auxiliary plants, to tide over the peak period. The later hydro-electric developments

which have been made, have ample storage facilities which will obviate, to a great extent, the necessity of these steam relays; particularly is this true where more than one water power plant feeds into a transmission line. With only one such plant, the steam relay is needed to guarantee continuity of service; but, with several water plants, it is not so essential. In some cases, the expensive steam auxiliary plants provided in the early stages of development are now practically a dead investment so far as present revenue producing capacity is concerned; as a measure, however, of guaranteed continuity of service they are worth the money invested. The northern portion of the Pacific Coast differs very materially from the southern portion in this respect. On many of the streams in the southern portion the run-off is not sufficiently large to provide storage of any size, while on others prior appropriation of water for irrigation or for mining purposes prevents storage of any magnitude. In the northern part, however, these conditions do not exist. The run-off in the streams, owing to the fact that the precipitation is very heavy, is much greater.

As stated above, up to 1910 the operating companies had much difficulty in obtaining capacity needed for the demand upon their plants. Since that time conditions have changed to a certain extent; the markets have become more nearly saturated with power, and there has not been the demand that existed prior to that time. Forecast curves made as late as 1909 and 1910 by various operating companies showed an average annual increment that seemed to prove that much greater capacities would be needed in the next few years. It is not possible for a public utility company to wait until the demand exists for power before constructing its plant, but it is necessary for it to look ahead a few years, estimate, as closely as possible, the power that will be required, and anticipate the demand. Following this procedure, the various companies provided additional capacities and made arrangements for new plants to take care of the load which they expected to have in the succeeding years. The forecast curves did not follow their upward trend, but flattened out, and practically all of the companies on the Coast now find that they have a surplus of power. This condition is not so marked with the companies in California, for the reason that new uses have been found for power which cannot be found in the Pacific Northwest. Pumping water for irrigation, dredging, and similar purposes in California has served to consume a large amount of power, which at the time the plants were constructed was not counted upon. So far as the Pacific Northwest is concerned, the three large operating companies find themselves with an excess in their present operating plants of from thirteen thousand to twenty-five or thirty thousand horsepower. If the capacities of their steam plants are included, their surplus power ranges from thirty-five to forty thousand horsepower, up to as much as fifty and sixty thousand horsepower.

As a result of this condition the largest operating company in the Northwest has attempted by means of a very aggressive campaign, to interest manufacturers in other parts of the country in locations in the Pacific Northwest. The result has been rather gratifying. An endeavor of this kind is entirely new to the power companies, and the results will be noted with interest. In line with all the other public utility corporations operating in this country, the Pacific Coast companies are endeavoring at all times to build up the communities which they serve, realizing that upon these communities depends the success or failure of their particular enterprises. The amount of new capital needed for electrical development in California, Washington and Oregon in the next ten years is estimated at anywhere from \$150,000,000 to \$250,000,000, depending largely upon the number of new industries that can be brought to this section.

In practically all of the Coast cities the value of the manufactured products is less than in a majority of cities of smaller size in the eastern part of the country. With a rapidly increasing population, with the opening of the Panama Canal, and with the opening of Alaska, it is believed that this condition will be changed. Local conditions will have to be taken into consideration before any prediction can be made as to the extent to which the Coast will become a manufacturing centre. The four vital elements for industrial pre-eminence are: a market for the product manufactured, transportation, labor, and raw materials, and, to a lesser extent, the cost of power. The location of the industry naturally depends to a great extent upon the article manufactured. It is believed that the predominance of raw materials in the Pacific Northwest, the extremely cheap power which can be had there, the splendid transportation facilities offered both by rail and water to all points along the Pacific Coast, as well as to eastern points, will have much to do in influencing large concerns to locate west of the Cascade Mountains.

Statistics show that today one-fourth of the entire generating capacity of the United States is used by one-seventeenth of the country's population in the West, and that this same population is contributing one-seventh of the aggregate income of the electric lighting industry. On an average, every person in the West uses five hundred and twenty-seven kilowatt hours annually, and pays \$7.50 for light and power, as compared with the ninety-nine kilowatt hours consumption, and the \$3.00 contribution east of the Rockies.

California ranks second to New York State in the amount of water power development, there being a total of 432,300 horsepower in water wheels installed; (it also ranks third in total capacity of dynamos, having 817,000 horsepower installed). Washington, with an installation of 269,640 horsepower in water wheels, ranks third, while Oregon, with a total water wheel development of 105,300 horsepower, also ranks high among the states as a producer of electric power.



RIVERS AND HARBORS OF THE PACIFIC COAST OF THE UNITED STATES.

Brig. Gen. W. H. Bixby, U. S. A., Retired.
Formerly Chief of Engineers.

The present extent and the possible future development of the rivers and harbors of the Pacific Coast of the United States can not be fully appreciated without comparison of those of the Eastern United States and of foreign countries.

The useful water area of the State of Washington is closely that of the States of Virginia and Maryland. The American half of the Juan de Fuca Strait (whose length is about 80 miles, average width about 14 miles, average depth several hundred feet, with few outlying dangers) taken in connection with its southward prolongation, Admiralty Inlet and Puget Sound (together about 82 miles long, 7 to 1 miles wide—average about 2 miles—great depths as a rule up to within half a mile of the shore or to within reach of modern wharf construction) and the adjoining waters of Washington Sound, on the northeast, and Hood Canal, on the southwest, constitute a single waterway, almost equal in area to Chesapeake Bay, and far surpassing it in deep water anchorage and deep water frontage. Such being the case, with their large area of fast-developing back country and their direct connection to four trans-continental railway lines, Tacoma and Seattle, and even Everett and Bellingham, have possibilities greater than those of Baltimore and Norfolk of today. The Columbia River valley is over a thousand miles in length; and its basin, or drainage area, involving about two-thirds of the States of Washington, Oregon, and Idaho, is larger than the valley of the Danube west of the Iron Gates, or than the Ohio River valley. The Sacramento and San Joaquin valleys, forming a single continuous valley tributary to San Francisco Bay, form an area greater than the valley of the Rhine or the Rhone, and practically equal to that of the Elbe or the Vistula.

In past years, especially prior to 1900, the water borne commerce, and the river and harbor developments, of the Pacific Coast (except at San Francisco) have been comparatively slight, due rather to sparseness of population than to lack of harbors or harbor depths. At present, the

Pacific Coast is increasing rapidly in population, and with this increase has come the natural demand for better water transportation facilities, and the ability to provide them.

The experience of the Atlantic Coast and Europe indicates that the success of a harbor or water terminal depends greatly upon its accessibility to and from all its transportation lines, both water and land, at inexpensive rates for transfers between them, and that this condition can rarely be secured except through public control of some sort. It is already known (see House Doc. 492, 60th U. S. Congress, 1st Session) that once loaded into 21ft. draft boats on the Great Lakes, or into 9-ft. draft boats on rivers like the Ohio, heavy bulk cargoes can be transported by water at a cost of less than \$.005 per ton mile, a rate which is much lower than rates by rail; but this saving may easily be wiped out by the high transfer rates of poorly arranged, or monopolized, terminals. Within the past few years, the legislatures of California, Oregon, and Washington have passed acts allowing municipalities and other public bodies to own, or to control, the harbor areas, piers, wharves, docks and adjacent properties, and to issue bonds to secure the funds necessary for proper development of harbors. Realizing further that the chief benefits from such developments are usually local, and that direct federal help must be limited in amount, and be merely supplemental to local expenditures, the larger municipalities (and some smaller ones) of the Pacific Coast are contributing liberally to harbor development work, and the counties and states are lending aid in the same, or other equally material, ways.

San Diego, which has complete ownership of several miles of harbor front and several hundred acres of tide lands adjacent thereto, is already spending, under the guidance of expert harbor engineers, \$1,000,000 in commencing the construction of modern terminals for 35 feet draft vessels. The actual depth over the ocean bar is already 30 feet at low water and 35 feet at high water, with an additional 5 feet being dredged by the federal government. The municipal wharves are to be provided with modern loading and unloading devices, and the dockage, wharfage and handling charges at all wharves receiving mixed or general cargoes are regulated by the Board of Harbor Commissioners.

Los Angeles, in like manner, although without complete ownership, is spending \$10,000,000 (over half of which has already been voted) upon accommodations for vessels of 35 feet draft. Its existing draft is 30 feet at low water (an increase to 35 has been recommended by federal officials) up to 16,000 linear feet of wharf frontage, over 2,600 of which belongs to the city, and a less draft up to about 14,000 more wharfage. The municipal ownership is about one-sixth of the present total wharf frontage, and the charges at all wharves are controlled, as at San Diego. An increase of depth to 35 feet has been recommended by federal officials. At San Francisco harbor, the State owns about 10 miles of water frontage, of which it has improved about 4.75 miles with about 10 miles of wharves—exclusive of bulkheads. Moreover, along the entire improved water front of the city of San Francisco, the State controls a public street between the water and the private property with riparian rights. By popular vote of 1904 and 1910 the State is now spending \$12,000,000 upon port improvements, all of which, together with operation of existing State wharves and of the State Belt Railroad, are under the direction and control of the State Harbor Commission of San Francisco; all being based upon the existing 48 feet depth at low tide on the best ocean bar, and 4 feet tidal range.

Portland, Ore., within the past 2 years has voted \$2,500,000 for municipal wharves, and Portland and Astoria have together voted \$500,000 for channel dredging in the Columbia River, this being in addition to liberal former contributions for similar dredging by the Port of Portland; all being based upon an actual 26.5 feet depth at low water on the ocean bar and in the river. The federal project, two-thirds completed, is for 40 feet on the ocean bar, at a total cost of about \$18,000,000.

Seattle and King county in 1912-3 voted \$6,300,000 for port improvements to accommodate vessels of 30 feet draft at low water, a much greater draft being possible at comparatively slight expense whenever demanded by Pacific vessels.

Tacoma, Yaquima, Tillamook, Nehalem, and other lesser municipalities along the seacoast are following these examples, so far as local circumstances will allow.

The Pacific Coast is already reasonably supplied with dry docks, stone and floating, and marine railways, for vessel repairs. At San Diego, there is a marine railway of 50 feet length, 50 feet beam, 11.5 feet draft, and 1,000 tons capacity. At Long Beach, adjoining San Pedro, a floating dock of 284 feet length, 76 feet beam, 21 feet draft over keel blocks, and 3,000 tons capacity. At San Francisco, besides the accommodations at the U. S. Naval Station at Mare's Island, there are 4 marine railways of 4,000, or less, tons capacity; 3 floating docks of 2,500, or less, tons capacity; and 2 stone docks, the largest (Union Iron Works) having 730 feet bottom length, 74 feet bottom breadth, and 30 feet draft over sills. At Portland, Ore., 5 marine railways and 2 floating docks,

the largest (municipal) having 468 feet length, 82 feet inside breadth, 25 feet draft over keel blocks and 10,000 tons capacity. At Aberdeen, Grays Harbor, a marine railway of 1,500 tons capacity. At Seattle, 3 marine railways of 3,000, or less, tons capacity, and 4 floating docks, the largest (Seattle Construction & Dry Dock Co.) having 468 feet length, 110 feet inside width, 31 feet depth over keel blocks, and 12,000 tons capacity. At Bremer-ton, the Puget Sound U. S. Naval Establishment, there are 2 stone docks, available to the public when not in use by the federal government, of which the largest has 573 feet length on blocks, 93 feet entrance width, and 28.5 draft over its blocks. At Winslow, Eagle Harbor, there is a marine railway (Hall Bros.) of 325 feet length, 85 feet width, 17-21 feet draft over blocks, and 4,000 tons capacity. At Everett, another marine railway of 1,500 tons. And at Esquinalt, Victoria, and Vancouver, British Columbia, there are 6 marine railways of 3,000, or less, tonnage capacity, and 1 government stone dock of 450 feet length, 65 feet width of gate, 45 feet bottom width and 27-29 feet draft over sills. In connection with the above docks and railways, ship-building operations are carried on at San Francisco, at Portland, and at Grays Harbor, Eagle Harbor, and Seattle. Oil docks for general supply purposes exist at San Diego, San Pedro, Redondo Beach, Monterey, San Francisco, Oleum, Stockton and Sacramento, at Astoria and Portland, and at Seattle. Coal docks for supply in large quantities exist at San Francisco, Portland, Tacoma, and Seattle.

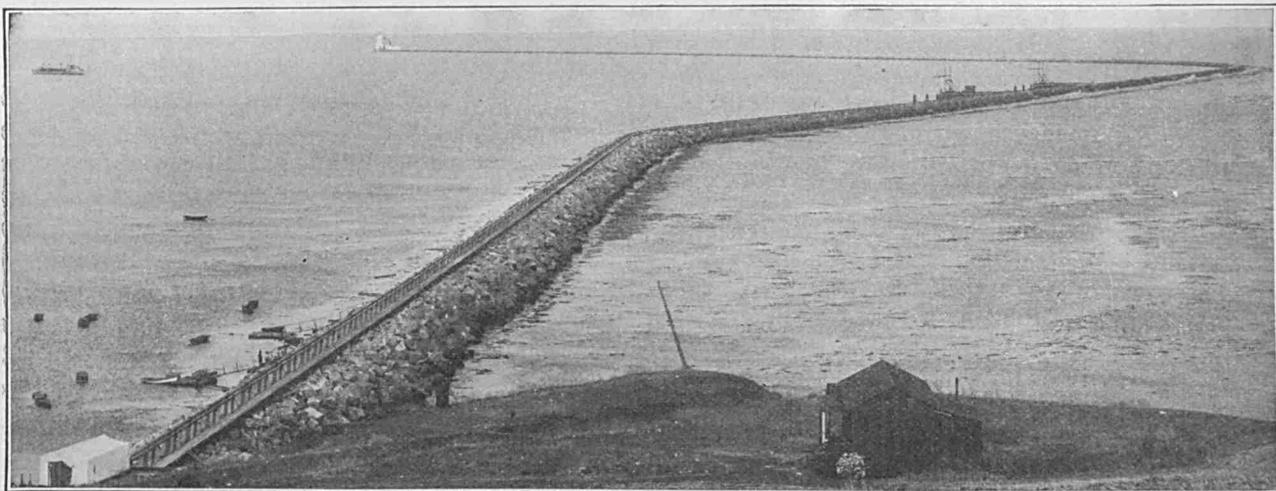
As regards existing commerce, the ports of the Pacific Coast are already doing well considering their youth and surroundings. In 1913 (as stated in the An. Report Chief of Engineers U. S. Army, 1914) the total water commerce, exports and imports, foreign and coastwise, reached the following values at the larger ports: At Tacoma \$36,000,000,—greater than that of Toledo, Ohio; at Seattle about \$115,000,000,—about the same as that of Portland, Me., or Providence, R. I., and more than half that of Baltimore or Buffalo; (the foreign commerce of Puget Sound alone equaling about \$114,000,000, or about one-half that of Boston); at Astoria and Portland, Ore. (mouth of Columbia River) \$102,000,000, — greater than either Cleveland, O., Mobile, Ala., or Charleston, S. C.; at San Francisco, \$540,000,000 (of which \$183,000,000 was foreign), surpassed in the United States, in both total and foreign commerce, only by New York City, Boston, Norfolk and Galveston, and in total commerce alone by Philadelphia; at Los Angeles, \$94,000,000, greater than Cleveland, Mobile, or Charleston, S. C.; and at San Diego, \$55,000,000, practically equal to Tampa, Fla., and only a little less than Mobile, Ala., and Jacksonville, Fla.

In this connection, it is well to bear in mind the rapidity with which all Pacific Coast water-borne commerce is increasing; for example, San Francisco foreign commerce alone increased 33 per cent in the eight years from 1905 to 1913 (of which 20 per cent was in 1912-1913), and Puget Sound foreign commerce alone increased in like manner 50 per cent in the same eight years (of

which 12 per cent was in the single year 1912-1913).

In available depths, Seattle, Tacoma, and Puget Sound water fronts in general are equal to those of any parts of the Atlantic coast of America, and better than those of Antwerp, Belgium; Naples or Brindisi, Italy; Dieppe or Havre, France; Bremerhaven or Hamburg, Germany. Grays Harbor (21 feet on its bar at low water) and Willapa Harbor (27 feet on bar) north of the Columbia River, and Tillamook Bay (10 feet on bar), Yaquina (12 feet on bar), Sinlaw (7 feet on bar), Umpqua (13 feet on bar), Coos Bay (14 feet on bar), Humboldt Harbor (18 feet on bar), between the Columbia and San Francisco, while not yet fully developed, have natural endowments sufficient in time to enable them to rival Charleston, S. C., or Portland, Me., (the shifting and dangerous bars are being improved under projects and appropriations made by the federal government). From the Ocean to Portland, Ore., the Columbia River is, in depth, equal or superior to the harbors of Portland (Me.), Norfolk, Charleston (S. C.), Jacksonville or Pensacola. Astoria and Portland, which bear to the rich and extensive Columbia River basin the same geographical

The Columbia, Sacramento, and San Joaquin rivers have large drainage basins and permit of extensive navigation. The Columbia is valuable for water power and irrigation as well in its middle portions as in its upper portion. The Sacramento and San Joaquin are specially valuable for irrigation purposes in their middle portion. The Columbia river, and its tributaries, by the end of 1915 when the 9-mile, 8-foot depth canal is completed at Cellilo, will be navigable from its mouth upward for 114 miles (to Portland) with 26 feet draft, 200 miles with 8 feet draft, 400 miles with 4 feet draft, and over 500 miles with 2 feet draft, into the interior of Oregon, Washington, and Idaho. The Sacramento is already navigable over 100 miles with 7 feet (to Sacramento), and over 300 miles with 2 feet (to Red Bluff). The San Joaquin is already navigable 45 miles with 7 feet (to Stockton); and the San Joaquin and Mokelumne 88 miles with 8 feet (to Galt-New Hope). So far as these rivers are navigable they are valuable adjuncts to the harbors into which they enter, and the communities served thereby are naturally much interested in the general river and harbor developments to which they are thus affiliated. Aside from these



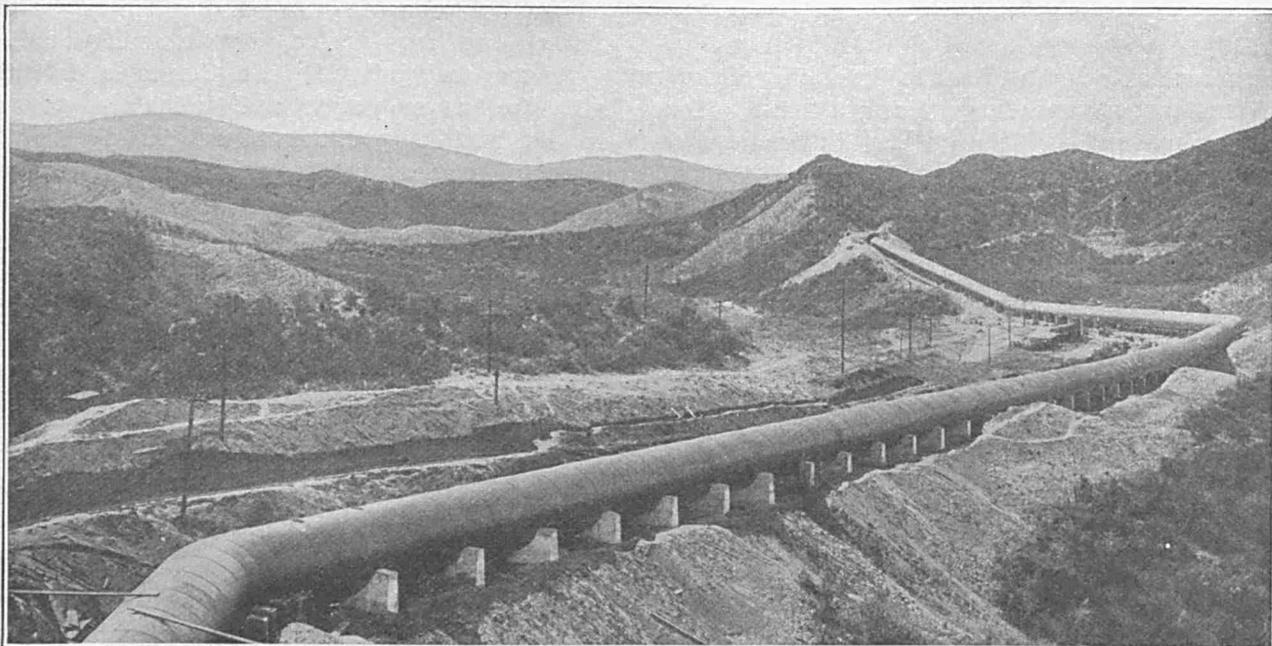
BREAKWATER AT SAN PEDRO—PORT OF LOS ANGELES.

relations that Rotterdam and Cologne bear to the Rhine basin, have depths and areas of good waterways, accessible back country, and trans-continental railway connections sufficient to bring them a population and commerce equal to that of the European cities. San Francisco Harbor (all of San Francisco Bay) with its 36 square miles of anchorage area with depths of 40 to 90 feet, and 200 or more square miles of lesser depths, is already in depths equal to New York Harbor or any other Atlantic or Gulf port of the United States; and in future possibilities it is the equal of any of them. Los Angeles has an available bar and harbor depth equalled by no United States port except New York. San Diego Harbor, with its completely land-locked, half-tide water area of 21 square miles, and its existing inside draft of 21 feet at low water over 9 miles in length, will, when dredging now in progress is completed, have a bar and harbor depth exceeded on the Atlantic coast only by New York, and its commerce should now increase with great rapidity.

three, Pacific Coast rivers are comparatively small, and their navigable lengths are mainly restricted to the portions affected by the tides of the harbors which they enter. All of them however have valuable water powers at or near their head-waters.

The opening of the Panama Canal will necessarily add considerable impetus to further development of the Pacific Coast Harbors. With the increased business will come the need for more wharves and improved terminal facilities, such as are already being started at San Diego, Los Angeles, San Francisco, Portland, and in Puget Sound, under municipal ownership or supervision.

Full details of past development of individual harbors, and present rules and directions for use of pilots and other navigators of the Coast or its harbors, are published by the War Department (Annual Reports, Chief of Engineers, U. S. Army) and of the Department of Commerce and Labor—now the Department of Commerce—(U. S. Coast Pilot—Pacific Coast, 1909, with annual supplements).



SIPHON ON LOS ANGELES AQUEDUCT. BUILT BY THE CITY. DEADMAN'S CANYON.

PACIFIC COAST SECURITIES.

By G. K. Weeks.

The following article, prepared before the cataclysm in Europe temporarily deranged all security markets, undertakes to deal with normal conditions as they have existed. A discussion of the qualities of investment bonds which are common to these securities in all markets is not considered within its scope. Rather will it be the purpose to outline as clearly as may be those conditions governing the issuance of securities or features of the market therefor which have been characteristic of the Pacific Coast.

The leading characteristics of the Pacific Coast States which have influenced the issuance and sale of securities are probably the rapid growth of this territory in population and production; the need of outside capital; the exceptional climate, which attracts people accustomed to the luxuries of life; and the original and independent habits of thought which are typical of the sons of pioneers who form the backbone of the population of this section.

The last federal census showed a percentage of increase in population during the 1900-1910 decade as compared with the beginning of that decade amounting in California to 60.09%, in Oregon, to 62.68%, and in the State of Washington to 120.41%, as compared with only 21.02% for the United States as a whole. While the most rapid growth was in the cities, the rural districts also showed marked increases in population and wealth. Of the eleven counties in California where the population increased over 75% between 1900 and 1910, only two contained cities having a population of 50,000 or more. These increases are all the more striking as compared with the small growth or declines in the population of rural districts in the East and Middle West. Such rapid growth points to a necessity on the part of states, municipalities and public utility corporations alike of raising large amounts of capital for providing the facilities necessary for the adequate public service of these communities.

There are at present evidences of some discrimination against Pacific Coast Municipal Bonds, on the ground that these municipalities are putting out "too many bonds." That there is some justice in this criticism the writer would be the last one to deny. However, from 1890 to 1910, Seattle grew in population from 42,837 to 237,194; Oakland from 48,682 to 150,174; Los Angeles from 50,395 to 319,198, and the confident utterances of the various Chambers of Commerce are to the effect that the ratio of growth reflected in the above federal census figures has been more than maintained during the last four years. In contrast, we find that among Eastern cities of similar rank, between 1890 and 1910 Cincinnati increased in population only from 296,908 to 363,591; Buffalo from 255,664 to 423,715; Washington from 230,392 to 331,069, and New Orleans from 242,039 to 339,075. This rapid Western growth requires continuous expenditures for new schools, new public buildings, new sewers, new fire protection systems, and, alas, new jails. Also, if the municipality operates its own water system, new capital is constantly required for its enlargement, particularly in "Sunny California," with her dry seasons, where domestic water in many cases is brought at heavy expense from the distant mountains.

Likewise, in undertaking the financing of healthy public utilities on the Pacific Coast, it must be realized that success can only be attained by the expenditure of large sums of money year after year to provide necessary increases in plant and equipment, and that if these sums are not supplied, companies cannot give satisfactory service to consumers in their territory and cannot prosper. An illustration of financing ill suited to conditions in this territory is furnished by a traction system in California on which there were placed in the short space of eight and one-half years five successive bond issues, being in turn, first, second, third, fourth, and fifth mortgages on the bulk of the system, all because the authorized amount of these various issues was insufficient to provide for the growth of the sys-

tem for even a moderate period of time. The history of the Pacific Gas & Electric Company, the largest and best known utility on the Pacific Coast, illustrates the growth for which a utility in this territory must be prepared to provide. This company practically doubled the number of its consumers in the six and one-half years ending June 30, 1914, the increase being from 183,271 to 359,228, without extending into any new territory of importance. Our first proposition thus is, that the legitimate financing of the Pacific Coast States involves the continued issuance and sale of large amounts of new securities so long as the present ratio of growth continues.

The demand for outside capital follows naturally, although not necessarily, the rapid growth already outlined. In this matter conditions in the three Coast States have been by no means identical. In California, during a long period terminating about 1906, local capital seemed sufficient for all requirements. Except for the money brought into the State by the transcontinental railroads, financed in the East, and by Eastern settlers, neither the municipalities nor the corporations went outside their own state for funds. Since the bonanza days of '49, the output of the State's mines had been enormous, the fertile valleys had rendered ready tribute to the agriculturist, and the shipping of the State's chief port, San Francisco, had added not a little to the general wealth. At the beginning of the year 1906 the total of California State and Municipal Bonds held in the East was less than \$5,000,000, an amount now frequently exceeded by the shipments during a three months' period. The public utilities of the State were practically all financed at home. The San Francisco earthquake and fire of 1906 resulted in a tremendous demand for capital for the rebuilding of homes, stores, office buildings and factories. About the same time the subdivision of the great interior ranches, and their irrigation or reclamation to make them suitable for intensive farming, received a great impetus; interurban railroad building began in earnest; the hydro-electric industry, which had sprung into being half-a-dozen years before, underwent rapid development; and the State came to be one of the greatest petroleum-producing sections in the world. From being self-sufficient in her financial affairs, California has now come to be a very large borrower of Eastern and foreign capital. In Oregon development has been less rapid. Portland is the most conservative city on the Pacific Coast. The East is constantly buying securities in moderate volume for the financing of Oregon municipalities, utilities and timber enterprises, but the development of the State has not gone forward with the feverish haste that has characterized California during recent years. Washington has been developed almost entirely by Eastern money, a goodly portion of it coming from New England, and while the forests and grainfields of the State are bringing in increasingly large returns and the Alaskan trade is proving a source of great revenue, municipalities and corporations alike

still turn to the Atlantic Seaboard for practically their entire supply of new capital.

The effect of the climate and the wealth it attracts is to be noted in the \$18,000,000 issue of California State Highway Bonds now in process of being marketed, supplemented by county bond issues throughout California aggregating an additional \$12,500,000 for permanent road-building, which have been sold during the last six years. California owns more automobiles per capital than any other state in the country, which probably accounts in some degree for the passion for good roads. Santa Barbara and San Diego are reputed to enjoy an exceptionally equable climate, and have attracted a large number of wealthy Eastern residents. Santa Barbara, in order to assure herself a permanent supply of pure water has tunneled a mountain, tapping a natural reservoir. San Diego, a comparatively small city, has sold during the last five years approximately \$6,100,000 bonds for the acquisition and development of a domestic water system, and \$4,000,000 additional for parks, schools and other municipal improvements.

The effect of the pioneer spirit already referred to is to be found in part in the confident crowding into a few short years of the development and improvements which have occupied practically as many decades in most Eastern communities,—in part in the slashing way in which Pacific Coast communities frequently go about remedying abuses. If because of improper financing or for other reasons a street railway system fails to give proper service, or to provide the extensions required by the growth of a community, the vigorous Western mind jumps at the solution of municipal ownership, sometimes, it seems, with very little consideration, minding not at all that the careful economist who has worked out these movements to their final conclusion may advise that the latter state will be worse than the first. While it is unwise to dogmatize on matters of this kind, it is the writer's judgment that the population on the Pacific Coast contains no greater socialistic element—probably less—than the population of the Eastern states, and that the considerable vogue of municipal ownership is due not to any theoretical conversion to the wisdom of state ownership and operation of utilities, but rather to an ungovernable determination that the facilities which are believed by the local population to be befitting their ambitious cities, shall be immediately achieved—if private capital does not respond with alacrity, then by the municipality itself.

A detailed discussion of the exact market for the various classes of Pacific Coast bonds would be too technical for the purposes of this article. The state bonds and bonds of the cities of Spokane, Seattle, Portland, San Francisco, Oakland, and Los Angeles, which alone of the Pacific Coast public issues are legal investments for savings banks in New York and Massachusetts, naturally find their market largely in the East. In the case of none of the municipalities in question are more than 50% of outstanding bonds held on the Pacific Coast, and in the case

of some of them practically the entire outstanding indebtedness is held outside the home market. The situation as regards county bonds is somewhat mixed. Many of these issues find their way to the Eastern market, but in California, where county bonds are favored for trust fund investment, even above the bonds of the largest municipalities, the local market absorbs a very fair proportion of county issues. Of all California county bonds outstanding, a majority are today held within the State. In all of the three Pacific Coast states, local municipal bonds are accepted as security for public deposits; in California they are the only legal security. The demand for public bonds for this purpose reinforces the demand for savings bank or trust fund investment to a marked degree, in addition to which the state school funds in California and Washington absorb a very considerable amount of local bonds, so that outside of the very high-grade municipals which are legal for savings banks or sought after for insurance company investment in the East, the local market absorbs the bulk of new municipal issues.

In the public utility field the movement toward consolidation, so well known in all sections of the country, has gone forward in a rather rapid way. In the State of Washington practically all public utilities of importance fall within five or six groups, all controlled from the East. The situation in Oregon is similar. In California many of the important interurban railways are under the control of the Southern Pacific Company. In the hydro-electric field eight companies practically dominate this industry throughout the State. These companies are mostly controlled in California, but represent the investment of a large amount of Eastern capital. In the case of bonds issued, the proportion placed in the East is usually in direct ratio to the size and importance of the issue, the more important bond issues which come on the market in large blocks being taken principally by Eastern and foreign capital, while the smaller companies putting out bonds in limited amounts from time to time are able to obtain their capital to a large extent in the local market.

The railroad commissions of the Pacific Coast states, and particularly the California Commission, bid fair to become large factors in the market for public utility securities which come under their jurisdiction. The California Commission has adopted the broad principle that no securities, either stock or bonds, may be issued except against an investment in property in an amount fairly comparable to the par value of the securities issued. While a strict adherence to this rule may work some initial hardship in the matter of stock issues, it is believed by the writer that its conscientious application to the securities of companies operating in a territory which possesses such great natural resources and such brilliant prospects of future growth as the Pacific Coast states, will insure a class of public utility bonds as safe and ultimately as popular as those originating in any other section of the United States.

MINING ON THE PACIFIC COAST.

By H. Foster Bain, Editor Mining & Scientific Press, San Francisco.

Time is bringing changes in mining along the Pacific Coast. Only in Alaska and Oregon do the gold mines now make the largest contribution to the annual output. In California, petroleum, the wonderful liquid fuel that is transforming the industrial situation on the West coast, now outranks it; while in Washington coal takes first place and even in British Columbia, that province of marvelously varied mineral wealth, coal outranks not only gold but copper, which there takes second place.

Using for convenience the more complete figures for 1912, and following the statistics compiled by the United States Geological Survey, it appears that the mineral output of the three Pacific Coast states is now as follows:

California	\$92,837,374
Washington	15,347,313
Oregon	2,553,549

\$110,738,236

To this may be added the production of Alaska and British Columbia, \$22,724,833 and \$32,440,800 respectively, making a total of \$165,903,869. The present production is at an even larger rate. The total is impressive even in these days of large sums. What is even more significant, however, is the large portion of the total which represents fuels and structural materials; the former accounts for \$58,322,376, and the latter for \$26,276,879. Of these the expenditure on structural materials—including clay products, stone, cement, and lime—represents money spent at home largely in building up permanent structures. In a sense, it stands for savings of the present for the future. The fuel, too, is largely consumed at home. While California is exporting large quantities of petroleum, the bulk of the oil is burned on the West coast and each barrel of oil or ton of coal represents work done by unseen hands; labor that does not eat and does not consume. The waterfalls, oilwells, and coal mines make up in part for the small population in the large area.

Ninety per cent of the mineral output of the Pacific Coast is represented by four items:

Fuel	\$58,322,376
Gold	43,416,335
Structural materials.....	26,276,879
Copper	19,373,233

The remainder of the production is in widely varied form. California is the most important North American producer of quicksilver, and Alaska has the only important tin mine. Silver and lead are not mined in important quantities on the Pacific coast, though in eastern British Columbia there is a thriving industry and in the Coeur D'Alenes, barely outside the state of Washington, is one of the world's great lead-silver districts. Almost all the metals and non-metallic minerals of economic importance occur in the region and many of them are produced. It is not likely, however, that within any period of

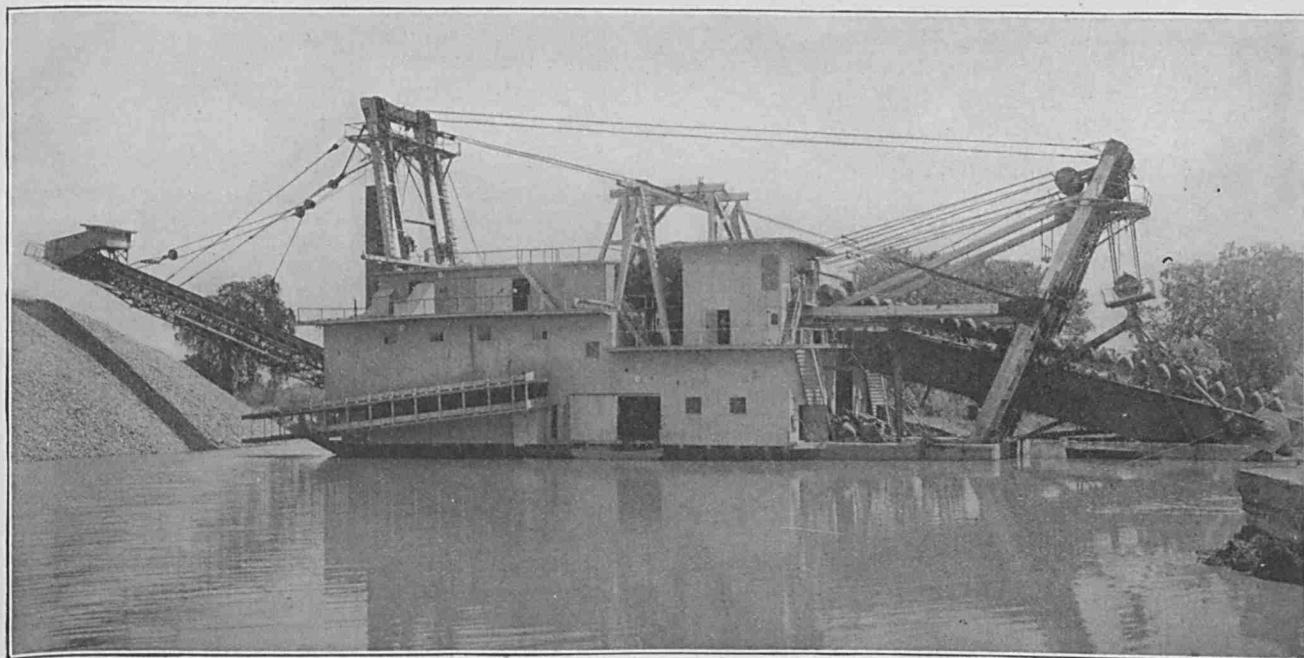
present importance the dominance of fuels, gold, copper, and building materials will be challenged.

While the days of gold easily won from shallow placers have gone, gold mining is still a great industry and it is now based upon deposits that assure it a long life. The dredging fields, it is true will be exhausted in a few years by the great 16-cubic foot buckets used on modern boats, but the quartz mines grow in importance rather than the reverse. The reason is that each new device, each increase in scale of operations, so lowers the cost of production as automatically to convert into ore much that was previously too lean to rank as more than waste. When mining began at Juneau, small veins of quartz containing gold to the value of \$20 per ton or more were worked, just as even richer veins have been, within a few years, opened near Sitka. Such veins are quickly exhausted, but the Alaska-Juneau is now preparing to mine ore worth but \$1.35 per ton net, and is counting on treating 12,000 tons per day. On this basis the supply is considered adequate for 300 years. Two neighboring mines are likewise arranging for wholesale production. While the opportunities are exceptional at Juneau, and for some time to come it will be impossible to hope for equally low costs elsewhere, movement in the same direction is taking place in all the mining districts on the coast. There can be no such thing as total exhaustion of the mines, even though a mine is a true wasting asset. As the demand for metal grows, any resulting scarcity is reflected in price, which in turn, with better or larger scale operations reducing costs, brings into the field deposits previously unworkable.

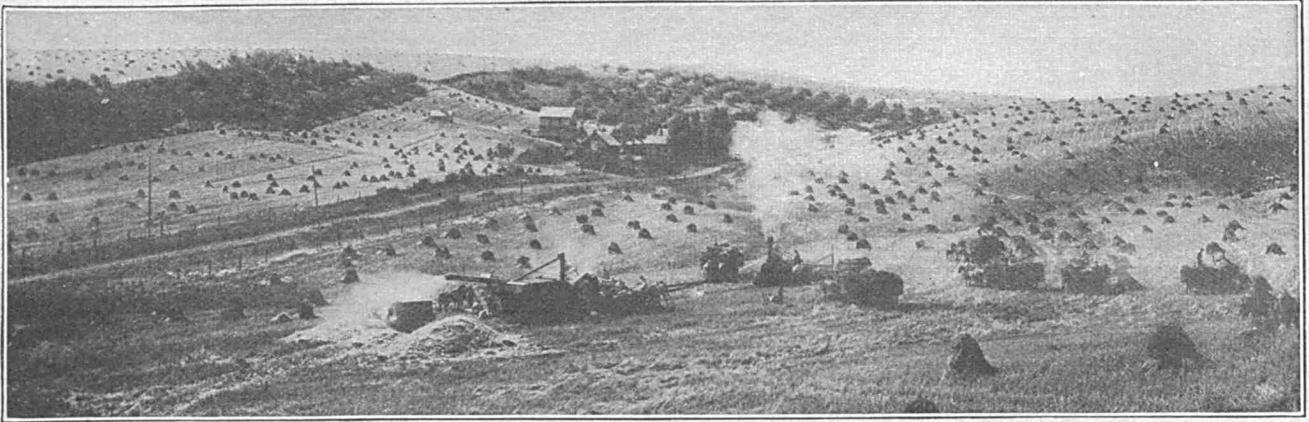
The great new thing in the Pacific Coast mineral industry in the last decade has been the opening of the California oil fields. It is difficult to overestimate the importance of this development in an area relatively barren of fuel. Nowadays not only does California supply more crude petroleum than any field in the world, but its reserve is the largest known; more than half the total for the United States. It is believed

that the California oil fields have now been outlined and that there is comparatively little hope of finding any great productive area outside their limits. While, too, it is hazardous to guess, it is not thought probable that any comparable fields will be discovered upon the Pacific Coast of North America. The reserve, therefore, while large when measured in barrels is small as measured against future demands if oil is to continue to be burned for fuel in all the industries and territory now dominated by it. For the present coal is at a discount on the Pacific, but, measured by long years, the petroleum supply is entirely inadequate. Even now, and with the Mexican and other Gulf coast fields to reinforce the supply, the Atlantic steamship companies dare not convert their ships to oil burners. It is inevitable that in a comparatively few years the demand for petroleum will outrun the cheap supply and its use will be restricted. For the present it is abundant and so cheap that the producer makes little or not profit. The benefit goes to the transporting and marketing agencies in part, but most of all to the people of California and neighboring states who, by reason of the possession of this marvelously efficient and convenient fuel, have seen industries established and brought to a profitable basis in a few years that would otherwise have had to wait for decades.

Time will continue to work changes in the mining industry of the coast. Petroleum will become a precious fuel to be used only for special purposes. Coal mining in the Northwest and Alaska will grow; improvements in smelting practice will permit the copper industry, now held down by court restrictions on fume emission, to take its proper place; iron and the minor metals will play their part; the output of structural materials will increase with the population; and always the West will furnish, not only the minerals called for by industry, but an appreciable amount of gold as a basis for the currency with which the business of industry may be transacted.



A GOLD DREDGER.



HARVEST TIME IN THE INLAND EMPIRE.

THE AGRICULTURE OF THE PACIFIC COAST.

By Thomas H. Means, of Symmes, Means & Chandler.

Less than one hundred years ago the agricultural products of the Pacific Coast country consisted of a few cattle raised under the direction of the mission fathers, and of the yields from small orchards, gardens, and grain fields surrounding the mission settlements. The country back from the Coast and away from the missions was a wilderness inhabited by Indians. Within this hundred years a population of seven millions has come into the district west of the Rocky Mountains; five millions occupying the immediate coast states. The mines first attracted settlement, but agricultural development has gone on so rapidly that today mining is but a small part of the interests of the people. Agriculture has become the great industry, and, though the area of land developed is small as compared with the total area, there are large areas of the highest type of agricultural development. One hundred years has seen a change from wilderness to the most scientific and highly specialized farming in the world.

This settlement and development of so vast a territory is one of the most remarkable events in the history of the world. While the time given above is one hundred years, the real substantial progress has occurred within sixty years. Within that time the five millions of people who occupy the Pacific Coast states have established 200,000 farms containing 51 million acres, of which 22 million acres are improved. The value of crops raised in 1909 was \$345,000,000, and the value of live stock on farms \$360,000,000.

A development carried on at such a rapid rate must meet and solve many important problems, and it is natural to suppose that many problems of importance are yet awaiting solution. Taking everything into consideration, however, the development of agriculture in some parts of this territory, is superior to that of any similar area in the world.

The Pacific Coast region is divided, agriculturally, into five great districts, each of which has agricultural possibilities peculiar to itself. These are:

1. Rocky Mountain Slopes.
2. Great Basin.
3. Sierra Nevada Valleys.
4. Interior Valleys of California and Oregon.
5. Coastal Regions of California, Oregon and Washington.

These five topographic regions merge somewhat, but are, in their broad lines, distinct. Each has its crops, its transportation and marketing problems, and each will develop in the future along lines more or less independent of the others.

The Rocky Mountain Region.

The Rocky Mountain Region of the Pacific Coast includes that part of Montana, Idaho, Wyoming, Utah, Colorado and New Mexico draining into, and commercially tributary to, the Pacific Coast. The area includes the mountain slopes and elevated valleys of the states mentioned. A great variety of climates, soils and agricultural possibilities are present.

Owing to the distance of the region from large cities and from cheap transportation, the agricultural development of an intensive character is confined to small areas around centers of mining activity, and to districts along the transcontinental railroads and their branch lines.

Grain, hay, cattle and sheep are the principal products, but the growing of potatoes for shipment and fruit of a superior quality has been developed on a considerable scale at many points. The upper Snake River Valley in Idaho, and the country around Grand Junction, Colo., are examples.

Irrigation is necessary in all of these higher valleys. The country can be said to be only opened up, and its possibilities demonstrated, by these developments; the future will see many undeveloped areas brought into a high state of cultivation. Very few localities now have a large area of high class development, but as transportation facilities and population increase larger areas will be improved, and we may expect to see a continued and healthy growth on these regions.

A great area in which irrigation cannot be carried on will, on account of its roughness, doubtless be devoted in the future, as it has been in the past, to grazing. The valleys will be devoted to the production of grain and hay for maintaining and fattening the cattle grazed on the mountains and hills. The local markets in mining camps and cities along the railroads will be supplied with produce, and a surplus of high grade fruit, and such commodities as potatoes will be shipped out.

Freight rates from this mountain region to the markets of the world will always act to prevent the shipping of bulky commodities. The produce will probably be shipped out as meat, wool, or other animal products. The high quality of the potatoes, fruit and canned goods is such that there will always be an outside market for them, and Colorado, Utah and Montana potatoes and apples are likely to be in demand.

This region will benefit as little as any from the Panama Canal, except as the opening of the canal will cause great development on the Pacific Coast. The canal will not make the world's markets more available to Rocky Mountain agriculturists.

The Great Basin.

The great basin is that county between the Rocky and Sierra Nevada mountains, and includes parts of Idaho, Washington, Oregon, Utah, Nevada, Arizona, and Eastern California. The region is elevated in Southern Idaho and Nevada, the valleys averaging over 4,000 feet above sea level, but is lower at the north and south ends. In Washington the elevation is generally less than 2,500 feet, and in Southern Arizona less than 3,000 feet. The rainfall varies greatly, from less than 5 inches per annum in parts of Southern California, Arizona, and Nevada, to 25 inches in Washington. Temperatures vary in a similar manner and, while oranges are grown in the south, there are mountain ranges covered with perpetual snow.

Irrigation is necessary in most parts of the great basin region. The only portions where farming without irrigation is possible are certain parts of Northern Idaho, Oregon, and Washington. A few districts are humid enough to permit of dry farming in parts of Utah, Nevada, and Arizona.

The irrigated valleys present highly cultivated and prosperous districts, as is seen in Southern Idaho, and in Utah and Arizona. Much of the land, however, has no available water supply and is used for pasturage alone. Hundreds of square miles are sheep and cattle range, and will always remain so.

The soils of the great basin vary greatly, but there are larger areas of soil derived from volcanic material. Washington, Idaho, and Nevada are regions of lava ash and lava soil. Where rainfall or irrigation water is available, the crops produced are excellent and regular.

The crops of the great basin are varied, oranges in the south; fruit in Utah and in the north; potatoes in Idaho; and alfalfa, grains, and cattle in all parts. Fruits and vegetables are but a small part of the total produce, but in some districts they become an important item of production. For instance, in certain parts of southern Idaho fruits are important, and potatoes of a high quality are produced. Oranges and grape-fruit, very early in bearing, are grown in Arizona, and there is promise of considerable extension of this business. In Utah, where farms are small and labor abundant, fruits and vegetables are grown for canning and shipping.

Grain and cattle products are, however, the

most important items which go into general commerce. The grain-growing regions of Oregon and Washington now produce fifty million bushels of wheat yearly and are capable of producing more. The other parts of the region do not now produce much more grain than needed for local consumption.

Cattle and cattle products are everywhere important, and in aggregate these are the most important items of agricultural produce entering the channels of commerce. The wide areas of semi-arid land, too dry for farming, afford considerable feed, and cattle and sheep produced under range conditions are fattened for slaughter in the irrigated valleys, or shipped to other feed-producing regions. The opportunities for the future lie in the direction of increasing the number and quality of the cattle and sheep raised.

High freight rates will always work against the great basin country and hold down the shipping of bulky produce. It is true that, in special districts, fruit and vegetables of a high quality will always be produced and, on account of their superior quality, will be shipped long distances, but in the long run sheep, cattle, and their products, will be the staples and the money makers for the farmer.

The new lines of commerce introduced by the opening of the Panama Canal will have considerable effect upon the great basin region. Freight rates at tide water are low enough to enable these regions to ship into the world's markets, and it is likely that canned foods, potatoes, fruits and grain, as well as animal products, will be shipped.

The Sierra Nevada Region.

The district designated the Sierra Nevada Region includes the mountain zone from Mexico to Canada which lies between the great basin on the east, and the Interior Valleys of California and Oregon on the west. The width of this great mountain belt varies from fifty to one hundred miles. It includes a large area of fertile valley and hill land, but a great area is too rough for anything but grazing or forestry.

Much of the area is now occupied by National Forests, and by forest land in private ownership. The lower mountain slopes are well suited to fruit culture, and the valleys for production of all kinds of produce suited to the climate. The east slope is much drier than the west slope and much smaller in area, for the distance between the mountain crest and the great basin region is short. To the west the slope is gradual, and the area of land suited for agriculture is large.

Very little of this region is now farmed. Much of it is grazed by cattle and sheep, and it is only where the transcontinental railroads cross the range that the area of farmed land is large. Such a farming area is found along the Southern Pacific Railroad from Sacramento to Reno.

Large areas of land of great potentiality are found in all three states traversed by this great mountain range and it is likely that future generations will see much of this now undeveloped



HOPS IN THE SACRAMENTO VALLEY, CAL.

land cultivated, irrigated and producing crops. Fruit and fruit products will be the greatest item in production, but cattle and animal products will be important on account of the area of land which is too high and too rough for anything but pasturage.

The Interior Valleys of California and Oregon.

The Interior Valleys of California and Oregon lie between the Sierra Nevada Mountains and the Coast Range. The San Joaquin and Sacramento Valleys in California, and the Willamette Valley in Oregon are the most important regions.

These valleys are warm in summer, with very mild winters; have large areas of excellent soil, and quantities of water for irrigation; are surrounded by mountains rich in minerals and oil, with tremendous quantities of water power developed and awaiting development. Deep water transportation is available in both valleys, and rail transportation is well developed.

The products are varied, almost every crop grown in the United States, with the exception of a few strictly tropical plants, is grown here, and there are such varieties of soils and situations that some spot may be found where each crop can be produced commercially. There is no region in America where a greater variety of products may be found. Grain has long been the staple crop, but as irrigation is developed, grain gives way to horticulture, dairying, gardening, sugar beets and hops. Cotton, tobacco, and rice have been grown on a small scale, and the near future will

see these rapidly extended. Cattle and sheep summer in the surrounding mountains, and winter in the valleys. Hops, barley, and vines furnish the stimulants for the nation and there is the opportunity for great extension of these crops when temperance instead of prohibition becomes the rule in the United States.

These valleys are, in many places, highly developed, and support comfortably a large population in a small area. Such regions as those around Fresno and Modesto in California have considerable areas where a family is comfortably supported by the produce from ten or twenty acres, and there are, in California and Oregon, several million acres capable of equally high development. The great valleys of California and Oregon could support five million people in comfort.

The nearness of these valleys to tidewater is an important factor in their favor. Tidewater enters the lower part of the valleys in both cases. Steam roads and electric lines are being constantly developed to transport produce to the cities and to tide water.

The products of these valleys already enter extensively into the world's commerce. California grain, wines, and dried fruits, and Oregon hops, are shipped to Europe in direct competition with European grown produce.

These valleys have a variety of soils, and conditions which permit regular and heavy crops to be produced. The climate is dry and the sunshine strong in summer, making the harvesting of crops sure and the quality good.

As yet, water transportation, though available, has had a small part in the development of these valleys. The greater part of the higher valued produce goes east by rail, but grain, hops, dried fruits, and wines are sent to Europe and the Atlantic coast by water. The Panama Canal will open the way for more extensive shipments of these commodities, and it is likely that vessels equipped for refrigeration will permit shipment, by the canal route, of oranges, grapes, apples, and other fruits now shipped by rail.

Coastal Regions, California, Washington and Oregon.

The coastal regions of California, Washington, and Oregon include that portion of the coast which derives its climate directly from the Pacific Ocean, where the temperatures are generally low, there is little frost, and more rain than in the interior valley.

In southern California, the rainfall varies from 12 to 15 inches. Northward there is a gradual increase until, in Washington and Oregon, the fall is from 100 to 120 inches. There is a corresponding gradual change in crop possibilities, and in native vegetation. In southern California, the land is scarcely timbered at all, and the agricultural products are largely of a sub-tropical nature. In central and northern California, grain, beans, alfalfa, truck, and dairying are the rule. In the north, dairying is the greatest industry.

These coast regions have a climate which is regarded as superior to any of the interior climates, and for that reason are apt to fill up with a large population. We have today an example of this dense population in southern California. Almost the entire orange belt lies in the coastal region. A similar condition prevails in many of the smaller valleys which open out on the Pacific Ocean, such as the Salinas Valley, and the valleys at each end of the San Francisco Bay. The portions of this region in north California, Oregon, and Washington, are now only partially developed, but we may expect a large influx of settlers who will farm the valleys and clear the low mountains and foot hills for the planting of fruit. This region will be largely farmed for the purpose of supplying the coast cities; comparatively few products will be grown for shipping or export. There are important exceptions, however. The citrus fruits of southern California are one of the State's largest export crops, and important fruit centers have been developed in a number of other valleys, such as the Pajaro and Santa Clara valleys, south of San Francisco. Other important centers of fruit growing will later be developed in the north.

These fruits will be shipped to eastern markets by rail or the Panama Canal.

The Agricultural Problems of the Pacific Coast.

The statements above outlined briefly review the physical conditions of each of the important districts of the Pacific Coast, and call attention to the products which these districts grow for shipment. It is easy to see that the development of the Pacific Coast is yet in its infancy, and while no portion of the United States has had more

rapid development or greater increase in population in the last twenty-five years, it is equally true that in the near future we may expect a much greater advance. There are certain problems, however, which must, sooner or later, be settled by the people who come into these regions.

The first problem, on the settlement of which will depend the future of the country, is that of markets for produce. The second problem, which has been seriously considered in many regions of the west, is that of the supply of agricultural labor. The third problem is that of securing settlers for much of the land which now lies idle, or which is held in large tracts.

The Markets for Pacific Coast Products. The markets for Pacific Coast products are today well developed, but a large increase in the production of any one crop would cause disaster. For instance, the orange business has been developed from a small beginning to shipments exceeding 40,000 carloads per annum. It happens that Florida is now increasing products of citrus fruits to a great extent, and any further increase in the production of the Pacific Coast will have to meet Florida competition, or seek a market elsewhere. Again, the apple industry of Washington and Oregon has been developed faster than regular markets for the produce have been secured, and there are now years when fruit brings low prices. These low prices are, without doubt, largely due to competition from districts nearer the point of consumption. Until the people of the Pacific Coast have developed and secured a permanent market for their fruit, they will always have this fluctuation in prices. It is thought that the Panama Canal will open new channels of trade and thus enable the people of the Pacific Coast to overcome these difficulties by shipment of their products over a wider area.

The fruit business is, however, by no means the only agricultural industry which has problems of marketing. The grain crops are generally sold without difficulty, but there are times when the hay crop exceeds the demand and prices are low. At present this is due to the scarcity of feeding cattle for the consumption of hay, high prices for beef having recently caused large numbers of young animals to be sold. It will naturally come about that the herds of the west will be built up, though this is going to be difficult as long as young cattle continue high in price, but once the industry is re-established, there should be a smaller fluctuation in hay prices. The time will rapidly come when the small farmer who has a few acres of hay will produce a few animals for slaughter and, by thus creating a market for his own forage crops, be independent of the general market prices for such produce.

The Labor Problem. Many of the industries of the Pacific Coast are highly specialized and a large amount of labor is, each year, required for short periods; for example, the fruit picking and hop picking seasons. The hay harvest, which extends over a longer period than in the east, also requires considerable

extra labor and coincides with the busy season in the mountain lumber camps. The consequence is that there are often periods when labor is scarce in parts of the west, and the farmer has to put up with very inferior help, despite the fact that prices for agricultural labor in the west are higher than in the eastern states.

This condition will slowly right itself as the large holdings are cut up. An increase in the number of small farms results in a large amount of labor being brought into the country. The women and children will be able to do much in the way of fruit and hop picking, leaving the men free for the hay and grain harvests. It is furthermore expected that cheap passenger rates will be established via the Panama Canal bringing immigrants from European countries, who will naturally drift to the farms, and much healthier labor conditions will be the result. It is not likely that much of this labor will come supplied with capital sufficient to enable them to buy farms, but, wherever government lands are available, they will settle on them and secure their living, while developing their own farms, by working on adjoining places. It is unfortunate that public sentiment on the coast is now so strongly unfavorable to certain classes of Oriental labor, for no other people have been able to give us the services required at such a low rate of pay.

The Settlement of the West. The settlement of the west has only begun. It will easily be possible to support a population five times as great as that now found there. Climatic conditions are favorable; health conditions are good; the splendid class of pioneers who settled

the west have built up social and political institutions which are attractive to thinking people. All of these together are serving to interest people the world over in the Pacific Coast. Now that the Government has undertaken the development of the irrigation resources of the country, and has settled upon a fixed policy regarding other natural resources, this population is bound to come, and come to stay.

It is unfortunate that the real development of the west has been made a business of money making on too large a scale. The sale of land at high prices has been the one great motive which is back of practically all settlement in the west. The rise in land values has been extraordinary and to-day, in California, Washington, Oregon, and other states of the west, land is offered to settlers at prices ten times its value a few years ago. It is claimed that the prices now being asked are justified by the return that the lands will give, but, whether this is true or not, high prices are discouraging settlers, and the west is suffering in consequence. However, operators are beginning to realize their mistakes, and are taking steps to rectify them, as elsewhere cited in this volume.

Natural conditions on the Pacific Coast have made possible a remarkably rapid development of that territory in the last sixty years. Its future development, to which the Panama Canal will contribute, will be even more rapid. The present tendency is toward development of a constantly more intensive character. This, together with an ever broadening market for its products will result in greater prosperity.



ALL READY TO PICK APPLES IN OREGON.

INTENSIVE FARMING ON A LARGE SCALE

By S. F. B. Morse

The farming industry has not, until within a few years, been regarded with favor by the large investor. Bad seasons, lack of rain, or too much rain have rendered the return uncertain and the interest item has been considered hazardous when directly dependent upon crops; although the fact that principal invested in the industry has been deemed sufficiently secured is evidenced by the enormous aggregate loaned on farm mortgage by such large investors as the Insurance companies.

That this general attitude on the part of capital has been successfully defied is illustrated by the great fortunes built up in earlier days by the "wheat kings" and other large operators of the Pacific Coast.

describe here only such of its phases as bear directly on the subject in hand.

Irrigation greatly reduces the uncertainty of farming and, owing to the fact that the Pacific Coast has a wet and a dry season, the danger of injury to crops by summer rains is practically eliminated. It has been the general opinion that irrigated farming, which is of necessity intensive, must be limited to the small farmer, the average size of an irrigated farm in California being twenty acres. The difference between the earning power per acre of dry farmed or grain land, and that of irrigated land, was so wide that the majority of large investment in agricultural projects up to the present time has been along the lines of acquiring tracts of arid land, developing irrigation, and offering the land for sale to small farmers or, as they are commonly called, colonists.

The most inexpensively developed irrigation project is one where the land is adjacent to a stream,



Tractor and 24 disc plows cutting a 16-foot furrow in dry sod land and covering over 4 acres per hour.

These men were, almost without exception, "one crop" men. In spite of the large average return that their operations showed, floods, droughts, or other causes of crop damage or failure occasioned them heavy periodic losses—sometimes through a series of years. This fact did not tend to change the attitude of capital toward large single investments in the farming industry.

The first primitive experiments in irrigation in California quickly served to demonstrate the economic error of such operations. The case of the "wheat kings" was analogous to that of Mark Twain's pseudo prince "Tom Canty," who used the Great Seal of England "to crack nuts with." They were raising seventeen bushels of wheat per year, less deductions for losses and fallow years, on an acre of land which, with the additional investment required for irrigation would, in seven years, yield annually one ton of olives, and in ten years, two tons. Investors were quick to see the obvious and the conversion of great grain farmed tracts to diversified farming under irrigation has since been steadily carried on.

As the subject of irrigation is separately treated in another article it is the writer's intention to

the flow of which is constant enough to furnish sufficient water for irrigating, and where there are no difficult engineering features involved in diverting the water from the stream onto the land. Projects of this type were, of course, the first to be developed. Those who were able to acquire large tracts of land so located, at a price based upon its value when grain farmed, realized enormous profits from its sale in twenty acre tracts under irrigation. The success of the early investors gave such an impetus to the business of developing large irrigation tracts that, at the present time, there remains no arid land capable of simple irrigation, save at a price based upon its possible earning power when irrigated rather than on its present earnings. Furthermore, all of the inexpensively developed river waters which can be used for direct irrigation have been appropriated. The future irrigation supply must be had by means of expensive storage or pumping stations.

Of land and water available by such methods there is still abundant supply. Great as has been the influx of settlers, particularly to California, it is a fact that of the fourteen millions of acres susceptible to intensive cultivation in the San Joaquin and Sacramento Valleys alone, there are less than three

million acres actually irrigated and settled. There is very little agricultural land in the entire state that cannot be supplied with sufficient water for irrigation by one of the two methods above mentioned. All of the streams of the semi-arid west have tremendous flood discharges in the winter and spring caused by winter rains and melting snows in the mountains. These flood discharges are, for the most part, unused, as they seldom occur during the irrigating season. It has been estimated that the flood discharges of the streams emptying into the San Joaquin and Sacramento rivers are, if stored, of sufficient volume to irrigate every acre of agricultural land in the valleys, and that sufficient practical storage sites exist to hold these flood waters.

The San Joaquin and Sacramento valleys are the agricultural backbone of California and, as Southern California is already in a high state of development, they will be the field for the greatest development in the future.

In an article recently published by the Modesto Chamber of Commerce, certain statistics for the year 1912 were quoted showing that in the Modesto Irrigation District the average value per acre of all products grown amounted to \$137.16. After deducting 50% of the gross as the necessary cost of caring for the land, harvesting crops, water charges, etc., the net production amounts to 6% on a valuation of \$1,143 per acre. Despite the showing made by these figures a number of the largest agricultural projects on the coast have met with severe reverses in the last two years and are now in difficulties and process of re-adjustment.

The failure of nearly every one of these projects has been due to a mistake in policy or to bad management rather than to any intrinsic fault in the physical property, such as poor land or insufficient water. The increased cost of land and of water, and the large overhead expense entailed by present methods of subdividing and selling, together with the development of a supply of small irrigated tracts actually exceeding the demand and the resulting competition between the selling companies, have reduced the chances of financial success for such companies to a minimum. Competition has been so keen that great extremes have been resorted to in connection with the selling of such small irrigated tracts. Many companies maintain extensive offices with a number of branches throughout the country, pay large commissions, and indulge in extravagantly expensive and badly planned advertising campaigns. Nearly all are compelled to allow the purchaser several years in which to pay for his property.

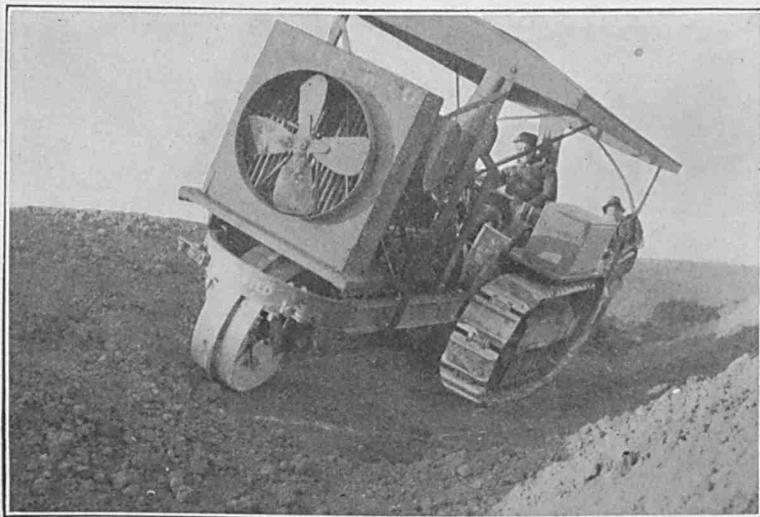
The basic error in the methods that have been employed is the fact that the developing companies have depended entirely upon the sales of land, not only for the ultimate return of their initial investment, but also for the payment of interest, overhead charges, and their profits. Hard times, over supply,

or any one of a number of possible conditions that hinder their ability to make sales, may force the companies to offer their properties in small parcels at far below their real value, in a vain attempt to meet fixed and current charges. *Yet these companies have made no expenditures in the actual farming of the land.*

The majority of the colonists come to the coast from abroad or from the middle west. In most cases they are unfamiliar with local conditions and with irrigation, and have only enough money to make a reasonable payment on their land and equip themselves to start farming. Generally the colonist is dependent upon the immediate success of his operations for his living and for the funds required to defray the deferred payments on his land, which, as a rule, consist of five equal annual payments, with interest on balances at the rate of 7% per annum. Even if the land he purchases is excellent, the climatic conditions good, and the water supply adequate, his success, under this handicap, is problematical; yet upon his success hangs that of the company from whom he buys, if they are depending entirely upon the sale of their lands to meet their financial requirements.

If the colonist fails, not only does the land revert to the seller but the reputation of the entire project suffers, making future sales increasingly difficult.

In view of these facts it is strange that the large investor, in casting about for a more substantial financial plan, has neither contemplated nor investigated the possibilities of intensive farming on a large scale as the logical solution of his problems in meeting carrying charges and overhead ex-



Caterpillar tractor with two-furrow ditching plow building irrigation ditch and levee at the same time.

pendence; the items which have been the primary cause of so many failures. If the small farmer with limited means and narrow viewpoint can, in unnumbered instances, make a success of such farming on a small scale, the business man with adequate capital, scientific management, and labor saving devices, can make an even greater success on a large scale. *Broad, axiomatic business principles pertain to this industry as well as to any other, if applied with equal intelligence.*

Farming projects so handled under able management give the investor a high rate of return and permit of his holding developed lands for higher prices and disposing of the property in accordance with the natural laws of supply and demand at an ultimately greater profit. Likewise, when fully developed lands, from which the colonist can be assured of an immediate return, are sold on the partial payment plan, the security to the seller is much greater for the unpaid portions of the purchase price. In the Modesto district above mentioned, land may be purchased at \$125 yielding a 6% return on a valuation of \$1,143. It is obvious that the large investor, purchasing land in large tracts at much less than this retail price, and developing his own water supply, is presented with greater possibilities in the develop-

ment and operation of the land than in the re-sale in small parcels at prevailing values.

There are certain crops for irrigated areas that are particularly suited to farming on a large scale. Perhaps the most important of these is alfalfa, which is, of course, a staple. It is *the* forage crop of the southwest, being particularly valuable in the feeding of all types of work stock and dairy cows, and in fattening cattle, hogs or sheep. It is the most common crop grown by the twenty or forty acre farmer.

There are other crops that it is practical to grow on a large scale under irrigation; the olive, for which there is a constantly increasing demand, an especially hardy tree bearing for practically an unlimited length of time; the fig, of which much the same can be said; the sugar beet; the onion; the potato (all being among the hardier types of roots). Within the last year or two cotton has been proved to be a profitable crop in certain sections of California. In fact, an eminent authority states that there is no crop grown in the United States which cannot be grown to advantage in California, under irrigation. It is simply a question of the selection of the crop best suited to the land, which can be handled to advantage on a large scale.

The developer of an irrigation project which is to be operated on a large scale has a distinct advantage in that he can so prepare his land as to make irrigation adequate and inexpensive, and provide for proper drainage.

Under a district, or co-operative plan, the small farmer must be satisfied with a restricted quantity of water, available

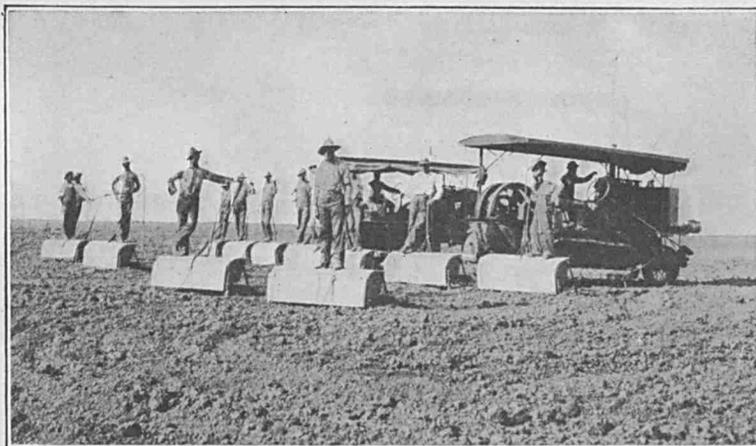
only at certain intervals, and he ordinarily meets with a serious problem in drainage, owing to the fact that his excess water must either remain on his own land, or, in discharging, prove an injury to his neighbor. Of course, in certain districts, such difficulties have been largely obviated, but the fact remains that a large tract operated by one management can be made to yield a return much greater than the same number of acres cut up into small tracts under several hundred individuals.

Even if it is the ultimate intention to dispose of the tract in small parcels, it is the course of wisdom to develop all, or a large portion, of it for immediate operation, to provide for interest and overhead expenses. The project thus developed is independent of any of the causes of adverse selling conditions. The chance of failure of either seller or buyer is reduced to a minimum. It is along such lines that the irrigation project of the future must be handled in order to obtain for the investor the surest and highest return.

There have recently been some projects that have been handled exactly along the lines above outlined. In most instances with which the writer is familiar, the operating returns have been so much greater than was anticipated that it has been deemed inadvisable to market any of the property

in small tracts at current prices. A fair example of the advantage of intensive farming on a large scale has come to the observation of the writer in the case of a company holding a tract of nearly seventy thousand acres in the San Joaquin Valley in California. Interesting comparisons are available between its operations and those of the adjoining farmers of small tracts. This company has ample financial backing and owns one of the old holdings of the state, to which it has added from time to time as occasion demanded. From grain farming the company has progressed, step by step, through various phases of operating as experience and conditions have dictated changes. It was one of the first to develop a large irrigation system, yet for years did little farming on its own account, depending entirely upon the subdivision and sale of its property in small parcels for its revenue, disposing of several thousand acres in this manner. Later it did small development in the line of producing alfalfa, gradually working into the business on a larger scale. The company now has nearly three thousand acres in a single tract of alfalfa and intends to increase this to ten thousand acres. A direct comparison of the methods and results obtained by the colonists on the one hand and the company on the

other are available. The company has taken units of three thousand acres and first platted these lands in twenty acre tracts, then surveyed an irrigation system and a drainage system in such a manner as to make each unit a block of perfectly drained and irrigated twenty acre farms. The purpose of first subdividing the land has been to make it possible, should



A tractor pulling a battery of scrapers. Grading and leveling land ready for water.

conditions warrant, to dispose of the property in small blocks in the shape of developed and producing farms. But the work is done in such a manner as not to handicap in any way the ease and economy of operating the property as a whole. The use of tractors and heavy disc gang plows has made it possible for the company to do better, more rapid, and more economical work than can be done by the colonist with small horse-drawn implements. The company has also developed a special type of leveler designed for use with a tractor which reduces the cost of leveling to one-half of what it is when done with horse-drawn Fresno scrapers; the only available method for the small farmer. By the employment of these methods the company is independent of unskilled labor. There is but a small and extremely undependable floating supply of such labor in California and it is the cause of one of the most serious problems facing the ordinary developer. On the developed portions of the company's alfalfa fields certain crops are cut and cured. The cuttings are, for the most part, chopped, and blown by machinery into large storage feed sheds for the winter feeding of beef cattle. The food value of chopped alfalfa hay is much higher than that of unchopped hay. Other crops are allowed to mature on the ground and are pastured off by beef steers being fattened for market.

At first all of the company's fattened cattle were sold on the hoof to large packing establishments. Later, realizing that neighboring communities could be easily supplied with dressed beef, the company installed its own abattoir and cold storage plant which was made large enough to handle much of the live stock produced by small local operators in addition to the entire product of the company's own ranch. Having recently added to their holdings large tracts of grange lands on which cattle are raised to be alfalfa-fattened for killing, this product is considerable. So successful has the company been with its dressed beef operations that it now contemplates the purchase of a chain of retail butcher shops. Many of the neighboring colonists, on the other hand, are not in a position to consume the alfalfa that they produce but are obliged to haul it to market and dispose of it subject to variations in price. It so happens that in the season of 1914 there has been a large supply of alfalfa hay and small farmers are receiving a low price. On the other hand, while hay is cheap, beef is high and the company, which is marketing its alfalfa in the form of dressed beef, is receiving a handsome price and making a large profit with much less cost of handling. Many of the colonists are fattening beef on a small scale; many are raising and feeding hogs on alfalfa; and many are operating dairies. Here again the large operator has a distinct advantage. The company has control of the dressed meat market over a considerable extent of local territory and is independent of the middle man, whereas the colonist is not. In fact the company is in the position of making the middleman's profit on the product of the colonist, a large portion of which the company handles, as well as saving that profit on its own product. In addition to these obvious items there are many ways in which this company, on account of the size of its holdings and the magnitude of its operations, effects minor economies which, in the aggregate,

amount to a considerable percentage. For instance, the company breeds, raises, and breaks all of the work stock for its own use and some for market. The company maintains a machine shop of considerable size and not only makes all necessary repairs to its machinery and equipment but also manufactures new parts, thus effecting the saving of a considerable item. The company is in a position where it is making a very liberal return on a valuation approximately double the price at which it disposed of its other holdings to colonists, plus the cost of development. It is able, when it desires, to dispose of its improved holdings to demonstrate its earning power and can afford to be liberal in the terms of payment allowed the purchaser because of the certain knowledge that the property is fully and properly developed and is now producing at a rate sufficient to insure the success of purchasers under ordinary conditions. As a matter of fact, its success in intensive farming under irrigation on a large scale has been so great that it is not now offering, and cannot afford to sell, any of its irrigable lands at present prices. The facts regarding this company strikingly illustrate the possibilities of this method of handling large projects.

The field for investment in this line is tremendous and the profits to be realized by the project properly handled are large and sure. The three requisites to certain success are these:

Proper examination prior to the purchase of the land, taking into consideration soil, climate, water supply, and transportation available.

Intelligent planning of crops with a view to what is best suited to the particular soil and general market conditions.

Efficient management, insuring a maximum output at a minimum cost.

Intensive farming on a large scale offers a most attractive field for investment and its possibilities loom large in the realm of big business.



Tractor and scarifier working in an orchard to help the rapid growth of trees.

THE OIL INDUSTRY OF CALIFORNIA.

By Frank J. Silsbee.

The beginning of the twentieth century marked the dawn of the era of oil power in industrial and maritime pursuits the world over. Before its span of years is half passed there will have been witnessed the most phenomenal revolution in all history of mechanical engineering through the utilization of oil as a source of energy in place of coal and other combustibles used for steam-making and other power-production purposes. The development of the internal combustion engine, capable of being operated with crude petroleum and low-grade distillates, and suited to the requirements of the world's work on land and sea, will work a marvelous change in engineering standards. No mechanical achievement has made such rapid strides and none has been more revolutionary in effect. Oil power is in the ascendancy.

The petroleum industry of California is of great importance to the industrial and commercial pursuits of the Pacific coast, on account of the economic change in production and transportation costs being brought about by the development of oil power. The oil resources of the Golden State are destined to have a world-wide influence on industry and commerce. The economic advantages of liquid fuel on land and sea will attract the manufacturer, and, with the Panama Canal, influence the routing of the world's shipping.

Petroleum is the natural fuel of the Pacific coast states of North and South America. This territory has no coal deposits of particular commercial importance. Aside from deposits in Washington and British Columbia, and the undeveloped resources of Alaska and Peru, there is no satisfactory coal. The coal that is produced does not compare favorably with eastern, Welsh, or Australian coals, and the cost is considerably higher. The use of California oil is therefore universal on all railroads in the state and its consumption extends into Arizona, New Mexico, Nevada, Oregon and Washington, British Columbia and Alaska. In short, the market comprehends a territory from Alaska to Chile and Hawaii, and inland as far east as Carlin, Nevada, El Paso, Texas and Albuquerque, New Mexico. Almost all coastwise steamers burn oil, and when the economic influence of liquid fuel with the internal combustion engine begins to be felt, the use of oil will extend to the trans-oceanic vessels.

The advantages enjoyed in the use of liquid fuel in stationary plants may be summed up briefly as follows:

1. General cleanliness.
2. High boiler and furnace efficiency.
3. Ability to carry overloads and meet, almost instantly, wide ranges in load.
4. Total absence of smoke when burners are properly handled.
5. Uniform draft and air supply, giving minimum variation in furnace temperature.

6. No loss when stored indefinitely.
7. Low cost of handling.

The advantages of oil being burned under marine boilers instead of coal are enumerated as follows:

1. Ability to raise steam quickly.
2. Rapid bunkering from lighter or shore, day or night, rain or shine, with no dust or dirt.
3. Can be stored in double bottoms and in other spaces on board ship where coal could not be placed.
4. Practically double steaming radius for given storage space.
5. No spontaneous combustion; decreased boiler room force; hardships of stoking removed; absence of dust and dirt in the engine room with the consequent reduction of wear on working parts.
6. No ashes to handle; and decreased maintenance cost through increased life of boilers, etc.

For railroad purposes the use of liquid fuel, aside from affording many of the benefits given in the foregoing, has the further advantage of the absence of sparks, thereby eliminating the danger of fires along rights-of-way. In certain forest reserves through which railroads pass, the government requires that oil be burned, to reduce the fire hazard.

For metallurgical purposes, fuel oil gives an increased capacity to the furnaces, high temperatures, absence of soot in dust chambers, ease and range of regulation, and ability to reduce "sows" quickly.

The average price for which good steaming coal can be delivered into bunkers of consumers in Pacific coast territory is close to \$8 per ton. Records of the Navy Department from 1906 to 1910 indicate that the average price the federal government paid for coal for its war vessels on the Pacific was \$8.10 per ton. The average in the Puget Sound country was \$8.18 and Mare Island \$8.47 per ton. It will therefore be seen that \$8 per ton is a fair basis of coal cost in comparison with liquid fuel. Exhaustive tests by the United States government, and other independent investigations, indicate that from three to three and one-half barrels of oil fuel are equivalent to one ton of good steaming coal. The average price which the consumer of California fuel oil has had to pay for supplies during the past decade is probably less than \$1 per barrel; for the purpose of comparison, however, that figure will be used. On the basis of three and one-half barrels of oil as the equivalent of one ton of good steaming coal, the per-coal-ton-cost of oil figures \$3.50. The saving in favor of oil, therefore, is \$4.50.

To illustrate how this works out, take the case of the Southern Pacific railroad system, the greatest single beneficiary of oil fuel. It uses approximately a million and a quarter barrels per month. The cost of this oil to the railroad is probably close to 75c per barrel, or \$2.75 for the combustible equivalent to one ton of coal. If coal were used, approximately 357,143 tons would be required to do the work done by oil. At \$8 per ton this coal would cost \$2,857,144.

Figuring oil at 75c per barrel, the cost for fuel would be \$937,500, representing a saving of \$1,919,644 per month, or approximately, \$24,000,000 a year. It might be well to point out, at this juncture, the economy of oil transportation on railroads. Fuel oil equivalent to one ton of coal weighs 1,139 pounds. One of the ordinary tank cars in use on the railroads will hold 297 barrels of oil, which is equal to 85 tons of coal. It is thus seen that two forty-ton coal cars would be required to transport the fuel equivalent of one tank car of oil. The saving in equipment and transportation costs is readily apparent.

A gas company in Los Angeles uses approximately 60,000 barrels of oil fuel per month. Assume that the average cost per barrel is \$1, though in fact, this company has long bought fuel below 75c per barrel. The total monthly bill for oil fuel would therefore be \$60,000. Sixty thousand barrels of oil is equivalent to 17,143 tons of coal, which figured at \$8 per ton, would require an outlay of \$137,144, compared to \$60,000 for oil; a monthly saving of \$77,144. Thus the comparisons may be brought down to the smallest consumer, whose saving is proportionate to the amount of oil used. It can readily be seen what a boon oil fuel is to the small user, particularly on account of its ease in handling, storage, etc.

Interesting and remarkable as these facts are in connection with the use of oil as fuel, they sink into comparative insignificance, in the light of the economies of the heavy oil internal combustion engine for land or sea power. Burning oil under boilers must be characterized as criminally wasteful when compared to the new engine.

A description of this engine, which is commonly referred to as the Diesel, taken from a paper prepared in 1912 by Rudolph Diesel, the inventor, is as follows:

"The Diesel engine suffers neither ignition nor carburetion troubles for the same reason that a snake is not troubled with gout. The oil engine does not depend on any sparking device, as does the gasoline engine, nor any red-hot ball, as does the kerosene engine. The Diesel compresses pure air into its cylinders, not an explosive mixture of gas and air. The air is compressed to a degree which raises its temperature far above the burning point of oil. Pre-ignition would occur, as in gasoline engines, were it not for the fact that there is nothing to ignite until the piston has finished its upward stroke and is ready to descend.

Just at this instant a tiny spurt of oil is injected into the hot compressed air, where it ignites. The result is what the average person would call an explosion. In reality it is not an explosion such as occurs in the gasoline engine, where a mixture of gas and oil is fired. The burning of the oil occupies almost the whole time during which the piston is descending. The result is a steady push like steam, instead of the violent blow of a gas explosion."

The United States Bureau of Mines, in Technical Paper No. 37, has published some interest-

ing facts in connection with some of the advantages of the internal combustion engine over steam and other prime movers. It deals particularly with the engine as adapted for marine propulsion, showing such economies and efficiency in its use, as will attract the attention of the world's merchant marine. Reduced to simple terms, one barrel of oil used in the marine internal combustion engine, is equivalent to three or four barrels burned under a boiler. The oil engine requires less men than a steam engine of equal power. It is cleaner, and much easier for the men to handle. No fireroom is necessary. No stokers are required and consequently there is no need of quarters for them. The engine dispenses with boilers. It requires no smokestacks — only a small exhaust stack—and no ventilating fans are needed in the stokehold. It develops no smoke whatever. When the engine is running properly, no exhaust is visible. The total weight of the engine is about the same as that of a reciprocating steam engine, not including the boilers and condensers. No fresh water is required; salt water can be used for cooling the cylinders. The engine room is thirty to fifty per cent smaller than that of the steam engine of equal power and more easily kept clean and in order. The thermal efficiency of the internal combustion engine, or heavy oil engine, as it is sometimes called, under full load is thirty per cent, compared to twelve per cent under steam units. Such engines are in use in many types of vessels, ranging from small pleasure vessels to those of ten to twelve thousand tons displacement, and larger ones are constantly being built.

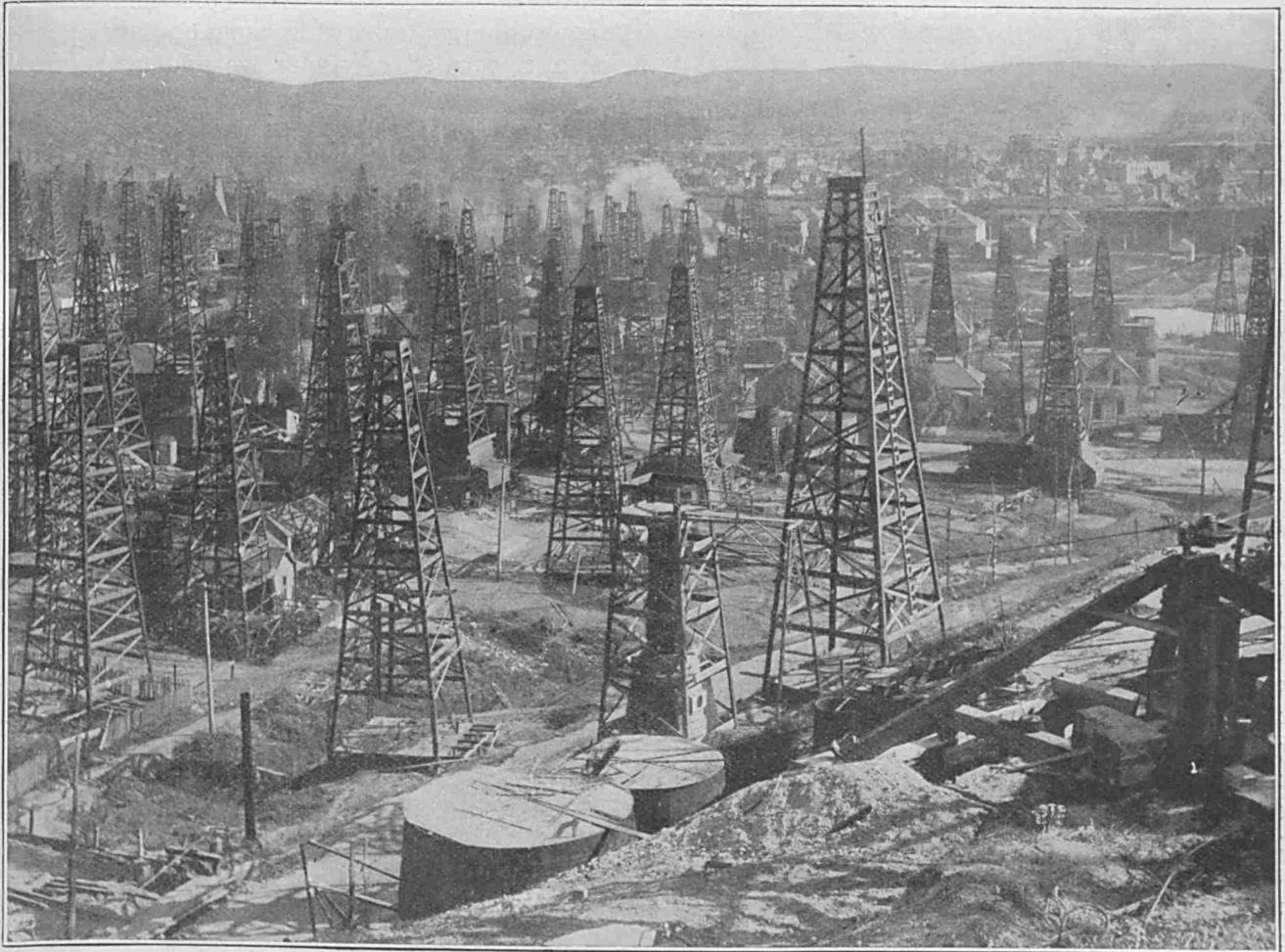
A ship of this type visited California ports recently. Comparing two vessels of equal displacement, one a motor-ship and the other a steamer, it is stated that the motor-ship will carry 10,000 tons of pay freight as against 8,000 tons by the steamer, at 50 per cent of the fuel cost per ton carried and with a ship's crew of half the size. The motor-ship can travel one and one-quarter times the circumference of the globe without replenishing fuel tanks, whereas a steamer could go no more than a quarter of the distance without coaling. Marine engineers state that, even though the first motor-ships built have cost more than steamers, there is no real reason why the new type of sea transport should not ultimately be built and fully equipped for nearly the same price per ton as a high grade quadruple-expansion-engined steamship, provided the size is at least 10,000 tons. Even though the original cost of the motor-ship exceeds that of the steamer, its rate of interest return is higher on account of greater earning capacity and smaller operating cost.

The petroleum fields, so far discovered in California, are vast in area and remarkable in output, approximating over 150 square miles of proven ground, and with a potential production for 1914 of approximately 112,000,000 barrels. The United States Geological Survey estimates that the California fields are capable of furnishing a maximum of eight billion barrels of crude petroleum

out of twenty-four billion barrels maximum yet available in the United States. It is fair to state, however, that since this estimate was made by the government agents, additional resources have been discovered in Oklahoma, which no doubt will raise considerably the estimate as to the ultimate extractable oil content of this country. The minimum estimates are about fifty per cent of the maximum in each case. Whether or not the maximum is reached seems immaterial at this time. Competent petroleum engineers and geologists, on independent investigation, state that it is reasonable to believe that the oil fuel of California will dominate the Pacific coast for the next fifty years, and possibly the balance of the present century.

The importance of the California petroleum resources as compared to the rest of the United

duction purposes, for years to come. According to figures published in United States Geological Survey Bulletin No. 442-A, of the year 1910, the cost of delivering Alaskan anthracite and bituminous coal to Washington and Oregon ports will approximate \$5 per ton, and to California ports 50c per ton additional. By the time the necessary arrangements are made to mine and transport this coal, it is possible that progress in the development of the internal combustion engine will have been so great that the Alaskan product will not threaten the supremacy of liquid fuel for some time to come. Furthermore, the growth in ideals of the conservation of our natural resources will ultimately forbid the use of our bituminous coals under boilers, just as this sentiment must eventually force a discontinuance of the wasteful burning of petroleum



OIL FIELD NEAR LOS ANGELES.

States, and the production of foreign countries is set forth in statistical data accompanying this article. These statistics show that in the year 1901 California produced eleven per cent of the total output of the United States, the proportion growing steadily until the year 1913, when, according to the United States Geological Survey, the Golden State produced nearly forty per cent of the total petroleum yield of this country. The production of all foreign countries, as compared to California, shows that of the whole, California's output amounted to a little over seven per cent in the year 1901, mounting upward to forty per cent in 1912.

The development of Alaskan coal resources will not affect the practical predominance of California oil for steam-making, and other power pro-

in a like manner. The factor of conservation along this line will certainly play an important part in determining the length of time that oil maintains supremacy as a fuel, and this point is taken cognizance of, in estimating the years that liquid fuel will probably predominate. When the oil resources are exhausted, the country will turn to the development of its remarkable shale deposits, and coal will be coked, and the oil residues, and other by-products, turned into their natural industries, instead of going up the chimney into the air. The shale deposits, existing in conjunction with the oil fields of the state, and the coal measures of Utah, Wyoming and other western states, should yield enough oil to guarantee practically an unlimited supply for the future, particularly when it is considered that by virtue of

the internal combustion engine, a price can be paid for oil that will make the mining of these shales profitable.

It is to be regretted that so much information has been peddled to the public heralding the oil business as the long-sought way to "get rich quick." It has done inestimable damage to the industry and its legitimate promoters. The public mind has been educated to believe that the earnings of such corporations as the Standard Oil Company are general in the petroleum industry. This is far from true. The Standard Oil Company is principally a purchaser, transporter, and refiner of crude petroleum. The business of producing oil is totally different. The history of the oil business of California shows that the producer of oil, under a competitive economic system, influenced by considerations of competition, and the diplomacy of rivalry among the marketing factors, in conjunction with the law of supply and demand, can hardly expect stable profits from year to year in an oil region of tremendous potentialities.

The writer is not decriing investment in California oil properties. It is well to point out, however, that the average price per barrel, at the well, for California crude oil during the past fourteen years has been forty-five cents. Competent petroleum engineers estimate that the actual cost of producing oil in California, taking into account depreciation of the producing capabilities of the land, redemption of capital, and development and operating expense, is not far from that figure. Indeed the statement is made that, considering the hazardous and speculative nature of the business, seventy-five cents per barrel should be the minimum price, at the well, to insure profit. In face of a market with very fixed and definite limitations and production potentialities of enormous proportions, millions of barrels of California oil are now being marketed annually at a price below the cost of production. It is certain that, for many years to come, California can produce millions of barrels more oil than can be profitably marketed. Under the unrestricted operation of the law of supply and demand, advance in price to the producer only serves to stimulate production until returns to the producer again fall back to an unprofitable level. It, logically follows, that if the producer is to receive a profit commensurate with the risk of the business, some regulating influence must be brought into play. Some means must be adopted whereby the producer will receive a just economic price for the product, at the same time taking care of the marketer. The question of declaring oil a public utility to meet the present unprofitable situation is occupying the attention of the leaders of the industry. It is proposed that thorough regulation, from producing to marketing, be instituted through the present railroad commission, or some other legally constituted body. The idea is permeating the consciousness of the leaders of the state that, in a higher way, our mineral resources should be regarded as property to be used, and to be held in trust, with regard to

the present and future needs of the country. It is being realized that neither human labor nor any other human agency has contributed to the origin of oil. Whatever rights the individual may possess have been derived from the general government and from the state as the original owners. The men of this generation must not be permitted to dissipate a great state asset at continuous financial loss to themselves, as well as to future generations. There can be no such thing as an oil industry without profit, and when this is more fully and concretely realized suitable regulation will come about to the interest of all concerned, based on the principles of conservation of natural resources, and economic fairness to the producer.

Thus, while the present situation from an investment point of view is not encouraging, the future is bright. Well managed and amply financed companies, with reasonably large acreage, offer attractive speculative and investment possibilities, if judicious selection is exercised. California properties are rapidly going into centralized control. The small operator is at a hopeless disadvantage from a marketing standpoint. The capitalist finds his opportunity in consolidation, which reduces the cost of production. Centralization in California has progressed to the point where 65 per cent of the output of the state is controlled outright by the marketers and consumers, leaving 35 per cent to be purchased in the open market. Amalgamation of producing properties will assist materially the operation of measures of regulation and work for the best interest of producer and consumer. But the great story of California oil lies in the statistics accompanying this article.

ESTIMATE OF CALIFORNIA'S PROVEN PETROLEUM LANDS AND REMAINING RECOVERABLE OIL CONTENT

Counties	Estimated Proven Oil Acreage	Estimated Recoverable Oil Content	Production to Jan. 1, 1915	Estimated Remaining Recoverable Oil Content
Fresno	30,000	1,150,000,000	154,843,000	995,157,000
Kern	53,000	2,375,000,000	397,156,645	1,977,843,355
Los Angeles ..	17,000	775,000,000	192,737,000	582,263,000
Orange				
Santa Barbara ..				
Ventura				
San Luis Obispo ..				
Santa Clara ..				
TOTAL ..	100,000	4,300,000,000	744,736,645	3,555,263,355

NOTE.—Estimates of additional probable oil lands range from 250,000 to 544,000 acres, the greater part of which, if proven at all, being considered as of low productivity per acre.

PRODUCTION IN CALIFORNIA AS COMPARED TO ALL FOREIGN COUNTRIES PREPARED FROM RECORDS OF UNITED STATES GEOLOGICAL SURVEY

Year	California	Foreign Countries	Total	California's Percentage
1901.....	7,710,315	96,384,167	104,094,482	7.4%
1902.....	13,984,268	96,391,106	110,375,374	12.7
1903.....	24,382,472	94,742,174	119,124,646	20.5
1904.....	29,649,434	102,170,629	131,820,063	22.5
1905.....	33,427,473	80,928,598	114,356,071	29.2
FIVE YEARS.	109,153,962	470,616,674	579,770,636	18.8%
1906.....	33,098,598	86,899,474	119,998,072	27.6%
1907.....	39,748,375	96,533,286	136,281,661	29.2
1908.....	44,854,737	105,041,543	149,896,280	29.9
1909.....	55,471,601	115,155,199	170,626,800	32.5
1910.....	73,010,560	117,917,056	190,927,616	38.2
FIVE YEARS.	246,183,871	521,546,558	767,730,429	32.1%
1911.....	81,134,391	125,062,794	206,197,185	39.4%
1912.....	86,450,767	129,065,018	215,515,785	40.1
1913.....	97,764,525	.....	.....	.....
1914.....	105,000,000	.....	.....	.....

NOTE.—While complete figures are not available, production in foreign countries will probably show a decline in 1913 and 1914.

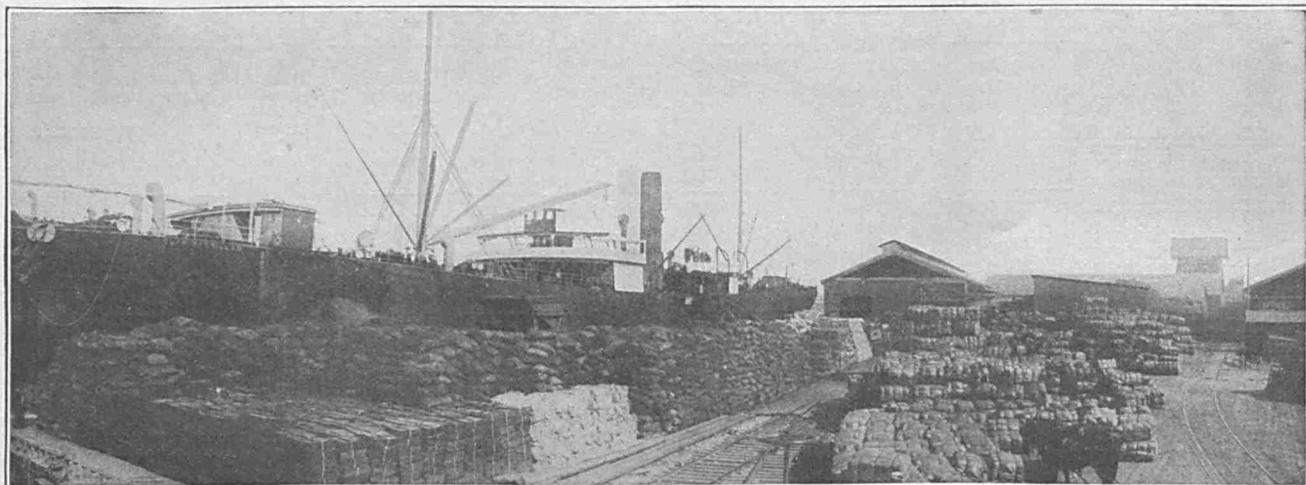
PRODUCTION AND VALUE OF PETROLEUM IN CALIFORNIA FROM 1876 TO 1914 PREPARED FROM RECORDS OF U. S. GEOLOGICAL SURVEY

Year.	Production			Years	Value			Total Value Series Years	Per Barrel
	Barrels Production	Per Cent Gained	Total Yield Series Years		Yearly Value	Per Cent Gained	Per Barrel		
1876	12,000	.....	12,000	1	\$ 36,000	.....	\$3.00	\$ 36,000	.....
1877	13,000	8.3%	25,000	2	39,000	8.3%	3.00	75,000	.....
1878	15,227	17.1	40,227	3	45,681	17.1	3.00	120,681	.....
1879	19,858	30.4	60,085	4	59,574	30.4	3.00	180,255	.....
1880	40,552	104.2	100,637	5	121,656	104.2	3.00	301,911	\$3.00
FIVE YEARS	100,637	.....	100,637	.....	\$ 301,911	.....	\$3.00	\$ 301,911	.....
1881	99,862	146.3%	200,499	6	199,724	6.4%	\$2.00	\$ 501,635	.....
1882	128,636	28.8	329,135	7	257,272	28.8	2.00	758,907	.....
1883	142,857	11.1	471,992	8	285,714	11.1	2.00	1,044,621	.....
1884	262,000	83.4	733,992	9	524,000	83.4	2.00	1,568,621	.....
1885	325,000	24.0	1,058,992	10	650,000	24.0	2.00	2,218,621	\$2.09
FIVE YEARS	958,355	852.3%	.....	.....	\$ 1,916,710	534.8%	\$2.00	.....	.....
1886	377,145	16.0%	1,436,137	11	\$ 754,290	16.0%	\$2.00	\$ 2,972,911	.....
1887	678,572	80.0	2,114,709	12	1,357,144	80.0	2.00	4,330,055	.....
1888	690,333	1.7	2,805,042	13	1,380,666	1.7	2.00	5,710,721	.....
1889	303,220	*56.0	3,108,262	14	368,048	*81.5	1.21	5,078,769	.....
1890	307,360	0.1	3,415,622	15	384,200	4.3	1.25	6,462,969	\$1.89
FIVE YEARS	2,356,630	145.9%	.....	.....	\$ 4,244,348	121.4%	\$1.80	.....	.....
1891	323,600	5.2%	3,739,222	16	\$ 401,264	4.4%	\$1.24	\$ 6,864,233	.....
1892	385,049	18.7	4,124,271	17	561,333	39.9	1.46	7,425,566	.....
1893	470,179	22.1	4,594,450	18	608,092	8.3	1.29	8,033,658	.....
1894	783,078	66.5	5,377,528	19	1,064,521	74.9	1.36	9,098,179	.....
1895	1,245,339	59.0	6,622,867	20	1,000,235	*6.0	.80	10,098,414	\$1.52
FIVE YEARS	3,207,245	36.1%	.....	.....	\$ 3,635,445	14.3%	\$1.13	.....	.....
1896	1,257,780	0.9%	7,880,647	21	\$ 1,180,793	18.0%	\$0.94	\$ 11,279,207	.....
1897	1,911,569	51.9	9,792,216	22	1,918,269	62.4	1.00	13,197,476	.....
1898	2,249,088	17.6	12,041,304	23	2,376,420	23.9	1.06	15,573,896	.....
1899	2,677,875	19.0	14,719,179	24	2,660,793	11.9	.99	18,234,689	.....
1900	4,329,950	61.7	19,049,129	25	4,152,928	56.1	.96	22,387,617	\$1.17
FIVE YEARS	12,426,262	287.4%	.....	.....	\$ 12,289,203	238.0%	\$0.99	.....	.....
1901	7,710,315	78.0%	26,759,444	26	\$ 2,961,102	28.7%	\$0.38	\$ 25,348,719	.....
1902	13,984,268	59.1	40,743,712	27	4,873,617	64.5	.35	30,222,336	.....
1903	24,382,472	74.3	65,126,184	28	7,399,349	51.8	.30	37,621,685	.....
1904	29,649,434	21.6	94,775,618	29	8,265,434	11.7	.28	45,887,119	.....
1905	33,427,473	12.7	128,203,091	30	8,201,846	0.7	.25	54,088,965	\$0.42
FIVE YEARS	109,153,962	778.4%	.....	.....	\$ 31,701,348	157.9%	\$0.29	.....	.....
1906	33,098,598	*0.9%	161,301,689	31	\$ 9,553,430	16.5%	\$0.29	\$ 63,642,395	.....
1907	39,748,375	20.1	201,050,064	32	14,699,956	53.8	.37	78,342,351	.....
1908	44,854,737	12.8	245,904,801	33	23,433,502	59.4	.52	101,775,853	.....
1909	55,471,601	23.6	301,376,402	34	30,756,713	31.2	.55	132,532,566	.....
1910	73,010,560	31.6	374,386,962	35	35,749,473	16.2	.49	168,282,039	\$0.45
FIVE YEARS	246,183,871	125.5%	.....	.....	\$114,193,074	260.2%	\$0.46	.....	.....
1911	81,134,391	11.1%	455,521,353	36	\$ 38,719,080	8.3%	\$0.48	\$207,001,119	.....
1912	86,450,767	6.6	541,972,120	37	39,213,588	1.3	.45	246,214,707	.....
1913	97,764,525	13.1	639,736,645	38	45,661,400	16.4	.47	291,876,107	.....
1914	105,000,000	7.4	744,736,645	39	47,250,000	3.4	.45	339,126,107	\$0.45

*Loss. NOTE.—Figures for 1914 are estimated based on a production of approximately 53,000,000 barrels for the first half of the year. In that period fully 3,000,000 barrels were shut in, indicating a potential production strength of 56,000 barrels for the six months, or approximately 112,000,000 barrels for 1914, figured at the same rate of output.

PRODUCTION AND VALUE OF PETROLEUM IN THE U. S. FROM 1876 TO 1913 INDICATING CALIFORNIA IN COMPARISON TO THE WHOLE PREPARED FROM RECORDS OF UNITED STATES GEOLOGICAL SURVEY

Year	Production				Year	Value			
	California	15 Other States	Total	Calif's Per Cent		California	15 Other States	Total	Calif's Per Cent
1876	12,000	9,120,669	9,132,669	.....	1876	\$ 36,000	\$ 22,946,822	\$ 22,982,822	.....
1877	13,000	13,337,363	13,350,363	.....	1877	39,000	31,749,566	31,788,566	.....
1878	15,227	15,381,641	15,396,868	.....	1878	45,681	17,998,839	18,044,520	.....
1879	19,858	19,894,288	19,914,146	.....	1879	59,574	17,151,134	17,210,708	.....
1880	40,552	26,245,571	26,286,123	.....	1880	121,656	24,478,982	24,600,638	.....
FIVE YEARS	100,637	83,979,532	84,080,169	.....	FIVE YEARS	\$ 301,911	\$114,325,343	\$114,627,254	.....
1881	99,862	27,561,376	27,661,238	.....	1881	199,724	\$ 23,312,327	\$ 23,512,051	0.9%
1882	128,636	30,221,261	30,349,897	.....	1882	257,272	\$ 23,373,893	\$ 23,631,165	1.1
1883	142,857	23,306,776	23,449,633	.....	1883	285,714	25,454,538	25,740,252	1.1
1884	262,000	23,956,438	24,218,438	.....	1884	524,000	19,952,924	20,476,924	2.6
1885	325,000	21,533,785	21,858,785	.....	1885	650,000	18,543,694	19,193,694	3.4
FIVE YEARS	958,355	126,579,636	127,537,991	.....	FIVE YEARS	\$ 1,916,710	\$110,637,376	\$112,554,086	1.7%
1886	377,145	27,687,696	28,064,841	1.3%	1886	754,290	\$ 19,274,167	\$ 20,028,457	3.8%
1887	678,572	27,604,911	28,283,483	2.4	1887	1,357,144	17,499,462	18,856,606	7.2
1888	690,333	26,921,692	27,612,025	2.5	1888	1,380,666	16,569,687	17,950,353	8.1
1889	303,220	34,860,293	35,163,513	0.9	1889	368,048	26,595,292	26,963,340	1.4
1890	307,360	45,516,212	45,823,572	0.7	1890	384,200	34,980,905	35,365,105	1.1
FIVE YEARS	2,356,630	162,590,804	164,947,434	1.4%	FIVE YEARS	\$ 4,244,348	\$114,919,513	\$119,163,861	3.6%
1891	323,600	53,969,055	54,292,655	0.6%	1891	401,264	\$ 30,125,289	\$ 30,526,553	1.3%
1892	385,049	50,129,608	50,514,657	0.8	1892	561,333	25,345,130	25,906,463	2.2
1893	470,179	47,960,887	48,431,066	1.0	1893	608,092	28,324,234	28,932,326	2.1
1894	783,078	48,561,438	49,344,516	1.6	1894	1,064,521	34,457,574	35,522,095	3.0
1895	1,245,339	51,646,937	52,892,276	2.4	1895	1,000,235	56,691,044	57,691,279	1.7
FIVE YEARS	3,207,245	252,267,925	255,475,170	1.2%	FIVE YEARS	\$ 3,635,445	\$174,943,271	\$178,578,716	2.0%
1896	1,257,780	59,702,581	60,960,361	2.1%	1896	1,180,793	\$ 57,337,916	\$ 58,518,709	2.0%
1897	1,911,569	58,563,947	60,475,516	3.2	1897	1,918,269	39,011,342	40,929,611	4.7
1898	2,249,088	53,115,145	55,364,233	4.1	1898	2,376,420	41,816,939	44,193,359	5.4
1899	2,677,875	54,392,975	57,070,850	4.7	1899	2,660,793	61,943,111	64,603,904	4.1
1900	4,329,950	59,290,579	63,620,529	6.8	1900	4,152,928	71,599,763	75,752,691	5.5
FIVE YEARS	12,426,262	285,065,227	297,491,489	4.2%	FIVE YEARS	\$ 12,289,203	\$271,709,071	\$283,998,274	4.3%
1901	7,710,315	61,678,879	69,389,194	11.1%	1901	2,961,102	\$ 63,456,233	\$ 66,417,335	4.5%
1902	13,984,268	74,782,648	88,766,916	15.8	1902	4,873,617	\$ 66,305,293	\$ 71,178,910	6.8
1903	24,382,472	76,078,865	100,461,337	24.3	1903	7,399,349	87,294,701	94,694,050	7.8
1904	29,649,434	87,431,526	117,080,960	25.3	1904	8,265,434	92,910,021	101,175,455	8.2
1905	33,427,473	101,290,107	134,717,580	24.8	1905	8,201,846	75,955,553	84,157,399	9.8
FIVE YEARS	109,153,962	401,262,025	510,415,987	21.4%	FIVE YEARS	\$ 31,701,348	\$385,921,801	\$417,623,149	7.6%
1906	33,098,598	93,395,338	126,493,936	26.2%	1906	9,553,430	\$ 82,891,305	\$ 92,444,735	10.3%
1907	39,748,375	126,346,960	166,095,335	23.9	1907	14,699,956	\$ 105,406,793	\$ 120,106,749	12.2
1908	44,854,737	133,672,618	178,527,355	25.1	1908	23,433,502	105,645,682	129,079,184	18.1
1909	55,471,601	127,699,273	183,170,874	30.3	1909	30,756,713	97,571,774	128,328,487	23.9
1910	73,010,560	136,546,688	209,557,248	34.8	1910	35,749,473	92,150,215	127,899,688	27.9
FIVE YEARS </									



A BUSY PIER IN SAN FRANCISCO.

THE SHIPPING INDUSTRY OF THE PACIFIC COAST.

By Capt. Robert Dollar.

This industry is second to none in importance in the Pacific Coast States. It is difficult to get at the exact tonnage owned, as, on account of the high taxes imposed, many coastwise vessels are registered in Minnesota, Maine, New York and New Jersey; and, on account of our unjust and unreasonable laws, a great many large cargo steamers, owned by citizens of the Pacific Coast States, are registered in foreign countries, fly their flags, and are principally engaged in foreign commerce to and from this coast. The approximate tonnage of vessels is 1,049,296 gross registered tons. The money value also can only be approximated; it is estimated at sixty million dollars.

The vessels engaged in the domestic trade are more than sufficient for present requirements. At this writing some thirty steamers are laid up, so I think the increase will be gradual and will only come as trade conditions warrant. In the Foreign Trade, we look for very great advancement and development. This will be brought about by the great increase of trade that we will get from the opening up and development of China. Thirty-five years ago the Pacific Mail was the only company operating steamers, and the combined cargo capacity, of all their steamers at that time, was not as great as is that of one of their large, modern steamers. If the increase keeps up at the same rate as during that period, long before this century closes, the center of the world's commercial activity will be transferred from the Atlantic to the Pacific.

It is generally supposed that the opening of the canal will take away a great deal of freight from our ports, but from the line of the great northern circle from Panama to Japan, San Diego is only 225 miles, Los Angeles 245, San Francisco 325, Eureka 430, Astoria 670, the entrance to the Straits of Juan de Fuca 800; so it will be seen that the deviation will be very slight.

The Pacific Coast is favored with many good

and commodious harbours. In the extreme South is San Diego, having ample accommodations for all the requirements; next Los Angeles with more than they require and by dredging they can extend indefinitely; then San Francisco with sufficient anchorage for all the navies of the world. Eureka has plenty of room for her rapidly growing trade. In Oregon is Coos Bay. As soon as contemplated improvements are completed, the largest tramp steamers afloat can find berth there. Next comes the Columbia River. When the jetties and dredging contemplated are completed, it can receive vessels drawing thirty feet of water. Willapa and Grays Harbor are rapidly increasing their facilities to receive large vessels. At present steamers 400 feet long and drawing 20 feet have no trouble going in and out. Puget Sound, unsurpassed for its land locked bays, has sufficient water to take at one time all the ships of the world. Seattle and Tacoma are rapidly building wharves to accommodate the great increase expected after the Canal is in operation.

Our shipping may be divided into three parts, first, Coastwise, second, Inter Coast, (via Panama), and third, Foreign.

The bulk of the coastwise cargoes carried are from north to south, lumber furnishing more than 95% of the whole. Vessels carry bulk cargoes north, but not to exceed 10% of their capacity. The steamers engaged in carrying lumber on this Coast are constructed specially for this trade and are entirely different than can be seen in any other part of the world. The machinery is placed aft, and from 30% to 50% of the cargo is carried on deck and with perfect safety to both the vessel and cargo. The ordinary height of those deckloads are from 12 to 18 feet.

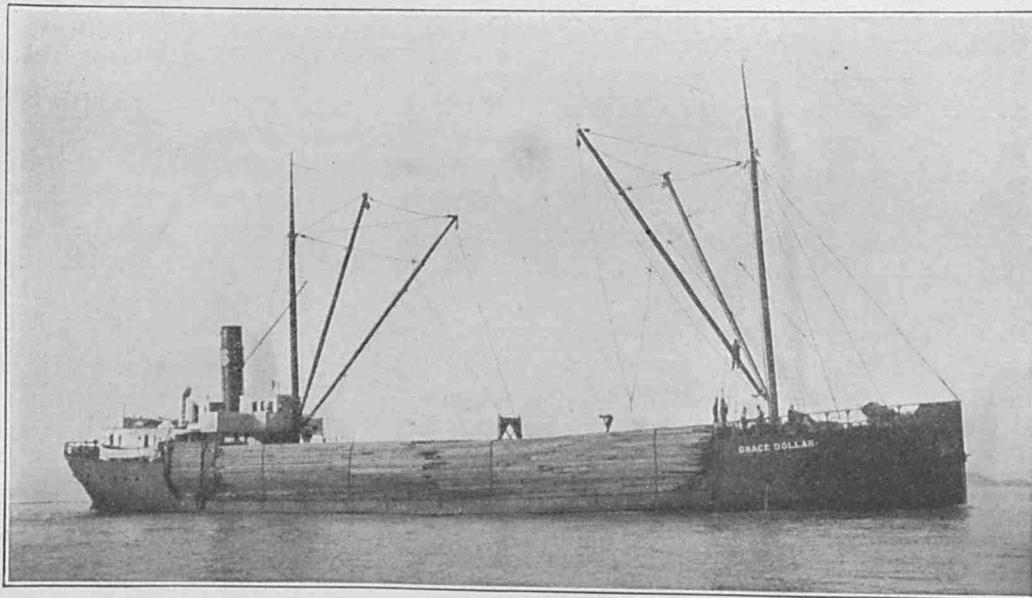
The trade that will go from one seaboard of the United States to the other is problematical. The value of commodities carried in 1913 was \$80,026,517. This was an increase from 1900 of \$73,208,737, although handicapped by having to trans-ship by rail either via Tehantepec or Panama. As to what increase the opening of the Canal will effect we must wait trade develop-

ment for a year or two, before we can even make any calculations. That the increase will be gradual, we are sure, although some expect an immediate expansion. In this they will be disappointed, but that there will be a tremendous increase of this trade, admits no argument. The difference between rail and all water rates will be sufficient to warrant this prediction. For the opening of the Canal the rate of freight has been reduced about 30%.

Foreign trade has not been pushed as it should. The local or domestic demand has satisfied all producers, therefore there was little incentive to go farther afield as long as the home consumption kept up. Now we see that we must reach out for foreign markets. So far we have only exported the products of the forest, fields and fisheries; now we must reach out for manufacturies. Up to the present time labor conditions have been such as to effectually preclude the possibility of manufacturing on this coast for export. Now we feel that, with the opening of the canal, a great number of emigrants will reach our shores. Employment must be found for them either in the cultivation of the fields or in manufacturing as very few will have money enough to take up land. We can expect factories to be built because raw material can be gotten as cheap

as in any part of the United States. Iron ore of a better quality can be laid down in Pacific Coast ports at a lower price than the supply is delivered at Pittsburg. Cokeing coal can be delivered here at a price that will enable us to produce coke at competitive prices if the most modern by-product ovens are employed. Thus there is no reason why we cannot produce iron and steel, not only for our own requirements, but for export also. Raw cotton and wool can be delivered at our sea-board as cheap as anywhere else, as both are grown near by.

The opening of markets of China warrants the prediction of an enormous commerce between that country and ours. The Philippine trade that has increased by leaps and bounds and, if political conditions permit, a great trade will result. Japan, India and the East Indies will all increase their trade with us. The custom house statistics are extremely encouraging. In 1856 our total exports from this entire coast were \$3,460,448, in 1880 \$38,888,418, in 1913 \$146,856,469. If this same ratio of increase continues for the next 60 years, it can easily be seen that the fulfillment of my prediction will be accomplished, that the Atlantic trade will be superseded by the Pacific, and that the commerce of San Francisco will exceed that of New York of today.



A VESSEL ESPECIALLY DESIGNED FOR TIMBER CARRYING. NOTE THE LENGTH OF CLEAR HULL AND DECK ROOM.



A SALMON CANNERY IN WASHINGTON SHOWING SOME OF THE TRAPS.

FISH FACTS AND FIGURES.

Commercial, Financial and Economic Features of the Pacific Coast Fisheries.

By Miller Freeman. Editor of "The Pacific Fisherman."

Food is the prime requisite of life and where, when and how to get it, how to pay for it, and how much, constitute the vital problem of the race. The traffic in food is the biggest item in the world's commerce.

Fish are food—nay more, they are cheap food. As such they are surely entitled to serious consideration in this day and age. Americans, it is true, are not, broadly speaking, a fish eating people and it is in America that the High Cost of Living holds untrammelled sway. These two facts are worth weighing in their relation to one another.

It seems strange that Americans—not themselves essentially fish consumers, should have developed, and today control, what is probably the world's most important fishery. It has sprung up upon the Pacific Coast within the past half century and, in spite of the important position it now occupies as demonstrated by statistics, it is still considered in its infancy.

So rapid has been the development of the commercial fisheries of the West Coast that few people east of the continental backbone have even an approximate idea of their present size and im-

portance. The total fisheries products of the Pacific Coast were worth, last year, about \$60,000,000 to the producer, or with transportation and distributing costs \$100,000,000 to the consumer.

One reason why, perhaps, so little is understood about the Pacific Fisheries is because they differ so radically from those of the Atlantic coast, upon which most casual observers formulate their opinions. On the east coast large fishing banks are located in a position really adjacent to large consuming centers such as Boston, New York, and Philadelphia, with the result that most of the fish is handled in a fresh state. The Pacific Coast is comparatively lightly populated, and its fishery products must find their chief market in the Eastern states and abroad. Owing to the fact that these fisheries are situated so far from the consuming centers, the bulk of the product must be prepared, with the result that here we have not only a fishery of unparalleled importance, but a large and thriving manufacturing business.

Take, for instance, the example of the salmon canning industry, the product of which comprises three-fourths of the sixty million dollar total. Last year this industry consumed, in raw materials, 575,000,000 pounds of fish; 30,000,000,000 square inches of tin plate; 8,000,000 packing cases; 60,000,000 pounds of salt; 4,000,000 pounds each of pig tin and pig lead; 360,000,000 cement coated nails; 400,000,000 lithographed labels, and thousands of gallons of gasolene, kerosene, lacquer

and acids. With this it produced some four hundred million sealed packages of nutritious, palatable, and economical food.

To further show how this differs from the ordinary conception of a fishing business, it might be mentioned that these fish are, in the main, not caught by hook and line, but with such gear as salmon traps and purse seines. In the traps the fish are kept alive in the water until ready for packing, and are not touched by human hands until they are delivered at the packing establishment.

The fish are handled with large power vessels driven by gas engines, less picturesque, but more practical than the fishing smacks of the Atlantic.

From an initial pack of 2,000 cases, the business grew by leaps and bounds, the output of 1913 being 8,000,000 cases of 48 pounds each. This industry employs over 30,000 people and, since the entire pack is made in a few months in the summer season, an enormous equipment is required to handle it successfully.

Canned salmon now fills a tremendous domestic demand, and may be found on sale in every country in the world. Twenty-five per cent of the output is sold abroad and it is the largest item of canned food exported by the United States.

The fish canning activities of the coast are by no means limited to salmon. Within the past few years, there has sprung up the practice of



SALMON ON THE FLOOR OF THE CANNERY.

The manufacture of engines for the fishing fleet is in itself a large industry on the Pacific Coast.

In the canneries, modern sanitary machinery is used throughout and the fish are even butchered by a mechanical device known as the "Iron Chink," which performs this difficult operation without the aid of a human hand.

In 1913 this branch celebrated its fiftieth anniversary with the largest output in its history. It was founded on the Sacramento half a century ago by some pioneers experienced in the lobster canneries of Maine. Today the business finds its principal seat in the state of Washington, and in Alaska. The Columbia River, while not numerically a big factor, will always continue to enjoy an enviable reputation for the quality of its fish.

canning a species of tuna found on the coast of California and, although only a few years old, this business exceeds a million dollars a year. Besides this there are canned large quantities of clams, crabs, sardines, etc.

In the fresh fisheries the halibut is of paramount importance. As this fish must find its principal market in Eastern States, it must be shipped packed in ice, or frozen. This has necessitated the construction, at various points along the coast, of ice making plants and cold storages. The largest fish cold storage plant in the world, is now located at the Pacific Coast and has a capacity of 15,000,000 pounds. The halibut fisheries alone produce about 60,000,000 pounds of fish a year and, in addition to this, there is a consider-

able business in fresh salmon, herring, and various kinds of cod.

The salt fish business is also an important branch of the industry. This group includes, as its most important branch, the business of packing large, choice salmon in light brine, and shipping them to Germany where they are washed, smoked, and canned. The current year's business has of course been disorganized by the war, but last year some 20,000,000 salmon were prepared in this fashion. The general salt fish business includes the packing of salmon and herring in barrels, and salting codfish and herring in bulk.

The manufacture of oil and fertilizer, together with miscellaneous chemical by-products from whales, cannery offal and non-edible fish, is also another branch of the fisheries which is increasing in importance with the passing of years.

It is very fascinating to contemplate the future of this industry. There are at least 250 varieties of edible fish on the Pacific Coast, of which not more than a dozen are being exploited today, and yet these dozen have elevated the fishery to a sixty million dollar business. The finding of a market for California's tuna, which was unutilized up to a few years ago, is only one example of the many developments which years are sure to bring. In this instance, we have a case of a million dollar business springing up in a twinkling from a fish which had not been regarded as edible, and southern California ports are the richer by a score of fine food factories employing hundreds.

The raw material—the fish—is to be found in these waters in inconceivable quantities, and growth is, at present, limited only by the market—by the amount of fish that can be packed and sold profitably. With the extension of the markets the industry will logically expand.

All eyes are at present turned to the Panama Canal. Its economical altering of trade routes is bound to have a beneficial effect upon Pacific

Fisheries, and it may be said that readjustment in accordance with the changed conditions is going on even now. Every few days, large cargoes of canned salmon—a hundred thousand cases and more—leave the Pacific for Atlantic ports. These goods travel under a water rate of thirty cents a hundred pounds, compared to seventy cents present rail rate. As the chief markets, not only for canned salmon but our other fisheries products, lies in the East and abroad, the cost of getting the finished product to consumers is going to be reduced, and this will represent a saving to purchasers which is bound to result in increased consumption.

Direct benefits will come through a reduction in the cost of materials and equipment to the packers, as a large amount of these goods come from the east.

The canal will unquestionably make the Pacific Fisheries a bigger figure in the export trade than ever before. A general movement, originated by the writer, to secure a reduction in foreign duties on canned salmon is beginning to bear fruit and, coincident with the lower cost of getting these goods to foreign ports, this opens up new and rich markets. It will be possible to ship cheap frozen fish direct to Europe, and this branch alone will unquestionably receive a tremendous impetus when conditions on the continent have adjusted themselves, as they eventually must. The business of handling low priced salt fish in barrels and bulk will also expand, as a cheap food is more than welcome in many foreign countries.

Coupled with the natural growth incident to the continued extension of domestic markets, the opening of the canal marks the beginning of a new era in the Pacific Fisheries. The fishing industry of the Pacific Coast is an industrial benefactor. The money received for its products flows into a hundred trade channels and is an important factor in the general prosperity of the nation.

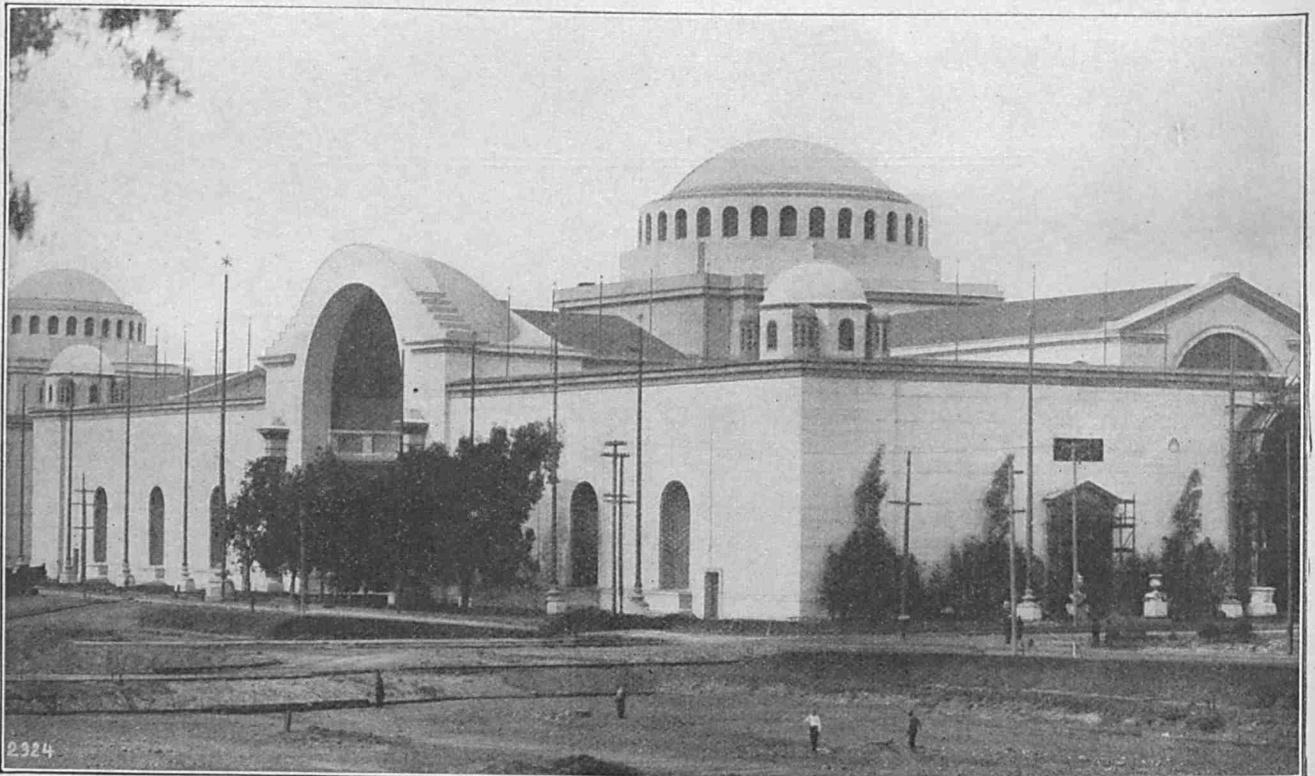


FISHING FLEET OF THE ALASKA PACKERS.

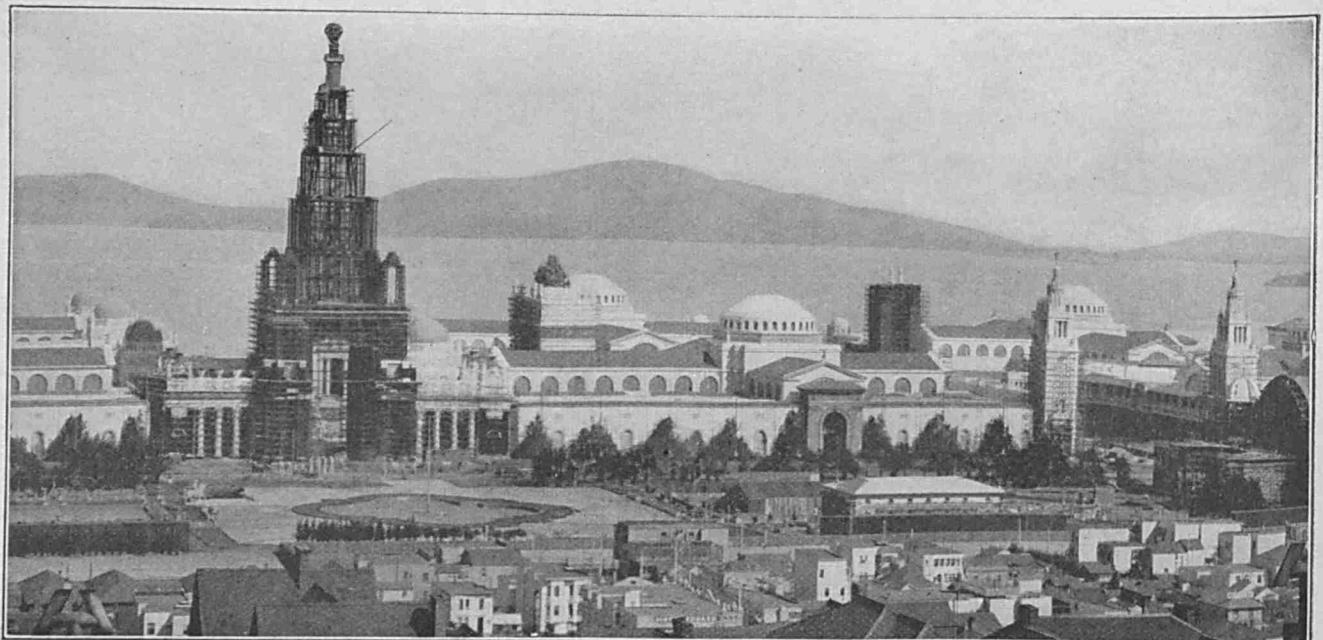
THE EXPOSITIONS



COMPLETE SECTIONAL PANORAMA OF EXPOSITION. WEST SECTION.



THE PALACE OF EDUCATION, SHOWING THE WESTERN ENTRANCE.



SECTIONAL PANORAMA OF EXPOSITION. EAST CENTRAL SECTION.

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SECTIONAL PANORAMA OF THE EXPOSITION. WEST CENTRAL SECTION.



PALACE OF MANUFACTURES FROM THE SOUTH GARDENS.



SECTIONAL PANORAMA OF THE EXPOSITION. EAST SECTION.

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The Panama California Exposition at San Diego

There is now in progress an engrossing experiment by the furthest south of the American ports on the Pacific, San Diego,—an experiment which is so closely bound up with San Diego's Panama-California Exposition of 1915, as to appear partly as a cause, partly as an effect. One important point is that it demonstrates a new idea in exposition work—a serious purpose and something of genuine economic interest rather than the futile hope of an ephemeral "boom." So far as known this is unique. Broadly, this purpose is to build up the great southwest area which is barely tapped today. No less interesting is the method whereby this purpose is to be carried out.

San Diego's present back country is almost negligible. Not even the Imperial Valley, directly east but over the first divide, can be considered as tributary to the coast city under present traffic conditions. To grasp the idea of the program there must be a general understanding of geographical conditions—San Diego the first port of call north of the Canal, nearer to the new waterway by 600 miles than is San Francisco,

routes became identical. Everything west and south of that line, then, was reserved as San Diego's back country, inasmuch as every point within that territory could obtain its goods from the east more cheaply via San Diego than by any other way. Similarly, all products of that country could be shipped to the Atlantic ports more cheaply via San Diego than by any other way.

The territory so defined includes Southern California, most of Nevada, southern Utah, southwestern Colorado, all of New Mexico and all of Arizona. Sections which are different in latitude and altitude are capable of producing an extraordinary variety of raw materials. The statisticians tossed aside their freight rate statistics and set about finding out what they are.

By means of detail maps and the data mentioned, the statisticians prepared their reports on each of the counties and valleys in the southwest, by states. Thus in southwest Colorado were 17 counties, in southern California 11 counties, in Arizona 14 counties, in New Mexico

Rates given in car load quantities.

Commodity.	Shipping Point.	Present Routes				Via Panama Canal			
		Rail Rate to New York	Water Rate to San Diego	Joint Rail and Water Rate to San Diego	All Rail Rate to San Diego	Rail Rate to New York	Water Rate to San Diego	Joint Rail and Water Rate to San Diego	All Rail Rate to San Diego
1. Carpets	Worcester, Mass.	\$0.22	\$1.15	\$1.37	\$1.85	\$0.22	\$0.60	\$0.82	\$1.85
2. Clothing	Rochester, N. Y.	.32	2.00	2.32	3.00	.32	.60	.92	3.00
3. Dry goods	Fall River, Mass.	.32	2.00	2.32	1.10	.32	.60	.92	1.10
4. Electrical appliances and supplies	Pittsburgh, Pa.	.30	1.00	1.30	1.60	.30	.55	.85	1.60
5. Furniture	Grand Rapids, Mich.	.48	1.50	1.98	2.65	.48	.60	1.08	2.65
6. Hardware	Cleveland, Ohio	.25	1.00	1.25	1.85	.25	.60	.85	1.85
7. Structural iron and steel	Pittsburgh, Pa.	.16	.60	.76	.80	.16	.30	.46	.80
8. Castings	Cleveland, Ohio	.16	.80	.96	.80	.16	.60	.76	.80
9. Safes, etc.	Hamilton, Ohio	.30 1/2	.90	1.20 1/2	1.75	.30 1/2	.40	.70 1/2	1.75
10. Pipe, wrought iron	Paterson, N. J.	.07	.45	.52	.65	.07	.25	.32	.65
11. Pipe fittings	Paterson, N. J.	.07	.50	.57	.70	.07	.25	.32	.70
12. Gas and gasoline engines	Detroit	.23 1/2	1.00	1.23 1/2	1.40	.23 1/2	.40	.63 1/2	1.40
13. Bathtubs	Pittsburgh, Pa.	.21	1.25	1.46	1.80	.21	.60	.81	1.80
14. Wire fencing, in rolls	Worcester, Mass.	.17	.65	.82	.85	.17	.25	.42	.85

also much nearer the east, owing to the curvature of the California coast, and, yet again, very much nearer in railroad time and cost by reason of the lower grades which the Southern Sierras offer. The last two are railroad factors, the first is a water factor.

Under the personal direction of H. O. Davis, director general of the Exposition, a corps of statisticians, equipped with the government and state reports, private data and water and rail freight information, has been at work for several months. The figures this corps has prepared are now made public for the first time.

The first task was to determine the potential "back country." A carload of steel was brought from Pittsburgh to eastern tidewater, transferred to boat, carried through the Canal and up to San Diego, there transferred to train and carried eastward. The same theoretical transfer was made with other commodities from various points. Then the same units were shipped to the southwest by all-rail routes. The cost of both routes was kept by zones.

The charts completed, the statisticians found a fairly steady line where the cost of the two

26 counties, in Nevada for the southern half 8, and for the southern half of Utah 17 counties. Some of the individual counties contain as many as twenty separate valleys and plateaus, but all of these containing 2,000 acres or over are itemized individually. The tabular report shows population, altitude, water sources, length of growing season, principal farm products, the number of railroads or distance to the nearest road and the principal town. Then comes the statement of development, the acreage of irrigated land in 1913, of other cultivated land, the percentage of increase over 1910, the acreage of other irrigable lands and other arable lands, and the total area of land which has agricultural possibilities.

So much as a basis. Certain farmland is of such a character as to make it most profitable in 320-acre units. Other land can be operated to better advantage in 40-acre tracts, even smaller. But for estimate purposes these two classifications have been made and for each river valley or plateau there is given the total number of possible 320-acre and 40-acre farms, their total being an approximation of what the agricultural land will have when it is fully developed. Whatever the

unit of operation, the average farm population is found to be seven persons, and on this basis the probable population is figured.

Then there is a return to the government census figures, and a citation of the value of all lands, all farm property, and domestic animals, poultry and bees. From the same source is taken a report on the value of all livestock products in 1909, of all crops, finally of all mineral products.

These data have been carefully checked and assembled, by counties, by states, and finally arranged in a single aggregate table for the entire southwest.

There is no mention of manufacturing or of cities, the entire tabulation concerning only land development and the potentialities of agriculture. Hence the moderate increase of population, inasmuch as no allowance is made for municipal growth.

It is the agricultural possibilities that demand attention. Southern California is nearly half developed, so far as occupation is concerned. Southwestern Colorado is about a third occupied. But how of Utah and Arizona and Nevada and New Mexico? Or the aggregate for the entire

What of the goods which must be purchased by the people who occupy these 742,931 farms? Here are figures which have been compiled by specialists in that field, figures for the lumber that will be needed, the cement, the hardware, paints, farm machinery, house, implements, every necessary article of furniture and furnishings for the farm and the house, 72 items in all, figured separately for the six states, and the totals are most interesting. For present purposes it is sufficient to mention only the total, \$4,148,378,117.

The Exposition's methods of impressing the facts developed by these statistics is unique. For instance, a complete equipment of heavy machinery, such as is used in large scale farming, will be in actual operation; in a bearing orchard will be demonstrated the most advanced methods of caring for fruit trees; a model five acre irrigated farm, already in a high state of cultivation, shows what a great variety of fruits, vegetables, and berries may be profitably grown, on a small scale, in the Southwest. A model poultry yard and bungalow complete this exhibit.

From the standpoint of settlement, this intensive farming display is significant, as it shows

	Southwestern Colorado	Southern California	Arizona	New Mexico	South Half Nevada	South Half Utah	Total Southwest
Population, 1910	112,526	815,452	204,354	327,301	36,596	131,079	1,627,308
Probable farm population after total number is reached at rate of seven persons per farm	399,784	1,076,978	860,195	1,247,554	730,009	885,997	5,200,517
Acreeage of irrigated lands under cultivation, 1913	730,533	1,044,894	600,000	1,013,777	227,000	613,500	4,229,704
Acreeage of other lands under cultivation, 1913	515,967	1,965,694	27,500	868,000	55,000	415,000	3,847,161
Acreeage of other irrigable lands, 1913 ..	1,361,500	4,723,527	3,919,000	4,858,500	3,679,500	3,772,500	22,314,527
Acreeage of other arable lands, 1913	1,024,000	1,220,550	3,143,500	9,185,000	2,064,500	5,000,000	21,637,550
Total acreeage of all agricultural lands, 1913	3,632,000	3,954,665	7,690,000	15,925,277	6,026,000	9,801,000	52,028,942
Possible number of irrigated 40-acre farms	52,300	144,210	112,975	146,807	97,662	109,650	663,604
Possible number of 320-acre farms of other arable lands	4,812	9,644	9,910	31,415	6,625	16,921	79,327
Total number of possible farms of all agricultural land	57,112	153,854	122,885	178,222	104,287	126,571	742,931
Value of all farm property, 1910	119,642,014	595,580,821	75,123,970	159,447,990	15,998,372	66,149,538	1,031,942,705
Value of all lands, 1910	92,268,698	511,420,821	42,349,737	98,806,497	10,209,146	40,613,771	795,668,670
Value of domestic animals, poultry and bees	15,219,741	33,800,481	26,050,870	43,494,674	3,750,201	16,415,179	138,731,146
Value of live stock products and domestic animals sold or slaughtered	7,164,911	17,223,748	7,206,443	14,969,422	1,555,861	6,124,321	54,244,706
Value of all crops, 1909	12,559,447	52,749,243	5,496,872	8,922,397	2,028,597	7,727,729	89,484,285
Value of farm products, 1909	19,724,358	69,972,991	12,703,315	23,891,819	3,584,458	13,852,050	143,728,991
Value of mineral products, 1911	9,961,890	31,400,950	44,157,223	7,230,768	30,424,565	13,542,842	136,718,238

southwest? The total area of irrigated land under cultivation in 1913 was 4,229,704 acres, with 3,847,161 other cultivated lands, a total of 8,076,865 acres. The total of irrigable lands other than that was 22,314,527 acres, with 21,637,550 acres of other arable lands idle, a total of 43,952,077 acres—roughly five and a half times as much as is now under cultivation.

Skipping the next item, the table shows the value of all farm property in 1910. It figures \$1,031,942,705. It shows the output from the farms in crops and livestock products in 1909 as \$143,728,991 entirely aside from the \$136,718,238 mineral products.

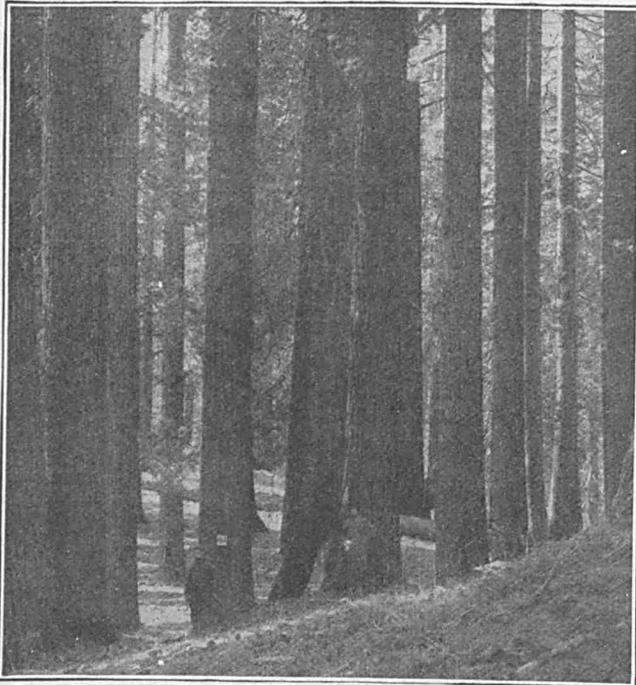
There are further figures in the tables that are most impressive. The thirty standard crops of the southwest, fruits, grapes, grains, grasses, vegetables, cotton and nuts, are listed, with the averages for the different sections, price per acre, and price for the total investment in units found operated most economically. On that investment is shown the annual gross, the cost of labor, of water, of team hire, running expense for the family, and interest at 7 per cent. The net results follow naturally.

in concrete form the possibilities of the small farm.

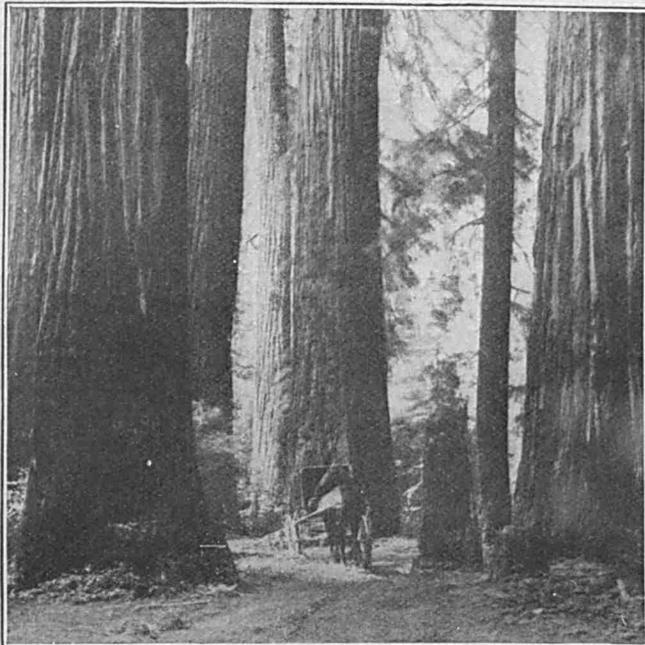
There are plenty of these small farms in the west. A little distance from San Diego, almost on the border of Mexico, lies an important colony of "little landers," many of them farming in units of less than an acre, and yet selling enough garden truck from that tiny spot to give them a sure living, and a sure, though small, annual profit. A colony of Japanese, situated in the Mission Valley, near the old mission of San Diego de Alcalá, demonstrates the efficiency of intensive farming quite as vividly.

If any considerable portion of the southwest be settled in this way, naturally the statistics prepared by the Exposition will prove underestimates. They are averages entirely, but by far the best figures of the sort prepared up to the present. Also they are ample evidence of why San Diego is holding its Exposition of 1915, regardless of the 1915 program of San Francisco. The smaller city has a most impressive story to tell the world, and incidentally a stage of gorgeous beauty on which to tell it.

Three Principal Species of Pacific Coast Timber.



SUGAR AND WHITE PINE.



REDWOOD.



FIR.

Complete Record of All Timber Bonds Handled by CLARK L. POOLE & CO.

As of July 1st, 1914

Of the total \$80,483,000 of timber land bonds purchased and sold by Clark L. Poole & Co. during the past eleven years \$23,982,500 have matured to date and been paid, or called in prior to maturity at a premium.

We give below a COMPLETE tabulated record of ALL of our loans. The last two columns sum up the operation of the sinking fund—showing the percentage of the loan paid off as compared with the percentage of timber cut.

Names of Lumber and Timber Cos.	Total amount of issue.	Now out-standing.	Percentage of loan paid off.	Percentage of timber cut or released.
Hudson River Lbr. Co.	\$ 560,000	None	100%	100%
King-Ryder Lbr. Co.	360,000	None	100%	100%
Rapides Lbr. Co.	420,000	None	100%	100%
Lufkin Ld. & Lbr. Co.	600,000	None	100%	100%
Weed Lbr. Co. (1st issue)	550,000	None	100%	100%
C. A. Smith Timber Co. (1st issue)	3,000,000	None	100%	100%
J. M. Thompson Lbr. Co.	600,000	None	100%	100%
Westmorel'd Lbr. Corp.	1,094,000	None	100%	100%
Ky. & Tenn. Ry. Co.	716,500	None	100%	100%
Silverton Lbr. Co.	153,500	None	100%	100%
Wilson River T'ber Co.	900,000	None	100%	100%
Camp & Hinton Co.	500,000	None	100%	100%
Scranton Lbr. Co.	1,000,000	None	100%	100%
Champion Lbr. Co.	2,500,000	\$ 2,385,000	5%*	5%
Cheboygan Tbr. Co.	150,000	150,000	100%	100%
Consolidated Land Co.	1,000,000	600,000	40%	40%
C. D. Danaher Pine Co.	600,000	450,000	25%	13%
Delta L'd & T'ber Co.	4,000,000	3,896,000	2%†	3%
Dowling Lbr. Co.	1,000,000	405,000	59%	29%
Elk Lbr. Co.	383,000	383,000	100%	100%
Falls City Lbr. Co.	250,000	222,500	11%°	8%
Fidelity Lbr. Co.	250,000	180,000	28%	14%
Fourche River Lbr. Co.	230,000	172,500	25%‡	19%
Fresno Flume & Lbr. Co.	1,235,000	1,146,000	7%	5%
Frost-Johnson Lbr. Co.	1,058,000	541,000	49%	No timber cut
Grandin Lbr. Co.	1,600,000	1,600,000	100%	100%
Great So. Lbr. Co.	2,140,000	1,316,000	38%||	15%
Hilton-Dodge Lbr. Co.	6,000,000	5,473,000	8%||	5%
Jones-Wheeler Co.	300,000	300,000	100%	100%
F. P. Kellogg Lbr. Co.	250,000	250,000	100%	100%
Lagoon Lbr. Co.	2,000,000	1,600,000	20%	No timber cut.
Long-Bell Lbr. Co.	9,000,000	4,557,500	49%	27%
Mendocino Redwood Co.	500,000	500,000	100%	100%
Metropolitan Redwood Lbr. Co.	310,000	290,000	6%	100%
Miller & Vidor Lbr. Co.	375,000	275,000	27%**	19%
O. D. McHenry Lbr. Co.	150,000	65,000	57%	15%
A. J. Neimeyer Lbr. Co.	500,000	212,000	58%	42%
N.Y. & P. Redwood Co.	500,000	400,000	20%	9%
Nor. Redwood Lbr. Co.	1,900,000	1,900,000	100%	100%
Norton Lbr. Co.	100,000	60,000	40%	No timber cut.
Ozan Lbr. Co.	443,500	102,500	77%	61%
Pacific Lbr. Co.	2,000,000	2,000,000	100%	100%
Parsons Pulp & Lbr. Co.	3,300,000	2,468,500	25%	13%
W. R. Pickering Lumber Co.	800,000	400,000	50%	35%
Pickering Ld. & Tim. Co.	1,027,000	927,000	10%	6%
Santiam Ld. & Tim. Co.	300,000	300,000	100%	100%
Savannah Timber Co.	179,000	150,000	16%††	13%
Silver Falls Tim. Co.	750,000	750,000	100%	100%
C. A. Smith Tim. Co.	4,500,000	4,500,000	100%	100%
So. Pine Lbr. Co.	750,000	200,000	73%	29%
Spokane Lumber Co.	500,000	425,000	15%	6%
Standard Lumber Co.	360,000	174,000	52%	29%
Storey Timber Co.	300,000	300,000	100%	100%
Temple Lumber Co.	493,500	286,000	42%	13%
Tillamook Tim. & Log. Co.	3,100,000	3,100,000	100%	100%
Tremont Lumber Co.	2,500,000	1,450,000	42%	25%
Tidewater M. Co.	350,000	350,000	100%	100%
Union Lumber Co.	3,000,000	3,000,000	100%	100%
Union Saw Mill Co.	368,000	128,000	66% less than	1%
Weed Lumber Co.	1,200,000	850,000	29%	18%
Wendling Johnson Lumber Co.	1,177,000	1,177,000	100%	100%
Willapa Lumber Co.	750,000	750,000	100%	100%
Wind River Lbr. Co.	250,000	150,000	40%	1%
Yosemite Lumber Co.	3,450,000	3,333,000	3%	2%
	\$80,583,000	\$56,600,500		

*\$107,368 in sinking fund to retire bonds—which will make 9% paid off.
 † 148,700 in sinking fund to retire bonds—which will make 8% paid off.
 ‡ 6,445 in sinking fund to retire bonds—which will make 13% paid off.
 § 12,140 in sinking fund to retire bonds—which will make 30% paid off.
 ¶ 57,595 in sinking fund to retire bonds—which will make 41% paid off.
 ** 25,307 in sinking fund to retire bonds—which will make 33% paid off.
 †† 14,127 in sinking fund to retire bonds—which will make 24% paid off.
 ‡‡ 11,872 in sinking fund to retire bonds—which will make 2% paid off.
 || In process of reorganization.

Note—Where no figures are shown in the last two columns showing percentages, no timber has been cut and no bonds matured.

WE DEAL EXCLUSIVELY IN TIMBER LAND BONDS

Circulars describing Four issues, the unsold portions of which we are now offering, to yield better than 6% per annum, will be sent upon application.

CLARK L. POOLE & CO.
 TIMBER LAND BONDS

BANK FLOOR WESTMINSTER BLDG., CHICAGO.

Attention is called to the announcement on page 11

**TIMBER
SECTION**

The Pacific Lumber Company

Originally Organized February 24th, 1869

Paid-up Capital - - - \$9,133,300.00 (Gold)

Largest Manufacturers of

REDWOOD

(Sequoia Sempervirens)

Cut 500,000 Ft. Daily

Saw Mills, Planing Mills, Factories, Redwood Dryers,
Dry Sheds and Air-Drying Yards

At

Scotia, Humboldt County, Cal.

“The Home of Redwood”



(Trade Mark Registered)

Large Stocks of Air-Dried Redwood

Twenty-eight patented Redwood dryers of our own design enable us to specialize in **Seasoned Redwood** for Eastern and Export shipment.

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A. F. THANE & CO., GENERAL EXPORT AGENTS,
SAN FRANCISCO, CAL. LIVERPOOL, ENG.

Correspondents in the principal cities of the world

THE REDWOOD OF CALIFORNIA.

By Junius H. Browne.

The market for Redwood was for many years uncertain and limited, its sale depending chiefly upon the California demand. The development of the Eastern and foreign business was slow, because there was no direct rail connection with the Redwood country, it being necessary to bring all shipments into the harbors of San Francisco or Los Angeles for reshipment. The opening of the Panama Canal and the completion of the Northwestern Pacific Railroad into Humboldt County will mean much to the Redwood industry. With the canal will come the opportunity of marketing Redwood throughout the world in parcel lots of twenty-five, fifty, or one hundred thousand feet, where, heretofore, it has been necessary to sell in cargo lots of a million feet or more to obtain advantageous freight rates. Direct rail connection with the mills in Humboldt County will enable them to market a large quantity of by-products which are now burnt up or sold at cost locally.

The earliest logging of Redwood forests was by the Spaniards near San Francisco Bay, but their operations were very small. At the beginning of the nineteenth century, a Russian colony near Fort Ross in Mendocino County, cleared a tract of Redwood which has since grown up and again been cut over. It was not until 1850, however, that small sawmills were started at various points along the coast. There are now eighteen or twenty important mills in operation with a total annual output of 550 to 600,000,000 feet.

The biggest stands of Redwood timber are in Del Norte, Humboldt and Mendocino Counties, but there are isolated groups as far north as the Chetco River in Curry County, Ore., and as far south as the Santa Lucia Mountains, Monterey County. The Redwood belt is from twenty to forty miles wide, the trees growing on the west slopes of the coast range. The enormous size which Redwood attains is due to the heavy rainfall in the autumn and winter, (from thirty to sixty inches) and to the sea fogs which bathe the coast in the summer. On the slopes Redwood grows mixed with other woods such as Red Fir, Tan Bark Oak and White Fir. As the slopes become moderate, the altitude lower, the soil deeper and the water supply better, Redwood steadily gains on the other species until on the rich flats there is no other tree. The extreme form of the Redwood flat is along the Eel River, and here the trees reach their greatest known height and clear length. Under best conditions these trees grow to be 350 feet high with a diameter of 20 feet. Most of the Redwoods cut are from 400 to 800 years old. The oldest tree found during the Government investigation in 1900 was 1,373 years old. The normal tree has a straight, slightly tapered bole clear for more than 100 feet, and a crown of horizontal branches that may occupy from one-third to one-half of its total length.

The enemies of Redwood are few and it suffers from them less than other trees. The wind can scarcely uproot it, insects seem to do it little harm, and fungi seldom affect it. Fire occasionally kills whole stands of young Redwood growth, but is unable to penetrate the sheathing of shaggy bark with which the old trees protect themselves.

The yield of Redwood will average from 75,000 to 85,000 board-feet per acre, but some of the flat lands will show a stand of 1,000,000 feet or more to the acre. It is estimated that there is standing today about 75,000,000,000 feet of merchantable Redwood timber, so that, at the present rate of production, there is more than a century's supply in sight.

The value of the stumpage varies from \$1.50 to \$5.00 per thousand feet, depending upon the character of the timber and its location and accessibility. The flat timber is less expensive to log, and produces a greater percentage of upper grade lumber.

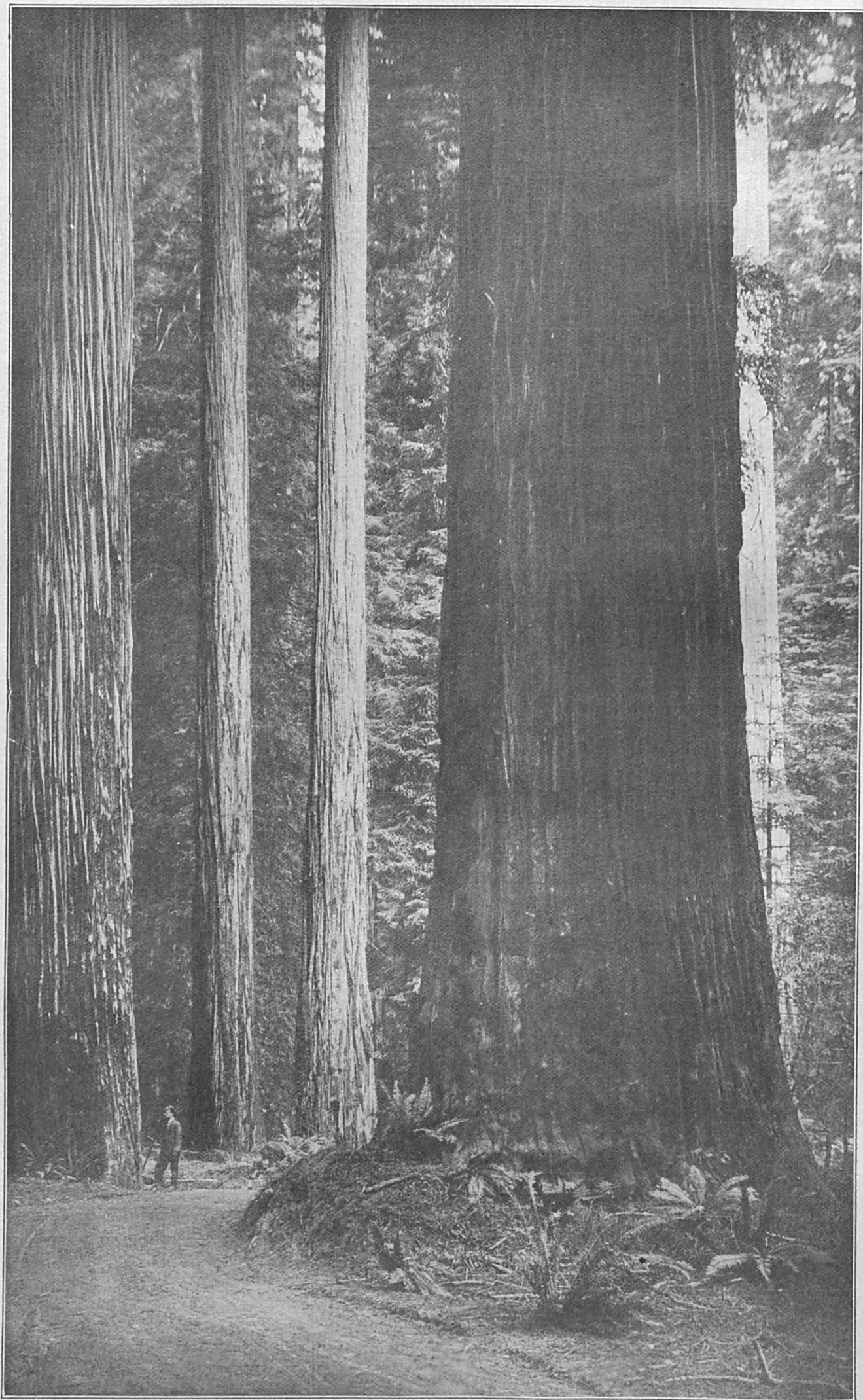
Redwood logging is expensive and difficult. The average cost is \$5.00 to \$6.00 per thousand feet. On the flat lands it will go as low as \$3.00 per thousand. The greatest care must be taken by the choppers in felling a tree so that it will strike throughout most of its length at the same time, otherwise the wood will break and splinter badly. When felled, the tree is barked and cut into lengths from 16 to 40 feet. Skid roads are constructed over which the logs are hauled to the landings and loaded on cars by donkey engines, on their way to the sawmills.

The cost of converting Redwood logs into lumber is from \$2.50 to \$3.00 per thousand feet, this cost being increased because of the waste in manufacture, and because of the large amount of small sizes which the market calls for. Some logs are so large that they have to be split before the carriage will handle them in the mills. All machinery must be of the heaviest.

In this country Redwood is used very largely for exterior finish. It is particularly valuable for this sort of work because of its lasting qualities and its resistance to fire. Redwood contains a peculiar acid which preserves the wood. Many examples can be given of buildings sided with Redwood boards and covered with Redwood shingles that are today in firstclass condition after fifty or sixty years of continuous use without paint or treatment of any kind. Redwood contains no pitch, will not ignite easily, and burns very slowly. After the great San Francisco fire in April, 1906, the Building Committee appointed by the Mayor specified galvanized iron and redwood as the only materials from which temporary buildings might be erected without a permit.

The United States Government has compiled a list of woods designating the degree of inflammability by the position on the list. Redwood heads this list.

The better grades of Redwood are peculiarly fitted for the better class of interior finishing.



THE REDWOOD FOREST.

It has an effective natural grain, so that it is not necessary to select special pieces for finish. It is easily worked and takes a beautiful polish. When the wood is once properly dried, it will not shrink, swell, or crack. It is used for all kinds of exterior and interior work.

There are various kinds of special work to which this wood is especially adapted on account of its peculiar qualities, such as incubators, beehives, pattern stock, tank, pipe and silo staves, cores for veneer work, caskets and casket boxes.

The lower grades of Redwood are used for all kinds of foundation work, irrigation work, and for railway ties and tunnel timbers. Redwood is not only valuable for these purposes because of its durability and freedom from decay or rot, but also because it is not susceptible to the attacks of insects, such as the white ant, that destroy other woods.

Notwithstanding the handicaps that have existed in connection with the marketing of Redwood in the East, the present volume of Eastern shipments is now about 75,000,000 feet annually. This stock is distributed in practically every State, except those in the extreme south. While Redwood is extremely heavy when it is first cut, it dries out very light so that it may be advantageously shipped at high freight rates in competition with other woods. The foreign market takes even greater quantities of Redwood than the Eastern market. Australia and the United Kingdom are the largest consumers of the Upper grades, while the west coast of South America, India, China, the Philippine and Hawaiian Islands use quantities of Redwood ties. Smaller shipments of Redwood have been made to the east coast of South America, France, Germany and South Africa. Earlier shipments of Clear Redwood to Australia and Great Britain were largely heavy plank in the green state. Recently both of these countries have begun to realize the advantage of purchasing seasoned material in the sizes that are actually going to be used, and as many of the mills are now equipped to handle seasoned stock in large quantities, the volume of business has been considerably increased. Australia has already ordered 50,000,000 feet of Clear Redwood in 1914.

The problem of drying Redwood properly has been serious because of the large amount of moisture the wood contains. Earlier shipments of kiln-dried material did not give satisfaction because excessive or too rapid drying left the wood brittle and likely to split. Now the manufacturers realize that the best method of artificial drying is the one that approaches most nearly the natural air-drying, namely, a low heat with a big circulation of air to carry off the moisture.

The ability to furnish seasoned Redwood in large quantities will undoubtedly open new markets throughout the world, and with the improved conditions for marketing their products, the Redwood manufacturers are looking forward to a period of prosperity that will increase rapidly as the true worth of the wood is recognized in a greater degree.

PACIFIC COAST TIMBER

By G. X. Wendling.

The annual production of lumber is about forty billion (40,000,000,000) feet for the entire United States. Of this, the Pacific Coast now produces over one-fifth,—manufacturing about eight billion two hundred million (8,200,000,000) feet. That this total will be largely increased by the opening of the Panama Canal to commerce, is generally expected by well informed people. This belief is based on the fact that the rail freight on lumber from the Pacific to the Atlantic is approximately seventeen dollars per thousand feet, whereas it is stated by the steamship companies that the present tentative rate of thirteen dollars per thousand by the new water route will later be materially reduced. The present rail rate permits the shipment of only a small amount of the highest grades. A substantially lower rate will allow shipment of even the lowest grades.

If we accept the figures given in the report of the U. S. Commissioner of Corporations on the lumber industry published February 13, 1911, the duration of the business on the West Coast is based on a stand estimated at over fifteen hundred billion feet, distributed as follows:

Montana	65,600,000,000
Idaho	129,100,000,000
Washington	391,000,000,000
Oregon	545,800,000,000
California	381,400,000,000
Total	1,512,900,000,000

The length of time necessary to cut this supply will depend on future demand. From year to year, the consumption of lumber is increasing while the supply in the forests is not.

Heretofore, many people have hesitated to invest money in the securities of timber and lumber companies because ignorant writers and interested parties have spread the idea that twenty years cut would entirely obliterate the lumber industry. The business on the Pacific Coast has a good life before it and the present method of issuing serial bonds on timber properties, when bonds are protected by sinking funds collected as the timber is cut, makes timber investments on the Pacific Coast safe and profitable.

In earlier years, the fire hazard was viewed as a serious obstacle to investment in timber but the difficulty of protection from fire,—it may be said without fear of successful contradiction,—is no longer a serious matter, for, with the splendid forest protection systems now in operation, timber owners have the fire risk safely underwritten. That there may be, and no doubt will be, forest fires goes without saying, yet the risk of fire is down to a minimum and standing timber is as safe from fire as property in any of our Western cities. In some classes of timber, such as Redwood, there is no fire risk, and in others the danger is so slight as to be negligible from a practical viewpoint.

The value of merchantable stumpage on the Pacific Coast is governed largely by its accessibility and ease of operation. It must be within reach of transportation and it must be so situated that the cost of putting a road into it will not be a burden on future

operations. The nature of the country in which the timber grows should be favorable for logging and handling so as to enable the logger to get the logs to the main line of railroad, or to the mill, at a cost that will permit profitable operation.

Nearly all the timber on the West Coast is large and the logging equipment must be big and powerful. The logging cost varies in different localities, but, throughout the Coast, it usually runs from \$4.50 to \$7 per thousand feet, including the cost of building logging railroads. The construction of these roads may be estimated as costing about one dollar per thousand feet on an average operation.

In the region extending from California to British Columbia, and east to the Rocky mountains, grows the Douglas Fir or Oregon Pine. There are two forms of this tree known as "Yellow Fir" and "Red Fir." Sometimes both grades of lumber are cut from one tree but chiefly the trees of each form grow on different kind of ground. The "Yellow Fir" is found in thick forests on deep, moist soil and the "Red Fir" on the thinner soils with less moisture.

The wood of the "Yellow," which is softer than the "Red," is of a light yellow color. The wood of Douglas Fir is beautifully grained, has good tensile strength, and comes in long lengths. It is in demand for spars, bridges, and framing timbers. It is also adapted for flooring, inside finish, doors, and other building purposes. It is one of the most valuable all-purpose woods in North America. The size of the trees range from four to twelve feet in diameter and up to two hundred feet to the first limb. The stands of fir run from thirty thousand feet up to a hundred thousand feet per acre. The total stand on the Pacific Coast of the United States is approximately 640,000,000,000 feet, exceeding the stand of any other wood in that region.

A strip of territory along the Pacific Coast from California to Alaska, stretching out in places to a width of two hundred miles, produces one of the largest trees in the world, known as Menzies Spruce. This tree yields a wood that does not impart taste or odor, and makes an excellent container. It is also adapted to paper making, car siding, roofing and inside finish. Where soil and climatic conditions are favorable the tree grows rapidly and at times attains a diameter of seventeen feet and a height of two hundred and sixty feet. It is the next largest tree to the Redwood. The approximate stand in California, Oregon and Washington of Menzies or Tideland Spruce is 23,000,000,000 feet.

Through the Coast mountains and on the western slope of the Cascade range is found the Western Hemlock, which sometimes grows in almost pure stands. Its wood is free from pitch, of a light color and, when thoroughly seasoned, is a most valuable lumber. The name "Hemlock" was an unfortunate title for this valuable wood which resembles the Hemlock of the East only in such externals as the color and general appearance of its foliage. Owing to the prejudice against the inferior Eastern Hemlock, the Western Hemlock was at first sold under the names of "Alaska Pine," "Mountain Spruce," "Silver Fir," "Gray Fir," "Washington Pine," "Hemlock Larch," and other titles. However its native value and splendid possibilities have forced

it into the favor of buyers and users, adjusted the misunderstanding of its qualities, permitted it to discard all disguises and enabled it to enter the mechanical field on a par with most other soft woods, and to sell under its own name. Much of the timely recognition of the superior qualities of Western Hemlock has resulted from the thorough tests carried on by the United States Forest Service at the University of Washington. These tests show conclusively that, while in its green state, it is, to a slight degree, inferior in strength to some other woods, its power of resisting rupture, crushing, and splitting is increased from 20% to 25% by seasoning. In the process of seasoning, it loses from 15% to 20% in weight and only 3% to 4% in volume. When dry, therefore, it compares favorably with any of the evergreens. Western Hemlock is practically free from "shake," differing greatly in this respect from the Northern and Eastern varieties. The tree is straight and tall, large in size, often growing to six and eight feet in diameter. The total quantity on the Pacific Coast of the United States is about 88,000,000,000 feet.

At altitudes of from two thousand to five thousand feet, on the Western slope of the Cascade mountains and also through the Coast Range, is found Larch or Noble Fir. The wood of this tree which is creamy white in color and is free from pitch or resinous matter. The fibre is soft, satiny, and susceptible of a high polish. The lumber is easily worked and valuable for inside finish. This tree attains a height of one hundred fifty to two hundred and eighty feet and a diameter of three to nine feet. The trunks are very erect and smooth, preserving a uniform diameter to a height of one hundred feet.

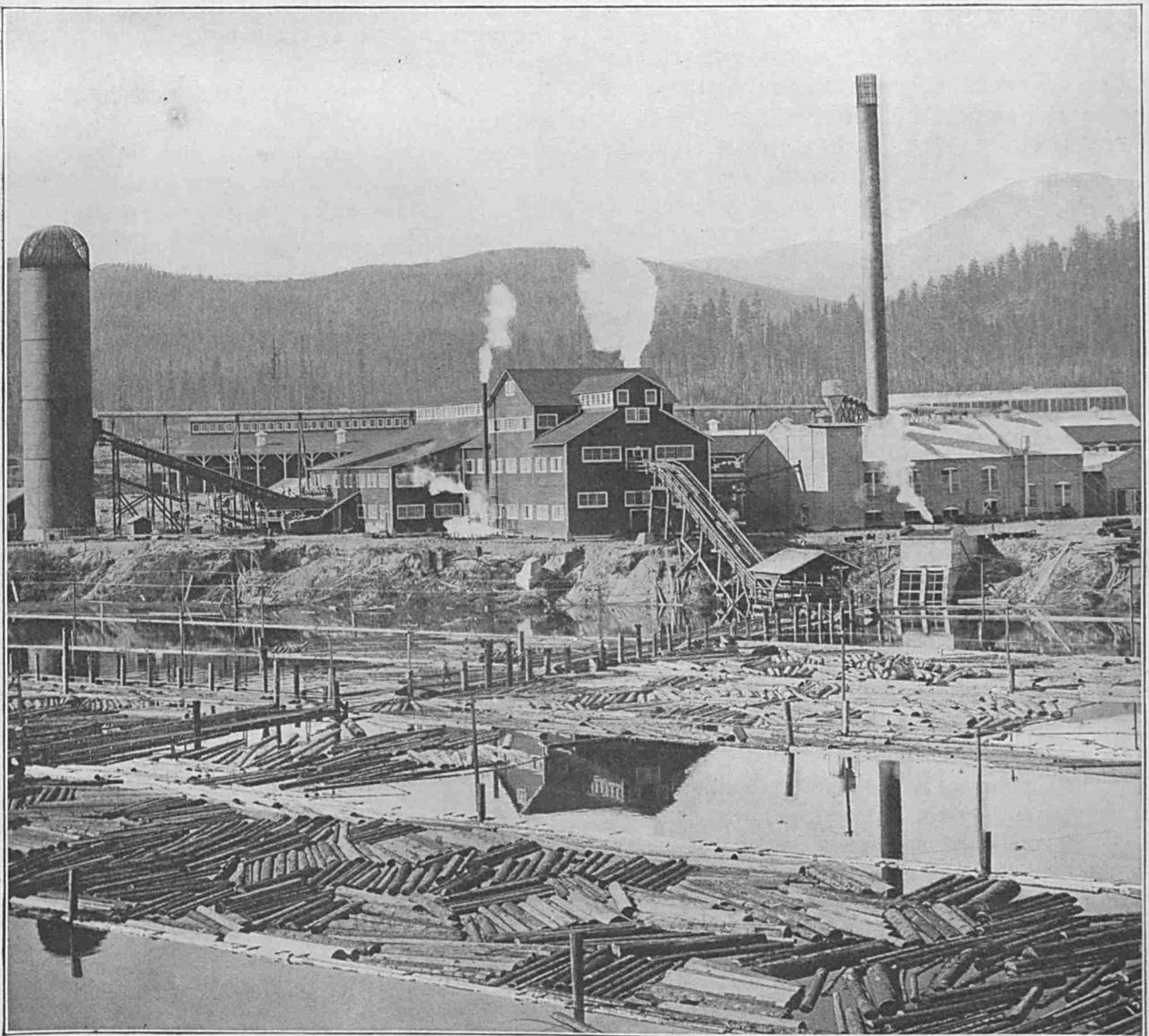
Along the western slopes of the Cascades and throughout the Coast Range grows the Western Red Cedar. Its heaviest stands are in the state of Washington where the abundant rainfall and other climatic factors fill its growing needs. Its reddish brown wood is soft, easily worked and very durable. Its wonderful lasting qualities under exposure have led to its use in large quantities for shingles. The state of Washington is the largest maker of shingles, producing about 85% of the total shingle output in the United States. The tree often attains a height of two hundred feet. Its average is more than one hundred feet. Diameter three to nine feet. Sometimes trees are found having diameters of fifteen feet. The exact quantity of this timber is not known, but there is a good supply.

In the Coos Bay region, in the southwestern part of Oregon, is found the most valuable species of cedar in the state, known as Port Orford, or White Cedar. The yellowish wood of this tree is very durable, easily worked, takes a high polish and contains a large quantity of resin. The odor from the resin is supposed to be offensive to insects, and for this reason the wood is used in large quantities in the manufacture of cedar chests for the protection of all kinds of cloth and fur clothes. The oil of the resin prevents decay, and the wood is extensively used in shipbuilding. The trees grow as high as two hundred feet and have diameters from three up to ten feet, but the latter size is rarely found. The

stands of this timber run about twenty thousand feet per acre and in isolated cases as high as one hundred thousand feet. The total quantity of Port Orford Cedar is supposed to be about 5,000,000,000 feet.

Sugar and White Pine grow along the western slopes of the Cascade and Sierra mountains from Central Oregon to Central California. The trees flourish at elevations of fifteen hundred to seven thousand feet, but the choicest growth is found between three thousand and fifty five hundred feet above sea level. The trees grow in a mixed forest carrying about an equal quantity of Sugar and White Pine and, generally, other woods such as White and Red Fir. It is a common remark among California lumbermen that our forests run about one-third Sugar Pine, one-third White Pine and one-third White and Red Fir, with some Incense Cedar. Sugar and White Pine are useful mainly for general building lumber. They make a beautiful house finish and trim, possess exceptional value for doors, windows, blinds. As a

vener material, they have no superior in soft woods, as they are entirely free from face checking. For the manufacture of box shooks, these woods are truly wonderful because the White and Sugar Pine shooks, when ready for use may be shipped to any climate without checking. In California the fruit products are, in the main, packed in White and Sugar Pine boxes. The consumption of raw material for this purpose reaches the generous total of about two hundred million feet annually. When thoroughly seasoned, Sugar Pine is not subject to expansion or contraction and, therefore, is superior to all known soft woods for making piano keys and pattern materials. The wood of Sugar and White Pine, which is soft and creamy white, is used for the same purposes as the White Pines of Michigan, Wisconsin and Minnesota. The trees grow up to twelve feet in diameter, and reach a height of two hundred and fifty feet. The total quantity of these woods in California is about 306,000,000,000 feet.



PARTIAL VIEW OF A LUMBER MILLING OPERATION IN WASHINGTON.

TIMBER BONDS.

Features Deserving Consideration.

By T. S. McGrath.

The timber bond issue should be, and generally is, a first mortgage on all the property of the company, but the real security on which the issue is based is the green and growing timber.

The margin of safety, as regards principle, is easily determined and is generally ample. Timber is a staple and its products have an established market. The industry pays vast sums to the people in the form of wages, to the governments as taxes, to transportation companies for carrying charges, to mill, foundries and supply houses for equipment. The quantity and quality of stumpage on a given area can be examined, estimated, graded and valued with a great degree of accuracy, and its loan value definitely determined. Timber differs from coal and iron which, once mined, can never be replaced. Timber is a crop, and with care in cutting and some attention to the logged-off land, it will again produce a forest in a reasonable time. When accurately estimated and properly appraised, it is a sound security for loans and a profitable investment, which contains certain basic features of safety not always to be found combined in other classes of collateral.

Defaults which occur in timber bond issues do not always come about through insufficient collateral security. Frequently they are caused by unwise provisions in the trust deed regarding sinking fund requirements and serial maturities.

As timber is cut and removed from the land, a sinking fund of a certain sum per thousand feet is paid to the trustee for the retirement of the principal, which is usually represented by serial bonds, maturing at specified intervals. This sinking fund should not be applied to the payment of interest.

The heavy cost of building present day mills and constructing railways, make it necessary to provide a supply of timber that will furnish raw material for many years. This involves a large initial investment. This timber can only be cut at a certain rate per month, and the bonds are made retirable every six months in amounts based on the capacity of the mill and the amount to be paid into the sinking fund. The interval allowed before the first serial maturity is a very serious matter. In many instances this interval is too short, and the necessity of meeting a large payment after only a brief period of operation is too great a burden. To provide for early maturities it is necessary to create heavy sinking fund payments, and these factors constitute a serious danger. This danger is sometimes overlooked or ignored by underwriters because it is easy, in many instances, to sell early maturities, and it has been easier to sell all the maturities if they had a brief life than if they ran for a long period.

Buyers of timber bonds have become alive to these dangers and it is safe to say that, henceforth, the amount paid to the sinking fund will be reduced to a minimum, the first maturity post-

poned for a safe number of years, the serial payment made as small as possible, and the life of the loan extended over the longest permissible period. Provisions regarding these matters must necessarily be regulated according to the particular property under consideration, but safety demands their careful adjustment.

The amount and kind of timber on a given area, and the cost of manufacturing it determines the loan value or the purchase price of timber land.

The quantity and quality of timber is determined by an examination of the land known as "cruise." The cruiser should estimate the amount of each kind and grade of timber on the tract. When timber was very cheap a "rule of thumb" method of doing this was sufficiently accurate. In the old days there were no bonds outstanding against the timber and an owner could cruise to suit himself. Today, however, the value of timber land has increased to such an extent that "rule of thumb" estimating should no longer be countenanced. There is no reason why a cruiser should be permitted to place the loan value on the timber, to estimate the logging cost, to lay out the probable railway line, to guess the milling cost, and to appraise mill value. The values should be figured by an expert; the logging cost should be determined by a logging engineer; the railway should be laid out by a civil engineer; the milling cost should be worked out by a millman who is perfectly familiar with the particular kind of timber to be manufactured. All these estimates and reports, including the legal opinion of the titles, should be correlated by a capable man, and the loan viewed and analyzed as a whole. There are many able cruising engineers whose men are educated, experienced and capable. There is, therefore, no excuse for the continuance of the antiquated and dangerous methods. The mistakes made through employing them are rarely discovered soon enough to prevent trouble.

Recently some cruising firms have been prone to over-estimate the quantity and quality of timber on a tract. This class of cruiser estimates everything that could be profitably taken out in the highest lumber market; and, occasionally, much more. When prices are normal it is impossible for the operator to get as much timber off the land at a profit as such a cruiser estimated, and when prices are low the shortage from the cruise is very heavy. The lumberman cannot get cost out of low grade logs or tops, and must leave them in the woods unless lumber prices are high. Thus the supposed security of the bond holder shrinks. Should the operator fail, the hope of the bond holder is in the timber, and if this timber is estimated to show twenty to fifty per cent more on the land than really exists in commercial grades, the bonds may not pay out after deducting court fees, receiver's charges and other expenses incident to foreclosure.

There are tracts of timber now under offer in this country and Europe where the cruises have been lifted fifty per cent and the values over one hundred per cent. Such tracts have been sold

here and abroad during the past six years. Bond buyers should scrupulously guard against excess cruises and valuations by purchasing their bonds through conservative houses and banks.

Over-production has always been the bane of the lumber business. In early days the ease of entering the trade and the profits to be derived, in good years, from sawing logs, caused numbers of small mills to spring up through the timber states. These mills butchered the log as well as the price, and finally raised the production of lumber far beyond the consumption. When this stage was reached the lumber buyer found himself in a position to insist that proper grades and kinds of lumber be delivered on his orders. He also insisted on careful sawing, even widths, uniform thickness and merchantable quality. These demands the small mills that were only designed to rip the log and butcher the board could not meet, and they gradually ceased to exist. They were succeeded by larger mills, and in recent years, these, in turn have been improved, or replaced by large band mills that operate with wonderful economy and efficiency. The purpose of the timber bond should be to secure for the existing mills the necessary lands to keep them running and to add the latest improvements as they are perfected and to provide capital for such new enterprises as rigid investigation shows are fully warranted. Bond buyers should learn to recognize promotion enterprises however skillfully disguised, and avoid purchase of their securities.

The purchaser of the bonds of public utility or industrial companies insists on the highest operating efficiency in the active management of the company whose securities he holds. The holder of the timber bond, who provides the operating capital, is entitled to the same consideration from the lumber mill man, yet, if the situation is carefully analyzed, he finds that there is a wide difference between the methods of lumber manufacturers and those of the manufacturers of many other staple commodities.

The bond holder is supposedly secured by the entire contents of the tree, but he finds that only that portion of sufficiently high quality to permit of its being profitably manufactured into lumber, is taken out of the forest. The remainder of the tree is wasted. He finds that the parts of the tree now discarded could be converted into marketable products, but that the skill for doing this in commercial quantities is lacking. While he holds the entire tree as security for his bonds he accepts a small portion of it as payment, which is bad practice if his bond has a long life. A large quantity of the timber content of every tree is wasted. Extension of the uses of the volume of the tree and improvements in the manufacture of wood products have not kept pace with the improvements in the other industries of this country.

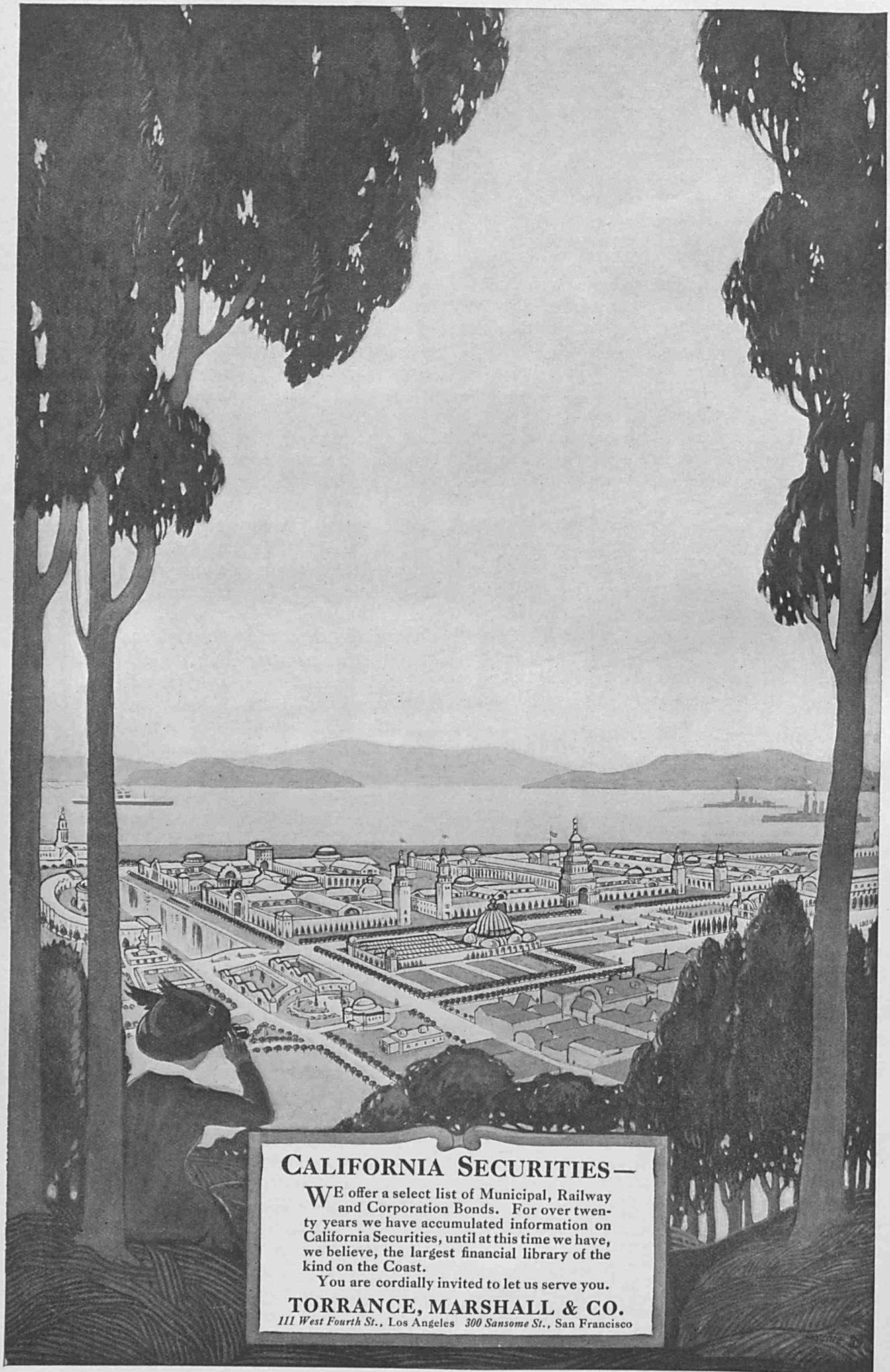
We have heard a great deal about conservation

of our timber resources. True conservation should look to the recovery of the entire merchantable content of the tree—the extraction of all of the wealth that the tree contains, whether in lumber or other products. The so called “conservationists” have preached the non-cutting of trees and the non-use of the forest areas. This theory that non-use is conservation is a fallacy that must inevitably be superseded by the practice of complete utilization.

It is a waste of energy to say that trees in the forest must not be cut, but allowed to die of old age and rot. The over ripe trees make poor lumber, are always in danger of being blown down by the wind, clutter the land and occupy the space that should be devoted to green and growing and living timber. *Every tree must die and fall.* Permitting them to stand until they are downed by decay makes them unfit for lumber, removes that much material from the market and raises the price of wood products.

The Bureau of Forestry is not giving the attention and aggressive interest to furthering the uses of the entire tree that the importance of such work demands. The country is in greater need of experts in the manufacture of wood products than in the policing of tracts of growing timber. Trees are a natural crop and if given the right chance will reproduce themselves, but it takes brains, skill and energy to manufacture them into finished materials. We need schools for teaching, and experiment stations and men for directing the utilization of the entire content of a tree, far more than we need instructions on how to grow a tree. Even under the present crude methods of manufacture we have enough timber to last a very long time, and if complete use of the tree was established our timber resources could be very conservatively figured as perpetual. The Bureau of Forestry is the arm of the Government that should bear the brunt of working out new uses for wood products. The industry is still in its infancy and the present methods so crude and backward that a large part of every tree is wasted. There is today a demand for many products that can be made from this waste. This demand was not recognized a generation ago or the lumber men of that day would have found the means to meet it by utilizing the parts of the tree not now used for naval stores, lumber, lath or shingles.

The next step forward in the timber industry should be the addition to the present plants of units for making by-products from all parts now wasted, thus making them complete factories—factories that will convert every part of the tree into useful articles of commerce. This step will be taken and these complete factories for making wood products will come into existence. The possibilities for development in the making of wood products are immense and it is time this large industry was freed from its handicaps and oppressions and permitted to develop into the great institution it is destined to become.



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**STATE AND
CITY
SECTION**

Debts and Resources of States, Cities and Towns in the Pacific Coast States

STATE OF CALIFORNIA.

ITS DEBT, RESOURCES, &c.

Admitted as a State (Act of Sept. 9, 1850).....Sept. 9, 1850
Total area of State (square miles)..... 158,297
State CapitalSacramento
Governor (term expires 1st Monday after
January 1, 1915).....Hiram W. Johnson
Secretary of State (term expires 1st Monday
after January 1, 1915).....Frank C. Jordan
Treasurer (term expires 1st Monday after
January 1, 1915).....Edw. D. Roberts
LEGISLATURE meets biennially in odd years on the first Monday
after January 1, and sessions are not limited, though members receive
only \$1,000 for each regular session and \$10 for each day while in
special session.

HISTORY OF DEBT.—Commercial and Financial Chronicle.—For
early history of the State debt, see "State and City Section" of April,
1894, page 142.

Civil War Bonds of 1857. Int. ceased \$3,500c.....	Harbor-Improvement Bonds. 4s g '11 J-J \$8,298,000c. July 2, 1985 (Subject to call after July 2, 1950.)
Civil War Bonds of 1860. Int. ceased \$500c.....	Highway Bonds. \$5,200,000c. July 3, '17-'29 1,600,000c. July 3, '30-'33 200,000c. July 3, 1934 3,000,000c. July 3, '35-'41 3,000,000c. July 3, '42-'49
Funded Debt Bonds. 6s g '73 J-J \$2,277,500c (*)	Sea Wall Bonds. 4s '05 J-J \$2,000,000c. Jan. 2, 1924 (Subject to call after Jan. 2, 1914.)

*Of which \$1,526,500 held by State School Fund and \$751,000 by
University fund.

INTEREST is payable at the office of the Treasurer in Sacramento,
and Bankers Trust Co., New York City.

TOTAL DEBT.—The total bonded debt of the State Sept. 1, 1914,
was \$25,579,500, including \$4,000 civil bonds on which int. has ceased.
The warrant debt on that date was \$334,465.20. Cash in treasury on
March, 20, 1914, amounted to \$22,545,783.09. The \$2,000,000 sea wall
bonds issued for San Francisco are not included in the total indebted-
ness of the State; these bonds are payable out of a sinking fund re-
ceiving its revenue from moneys collected by the San Francisco
Harbor Commissioners.

The bonds of 1873 (\$2,277,500) matured in 1893. No sinking fund
having been provided for their payment, they were taken over by the
State for its school funds and have been so held since 1893.

The State Treasurer on Sept. 1, 1914, held bonds aggregating
\$7,563,375 for the benefit of the State School Fund; this includes
\$1,526,500 of the funded debt bonds of 1873. The State Treasurer
also holds \$3,234,125 for the benefit of State funds other than the
School Fund. This includes \$751,000 of the funded debt bonds of 1873
held in trust for the University Fund referred to above.

ASSESSED VALUATION.—The following statement shows the
total assessed valuation and the tax rate (per \$1,000) for the years
indicated.—decrease in 1906 caused by destruction of property by
earthquake.

Years.	Valuation.	Tax rate.	Years.	Valuation.	Tax rate.
1914.....	\$3,202,450,546	.....	1902.....	\$1,290,238,964	\$3.82
1913.....	3,114,136,640	.....	1900.....	1,217,648,863	4.98
1912.....	2,920,400,512	.....	*None 1890.....	1,101,137,290	5.80
1910.....	2,471,505,410	\$3.53 1880.....	666,399,985	6.40	
1908.....	1,991,554,603	4.00 1870.....	277,538,134	8.65	
1906.....	1,595,897,411	4.76 1860.....	148,193,540	6.00	
1904.....	1,545,698,785	5.35 1850.....	57,670,689	5.00	

*Pursuant to Chap. 335, Laws of 1911, carrying into effect Sec. 14
of Art. 13 of the constitution as amended Nov. 8, 1910 (see below)
there is now no general tax, revenue being derived from the taxation
of public service and other corporations, banks and insurance com-
panies. The amount of tax placed upon these corporations by the
State Board of Equalization for 1911 was \$10,454,125.46; 1912, \$10,-
922,405.72; 1913, \$12,971,541.80; and 1914, \$13,580,773.44.

CONSTITUTIONAL AMENDMENTS.—Pursuant to a constitu-
tional amendment adopted Nov. 8, 1910, the city of San Francisco
voted and issued \$5,000,000 bonds, the proceeds to be used by the
Panama Pacific International Exposition Co. for an exposition to be
held in San Francisco to celebrate the opening of the Panama Canal.
Another amendment, approved on Nov. 8, 1910, creates a State fund
of \$5,000,000 for the use, establishment, maintenance and support of
the Panama Pacific International Exposition. Still another amend-
ment adopted provides for the separation of State and local taxation
and for the taxation of public service and other corporations for the
benefit of the State. On Oct. 10, 1911, the voters adopted constitu-
tional amendments granting equal suffrage to women, allowing the recall
of public officials, even the judiciary, and reserving to the people the
powers of initiative and referendum.

BOND PROPOSITIONS.—Propositions providing for the issuance
of \$18,000,000 highway, \$1,500,000 San Diego sea-wall, \$1,000,000
India Basin and \$9,000,000 harbor-improvement 4% bonds for the
city and county of San Francisco were adopted at the general election
on Nov. 8, 1910. This latter issue was declared valid by Superior
Judge Seawell on Feb. 2, 1914. On May 23, 1912, Judge Seawell dis-
missed an order to show cause why an injunction should not be issued
restraining the sale of the \$1,000,000 4% India Basin bonds. The offer-
ing of these bonds, which was to have taken place July 22, 1912, was
indefinitely postponed.

DEBT LIMITATION.—The limitations fixed in the constitution of
California with reference to the creation of State debt, debts of
counties, cities, towns, etc., are as follows:

ARTICLE 16. Section 1.—*State Indebtedness.*—The Legislature
shall not in any manner create any debt or debts, liability or liabilities,
which shall, singly or in aggregate with any previous debts or liabil-
ities, exceed the sum of three hundred thousand dollars, except in
case of war to repel invasion or suppress insurrection, unless the same
shall be authorized by law for some single object or work to be dis-
tinctly specified therein, which law shall provide ways and means,
exclusive of loans, for the payment of the interest of such debt or
liability as it falls due, and also to pay and discharge the principal of
such debt or liability within seventy-five years of the time of the
contracting thereof, and shall be irrevocable until the principal and
interest thereon shall be paid and discharged, and such law may
make provision for a sinking fund to pay the principal of such debt
or liability to commence at a time after the incurring of such debt
or liability of not more than a period of one-fourth of the time of

maturity of such debt or liability; but no such law shall take effect
until, at a general election, it shall have been submitted to the people
and shall have received a majority of all the votes cast for and against
it at such election; and all moneys raised by authority of such law
shall be applied only to the specific object therein stated, or to the
payment of the debt thereby created, and such law shall be published
in at least one newspaper in each county, or city and county, if one
be published therein, throughout the State, for three months next
preceding the election at which it is submitted to the people. The
Legislature may at any time after the approval of such law by the
people, if no debt shall have been contracted in pursuance thereof,
repeal the same.

ARTICLE 12. Section 13.—*State Not to Loan Its Credit, &c.*—The
State shall not, in any manner, loan its credit, nor shall it subscribe
to or be interested in the stock of any company, association or cor-
poration.

ARTICLE 4. Section 31.—*Legislature Prohibited from Loaning
Credit, &c., of State, City, County, &c.*—The Legislature shall have
no power to give or to lend, or to authorize the giving or lending of,
the credit of the State, or of any county, city and county, city, town-
ship or other political corporation or sub-division of the State now
existing, or that may be hereafter established, in aid of or to any
person, association or corporation, whether municipal or otherwise,
or to pledge the credit thereof in any manner whatever for the pay-
ment of the liabilities of any individual, association, municipal or other
corporation whatever; nor shall it have power to make any gift, or
authorize the making of any gift, or any public money or thing of
value to any individual, municipal or other corporation whatever;
provided, that nothing in this section shall prevent the Legislature
granting aid pursuant to section twenty-two of this Article; and it shall
not have the power to authorize the State or any political sub-division
thereof to subscribe for stock or to become a stockholder in any
corporation whatever.

The exception provided in Section 22 of Article 4 (referred to in the
last clause of the above) permits merely the granting of aid by the
State and by cities, &c., to institutions for the support and main-
tenance of minor orphans, or half-orphans, or abandoned children, or
aged persons in indigent circumstances. By an amendment adopted
Nov. 8, 1910, further provision is made for creating a fund of \$5,000,000
for the use, establishment, maintenance and support of the Panama
Pacific International Exposition. See constitutional amendments given
in preceding column.

ARTICLE 11. Section 18.—*Counties, Cities and Towns, &c., Debt
Restrictions.*—No county, city, town, township, board of education or
school district shall incur any indebtedness or liability, in any manner,
or for any purpose, exceeding in any year the income and revenue
provided for it for such year, without the assent of two-thirds of the
qualified electors thereof voting at an election to be held for that
purpose, nor unless, before or at the time of incurring such indebted-
ness, provision shall be made for the collection of an annual tax,
sufficient to pay the interest on such indebtedness as it falls due,
and also provision to constitute a sinking fund for the payment of the
principal thereof on or before maturity, which shall not exceed forty
years from the time of contracting the same; *provided, however*,
that the City and County of San Francisco may at any time pay the
unpaid claims, with interest thereon at the rate of five per cent per
annum, for materials furnished to and work done for said city and
county during the forty-first, forty-second, forty-third, forty-fourth and
fiftieth fiscal years, and for unpaid teachers' salaries for the fiftieth
fiscal year, out of the income and revenue of any succeeding year
or years, the amount to be paid in full of said claims not to exceed
in the aggregate the sum of five hundred thousand dollars, and that
no statute of limitations shall apply in any manner to these claims;
and provided, further, that the City of Vallejo, of Solano County,
may pay its existing indebtedness incurred in the construction of its
water-works whenever two-thirds of the electors thereof voting at an
election held for that purpose shall so decide, and that no statute of
limitations shall apply in any manner. Any indebtedness or liability
incurred contrary to this provision, with the exceptions hereinbefore
recited shall be void.

The City and County of San Francisco, the City of San Jose and
the Town of Santa Clara may make provision for a sinking fund, to
pay the principal of any indebtedness incurred, or to be hereafter
incurred, by it, to commence at a time after the incurring of such
indebtedness of not more than a period of one-fourth of the time
of maturity of such indebtedness, which shall not exceed seventy-five
years from the time of contracting the same. Any indebtedness in-
curred contrary to any provision of this section shall be void.

COUNTY DEBT RESTRICTIONS.—By a State law passed March
24, 1893, all counties are restricted to the issuance of bonds running
not longer than twenty years.

A new law regulating indebtedness for public improvements was
enacted in 1901. Section 4 of this law establishes a limit for such
indebtedness, and is as follows:

LIMIT OF INDEBTEDNESS.

SECTION 4. No city, town or municipal corporation shall incur
an indebtedness for public improvements which shall in the aggregate
exceed 15% of the assessed value of all the real and personal property
of such city, town or municipal corporation.

TAX EXEMPT AMENDMENT.—At the November 1902 election
the following amendment to Article 13 of the State constitution was
favorably voted upon.

SECTION 13. All bonds hereafter issued by the State of Cali-
fornia, or by any county, city and county, municipal corporation, or
district (including school, reclamation and irrigation districts) within
said State shall be free and exempt from taxation.

MORTGAGES EXEMPT FROM TAXATION.—Among the
amendments voted Nov. 8, 1910, is one repealing Section 4 of Article
13 of the State constitution, changing Section 1 so that hereafter a
mortgage deed of trust, &c., together with the money represented by
such debt, shall be exempt from taxation.

IRRIGATION BONDS AS SAVINGS BANK INVESTMENTS.—
The Legislature in 1911 passed an Act (Chapter 157, Laws 1911)
allowing investment by savings banks in bonds of irrigation districts.

POPULATION OF STATE.—
1910... 2,377,549 | 1890... 1,208,130 | 1870... 560,247 | 1850... 92,597
1900... 1,485,053 | 1880... 864,694 | 1860... 379,994

The number of Chinese in the population in 1900 was 45,753, 72,742
in 1890 and 75,132 in 1880.

CITIES, COUNTIES AND TOWNS IN THE STATE OF CALIFORNIA.

Many of the counties in this State levy a special tax on property
outside incorporated cities and towns for making, repairing and
sprinkling of roads, and the tax rate as given below under these
counties is made up of the State tax rate and the county tax rate
including special road tax.

ALAMEDA.

This city is in Alameda County. City was incorporated 1854; re-incorporated 1872. Special charter adopted April, 1907. For proposed purchase of certain water properties, Population 1910, 23,382.

City Hall.
5s '94 J-D \$ 26,250c.....Dec 1 '14-'34
School.
5s '94 J-D 21,525c.....Dec 1 '14-'34
4s '01 J-D 70,000c.....Dec 1 '14-'41
4½s '10 J-D 135,600.....June 1 '15-'50
Municipal Improvement Bonds.
4½s '08 A-O \$259,250c.....Apr 1 '15-'48
Electric Light & Police Department Bonds.
5s '12 M-N \$150,100.....Nov 1 '15-'52
Sewer Bonds.
4½s '10 J-D \$26,400.....June 1 '15-'50
BONDED DEBT Apr 1914.....\$693,075
Assessed valuation '13 (65% act.)...\$20,971,561
City tax rate (per \$1,000) '13.....\$10.30
INTEREST payable at City Treas. office.

ALAMEDA CO. UN. H. S. D. NO. 3.

Building Bonds.
5s g '12 J-D \$80,000c.....June 1 '18-'47
BONDED DEBT Nov 1913.....\$ 80,000
Assessed valuation '12 (3-5 act.)...7,449,900
Population in 1912 (estimated).....5,000
INTEREST payable at County Treasurer's office in Oakland.

ALAMEDA CO. UN. H. S. D. NO. 4.

High-School Building Bonds.
5s '06 J-J \$79,858.....1914-1926
Assessed valuation '12 (3-5 act.)...\$17,490,027
INTEREST at County Treasurer's office.

ARMJO UNION HIGH S. D.

A district in Solano County.
Building Bonds (Tax-free).
5s '13 J-J \$70,000c.....July 1 '14-'49
BONDED DEBT Mar 1914.....\$ 70,000
Assessed valuation '13 (60% act.)...4,272,867
School tax (per \$1,000) 1913.....3.80
Population in 1914 (estimated).....4,380
INTEREST at Treasurer's office.

BAKERSFIELD.

This city is in Kern County. Incorporated Jan. 11, 1898. Town of Kern annexed July 19, 1910. Population 1910 12,729.

Improvement Bonds.
4s '04.....\$23,000c.....Pt yly July 1
Fire-Department Bonds.
5s '12 A-O \$57,000.....Oct 1 '15-'52
Library Bonds.
5s '12 A-O \$26,650.....Oct 1 '15-'52
Sewer Bonds.
4½s g '07 M-N \$ 99,000.....May 1 '15-'47
5s '12 A-O 204,225.....Oct 1 '15-'52
5s '12.....15,200.....Oct 1 '15-'52
City-Hall Bonds.
5s '12 A-O \$145,875.....Oct 1 '15-'52
School Bonds.
4½s.....\$30,000.....Part yly July 1
BONDED DEBT Mar 1914.....\$ 606,425
Assessed valuation '13 (½ act.)...7,885,000
Total tax (per \$1,000) 1913.....19.00
INTEREST payable at City Treas. office.

BAKERSFIELD SCHOOL DISTRICT.

Building Bonds.
5½s '14.....\$40,000.....1918-1927
BONDED DEBT July 1914.....\$ 231,000
Assessed val. '13 (abt 3/5 act.)...8,852,594

BERKELEY.

This city is in Alameda County. Incorporated April, 1878. New charter adopted March 5, 1895. Commission government adopted July 1, 1909.

Commission government adopted July 1, 1909.
Sewer and Fire Equipment.
5s '13 J-J \$555,000c.....July 15-'51
School Bonds.
4½s '00 J-J \$65,000c.....July 10 '15-'40
Munic. Improvement Bonds (Tax exempt).
4½s g F-A \$245,932.50.....Feb 1 '15-'47
BONDED DEBT Sept 21, '14.....\$ 865,933
Sinking funds.....5,938
Assessed valuation '14 '15.....42,706,510
Total tax (per \$1,000) '12-'13.....24.10
Population in 1910 (Census).....40,434
INTEREST on fire-equipment and sewer bonds at office of City Treasurer or at N. W. Halsey & Co., N. Y.; other bonds at City Treasurer's office.

BERKELEY SCHOOL DISTRICT.

4½s '06 J. J. \$118,500.....
4½s '07 J. J. 186,750.....
4½s '07 J. J. 82,450.....
4½s '08 J. J. 175,000.....
BONDED DEBT June 30 '14.....\$562,700
INTEREST payable at County Treasurer's office.

BRAWLEY UNION HIGH S. D.

A district in Imperial County.
5s '13.....\$50,000.....1933
TOTAL DEBT Oct 14 '14.....\$ 50,000
Assessed valuation '14.....4,286,669
School tax rate (per \$1,000) '14.....6.00

CENTRAL UNION HIGH S. D.

A district (P. O. El Centro) in Imperial County. Population '14 (estimated) 8,000.
Building Bonds.
5s '11 J-J \$75,000.....1927-1951
7s J-J 15,000r.....1914-1919
BONDED DEBT Oct. '14.....\$ 90,000
Sinking fund Mar. 24 '14.....10,000
Assessed valuation '13 (3-5 act.)...6,500,000
High-school tax (per \$1,000) '14.....3.40
INTEREST payable at County Treas. office.

CHAFFEE UN. HIGH SCHOOL DIST.

A district in San Bernardino County.
Building Bonds.
5s g '11 Sept \$100,000.....Sept 11 '17-'51
5s g '11 Sept 100,000.....Sept 1 '20-'51

BONDED DEBT Mar 1913.....\$ 200,000
Assessed valuation 1912.....5,458,439
Real valuation (estimated).....12,000,000
INTEREST at County Treas. office.

CHICO.

This city is in Butte County.
Sewer Bonds.
5s '02 J-J \$31,500c.....Jan 1 '15-'42
Municipal Improvement Bonds.
5s '10 J-J \$138,750c.....July 1 '14-'50
BONDED DEBT Oct 31 '13.....\$ 171,375
Assessed valuation '13.....3,004,003
Tax rate (per \$1,000) '12-'13.....15.50
Population in 1910.....3,750
INTEREST at office of City Treasurer.

CHICO GRAMMAR SCHOOL DIST.

4s.....\$5,000.....
Building Bonds.
5s '13.....\$47,000.....1915-1938
TOTAL DEBT Sept '14.....\$57,500
Assessed valuation '13 (½ act.)...5,130,000
Population in 1914 (est.).....14,000

COLTON

This city is in San Bernardino County.
Water Bonds.
6s '85 J-J \$33,600c.....1925
6s '99 J-J 12,500c.....1939
Electric-Light Bonds.
6s '96 J-J \$3,300c.....1936
Refunding Bonds.
6s '01 J-J \$3,800c.....1941
Sewer Bonds.
5s '10 J-J \$57,000c.....1941
BONDED DEBT Apr 22 '14.....\$ 110,200
Assessed valuation '13-'14 (½ act) 2,105,965
Value of corporative and operative property (additional).....695,610
Total tax rate (per \$1,000) '13.....33.35
Population in 1910 (Census).....4,852
INTEREST payable at First Nat. Bank, Colton, or at Colton Nat. Bank.

COLUSA COUNTY.

Colusa is the county seat.
Hall of Records Bonds.
5s g '14 J-D \$60,000c.....yly on June 15
Bridge and Culverts Bonds.
5s g '14 J-D \$140,000c.....yly on June 15
BONDED DEBT Apr '14.....\$ 452,000
Assessed valuation.....14,150,781
Population in 1910.....7,732

CONTRA COSTA COUNTY.

Martinez is the county seat. Bonds are tax-exempt. Population, 1910, 31,674.
County-House and Jail Bonds.
4s g '03 J-J \$161,000c.....1943
BONDED DEBT May 1 '14.....\$ 161,000
Assessed valuation '13 (½ act.)...47,731,341
State & County tax (Inside.....12.00 (per 1,000 1913) Outside.....16.00
INTEREST payable at County Treasury.

CORONA.

This city is in Riverside County. Incorporated July 19, 1896. Population, 1910, 3,550.
Sewer Bonds.
5s g '09 A-O \$26,250c.....Aug 1 '15-'49
Street Bonds.
5s g '09 A-O \$ 12,687.50c.....Aug 1 '15-'49
5s g '12.....130,625c.....Jan 1 '15-'52
Drainage Bonds.
5s g '09 A-O \$79,625c.....Aug 1 '15-'49
Municipal Improvement Bonds.
4½s & 5½s '11 \$95,950.....1915-1952
BONDED DEBT Sept 1 '14.....\$ 249,188
Assessed valuation '14 (2-5 act.)...4,021,500
Total tax rate (per \$1,000) '14.....38.60
INTEREST payable at City Treas. office.

CORONADO.

This city is in San Diego County. Incorporated 1890. Population, 1910, 1,477.
Seawall Bonds.
F-A \$108,000.....
Seawall and Street Improvement.
A-O \$143,000.....
Sewer and Fire Improvement.
F-A \$42,550.....
BONDED DEBT Apr '14.....\$ 293,500
Assessed valuation '14 (½ act.)...3,372,276
City tax rate (per \$1,000) '14.....18.70
INTEREST Payable at City Treas. office.

CORONADO SCHOOL DISTRICT.

Building Bonds.
5s '12 July \$80,000c.....1915-1934
BONDED DEBT Sept 1 '14.....80,000
Sinking fund.....7,516
Assessed val. '14 (abt. 35% act.)...2,461,861
School tax rate (per \$1,000) '14.....13.80
Population in 1914 (estimated).....4,500
INTEREST at County Treasurer's office.

DIXON.

This town is in Solano County. Incorporated in 1878; re-incorporated in 1884. Population, 10,827.
Sewer Bonds (tax free).
5s '11 J-D \$38,000.....\$1,000 yearly
BONDED DEBT Mar 1 '14.....\$ 38,000
Assessed valuation '13 (½ act.)...625,750
City tax rate (per \$1,000) '13.....13.50
INTEREST payable at Bank of Dixon.

EL CENTRO.

This city is in Imperial County. Incorporated April 16, 1908.
Municipal Improvement Bonds.
5½s J-J \$50,000c.....July 2 '23-'42
BONDED DEBT Sept 21 '14.....\$ 149,000
Assessed valuation '14 (¾ act.)...3,404,815
City tax rate (per \$1,000) '14.....13.60
Population in 1910.....1,610

EL CENTRO SCHOOL DISTRICT.
6s g '13 J-D \$30,000.....1918-1947

TOT. BONDED DEBT Jan 1 '14..\$ 149,000
Assessed valuation '13 (½ act.)...2,308,919

EL DORADO COUNTY.

Placerville is the county seat.
County-House Bonds.
5s ann \$120,000.....1946
(Maturity 1-30 yearly after 5th year.)
BONDED DEBT Mar '14.....\$ 120,000
Assessed valuation 1913.....6,954,117
State & Co. tax rate (Inside.....17.00 (per \$1,000) 1913.....Outside.....21.00
Population in 1910.....7,492
INTEREST payable at County Treas. office.

EUREKA.

This city is in Humboldt County. Incorporated Feb. 10, 1874. All bonds are exempt from taxation. Commission government defeated Dec. 4, 1911. Population, 1910, 11,845.

City Hall Bonds.
4½s semi-an \$77,500c.....
Sewer Completion Bonds.
4½s semi-an \$27,125c.....
4½s semi-an \$61,625c.....
Fire Apparatus Bonds.
4½s semi-an \$11,625c.....
Park Bonds.
4½s semi-an \$3,875c.....
Third Ward School Bonds.
4½s semi-an \$10,875c.....
Fifth Ward School Bonds.
4½s semi-an \$10,875c.....
*Part yearly on July 15. \$Part yearly April 15.

Water Works Bonds.
5s '14 J-J \$270,000.....July 15 '24-'53
BONDED DEBT Mar 20 '14.....\$ 203,500
Assessed valuation '13 (2-5 act.)...x8,889,076
Total tax (per \$1,000) '13.....30.70
x Including \$712,839 operating property taxed only by State.
INTEREST payable at City Treas. office.

EUREKA HIGH SCHOOL DIST.

Building Bonds.
5s g '13 A-O \$150,000.....Oct 1 '18-'53
TOTAL DEBT Apr 24 '14.....\$ 150,000
Assessed valuation '14.....6,979,564
INT. at Co. Treas. office in Eureka.

FRESNO.

County seat of Fresno County. Incorporated Oct. 27, 1885. Commission government defeated July 26, 1912.

City Hall.
4½s '06 J-J 61,000c.....1914-1943
Sewer.
5s g J-J \$21,000c.....July 1 '15-'35
4½s '06 J-J 143,500c.....1914-1945
Playground Site Bonds.
4½s J-D \$54,000c.....1940
Convention Hall Bonds.
5s '12 F-A \$42,000.....Aug 15 '15-'42
TOTAL DEBT April '14.....\$ 311,500
Assessed valuation '13 (3-5 act.)...20,842,966
City tax rate (per \$1,000) '13.....11.40
Population in 1910.....24,892
INTEREST payable at City Treas. office.

FRESNO CITY SCHOOL DISTRICT.

5s.....\$40,000c.....June 6 '15-'22
5s g '09 June 150,000c.....June 12 '15-'34
5s g '14 A-O 200,000c.....1920-1936
BONDED DEBT Sept. 22 '14.....\$ 390,000
Assessed valuation '14 (½ act.)...24,114,513
School tax rate (per \$1,000) '14.....9.00
Population in 1912 (est.).....40,000
INTEREST at County Treasurer's office.

FULLERTON.

This city is in Orange County.
Water Works Bonds.
5s '12 A-O.....\$80,000.....
6s J-D.....12,000 Part yearly
Paving Bonds.
6s.....\$16,000 Part yearly
Road Bonds.
5s '12 A-O.....\$132,000
TOTAL DEBT Oct 10 '14.....240,000
Assessed valuation '13.....2,615,545
Population in 1910.....1,725

FULLERTON UN. HIGH S. D.

Building Bonds.
5s '06.....\$20,000c.....1926
(\$2,000 due annually.)
5s J-J 50,000c.....1914-1938
5s J-D 130,000c.....1916-1941
TOTAL DEBT Sept. '14.....\$200,000
Assessed valuation '13 (½ act.)...9,250,000
School tax (per \$1,000) 1913.....\$0.63
INTEREST at County Treasurer's office.

GLENDALE.

A city in Los Angeles County. Incorporated Feb., 1906. Of the water bonds given below \$114,000 had been sold up to date of statement.

Municipal Water Bonds...\$248,000.....
Electric-Light Bonds.
5s '09 J-J \$54,000c.....1949
5s '12 M-S 40,000c.....March 1 '30-'34
Fire Department Bonds.
6s '07 M-S \$ 4,250c.....1947
5s '13 J-J 19,500.....Jan 1 '15-'52
City Hall and Library Bonds.
5s '11 J-J \$16,500c.....1935
Street Bonds.
5s '13 J-J \$4,500.....Jan 1 '15-'23
BONDED DEBT act. '14.....\$385,125
Assessed valuation '14 (2-5 act.)...4,354,000
City tax rate (per \$1,000) '13.....12.30
Population in 1910.....2,746
INTEREST payable at City Treas. office.

GLENDALE SCHOOL DISTRICT.
BONDED DEBT July 1 '13.....\$88,000

GLENDALE UNION HIGH S. D.
TOTAL DEBT July 1 '13.....\$56,000

GLENN COUNTY.

Willow is the county seat. Road and Bridge Bonds. 5s g '11 M-N \$450,000.....Nov 1 '21-'50

HANFORD SCHOOL DISTRICT.

6s g '12.....\$32,000.....Oct 9 '15-'30 TOTAL DEBT May '13.....\$43,000

HAYWARDS UNION HIGH S. D.

A district in Alameda County. Building Bonds. 5s '12 J-J \$80,000.....1922-1932 BONDED DEBT Sept '14.....\$ 80,000

HESTER SCHOOL DISTRICT.

A district in Santa Clara County. Building Bonds (Tax-Exempt). 5s \$8,000.....April 1 1917

HILLSBOROUGH.

This city is in San Mateo County. Bonds are tax-free in California. Incorporated May 5, 1910.

IMPERIAL.

This city is in Imperial County. Incorporated August, 1904. Pop'n 1910, 1,257.

KERN COUNTY.

County seat is Bakersfield. Refunding Bonds. 4 1/2s '97 J-J \$90,000.....1915-1917

LODI.

This city is in San Joaquin County. Inc. in November, 1906. Population 1910, 2,697.

LONG BEACH.

This city is in Los Angeles County. Incorporated city of first class January 6, 1908.

LONG BEACH CITY SCH. DIST.

5s '08.....\$43,000.....1918 Site-Purchasing and Building Bonds. 4 1/2s g '12.....\$100,000.....

City tax rate (per \$1,000) '13..... 14.00 Population in 1910..... 17,805

LOS ANGELES.

County seat of Los Angeles County. Commission government rejected Dec. 3, 1912. All bonds are exempt from taxation in California.

LOS ANGELES CITY HIGH S. D.

4s '06.....\$156,000.....Jan 1 '15-'36 4s '09.....420,000.....April 1 '15-'49

LOS ANGELES COUNTY.

County seat is Los Angeles. Highway Bonds. 4 1/2s g '09 F-A \$3,500,000.....Feb 1 '15-'49

MENDOCINO COUNTY.

County seat is Ukiah. Refunding Bonds. 4s '01 J-J \$62,500.....July 1 '15-'39

MERCED COUNTY.

County seat is Merced. Bonds are exempt from taxation. Refunding Bonds. 4s g '03 Dec \$30,000.....Dec 1 '14-'16

MODESTO.

This city is in Stanislaus County. Incorporated 1834. Re-incorporated in 1911.

5s g '09 J-D { \$30,000.....Dec 1 '14-'25 { 18,000.....Dec 1 '26-'28

MODESTO IRRIGATION DIST.

This district (P. O. Modesto) is in Stanislaus County. Bonds are tax-free. 5s J-J \$1,010,511c.....Jan '23-'42

LOS ANGELES CITY SCH. DIST.

4s '06.....\$416,000.....Jan 1 '15-'46 4s '09.....175,000.....April 1 '15-'19

MONROVIA.

Monrovia is in Los Angeles County. Incorporated December, 1887. Pop'n 1910, 3,576.

Water Bonds. 6s '94 July \$20,000.....July 1 '15-'34
6s '98 July 15,000.....July 1 '15-'38
6s '00 Mar 13,135.....Mar 12 '15-'40
5s '05 J-D 3,400.....1930
5s '07 Mar 25,500.....1947
5s '07 Mar 3,500.....1927
5s '09 Mar 15,000.....1942
5s '10 Jan 47,500.....1945
Fire Apparatus Bonds. 5s '05 Mar \$400.....1915
Library Bonds. 5s '05 J-D \$400.....1915
Sewer Bonds. 5s '10 Jan \$114,000.....1945
Park Bonds. 5s '05 J-D \$14,000.....1945
Building Bonds. 5s '05 J-D \$6,600.....1941
BONDED DEBT June 1 '13.....\$ 282,050
Assessed valuation '13-'14 (1/2 act.)... 4,000,733
Tax rate (per \$1,000) '13..... 15.00
INTEREST at City Treasurer's office.

MONROVIA CITY SCH. DIST.

BONDED DEBT April 20 '14.....\$ 57,750
Assessed valuation '13.....4,150,000

MONROVIA HIGH SCH. DIST.

5s g '10 Sept \$121,700c.....Sept 12 '14-'50
BONDED DEBT April '14.....\$ 125,000
Assessed valuation '13.....4,150,000
INTEREST at County Treasurer's office.

MONTEREY.

This city is in Monterey County. Incorporated as a city of sixth class in 1889. Commission government went into effect July 1, 1911.

Municipal Impt. Bonds. 5s g '09 J-J \$131,448c.....Jan 2 '15-'51
BONDED DEBT Sept 23 '14.....\$ 131,448
Assessed valuation '14 (1/2 act.)... 2,650,496
City tax (per \$1,000) '13..... 14.50
Population in 1910..... 4,923
INTEREST at City Treasurer's office.

OAKDALE IRRIGATION DIST.

This district is in Stanislaus County. 5s '10 J-J \$1,600,000c.....July 1 '31-'40
5s '13 J-J 400,000c.....Jan 1 '34-'43
BONDED DEBT Sept 21 '14.....\$2,000,000
Assessed valuation '14 (1-3 act.)... 3,183,660
Total tax (per \$1,000) '14 (est.)... 60.00
Population in 1914 (est.)..... 4,500
INTEREST at District Treasurer's office.

OAKLAND.

Oakland is the county seat of Alameda County. Incorporated 1854. Commission government adopted Dec. 8, 1910.

Refunding Bonds. 4s g '97 M-S \$17,500c.....Sept 1 '15-'19
McElroy Bonds. 4 1/2 s g '09 J-J \$3,016,700c.....Jan 1 '15-'50
Municipal Improvement Bonds. 5s '13 F-A 725,000c.....Aug 1 '15-'43
5 1/2 s '13 F-A 986,000c.....Aug 1 '15-'43
4 1/2 s '13 F-A 1,131,000c.....Aug 1 '15-'43
Refunding Bonds. 4s g '97 M-S \$80,500c.....Sept 1 '15-'37
Sewer Bonds. 4 1/2 s g '07 J-J \$485,512.50c.....Jan 15 '15-'47
Park Bonds. 4 1/2 s g '07 J-J \$818,400c.....Jan 15 '15-'47
School and Auditorium Bonds. 4 1/2 s '11 J-D \$1,009,357.50c.....June 15 '15-'51
Clawson School Bonds. 5s '14 F-A \$26,000c.....Aug 1 '15-'29
Auditorium Bonds. 4 1/2 s '14 F-A \$104,000c.....Aug 1 '15-'39
BONDED DEBT Sept 19 '14.....\$ 8,319,470
Total assessed valuation '13-'14... \$153,845,660
Real value (est.)..... 307,691,840
Total tax (per \$1,000) '13-'14... 30.80
Population in 1910 (Census)..... 150,174
Population in 1914 (est.)..... 215,000
*Of the total valuation, \$451,400 is exempt from taxation in accordance with State laws and \$15,666,510 is taxed by the State only, but on this last-named amount the State reimburses the city for taxes on interest and redemption on bonds sold prior to Nov. 10, 1910.
INTEREST on all bonds payable at City Treasurer's office. The McElroy bonds, School and Auditorium bonds and the municipal improvement, Clawson School and Auditorium bonds of 1914, can also be paid at National City Bank, New York City.

OAKLAND SCHOOL DISTRICT.

4 1/2 s '04 J-J \$720,000.....1944
4.8s '06 J-J 224,000.....1946
BONDED DEBT Oct 6 '14.....\$ 994,000
Assessed valuation '14 (1/2 act.)... 135,591,670
School tax (per \$1,000) '14..... 8.60
Population in 1914 (est.)..... 225,000
Bonds are exempt from taxation.
INTEREST at County Treasurer's office.

ORANGE.

This city is in Orange County. Water Works Bonds. 5s '11 J-D \$48,750.....1951
4 1/2 s '05 40,000.....1945
Sewer Bonds. 5s '10 14,000.....1926
Paving Bonds. 5s '10 4,000.....1920
Fire Dept. Bonds. 5s '11 4,500.....1921
TOTAL BOND DT. April 20 '14.....\$ 106,650
Assessed valuation '13.....2,179,451
Real value (est.)..... 5,000,000
Total tax (per \$1,000) '13..... 13.00
Population in 1910..... 2,920

ORANGE UNION HIGH S. D.

Building Bonds. 5s '12 M-S \$46,000r.....Sept 1 '15-'37
BONDED DEBT April '14.....\$ 68,000
Assessed valuation '13.....4,398,025
School tax (per \$1,000) '13..... 6.70
INTEREST at County Treasurer's office.

ORANGE COUNTY.

Santa Ana is the county seat. 4s\$40,000.....
Bridge Bonds. 5s g '12 M-S \$90,000c.....1915-1932
Hospital and Almshouse Bonds. 5s g '12 M-S \$54,000.....1915-1932
Highway Bonds. 5s '13.....\$1,270,000.....
BONDED DEBT July 1 '13.....\$ 1,457,000
Assessed valuation '13.....41,887,235
State & Co. tax (Inside)..... 10.50
(per \$1,000) '13 (Outside)..... 14.50
Population in 1910..... 34,463

OROVILLE.

This city is in Butte County. Incorporated Jan. 3, 1906. Population 1910, 3,859.

Levee Bonds (Tax Exempt). 5s J-J \$68,000c.....
(\$2,000 payable annually on July 1)
Sewer Bonds (Tax Exempt). 5s J-J \$108,000c.....\$3,000 annually
BONDED DEBT Oct '14.....\$ 176,000
Assessed valuation '14 (3-5 act.)... 1,820,263
City tax (per \$1,000) '14..... 18.50
INTEREST payable at City Treas. office.

OXNARD.

This city is in Ventura County. Incorporated in 1901.

Water-Works Bonds. 5s '12 M-N \$100,000c.....May 1 '22-'46
Sewer bonds.....\$ 33,625
BONDED DEBT Sept 22 '14..... 133,625
Assessed valuation '14.....2,370,687
Tax rate (per \$1,000) '14..... 11.00
Population in 1910..... 2,555
INTEREST on water-works bonds payable at City Treasurer's office.

PALO ALTO.

This city is in Santa Clara Co. Incorporated July 1, 1909. Population 1910, 4,486.

Sewer Bonds. 5s A-O \$24,000c.....Oct 1 '15-'38
Improvement Bonds. 5s A-O \$28,000c.....Oct 1 '15-'42
5s A-O 60,000c.....May 1 '15-'47
5s g '09 J-J 12,600c.....July 1 '14-'50
5s '11 J-D 27,500c.....July 1 '14-'31
Subway Bonds. 5s '14 J-J \$9,500.....1954
Street Paving Bonds. 5s '14 J-J \$25,000.....1954
Water Bonds. 5s A-O \$22,000c.....July 15 '15-'36
Light and Water Bonds. 5s '12 \$19,000c.....1952
Power-Plant-Impt. Bonds. 5s '12 \$11,200c.....1927
Oil Pipe Line Bonds. 5s '12 \$2,800c.....1927
BONDED DEBT Sept 21 '14.....\$244,600
Assessed valuation '14-'15.....\$9,009,572
(Assessment 3-5 on real estate and 2-5 on personal property.)
City tax (per \$1,000) '12-'13.....\$9.50
INTEREST payable at Bank of Palo Alto.

PASADENA.

This city is in Los Angeles County. Incorporated June 14, 1886. Resident districts of San Rafael Heights and Linda Vista annexed to this city Aug. 12, 1914.

Electric-Light-Extension Bonds. 4s '06 J-J \$100,000c.....July 1 '14-'46
4 1/2 s '08 A-O 42,500c.....Apr 1 '15-'48
4s '09 M-S 131,250c.....Mch 1 '14-'49
Street-Machinery Bonds. 4s '02 J-J \$12,250c.....Jan 2 '15-'42
City Hall and Jail Bonds. 4s '02 J-J \$34,650c.....Jan 2 '15-'42
City Hall Bonds. 4 1/2 g '11 J-D \$21,275c.....June 1 '15-'51
Park Bonds. 4s g '02 J-J \$50,000c&r.....Jan 2 '15-'22
4s '02 J-J 10,000c.....Jan 2 '15-'22
Water Bonds. 4s '05 M-N \$19,375c.....May 1 '15-'45
4s '02 J-J 4,200c.....Jan 2 '15-'42
Water-Plant-Purchase Bonds. 4 1/2 s '12 A-O \$1,250,000.....
(Due \$50,000 yearly beginning Oct 1 '17)
Sewer Bonds. 4 1/2 s '08 A-O \$42,500c.....Apr 1 '15-'48
4s '02 J-J 24,500c.....Jan 2 '15-'42
Sewer Farm Bonds. 4s '02 3,500.....Jan '15-'42
Fire-Department Bonds. 4s '02 J-J \$14,000c.....Jan 2 '15-'42
4s '06 J-J 60,000c.....July 1 '14-'46
4 1/2 s g '11 J-D 16,650c.....June '15-'51
Bridge Bonds. 4 1/2 s g '11 J-D \$92,500c.....June 1 '15-'31
Garbage-Incinerator-Plant Bonds. 4 1/2 s g '12 M-N \$52,000c.....May 1 '15-'52
BOND DEBT Sept 1 '14.....\$1,981,950
Cash on hand..... 303,439
Assessed valuation '14 (2-3 act.)... \$7,551,665
City tax (per \$1,000) '13-'14..... 11.40
Population in 1910 (census)..... 30,291
INTEREST at City Treasurer's office.

PASADENA SCHOOL DISTRICT.

Includes the City of Pasadena and North and East Pasadena, Altadena, La Manda Park and Linda Vista School Districts.

School Bonds. 4 1/2 s '02 Sept \$45,000c.....Sept 15 '15-'22
4s '03 Sept 46,000c.....Sept 8 '14-'37
4 1/2 s '04 Oct 20,000c.....Oct 24 '14-'18
4s '06 M-N 125,000c.....Mch 12 '15-'39
4 1/2 s '08 140,000c.....Apr 27 1915

4 1/2 s '11 75,000.....1917-1931
5s '14 F-A 90,000.....
(Due \$5,000 yrly. for 15 yrs. beg. after 4 years from issue.)
High-School Building Bonds. 4 1/2 s '11 M-N \$475,000c.....May 1 '19-'42
BOND DEBT June 1914—
City School District.....\$ 548,000
High School District..... 475,000
Assessed val. '14 (33 to 40% act.)... 46,632,150
Tax rate (per \$1,000) (Gram. sch. bds.\$1.10 '14-'15 (High sch. bds. .50
Total tax (per \$1,000) '14-'15..... 8.60
INTEREST at County Treasurer's office.

PLUMAS COUNTY.

Quincy is the county seat. All bonds are tax-exempt.

Refunding Bonds. 4s A-O \$35,100c.....1934
Bridge and Highway Bonds. 4s g '07 A-O \$100,000.....Oct 1 '17-'32
(Part every 5 years.)
BOND DEBT Sept 22 '14.....\$ 135,100
Assessed val. '14 (3-5 act.)... 9,398,811
State & Co. tax rate (Inside)..... (?)
(per \$1,000) (Outside)..... \$16.00
Population in 1910..... 5,259
INTEREST at County Treasurer's office.

POMONA.

This city is in Los Angeles County. Incorporated Jan. 1888. All bonds tax-exempt. Population 1910, 10,207.

Special Fire Bonds. 5s '13 M-N \$15,000c.....
(Part yearly beg. Nov 1, 1914.)
Special Street Bonds. 5s '13 M-N \$75,000c.....
(Part yearly beg. Nov. 1, 1914.)
Sewer Bonds. 4s '00 J-D \$20,250c.....1940
Park Bonds. J-D \$43,500c.....1943
School Bonds. 4 1/2 s '07 J-D \$33,000c.....July 1 '15-'47
City-Hall Bonds. 4 1/2 s '09 J-J \$46,375c.....July 1 '15-'49
BOND DEBT June 30 '14.....\$ 235,450
Assessed valuation 1914 (1/2 act.)... 8,490,301
Tax rate (per \$1,000) '14..... 16.50
INTEREST at City Treasurer's office.

POMONA CITY SCHOOL DISTRICT.

4 1/2 s '09 \$77,000.....1949
Building Bonds. 5s '13 \$27,000.....1914-1923
BOND DEBT Apr 1914.....\$77,000

POMONA CITY HIGH SCHOOL DIST.

4 1/2 s '03 \$27,000.....1923
4 1/2 s '09 57,000.....1949
BOND DEBT Apr 1914.....\$84,500

REDLANDS.

This city is in San Bernardino County. Incorporated Nov. 1888. Pop. 1910, 10,449.

Water-Works System. 5s g '12 M-N \$600,000c.....Nov 15, '22-'51
Municipal Improvement Bonds. 4 1/2 s g '05 J-J \$77,500c.....July 15 '15-'45
Special Improvement Bonds. 5s g '07 J-J \$32,500c.....Jan 15 '15-'27
Public Park Bonds. 4 1/2 s g '07 F-A \$9,000c.....Aug 1 '14-'22
10,000c.....Aug 1 '23-'27
5s '11 M-S 74,000c.....Mch 1 '15-'51
BOND. DEBT Jan 1 '14.....\$ 610,000
Sinking fund July 1, '14..... 13,460
Assessed valuation '13 (1/2 act.)... 9,192,300
Total tax rate (per \$1,000) '13..... 42.20
INTEREST at office of City Treasurer.

REDLANDS SCHOOL DISTRICT.

Grammar School Bonds. 5s '02 \$10,000..... 1915-1919
5s '02 9,000.....Sept 15 '15-'23
5s '03 16,000.....May 26 '15-'19
5s '04 9,000.....Mch 8 '15-'23
5s '07 5,000.....Apr 13 '20-'21-'22
5s g '08 Aug 50,000c.....Aug 24 '23-'32
High School Bonds. 5s '03 \$36,000.....July 17 '15-'23
5s g '10 Apr 85,000.....1915-1935
BOND. DEBT Sept '14—
Grammar School District.....\$100,000
High School District..... 121,000
Assessed val. '13 (1/2 act.)... 7,719,021
School tax rate (per \$1,000) '13..... \$12.50
INTEREST at County Treasurer's office.

REDWOOD CITY.

This city is in San Mateo County.

Street Light Bonds. 5 1/2 s '13 A-O \$5,700.....Apr 7 '15-'33
Water Works Bonds. 5 1/2 s '00 5,600.....1940
Water Works Extension Bonds. 5 1/2 s '09 17,000.....1929
Municipal Improvement Bonds. 4 1/2 s '04 82,500.....1944
5s '10 40,375.....1950
Paving Bonds. 5 1/2 s '12 30,000.....
BONDED DEBT July 1 '12.....\$ 150,154
Assessed valuation '12.....2,081,965
Tax rate (per \$1,000) '12..... 16.70
Population in 1910.....2,442

RICHMOND.

This city is in Contra Costa County. Incorporated Aug. 7, 1905. Population, 1910, 6,802.

Harbor Bonds. 5s '13 J-J \$290,000.....1914-1952
Improvement Bonds. 5s '13 J-J \$270,000c.....Jan 1 '15-'23
BONDED DEBT Mar 20 '14.....\$ 560,000
Assessed valuation '13..... 15,235,860
(Assessment about 60% act. value.)
Total tax (per \$1,000) '13..... 26.65
City tax rate (per \$1,000) '13..... 10.00
INTEREST at City Treasurer's office.

(Compiled by the Commercial and Financial Chronicle.)

RIVERSIDE.

This city is the county seat of Riverside County. Incorporated 1883. Street Improvement Bonds. 5s '95 s.-an. \$47,250c. Aug 1 '15-'35 Electric-Light Improvement Bonds. 5s '95 F-A \$21,000c. Aug 1 '15-'35 Steam Power Plant Bonds. 4s g '00 J-D \$26,000c. June 1 '15-'40 Fairmont Park Bonds. 4 1/2 s g '11 M-S \$25,500c. Mch 1 '15-'31 Fire Department Bonds. 4 1/2 s g '11 M-S \$17,000c. Mch 1 '15-'31 Water-Works-Purchase Bonds. 5s '13 J-D \$1,131,000c. June 1 '15-'53 BONDED DEBT Sept 30 '14. \$ 1,271,000 Floating debt July '14. 13,690 Assessed valuation '14 (30% act.).. 10,264,999 Total tax rate (per \$1,000) '14.... 43.50 Population in 1910. 15,212 INTEREST at City Treas. office & in N. Y.

RIVERSIDE CITY SCHOOL DISTRICT.

All bonds are tax-exempt. 4s g '01 F-A \$ 24,000c. 1915-1920 5s '08 Feb 32,000c. 1915-1922 4 1/2 s '10 F-A 250,000c. Aug 3 1920-'39 5s '14 M-S 50,000c. \$2,000 annually BONDED DEBT Sept 21 '14. \$ 356,000 Assessed valuation '13 (30% act.) 9,659,735 School tax (per \$1,000) '13. 11.20 Population in 1914 (estimated). 17,000 INTEREST payable at County Treasury.

RIVERSIDE COUNTY.

Riverside is the county seat. All bonds are tax-exempt. Highway Bonds. 5g '14 M-N \$1,125,000c. May 1 '25-'54 Court-House Bonds. 4s g '02 M-S \$145,000c. Sept 1 '14-'42 BONDED DEBT May '14. \$ 1,270,000 Assessed valuation '13 (1-3 act.).. 31,984,516 State and county tax { Inside 13.00 (per \$1,000) '13. { Outside. 19.00 Population in 1910. 34,696 INTEREST on highway bonds at County Treasurer's office or at Hanover National Bank, New York; on other bonds at County Treasurer's office.

SACRAMENTO.

County seat of Sacramento County and capital of State. Re-incorporated April 23, 1863. Delinquency in payment of original debt. Commission government adopted Nov. 7, 1911 and went into effect July 1, 1912. Levee and Sewer (red. any time). 4s g '05 J-J \$120,000c. Jan '15-'38 4s '08 J-J 170,000c. Jan 1 '15-'48 Sewer and Drainage. 4 1/2 s '13 \$185,600. July 1 '15-'53 Electric Distribution. 4 1/2 s '14 \$9,600. Jan 1 '15-'54 Levee Bonds. 4 1/2 s '13 J-J \$751,825. Jan 1 '15-'53 4s '08 J-J 60,000c. July 1 '15-'38 High-School Bonds. 4s '05 J-J \$155,000c. Jan 1 '15-'45 4s '08 J-J 38,000c. July 1 '15-'33 City-Hall Bonds. 4s '07 J-J \$247,500c. July 1 '15-'47 Water-Main Bonds (red. any time). 4 1/2 s '13 \$ 35,500. July 1 '15-'53 4s '03 J-J 106,000c. Jan 1 '15-'41 River Improvement Bonds. 4 1/2 s \$67,500c. Jan 1 '15-'41 Old bonds outstanding. \$ 7,100 BONDED DEBT Oct '14. 1,953,625 Sinking fund 31,607 Assessed valuation '14 (72% act.).. 74,163,100 City tax (per \$1,000) '14. 14.60 Population in 1910 (Census). 44,696 Population in 1914 (estimated). 75,000 INTEREST on 4 1/2 % levee bonds at City Treasurer's office or at Bank of New York, N. B. A.; other bonds in Sacramento at Capital National Bank.

SACRAMENTO CITY SCHOOL DIST.

4 1/2 s '11 J-J \$2000,000. (Maturity 20 bonds in 6 years and 10 bonds every six months thereafter.) BONDED DEBT Mar '14. \$ 200,000 Assessed valuation '13 (3-5 act.).. 56,869,230 Population in 1914 (estimated). 71,000 INTEREST at County Treasurer's office.

SACRAMENTO CITY HIGH S. D.

Building Bonds. 4 1/2 s '11 J-J \$100,000. (Maturity \$4,000 in 16 years and \$2,000 every 6 months thereafter.) BONDED DEBT Mar '14. \$ 100,000 Assessed valuation '13 (3-5 act.).. 56,869,230 INTEREST at County Treasurer's office.

SACRAMENTO COUNTY.

County seat is Sacramento. Bridge Bonds. 4 1/2 s '08 J-J \$225,000c. Jan 1 '17-'48 Court-House and Jail Bonds. 4 1/2 s '08 J-J \$660,000c. Jan 1 '17-'48 Road Bonds. 4 1/2 s '08 J-J \$600,000c. Jan 1 '17-'48 BONDED DEBT Apr '14. \$ 1,485,000 Floating debt 66,825 Value of county property '13. 1,221,234 Assessed valuation '13 (3-5 act.).. 80,057,358 State and county { Inside 12.23 tax (per \$1,000) { Outside. 16.70 Population in 1910. 67,806

SALINAS CITY.

This city is in Monterey County. Incorporated Feb. 11, 1903. Population, 1910, 3,736. Sewer Bonds. 5s '97 J-J \$23,000c. Jan 2 '15-'37 City Hall Bonds. 5s g '06 J-D \$41,250c. Dec 31 '14-'46 School Bonds. 5s '09 J-J \$18,750c. Jan 2 '15-'39 5s '06 J-D 12,375c. Dec 31 '14-'46

BONDED DEBT Sept 23 '14. \$ 95,375 Assessed valuation '14 (3-5 act.).. 2,502,394 Total tax rate (per \$1,000) '14. 28.70 INTEREST at City Treasurer's office.

SAN BENITO COUNTY.

Hollister is the county seat. High-School Bonds. 5s \$24,000. \$3,000 yearly Road Bonds. 5s '12 J-J \$280,000. July 1 '15-'42 BONDED DEBT Sept 22 '14. \$ 304,000 Assessed valuation '14 (3-5 act.).. 9,091,200 County tax (per \$ Inside 27.00 \$1,000) '14 { Outside. 29.00 Population in 1910. 8,041 INTEREST at Hollister.

SAN BERNARDINO.

This city is located in San Bernardino County. Incorporated 1886. An amendment to the city charter was adopted on April 18, 1913 and subsequently approved by the Legislature, increasing the borrowing capacity to 15% of the assessed valuation. Population 1910, 12,779. Water Bonds. 4s '03 A-O \$118,175c. Apr 1 '15-'43 4s '03 A-O 48,300c. Apr 1 '15-'43 Improvements Bonds.—(Tax Exempt.) 4 1/2 s '08 A-O \$93,500c. 1915-1948 BONDED DEBT Sept '14. \$ 262,725 Assessed valuation { Non operative. 4,686,885 '13-'14 { Operative. 1,258,731 Total tax (per \$1,000) '14-'15. 32.00 INTEREST is payable at City Treasurer's office and in New York.

SAN BERNARDINO HIGH S. D.

This district not only includes the city of San Bernardino, but also adjacent territory. 5s g '14 A-O \$250,000. (Due \$5,000 yearly from 6 to 25 years inclusive and \$10,000 yearly from 26 to 40 years inclusive.) BONDED DEBT May '14. \$ 250,000 Assessed valuation { Non operative. 5,648,275 '13-'14 { Operative. 1,393,052 Real value (estimated). 12,000,000 INTEREST at County Treasurer's office.

SAN DIEGO

This is the county seat of San Diego Co. Incorporated Jan. 1, 1835. All bonds are tax-exempt. All bonds due part yearly. Population 39,578.

Reservoir Bonds. 4 1/2 s '07 J-D \$123,933c. June 1 '15-'45 Sewer Bonds. 4 1/2 s '03 J-J \$101,500c. July 1 '15-'43 4 1/2 s '05 A-O 58,125c. Oct 1 '15-'45 4 1/2 s '07 J-D 42,394c. June 1 '15-'43 4 1/2 s '07 J-D 1,148c. June 1 '15-'17 4 1/2 s '07 J-D 9,334c. June 1 '15-'33 4 1/2 s '07 J-D 889c. June 1 '15-'16 4 1/2 s '07 J-D 27,112c. June 1 '15-'42 4 1/2 s '04 85,000c. 1948 4 1/2 s 24,050c. 1950 4 1/2 s 2,000c. 1918 4 1/2 s 5,900c. 1926 4 1/2 s '11 J-J 68,500c. Jan 1 '15-'48 4 1/2 s '13 114,000c. 1952 Refunding Bonds. 4 1/2 s '98 J-J \$156,000c. Jan 1915-'38 Fire Department Bonds. 4 1/2 s '03 \$26,000c. July 1 '15-'40 4 1/2 s '07 52,000c. June 1 '15-'40 4 1/2 s '12 75,000c. 1952 Water Bonds. 4 1/2 s '01 J-J \$ 406,000c. July 1 '15-'41 4 1/2 s '03 J-J 144,275c. July 1 '15-'43 4 1/2 s '05 A-O 41,850c. Oct 1 '15-'45 4 1/2 s '07 J-D 48,608c. June 1 '15-'47 4 1/2 s '07 J-D 216,891c. June 1 '15-'45 4 1/2 s '11 J-J 313,000c. Jan 1 '15-'48 4 1/2 s '12 275,000. 1952 4 1/2 s '12 J-J 323,000c. 1952 4 1/2 s '13 J-J 2,437,500c. Jan 1 '15-'52 5s g '14 A-O 705,000c. Apr 1 '15-'54 4 1/2 s '14 J-J 1,500,000c. July 1 '15-'54

Street Bonds. 4 1/2 s '12 \$51,250c. 1952 Boulevard and Road Bonds. 4 1/2 s '07 J-J \$56,000c. June 1 '15-'42 Cemetery Road Bonds. 4 1/2 s '07 J-D \$1,500c. June 1 '15-'17 Concrete Culvert Bonds. 4 1/2 s '07 J-D \$39,500c. June 1 '15-'41 Park Bonds. 4 1/2 s g J-J \$925,000c. 1950 5s g '13 M-S 828,750c. Sept 1 '15-'53 Playground-Purchase Bonds. 4 1/2 s '13 \$71,250. 1952 Wharf and Harbor Bonds. 4 1/2 s '11 J-J \$950,000c. Jan 7 '15-'51 Municipal Improvement Bonds. 4 1/2 s '12 J-J \$9,000c. 1932 TOTAL DEBT Sept 1 '14. \$10,341,734 Assessed valuation '14 (1/2 act.).. 84,993,931 City tax rate (per \$1,000) '14. 15.70 INTEREST at City Treasurer's office and at National Park Bank, New York.

SAN DIEGO SCHOOL DISTRICT.

4s g '06 July \$ 72,000c. July 1 '15-'26 5s '07 July 130,000c. July 5 '15-'27 4 1/2 s '09 s-an 45,000c. 1921-1929 5s '13 A-O 350,000c. 1919-1953 BONDED DEBT Sept '14. \$ 597,000 Assessed valuation '13 (2-3 act.).. 50,356,208 School tax rate (per \$1,000) '13. 8.00 INTEREST at County Treasurer's office.

SAN DIEGO HIGH SCHOOL DISTRICT.

5s g '05 M-S \$ 99,000c. Sept '15-'25 5s '11 Feb 200,000c. Feb 6 '17-'51 BONDED DEBT Sept '14. \$ 299,000 Assessed valuation '13 (2-3 act.).. 50,356,280 School tax rate (per \$1,000) '12. 8.00 INTEREST at County Treasurer's office.

SAN DIEGO COUNTY.

San Diego is the county seat. Highway Bonds. 4 1/2 s '09 A-O \$1,095,000c. Oct 1 '15-'49 BONDED DEBT Oct '14. \$ 1,095,000 Sinking fund Sept '14. 50,329 Assessed valuation '14 (40% act.) 75,780,118 State and county tax { Inside 11.90 (per \$1,000) '14. { Outside. 18.50 Population in 1910. 61,665 INTEREST at County Treasurer's office.

SAN FRANCISCO.

San Francisco is in San Francisco County. Financial statement given below is for both city and county. At an election held Dec. 10, 1912, 17 amendments to the city charter were adopted. An agreement has been reached between the city and the Spring Valley Water Co. on a plan of condemnation proceedings. The Board of Supervisors on Jan. 5, 1914, passed an ordinance formally accepting the water supply and power rights in the Hetch-Hetchy Valley, granted in the bill passed by Congress in 1913. The \$5,000,000 5% exposition bonds given in table below are not figured in the 15% debt limit. These bonds were voted Nov. 15, 1910. See remarks under State of California for constitutional amendments giving authority to issue these and other bonds. On Aug. 26, 1913, the voters authorized the issuance of \$3,500,000 municipal-railway-system bonds. Up to March 20, 1914, \$1,802,500 had been disposed of.

Golden Gate Park Bonds. 3 1/2 s '04 J-J \$246,000c. July 1 '15-'44 Library Bonds. 3 1/2 s '04 J-J \$328,800c. July 1 '15-'22 Mission Park Bonds. 3 1/2 s '04 J-J \$219,000c. July 1 '15-'44 Playground Bonds. 3 1/2 s '04 J-J \$555,000c. July 1 '15-'44 Hospital Bonds. 5s '08 J-J \$1,800,000. July 1 '15-'32 Hospital-Jail Completion Bonds. 4 1/2 '13 A-O \$629,000. Apr 1 '16-'37 Sewer Bonds. 5s '08 J-J \$3,629,000c. July 1 '15-'54 3 1/2 s '04 8,000c. Polytechnic High-School Bonds. 4 1/2 s '10 J-J \$575,000c. July 1 '14-'37 Fire-Protection Bonds. 5s '08 J-J \$5,200,000c. July 1 '16-'55 Garbage Disposal Bonds. 5s '08 J-J \$672,000c. July 1 '15-'30 School Bonds. 3 1/2 s '04 J-J \$ 785,400c. July 1 '14-'16 5s '08 J-J 4,800,000c. July 1 '15-'38 Street Bonds. 3 1/2 s '04 J-J \$506,250c. July 1 '15-'19 City Jail and Hall of Justice. 3 1/2 s '04 J-J \$104,400c. July 1 '15-'20 5s '08 J-J 850,000c. July 1 '15-'31 Water-Supply Bonds. 4 1/2 s '10 J-J \$ 100,000. Jan 1 1915 4 1/2 s '10 J-J 1,212,000c. 1920-1964 Geary Street Ry. Bonds. 4 1/2 s '10 J-J \$1,900,000c. July 1 '15-'34 Market Street Ry. Bonds. 4 1/2 s '10 \$69,000c. Union Street Ry. Bonds. 5s g '13 J-D \$1,802,500c. Dec 1 '17-'51 Exposition Bonds. 5s '12 M-N \$5,000,000. (Payable \$200,000 yearly beginning May 1 '17) City-Hall and Civic-Centre Bonds. 5s '12 J-J \$7,480,000c. July 1 '17-'60 Special bonds made payable by statute from taxes on lands benefited: Montgomery Ave. bonds. \$1,579,000 Dupont Street bonds, 7s, amount outstanding. 285,000 Both the Dupont St. and the Montgomery Ave. bonds have long been in default, but they were not obligations of the municipality. Holders of Montgomery Ave. bonds brought suit against the State to recover the face value and interest aggregating \$2,000,000. The Superior Court holds that the State is not liable. Appeal was taken, which up to March 25, 1914, was still pending. INTEREST is payable in gold in San Francisco.

TOTAL DEBT. SINKING FUNDS, etc. Mar. 20 '14 Oct. 31 '13 Total bonded debt. \$39,485,100 \$34,997,600 Sinking funds 592,433 36,488 Net debt \$38,892,667 \$34,961,112

CITY PROPERTY.—The following is a description of the property owned by the City and County of San Francisco, as transmitted to the State Comptroller by direction of the Board of Supervisors Oct. 13, 1913. The water, gas and electric-light plant are not owned by the city: Park reservations, public squares and improvements \$33,543,000 Fire department, lots and improvements, apparatus, etc. 3,930,130 Police department, lots, improvements and furnishings. 342,100 Auxiliary fire-alarm system. 5,496,000 City Hall, Hall of Justice, county jails, hospitals, amshouses, lots and improvements and furniture Channel St. lots from 9th to 18th streets 610,000 School lots, improvements, libraries, furniture, etc. 12,963,520 Garbage system. 684,756 Hetch-Hetchy lands. 1,240,440 County-line Water Co., lands and property 30,000 Geary Street railway. 1,616,625 Civic Centre lands. 5,700,000 Total \$71,907,871

SAN FRANCISCO—Concluded.
ASSESSED VALUATION AND TAX RATE.—Property is assessed at about 50% of its actual value. Assessment decreased in 1906, owing to earthquake.

	1913-14.	1912-13.
Real estate.....	\$461,282,132	\$447,777,237
Personal	64,965,404	62,652,079
Total	\$526,247,536	\$510,429,316
Tax (per \$1,000)....	22.42	20.50

Tax rate for city and county purposes for 1913-'14 is \$20.20 and for State purposes \$0.42 per \$1,000 of valuation.
 The amount of taxes levied in 1913-'14 for city and county purposes was \$11,577,445.79; for State purposes, \$221,023.96; total amount of taxes, \$11,798,469.75.

POPULATION.—In 1910 (Census), 416,912; in 1900 (Census), 342,782; in 1890, 298,997; in 1880, 233,959; in 1870, 149,473.

SAN JOAQUIN COUNTY.
 Stockton is the county seat.
Highway Bonds.
 5s g '09 J-J \$1,750,000.....1949
BONDED DEBT Mar '14.....\$ 1,750,000
 Assessed valuation '14 (3-5 act.)... 60,638,988
 State and County tax { Inside..... 14.50
 (per \$1,000) '14..... { Outside..... 18.50
 Population in 1910.....50,731
INTEREST at County Treasurer's office or at office of Kountze Bros., New York.

SAN JOSE.
 This city is in Santa Clara County. Incorporated 1850. Bonds tax-free. An election held November 2, 1911, favored annexing East San Jose to this city. In December, 1912, Port San Jose was annexed.

Municipal Improvement Bonds.
 4s g '06 A-O \$172,000.....Apr 1 '15-'46
High School Bonds.
 4½s g J-D \$43,125c.....June 1 '15-'37
Sewer Bonds.
 4½s g J-D \$23,000c.....June 1 '15-'37
 4½s '12 F-A 95,000.....Feb 1 '15-'52
City-Hall and Fire Bonds.
 4½s g F-A \$123,750c.....Aug 1 '15-'47
Park Bonds.
 4½s '12 F-A \$104,500.....Feb 1 '15-'52
Fire and Police Department Bonds.
 4½s '12 F-A \$57,000.....Feb 1 '15-'52
Incinerator Bonds.
 4½s '12 F-A \$47,500.....Feb 1 '15-'52
Bridge and Creek Bonds.
 4½s '12 F-A \$52,250.....Feb 1 '15-'52
Station Bonds.
 4½s '12 F-A \$1,900.....Feb 1 '15-'52
East San Jose Bonds (Assumed).
 5s '09.....\$54,000.....
 (Payable part yearly for 40 years.)
BONDED DEBT Jan 1 '14.....\$ 772,525
 Total assessed valuation '13-'14..... 24,177,405
 (Assessment 60-70% actual value.)
 City tax rate (per \$1,000) '13..... 12.40
 Population in 1910.....28,946
INTEREST at City Treasurer's office.

SAN JOSE SCHOOL DISTRICT.
 4s g '07 Jan \$189,265c.....Jan 1 '15-'47
 5s '08 M-N 29,000c.....May 1 '15-'43
BONDED DEBT Apr '14.....\$ 219,000
 Assessed valuation '13 (3-5 act.)... 23,640,756
INTEREST at County Treasurer's office.

SAN JOSE HIGH SCHOOL DISTRICT.
 4s Jan \$127,000.....Jan 1 1927
 5s '08 M-N 14,000c.....May 1 '15-'28
BONDED DEBT Apr '14.....\$ 33,000
 Assessed valuation '13 (3-5 act.)... 23,640,756
 School tax rate (per \$1,000) '12..... .65
INTEREST at County Treasurer's office.

SAN LUIS OBISPO.
 This city is in San Luis Obispo County.
Water Bonds.
 5s '99.....\$56,000.....1939
Sewer Bonds.
 5s '99.....\$26,100.....1939
Improvement Bonds.
 5s '09.....\$171,000.....1949
BONDED DEBT May '15 '13.....\$ 142,000
 Assessed valuation..... 3,382,243
 Tax rate (per \$1,000) '11..... 23.30
 Population in 1910.....5,157
INTEREST at City Treasurer's office.

SAN LUIS OBISPO COUNTY.
 San Luis Obispo is the county seat. Bonds tax-free. Population, 1910, 19,383.
Wharf (Red. after 10 yrs. from issue).
 5s g '06 July \$32,000c.....July 1 '15-'30
 5s g '06 July 42,000c.....July 1 '15-'35
BONDED DEBT Sept 24 '14.....\$ 74,000
 Assessed valuation '14-'15..... 18,338,866
 State and county tax { Inside..... 16.20
 (per \$1,000) '14..... { Outside..... 22.00
INTEREST at County Treasurer's office.

SAN MATEO COUNTY.
 Redwood City is the county seat.
Highway Bonds.
 5s '13 J-J \$1,250,000.....July 1 '17-'42
Court-House Bonds.
 4s g '06 M-S \$135,397c.....Sept 1 '14-'46
BONDED DEBT July 1 '13.....\$ 491,500
 Assessed valuation '13..... 29,479,940
 State and county tax { Inside..... 10.50
 (per \$1,000) '13..... { Outside..... 16.50
 Population in 1910.....26,585
INTEREST at County Treasurer's office.

SANTA ANA.
 This city is in Orange County. Incorporated June 1, 1886. Bonds tax-free. Population 1910, 9,800.
Water Bonds.
 5s '05 F-A \$77,500r.....Feb 1 '15-'45
 4½s '11 M-S 18,000.....Mar 1 1931
 5s '14 s-a 63,000.....1915-1954

Sewer Bonds.
 4½s '98.....\$40,625c.....Apr 1938
City Hall.
 4½s '04.....\$11,000r.....Nov 1924
School Bonds.
 4½s '04.....\$3,000.....Nov 1915
Fire Bonds.
 5s '14 s-a \$12,000.....1915-1938
BONDED DEBT Apr 28 '13.....\$ 152,625
 Assessed value (35% act.) '12..... 6,417,800
 City tax (per \$1,000) '12..... 12.00
INTEREST payable at Treasurer's office.

SANTA BARBARA.
 Santa Barbara is in Santa Barbara County. Incorporated March 9, 1874.
Main Sewer Bonds.
 4½s g '03 F-A \$10,150c.....Aug 1 '15-'43
Bridge Bonds.
 4½g '03 F-A \$14,500c.....Aug 1 '15-'43
High-School Bonds.
 5s '01 Jan \$40,500c.....Jan 10 '15-'41
Oak Park Bonds.
 4½s '04 F-A \$11,250c.....Aug 15 '15-'44
Water Bonds.
 4½s '01 J-J \$ 42,000c.....July 1 '15-'41
 4½s '03 F-A 145,000c.....Aug 1 '15-'43
Water Works Extension Tunnel.
 4½s '08 M-S \$170,000c.....Sep 1 '15-'48
 4½s '10 A-O 180,000c.....Oct 1 '15-'50
Mission Tunnel.
 5s M-N \$116,000.....Nov 1 '15-'33
Boulevard Bonds.
 4½ '07 M-S \$42,500c.....Sept 3 '15-'47
 4½ '03 F-A 36,250c.....Aug 1 '15-'43
Street Bonds.
 4½s '09 J-J \$37,625c.....July 1 '15-'49
BONDED DEBT July 1 '14.....\$ 868,325
 Sinking fund..... 27,749
 Assessed valuation '13 (3-5 act.)... 9,893,030
 City tax rate (per \$ Inside..... 14.00
 \$1,000) '12-'13..... { Outside..... 12.60
 Population in 1910.....11,659
INTEREST on water works extension tunnel and street bonds at Kountze Bros., N. Y. and City Treasurer's office; other bonds at City Treasurer's office.

SANTA BARBARA COUNTY.
 Santa Barbara is the county seat.
Road Bonds.
 6s '11 J-J \$34,000c.....July '15-'31
 6s '11 A-O 75,000c.....\$5,000 yearly
 6s '12 ann 45,000c.....July 22 '15-'32
 6s '13 ann 34,000c.....July 1915-30
 County has no general bonded debt.
 Road dist. debt Oct 6 '14.....\$ 188,000
 Assessed valuation '14 (70% act.) 29,154,461
 State and county tax { Inside..... 16.00
 (per \$1,000) '14..... { Outside..... 20.00
 Population in 1910.....27,738
INTEREST at County Treasurer's office.

SANTA CLARA.
 This town is in Santa Clara County. Incorporated March 6, 1872. Pop'n 1910, 4,348.
Gas Bonds.
 5s '00 J-J \$19,500c.....Jan 1 '15-'40
Water, Light and Power Bonds.
 4½s '07 M-N \$17,325c.....May 1 '15-'47
Sewer Bonds.
 4½s '07 M-N \$24,750c.....May 1 '15-'47
Water Bonds.
 5s '09 M-N \$31,500c.....May 1 '15-'35
School Bonds.
 5s g '05 J-J \$38,750.....Jan 2 '15-'45
 4½s '07 M-N 675.....May 1 '15-'47
 5s '12..... 58,500.....
Fire Apparatus Bonds.
 5s '12.....\$5,362.50.....
BONDED DEBT May 1 '14.....\$ 205,691
 Local impt. bonds (included)..... 9,328
 Assessed valuation '14 (3-5 act.)... 2,417,553
 Total tax rate (per \$1,000) '14..... 14.75
INTEREST payable at Treasurer's office.

SANTA CLARA COUNTY.
 San Jose is the county seat.
 4s '07 Jan \$300,000c.....1947
BONDED DEBT Apr '14.....\$ 300,000
 Assessed valuation '13..... 80,072,624
 State and county tax { Inside..... 11.50
 (Per \$1,000) '13..... { Outside..... 15.60
 Population in 1910.....83,538
INTEREST at County Treasurer's office.

SANTA CRUZ.
 This city is in Santa Cruz County. Commission government adopted Jan. 31, 1911. City's liability on Water Co. bonds assumed by it sustained by U. S. Circuit Court of Appeals on Jan. 13, 1913.
Wharf and Bridge Bonds.
 5s '14 J-J \$182,000c.....Jan 15 1954
Refunding Bonds.
 4s '94 Apr \$189,000c.....1934
Water-Plant Purchase Bonds.
 5s '13 F-A \$220,000.....Feb 1 1930
BONDED DEBT Apr 1 '14.....\$ 591,000
 Assessed val. '13 (abt. 1-3 act.)... 7,286,555
 Total tax rate (per \$1,000) '13..... 14.80
 Population in 1910.....11,146
INTEREST at City Treasury.

SANTA CRUZ HIGH SCHOOL DIST.
Building Bonds.
 5s g '14 M-S \$160,000c.....Mar 25 '19-'50
BONDED DEBT Sept '14.....\$ 160,000
 Assessed valuation (real and pers.) 7,588,800
 Real valuation between \$15,000,000 & 20,000,000
 Population in 1914 (estimated).....12,000
INTEREST at County Treasurer's office in Santa Cruz.

SANTA CRUZ SCHOOL DISTRICT.
Building Bonds.
 5s g '14 M-S \$80,000c.....Mar 25 '15-'54
BONDED DEBT Sept '14.....\$ 100,000
 Assessed valuation (real and pers.) 7,588,800
 Real valuation between \$15,000,000 & 20,000,000
 Population in 1914 (estimated).....12,000
INTEREST at County Treasurer's office in Santa Cruz.

SANTA MONICA.
 This city is in Los Angeles County. Incorporated Nov. 20, 1886; chartered 1907. Purchase of local water plant is proposed.
Sewer and Incinerator Bonds.
 5s '07 M-N \$132,000.....Nov 1 '15-'47
Fire Apparatus (part yearly).
 5s '06.....\$15,000.....1941
Crematory Bonds (part yearly).
 5s '06.....\$7,500.....1926
Storm-Drain Bonds (part yearly).
 5s '06.....\$11,500.....1934
Sewer Bonds (part yearly).
 6s '97.....\$26,000.....1937
 5s '06..... 32,000.....1943
City-Hall Bonds (part yearly).
 5s '02.....\$26,000.....1937
Bridge Bonds (part yearly).
 5s '02.....\$16,000.....1927
 5s '06..... 4,000.....1919
 5s '06..... 12,500.....1936
BONDED DEBT Sept 19 '14.....\$ 273,000
 Assessed valuation '14 (½ act.)... 15,747,455
 Tax rate (per \$1,000) '14..... 14.00
 Population in 1910.....7,847

SANTA MONICA CITY SCHOOL DIST.
 4½s '05.....\$ 8,000.....Nov 7 1915
 4½s '06..... 8,000.....June 21 1915
 5s '08 M-N 30,000.....1918-1932
 5s g '11 A-O 25,000.....Apr 1 '17-'29
 5s '12..... 80,000.....Oct 1 '17-'52
BONDED DEBT Sept 21 '14.....\$171,000
INTEREST at County Treasurer's office.

SANTA MONICA HIGH SCHOOL DIST.
Polytechnic High-School Bonds.
 5s g '11 A-O \$200,000.....Apr 1 '17-'51
High-School Bonds.
 5s '12 A-O \$70,000.....Oct 1 '17-'52
TOTAL DEBT Sept 21 '14.....\$ 270,000
 Assessed valuation..... 11,342,155
INTEREST payable at County Treasury.

SANTA ROSA.
 This city is in Sonoma County. Incorporated in 1872.
Water Bonds.
 4s '95 Jan \$82,500c.....1915-1925
 4s '05 Jan 62,500c.....1915-1925
Sewer Bonds.
 4s '05 Jan \$56,000c.....1915-1925
Fire-Engine Bonds.
 4s '05 Jan \$1,000c.....1914-1925
BONDED DEBT March '14.....\$ 242,100
 Assessed valuation '13-'14 (3-5 act.) 6,429,885
 Total tax rate (per \$1,000) '13..... 14.00
 Population in 1910.....7,817
 INT. at Cy. Tr. of. and Un. Tr. & Sgs Bk.

SANTA ROSA—COURT HOUSE SCHOOL DISTRICT.
High School Bonds.
 5s '11 A-O \$80,000.....1951
Grammar School (Part yearly).
 4½s.....\$24,000.....July 1 1925
BONDED DEBT April 28 '14.....\$80,000
 High School District.....\$80,000
 Grammar School District..... 24,000

SAUSALITO.
 This town is in Marin County.
Water Bonds.
 5s '09 J-J \$87,500c.....Jan 15 '15-'49
BONDED DEBT Jan '14.....\$ 87,500
 Assessed valuation '13-'14 (3-5 act.) 2,061,150
 Total tax rate (per \$1,000) '13..... 13.70
 Population in 1910.....2,383

SIERRA MADRE.
 This city is in Los Angeles County.
Water-Works Bonds (part yearly).
 5s '10 s-an \$ 40,000c.....
 5s '11 s-an 111,000c.....
 5s '12 s-an 75,000c.....1929-1953
 5s '13 s-an 20,000c.....
 5s '13 J-D 111,000c.....
 5s '13 s-an 20,000c.....
 5s..... 36,000.....
BONDED DEBT April '14.....\$ 471,000
 Assessed valuation '13 (½ act.)... 1,575,000
 City tax rate (per \$1,000) '13..... 15.00
 Population in 1910.....1,303
INTEREST at City Treasurer's office.

SOLANO COUNTY.
 Fairfield is the county seat.
Court-House Bonds.
 5s g '09.....\$200,000c.....Dec 1 '15-'34
BONDED DEBT March '14.....\$ 210,000
 Assessed val. '13 (65% act.)... 25,406,952
 State & Co. tax rate { Inside..... 13.00
 (per \$1,000) '13 { Outside..... 17.00
 Population in 1910.....27,559
INTEREST payable at County Treas. office.

SONOMA COUNTY.
 Santa Rosa is the county seat.
Court-House Bonds (Tax-Exempt).
 4½ g '07 June \$268,000c.....June 30 '14-'42
BONDED DEBT March '14.....\$ 268,000
 Assessed valuation '13..... 40,781,686
 State & Co. tax { Inside..... 12.00
 (per M) in '13 { Outside..... 16.00
 Population in 1910.....48,394
INTEREST payable at County Treas. office.

SOUTH PASADENA.
 This city is in Los Angeles County.
Bridge Bonds.
 4½s '11.....\$28,000.....
Fire Prot., Paving and Cy-Yard Bonds.
 5s g '14 J-J \$50,000c.....Jan 2 '15-'54
Sewer Bonds.
 5s g '14 J-J \$120,000c.....Jan 2 '15-'54
BONDED DEBT Sept 21 '14.....\$ 198,000
 Assessed val. '14 { Non-operative... 5,792,415
 { Operative..... 644,720
 Tax rate (per \$1,000) '14..... 15.00
 Population in 1910.....4,649
INTEREST at City Treasurer's office.

(Compiled by the Commercial and Financial Chronicle.)

SOUTH SAN JOAQUIN IRR. DIST.
A district in San Joaquin County. The bonds of 1914 are part of an issue of \$790,000.

Irrigation Bonds.
5s '10 J-J \$1,875,000c.....July 1 '31-'40
5s '13 J-J 1,170,000c.....Apr 18 1943
(Bonds are subject to call at any interest time by mutual agreement.)

Reservoir-Construction Bonds.
5s '14 J-J \$790,000.....July 1 '34-'43
BONDED DEBT April '14.....\$3,835,000
Assessed valuation, real, '13.....3,000,000
(Assessment about 30% actual value.)
Total tax rate (per \$1,000) '12.....\$40.00
INT. at Dist. Treas. office in N. Y.

STOCKTON.
Stockton is in San Joaquin County. Incorporated Aug. 5, 1850. Population 1910, 23,253.

Sewer Bonds.
4s\$35,100.....Sept 1 '40
4s31,000.....Nov 1 '46

Street-Improvement Bonds.
5s g '06 F-A \$154,275c.....Feb 1 '47
BONDED DEBT April 1 '14.....\$ 222,375
Assessed valuation '13 (2-3 act.)... 26,269,804
City tax rate (per \$1,000) '14..... 15.00
INTEREST at First National Bank.

STOCKTON SCHOOL DISTRICT.
(Part due each year.)
6s '11 M-N \$72,000c.....1936
5s July \$52,500c.....July 1 '15-'21
(Part due yearly on July 1.)

High-School Bonds.
5s '13 J-J \$98,000c.....

Grammar-School Bonds.
5s '13 J-J \$498,000c.....
(Part due yearly on July 1.)
TOTAL BOND. DT. March '14...\$ 720,500
Assessed valuation '14 (3-5 act.)... 22,177,155
School tax (per \$1,000) '14..... 9.00
INTEREST at Stockton Savings Bank.

SUTTER CO. LEVEE DIST. No. 1.
This district (P. O. Yuba City) is in Sutter County.

6s '08 s-a \$230,000c.....1933
6s '10 s-a 100,000c.....1935
BONDED DEBT March '14.....\$ 330,000
Assessed valuation '13 (40% act.)... 3,105,220
Tax rate (per \$1,000) '13..... 45.00

TULARE.
This city is in Tulare County. The voters in February, 1913, defeated a proposition to purchase local water company for \$44,000.

Water Bonds.
5s g '12 J-D \$100,000c.....Dec 1 '17-'49

Municipal-Improvement Bonds.
5s g '12 J-D \$7,500c.....Dec 1 '14-'28
5s g '12 J-D 1,900c.....Dec 1 '14-'32
BONDED DEBT May '13.....\$ 186,000
Assessed valuation '12.....1,407,620
Tax rate (per \$1,000) '12..... 16.00
Population in 1910.....2,758
INTEREST at City Treasurer's office.

TURLOCK.
This city is in Stanislaus County.

Sewer Bonds.
5s '09\$25,650.....1949
5s '109,750.....1920

Water Bonds.
5s '09\$24,700.....1949
5s '1014,625.....1920

Water and Sewer Bonds.
'12\$25,000.....
BONDED DEBT April 1 '12.....\$ 74,725
Assessed valuation '12.....1,113,045
Total tax rate (per \$1,000) '12..... 13.70
Population in 1910.....1,573

TURLOCK IRRIGATION DIST.
This district (P. O. Turlock) is in Stanislaus County.

5s '02 J-J \$1,156,000c.....July 1 '22-'41
5s '05 J-J 200,000c.....Jan 1 '26-'35
5s '10 J-J 100,000c.....July 1 '31-'40
5s '11 J-J 1,040,400c.....1932-1941
BONDED DEBT May '14.....\$ 2,396,400
Assessed valuation '13 (45% act.)... 10,099,470
District tax rate (per \$1,000) '13... 35.50
Population in 1913 (est.)..... 16,000
INTEREST at Commercial Bank, Turlock.

VALLEJO.
This city is in Solano County. Incorporated March 30, 1868. Commission government adopted Feb. 21, 1911.

Refunding Bonds.
5s '95 F-A \$16,800c.....Aug 1 '15-'35

Water Bonds.
5s '02 M-N \$36,000c.....May 1 '15-'22
5s '05 M-N 49,500c.....May 1 '15-'25
5s '08 M-S 55,000c.....Sept 1 '13-'25
5s g '11.....76,053c.....Jan 1 '15-'31

Harbor-Improvement Bonds.
5½s '14 M-N \$142,000.....May 1 '15-'35
BONDED DEBT April 23 '14.....\$ 248,600
Assessed valuation '13 (3-5 act.)... 5,525,108
City tax rate (per \$1,000) '13..... 17.50
Population, 1910.....11,324
INTEREST at City Treasurer's office.

VALLEJO HIGH SCH. DIST.
5s '10 s-an \$54,000c.....1914-1935
BONDED DEBT March '14.....\$ 54,000
Assessed valuation '13 (65% act.)... 4,425,672
School tax rate (per \$1,000) '13..... 5.70
Population in 1913 (estimated).....13,000
INTEREST at City Treasurer's office.

VAN NUYS GRAM. SCH. DIST.
A district in Los Angeles County.

Building Bonds.
5s '12 Feb \$50,000.....
TOTAL BOND. DT. April 1 '14.....\$ 50,000
Assessed valuation '13.....4,486,340

VAN NUYS HIGH SCH. DIST.
5½s '14 s-an \$120,000.....1915-1954

VENICE.
This city is in Los Angeles County. Incorporated Feb. 17, 1904.

BONDED DEBT March '14.....\$ 68,000
Sinking fund2,136
Assessed valuation '13-'14.....11,716,659
(Assessment about 60% actual value.)
City tax (per \$1,000) '13.....\$10.00
Population in 1914 (est.).....6,500

INTEREST at First National Bank, Venice.
VENICE CITY SCHOOL DIST.
Building Bonds.
5s\$92,000.....
BONDED DEBT April '14.....\$ 102,000
Assessed valuation '13.....7,334,000
INTEREST at County Treasurer's office.

VENICE UNION HIGH S. D.
Building Bonds.
5s '13 F-A \$250,000.....Aug 1 '19-'52

VENTURA COUNTY.
Ventura is the county seat.

Court-House Bonds.
5s g '12 F-A \$140,000c.....Feb 1 '15-'42

Bridge Bonds.
5s '11 F-A \$252,000c.....Feb 1 '15-'42
BONDED DEBT Sept 20 1914.....\$ 392,000
Assessed valuation '14 (3-5 act.)... 30,971,620
State & Co. tax { Inside 13.00
(per \$1,000) '13 { Outside..... 16.00
Population in 1910.....18,347
INTEREST at County Treasurer's office.

VENTURA UNION HIGH S. D.
Building Bonds.
5s g '11 J-J \$66,000c.....1915-1936
BONDED DEBT Sept 20 '14.....\$ 66,000
Assessed valuation '14-'15 (3-5 act.) 7,455,535
School tax rate (per \$1,000) '14-'15... 3.40
Population in 1913 (est.).....6,000
INTEREST at County Treasurer's office.

VISALIA.
County seat of Tulare County. Incorporated Feb. 27, 1874. Bonds are taxable.

School Bonds.
6s July \$5,750c.....1937

Sewer Bonds.
5s J-J \$54,000c.....1940

Sewer, Bridge and City-Hall Bonds.
5s J-J \$128,100c.....1948
BONDED DEBT Sept 21 '14.....\$ 187,850
Assessed valuation '14 (3-5 act.)... 3,608,335
Total tax rate (per \$1,000) '14..... 14.40
Population in 1910.....4,831
INTEREST at First Nat. Bank, Visalia.

VISALIA HIGH SCHOOL DIST.
5s '12\$19,000.....
6s '1050,000.....

WHITTIER.
City is in Los Angeles County. Incorporated Feb. 21, 1898.

Water-Works Bonds.
5s g J-J \$25,000c.....Jan 1 '15-'39
5s g '05 J-D 85,250c.....June 1 '13-'45
5s M-S 3,250c.....Mch 1 '15-'40

Sewer Bonds.
5s '09 A-O \$96,250c.....June 1 '15-'49

Fire and Reservoir.
5s A-O \$3,500c.....Apr 1 '15-'42
BONDED DEBT Sept 30 '14.....\$ 213,250
Floating debt5,126
Sinking fund21,539
Assessed valuation '14 (½ actual)... 3,986,631
City tax rate (per \$1,000) '14..... 16.10
Population, 19104,550
INTEREST at City Treasurer's office.

STATE OF OREGON.

ITS DEBT, RESOURCES, ETC.

Organized as a Territory (Act Aug. 14 1848)...Aug. 14 1848
Admitted as a State (Act Feb 14 1859).....Feb. 14 1859
Total area of State (square miles).....96,030
State CapitalSalem
Governor (term expires in January 1915).....Oswald West
Secretary of State (term expires Jan. 2 1917)...B. W. Olcott
Treasurer (term expires Jan. 2 1915).....T. B. Kay
LEGISLATURE meets biennially in odd years on the second Monday in January, and there is no limit to length of sessions; but members of the Legislature can draw pay only for 40 days' services in the aggregate.

HISTORY OF DEBT.—For the early history of Oregon's State debt see Commercial and Financial Chronicle's "State and City Supplement" of April, 1893, page 146.
Today Oregon has no bonded debt.
On Jan. 1, 1914, the amounts held in the irreducible trust funds were as follows: School fund, \$6,405,950.64; Agricultural College fund, \$202,113.99; and University fund, \$103,635.96. On the same date the cash on hand amounted to \$710,314.14.

VALUE OF TAXABLE PROPERTY AND TAX RATE.—

Years	Property	Taxable Property	Tax per 1,000	Years	Property	Taxable Property	Tax per 1,000
1913.....	\$954,282,374	\$1,000	1903.....	\$173,559,889	\$7.06		
1912.....	905,011,667	1.20	1902.....	148,099,602	5.13		
1911.....	890,644,164	3.44	1900.....	117,804,874	5.70		
1910.....	844,887,708	1.64	1895.....	144,445,426	4.80		
1909.....	694,727,632	2.20	1890.....	114,077,788	4.34		
1908.....	598,133,963	2.13	1885.....	77,188,694	3.10		
1907.....	581,558,918	1.98	1880.....	48,483,174	7.00		
1906.....	427,379,978	2.39	1875.....	41,436,086	...		
1904.....	188,058,281	5.45					

DEBT LIMITATION.—Constitutional inhibitions as to the creation of debt are all found in Article XI, sections 5 to 10 inclusive, of the Constitution of 1857. We quote these sections in full.

SECTION 5.—Restrictions upon Municipal Corporations.—Acts of Legislative Assembly incorporating towns and cities shall restrict their power of taxation, borrowing money, contracting debts and loaning their credit.

SECTION 6.—State not to be Stockholder in Company.—The State shall not subscribe to or be interested in the stock of any company, association or corporation.

SECTION 7.—Credit of State not to be Loaned—Limitation upon Powers of Contracting Debts.—The Legislative Assembly shall not lend the credit of the State nor in any manner create any debt or liabilities which shall singly or in the aggregate, with previous debts or liabilities, exceed the sum of fifty thousand dollars, except in case of war or to repel invasion or suppress insurrection, or (according to an amendment of 1912) to build and maintain permanent roads; and the Legislative Assembly shall not lend the credit of the State nor in any manner create any debt or liabilities to build and maintain permanent

roads which shall singly or in the aggregate, with previous debts or liabilities incurred for that purpose, exceed two per cent of the assessed valuation of all the property in the State; and every contract of indebtedness entered into or assumed by or on behalf of the State in violation of the provisions of this section shall be void and of no effect.

SECTION 8.—State not to Assume County Debt, Except in What Case.—The State shall never assume the debts of any county, town or other corporation whatever, unless such debts shall have been created to repel invasion, suppress insurrection or defend the State in war.

SECTION 9.—Prohibition upon Municipal Corporations.—No county, city, town or other municipal corporation, by vote of its citizens or otherwise, shall become a stockholder in any joint-stock company, corporation or association whatever or raise money for or loan its credit to, or in aid of, any such company, corporation or association.

SECTION 10.—Limitation upon Powers of County to Contract Debts.—No county shall create any debts or liabilities which shall singly or in the aggregate, with previous debts or liabilities, exceed the sum of five thousand dollars, except to suppress insurrection or repel invasion, or (according to constitutional amendment of 1910) to build and maintain permanent roads within the county; and debts for permanent roads shall be incurred only on approval of a majority of those voting on the question, and (according to an amendment adopted in 1912) shall not either singly or in the aggregate with previous debts and liabilities incurred for that purpose, exceed two per cent of the assessed valuation of all the property in the county.

It will be seen from the above that the power to limit the indebtedness of municipalities has been relegated to the Legislative Assembly. In 1903 the Legislature, acting under this authority, passed the following Act, Section 2722 of Bellinger & Cotton's Annotated Codes and Statutes:

The common council (of cities and towns) shall not in any manner create any debt or liability which shall singly or in the aggregate exceed the sum of two thousand five hundred dollars without first obtaining authority from the Legislative Assembly of this State to contract a debt or liability in excess of said sum.

The above limitation does not apply to bonds issued in anticipation of the collection of street and sewer assessments under the authority of any charter of any city of 2,500 or more inhabitants. See sections 2727 to 2735 of the Annotated Codes and Statutes.

As regards school districts, the general school law as amended by the State Legislature in 1901 (Bellinger & Cotton's Code, section 3389, paragraph 3) gives permission to school boards to issue bonds (prescribing the method) without special legislation, but stipulates that "in no case shall the aggregate of bonded debt in any school district exceed five per centum of the value of the taxable property of any such district." Further provision is made (Section 3415 of the Code) that the indebtedness of districts of the first class (those having over 1,000 children of school age) located in cities of over 75,000 inhabitants shall never exceed \$100,000—the 5% limit mentioned above applying to all districts of under 75,000 inhabitants.

TAXATION OF MUNICIPAL BONDS.—No legislation has been enacted, we were advised Dec. 12, 1911, by the Board of State Tax Commissioners, exempting from taxation bonds or other obligations of the State or its counties and municipalities.

POPULATION OF STATE.—The population of Oregon has been as follows in the years named:
1910672,765
1890313,767
187090,231
185013,294
1900413,536
1880174,768
186052,465

(Compiled by the Commercial and Financial Chronicle.)

ALBANY.

This city is in Linn County.
6s J-D \$20,000.....June 1 1915
Refunding Bridge & Sewer Bonds.
5s A-O \$75,000c..... 1923
Sewer Bonds.
5s '13 J-J \$18,000.....Jan 1 1928
(Subject to call after Jan 1 1923.)
BONDED DEBT July 1913.....\$ 113,000
Paving bonds (add'l)..... 123,043
Warrants outstanding..... 46,642
Sinking fund..... 7,200
Assessed valuation 1912..... 3,527,850
Real value (est.)..... 7,000,000
City tax rate (per \$1,000) 1911..... 8.00
Population in 1910..... 4,275
INTEREST at fiscal agency in New York.

ASHLAND.

This city is in Jackson County. Bonds are tax-exempt.
Sewer Bonds.
4 1/2s '04 A-O \$13,000c.....Apr 1 '15-'27
Fire Protection Bonds.
.....\$5,000
Refunding Water Bonds.
5s '09 J-J \$10,000c.....July 1 '15-'16
.....30,000c.....July 1 1929
(The \$30,000 is subject to call after '19.)
Water Bonds.
4 1/2s '05 J-J \$23,000c.....July 1 1920
Street (Red. after 1 year from issue.)
6s '11 A-O \$15,500c.....Apr 1 1921
6s '09 M-S 12,000c.....Sept 1 1919
6s '10 J-J 24,000c.....July 1 1920
Electric Light Bonds.
4 1/2s '08 M-S \$40,000c.....Sept 1 '14-'29
4 1/2s '09 J-J 30,000c.....Jan 1 1929
(Subject to call after Jan 1 1919.)
5s g '10 J-J \$25,000c.....July 1 1930
(Subject to call after July 1 1920.)
Septic-Tank Bonds.
6s g '11 M-S \$7,000c.....Mch 10 1921
(Subject to call after March 1 1912.)
GEN. BD. DT. June 15 '14.....\$ 76,500
Water and light debt (add'l)..... 163,000
Assessment debt (add'l)..... 204,298
Assessed val. '13 (3-5 act.)..... 2,880,640
Total tax rate (per \$1,000) '13..... 38.50
Population 1910.....5,020
INTEREST payable in Ashland at Granite Sav. Bank, Citizens' Banking & Trust Co., U. S. Nat. Bank and First Nat. Bank.

ASHLAND SCHOOL DISTRICT NO. 5.
s-a \$7,000r.....Sept 1 1919
(Subject to call Sept 1 1909.)
5s J-J \$10,000r..... 1924
(Subject to call any time.)
5s '11 J-J \$75,000r.....Jan 1 1931
(Subject to call \$25,000 in 10 years and \$25,000 in 15 years.)
BONDED DEBT Sept 21 '14.....\$ 97,000
Assessed valuation '13 (3-5 act.)..... 3,488,165
School tax (per \$1,000) 1913..... 8.70
Population in 1914 (est.)..... 7,000
INTEREST payable at Nat. Park Bank, N. Y. City, or in Ashland.

ASTORIA.

Astoria is in Clatsop County. Incorporated 1865. Commission government rejected Dec. 13, 1911.
Funding Bonds. (x)
6s g A-O \$90,000c.....Apr 1917
Refunding Bonds. (†)
5s '11 M-N \$50,000c.....Nov 1 1931
Water Bonds. (*)
5s & 6s J-J \$300,000c.....1922 & 1925
5s g '11 s-a 45,000c.....1931
Bulkhead (Red. beg. Dec. 1923).
5s g '13 J-D \$100,000c.....Dec 1 1953
Dam and Reservoir Bonds. (*)
5s g '12 J-J \$80,000c.....Jan 1 1932
BONDED DEBT Sept 19 '14.....\$ 665,000
Assessed valuation '14..... 7,566,019
Total tax (per \$1,000) '13..... 44.00
Population in 1910.....9,599
INTEREST on bonds marked (*) at Chase National Bank, N. Y.; (x) at Kountze Bros., N. Y. City; (†) at National Park Bank, N. Y.

ASTORIA SCHOOL DISTRICT NO. 1
6s '91 J-J \$ 5,000c.....July 1 1921
5s '10 J-D 75,000.....June 1 1930
(Subject to call after June 1 1920.)
Building Bonds. (Red. beg. July 1 '24.)
5s '14 J-J \$20,000c.....July 1 1934
Refunding Bonds.
5s '03 F-A \$27,000c.....1923
(Subject to call after Aug 1 1913.)
5s '04 A-O \$12,000c.....Apr 1 1924
(Subject to call after April 1 1905.)
BONDED DEBT Sept '14.....\$ 120,000
Assessed valuation '13 (3-5 act.)..... 5,154,968
School tax (per \$1,000) '13..... 8.50
Population in 1914 (estimated).....15,000
INTEREST on issues of 1891 and 1910 payable in New York; on refunding bonds at office of County Treasurer.

BAKER CITY.

County seat of Baker County. Incorporated 1874. Commission government was adopted Oct. 3, 1910. All bonds are tax-exempt.
Sewer Bonds.
5s '03 J-J \$12,000c.....July 1 1923
Water Bonds.
5s g '00 J-J \$100,000c.....July 1 1920
5s '01 M-S 20,000c.....Sept 3 1921
5s '02 A-O 45,200c.....Apr 2 1922
5s '05 A-O 10,000c.....Apr 30 1927
5s g '11 J-J 90,000c.....July 1 1931
5s '14 M-S 98,851c.....Mar 1 1934
Refunding Water Bonds.
5s '10 A-O \$25,000c.....April 4 1930
Reservoir Bonds.
5s g '11 J-J \$25,000c.....July 1 1921
New City Hall Bonds.
5s '03 J-J \$46,000c.....July 1 1923
5s g '04 J-D 12,000c.....Dec 21 1924
Street Intersection Bonds.

5s g '11 J-J \$23,500c.....July 1 1931
5s '12 .. 5,503.72.....
5s '13 .. 8,826.36.....
Electric-Light Bonds.
5s g '13 J-D \$25,000c.....Dec 1 1933
GEN. BONDED DEBT July 1 '14 \$ 546,830
Assessment debt (additional)..... 200,103
Sinking Fund..... 45,000
Assessed valuation '13 (abt. act.)..... 5,768,060
Population 1910.....6,742
INT. payable in Baker City and N. Y.

BAKER CITY SCHOOL DISTRICT NO. 5
s '88 .. \$20,000.....
s '89 .. 15,000.....
s '01 .. 15,000.....
School Bonds (Red. begin in 1916).
5s g '08 J-J \$20,000c.....1926
Heating and Sanitary Plant Bonds.
5s '09 s-a \$25,000c.....1929
(Subject to call after 1919.)
Ref. Bonds (Red. beg. in 1921).
5s '11 J-D \$45,000c.....June 1 1931
BONDED DEBT Apr 1 '14.....\$ 92,000
Assessed valuation '13 (30% act.)..... 6,362,000
School tax (per \$1,000) '13..... 7.00
Population in 1910 (estimated).....8,000
INTEREST payable in Baker City or N. Y.

CLATSOP COUNTY.

Astoria is the county seat. Bonds below declared valid by State Supreme Court.
Road Bonds.
5s '14 A-O \$400,000.....Apr 1 1934
BONDED DEBT Sept 19 '14.....\$ 400,000
Assessed valuation '13 (equalized) 35,019,969
Population in 1910.....16,106
INTEREST at State fiscal agency in N. Y. City or at County Treasurer's office.

COLUMBIA COUNTY.

St. Helens is the county seat.
Road Bonds.
5s g '14 A-O \$ 60,000c.....Apr 1 1919
.....300,000c.....Apr 1 '24-29-34
BONDED DEBT Apr '14.....\$ 360,000
Assessed valuation '13..... 18,067,830
Total cash valuation..... 24,086,677
Population in 1910.....10,580
INT. at off. of Co. Treas. or in N. Y. City.

CORVALLIS.

This city is in Benton County.
Water Bonds (Red. beg. in 1916).
5s '06 J-J \$75,000c.....Jan 2 1936
5s '14 A-O 7,000c.....Apr 1 1954
Sewer Bonds.
5s '10 J-J \$144,000c.....July 1 1950
Fire-Department Bonds.
5s '10 J-J \$16,000c.....July 1 1950
Street-Improvement Bonds.
5s '10-'11.....\$28,746.51.....40 years
Bridge Bonds.
5s '13 J-J \$2,500c.....Jan 1 1953
Refunding Bonds.
5s '13 J-J \$51,397.08.....1953
GEN. BONDED DEBT Jan 27 '13.....\$ 242,644
Water debt (additional)..... 75,000
Assessment bonds (additional)..... 135,515
Warrant debt..... 51,397
Assessed valuation '13..... 2,273,749
Actual value (estimated)..... 4,500,000
Tax rate (per \$1,000) '12..... 35.70
Population in 1910.....4,652
While the water bonds are direct liabilities of the city, provision is made in the law for fixing the rate annually at a sum sufficient to cover the expenses, pay interest on bonds and provide a sinking fund that, by annual retirement, will pay the bonds in full at maturity.

DALLES CITY.

This city (P. O. The Dalles) is in Wasco County.
Sewer Bonds.
5s '12 J-J \$65,000c.....July 15 1933
6s M-N 8,250c.....1924
Sidewalk and Improvement Bonds.
6s J-D \$6,700.....1924
Water Bonds.
6s '91 J-D \$25,000c.....June 30 1916
5s '03 M-N 50,000c.....Nov 1 '17-'26
Refunding Bonds.
4s '95 M-N \$54,500c.....May 1 1920
City Hall Bonds.
6s '08 M-N \$28,900c.....May 1 1918
General Improvement Bonds.
5s '13 .. 12,000c.....1933
Street Bonds.
6s F-A \$ 9,000c.....1920
6s M-S 16,000c.....1920
6s J-D 8,400c.....1920
Street and Sewer Bonds.
6s M-N \$45,000c.....1924
GEN. BD. DEBT Sept 24 '14.....\$ 156,650
Water bonds (additional)..... 75,000
Assessment debt (additional)..... 85,100
Sinking fund Aug 31 '14..... 95,887
Assessed valuation '13 (70% act.) 4,211,000
Total tax (per \$1,000) '13..... 25.25
Population 1910.....6,834
INTEREST on bonds of 1912 payable at State fiscal agency in N. Y.; other interest at San Francisco, Cal., N. Y. Security & Trust Co., N. Y., and at City Treasurer's office.

EUGENE.

The city is in Lane County. Incorporated in 1864. The city owns property valued at \$842,000.
Refunding Bonds.
5s '10.....\$50,000c.....Aug 1 1915
5s '11 J-D 100,000c.....Aug 1 '20 & '30
5s '11 J-D 130,000c.....Dec 1 1936
Sewer Bonds.
4s '03 .. \$ 6,000c.....Oct 20 '15 & '18
4s '05 .. 5,000c.....Oct 20 '15 & '18
5s '12 M-S 183,500c.....Sept 1 1942
Paving Bonds.
5s '12 s-a 50,000c.....June 1 1922
6s '13 J-J 25,000c.....July 1 1923

6s '14 F-A 43,950c.....Feb 1 1924
(Subject to call after Feb 1 1915.)
6s '14 J-D \$20,100c.....June 1 1924
(Subject to call after June 1 1915.)
Water Bonds.
5s '08 .. \$300,000c.....Jan 1 1948
5s '10 .. 60,000c.....'20, '30 & '40
5s '14 .. 100,000c.....1939
Electric-Light Bonds.
6s '11 s-a \$25,000c.....Oct 1 1921
Light, Power and Water Bonds.
5 1/2s '11 J-D \$57,000c.....Dec 1 1926
City-Hall-Site Bonds.
5s '12 .. \$15,500c.....July 1 1922
Armory Building Bonds.
5s '14 July \$25,000.....July 1 1924
TOT. BD. DEBT July 19 '14.....\$ 1,185,430
Bancroft bonds (incl)..... 153,430
Water and power bonds (incl)..... 442,000
Floating debt Apr 1 '14..... 46,523
Sinking funds and cash..... 135,295
Assessed valuation '13 (equalized) 9,347,813
Real value (estimated)..... 12,000,000
City tax rate (per \$1,000) '13..... 12.50
Population 1910.....9,009

EUGENE SCHOOL DISTRICT NO. 4.

Site and Building Bonds.
4s s-a \$18,500r.....1921
4s s-a 32,000r.....1924
4 1/2s s-a 40,000c.....1929
5s '13 J-J 20,000c.....Jan 1 1933
(Subject to call beginning Jan 1 1923.)
5s '14 M-N \$110,000c.....May 1 1934
(Subject to call after May 1 1924.)
BONDED DEBT May '14.....\$ 220,500
Assessed val. '13 (real & pers.)..... 9,347,813
Real valuation (estimated)..... 11,684,760
Population in 1914 (estimated).....14,000
INTEREST on 1914 bonds at State fiscal agency in New York City.

GRANT'S PASS.

This city is in Josephine County. \$200,000 railroad bonds given below upheld by State Supreme Court on April 28, 1914.
Sewer Bonds.
5s .. \$19,000.....1940
Fire Auto Bonds.
6s .. \$5,500.....1921
Warrant-Funding Bonds.
5s '12 A-O \$80,000c.....Apr 1 1932
Municipal R. R. Bonds.
.....\$ 15,000.....1939
6s '14 J-J { 100,000.....1940-1943
{ 85,000.....1944
BONDED DEBT Sept 22 '14.....\$ 304,500
Warrant debt Sept 1 '14..... 2,392
Assessed valuation '13..... 3,000,000
Real valuation..... 6,500,000
Population in 1910.....3,980
INTEREST payable at City Treas. office.

HOOD RIVER

This city is in Hood River County.
Water Bonds.
5 1/2s '12 J-J \$36,000c.....July 1 1922
Street-Improvement Bonds.
6s '13 J-D \$10,805.36.....Dec 22 1923
(Subject to call any interest paying period after one year.)
GEN. BD. DEBT Sept 19 '14.....\$ 126,000
Assessment debt (additional)..... 116,420
Sinking fund (cash)..... 13,419
Assessed valuation '13..... 2,184,151
Approximate value..... 3,375,626
Population in 1910.....2,331

HOOD RIVER IRRIGATION DISTRICT.

A district in Hood River County.
Completion Bonds.
6s g '11 .. \$170,000c.....1922-1931
BONDED DEBT Apr 26 '12.....\$170,000
Assessed valuation (3/4 act.) '11..... 950,000
District tax (per \$1,000) '11..... 13.00
INTEREST in Portland, Chicago or N. Y. City at National Park Bank.

JACKSON COUNTY.

Jacksonville is the county seat.
Road Bonds.
5s '13 M-N \$500,000c.....Nov 1 1933
BONDED DEBT Sept 1 '14.....\$ 500,000
Warrant debt..... 473,720
Assessed valuation '14 (estimated) 36,000,000
Tax rate (per \$1,000) '13..... 15.00
Population in 1910.....25,756
INTEREST payable at fiscal agency of State of Oregon in N. Y. City.

KLAMATH FALLS.

This city is in Klamath County. First incorporated in 1889.
City Hall Bonds.
5s '14 A-O \$50,000c.....Apr 1 1934
BONDED DEBT Mar '14.....\$ 176,793
Sinking fund..... 3,000
Assessed valuation '13 (abt. act.)..... 2,906,893
City tax (per \$1,000) '13..... 13.25
Population in 1910.....2,758
INTEREST on bonds of 1914 at fiscal agency in N. Y. City.

LA GRANDE.

This city is in Union County. Incorporated Feb. 23, 1885. Commission government approved Oct. 1, 1913.
5s '08 F-A \$160,000c.....1929
(Subject to call after 1918.)
City Hall Bonds (Red. beg. in 1914).
5s '04 J-J \$25,000c.....1924
Sewer (Red. after 10 years from issue).
5s '10 .. \$40,000c.....Feb 1 1930
5s '11 J-J 10,000c.....Jan 1 1931
Ref. Water (Red. beg. in 1920).
5s '10 s-a \$49,000c.....Jan 1 1930
GEN. BONDED DEBT Mar '14.....\$ 284,000
Assessment debt (additional)..... 328,311
Floating debt..... 109,000
Sinking fund..... 40,000
Assessed valuation '13 (3/4 act.)..... 3,500,000
City tax rate (per \$1,000) '13..... 18.50
Population 1910.....4,843

LA GRANDE—Concluded.

INTEREST on refunding water bonds is payable at A. B. Leach & Co., N. Y.; on city-hall bonds in Portland, and on sewer bonds at E. H. Rollins & Sons, Boston.

LA GRANDE SCHOOL DISTRICT NO. 1.

Bonds all subject to call 10 years before maturity.

High-School Bonds. 5s g J-D \$ 8,000.....1919 5s g A-O 4,000.....1920 5s g J-D 12,000.....1923 5s g '10 M-N 75,000.....May 2 1930

School-Site and Building (Tax-exempt). 5s g '13 A-O \$30,000.....Apr 1 1933 BONDED DEBT Sept 19 '14.....\$ 127,000

INTEREST on bonds of 1913 is payable at National Park Bank, N. Y. City; on other bonds at County Treasurer's office in La Grange.

McMINNVILLE.

This city is in Yamhill County. Incorpor. 1882. City owns and operates local water and light plant. Bonds are exempt from city tax.

Park Bonds. 5s '08 J-J \$9,400.....Jan 1 1928 (Subject to call after Jan. 1 1913.) 5s '10 J-D \$3,000.....June 1 1928

Street Bonds (General). 6s '14 J-J \$27,000.....July 1 1924 6s '14 12,500.....1924 (Subject to call after one year.)

Water-Main Bonds. 6s '12 J-J \$13,000.....July 1 '14-'28 Water and Light Bonds. 4 1/2s '04 M-N \$20,000.....Nov 1 1924

(Subject to call Nov. 1 1919.) 5s '06 J-J \$45,500.....Jan 1 1931 (Subject to call Jan. 1 1921.)

5s '08 A-O \$20,000.....Oct 1 1928 5s '08 M-N 10,000.....Nov 1928 5s '10 M-S 30,000.....Mar 1 1930 6s '12 J-J 25,000.....Jan 1 1932

(Subject to call after Jan. 1 1927.) BOND DEBT Sept 1914.....\$ 194,100 Assessment debt (add'l).....28,500

Floating debt.....5,000 Sinking fund (conditional).....10,000 Assessed val. '13 (3/4 act.).....1,402,000

Total tax (per \$1,000) 1913.....38.00 Population in 1910.....2,400 INTEREST on 4 1/2s at office of City Treas.; on 5s at U. S. Nat. Bank in Portland; on bonds of 1912 at fiscal agency of Oregon in New York.

MARSHFIELD.

This city is in Coos Co. Inc. 1874. TOTAL DEBT Apr 1 '14.....\$ 156,778

Spec. impt. bonds (incl.).....102,778 Sinking funds.....15,570 Assessed valuation 1913.....2,602,259 Population in 1910.....2,980

MEDFORD.

This city is in Jackson County. Incorporated as a town Feb. 24, 1885, and as a city Feb. 6, 1901. Re-incorporated (new city charter) Feb. 7, 1905.

Water Bonds (Tax-exempt). 5s '07 M-S \$45,000.....Mar 1 1917 5s '08 J-J 355,000.....July 1 '23-'38

City Hall, &c., Bonds (Tax-exempt). 6s '08 F-A \$25,000.....Feb 1 1918 Refunding Bonds (Tax-exempt).

5s '10 F-A \$30,000.....Aug 1 1930 Fire Apparatus, &c., (Tax-exempt) 5s '11 A-O \$38,000.....Apr 1 1921

Bridge Bonds (Tax-exempt). 5s '12 A-O \$20,000.....Oct 1 1932 GEN. BD. DEBT Sept 1 '14.....\$ 513,000

Water debt (included).....400,000 Assessment debt (add'l).....780,000 Sinking fund.....44,892

Assessed val. '13 (60% act.).....5,608,090 Total tax rate (per \$1,000) '13.....37.00 INT. on water bonds due 1917 in Medford; bridge, city-hall and refunding bonds in N. Y.; all others in Chicago.

MORROW COUNTY S. D. No. 1.

P. O. Heppner. 5 1/2s '12 J-J \$40,000.....July 1 1932 (Subject to call beginning July 1, '22.)

BONDED DEBT Mar 20 '13.....\$ 48,000 Cash in sinking fund.....2,777 Assessed valuation 1911.....1,123,693

INT. at State fiscal agency in N. Y. NEWBERG.

This city is in Yamhill Co. Inc. Feb. 21, 1889. Water Bonds. 6s '97.....\$15,000.....Jan 1 1917

4 1/2s '06.....15,000.....June 1 '21 & '27 Sewer Bonds. 5s '11.....\$80,000.....Jan 1 1931

Improvement Bonds. 6s '13 M-N \$38,489.48.....Nov 1, 1923 (Subject to call after Nov. 1 1914.)

Water and Sewer Bonds. 5s '12.....\$22,000.....Jan 1 1932 GEN. BONDED DEBT Jan '14.....\$150,000

Assessment debt (add'l).....64,902 Floating debt.....17,010 Assessed valuation 1913.....921,989

Tax rate (per \$1,000) 1913.....13.00 Population in 1910.....2,260 INT. at First Nat. Bank, Newberg.

OREGON CITY.

This city is in Clackamas County. Refunding Bonds. 5s.....\$30,000.....1925

5s.....20,000.....1933 5s.....50,000.....1933 BONDED DEBT Sept 1914.....\$ 100,000

PENDELTON. This city is in Umatilla County. Incorpor. Oct. 25 1880. All bonds are tax-exempt to residents of State. Commission government defeated Dec. 1, 1913.

General Bonds (Red. beg. after 20 years from date). 5s '09 J-J \$75,000.....July 1 1929

Water-Works Bonds. 5s '09 J-J \$45,000.....July 1 1929 5s '13 J-J \$200,000.....July 1 1943

5s '14 J-J 40,000.....July 1 1944 Levee Bds. (Red. after 20 yrs. from issue). 5s '06 M-N \$10,000.....Nov 30 1936

5s '07 F-A 67,000.....Aug 1 1937 Sewer (Red. after 20 years from issue).... 5s '03 J-J \$30,000.....July 1 1933

5s '08 F-A 10,000.....1938 Street Bonds. 5s '08 F-A \$18,000.....1938

City-Hall and Jail Bonds. 5s '08 F-A \$40,000.....1938 BONDED DEBT Mar 1914.....\$ 495,000

Assessed valuation '13.....5,024,386 Total tax rate (per \$1,000) '13.....25.00 Population in 1910.....4,460

INT. at City Treas. office, Harris Tr. & Sav. Bk., Chicago, and Kountze Bros., N. Y. PENDLETON SCHOOL DISTRICT No. 16.

4 1/2s '11 A-O \$100,000.....1931 (Subject to call after 1921.) Building Bonds (Tax-exempt). 4 1/2s J-J \$60,000.....1924

BONDED DEBT Sept 19 '14.....\$ 160,000 Assessed valuation '13 (3-5 act.).....5,582,250

School tax (per \$1,000) 1913.....9.00 Population in 1911 (est.).....5,000 INTEREST at Nat. City Bank, N. Y.

PORTLAND, A. L. Barbur, Auditor.

Portland is the county seat of Multnomah County. Commission government adopted May 3, 1913, and upheld by State Supreme Court on May 28, 1913. The cities of Portland, East Portland and Albina were consolidated in June, 1891. Attempted consolidation of Portland and St. Johns held illegal by State Supreme Court, March 26, 1912.

Dock Bonds. 4 1/2s g '11 M-N \$500,000.....Nov 1 1961 (Subject to call after Nov 1 1941.)

4 1/2s g '13 M-N \$2,150,000.....May 1 1943 4 1/2s g '14 A-O 100,000.....Oct 1 1939

Bridge Bonds. 5s g '92 J-J \$500,000.....Jan 1 1922 5s g '95 A-O 200,000.....Apr 1 1925

4s g '04 J-J 400,000.....Jan 1 1934 4s g '09 J-J 450,000.....Jan 1 1939 4s g '10 J-J 250,000.....July 1 1940

4s g '11 J-J 500,000.....Jan 2 1941 4s g '11 M-S 600,000.....Sept 1 1941 4s g '12 A-O 315,000.....Oct 1 1942

4s g '13.....55,000.....1943 City Hall Bonds. 5s g '90 J-J \$175,000.....Jan 1 1920

5s g '92 J-J 500,000.....July 1 1922 General Bonds. 6s g '91 J-D \$40,000.....June 1 1921

Park and Boulevard Bonds. 6s g '91 J-D \$50,000.....June 1 1921 6s g '08 J-D 500,000.....Dec 1 1933

4s g '11 J-J 250,000.....July 1 1936 4s g '12 A-O 250,000.....Oct 1 1937

Water Bonds. 6s g '91 M-N \$250,000.....May 1 1921 5s g '87 J-J 700,000.....Jan 1 1917

5s g '93 J-J* 2,200,000.....July 1 1923 4s g '09 J-J 250,000.....Jan 1 1934 4s g '10 J-D 500,000.....June 1 1935

4s g '10 M-S 500,000.....Sep 1 1935 4s g '11 J-J *500,000.....Jan 2 1936 4s g '11 M-S *500,000.....Mch 1936

4s g '11 A-O *500,000.....Oct 1 1936 4s g '12 M-S *500,000.....Mch 1 1937 4s g '12 M-N *200,000.....Nov 1 1937

4s g '13 M-N 100,000.....May 1 1938 4s g '13 F-A 75,000.....Aug 1 1938 4s g '13.....250,000.....1938

4s g '14 F-A 175,000.....Feb 2 1939 Boulevard Bonds. 6s g '91 J-D \$50,000.....June 1 1921

Ferry Bonds. 5s g '93 A-O \$50,000.....Apr 1 1923 5s g '03 J-D 15,000.....Dec 1 1933

4s g '04 J-J 50,000.....Jan 1 1934 Funding Bonds. 5s g '98 J-D \$430,000.....Dec 1 1928

Electric Light Bonds. 6s g '91 M-N \$50,000.....May 1 1921 Crematory Bonds. 5s g '10 M-S \$35,000.....Sept 1 '14-'20

5s.....52,200..... Refunding Bonds. 4s g '03 M-N \$56,500.....May 1 1928

Fire-Boat Bonds. 4s g '11 J-J \$125,000.....July 1 1936 Municipal Jail Bonds. 4s g '11 M-N \$200,000.....Nov 1 1931

Auditorium Bonds. 4s g '13.....\$35,000.....1943 GEN. BONDS Sept 1 '14.....\$16,074,100

The improvement bonds are issued on account of street improvement, sewer, street extension and water-main assessments and, according to the city charter, are not included in the 7% debt limit.

INT. on dock bonds of 1913 at City Treasurer's office or at fiscal agency of city in N. Y. City; on others at Chase Nat. Bk., N. Y., with exception of one issue, which is payable at Chemical Nat. Bank, N. Y.

CITY PROPERTY.—The city owned property on Sept 1 '14 valued at \$26,338,068, including the water works, which are valued at \$13,682,696. Receipts of water works from Dec 1 '13 to Aug 30 '14 \$1,087,364; operating expenses (including interest), \$1,104,276.

PORTLAND SCHOOL DISTRICT No. 1.

District No. 31 Bonds. 6s '91 J-D \$10,000.....June 1 1916 District No. 1 Bonds (All redeemable 10 years before maturity).

4 1/2s '08 A-O \$250,000.....Oct 1 1928 4 1/2s g '10 A-O 350,000.....Oct 1 1930 4 1/2s '12 J-D 150,000.....Dec 2 1932

District No. 12 Bonds. 6s '05 M-S \$6,000.....Sept 1 1915 BONDED DEBT Sept '14.....\$ 770,000

Sinking fund.....55,044 Assessed valuation '13 (1/2 act.).....316,180,443

School tax (per \$1,000) '14.....7.50 Population in 1914 (estimated).....247,000 INTEREST is payable in N. Y. City or Portland.

THE PORT OF PORTLAND.

Incorporated in 1891. Limits include consolidated City of Portland and approximately half area and 97% of valuation of the territory of Multnomah Co. Bonds are tax-exempt to residents.

River Improvement Bonds. 5s g J-J \$350,000.....Jan 1 1922 Dry Dock Bonds.

4s g J-J \$185,000.....July 1 1933 4s g J-J 215,000.....Jan 1 1934 BONDED DEBT Sept '14.....\$ 750,000

Sinking fund Mar 18 '14.....207,290 Assessed valuation '13 (70% act.) 333,452,492

Tax rate (per \$1,000) '13.....1.85 Population of district '14 (estimated).....270,000 INTEREST at U. S. Nat. Bank, Portland.

PORT OF ASTORIA.

A district (P. O. Astoria) in Clatsop County. The bonds below are part of an issue of \$800,000.

Municipal Harbor Bonds. 5s g '14 J-J { \$150,000.....1924 & 1929 150,000.....1934 & 1939 100,000.....1944

TOTAL DEBT Sept 23 '14.....\$ 400,000 Assessed valuation '13 (3-5 act.)... 35,019,969

Population in 1910.....16,106 INTEREST at State fiscal agency in N. Y. City.

PORT OF COOS BAY.

P. O. Marshfield. Series "A" Improvement Bonds. 5s g '13 J-J \$600,000.....Jan 1933-1956

BONDED DEBT Mch 1 '14.....\$ 300,000 Assessed valuation '13.....9,140,749

(Assess. abt. 1-5 to 1-4 act. value.) District tax (per \$1,000) '13.....3.00

Population in 1914 (estimated).....15,000 INTEREST at Oregon fiscal agency in N. Y. (National Park Bank.)

PORT OF NEHALEM.

A district in Tillamook County. Harbor Improvement Bonds. 6s g '10 J-J \$30,000.....July 1 '15-'20

6s J-J 235,000.....1927-1937 6s J-J 25,000.....1921-1926 BONDED DEBT July 1 '14.....\$ 290,000

Assessed valuation '13 (35% act.)... 3,810,000 Population in 1913 (estimated).....2,500

INTEREST on first two issues payable at Kountze Bros., N. Y.; on third issue at Nat. Park Bank, New York.

PORT OF SIUSLAW.

A district (P. O. Florence) in Lane County. Organized June 15 1909. Harbor-Improvement Bonds.

5s '09 J-J \$85,000.....July 1 '19-'29 6s '11 J-J 115,500.....July 1 '21-'31

BONDED DEBT Sept 22 '14.....\$ 200,500 Assessed valuation '13 (1/2 act.).... 4,300,000

INTEREST pay. at Kountze Bros., N. Y. PORT OF TILLAMOOK.

A district in Tillamook County. Organized in 1899 by the Legislature. Water-Front and Channel Bonds.

6s g '11 J-J \$214,000.....July 1 '21-'31 Bar-Improvement Bonds. 6s g '11 J-J \$236,000.....July 1 '21-'31

TOT. BD. DEBT May '13.....\$ 450,000 Assessed valuation (1/2 act.) '11.....7,270,000

Population 1912, (estimated).....3,000 INTEREST payable in Tillamook or at office of State's fiscal agent in N. Y.

PORT OF TOLEDO.

A district in Lincoln County. Improvement Bonds. 6s '10 g J-J \$50,000.....Nov 1 1930

(Subject to call after Nov. 1 1920.) BONDED DEBT Oct 16 '14.....\$ 50,000

Assessed valuation '14 (1/2 act.)... 1,388,246 INT. at Lincoln Co. Bk., Toledo, Ore.

ROSEBURG.

This city is in Douglas County. Incorporated Oct. 3, 1872. Population, 1910, 4,387.

Street and Bridge Bonds. 5s '09.....\$35,000.....1929 Street Bonds. 4 1/2s '10.....\$40,000.....1930

ROSEBURG—Concluded.

Refunding Bonds. 5s '10 \$25,000. GEN. BD. DEBT Sept 21 '14. Improvement bonds (additional). Assessed valuation '13. City tax (per \$1,000) '13. INTEREST on street and bridge 5s and street 4 1/2s at Douglas Nat. Bank, Roseburg; refunding bonds at Roseburg Nat. Bank, Roseburg and on improvement bonds at City Treasurer's office.

ST. JOHNS.

This city is in Multnomah County. City-Hall Bonds. 6s '06 \$10,000. City Dock Bonds. 6s '08 \$60,000. Ferry Bonds. 6s '11 \$6,000. GEN. BD. Debt Mar 18 '14. Improv. bonds (additional). Assessed valuation '13. City tax (per \$1,000) '13. Population in 1910.

SALEM.

This city, the capital of the State, is in Marion County. Incorporated Jan., 1857. Bonds are tax-exempt. City owns property valued at \$350,000. Refunding Bonds.

5s '10 J-J \$63,050r. 5s g '14 J-J \$60,000. 5s g '14 A-O 30,000. Sewer Bonds. 5s '10 J-J \$19,000r. 5s g '13 M-N \$456,000. Refunding Bridge Bonds. 6s '10 A-O \$20,000c. GEN. BD. DEBT Sept 19 '14. Improvement bonds (additional). Warrants outstanding. Cash on hand. Assessed valuation '13 (3/4 act.). Total tax (per \$1,000) '13. Population in 1910.

INTEREST on sewer bonds of 1913 at City Treasurer's office or at fiscal agency in N. Y.; on refunding 6s at Fourth National Bank, N. Y.; others in Salem.

SALEM SCHOOL DISTRICT NO. 24.

Bonds all redeemable 10 years before final maturity. 5s A-O \$35,000r. 5s M-N 15,225r. 5s J-D 4,400r. Refunding Bonds. 5s '11 A-O \$49,650r. BONDED DEBT Sept 21 '14. Note debt (additional). Cash on hand. Assessed valuation '14.

School tax (per \$1,000) '14. INTEREST at Nat. Park Bank, N. Y.

TILLAMOOK SCHOOL DISTRICT.

A district in Tillamook County. Building (Redeemable beginning in 1922). 6s '12 A-O \$35,000. BONDED DEBT Sept 22 '14. Sinking fund. Assess. val. '14 (70% act.) est. School tax (per \$1,000) '14. Population in 1914 (estimated). INTEREST at Nat. Park Bank, N. Y.

WASCO CO. SCHOOL DISTRICT NO. 12.

P. O. The Dalles. Building (Red. beginning Mar. 1, 1924). 5s '14 M-S \$100,000. BONDED DEBT Oct 14 '14. Cash on hand (general fund). Building fund. Assessed valuation. INTEREST at County Treasurer's office or at State fiscal agency in N. Y. City.

WASHINGTON CO. S. D. NO. 7.

Building Bonds (Red. beginning 1922). 5s '12 J-J \$35,000. BONDED DEBT Nov '13. Assessed valuation '12. Real value (estimated). Population in 1912 (estimated). INTEREST at Equitable Trust Co., N. Y., or at County Treasurer's office, Hillsboro.

STATE OF WASHINGTON.

ITS DEBT, RESOURCES, ETC.

Organized as a Territory (Act March 2 1853) March 2 1853 Admitted as a State (Act Feb. 22 1889) Nov. 13 1889 Total area of State (square miles) 69,180 State Capital Olympia Governor (term ends Wed. aft. 2d Mon. Jan. '17) Ernest Lister Secretary (term ends Wed. aft. 2d Mon. Jan. '17) I M Howell Treasurer (term ends Wed aft. 2d Mon. Jan. '17) Ed. Meath Auditor (term ends Wed. aft. 2d Mon. Jan. '17) C. W. Clausen

LEGISLATURE meets biennially in odd years on the second Monday in January. Sessions are limited to sixty days.

TOTAL DEBT—The State has no bonded debt against the general fund. There are outstanding, however, \$206,024 Normal School Fund bonds and \$87,000 Public Highway Fund bonds shown in detail below.

Normal School Fund Bonds. 3s '09 J-D \$206,024, June 10, 1924 (Subject to call after June 10 1914). Public Highway Fund Bonds. 4s '11 F-A \$87,000, Feb 1 1923 (Subject to call on any interest date, 10% (\$12,500) annually).

*If not paid by highway fund in 12 years from their date, these bonds will be paid out of general fund.

INTEREST is payable at the office of State Treasurer in Olympia. ASSESSED VALUATION.—The following statement shows the total assessed valuation of the State for the years indicated. Real estate is valued only every two years. The State tax rate (per \$1,000) for 1913 was \$8.81.

Table with 5 columns: Years, Assessment, Years, Assessment, Years, Assessment. Data for 1914, 1913, 1907, 1906, 1900, 1890.

Table with 5 columns: Years, Assessment, Years, Assessment, Years, Assessment. Data for 1912, 1911, 1910, 1908, 1905, 1904, 1903, 1860.

EXEMPTION FROM TAXATION.—Act of Legislature, approved Feb. 28 1907, exempted mortgages, credits, notes, municipal securities, &c., from all taxation as personal property. Act upheld by State Supreme Court in 1908.

DEBT LIMITATION.—The State may, to meet casual deficits or failures in revenues, or for expenses not provided for, contract debts; but such debts in the aggregate shall not at any time exceed \$400,000. The State may also incur debts to repel invasion, suppress insurrection or to defend the State in time of war. Otherwise the State shall not contract any debt except the same shall be authorized by law, and provision must be made for the payment of the annual interest on the same and also for the payment of the principal within 20 years. All such propositions must first receive the approval of the voters.

As regards counties, cities, towns, school districts or other municipal corporations, no debt is to be incurred by them in an amount exceeding 1 1/2% of the taxable property without the assent of 3-5 of the voters therein, nor in cases requiring such assent shall the total indebtedness at any time exceed 5% of the taxable property. It is further provided that "any city or town" with the required assent of the voters, may be allowed to become indebted to a larger amount but not exceeding 5% additional for supplying such city or town with water, light and sewers, when the works for the same shall be owned and controlled by the municipality. The provisions in full will be found in Section 6 of Article 8 of the Constitution.

POPULATION OF STATE—Table with 5 columns: Years, Population, Years, Population, Years, Population. Data for 1910, 1890, 1870, 1900, 1880.

CITIES, COUNTIES AND TOWNS IN THE STATE OF WASHINGTON

Equitable Trust Company of New York City is the fiscal agent for the State of Washington.

ABERDEEN.

This city is in Chehalis County. Incorporated, May 12, 1890. Commission government rejected Nov. 20, 1911.

Funding Bonds. 5 1/2s '11 J-D \$120,000c. Refunding Bonds. 5 1/2s J-D \$40,000. GEN. BD. DEBT Oct 8 '14. Warrant debt. Cash on hand. Assessed valuation '14 (2-5 act.). Total tax rate (per \$1,000) '13. Population in 1910. INTEREST at Equitable Trust Co., N. Y.

BELLINGHAM.

This city is in the county seat of Whatcom County and was organized Dec. 28, 1903, by the union of the cities of Fairhaven and Whatcom.

Bonds Issued by Bellingham to Refund Bonds of Former Cities, New Whatcom— Series A—Funding Bonds. 5s g A-O \$18,000c. Series B—Funding Bonds. 5s g A-O \$39,000c. Series C—Funding Bonds. 5s g A-O \$237,000c. Series D—Funding Bonds. 5s g A-O \$183,000c. Series E—Funding Bonds. 5s g A-O \$225,000c. BONDED DEBT Sept 1 '14. Assessed Valuation for 1913. District A (former old Whatcom). District B (former new Whatcom). District C (former Keeslingville). District D (former Fairhaven). District E (former Silver Beach). District F (water-front). Total for all Bellingham. City Tax Rate (per \$1,000), 1913. District A. District B. District C. District D. District E. District F. Population in 1910. INTEREST at Equitable Trust Co., N. Y.

BELLINGHAM SCH. DIS NO. 301.

This district was formed by the consolidation of Whatcom County School Districts Nos. 1, 4, 37 and 81. Building Bonds (Red. aft. June 1, 1918.) 4 1/2s '08 June \$70,000. June 1 1928

Refunding Bonds.

5s '13 ann \$35,000. Old District No. 1 (Whatcom). 4 1/2s '01 J-J \$13,000. 4 1/2s '03 M-S 65,000. Old District No. 4 (Fairhaven). 3 3/4s '03 June \$25,000. BONDED DEBT Oct 16 '14. Assessed valuation '14 (2-5 act.). School tax (per \$1,000) '14. INTEREST on building and 3 3/4% bonds payable at State Treasurer's office in Olympia; on refunding bonds at Bellingham National Bank; on 4 1/2s and bonds of 1901 at Equitable Trust Co., New York City.

BENTON COUNTY S. D. No. 16.

Building (Redeemable beg. in 1922). 5s '12 Sept \$50,000. TOTAL BONDED DT. July 1 '13. Assessed valuation. Actual valuation. INTEREST at County Treasurer's office in Prosser.

CENTRALIA.

This city is in Lewis County. Incorporated in 1890.

Electric-Light Bonds. 6s \$11,000. Trunk Sewer Bonds. 6s \$22,150. Water Revenue Bonds. 6s g '13 semi-ann. \$300,000. 1919-1938 Funding Bonds. 5s '14 M-N \$118,891.01. GEN. BD. DEBT Sept 20 '14. Water bonds. Assessment debt (add'l). Warrant debt. Assessed val. '13. Real value (estimated). Total tax rate (per \$1,000) '14. Population in 1910. INT. on electric-light, water and funding bonds at fiscal agency (Equitable Tr. Co.) in N. Y. City; other bonds at Centralia. *The water bonds are not a direct obligation of the city, but against the water system and its income. The total issue of \$300,000 is being delivered in installments from time to time to take up the monthly estimates of work done on the system.

CHEHALIS.

* This city is in Lewis Co. Incorporated Sept. 22, 1890. State Supreme Court upholds city's right to issue bonds for gravity-water system. 6s J-J \$23,000. Jan 1 1915 Gen. bonded debt Dec 31 '13. \$ 23,000

Impt. bonded debt (add'l). Impt. warrant debt (add'l). Warrant debt (add'l). Assessed valuation 1913. Real value (est.). Population in 1910.

CHEHALIS COUNTY.

Montesano is the county seat. Funding Bonds. 5 1/2s '13 J-D \$180,000. (Red. \$18,000 yearly beg. Dec. 1, '14.) BOND DEBT Sept '14. Assessed valuation '13. Population in 1910. INT. at fiscal agency N. Y.

CHEHALIS CO. S. D. No. 5.

Building Bonds. 5s '02 J-J \$8,000. 4s '06 Aug \$20,000. 4s '09 Sept \$80,000. Warrant Funding Bonds. 4s '05 Aug \$11,000. 4s '09 July \$70,000. 5 1/2s '14 M-S 86,000. BONDED DEBT Oct '14. Assessed valuation '13. School tax rate (per \$1,000) '13. INTEREST at State Treasurer's office in Olympia.

CHEHALIS CO. SCH. DIS. No. 28.

Building Bonds. 4 1/2s '07 \$40,000. Warrant Funding Bonds. 5s '11 F-A \$60,000. 4 1/2s '13 s-a \$90,000. BONDED DEBT Oct '14. Assessed valuation '13 (3-5 act.). School tax rate (per \$1,000) '13. INTEREST at State Treasurer's office in Olympia.

CHELAN CO. SCH. DIST. No. 46.

Building Bonds (Tax-Exempt). 4s '06 June \$12,000c. 4 3/4s '07 J-J \$10,000c. 4s '09 Feb \$80,000c. 5 1/2s '10 Dec \$15,000c. 5s '11 July \$50,000. (Subject to call.)

CHELATIS CO. SCH. DIST. No. 28—Continued. BONDED DEBT Oct 1 '13.....\$ 167,000

CHELAN COUNTY S. D. No. 49. Building Bonds (Tax-Exempt). 5 1/2s '07 Apr \$18,000c.....Apr 15 1922

CHELAN CO. SCH. DIST. No. 56. Building Bonds (Tax-Exempt). 5s '07 Aug \$14,500c.....Aug 1 1927

CLALLAM COUNTY. County seat is Port Angeles. All bonds are tax-exempt. Refunding Bonds. 4 1/2s M-N \$90,000c.....May 15 1921

CLALLAM COUNTY SCH. DIST. No. 3 Bonds. 5 1/2s J-D \$4,000c.....Dec 1 1929 (Subject to call after 1919.)

CLARKE COUNTY. County seat is Vancouver. Bonds are tax-exempt. Population 1910, 26,115. Funding Bonds. 6s J-D \$61,000c.....Dec 1 1916

CLARKE CO. SCH. DIST. No. 6. 4 1/2s \$ 25,000.....July 1 1929

CLARKE CO. SCH. DIST. No. 58. Building Bonds. 5s '13 Nov \$29,000.....\$ 29,000

COWLITZ COUNTY. Kalama is the county seat. Funding Bonds (Series "C"). 5s '11 F-A \$22,000c.....Aug 1 1931

ELLENSBURG. This city is in Kittitas County. Electric-Light Bonds. 5s J-D \$44,000c.....June 1 1931

ELLENSBURG SCH. DIST. No. 3. Refunding Bonds. 5s A-O \$40,000c.....Oct 1 1931

EVERETT. This city is in Snohomish County. Incorporated May 4, 1893. Sewer Bonds. 5s g F-A \$60,000c.....Feb 1 1920

EVERETT SCH. DIST. No. 24. 3 3/4s '07 \$150,000c.....Mch 1 1927

FRANKLIN COUNTY. Pasco is the county seat. Fund. Bonds (Red. beg. Dec. 1, 1921.)

FRANKLIN CO. SCH. DIS. No. 1. 5s '11 \$40,000.....Dec 1 1931

HOQUIAM. This place is in Chehalis County. Commission government adopted June 5, 1911. Refunding Bonds.

JEFFERSON COUNTY. County seat is Port Townsend. Refunding (Part every 5 years).

JEFFERSON CO. S. D. No. 1. Treasurer; on 5s at State Treasurer's office. Fund. Bonds (Red. beg. in 1905).

KING COUNTY. County seat is Seattle. The State Supreme Court on Dec. 6, 1913, declared valid the court-house bonds given below.

KING COUNTY COMMERCIAL WATERWAY DIST. No. 1. P. O. Seattle. Bonds are tax-exempt.

KING COUNTY SCH. DIST. No. 7. Building Bonds. 5s '07 June \$1,500c.....June 15 1917

KING COUNTY S. D. No. 51. Building Bonds (Red. beg. in 1918). 5s '13 Sept \$45,000c.....Sept 15 1933

KING CO. SCH. DIST. No. 162. Building (Subject to call). 4 1/2s '10 Aug \$55,000c.....Aug 1 1925

KING CO. SCH. DIST. No. 170. Building (Subject to call). 4 1/2s '10 July \$46,000c.....July 1 1920

KITITAS COUNTY. County seat is Ellensburg. Chelan County's portion of the bonded debt is \$16,513.

LEWIS COUNTY. County seat is Chehalis. Refund. (Red. aft. 10 years fr. issue).

LEWIS CO. SCH. DIST. No. 9. 5s '06 M-S \$2,600.....Mar 15 1916

LEWIS CO. SCH. DIST.—Concluded.
 Refunding (Red. beg. in 1912).
 4½s '11 June \$50,000.....June 5 1931
 Building (Red. beg. in 1912).
 4½s '11 July \$43,000.....July 1 1931
BONDED DEBT Jan 1 '14.....\$ 112,600
 Floating debt 82,470
 Sinking fund Jan 1 '14..... 2,939
 Assessed valuation '13 (60% act.).. 3,011,065
 School tax rate (per \$1,000) '13..... 15.00
INTEREST at State Treasurer's office.

LEWIS COUNTY S. D. No. 211.
 Building (Red. begin. July 1, 1914).
 5½s '13 July \$25,000.....July 1 1918
BONDED DEBT Jan 1 '14.....\$ 25,000
 Floating debt 5,995
 Sinking fund 697
 Assessed valuation '13 (60% act.).. 807,863
 School tax (per \$1,000) '13..... 12.00

LINCOLN COUNTY.
 Davenport is the county seat. All bonds are taxable.
Refunding Bonds.
 4½s '02 June \$54,000.....June 2 1922
 Court-House (Red. beg. in 1916).
 4½s '06 Apr 5 \$41,000.....Apr 5 1926
BONDED DEBT March 20 '14..\$ 95,000
 Assessed valuation '13 (½ act.).. 24,177,168
 State and Co. tax (per \$1,000) '13.. 16.80
 Population in 1910..... 17,539
INTEREST at Equitable Trust Co., N. Y.

MIDDLE KITTITAS IRRIG. DIST.
 A district in Kittitas County.
 6s g '10 J-J \$103,000.....1940
BONDED DEBT Sept 21 '14.....\$103,000
 Assessed valuation '13 (40% act.).. 673,274
 Tax rate (per \$1,000) '13..... 9.40
INTEREST at County Treasurer's office.

NORTH YAKIMA.
 This city is situated in Yakima County. Incorporated May 14, 1894. Commission government went into effect September, 1911.
Sewer Bonds.
 4s '06 M-S \$48,000.....Mar 1 1926
 4½s '11 A-O 50,000.....Oct 1 1931
 5s g '11 J-D 60,000.....Dec 15 1931
 (Subject to call after Dec. 15, 1912.)

Refunding Bonds.
 4½s '08 J-D \$80,000.....Dec 1 1928
 5s '10 J-D 30,000.....Dec 1 1930
 5s '12 F-A 30,000.....Feb 1 1932
 (Subject to call after Feb. 1, 1913.)
TOTAL DEBT March 18 '14.....\$ 298,000
 Assessed valuation '13 (3-5 act.).. 8,450,645
 City tax (per \$1,000) '13..... 20.94
 Total tax rate (per \$1,000) '13..... 43.86
 Population in 1910 (Census)..... 14,082
INTEREST on sewer 4½s and refunding 5s of 1910 at fiscal agency (Equitable Trust Co.), New York; the sewer 4s at Chicago; sewer 5s and refunding 4½s at City Treasurer's office; others at State Treasurer's office.

NORTH YAKIMA S. D. No. 7.
 4½s '00 May \$11,000.....May 1 1920
 4s '03 Aug 22,000.....Aug 8 1923
 (Subject to call after Aug. 1, 1904.)
 4s '05 Feb \$25,000.....Feb 11 1925
 (Subject to call after Sept. 11, 1906.)
 4s '07 Apr \$150,000.....April 1927
 (Subject to call after 1908.)
 5s '11 Feb \$75,000.....Feb 1931
 (Subject to call after 1912.)
BONDED DEBT Sept 19 '14.....\$ 303,000
 Sinking fund 13,780
 Assessed valuation '13 (45% act.).. 9,766,600
 School tax (per \$1,000) '13..... 6.22
INTEREST at New York, Chicago and in Olympia, Wash.

OLYMPIA.
 Olympia is situated in Thurston County. Incorporated as a town 1859; as a city 1881. Bonds below all owned by State Permanent School Fund.
Refunding Bonds (Red. beg. in 1911).
 3½s '06 J-J \$200,000.....1926
BONDED DEBT Sept 24 '14.....\$ 200,000
 Assessment debt (est.)..... 357,463
 Floating debt (est.)..... 65,886
 Assessed valuation '14 (3-5 act.).. 3,271,435
 Total tax (per \$1,000) '13..... 48.00
 Population in 1910..... 6,996
INTEREST at office of State Treasurer.

OLYMPIA SCHOOL DIST. No. 1.
Refunding Bonds.
 5s '10 J-J \$25,000.....July 1 1930
 (Subject to call beg. July 1 1912.)
 5½s '13 Oct \$10,000.....Oct 15 1933
 (Subject to call beg. Oct. 15, 1914.)
Funding Bonds (Red. beg. in 1912).
 4½s '11 s-a \$78,000.....Jan 2 1932
BONDED DEBT Sept 18 '14.....\$ 113,000
 Floating debt 6,237
 Assessed valuation '13 (3-5 act.).. 3,432,107
 School tax rate (per \$1,000) '13..... 13.00
 Population in 1914 (est.)..... 9,000
INTEREST at State Treasurer's office.

PACIFIC COUNTY.
 South Bend is the county seat.
Building Bonds (Red. any time).
 5s '13 \$10,000.....1933
Court-House (Red. beg. in 1911).
 5s '10 J-J \$150,000.....July 1 1920
Refunding (Red. beg. in 1911).
 5s '01 M-N \$33,000.....Nov 2 1921
 Road and Bridge (Red. beg. in 1912).
 5s '11 J-J \$100,000.....Jan 2 1926
BONDED DEBT April 26 '14..\$ 283,000
 Warrants outstanding 200,000
 Assessed valuation '13..... 17,979,788
 State and Co. tax (per \$1,000) '12 12.65
 Population in 1910..... 12,532

PACIFIC COUNTY S. D. No. 36.
 High-School-Building Bonds.
 4½s '13 ann \$75,000 (Red. beg. '23)....1933
BONDED DEBT Sept '13.....\$ 105,000
 Assessed valuation 2,219,919

PEND OREILLE COUNTY.
 Newport is the county seat.
Warrant-Funding Bonds.
 4½ g '12 M-N \$72,000.....May 1 1932
 (Subject to call after May 1, 1922.)
BONDED DEBT May '14.....\$ 72,000
 Warrants outstanding 56,152
 Sinking fund 10,000
 Assessed valuation '14 (½act.).. 6,550,382
 Population in 1910.....6,660

PIERCE COUNTY.
 The county seat is Tacoma.
Refunding Bonds.
 5s '05 A-O \$268,000.....Oct 2 1925
 (Subject to call beginning Oct. 2, 1915.)
 3½s '06 J-D \$8,000.....June 1 1926
 (Subject to call beginning June 1, 1907.)
 4s '06 M-S \$150,000.....Sept 1 1926
BONDED DEBT Jan 1 '13.....\$ 426,000
 Assessed valuation, real..... 81,082,429
 Assessed valuation, personal..... 17,514,757
 Assessed valuation, railroads..... 10,146,457
 Total valuation '12 (3-5 act.).. 108,743,643
 State and Co. tax (per \$1,000) '12 13.00
 Population in 1910..... 120,812
 Interest on 3½s is payable at State Treasurer's; on other bonds in N. Y. City.

PORT ANGELES.
 This city is in Clallam County. Incorporated as a city of the third class about June, 1891.
Refunding Bonds (Red. Oct. 1, 1923).
 5½s '12 \$50,000.....Feb 1 1932
 6s '13 A-O 36,000.....Oct 1 1933
GEN. BD. DEBT Oct 1 '14.....\$ 86,000
 Assessment bonds (additional).... 223,121
 Warrants outstanding..... 59,298
 Assessed valuation '14..... 2,020,060
 Population in 1910.....2,286

PORT OF SEATTLE.
 P. O. Seattle.
East Waterway Improvement District No. 1.
 4½s g '13 J-J \$494,000.....Jan 1 '15-'55
 4½s g '13 M-N 348,000.....May 1 '15-'55
 5s g '13 M-S 436,000.....Sept 1 '15-'55
East Waterway Improvement No. 2 Bonds.
 5s g '13 M-S \$554,000.....Sept 1 '15-'55
 5s g '14 J-J 40,000.....Jan 1 '15-'56
Salmon Bay Improvement Bonds.
 4½s g '13 J-J \$347,000.....1915-1955
 5s g s-a 197,000.....Part yearly
West Seattle Ferry Bonds.
 5s g '14 J-J \$200,000.....Jan 1 '15-'55
Central Water Front Improvement Bonds.
 4½s g M-N \$745,000.....Part yearly
Smith's Cove Improvement Bonds.
 4½s g s-a \$996,000.....Part yearly
Lake Washington Improvement Bonds.
 4½ g '13 J-J \$149,000.....July 1 '15-'55
BONDED DEBT Sept 1 '14.....\$ 4,712,000
 Assessed valuation '13 (45% act.) 263,611,027
 Population in 1910.....284,638
 Population in 1913 (estimated).....338,500
INTEREST at Equitable Tr. Co., N. Y.

PORT TOWNSEND.
 This city is in Jefferson County. Incorporated Dec. 8, 1881.
Funding Bonds.
 6s M-N \$29,100.....Dec 1 1915
***Water Bonds (Red. any time).**
 6s M-N \$185,000.....Nov 1925
Refunding Bonds.
 5½s '11 J-J \$75,000.....July 1931
 (Subject to call after 1921.)
GEN. DEBT Jan 1 '14.....\$ 104,100
 Assessment debt (additional).... 28,983
 Sinking fund and cash 11,643
 Water bonds (not included above) 180,000
 Water sinking fund..... 8,929
 Assessed valuation '13..... 1,387,239
 City tax (per \$1,000) '13..... 17.00
 Population 1910 4,181
 *These bonds are not a city obligation.

SEATTLE.
 Situated in King County. Incorporated as a town Jan. 14, 1865 and as a city Dec. 2, 1869. Proposed new city charter rejected June 30, 1914. An issue of \$800,000 municipal-electric-railway system bonds was voted Mar. 7, 1911, and validity subsequently upheld. Up to Aug. 1, 1913, \$300,000 had been issued.

Building Bonds.
 4s '02 A-O \$100,000.....Oct 15 1922
 4s '05 J-J 175,000.....July 1 1925
 4½s '10 J-J 50,000.....July 1 1930
 4½s '10 J-D 300,000.....Dec 1 1930
Funding Bonds.
 5s '11 J-D \$46,000.....June 1 1931
General Improvement Bonds.
 4½ g '11 J-D \$136,000.....Dec 1 1931
Sewer Bonds.
 4½s '07 M-S \$1,650,000.....Mar 1 1927
Refunding Bonds.
 5s g '11 J-J \$391,000.....July 1 '15-'31
 5s g '12 A-O 699,000.....Apr 1 '14-'32
 5s g '12 J-J 376,000.....July 1 '14-'32
 5s '13 J-J 780,000.....July 1 '15-'18
Light Plant Extension Bonds.
 4s '05 J-J \$250,000.....July 1 1925
 4s '09 A-O 500,000.....Apr 1 1929
 4½s '10 M-S 200,000.....Mch 1 1930
 4½ g '10 J-D 1,000,000.....Jan 1 1932
Park Bonds.
 4s '07 M-S \$500,000.....Mch 1 1927
 4s '09 A-O 500,000.....Apr 1 1929
 4½s '10 M-S 500,000.....Mch 1 1930
 4½s '10 J-D 500,000.....Dec 1 1930
 4½s '11 J-D 1,000,000.....June 1 1931
 4½s '12 J-J 500,000.....Jan 1 1932
 4½s '12 J-J 500,000.....July 1 1932

Municipal Light Plant Bonds.
 3½s '04 J-J \$400,000.....July 27 1923
 3½s '04 A-O 190,000.....Apr 1 1924
 3½s '07 J-J 200,000.....July 1 1927
 3½s '08 J-J 400,000.....J & J 1 1928
 4½s '11 J-D 100,000.....June 1 1931
 4½s '14 75,000 Jan 1 1934

Refunding Water and Sewer Bonds.
 5s g '10 J-J \$814,000.....July 1 '14-'30
Water-Works-Extension Bonds.
 4½s '10 J-J \$500,000.....July 1 1930
 4½s '11 J-J 580,000.....July 1 1931
 4½ g '12 J-J 500,000.....Jan 1 1932

Water Tunnel Bonds.
 4½s g '14 J-J \$300,000.....July 1 1934
Refuse Disposal Plant Bonds.
 4½s '10 J-J \$320,000.....July 1 '15-'30

City Electric Ry. Bonds.
 4½ g '13 M-N \$300,000.....May 1 1933
BALLARD—Annexed Jan. 29, 1907:
Refunding Bonds.
 6s '95 J-D \$24,500.....Dec 1 1915

Funding Bonds.
 4½s '05 F-A \$75,000.....Aug 1 1925
 5s '10 M-S 65,000.....Mar 1 1930
Water-Works Bonds.
 6s '95 J-J \$42,000.....Jan 1-1915
 4½s '02 F-A *10,000.....Aug 1 1917
 4½s '04 A-O *25,000.....Oct 1 1924

COLUMBIA—Annexed May 3, 1907:
General Municipal Bonds.
 6s '04 F-A \$3,900.....Aug 27 1924

In addition to the bonds given above, there are also outstanding \$1,767,000 5% (J-J) coup. Cedar River water bonds due Jan. 1, 1915-'26. These bonds are a lien on a certain portion of the revenues of the Water Dept., and are not a general municipal indebtedness. There also remain outstanding \$510,000 from an issue of \$1,250,000 Cedar River water-supply warrants payable at the rate of \$100,000, principal and interest yearly from water revenues only.

*Issued in payment for water systems by their respective cities prior to annexation. They were then made part of the water plant of this city, and although they are a general indebtedness, and interest is being paid from the water fund.

INTEREST is payable as follows: Funding bonds of 1891 and funding bonds of 1893 (first and second series) at Seattle or at Harris, Forbes & Co., N. Y. City; funding bonds due 1931 and 1933 at fiscal agency in N. Y. City or at City Treas. office; sewer tunnel bonds of 1893 and sewer bonds of 1893 at City Treasurer's office or at Blair & Co., N. Y. City; library-site bonds at City Treasurer's office or fiscal agency, N. Y. City; Municipal-light and power-plant bonds (series A and B), State Treasurer's office; municipal-light and power-plant-extension and park bonds due July 1, 1932, at City Treasurer's office, and fiscal agency, New York City; park bonds due 1931, the refuse-disposal-plant bonds and bonds of 1912 at fiscal agency in N. Y. City (Equitable Trust Co.). All the other bonds, except those of the annexed cities, at City Treasurer's office or at fiscal agency in New York. Interest on the annexed cities' bonds is payable as follows: On refunding bonds, the water-works bonds due 1917 and 1924 and on the general municipal bonds, at the fiscal agency in N. Y. City; on the funding bonds at the Harris Trust & Savings Bank, Chicago; on the water-works bonds due 1915 at the Chemical Nat. Bank, N. Y. City, and on the water-works bonds due 1922 at the State Treasurer's office.

TOTAL DEBT, etc.—Cash in treasury
 Apr. 1, 1914.....\$1,330,721.05
 Apr. 1 '14 Apr. 1 '13
 Bonded debt.....\$15,440,400 \$15,258,400
 Floating debt None None

Total\$15,440,400 \$15,258,400
 Water debt (inclu.).. 2,572,241 2,625,827
 In addition to the above debt, the city had outstanding March 1, 1914, \$8,762,680.99 of assessment bonds and \$2,316,162.53 of assessment warrants, both a lien only against benefited property.

DEBT LIMITATION.—The limitation of bonded indebtedness is 10% of the assessed valuation, of which 5% is for water, light and sewers and 5% for general purposes.

CITY PROPERTY.—Jan. 1, 1914, the city owned personal property, real estate and securities valued at \$29,735,473. This total is exclusive of highways, sewers and cash.

ASSESSED VALUATION.—Assessment about 45% actual value.—

	1913	1912
Real estate.....	\$178,468,225	\$176,975,528
Personal	36,893,926	35,953,520

Total	\$215,362,151	\$212,929,048
Tax (per \$1,000).....	\$43.87	34.57

CITY TAX RATE (per \$1,000) for 1913 in the "old limits" was \$19.86; in the "new limits" it was \$19.31 and in South Seattle \$17.63. The total tax rate for 1913 was \$43.87, incl. State, county, city, school and Port of Seattle.

POPULATION in 1910 (Census) was 237,194; in 1900 (Census), 80,671; in 1890, 42,837; in 1880, 3,533.

SEATTLE SCHOOL DISTRICT NO. 1
 This school district is in King County, and includes the city of Seattle.

School Bonds.
 5s '95 J-J \$400,000.....July 1 1915
 4s '02 M-S 275,000.....Mar 1 1922
 4½s '03 A-O 100,000.....Oct 1 1923
 4½s '04 M-N 300,000.....May 1 1924
 4½s '06 M-S 200,000.....Sept 1 1920
 4s '06 J-J 500,000.....Jan 1 1926
 4½s '08 M-N 300,000.....May 1 1928
 4s '08 M-N 200,000.....May 1 1928

(Compiled by the Commercial and Financial Chronicle.)

SEATTLE—Concluded.

4s '09 M-N	400,000c.	May 1 1929
4½s '11 M-S	400,000c.	Mch 1 '15-'30
4½s '12 M-S	510,000c.	Mch 1 '15-'31
4½s '11 M-S	100,000c.	Mch 1 1931
4½s '13 M-S	200,000c.	Mar 1 '15-'33
5s '13 M-S	437,000c.	Mar 1 '15-'33
5s '14 A-O	361,000c.	1916-1934
4½s '14 A-O	152,000c.	
So. Park District No. 9 (Annexed).		
5s '01 M-S	\$3,000c.	Sept 1921
Rainier Val. District No. 18 (Annexed).		
4s '03 July	\$15,000c.	July 1923
W. Seattle District No. 73 (Annexed).		
4½s '08 J-D	\$55,000c.	June 1928
Bullard District No. 50 (Annexed).		
4¾s '03 F-A	\$20,000c.	Feb 1 1923
4½s '99 M-S	10,000c.	Sept 1 1919
4½s '01 M-S	8,000c.	Sept 20 1921
3¾s '07 F-A	70,000c.	Mar 1 1927
Georgetown Dists. 143 and 153 (Annexed).		
4¾s '04 J-D	\$20,000c.	June 4 1924
4½s '09 M-S	20,000c.	Mar 1 1929
BONDED DEBT June 30 '14...\$ 4,904,000		
Sinking fund.....244,334		
Assessed valuation '13 (45% act.) 218,046,671		
School tax (per \$1,000) '13.....6.00		
Value of school property.....6,315,190		
Population in 1910.....237,194		
INTEREST on 4½s of 1911 payable in Chicago (Harris Tr. & Sav. Bank) or N. Y. City; on \$200,000 4½s of 1913 at State Treasurer's office in Olympia; all other bonds at office of County Treasurer or at State fiscal agency in N. Y. City (Equitable Trust Co.).		

SKAGIT COUNTY.

Mt. Vernon is the county seat.		
Refunding Bonds (Red. beg. in 1914).		
3¾s '04 J-D	\$100,000.	June 1 1924
Refunding Warrant (Red. beg. in 1921).		
4½s '11 A-O	\$100,000.	Apr 1 1931
BONDED DEBT Sept 21 '14...\$ 200,000		
Assessed valuation '13 (31% act.) 14,367,727		
State and Co. tax (per \$1,000) '13.....29.00		
Population in 1910.....29,241		
INTEREST on 3¾s at State Treasurer's office; on 4½s at N. W. Halsey & Co., Chi.		

SNOHOMISH

This city is in Snohomish County. Incorporated in 1890.		
Special water bonds payable from water rent collections.....\$ 82,500		
Coupon water bonds payable from tax levy.....15,000		
Refunded water bonds payable from tax levy.....28,000		
BONDED DEBT Oct 19 '14.....125,000		
Assessed valuation '13 (35% act.) 1,177,235		
Total tax rate (per \$1,000) '13....44.60		
Population 1910.....3,244		
INTEREST on 3¾s at Olympia; on 5s at County Treasurer's office or Equitable Trust Co., N. Y.		

(Compiled by the Commercial and Financial Chronicle.)

SNOHOMISH COUNTY.

County seat is Everett.		
Refunding (Subject to call).		
3¾s	\$53,000.	Aug 1 1925
Funding Bonds (Red. beg. in 1921).		
5s '11	\$100,000.	Jan 2 1931
BONDED DEBT Feb '13.....\$ 153,000		
Warrant debt Jan 1 '13.....194,253		
Cash on hand Jan 1 '13.....115,742		
Assessed valuation '11 (48% act.) 38,737,641		
State and Co. tax (per \$1,000) '11.....17.50		
Population in 1910.....59,209		
INTEREST on 3¾s payable at Olympia; on bonds of 1911 at the County Treasurer's office or at Equitable Trust Co., N. Y. City.		

SPOKANE.

This city is in Spokane County. Incorporated Nov. 29, 1881. Commission government adopted in Dec., 1910.

Funding Bonds.		
5½s	F-A \$300,000c.	Feb 1 1918
Crematory Bonds (Tax-Exempt).		
4½s '09 F-A	\$70,000c.	Feb 1 1929
Bridge Bonds (Tax-Exempt).		
4½s g '07 J-D	\$400,000c.	Dec 1 1933
4½s g '09 J-J	500,000c.	July 1 1934
4½s g '11 J-J	415,000c.	July 1 1931
Park Bonds.		
5s	J-D \$100,000c.	Dec 1 1927
4½s '12 J-J	875,000c.	Jan 1 1962
Water Bonds.		
4s g '05 J-J	\$450,000c.	July 1 1925
4½s g '10 J-J	400,000c.	Jan 1 1935
Refunding Water Bonds.		
4½g '11 A-O	\$500,000c.	Oct 1 1931
Refunding Municipal Bonds.		
4½g '11 A-O	\$700,000c.	Oct 1 1931
GEN. BONDS Mar 31 '14.....\$ 3,360,000		
Water debt (additional).....1,400,000		
Assessment debt (additional).....4,458,602		
Floating debt.....414,036		
TOTAL DEBT Mar 31 '14.....9,632,638		
Sinking fund.....141,227		
NET DEBT Mar 31 '14.....9,491,411		
Assessed valuation '13 (3-5 act.) 89,987,215		
City tax rate (per \$1,000) '13.....12.00		
Total tax (per \$1,000) '13.....33.50		
Population in 1910 (Census).....104,237		
In addition to the bonds given above there are outstanding \$1,185,000 5% (J. & D.) coupon water bonds due Dec. 1, 1914-31 and \$78,000 6% (J. & J.) water-works warrants. These are not payable from the general tax levy but are secured by a lien upon the gross revenues of the water-works.		
Assessment bonds are not considered city debt, being payable by special assessment.		
CITY PROPERTY.—The city inventory on Jan. 1, 1914, showed real estate, buildings, library department equipments, etc., to the value of \$9,447,880, including water system valued at \$4,802,994.		
INTEREST and principal of city bonds payable in New York City at Equitable Trust Co.		

SPOKANE SCHOOL DISTRICT NO. 81.

Building Bonds.		
5s	'98 J-J \$ 50,000c.	Jan 1 1918
4s	'02 F-A 80,000c.	Aug 1 '15-'22
4½s	'04 M-S 209,000c.	Mch 1 1924
4½s	'07 J-J 200,000c.	July 1 1927
(Subject to call after July 1 1917.)		
4½s	'08 J-J \$250,000c.	July 1 1928
4½s	'09 J-J 400,000c.	July 1 1929
5s	'06 M-N 10,500c.	Nov 1 1926
(Subject to call after Nov 1 1916.)		
6s	'04 F-A \$3,000c.	Aug 1 1919
(Subject to call after Aug 1 1914.)		
5½s	'04 \$4,000c.	Aug 1 1924
(Subject to call after Aug 1 1914.)		
4½s	'11 M-N \$500,000c.	May 1 1931
4½s	'12 J-J 250,000c.	July 1 1932

Refunding Bonds.		
4½s	'10 J-J \$250,000c.	July 1 1930
BONDED DEBT Sept 1 '14...\$ 2,197,500		
Floating debt.....227,512		
Assessed valuation '13 (½ act.)...90,192,565		
School tax (per \$1,000) '13.....5.50		
Population in 1913 (estimated).....110,000		

INTEREST on bonds due Aug. 1, 1924, payable at County Treasurer's office; on 4½s due March 1, 1924 at County treasurer's office or at State fiscal agency in New York City (Equitable Trust Co.) and on bonds of 1907 and 1912 in N. Y. City at Equitable Trust Co.

SPOKANE SCHOOL DISTRICT NO. 122.

School-Building Bonds. (Tax-Exempt).		
5s	'07 J-D \$25,000c.	June 1 1922
(Subject to call after June 1, 1917.)		
5s	'12 A-O \$20,000c.	Apr 1 1932
BONDED DEBT Sept 1 '14...\$ 45,000		
Floating debt.....5,656		
Sinking fund.....2,753		
Assessed valuation '13 (½ act.)...1,772,862		
School tax (per \$1,000) '13.....38.00		
Population in 1913 (estimated).....5,000		
INTEREST on 5s at fiscal agency in N. Y. City (Equitable Trust Co.).		

SPOKANE COUNTY.

County seat is Spokane.		
Refunding Bonds (Red. beg. in '11).		
4s	'01 J-D \$129,000c.	Dec 2 1921
Court House and Jail Bonds.		
4½s	'03 A-O \$270,000c.	Oct 1 1923
(Subject to call after Oct 1 1913.)		
BONDED DEBT Sept 19 '14...\$ 399,000		
Warrants outstanding.....34,499		
Cash on hand.....196,300		
Assessed valuation '13 (about 42% actual).....122,492,478		
State and Co. tax (per \$1,000) '13.....16.00		
Population in 1910.....139,404		
INTEREST at fiscal agency in New York.		

EYMAN & CO.

INCORPORATED

INVESTMENT BANKERS SEATTLE, WASH.



Specialists in HIGH GRADE TAX SECURED BONDS originating in the Pacific Northwest. Investments suitable for Banks, Insurance Companies, Estates and Individuals — *Exempt from Income Tax*—To net 6% to 7%. Correspondence invited.

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The great strides in growth of population and wealth of Washington, Oregon, Idaho and Montana are making available millions of dollars of excellent securities of the character indicated above. Lists of bonds which we have purchased for our own account and can recommend for their security and high income yield gladly furnished.

Hoge Building, Cor. Second Ave. and Cherry St. SEATTLE

Attention is called to the announcement on page 11

STEVENS COUNTY.

County seat is Colville. A portion of this county has been taken to form the new Ferry County.

Refunding Bonds.
 4½s '02 J-J \$35,000c.....Mar 1 1922

Refunding Bonds.
 4½s '02 M-N \$184,000c.....Nov 1 1929
 (Subject to call after Nov 1 1919.)

BONDED DEBT Sept 19 '14....\$ 239,000
 Assessed valuation '14..... 8,910,941
 State and Co. tax (per \$1,000) '14 28.00
 Population in 191019,270
INTEREST payable in N. Y. City.

TACOMA.

Tacoma is the county seat of Pierce County. Incorporated Nov. 8, 1883.

Bridge Bonds.
 4½s '09 J-D \$300,000c.....July 1 1929
 4½s '12 J-J 543,000c.....Jan 1 1932
 4½s '13 M-S 35,000c.....Mar 15 1928

Refunding Bridge Bonds.
 5s '13 s-an \$90,000c.....June 1 '15-'17

Funding Bonds.
 5s g '00 F-A \$1,093,000c.....Feb 15 1920

Refunding Bonds.
 4½s '11 A-O \$518,000c.....Apr 1 1931

Surface Water Drainage Bonds.
 4½s '09 J-J \$ 75,000c.....July 1 1929
 4½s '10 F-A 100,000c.....Aug 1 1930

Green River Gravity Water Bonds.
 4½s '10 J-J \$500,000c.....July 1 1930

Refunding Light Bonds.
 5s '13 s-an \$250,000c.....June 1 '18-'21

Refunding Water Bonds.
 5s '13 s-a \$1,750,000c.....June 1 '22-'33

Light and Power-Plant Bonds.
 4½s '09 J-J \$300,000c.....Jan 1 1929

Wharf and Dock Bonds.
 4½s '11 J-J \$405,000c.....Jan 1 1931

Road Bonds.
 4½s '13 M-S \$117,000c.....
 (Due \$8,000 yearly for 15 years and \$5,000 in 16 years.)

GEN. BD. DEBT Sept 1 '14....\$ 6,076,000
 Water and light debt (additional) *3,507,904
 Improvement debt (additional).... 1,617,913
TOTAL DEBT Sept 1 '14..... 11,201,817
 Sinking fund assets..... 300,319
NET DEBT Sept 1 '14..... 10,901,498
 Assessed valuation, real..... 48,396,653
 Assessed valuation, personal and public service corporation..... 25,892,923
 Total valuation '13 (3-5 act.).... 73,298,458
 Total tax (per \$1,000) '13..... 36.20
 Population in 1910 83,743
 Population in 1914 (estimated).... 110,000

*This debt consists of water and light and power plant bonds maturing from 1 to 20 years. These are not payable from the general tax levy, but are paid out of revenue of water and light plants.

INTEREST on local improvement bonds at City Treasurer's office; other interest at

Equitable Trust Co., N. Y.

TACOMA SCHOOL DISTRICT NO. 10.

Building Bonds.
 4½s '05 M-S \$200,000c.....Sept 1 1925
 4½s '11 ann *290,000c.....July 1 1931
 4½s '12 ann *200,000c.....Dec 31 1932
 4½s '13 July *200,000c.....July 1 1933

Refunding Bonds.
 4½s '00 F-A \$100,000c.....Feb 1 1920

BONDED DEBT Mar 1 '14.....\$ 990,000
 Sinking fund 33,243
 Value school property '13..... 2,644,522
 Assessed valuation '13 (½ act.).. 77,892,299
 Tax rate (per \$1,000) '13..... 5.15
 Population in 1913 (estimated).....100,000
 *Redeemable beg. 1 year after date.

INTEREST Equitable Trust Co., N. Y.

WALLA WALLA.

This city is in Walla Walla County. Incorporated in 1862.

Water and Sewer Bonds (Tax-Exempt).
 5s '99 Jan \$159,000c.....1926

Refunding Bonds. (Tax-Exempt).
 4½s g '12 J-J \$40,000c.....Jan 1 1932

City-Hall and Fire-Station Bonds.
 5s g '08 J-J \$100,000c.....Jan 1 1928

Municipal Improvement Bonds.
 5s & 6s \$41,403.54c.....

Water-Works Bonds (Tax-Exempt).
 4½s '99 M-S \$133,000c.....1919
 5s g '06 Nov 213,000c.....1936
 (Subject to call.)

GEN. BONDS Oct '14.....\$ 686,404
 Assessment debt (additional)..... 236,797
 Floating debt 90,042
 Cash on hand..... 22,042
 Assessed valuation '14 (40% act.).. 9,359,712
 Tax rate (per \$1,000) '14..... 13.00
 Population 1910 19,364

INTEREST in W. W. and N. Y. City.

WALLA WALLA CO. S. D. NO. 1.

All bonds are tax-exempt.

Funding and Building Bonds.
 4½s '03 \$63,000c.....Sept 21 1923
 4½s '08 M-S 30,000c.....Sept 15 1928
 (Subject to call after Sept 15 1918.)

4s '09 ann \$167,000c.....1926
 (Subject to call at any time.)

5s '10 F-A \$50,000c.....Aug 1 1930

BONDED DEBT Apr 18 '14.....\$ 310,000
 Assessed valuation '13 (3-5 act.).. 10,659,981
 School tax (per \$1,000) '13..... 5.15

INT. at Harris T. & Sav., Chicago.

WALLA WALLA CO. S. D. NO. 24.

Funding and Building Bonds.
 5½s '11 ann \$35,000c.....Aug 1 1921
 (Subject to call \$5,000 after 3 years, \$5,000 after 5 years and \$10,000 after 10 years.)

TOTAL DEBT Apr 18 '14.....\$ 35,000
 Assessed valuation '13 (3-5 act.).. 1,193,492
 School tax rate (per \$1,000) '13.. 11.75

Interest at County Treasurer's office.

WENATCHEE.

This city is in Chelan County. Incorporated Dec 26, 1892.

Warrant Funding Bonds.
 5s '12 \$9,500.....1932

Municipal Purpose Bonds.
 5s '09 \$40,000.....1924
 5s '10 50,000.....1930

General Bonds.
 5½s '12 J-D \$15,000.....Dec 15 1932

Water Bonds.
 6s '01 \$ 7,500.....1921
 4½s '04 16,000.....1924
 4½s '08 55,000.....1928
 5½s '12 J-D 27,000.....Dec 15 1932

BONDED DEBT Dec 31 '13....\$ 220,500
 Warrants outstanding 115,969
 Assessed valuation '13 (60% act.).. 3,108,970
 City tax (per \$1,000) '13..... 17.25
 Population in 1910.....4,050

INTEREST at City Treasurer's office.

WHATCOM COUNTY.

County seat is Bellingham.

Refunding Bonds. (Red. beg. in '12).
 4½s J-J 160,000c.....Jan 1 1922

GEN. BD. DEBT Jan 1 '14.....\$ 160,000
 Assessment debt (additional).... 29,114
 Floating debt 347,875
TOTAL DEBT Jan 1 '14..... 536,989
 Sinking fund and cash..... 28,963
 Assessed valuation '13 (2-5 act.).. 25,718,955
 State and Co. tax (per \$1,000) '13 30.16
 Population in 1910.....49,511

INTEREST is payable at fiscal agency in N. Y. (Equitable Trust Co.)

WHITMAN CO. S. D. NO. 59.

Refunding Bonds.
 5s '06 F-A \$25,000c.....1926
 (Subject to call beginning 1921.)

High-School-Building Bonds.
 5s '13 A-O \$25,000c.....Apr 1 1933
 (Subject to call beginning Apr 1 1922.)

BONDED DEBT Sept 19 '14.....\$ 50,000
 Floating debt Apr 24 '14..... 20,469
 Assessed valuation '13 (45% act.).. 1,260,327

INT. at Co. Treas. office or New York.

YAKIMA COUNTY.

County seat is North Yakima.

County Bonds.
 5½s '89 A-O \$80,000c & r.....1919
 4s '06 Mar 80,000c & r.....1926

BONDED DEBT Sept 1 '14.....\$ 160,000
 Warrants out. (County funds).... 13,875
 Warrants out. (road dist. funds)... 32,795
 Cash in road funds..... 7,389
 Sinking fund and cash (Co. funds) 120,274
 Uncollected tax due (Co. funds)... 155,592
 Assessed valuation '14 (½ act.).. 37,246,145
 State and Co. tax (per \$1,000) '13 18.86
 Population in 1910 (Federal).....41,709
 Population in 1914 (local).....50,465

INTEREST in N. Y. and San Francisco.

(Compiled by the Commercial and Financial Chronicle.)

BOLGER, MOSSER & WILLAMAN
BANKERS
 Established in 1894

MUNICIPAL BONDS

State, County, City, School, Road and Drainage District Bonds.

Our twenty years' experience in the selection and sale of municipal bonds has convinced us (and our clients also) that bonds payable from taxes are the most reliable and desirable form of investment. Their market value is stable and the payment of principal, as well as interest, is assured.

We solicit correspondence and interviews with investors desiring safe, conservative bonds.

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Investment Bonds

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Municipals

County, City and School District
 **To yield 4½ to 5½%**

Public Utility

Issues secured by established, well managed properties operating in the east and middle west.
 **To yield 5½ to 6%**

Timber Land

Bonds, being first liens on selected tracts of merchantable timber, examined and cruised by experts . . . **To yield 6 to 7%**

Suitable for investment of banks, trust funds, insurance companies, fraternal organizations, postal savings deposits, and for conservative investors.

Further details cheerfully furnished upon request

Attention is called to the announcement on page 11

Bonds of public service companies, amply secured by property and earning power, can now be purchased at prices to yield from 5% to 6%. Bonds of such companies located in thriving cities and supplying the necessities of the public in transportation, light, heat and power are little affected by fluctuations in business conditions.

We shall be glad to send offerings and detailed information upon request.

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STOCK EXCHANGES

**CORPORATION
SECTION**

E. H. ROLLINS & SONS

FOUNDED 1876

INVESTMENT BONDS

E. H. ROLLINS & SONS' SHARE IN CALIFORNIA'S DEVELOPMENT

During the last twenty years the financial and commercial growth of the State of California has been the greatest in its history and almost unparalleled by that of any other section of the United States. Foreseeing this growth and the consequent demand for capital necessary to develop the natural resources and wealth of the State, E. H. Rollins & Sons, Investment Bankers, opened in 1894 a branch office in San Francisco and were

THE FIRST BOND HOUSE ESTABLISHED IN CALIFORNIA.

Since then through the purchase of Municipal Bonds they have assisted in the upbuilding and improvement of practically every section of the State, and by furnishing Public Service Corporations with large sums required for their development they have been financially associated with the remarkable growth of most of the important companies in the California Public Utility field.

Following are the chief California Public Utility Corporations whose bonds have been purchased by E. H. Rollins & Sons and their associates to an amount of approximately \$100,000,000. Their annual gross earnings are now in excess of \$35,000,000.

- *American River Electric Co.
- *Bay Counties Power Company.
- *Blue Lakes Water Company.
California Delta Farms, Inc.
California Electric Generating Co.
Coast Valleys Gas & Electric Co.
- *Edison Electric Co. of Los Angeles.
- *Fresno Traction Company.
Great Western Power Company.
Huntington Land & Improvement Co.
Long Beach Consolidated Gas Co.
- *Los Angeles Gas & Electric Co.
Los Angeles Gas & Electric Corp.
- Los Angeles Railway Corporation.
Market Street Cable Railway Co. (S. F.)
- *Mutual Electric Light Company.
Oakland Transit Company.
- *Oro Water, Light & Power Company.
Petaluma & Santa Rosa Rwy. Co.
San Francisco, Napa & Calistoga Rwy.
Santa Barbara Gas & Electric Co.
Southern California Edison Co.
- *Stockton Gas & Electric Corp.
- *United Electric Gas & Power Co.
Western Power Company.
Western States Gas & Electric Co.

*Ten issues of bonds put out by the above companies have, since E. H. Rollins & Sons handled them, become underlying liens. The issues in question are indicated by a star.

Since 1894 E. H. Rollins & Sons and their associates have purchased over \$5,000,000 of State of California bonds for harbor and highway purposes. They have furnished funds for the improvement of all of its important counties, cities and many of its minor political subdivisions, including over \$10,000,000 for the reconstruction and improvement of the City of San Francisco and the construction of the Panama-Pacific International Exposition; also about \$24,500,000 for general civic improvements for the City of Los Angeles, including the important Owens River Aqueduct. The activities of E. H. Rollins & Sons along the above lines represent the furnishing of approximately \$62,000,000 to the State of California and ninety-two of its counties, municipalities and political subdivisions.

In the Public Utility field the financing arranged through E. H. Rollins & Sons has enabled—

The extension of the street railway systems in San Francisco, Los Angeles and Oakland;

The development of the Bay Counties Power Company which was the first company in the world to successfully transmit electric power over a long distance;

The completion of Southern California Edison Company's original hydro-electric installation on the Kern River and its steam station of 63,000 H.P. near Los Angeles;

The construction and extension of the Great Western Power Company's hydro-electric installation (now 82,000 H. P.) on the Feather river and its storage reservoir in Big Meadows. This reservoir, when fully developed, will be, next to the lake impounded by the Asuan Dam in Egypt, the largest artificial body of water in the world.

Write for information regarding California's progress, the probable effect the Panama Canal will have upon its future, its Public Utility Corporations, and the safeguards furnished to the conservative investor by its laws.

As E. H. Rollins & Sons have head offices in Boston and New York and branches in the important financial cities of Chicago, Philadelphia, Denver, Los Angeles and San Francisco, they are familiar with most of the important Public Utility Companies and general financial conditions throughout the country. On request information and advice as to the soundness of Municipal and Corporation Bonds will be gladly given to prospective purchasers or holders of securities.

E. H. Rollins & Sons, after careful investigation by their attorneys, engineers and commercial experts, have purchased for their own account bond issues of cities and corporations located in all parts of the United States. Circulars describing Corporation Bonds yielding from 5% to more than 6%, and State, County and Municipal issues yielding from 4% to more than 5% will be forwarded on request.

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LONDON
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Securities and Reports

of

Public Service and Miscellaneous Corporations of the Pacific Coast

Alaska Packers' Association, San Francisco, Cal.

The operations of the company consists of catching and packing of salmon in Alaska and Puget Sound waters. The company owns and operates a fleet of steamers, sailing vessels, canneries and hatcheries.

Capitalization.

Stocks—	Authorized.	Outstanding.
Common	\$7,500,000	\$5,750,000
Funded Debt—		
Bonds	2,000,000	815,000

Physical Property.

The company owns 9 ships, 12 barks, 1 barkentine, 3 schooners and 63 steamers and launches, a total of 88 vessels appraised at \$1,505,850. The company operated in 1913 14 canneries in Alaska and 3 on Puget Sound and 2 salmon hatcheries in Alaska. From 68,760,000 red salmon eggs taken in 1912 at these two hatcheries, 62,603,000 fry were liberated in 1913. 44,109,160 red salmon eggs were taken at the two hatcheries in 1913. The company also owns and operates a ship yard at Alameda on San Francisco Bay. The company carries its own insurance on all its property and operations. The insurance fund in 1913 was \$1,841,248.39, of which \$1,537,500 is invested in bonds.

Statistics.

The following table shows the number of canneries operated and cases packed:

1904—21—1,170,474	1907—16—1,100,035	1910—15— 971,716
1905—16—1,139,721	1908—16—1,160,477	1911—16—1,053,015
1906—16—1,044,676	1909—17—1,338,254	1912—15—1,202,779
	1913—17—1,504,415	

Earnings.

1910 \$517,009—1911 \$631,899—1912 \$372,832—1913 \$148,380

Officers.

Henry F. Fortmann, Pres. Isaac Liebes, Treas.
Louis Sloss, V.-P. A. K. Tichenor, Secy.
William Timson, V.-P. G. E. Geary, Cashier.

Amalgamated Copper Co., New York, N. Y.

The company is a holding company and does not operate any mining, milling or smelting properties.

Subsidiary Companies.

Anaconda Copper Mining Co. The United Metals Selling Co.

Capitalization.

Stocks—	Authorized	Outstanding
Common	\$155,000,000	\$153,887,900
Funded Debt—		
2 year, 5% gold notes, due March 15, 1915	12,500,000	12,500,000

Physical Property.

The company owns the entire capital stock of the United Metals Selling Co. It owns a controlling interest in the Anaconda Copper Mining Co. (\$79,609,150 out of the capital stock \$108,312,500). It also owns \$3,080,000 of the capital stock of the Green-Cananea Copper Co. and 150,000 shares of the Inspiration Consolidated Copper Company.

Earnings.

Year	Net†	Dividends.	Balance.
1910	\$5,963,968	\$3,077,758	\$2,886,210
1911	6,048,896	3,077,758	2,971,138
1912	6,647,006	3,847,198	2,799,808
1912 (8 mo. ending 12/31)	6,595,611	3,847,198	2,748,413
1913	8,871,799	9,233,274	*361,475

*Deficit.
†Net earnings are shown after deducting operating expenses and taxes.

Dividends.

Per cent	02	03	04	05	06	07	08 to 11	12	13	14
	2½	2	2	4½	7	7	2 yrly	4	6	1½-1½

Officers.

John D. Ryan, Pres. A. H. Melin, Sec'y and Treas.
D. B. Hennessy, Asst. Sec'y and Asst. Treas.

American Smelting and Refining Co., and the American Smelters Securities Co. New York.

The operations of these companies consist of mining or otherwise acquiring gold, silver, copper, lead and other ores; dealing in such ores and their products; and of smelting, refining, milling or otherwise treating same.

Subsidiary Companies.

(Amer. S. & R. Co.) A. S. Steamship Co. Federal Lead.
Con. K. C. S. & R. Co. Nat'l Metallurg. Co. Garfield S. Co.
U. S. Zinc Co. (Amer. S. S. Co.) Selby S. & L. Co.
Carbon C. & C. Co. Balt. Cop. S. & R. Co. Tacoma S. Co.

Capitalization.

Stocks—	Authorized.	Outstanding.
Preferred:		
A. S. & R. (7% cum.)	\$50,000,000	\$50,000,000
A. S. & S. (a) (6%)	17,000,000	17,000,000
A. S. & S. (b) (5%)	30,000,000	30,000,000
Common		
A. S. & R.	*65,000,000	50,000,000
Funded Debt—Bonds		
A. S. & S.	30,000,000	†30,000,000
A. S. & S. convertible 6s, Feb. 1st, 1926	15,000,000	15,000,000
*\$15,000,000 issued to retire the A. S. & S. 6 per cent convertible Debentures.		
†Owned by the A. S. & R. Co.		

Physical Property.

These companies own and operate mining properties in Mexico, Colorado, Missouri, California, Washington, Utah. They also own and operate smelting and refining plants in Utah, Montana, Nebraska, Colorado, Illinois, New Jersey, Mexico, Arizona and elsewhere. The principal merchantable products are bar gold and silver, pig lead, electrolytic copper and blue vitrol.

Earnings.

Year.	Gross Revenue.	*Net Earnings.	Interest and Dividends.	Balance.
1911	\$15,112,125	\$10,571,502	\$8,020,000	\$2,551,502
1912	16,759,499	11,079,676	8,020,000	3,059,676
1913†	13,429,993	9,756,540	8,020,000	1,736,540

*Net earnings are shown after deducting operating expenses and taxes.

†Reduction in earnings during 1913 due entirely to the disturbed conditions in Mexico.

Sources of Gross Revenue.

	Smelting, Refining, etc.	Mining Properties	Interest, Rents, etc.
1912	\$12,568,835	\$3,113,105	\$1,077,560
1913	10,926,254	1,185,154	1,318,525

Dividends.

	05	06	07	08	09	10	11	12	13
A. S. & R. common pct.	5½	7	7½	5	4	4	4	4	4

Officers.

Daniel Guggenheim, Pres. Judd Stewart, Gen. Aud. & Asst.
Barton Sewell, V.-Pr. to Pres.
Edward Brush, V.-P. & Asst. P. Frank W. Hills, Comptroller.
S. W. Eccles, V.-P. Lucius A. Chapin, Asst. Treas.
Edgar L. Newhouse, V.-P. W. E. Merris, Sec'y.
Isaac Guggenheim, Treas. F. R. Foraker, Asst. Gen. Coun.
John N. Steele, Gen. Coun. & Asst. Sec'y.
R. P. Reese, Auditor.

The Armsby Company of New York,

New York, N. Y.

The company is engaged in packing and distributing at wholesale throughout the United States, Canada and Europe, dried fruits, canned fruits, and walnuts; and in selling at wholesale on a commission basis similar products for other smaller packing companies. The company handles the entire distribution in the United States of salmon canned by the Alaska Packers' Assn., the largest concern of its kind in the world. The company's central business organization is in San Francisco. It maintains branches in New York, Boston, Chicago, and Los Angeles.

Subsidiary Companies.

J. K. Armsby Co. of Illinois.

Capitalization.

Stocks—	Authorized	Outstanding
Preferred (7% cum.)	\$500,000	\$485,000
Common	500,000	437,000

Physical Property.

The company owns and operates 16 plants for preparing and packing its various products at the following points: Los Angeles, Armona, San Jose, Fresno, Visalia, Suisun, Marysville, Sunnyvale, Stockton, Healdsburg, Gilroy, Sanger, Vacaville, and Winters, in California, and at Vancouver, Wash., and Dallas, Oregon; also owns warehouse and office building in San Francisco. The company owns all of the capital stock of the J. K. Armsby Company of Illinois and a large interest in the Central California Canneries; also owns stock interests in the Pacific Coast Seeded Raisin Co. and valuable trade mark rights.

Earnings.

	Net Earnings after all charges
1910	\$ 87,214
1911	110,098
1912	172,060
1913	170,912

Officers.

J. K. Armsby, Pres. F. A. Aplin, V. P.
G. N. Armsby, V. P. A. W. Porter, V. P.
E. P. Sills, V. P. A. M. Lester, Sec.
E. R. Armsby, Treas.

Associated Oil Co., *San Francisco, Cal.*

The company transacts a general business in the acquiring of oil properties, leasing of oil rights, producing, manufacturing, refining, transporting and distributing oil in California and throughout the United States and territories.

Subsidiary Companies.

Associated Pipe L. Co.	Sterling Oil & De. Co.
Amalgamated Oil Co.	West Coast Oil Co.
Pioneer Midway Oil Co. Cons.	Calif. Coast Oil Co.

Capitalization.

Stocks—	Authorized.	Outstanding.
*Common	\$40,000,000	\$40,000,000
Funded Debt—		
Bonds	30,000,000	15,685,000

*Control owned by Southern Pacific Co.

Physical Property.

Of the California oil properties held in California, the company owns in fee, according to latest returns, 36,511 acres, and has under leases (20 years) 2,125 acres. Mineral locations, 3,200 acres.

These properties are in Kern, Fresno, San Luis Obispo, Santa Barbara, Contra Costa and Kings counties. The company also owns refineries, distributing plants, railway equipment and a fleet of 13 vessels. It has selling agencies in the principal cities of Nevada, Arizona, California and in Portland and Hawaii. The company also owns controlling interest in all the subsidiary companies above mentioned and stock interest in a number of other companies.

The company had on hand Dec. 31, 1913, 8,595,145 bbls. of oil, an increase for the year of 488,529 bbls.

Earnings.

Year.	Gross Revenue.	*Net Earnings.	Interest.	Balance.
1910	\$22,385,117	\$ 3,007,902	\$ 553,688	\$ 2,454,214
1911	20,337,684	2,594,933	828,687	1,766,246
1912	16,772,618†	2,049,093	818,648	1,230,445
1913	17,871,693	2,606,666	784,254	1,822,412

*Net earnings are shown after deducting operating expenses and taxes and dep.

†Loss is largely due to change in methods of accounting.

Officers.

Wm. Sproule, Pres.	F. B. Henderson, Asst. Genl. Mgr.
J. A. Chanslor, V.-P.	P. G. Williams, Secretary.
F. H. Buck, V.-P.	W. A. Sloan, Treas.
J. R. Lewis, V.-P.	C. L. Coppage, Asst. Sec'y.

R. G. Page, Assistant Secretary.

Booth Fisheries Co., *Chicago.*

The company is engaged in buying and selling at wholesale and retail fish, oysters and all sea foods, and operates in the Atlantic and Pacific oceans and on the Great Lakes. Its distributing branches number more than 100 which are located in the most important cities of the United States.

Subsidiary Companies.

N. W. Fish Co. of Washington.	Booth C. S. Co. of Minnesota.
Booth C. S. Co. of Ill.	U. S. & D. T. Co., Minnesota.

Capitalization.

Stocks—	Authorized.	Outstanding.
Preferred (1st cum. 7%)	\$10,000,000	\$2,200,000
Common	10,000,000	5,000,000
Funded Debt—		
Bonds	5,000,000	3,520,000
Bonds on cold storage plants		187,500

Physical Property.

The company owns its 100 distributing plants above mentioned and producing stations on the Great Lakes and the North Pacific Coast with some minor stations on smaller inland waters. Four public cold storage plants are owned and the more important stations are equipped with freezing plants. The company owns and operates a line of passenger and freight boats on Lake Superior and has fishing fleets on the Great Lakes and Pacific Ocean. The company has also obtained concessions from the Newfoundland government. It owns the entire capital stock of the Northwestern Fisheries Co.

Statistics.

Sales 1911, \$14,558,432.59 1912, \$16,717,161.58 1913, \$17,554,490.75

Earnings.

Year.	Gross Revenue.	*Net Earnings.	Interest.	Balance.
1911	\$3,849,304	\$582,156	\$180,091	\$402,065
1912	4,585,085	703,705	299,735	403,969
1913	4,806,481	525,238	314,786	210,452

*Net earnings are shown after deducting operating expenses and taxes.

Officers.

A. B. Carpenter, Pres. & Treas.	W. G. Weil, Sec'y & Asst. Treas.
K. L. Ames, V.-P.	W. F. Cochran, Asst. Sec. & Treas.

California Delta Farms, Inc., *Los Angeles, Cal.*

The company operations consist of the reclamation by levee construction and drainage of delta lands of the San Joaquin River in Contra Costa and San Joaquin counties; placing reclaimed land under irrigation by pumping sys-

tems and the sale and lease of such lands for agricultural purposes.

Subsidiary Companies.

Holland Land & Water Co.	Empire Navigation Company.
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Capitalization.

Stocks—	Authorized	Outstanding
Common	\$7,500,000	\$7,500,000
Funded Debt—		
Bonds	3,500,000	2,593,000

Physical Property.

The company owns approximately 45,500 acres of land valued Dec. 31, 1913, at \$8,307,425; its permanent improvements consisting of canals, buildings, pumping plants, bridges, telephone lines, floodgates, dry dock, wharves and levees valued at \$1,129,206; 12 dredges and other machinery and equipment valued at \$360,481. Mortgages held by the company aggregate \$484,081; its rent role from lands leased total \$328,231.70 for 1914.

Earnings.

Year.	Gross Revenue.	*Net Earnings.	Interest.	Balance.
1913	\$545,993	\$419,367	\$80,562	\$338,805

*Net earnings are shown after deducting operating expenses and taxes.

Officers.

Lee A. Phillips, Pres.	Geo. A. Atherton, Gen'l Mgr.
Isaac Milbank, V.-P.	Howard S. Dudley, Sec'y & Treas.
John B. Miller, V.-P.	Geo. M. Burton, Ass't Sec'y.

California Fruit Cannery, *San Francisco, Cal.*

The company is engaged in canning and preserving of fruits and vegetables throughout California, and in the sale and distribution of their products.

Capitalization.

Stocks—	Authorized	Outstanding
Common	\$3,500,000	\$3,000,000

Physical Property.

Owens and operates about 75 per cent of the vegetable and fruit canneries in the state of California. The company owns interests in a number of other companies similarly engaged. Valuation of such holdings, together with real estate, machinery and operating plants was \$3,192,260 as of February 28, 1914.

Earnings.

Year	Net Earnings	Div.	Surplus and Contingent Reserve Fund
1910	\$331,175	\$208,195	\$1,407,936
1911	416,725	208,195	1,506,359
1912	603,025	208,195	1,700,929
1913	739,261	208,195	1,992,862
1914	603,051	333,545	2,129,136

Dividends.

Every year since 1900 at the rate of 7.20 per cent annually. Dividend paid monthly except for 7 months, May to November, 1906.

Officers.

William Fries, Pres.	R. I. Bentley, V.-P. & Gl. Mgr.
S. L. Goldstein, V.-P. & Treas.	Francis Cutting, Vice-Pres.
	Chas. B. Carr, Sec.

California Oregon Power Company, *San Francisco, Cal.*

The company furnishes electric light and power to the territory extending from Castilla, Cal., on the south to Glendale in Oregon on the north; east to Klamath Falls in Oregon, and west to Etna in California. It also furnishes water to two communities. Thirty-three cities and towns in northern California and southern Oregon are served by this company. Its primary lines extend over 400 miles, through Shasta-Scott-Butte Valleys in California and Klamath-Rogue River Valleys in Oregon.

Subsidiary Companies.

Rogue R. Elect. Co.	Sisk. E. Pr. & L. Co.	Klamath Power Co.
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Capitalization.

Stocks—	Authorized.	Outstanding.
Common	\$10,000,000	\$10,000,000
Funded Debt—		
Bonds	10,000,000	5,600,000

Physical Property.

The company owns and operates 7 hydro-electric plants with an aggregate development of 71,250 hp. and a possible development of 160,000 hp.; also 400 miles of high tension transmission lines and the water works at Klamath Falls, Ore., and Dunsmuir, Cal.

Officers.

J. W. Churchill, Pres.	J. R. Churchill, Treas.
J. D. McKee, V.-P.	A. J. Rosborough, Sec'y.

California Wine Association, *Winehaven, Cal.*

The operations of the company consist of the growing and making of wines and brandies and the sale and distribution of these products.

Capitalization.

	Authorized.	Outstanding.
Stocks—		
Preferred (6% cum.)	\$ 7,000,000*	\$1,426,260
Common	13,000,000*	4,754,200
Funded Debt—		
Bonds	7,000,000	4,495,000

*\$5,000,000 each of pref. and com. authorized in 1913 to provide for convertible feature of debentures.

Physical Property.

The company owns approximately 50 parcels of real estate in 14 counties of California, wineries, distributing plants, etc., valued at \$1,731,392* with an approximate annual production capacity of 20,000,000 gals. It also owns interests in the capital stock of other companies similarly engaged amounting to \$7,128,048*. Stock inventory of wines, etc., \$3,250,605.*

*As of December 31st, 1913.

Officers.

B. R. Kittredge, Pres. J. Frowenfeld, 2nd V.-P. & Treas.
 C. O. G. Miller, 1st V.-P. W. Hanson, V.-P., Sec. Gn'l Mngr.
 J. A. O. Covik, Ass't Sec'y.

Coast Counties Gas & Electric Co., San Francisco.

The company furnishes electric light and power and gas in Santa Cruz, San Benito and Santa Clara counties, Cal. The company purchases a part of its power from the Pacific Gas & Electric under a long term contract; also operates the electric railways in Santa Cruz and vicinity.

Subsidiary Companies.

Coast Co. L. & Pr. Co. Union Traction Co. Big Creek Lt. & Pr. Co.
 S. Benito L. & Pr. Co.

Capitalization.

	Authorized.	Outstanding.
Stocks—		
Preferred (6% cum.)	\$2,000,000	\$1,000,000
Common	2,000,000	1,000,000
Funded Debt—		
Bonds	1,839,000	1,580,000

Physical Property.

The company owns and operates one hydro-electric and 2 steam plants with a combined development of 3,346 hp.; 75 miles of transmission lines and 531 miles of distributing lines, 6 substations; owns gas plants at Santa Cruz, Watsonville, Hollister and Gilroy; the Union Traction Co. operates 18 miles of standard gauge track in Santa Cruz and thence to Capitola. The company's municipal franchises are perpetual—county franchises on highways run until 1946-1959. The Company owns all the capital stock of its subsidiary companies, except the Union Traction company, which it controls.

Statistics.

Consumers Served.

Year.	Gas.	Electric.	Total
1909	1,912	3,095	5,007
1910	2,017	3,539	5,556
1911	2,725	4,627	7,352
1912	3,161	4,862	8,023
1913	3,281	5,530	8,811

Earnings.

	Gross Revenue.	*Net Earnings.	Interest.	Balance.
1909	\$209,989	\$ 87,130	\$ 57,575	\$ 29,555
1910	252,104	113,037	63,560	49,477
1911	289,115	143,134	69,560	73,574
1912	319,940	161,032	72,560	78,543
1913	356,508	143,174	78,543	64,631

†Gross earnings include profit from Union Traction Co. operations. Deficit in 1913.

*Net earnings are shown after deducting operating expenses and taxes.

Officers.

S. W. Coleman, Pres. & Gen. Mgr. R. M. Hotaling, Vice President.
 L. W. Pryor, Secretary and Treasurer.

Coast Valleys Gas and Electric Co.,

San Francisco, Cal.

The Company owns and operates the electric business in Salinas, Monterey, Pacific Grove and King City; the gas business in Salinas, Monterey and Pacific Grove; the water business in Salinas and King City; together with an electric distribution system for power and lighting service in the Salinas Valley between Salinas and King City.

Capitalization.

	Authorized	Outstanding
Stocks—		
*Preferred (7%)	\$2,000,000	\$2,000,000
Common	3,000,000	3,000,000
Bonds	10,000,000	900,000

*The stock of this company is controlled by the United Rys. Inv. Co. through the Cal. Ry. & Power Co.

Physical Property.

All power is purchased from Sierra & San Francisco Power Company, but the Company owns three steam stations having total capacity of 1,375 K. W. The Company also owns 65 miles of high tension transmission line, 8 sub-stations aggregating 5,100 K. W., and 210 miles of dis-

tribution system. The gas plants at Salinas and Monterey have, respectively 400,000 and 500,000 cubic feet daily capacity. Gas is distributed through 3 miles of high pressure and 39 miles of low pressure mains.

Earnings.

Year	Gross Revenue	*Net Earnings	Interest	Balance
1913	\$227,704	\$94,503	\$59,813	\$34,690

*Net earnings are shown after deducting operating expenses and taxes.

Officers.

C. N. Black, Pres. H. F. Jackson, V.-P. & Gen'l Mgr.
 G. W. Bacon, Vice-Pres. F. J. Blanchard, Sec'y and Treas.

General Petroleum Co.,

Los Angeles, Cal.

The company owns, leases, and develops oil lands and constructs and operates pipe lines, refineries, distributing plants and equipment, etc., and buys and sells oil and its products.

Subsidiary Companies.

Trumble Refining Co. General Pipe Line Co.

Capitalization.

	Authorized.	Outstanding.
Stocks—		
Common	\$50,000,000	\$34,814,600
Funded Debt—		
Bonds	25,000,000	12,477,300
Conv. serial 2 yr. notes, 1915	3,000,000	2,868,000

Physical Property.

The company owns 23,644 acres of oil lands in California, and 24,500 in Mexico; tanks with combined capacity of 25,128 gals.; 3 refineries with daily capacity 35,000 bbls. Owns entire stock of its subsidiary companies.

Officers.

John Barneson, Pres. Virgil F. Shaw, Ass't Sec'y.
 Jas. T. Currie, 1st V.-P. B. C. Donham, Ass't Sec'y.
 Wm. Weir, 2nd V.-P. Robert Mitchell, Treas.
 C. R. Stevens, Sec'y.

Great Western Power Co. of California,

San Francisco, Cal.

The company furnishes electric light and power to a territory including 11 counties in California, and having a total area of 8,600 square miles.

Subsidiary Companies.

California Electric Generating Co. City Electric Co.

Capitalization.

	Authorized	Outstanding
*Stock—		
West. Power Co. of N. J., pref. 6%	\$ 6,000,000	\$ 6,000,000
West. Power Co. of N. J., com.	14,670,000	14,670,000
Funded Debt—		
Bonds, Gt. West. Power Co. and subsidiaries	35,000,000	23,645,000
West. Power Co. of N. J., notes coll. tr. 6s, due 1915	1,250,000	1,250,000

*The stock of the Great Western Power Co. is all owned by the Western Power Co. of New Jersey. The latter has no bonded indebtedness.

Physical Property.

The company owns at Big Bend, California, 18 miles above Oroville and 154 miles northwest of San Francisco, a hydro-electric plant with a capacity of 55,000 H. P. its power being transmitted to Oakland over two circuits to sub-stations at Sacramento, Brighton, Cowell and Oakland, each sub-station supplying customers within a radius of 25 miles; a reservoir of 82,000,000,000 gallons capacity at Big Meadows, which, with the falls on the north fork of the Feather River, with an ultimate possible development of 550,000 H. P.; also owns a steam electric power station in Oakland, developing 15,000 H. P. and a steam power station at North Beach, San Francisco, developing 28,000 H. P. Power is transmitted from Big Bend station over double circuit steel tower line to Oakland and thence by cable to San Francisco.

Statistics.

	1912	1914	Increase	% Inc.
Customers served	4,228	15,010	10,782	255

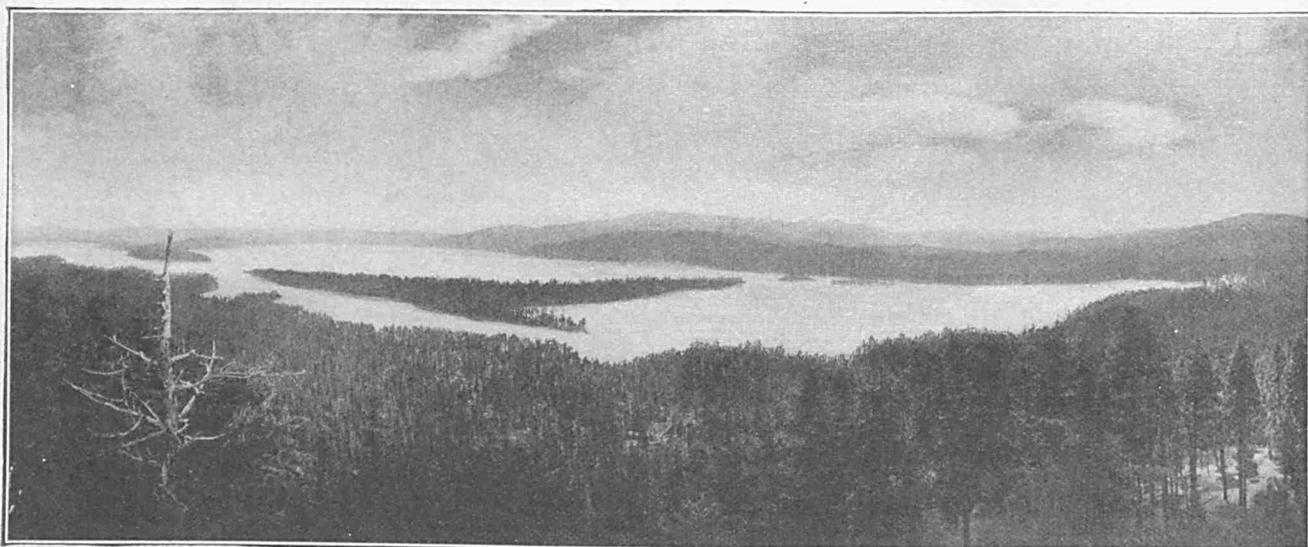
Earnings.

Year	Gross Revenue and other Income	*Net Earnings	Interest	Balance
1910	\$ 928,786	\$ 646,122	\$ 592,828	\$ 53,294
1911	1,938,158	1,179,352	842,267	337,885
1912	2,313,699	1,303,216	1,017,572	285,644
1913	2,930,068	1,964,099	1,183,751	780,348

*Net earnings are shown after deducting operating expenses and taxes.

Officers.

Mortimer Fleishacker, Pres. Frank M. Tompkins, Treas.
 Guy C. Earl, Vice-Pres. Harley P. Wilson, Sec.
 Herbert Fleishacker, Vice-Pres. William H. Spaulding, Asst Sec.
 Harley P. Wilson, Vice-Pres. Charles E. Maynard, Asst. Treas.



Great Western Power Company's storage reservoir (Lake Almanor) on the North Fork of the Feather River, Plumas County, California—the largest artificial reservoir in the State of California. The lake is over 10 miles in length, has an area of 30 square miles and contains 82,000,000,000 gallons of water, at an elevation of 4,450 feet above sea-level. The equalized river flow resulting from this vast storage reservoir is utilized at the Big Bend Power House where is generated 75,000 continuous electrical horsepower.

Great Western Power Company System of California

The Great Western Power Company of California had its origin in the year 1901, in the study of water power possibilities covering the northern half of the State of California. This study resulted in the elimination of those possibilities which were either expensive or unreliable and in the discovery of the great water supply of the North Fork of the Feather River, the unusually large natural underground storage in its water-shed, and the vast storage site known as the Big Meadows. In connection with the great storage facility was the possibility of dropping this equalized water within a reasonably short section of river, including the famous Big Bend, through a total vertical head of 4,000 feet.

The result of this extensive survey was presented to a group of capitalists and shortly afterward land was purchased for reservoir sites, water rights were acquired, and the original Western Power Company of California was organized in the spring of 1901. To this company all land and water rights acquired were conveyed.

In September, 1906, the Great Western Power Company of California, the present operating company, was organized, and acquired all of the physical properties of the former company. At the same time the Western Power Company of New Jersey, a holding company, was formed, which acquired and now holds all of the stock (except qualifying directors' shares) of the Great Western Power Company of California. This is a non-operating company and has no bonded debt. Development of the property was at once begun, and in December, 1908, the initial development at Big Bend, of 60,000 horsepower, was placed in operation. Shortly afterward the California Electric Generating Company erected a 15,000 horsepower auxiliary steam plant at the Oakland terminal of the hydroelectric transmission line, which plant is now leased to the Great Western Power Company. In July, 1911, the City Electric Company, comprising a 28,000 horsepower steam plant and an extensive distribution system in San Francisco, was acquired.

An extension of the Big Bend plant of 60,000 horsepower has since been under way and is partially completed, making the present capacity of this station 75,000 horsepower. The present installed generating capacity of the system is therefore 118,000 horsepower.

The Big Meadows dam has recently been completed to a height of eighty feet. The Great Lake Almanor, formed by the waters impounded by this dam, is already over ten miles in length and covers thirty square miles of territory. In this vast reservoir, which is at an elevation of 4,450 feet above sea level, there are at present eighty-two billion gallons of water, a sufficient supply to equalize the river flow so as to generate continuously at the present Big Bend plant, even through the driest years, 75,000 horsepower. This same water can further be used at the four other power sites controlled by the company, where it will generate 240,000 additional horsepower.

Power from the Big Bend station is transmitted over a double circuit steel tower transmission line, operating at one hundred thousand volts, and which is one hundred and fifty-four miles in length, extending through the fertile Sacramento Valley to the many substations in eleven counties and to the Oakland terminal station, which supplies the territory contiguous to San Francisco. Hydroelectric power is transmitted from the Oakland terminal of this transmission line through the agency of two 11,000-volt submarine cables (the largest of their kind in the world) under San Francisco Bay to the city of San Francisco. Through the aid of eight hundred miles of distributing lines and thirteen substations, the company is now serving the needs of sixteen thousand consumers, having a connected load of 165,000 horsepower, in eleven counties in the central portion of the state.

The Big Meadows dam will be even further enlarged and will ultimately impound 1,250,000 acre feet of water, forming an artificial lake larger than any yet constructed. The final development of this watershed will ultimately avail 550,000 continuous horsepower, and the stored water, after passing through the five powerhouses (falling through a vertical drop of 4,000 feet) will afford irrigation for over one-half million acres of land in the great Sacramento Valley.

This hydroelectric power project is one of the largest and most economical of development in the United States, and is particularly valuable in view of the great demand for electric service in this community.

Adv.

Attention is called to the announcement on page 11

The Holt Manufacturing Company, Stockton, Cal.

This company manufactures and sell patented machinery, consisting of Gas Tractors, Combined Harvesters, Plows and Harrows, together with the necessary supplies and lubricants. All these goods are sold under their registered trade mark CATERPILLAR. Its products are protected by patents in the United States, England, France, Germany, Australia, South America, and all principal foreign countries. The trade mark CATERPILLAR, together with its equivalent in the principal foreign languages, has been registered in practically every country in the world.

In 1913 a consolidation was effected by which all subsidiary companies were absorbed and became a part of the parent company.

Capitalization.

Stocks—	Authorized	Outstanding
Preferred (7%)	\$1,000,000	\$603,000
Common	500,000	500,000

Physical Property.

The company owns and operates two factories, one at Stockton, Cal., employing about seven hundred and fifty men, and one at Peoria, Ill., employing about two hundred men.

The Stockton plant manufactures tractors, plows and harvesting machinery, and its products are shipped all over the Pacific Coast, including Alaska and the west coast of South America; also the Pacific Islands, China, Australia, and New Zealand.

The Peoria factory, which is devoted exclusively to the manufacture of CATERPILLAR tractors, supplies the trade east of the Rocky Mountains, the eastern part of South America, and the European trade.

The company sells direct to the consumer, and it has twelve American branches and district sales agents. Fourteen foreign agencies handle the trade abroad.

Its real estate, buildings, machinery equipment, etc., was appraised as of December 31, 1913, at \$1,161,398. This amount allowed a reserve for depreciation of \$259,418.09. Stock on hand at the same date was \$1,486,916.

Statistics.

Sales—		Year	1909.....	\$1,365,889
Year	1903.....	\$	787,815	
	1904.....		614,264	
	1905.....		784,170	
	1906.....		1,027,544	
	1907.....		1,046,948	
	1908.....		1,058,726	

Officers.

Benj. Holt, Pres. C. Parker Holt, Treas.
 R. S. Springer, V. P. P. Ehrenfeldt, Sec'y & Auditor.
 M. M. Baker, V. P. C. L. Neumiller, Gen'l Counsel.
 P. E. Holt, V. P. & Gl. Man.

Home Telephone Co. Los Angeles, Cal.

The company operates an independent telephone system covering Los Angeles, South Pasadena and Huntington Park. Its lines connect with other independent systems in southern California through the U. S. Long Distance Tel. & Tel. system.

Capitalization

Stocks—	Authorized	Outstanding
Preferred (5%)	\$3,000,000	\$3,000,000
Common	3,000,000	3,000,000
Funded Debt—		
Bonds	7,500,000	4,318,000

Physical Property.

The company owns and operates an extensive system of exchanges and connections in the territory which it covers and is in active competition with the Pacific Tel. & Tel. Co. in that territory.

Earnings.

Year	Gross Revenue	*Net Earnings	Interest	Balance
1910	\$1,079,261	\$543,579	\$241,650	\$301,929
1911	1,293,365	556,140	244,021	313,119
1912	1,514,501	707,894	247,247	460,647
1913	1,720,499	690,430	440,480	515,176

*Net earnings are shown after deducting operating expenses and taxes.

Officers

A. B. Cass, Pres. E. P. Murphy, Sec'y.
 E. J. Marshall, Vice-President. M. H. Hellman, Treas.
 F. W. Rea, Asst. Treas.

Los Angeles Gas and Electric Corp.,

Los Angeles, Cal.

This company operates a complete equipment for the manufacture and distribution of gas in Los Angeles, Pasadena, South Pasadena, Alhambra, San Gabriel, San Marino, Watts, Eagle Rock, Huntington Park, Inglewood, and other suburban districts of the City of Los Angeles. The com-

pany controls 85% of the gas business in the City of Los Angeles and all of the gas business in the other cities above named, serving an approximate population of 570,000. It also operates a plant for the distribution of electric light and power in the City of Los Angeles.

Capitalization.

Stocks—	Authorized.	Outstanding.
1st preferred	\$ 4,000,000	None.
2nd preferred	6,000,000	None.
Common	20,000,000	\$10,000,000*
Funded Debt—		
Bonds	15,000,000	8,686,000

*The capital stock of this company is owned by the Pacific Lighting Corporation, San Francisco, California.

Physical Property.

The rated capacity of the gas generating plant, owned and operated by the company, is 31,140,000 cu. ft. The holder capacity is 14,950,377 cu. ft. The company owns 1,247 miles of gas mains and on July 1st, 1914 had outstanding 124,055 meters. The rated capacity of the electric plant, owned and operated by the company, is 25,650 H. P.; miles of overhead main wire, 2,410; underground conduits, 21 miles. On July 1st, 1914, the company had outstanding 37,166 electric meters; with a total connected load of 67,021 H. P. The value of physical property of the corporation without allowing for good will and franchise, \$20,600,000.

Statistics.

Comparative statement of Meters Installed.

	1910	1911	1912	1913	1914
January 1st,	74,853	84,773	96,108	107,952	122,020
Gas	20,844	24,130	27,295	31,324	36,086
Electric					
Totals	95,197	108,903	123,403	139,276	158,106

Earnings.

Year.	Gross Revenue.	*Net Earnings.	Interest.	Balance.
1910	\$3,334,861	\$1,236,563	\$260,507	\$ 976,056
1911	3,893,189	1,552,479	328,934	1,223,545
1912	4,178,176	1,842,964	396,405	1,446,559
1913	4,527,164	1,937,570	400,943	1,536,627

*Net earnings are shown after deducting operating expenses and taxes.

Officers.

W. B. Cline, Pres. & Gen'l Mgr. C. S. Vance, 3rd V.-P.
 Wm. Baurhyte, V.-P. R. M. Adams, Sec'y. & Treas.
 C. P. Houghton, 2nd V.-P. T. P. McCrea, Ass't. Sec'y.
 Horace Cline, Ass't. Treas.

Los Angeles Railway Corp., Los Angeles, Cal.

The company operates the entire street railway system in the city of Los Angeles and in the adjacent territory which includes 5 other towns. The present population of the territory served is estimated at 516,000 with an average annual increase of 15%. The company does not operate generating plants but purchases its power from the Pacific Light & Power.

Subsidiary Companies.

City Railway of Los Angeles.

Capitalization.

Stocks—	Authorized.	Outstanding.
*Common	\$20,000,000	\$20,000,000
Funded Debt—Bonds	25,500,000	20,000,000

*Owned by Mr. H. E. Huntington.

Physical Property.

The company owns 357.88 miles of track and operates 385.82 miles, of which 85.15 miles is over private right of way; 875 cars, of which 601 are PAYE type; 321 miles of transmission lines and 10 sub-stations. The company also owns all the capital stock of the City Ry. Co. of Los Angeles. 82% of the company's franchises run beyond 1940.

Statistics.

	Gross Income.	Miles of Road Operated.	Cars Operated.	Passengers Carried.
1900	\$ 835,627	74.85	110	17,874,308
1911	5,843,377	360	800	117,731,241
1912	6,616,924	363	800	135,658,571
1913	7,005,433	375	875	145,437,439

Earnings.

Year	Gross Revenue.	*Net Earnings.	Interest.	Balance.
1911	\$5,817,561	\$1,693,676	\$1,002,500	\$ 691,176
1912	6,542,468	2,207,059	1,002,500	1,204,559
1913	7,005,945	2,306,931	1,002,500	1,304,431

*After deducting operating expenses and taxes.

Officers.

H. E. Huntington, President. C. A. Henderson, Sec. and Treas.
 Howard Huntington, Vice-President and General Manager.

Montana Power Co., New York.

The company owns and operates electric power and lighting plants in the territory extending from the western boundary of Montana, 540 miles to Billings, and from the southern border of the state to within a few miles of the Canadian boundary, embracing the state's most productive territory and including nearly all of its important cities and towns. The company furnishes electric power

and light to 51 cities and towns and sells power to the lighting and traction lines of Helena and to the electric railways of Butte; also sells power for mining and smelting operations. The company operates irrigation systems of both the gravity and pumping type.

Subsidiary Companies.

Great Falls Power Co. Montana Power Transmission Co.
Thompson Falls Power Co. Montana Res. & Irrigation Co.

Capitalization.

Stocks—	Rate	Authorized.	Outstanding
Preferred (7 per cent cum.)	\$25,000,000	* \$ 9,700,000
Common	75,000,000	† 49,557,600
Funded Debt—			
Bonds	75,000,000	24,938,000

*\$28,200 in treasury of Great Falls Power Co.
†\$22,500,000 under voting trust with dividend deferred. Of the remainder \$225,800 in treasury of Great Falls Power Co.

Physical Property.

The total present capacity of all plants controlled by the company is 102,000 H. P. The present output reaches a maximum of 86,000 H. P. with an average of 62,000 H. P. The estimated ultimate development of water power sites undeveloped and under construction is 253,000 H. P., of which it is expected that 160,000 H. P. will have been developed by 1918. The total then developed will be 262,000 H. P., and the grand total, developed and undeveloped, 355,000 H. P. The company owns all of the capital stock of the subsidiaries above mentioned.

The Great Falls Power Company and Thompson Falls Power Company have entered into contracts with the Chicago, Milwaukee & Puget Sound Ry. Co. for electrical power to operate about 450 miles of its main transcontinental line. Under these contracts, which cover a period of 99 years and go into effect on or before Jan. 1st, 1918, the railway company is bound to take and pay for 20,000 kilowatts (26,500 H. P.), and it has taken an option on additional power to the extent of 30,000 kilowatts (about 40,000 H. P.), which option must be exercised, 1/2 in five years and 1/2 in ten years, but not less than 1/2 of the amount under option must be taken, if any.

Earnings.

Year.	Gross Revenue.	*Net Earnings.	Interest.	Balance.
1912	\$3,029,875	\$1,991,469	\$786,510	\$1,204,959
1913	3,359,198	2,421,424	904,555	1,516,869

*Net earnings are shown after deducting operating expenses and taxes.

Dividends.

January, 1913, to date quarterly dividends of 1 3/4% on the preferred and 1/2% on the common have been paid.

Officers

John R. Ryan, Pres. Frederick Strauss, V.-P.
Max Hebben, V.-P. C. R. McCabe, V.-P.
Alfred Jaretski, V.-P. Walter Dutton, Sec'y & Treas.

Mt. Whitney Power & Electric Co., Visalia, Cal.

The company furnishes electric light and power to a territory composed of all of Tulare Co. and a part of Kern Co., Cal., including the towns of Visalia, Tulare, Portersville, Lindsay and Exter.

Capitalization.

Stocks—	Authorized	Outstanding
Preferred	\$1,800,000	\$ 750,000
Common	3,200,000	1,875,000
Funded Debt—		
Bonds	5,000,000	2,477,000

Physical Property.

The company owns and operates 5 hydro-electric stations on the Kaweah and Tule Rivers and a storage reservoir with 130,000,000 cubic feet capacity; a steam turbine generator plant at Visalia developing 10,000 h. p.; 178 miles of high tension transmission and 823 miles distributing lines.

Earnings.

Year	Gross Revenue	*Net Earnings	Interest	Balance
1910	\$356,148	\$193,332	\$121,976	\$ 71,356
1911	413,628	232,620	105,124	127,496
1912	451,862	233,074	119,613	113,451
1913	592,882	336,425	138,201	198,224

*Net earnings are shown after deducting operating expenses and taxes.

Officers.

John Coffee Hays, Pres. E. E. Baker, Sec.
B. M. Maddox, Vice-Pres. Patrick Longan, Treas.
Harris Hammond, Vice-Pres. R. D. Hanna, Asst. Sec.

National Ice & Cold Storage Company of California, San Francisco, Cal.

The company harvests natural ice in the Sierra Nevada Mountains, manufactures artificial ice in various factories located in the principal cities of California and does a diversified business in storage of all classes of meats, poultry, fruits and vegetables, car icing, and the sale of ice for

wholesale and retail consumption throughout a territory embracing practically the entire state of California.

Subsidiary Companies.

Pacific I. & C. S. Co. Tahoe Ice Company. Sonora Ice & C. S. Co.
California Ice Co. Mt. Ice Co. of Cal. South. Calif. Ice Co.
Petal'a I. & C. S. Co. Floriston Ice Co. Dist. I. & C. S. Co.
Marys'le I. & C. S. Co. S. Pablo I. & C. S. Co. Cone I. & C. S. Co.
Stock. I. & C. S. Co. Fresno Con. Ice Co. San J. I. & C. S. Co.
Watson. I. & C. S. Co. Con. Ice & C. S. Co. Valley Ice Co.
Oakland I. & C. S. Co.

Capitalization.

Stocks—	Authorized.	Outstanding.
Preferred (7% cum.)	\$ 5,000,000	\$ 200,000
Common	15,000,000	15,000,000
Funded Debt—		
Bonds	15,000,000	3,530,000

Physical Property.

The company owns and operates four natural ice plants located at Floriston, Iceland, and Polaris, Cal., with a producing capacity of 50,000 tons per annum and a storage capacity of 37,000; and wholly or partly owns and operates 25 artificial ice factories in the following cities: San Francisco (2), Los Angeles (2), Sacramento, Oakland (2), Stockton (2), Fresno (2), Red Bluff, Vallejo, Sonora, Berkeley, Riverside, Santa Rosa, Watsonville, Merced, Petaluma, San Jose, Marysville, San Bernardino, Porterville and Bakersfield, with a daily capacity of 1,011 tons and a storage capacity of 46,775 tons of ice. Plants, equipment, real estate, etc., were appraised at \$5,750,000 on May 22, 1913, and since that date new construction to the amount of more than \$500,000.00 has been completed or nearly completed.

Net Earnings.

1910	\$363,116.00	1912	\$460,157.00
1911	420,496.00	1913	487,733.58

Officers.

N. Ohlandt, Pres. F. B. Whipple, 2nd V.-P.
Jno. A. Buck, 1st V.-P. Joseph Martin, Gen'l Mngr.
J. T. Donahue, Sec'y & Treas.

Nevada California Power Co., Denver, Colo.

The operations of the company and its subsidiaries cover the mining districts of Goldfield, Tonopah, Millers, Manhattan, Round Mountain, Rhyolite, Blair and other towns and cities of Western Nevada, where a large proportion of the company's output is required for mining operations and lighting. The company also, through its subsidiary, The Southern Sierras Power Company, serves districts in Inyo, Kern, San Bernardino and Riverside counties, California, and through a long term contract with the Coachella Valley Ice & Electric Company and the Holton Power Company, will supply power for distribution to the Coachella and Imperial Valleys, California, as far south as the Mexican border. The territory served, including that reached by the lines of the Pacific Power Company (an allied and inter-connected company), covers a total distance, running north and south along the western portion of Nevada and the eastern portion of California, of nearly 600 miles. In addition to furnishing power for mining and irrigation, the company owns and operates local distributing systems in the cities and towns of Bishop, Big Pine, Lone Pine, Randsburg, Inyokern, San Jacinto, Hemet, Perris, Elsinore and Corona, California; also electric plant and distributing system at San Bernardino and Barstow, California; also wholesale current to the cities of Redlands and Riverside, California, for municipal use.

The company operates an extensive system of telephone lines covering practically the same territory served by its electrical transmission lines as far south as San Bernardino, California, with exchanges in many small towns and working arrangement with the Pacific Telephone and Telegraph Company.

Subsidiary Companies.

The Southern Sierras Power Co. Bishop Light & Power Co.
The Sierras Construction Co. Corona Gas & Electric Light Co.
Interstate Telegraph Co. Hillside Water Co.

Capitalization.

Stock—	Authorized	Outstanding
Common	\$5,000,000	\$5,000,000
Bonds	8,000,000	5,413,000

Physical Property.

The company's physical properties consist of five (5) hydro-electric plants on Bishop Creek, California; aggregate capacity 22,000 kilowatts; also auxiliary steam plant at San Bernardino, California; capacity 9,000 kilowatts; 553 miles of transmission, 560 miles of distributing and 643 miles of telephone lines. The company owns a ranch and irrigating system at Bishop, California, covering about 5,000 acres.

Earnings.

Year	Gross Revenue	*Net Earnings	†Interest	Balance
1910	\$744,644	\$512,451	\$175,083	\$339,409
1911	772,846	560,025	167,323	392,161
1912	872,844	580,572	157,438	423,134
1913	998,457	513,696	120,228	375,283

*Net earnings are shown after deducting operating expenses and taxes.

†Less interest earned.

Officers.

Delos A. Chappell, Pres. Lawrence C. Phipps, Jr., Treas.
 Rodney Curtis, Vice-Pres. G. S. Wood, Asst. Treas.
 G. S. Wood, Vice-Pres. A. S. Cooper, Asst. Treas.
 A. B. West, Vice-Pres. W. E. Porter, Sec.
 J. R. Dixon, Gen. Counsel.

Northern California Power Co., Cons.,
San Francisco, Cal.

The company operates 5 hydro-electric plants in Shasta Co., Cal., and 2 in Tehama Co., serving 46 cities and towns in these counties and in Glenn and Colusa Cos. with electric light and power. It also operates gas and water works in Redding and Willows, and gas works in Red Bluff.

Subsidiary Companies.

Northern Calif. Pr. Co. Battle Creek Pr. Co. Sac. Valley Pr. Co.
 Keswick Elec. Pr. Co. The Redding Wr. Co. The Sac. Val. Pr. Co.

Capitalization.

Stocks—	Authorized	Outstanding
Preferred (6% cum.)	\$2,000,000	
Common	10,000,000	\$10,000,000
Funded Debt—		
Bonds	11,900,000	7,157,200

Physical Property.

The company owns and operates the following hydro-electric plants in Shasta Co., Volta, Kilarc, Coleman, South Cow Creek, Snow Creek, and the following in Tehama County—South Power House, Inskip, with combined output of 49,800 H. P. Through consolidation, it acquired and owns and operates the gas plants and containers, mains, etc., in Redding, Red Bluff and Willows, and the water works in Redding and Willows. Operates under State Constitution and Public Utilities Act, requiring no franchises. It also owns the entire capital stock of its two subsidiaries—Sacramento Valley Power Co. and the Sacramento Valley Power Company.

Earnings.

Year.	Gross Revenue	*Net Earnings	Interest	Balance
1910	\$588,545	\$406,843	\$122,834	\$284,009
1911	654,898	421,291	156,403	264,888
1912	727,562	412,736	282,788	129,948
1913	822,043	488,383	350,666	137,717

*Net earnings are shown after deducting operating expenses and taxes.

†Includes store and ranch account.

Officers.

H. H. Noble, Pres. E. V. D. Johnson, Mgr.
 A. S. Carman, V.-P. Edw. Whaley, Sec'y.
 F. Reis, Jr., V.-P. W. H. Pearce, Asst. Sec'y.

Oakland, Antioch & Eastern Railway,
San Francisco, Cal.

The company's operations, with those of its direct connections and tributaries, extends through six counties in the State of California, connecting the populous bay section, including San Francisco and Oakland, through the San Ramon Valley to the capital city of Sacramento.

Operates through cars, over its connections, to Chico and Marysville. It is unusual in the fact that with approximately 100 miles of main line it is tributary to a population of 1,000,000, more than one-third of the total population of the State of California.

It has entrances and terminal facilities in Sacramento and Oakland, carrying its cars, by arrangement with the Key Route, directly to the Key Route mole; thus having the quick ferry service to San Francisco.

A bridge permit has been granted by the War Department to bridge the Suisun Straits, which, when completed will give this road the only all rail entrance into the Bay Cities.

Subsidiary Companies.

Oakland & Antioch Ry. San Ramon Val. R. R.

Capitalization.

Stocks—	Authorized	Outstanding
Common	\$10,000,000	\$ 9,200,000
Funded Debt—		
Bonds	7,100,000	4,600,000
Six % four year gold notes	700,000	317,000

Physical Property.

The Company has 36 passenger and motor cars and a large equipment of flat, box and express cars. Four electric passenger and freight locomotives and two steam locomotives. Operates four substations. Roadbed is 70 lb. Ferro titanium rail, all rock ballasted.

Officers.

W. Arnstein, Pres. H. C. Breeden, V.-P.
 S. L. Naphталy, V.-P. H. A. Mitchell, Sec'y & Gl. Mgr.

Oro Electric Corporation, *San Francisco, Cal.*

The company furnishes light, water and power to the city of Oroville and vicinity.

Subsidiary Companies.

Oro Water Light & Power Co. Oroville Light & Power Co.
 Oro Development Co.

Capitalization.

Preferred (6% cum.)	\$ 3,500,000	\$3,500,000
Common	6,500,000	6,500,000
Stocks—	Authorized	Outstanding
Funded Debt—		
Bonds	11,750,000	11,275,000

Physical Property.

The company owns undeveloped hydro-electric properties on Deer Creek and Tehama Creek in Tehama Co., Cal.; a hydro-electric plant on Yellow Creek, Plumas Co., with a capacity of 50,000 h. p.; a steam relay plant at Stockton. The ultimate possible development of the hydro-electric properties owned by the company is 130,000 h. p. The company owns the entire capital stock of its subsidiaries.

Officers.

J. W. Goodwin, Pres. E. B. Bumsted, Vice-Pres.
 L. J. Holton, Vice-Pres. J. K. Moffitt, Sec.
 R. Leo Van der Naillen, Gl. Mgr.

Pacific Coast Company, *Seattle, Wash.*

The company is engaged either directly or through constituent subsidiary and affiliated corporations in real estate, railroad, steamship, lumber, coal and mining enterprises in the entire Pacific Coast territory from Mexico to Alaska.

Subsidiary Companies.

Colorado Puget Sound R. R. Co. Pacific Coast Coal Co.
 Pacific Coast Railway. Pacific Coast Steamship Co.

Capitalization.

Stocks—	Authorized	Outstanding
1st preferred (5%)	\$1,525,000	\$1,525,000
2nd preferred	4,000,000	4,000,000
Common	7,000,000	7,000,000
Funded Debt—		
Bonds	5,000,000	5,000,000
Serial notes due 1916-1919	1,000,000	750,000

Physical Property.

The company owns and operates 18 steamships; 57 miles of standard gauge railroad from Seattle to Franklin, 105 miles of narrow gauge road in California from Port Luis to Los Olivos and Branches; docks and wharves at Seattle, Tacoma, San Francisco, Skagway, Nome and other points; coal lands at various points in Washington with an aggregate acreage of 12,180 acres; real estate holdings in San Francisco, Seattle, Portland and Alaska ports, and more than 3,000 acres of timber and logged off land in Washington. The company also owns a controlling interest in the stock of its subsidiaries and 1/2 the capital stock of the Juneau S. S. Co., and the Ketchikan Wharf Co. Railroad equipment: 19 locomotives, 20 passenger cars, 687 freight cars.

Earnings.

Fiscal year ends June 30.

Year.	Gross Revenue	*Net Earnings	Interest	Balance
1911	\$7,833,437	\$1,363,678	\$250,000	\$1,113,678
1912	7,525,491	1,115,090	250,000	865,090
1913	7,989,080	1,225,260	250,000	975,260
1914	7,198,135	855,736	259,375	596,361

*Net earnings are shown after deducting operating expenses and taxes.

Dividends.

	'05	'06	'07	'08	'09	'10	'11	'12	'13	'14
1st preferred, %	5	5	5	5	5	5	5	5	5	5
2nd preferred, %	5 1/4	6	6	4 3/4	4 1/4	9	6	6	6	5 1/2
Common, %	5 1/4	6	6	4 3/4	4 1/4	9	6	6	6	5 1/2

Officers.

Wm. M. Barnum, Pres., N. Y. C. C. Fay, Sec'y & Treas., N. Y.
 J. C. Ford, V.-P. & Gen'l Mgr. J. W. Smith, Asst. Sec'y & Gen'l Auditor, Seattle.

Pacific Electric Railway Co., *Los Angeles, Cal.*

The Company operates an interurban electric railway system centering at Los Angeles, Cal., extending into the counties of Los Angeles, San Bernardino, Riverside and Orange and serves the cities of Pasadena, San Bernardino, Riverside, Colton, Redlands, Pomona, Ontario, Santa Ana, Long Beach, Venice, Ocean Park, Santa Monica, Redondo, San Fernando, Owensmouth and Lankershim.

Estimated population of territory served, including Los Angeles, 900,000.

Subsidiary Companies.

Pacific Electric Land Company.

Capitalization.

Common stock	\$100,000,000	*Outstanding \$74,000,000
Bonds	156,130,000	56,528,000

*Owned by Southern Pacific Co.

Physical Property.

The company owns and operates: 536 miles of single track, 313 miles of second track, 98 miles of sidings, etc.; total, 947 miles. It operates under lease: 28 miles of single track; 18 miles of sidings, etc.; total, 46 miles. It operates under contract: 9 miles of single track, .3 miles of sidings, etc. It operates under trackage rights: 1 mile of single track, sidings, etc. Total miles of line in operation June 30, 1914, 1,005 miles.

The company owns and operates—

	With Electric Equipment.	Without Electric Equipment.
Passenger Cars	610	113
Freight Cars	17	1,228
Combination Cars	17	26
Express Cars	21	31
Work Cars	49	1
Locomotives	7	10
Miscellaneous		
Total equipment in operation June 30, 1914	730	1,283

The company's real estate holdings consist of right of way, station grounds and other lands used in the operation of the road. Power is purchased from Southern California Edison Company and Pacific Light & Power Company. The company's lines are operated under franchise ordinances granted by cities and counties. All franchise payments are a percentage of a pro rata proportion of the company's gross receipts based on the mileage of line covered by the franchise to the mileage of the entire system.

Statistics.*

	1912.	1913.	1914.
Mileage of Line in Operation—			
Owned and operated.....	907,194	930,050	947,872
Operated under lease.....	40,516	46,187	46,934
Operated under contract	6,220	6,220	9,440
Operated under trackage rights			1,525
Total miles operated.....	953,930	982,457	1,005,771

	1913.	1914.
Capital Expenditures—		
Road	\$1,614,511	\$2,365,919
Equipment	502,765	205,280
General Expenditures	30,556	60,162
Floating Equipment	48,598	
Total Expenditures	\$2,196,430	\$2,631,361

	1912.	1913.	1914.
Car Mileage	27,320,758	30,709,718	30,787,415
Passengers Carried	69,751,537	78,803,806	82,084,424

*All figures are for fiscal year ending June 30th.

Earnings.

Year.	Gross Revenue.	*Net Earnings.	Interest.	Balance.
1912†	\$8,645,504	\$2,574,518	\$2,195,944	\$3378,574
1913	9,399,080	2,655,653	2,531,540	1124,113
1914	9,467,483	2,366,911	2,820,839	\$453,928

*Net earnings are shown after deducting operating expenses and taxes.

†Figures for 1912 are for constituent companies for months of July and August, 1911, and for Pacific Electric Railway Company (of Sept 1, 1911), for balance of year.

‡Surplus.
§Deficit.

Officers.

Paul Shoup, Pres.	J. McMillan, Gen. Manager.
A. K. Van Deventer, V. P.	Geo. E. Pillsbury, Chief Engineer.
H. A. Culloden, Sec. & Auditor.	F. L. Annable, Gen'l Supt.
I. W. Hellman, Treas.	D. W. Pontius, Traffic Manager.
Frank Karr, Attorney.	Geo. L. Bugbee, Land Agent.

Pacific Gas & Electric Co., San Francisco, Cal.

The operations of the Pacific Gas & Electric Company extend into thirty counties of the State of California, having an area of 37,452 square miles, and a population at the 1910 census of 1,324,476. The company's business field embraces the populous San Francisco Bay section and the fertile Sacramento and San Joaquin Valleys, including the cities of San Francisco, Oakland, Sacramento, San Jose and 167 other communities. The company owns and operates properties employed in the manufacture and sale of gas and electricity for light, heat and power, in street railway operation and in the sale of water.

The franchise rights of the company are either unlimited in time or extend, with minor exceptions, beyond the maturity of its bonds, and the larger part of the transmission lines is located on private right of way.

Subsidiary Companies.

Cal. Gas & Elec. Corp.	Sac. Elec. G. & Ry. Co.	Subn. Lt. & Pr. Co.
Bay Counties Pr. Co.	Cent. Elec. Ry.	Livermore W. & P. Co.
Nev. Co. Elec. Pr. Co.	Blue Lakes Wtr. Co.	S. F. Gas & Elec. Co.
Yuba Elec. Pr. Co.	United Gas & Elec. Co.	Pac. Gas Imp. Co.
Valley Counties Pr. Co.	So. Yuba Water Co.	Edison Lt. & Pr. Co.
Cal. Cen. G. & E. Co.	Cent. Cal. Elec. Co.	Mut. Elec. Lt. Co.
Oakld G. L. & H. Co.	Std. Elec. Co. of Calif.	Met. Gas Corp.

Capitalization.

Stocks—	Authorized.	Outstanding.
1st preferred (6 per cent).....	\$ 50,000,000	\$ 3,057,000
Preferred (6 per cent).....	10,000,000	9,975,000
Common	100,000,000	10,559,500

Funded Debt—

Five per cent. gold notes due 1915	7,000,000	7,000,000
General and refunding 5s.....	150,000,000	24,986,000
Divisional bonds.....	Closed	*50,499,800

*In addition to this amount, \$2,344,200 bonds are held alive in Sinking Funds.

There are also outstanding \$3,572,000 additional General and Refunding Mortgage 5's and \$5,000,000 General Lien 6 per cent bonds, "Series A," all of which are pledged as collateral for the issue of notes.

Physical Property

The company has electric power plants with a total generating capacity of 233,928 H. P., of which 123,740 H. P. is hydro-electric. It owns and operates forty miles of street railway track in Sacramento, the capital of the state. The gas department has 2,374 miles of mains.

In November, 1913, the company completed the first section of an important hydro-electric development on the Yuba and Bear rivers, including an immense storage reservoir at Lake Spaulding, over 33,000 H. P. of generating capacity, and a steel tower transmission line, 110 miles in length, to the center of the company's distributing system. There was expended on this development to December 31, 1913, approximately \$7,000,000, from which practically no return was received during 1913, but which should result in substantially increasing the net earnings of the company in future years. When the ultimate capacity of this development, namely 190,000 H. P., has been reached, it is believed that this will rank as one of the cheapest developments of its size and character in the United States. Furthermore, it will make the company independent of outside sources of power supply, will enable it to effect a substantial saving as compared with the present cost of current purchased, and will give it a source of energy.

The company owns in fee all of the property of its subsidiary companies. (See map opposite)

Statistics.

The following table shows the growth during the past seven years in the number of consumers served by the company:

	Gas.	Electricity.	Water.	Steam.	Total
December 31, 1907.....	122,304	55,704	5,263	....	183,271
" 31, 1908.....	131,235	63,073	5,601	....	199,909
" 31, 1909.....	140,670	71,643	5,939	....	218,252
" 31, 1910.....	153,566	84,329	6,430	....	244,325
" 31, 1911.....	177,510	102,198	7,398	....	287,106
" 31, 1912.....	196,133	116,666	8,071	222	321,092
" 31, 1913.....	208,269	132,355	8,511	282	349,417
June 30, 1914.....	211,132	137,916	8,873	307	358,288

Earnings.

Year.	Gross Revenue.	*Net Earnings.	Interest.	Balance.
1907	\$11,342,140	\$ 5,115,911	\$ 2,854,264	\$ 2,261,647
1908	12,657,305	5,864,586	3,021,722	2,842,864
1909	13,491,288	5,959,712	2,988,522	2,971,191
1910	14,044,596	6,123,255	3,006,256	3,116,999
1911	14,604,609	6,390,537	3,254,133	3,136,404
1912	14,744,651	6,313,090	3,568,943	2,744,147
1913	16,202,337	6,871,131	3,902,045	2,969,085

*Net earnings are shown after deducting operating expenses and taxes.

Sources of Gross Revenue.

Year.	Electricity.	Gas.	St. Ry.	All Other.	Total.
1907	\$6,316,629	\$4,086,372	\$431,800	\$507,339	\$11,342,140
1908	7,059,088	4,494,945	414,326	688,946	12,657,305
1909	7,678,665	4,860,034	452,396	500,193	13,491,288
1910	7,899,224	5,202,284	509,152	433,936	14,044,596
1911	7,823,903	5,735,219	533,520	511,967	14,604,609
1912	7,672,570	5,805,865	547,187	719,029	14,744,651
1913	8,230,782	6,547,595	572,913	851,047	16,202,337

OFFICERS.

F. G. Drum, Pres.	D. H. Foote, Sec'y and Asst. Tr.
John A. Britton, V.-P. & Gl. Man.	Joseph C. Love, Asst. Treas.
A. F. Hockenbeamer, V.-P. & Treas.	Chas. L. Barrett, Asst. Sec'y.
J. E. Gladstone, 3rd V.-P.	M. K. Parker, Asst. Sec'y.

Pacific Light and Power Corporation,

Los Angeles, Cal.

The Corporation does a general lighting and power business in Southern California, centernig about Los Angeles; a large part of its business being the supply of current to the Los Angeles Railway, with a trackage of 385½ miles of street railway, and to the Pacific Electric Railway, which operates approximately 560 miles of urban and inter-urban electric road in Los Angeles and vicinity. It also sells current for lighting and power throughout Southern California, principally in the counties of Los Angeles, Riverside, San Bernardino and Orange. Next to the railway load, the most important power business is that of operating motors for irrigation purposes.

Subsidiaries.

The Mentone Power Company. Kern River Company. San Joaquin & Eastern Railroad Company.

Capitalization.

Stocks—	Authorized.	Outstanding.
1st preferred (cum.).....	\$ 5,000,000	\$ 3,057,000
2nd preferred (cum.).....	10,000,000	9,975,000
Common	25,000,000	10,559,500

The majority of the stock is owned by H. E. Huntington.

Physical Property.

The company operates three steam plants of modern design, of 55,919 H. P. one of which is located in the City of Los Angeles. The eight hydro-electric plants operated have an aggregate capacity of 99,631 H. P. the largest of which is located at Big Creek in Fresno County, with a present capacity of approximately 80,400 H. P. Other hydro-electric plants are on the Kern River and in the mountains about the San Bernardino Valley.

The company operates about 1,245 miles of high tension transmission line, of which 241 miles is 150,000 volt steel tower, aluminum cable line. Its distributing system consists of 1,976 miles of overhead, and an underground system in the congested district of Los Angeles City.

Statistics.

Year.	No. of Meters.	No. of Motors.	H. P. in Motors.	Incandescent Lamps.	Are Lamps.
1898	950	125	458	19,775	421
1903	2,919	640	7,306	73,393	1,232
1908	8,184	959	11,654	202,646	2,257
1913	24,112	2,423	32,560	474,638	4,424

Earnings.

Year.	Gross Earnings.	Operating Expense.	Net Earnings.	Interest.	Balance.
1908	\$ 49,444	\$ 28,338	\$ 21,105	\$ 12,467	\$ 8,638
1903	602,980	467,695	135,285	73,087	62,197
1908	1,796,899	957,592	839,307	518,404	320,904
1913	2,852,061	1,574,474	1,277,587	516,385	761,202

Officers.

H. E. Huntington, Pres.
 G. C. Ward, V.-P.
 W. E. Dunn, V.-P.
 A. N. Kemp, Treas. & Compt.
 W. J. Gracey, Purchasing Agent.
 E. R. Davis, Director.
 O. V. Showers, Sec'y.

Pacific Lumber Co., San Francisco, Cal.

The company operates exclusively in redwood, having extensive logging and milling operations in Humboldt County, Cal., where they manufacture various grades of redwood lumber, of which they are large exporters. The company maintains general offices in San Francisco, and branch offices in New York, Chicago, Kansas City, Los Angeles, and Saginaw, Mich.

Capitalization.

Stocks—	Authorized	Outstanding
Common	\$10,000,000	\$9,133,300
Funded Debt—		
Bonds	2,250,000	2,000,000

Physical Property.

The company owns 65,021 acres of redwood stumpage, of which, as of December 31, 1913, 48,099 acres were virgin timber. Owns and operates two mills at Scotia, Humboldt County, Cal., producing annually 110,000,000 board feet; storage yards; dry kilns, etc.; and wharves at Field's Landing on Humboldt Bay.

Officers.

C. W. Penoyer, Pres.
 Wm. H. Murphy, V. P.
 J. H. Emmert, Sec.
 Junius H. Browne, Gl. Sales Mgr.
 Donald McDonald, Gen'l Mgr. (Scotia).
 H. M. Robinson, Treas.

Pacific Power & Light Co., Portland, Ore.

The company serves a large territory in Washington, Oregon and Idaho including important towns such as Walla Walla, Pendleton, Pasco, North Yakima, The Dalles and Astoria. It does a gas and electric business in the Columbia, Yakima and Walla Walla Valleys and in Astoria, Ore. The company furnishes electric light and power and power service to 42 communities, gas service to 7, street railway service to 2, interurban railway service to 3 and water service to 4, having an aggregate population of 111,000 (estimated).

Subsidiary Companies.

Walla Walla Valley Ry. Co.

Capitalization.*

Stocks—	Authorized.	Outstanding.
Preferred (7% cum.)	\$ 3,500,000	\$2,000,000
2nd preferred (7% cum.)	2,500,000*	1,500,000
Common	6,000,000*	6,000,000
Funded Debt—		
Bonds	30,000,000	6,076,000

*This company is controlled by the American Power & Light Co. (Electric Bond & Share Co.) which owns all the common and second preferred stocks.

Physical Property.

The company owns and operates electric generating plants with an aggregate capacity of 27,610 hp. (of which 20,760 hp. is hydro-electric), gas holders of 439,500 cu. ft. capacity; 749 miles of distributing lines; 444 miles of high voltage transmission lines; 119 miles of gas mains and 89 miles of water mains. It owns all of the capital stock (except directors' qualifying shares) of the Walla Walla Valley Ry. Co. which operates the electric railways

of Walla Walla and an interurban line thence to Milton, Oregon. The company's franchises are either unlimited or extend for a long period.

Statistics.

Customers served	Elec. L. & P.	Gas	Water
1912	13,952	4,597	4,162
1913	15,285	5,759	4,442

Earnings.

Year.	Gross Revenue.	*Net Earnings.	Interest.	Balance.
1912	\$1,257,364	\$609,327	\$288,070	\$321,257
1913	1,288,059	624,385	341,656	282,729

*Net earnings are shown after deducting operating expenses and taxes.

Officers.

Guy W. Talbot, Pres.
 E. W. Hill, V.-P.
 F. G. Sykes, V.-P.
 A. S. Greiner, V.-P.
 G. E. Claffin, V.-P.
 E. W. Cookingham, V.-P.
 J. E. Davidson, V.-P.
 Geo. F. Nevins, Sec'y.
 E. P. Summerson, Treas.

Pacific Telephone & Tel. Co., San Francisco, Cal.

The company operates services throughout the entire states of Washington, Oregon and California and in portions of Nevada and western Idaho. The estimated population of the territory served is 4,250,000.

Subsidiary Companies.

Sunset Tel. & Tel. Co. Bell Tel. Co. of Nevada.

Capitalization.

Stocks—	Rate	Authorized.	Outstanding.
Preferred*		\$32,000,000	\$32,000,000
Common*		18,000,000	18,000,000
Funded Debt—			
Bonds			41,664,000

*The American Tel. & Tel. Co. owns \$21,727,200 of the preferred and \$9,027,000 of the common stock.

Physical Property.

Real estate, plants, general equipment, materials and supplies throughout the territory valued Dec. 31st, 1913, at \$82,153,884; 647,993 connected stations. The work now in progress includes a new pole line across Nevada connecting with the Mountain States Tel. & Tel. Co., which will make long distance service between San Francisco and New York. The total miles of wire Dec. 31st, 1913—1,806,169. The company owns the entire capital stock of its subsidiary companies. (See map opposite)

Statistics.

December	31, 1910	No. of Connected Stations.	Miles of Wire.
"	31, 1911	446,622	1,302,853
"	31, 1912	503,626	1,439,019
"	31, 1913	595,186	1,724,802
"	31, 1913	647,993	1,806,169

Earnings.

Year.	Gross Revenue.	*Net Earnings.	Interest.	Balance.
1910	\$14,667,112	\$ 2,875,413	\$ 1,676,208	\$ 1,199,205
1911	16,070,112	3,462,374	2,186,147	1,276,127
1912	18,244,786	4,261,431	2,433,659	1,827,772
1913	19,593,536	4,333,922	2,177,333	2,256,589

*Net earnings are shown after deducting operating expenses and taxes.

Officers.

H. T. Scott, Chairman of Board.
 G. E. McFarland, Pres.
 H. D. Pillsbury, V.-P.
 J. M. Quay, V.-P.
 F. W. Eaton, Sec'y and Treas.
 J. C. Nowell, Gen'l. Manager.
 F. C. Phelps, Gen'l. Auditor.

Phelps, Dodge & Co., New York.

The corporation is a holding company and does not operate directly any mining or other plants. The statistics which follow refer to the holdings and operations of its subsidiary companies. These companies operate copper mines in Arizona and New Mexico and in the state of Sonora, Mexico, and coal mines in New Mexico. The companies operate in connection with these mines smelters and reduction plants, etc., for the treatment of their own and other ores, and coke ovens in connection with their coal mining operations. The company also buys and sells ores of various kinds and their products. The mercantile company operates seven stores and branches in connection with the operations of all the subsidiary companies.

Subsidiary Companies.

Copper Queen Consolidated Mining Co.
 Detroit Copper Mining Co. of Arizona.
 Moctezuma Copper Co.
 Burro Mountain Copper Co.
 Stag Canon Fuel Co.
 Phelps Dodge Mercantile Co.

Capitalization.

Stocks—	Authorized.	Outstanding.
Common	\$50,000,000	\$45,000,000

Physical Property.

The company owns the entire issued capital stock (except shares required to qualify directors) of its subsidiary companies as follows: Copper Queen (\$2,000,000); Detroit Copper (\$1,000,000); Moctezuma (\$2,600,000); Burro Mountain (\$160,000); Stag Canon (\$3,000,000); Phelps, Dodge Mercantile (\$2,000,000).



MAP OF
THE PACIFIC TELEPHONE & TELEGRAPH CO.
SYSTEM

- THE PACIFIC TEL. & TEL. CO. LINES
- - - - - CONNECTING LINES
- · · · · PROPOSED LINES

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The extent of the physical property owned by the operating companies is shown by the following figures taken from the annual report for the year 1913:

Copper Queen Cons. Mines: Total production, 867,481 tons. Exploration and development work, 116,114 feet. Reduction department: Ore purchased, 1,041,453 tons; treated, 1,034,357 tons. Copper produced, 133,410,582 lbs. Ore reserves, 2,536,729 tons. Power plant daily development, 4,595.8 H. P. Employees, 3,661.

Detroit Copper Mining Co. Mines: Total production, 533,563. Reduction department: Ore treated, 150,695 tons. Bullion produced, 22,255,130 lbs. Exploration and development work, 18,492 feet. Employees, 1,510.

Moctezuma Copper Co. Mines: 31,292.5 feet drifting; 1,028 feet exploration work. Concentrator: Milled 603,654 tons; produced 135,057,331 tons of concentrates.

Burro Mountain Copper Co. In process of development, 3,753 feet of haulage tunnel driven.

Stag Canon Fuel Co. For production see coal and coke figures below. Development work, 30,226 feet.

Phelps, Dodge Mercantile Co. Sales, \$628,932.80. Employees, 490.

Statistics.

1913		Copper produced (pounds)...	
Copper & copper bearing, ores prod. (tons).....	1,994,465	.....	155,665,712
Ores and concentrates smelted From companies' mines.....	1,035,367	Silver produced (oz.).....	2,078,376
Purchased.....	82,874	Gold produced (oz.).....	32,037
		Lead produced (lbs.).....	5,701,628
		Coal produced (tons).....	1,322,813
		Coke produced (tons).....	293,090

Earnings.

Year.	Gross Revenue.	*Net Earnings.	Dividends.	Balance.
1910.....	\$ 9,099,910	\$ 8,847,388	\$5,399,875	\$3,447,513
1911.....	7,284,508	7,134,302	5,400,000	1,734,302
1912.....	10,411,535	10,285,185	6,750,000	1,535,185
1913.....	9,581,495	9,407,709	7,425,000	1,982,709

*Net earnings are shown after deducting operating expenses and taxes.
 †\$1,500,000 deducted for depreciation in value of stocks owned before transfer to surplus account.

Dividends.

Dividends, 1909, 12%; 1910, 12%; 1911, 12%; 1912, 15%; 1913, 16 1/2%.

Officers.

James Douglas, Pres. Walter Douglas, Gen'l Manager.
 Cleveland H. Dodge, V.-P. George Notman, Sec'y & Treas.
 Arthur C. James, V.-P. C. W. Parsons, Asst. Treas.
 James McLean, V.-P. F. T. Bulmer, Asst. Sec'y.

Portland Gas & Coke Co., Portland, Ore.

The company does the entire gas business in Portland, Ore., and suburbs, and supplies gas at wholesale to the St. Johns Gas Co. and to the Pacific Power & Light for its Vancouver, Wash., service. The estimated population served is 265,000.

Subsidiary Companies.

St. Johns Gas Co.

Capitalization.

Stocks—	Authorized.	Outstanding.
Preferred (7% cum.).....	\$ 2,000,000	\$2,000,000
Common.....	3,500,000	3,000,000*
Funded Debt—		
Bonds.....	15,000,000	5,796,000

*All common stock, except directors' shares, owned by American Power & Light Co. (Electric Bond & Share Co.)

Physical Property.

The company has recently put into operation an additional plant, which is one of the largest oil gas plants in the United States. This plant is located at Linnton on the Willamette River below the city limits. It has three 20-foot crude oil gas generators and a complete scrubbing, condensing and purifying system for approximately 7,500,000 cubic feet daily output, and two holders with a combined capacity of 1,185,000 cubic feet. The plant has been built to accommodate an ultimate daily generating capacity of 15,000,000 cubic feet. A sixteen-inch high pressure main connects the new plant with the company's distributing system and with its plant in Portland, which is maintained as a reserve plant.

The Portland plant, which is located on the Willamette River, in the heart of the City of Portland, has a generating capacity of 4,500,000 cubic feet daily and has a holder capacity of 3,000,000 cubic feet, including the holder capacity in East Portland.

In addition to the present holder capacity at the new plant and in Portland and East Portland, the company has under construction an additional 2,000,000 cubic foot holder in East Portland which is being built in order that there may be the most effective distributing service. This

will give the company a total holder capacity of 6,185,000 cubic feet. Franchises of the company are unlimited as to time.

Statistics.

	Customers served.	Cu. ft. output.
1912.....	37,276	1,480,923,593
1913.....	40,698	1,652,926,445

Earnings.

Year.	Gross Revenue.	*Net Earnings.	Interest.	Balance.
1912.....	\$ 1,178,772	\$ 579,163	\$ 201,745	\$ 377,418
1913.....	1,280,916	655,249	249,137	406,112

*Net earnings are shown after deducting operating expenses and taxes.

Officers.

C. F. Adams, Ch. of Board. A. S. Grenier, V.-P.
 Guy W. Talbot, Pres. E. W. Hill, V.-P.
 F. G. Sykes, V.-P. G. S. Nevins, Sec'y & Treas.

Portland Ry., Light & Power Co., Portland, Oregon.

The company operates all the street railways in Portland and the vicinity with the exception of three interurban lines. Its suburban lines include Oregon City, Troutdale, Cazadero and Bull Run, Oregon, and Vancouver, Wash., via the company's ferry. It furnishes a large percentage of the electric light and power in Portland and all the electric light and power in Oregon City, Salem and many other cities in the state of Oregon and in Vancouver, Wash. It also operates the gas plant at Salem. Altogether the company serves with electric light and power 26 cities and towns. Power is sold to the three interurban lines controlled by the Southern Pacific and Northern Pacific Railways, and to the street railway companies of Salem and Vancouver.

Subsidiary Companies.

Portland Ry. Co. Portland Gen'l. E. Co. Will. V. So. Ry. Co.
 Ore. Wr. Pr. & Ry. Co. Mt. H'd. R. & Pr. Co. Yamhill Electric Co.

Capitalization.

Stocks—	Authorized.	Outstanding.
Common.....	\$25,000,000	\$18,750,000
Funded Debt—		
Bonds.....	99,100,000	34,000,000
1 yr. 5 per cent gold notes due		
May 1915.....	5,000,000	5,000,000

Physical Property.

The company owns and operates 295.7 miles (on a single track basis) of electric railways, 633 passenger cars, 522 freight, work and express cars, and 12 locomotives. It also owns and operates 5 steam stations and 5 hydro-electric plants with a capacity of 65,280 KW. and 22 sub-stations with a capacity of 28,580 KW. In addition to this equipment the company owns a building used for headquarters of light and power service, car shops, four car houses, a 9-story building in the center of the business district used for its offices; the only amusement park near the city, large tracts of land on the east side of the Willamette River valuable for terminal purposes and real estate in various parts of the city. The street railway franchises owned by the company expire in 1932 but the company has preferential rights covering subsequent franchises. The power and light franchises are unlimited. It also owns the water power at Willamette Falls, Oregon City. Power is furnished to several large pulp and paper mills.

Statistics.

	1913	1912	1911	1910
Elec. K. W. hrs.	184,200,820	169,609,004	152,244,267	120,703,715
Light & Power				
Cus. served ..	42,063	38,415	33,192	26,413
Operating ratio	42.5%	42.9%	43.1%	43.3%
Pass. Carried ..	94,074,368	94,876,246	91,600,993	88,310,850

Earnings.

Year.	Gross Revenue.	*Net Earnings.	Interest.	Balance.
1910.....	\$5,638,896	\$2,914,518	\$1,398,029	\$1,516,489
1911.....	6,336,703	3,266,806	1,510,280	1,756,526
1912.....	6,642,308	3,313,397	1,760,991	1,552,406
1913.....	6,723,742	3,425,432	2,008,601	1,416,831

*Net earnings are shown after deducting operating expenses and taxes.

Officers.

Franklin T. Griffith, Pres. G. L. Estabrook, S. & A. Treas.
 F. I. Fuller, V.-P. Wm. Lilley, Ass't. Treas.
 M. S. Hopkins, V.-P. C. N. Huggins, Treas. & A. Secy.
 E. W. Clark, V.-P. F. W. Hild, Gen'l. Manager.
 Herbert L. Clark, V.-P. R. W. Shepherd, Aud. & Asst. Sec.

Puget Sound Traction, Light & Power Co., Seattle.

The company, through ownership or control, does substantially all of the electric street and interurban railway, and the greater part of the commercial electric lighting and power business in the Puget Sound district, including

the cities of Seattle, Tacoma, Bellingham, and Everett, Wash. It also supplies gas in the city of Bellingham. The 1910 census gave these cities an aggregate population of 370,049. The present population is estimated to be 389,500.

Subsidiary Companies.

Th Seattle Ry. Co. Whatcom Co. Ry. Lt. Pacific N. W. Traction
The Seattle Elect. Co. & Pr. Co. Puget Sound Interna-
Puget Sound Pr. Co. Puget Sound Elec. Co. tional Ry & Pr. Co.
Pacific Coast Pr. Co. Tacoma Ry. Co.

Capitalization.

Stocks—	Authorized.	Outstanding
Preferred (6 per cent cum.).....	\$15,000,000	\$14,792,100*
Common	25,000,000	20,112,300†
Funded Debt—		
Bonds	74,000,000	34,286,000

*Includes \$1,115,200 non interest bearing receipts exchangeable at par for pref. stock Jan. 15, 1916.
†Includes \$1,544,500 non interest bearing certificates exchangeable at par for com. stock Jan. 15, 1916.

Physical Property.

The company owns or controls hydro-electric power plants with a present development of 74,000 H. P. and an ultimate development of 175,000 H. P.; steam stations with a present capacity of 32,550 H. P., and street and interurban railways aggregating 493.3 miles of single track. It owns 623 passenger and 435 other cars, 2 steam and 13 electric locomotives. The company's franchises expire as follows: Tacoma, Ry., 1939; Lt. & Power, 1930; Seattle, Ry., 1934, light, 1952; Bellingham, Ry., 1941-1934, Light & Power, 1940, gas, 1941. Interurban roads operate chiefly over private rights of way. The company, directly or through subsidiary companies, owns all of the capital stock of its subsidiaries excepting that of the Puget Sound Electric Ry., which it controls.

Statistics.

	No. passengers	No. consumers
	Electric Ry.	Light & Power
(Inc. Transfers)		
1913	146,635,191	36,208

Earnings.

Year.	Gross Revenue.	*Net Earnings.	Interest.	Balance.
1913	\$8,613,599	\$3,605,224	\$1,811,435	\$1,793,788

*Net earnings are shown after deducting operating expenses and taxes.

Officers.

Frederick S. Pratt, V. P. Thos. S. Blumer, V. P.
Alton W. Leonard, V. P. Henry B. Sawyer, Treas.
Guy L. Weymouth, V. P. Stone & Webster Management,
James C. Trumbull, V. P. Ass't. Managers.

San Diego Electric Railway Co., San Diego, Cal.

The company operates the entire electric railway system in San Diego and vicinity, except one short line.

Capitalization.

Stocks—	Authorized	Outstanding
Common	\$5,000,000	\$1,250,000
Funded Debt—		
Bonds	5,000,000	1,625,000

Physical Property.

The company owns and operates 63.49 miles of main track standard guage 60 lb. T and 114 Trilby rails; a steam generating plant in San Diego with capacity of 7200 kw. 138 pass. motor cars, and 5 pass. trail cars, and 7 miscellaneous cars. The company has franchises covering all of its lines in San Diego; such franchises expire in 1952.

Statistics.

Total number of passengers carried during past five years:

1909.....	10,720,995
1910.....	13,768,038
1911.....	17,935,059
1912.....	23,667,585
1913.....	27,684,826
	93,776,503

Earnings.

Year	Gross rev. incl. Miscel. Inc.	*Net earnings Miscel. inc. ded.	Bond and Other int.	Balance
1909	\$ 434,144	\$135,917	\$28,228	\$107,688
1910	547,630	137,793	41,092	96,700
1911	675,142	163,377	73,460	89,917
1912	910,532	267,243	88,750	178,493
1913	1,058,977	196,806	85,000	111,806

*Net earnings are shown after deducting operating expenses and taxes.

Sources of Gross Revenue.

Year	Passenger Revenue	Sale of Electric power	Sale of Steam	Miscel. Revenue
1909	\$ 393,812	\$21,288		\$19,043
1910	502,612	23,096		21,921
1911	643,645	18,597		12,899
1912	859,526	23,568		27,437
1913	1,001,314	32,581	\$13,078	12,002

Officers.

John D. Spreckels, Pres. H. L. Titus, Gen'l Counsel.
Wm. Clayton, V. P. & Mg. Dir. Claus Spreckels, Sec. & Treas.

San Francisco & Oakland Terminal Railways,

Oakland, Cal.

(Known as Key System.)

The company operates street railway lines in and between Oakland, Berkeley, Richmond, Emeryville, Piedmont, Albany, San Leandro, San Lorenzo and Hayward. The system connects with San Francisco by ferry via the company's pier.

Subsidiary Companies.

San Jose Short Line. Oakland Terminal Co.

Capitalization.

Stocks—	Authorized	Outstanding
A preferred (6%).....	\$12,050,000	\$12,050,000
B preferred	1,000,000	1,000,000
Common	15,125,000	15,125,000
Funded Debt—		
Bonds	19,997,000	16,656,000
Notes		2,500,000

Physical Property.

The company owns and operates the equivalent of 257.13 miles of single track; 411 pass. cars and 66 miscellaneous cars; 1 wrecking crane and 5 ferry boats; docks and terminal facilities in Key Route Basin. Franchises expire 1933 to 1959.

Statistics.

Year	Fare Pass.	Car miles	Car hours
1912	75,560,740	16,429,484	1,527,377
1913	77,072,203	16,318,256	1,613,907
1914	76,606,881	16,397,707	1,599,923

Earnings.

Year	Gross Revenue	*Net Earnings	Interest	Balance
1912	\$4,776,873	\$1,678,304	\$875,389	\$802,915
1913	4,676,876	1,600,805	910,012	690,793
1914	4,651,335	1,477,159	821,598	655,561

*Net earnings are shown after deducting operating expenses and taxes.

Sources of Gross Revenue.

Year	Passenger	Freight	Switching	Advertising	All other
1912	\$4,281,815	\$31,329	\$17,615	\$14,430	\$331,684
1913	4,422,070	4,691	35,133	22,863	192,119
1914	4,411,022	8,691	19,212	27,888	184,522

Officers.

Geo. K. Weeks, Pres. Angus Clark, Sec. & Asst. Treas.
W. R. Alberger, V. P. & Gl. Man. Kirke Lathrop, Treas.
F. B. Whipple, V. P. B. W. Fernald, Auditor.

San Joaquin Light & Power Corporation,

Fresno, Cal.

Supplies electricity for lighting, power and pumping purposes, throughout the San Joaquin Valley, including the cities of Merced, Madera, Fresno, Selma, Hanford and Bakersfield, and 50 towns and small cities. Gas is distributed in Bakersfield, Kern, Merced, Selma; a street railway system is operated in the cities of Bakersfield and Kern and water furnished for domestic purposes in Selma and Madera. Population served, about 225,000. The rights under which the corporation operates are without limitation in point of time in the cities.

Subsidiary Companies.

San Joaquin Light & Power Co. Power, Transit & Light Co.
San Joaquin Power Co. Bakersfield & Kern Electric Ry.
Bakersfield Gas & Electric Co.

Capitalization.

Stocks—	Authorized	Outstanding
Preferred (6 per cent cum.).....	\$10,000,000	\$ 6,500,000
Common	15,000,000	11,000,000
Funded Debt—		
Bonds	31,670,000	7,309,000
Coll. Tr. 6 per cent notes, due 1915.....		909,000

Physical Property

The corporation owns and has in operation four hydraulic generating plants, a steam reserve plant in Fresno, and a modern steam turbine plant in Bakersfield. The electric generating capacity of these plants amounts to 57,000 H. P. Water is received at the principal hydraulic generating plant from the Crane Valley reservoir, under a head of 1,412 feet. The company has in operation 675 miles of high tension transmission lines; the current is transformed at 20 sub-stations and distributed through 1,643 miles of distributing lines. Recently a massive dam at the outlet of the Crane Valley has been constructed, increasing capacity of the reservoir to 51,000 acre feet (12 times its former capacity); thus providing ample water to operate the hydraulic plants to their full capacity during the entire season, with a large amount of reserve.

Franchises outside of the incorporated limits, with two exceptions, extend beyond the life of the bonds, or else the transmission lines are on private right of way. About one-half the total length of transmission line will be on private right of way.

Statistics.
Consumers

	Light	Power	Gas	Water
1910.....	9,011	630	3,083	722
1911.....	11,758	810	3,918	554
1912.....	14,627	1,283	4,449	545
1913.....	16,694	1,883	4,662	563

Earnings.

Year	Gross Revenue	*Net Earnings	Interest	Balance
1910.....	\$1,052,463	\$ 677,685	\$ 225,492	\$ 452,193
1911.....	1,104,131	622,538	354,191	268,347
1912.....	1,401,138	864,372	450,319	414,053
1913.....	1,762,320	921,390	†431,288	490,102

*Net earnings are shown after deducting operating expenses and taxes.

†Exclusive of sinking fund.

Sources of Gross Revenue.

	1913	1912	1911	1910
Light.....	\$ 632,266	\$ 571,101	\$ 533,599	\$ 462,482
Power.....	800,905	514,910	306,900	258,154
Gas.....	176,016	153,816	96,424	95,566
Water.....	15,065	15,416	17,650	17,261
Railway.....	106,664	110,842	102,857	94,763
Miscell.....	31,404	35,053	46,701	124,234
	\$1,762,320	\$1,401,138	1,104,131	\$1,052,463

Officers.

W. G. Kerckhoff, Pres. L. M. Farnham, Sec.
A. C. Balch, Vice-Pres. A. E. Peat, Treas. & Comp.
A. G. Wishon, Gen'l Mgr.

Seattle Lighting Co.,

Seattle, Wash.

The company supplies all of the gas for light, heat, and fuel in the city of Seattle and its suburbs, serving a population estimated at 280,000.

Capitalization.

	Authorized.	Outstanding.
Preferred stock, 6%.....	\$1,000,000	\$1,000,000
Common stock.....	3,000,000	3,000,000
Bonds.....	12,000,000	6,293,500

Physical Property.

The company owns a modern coal and water gas plant with a generating capacity of over 5,000,000 cu. ft. per day. It has recently added a coke plant.

Statistics.

	Gas sold	1910	Gas sold
1905.....	316,501,400	1910.....	715,491,500
1906.....	386,518,700	1911.....	776,402,700
1907.....	498,571,700	1912.....	861,910,300
1908.....	564,565,800	1913.....	973,569,300
1909.....	677,241,000		

Earnings.

Year	Gross Revenue	*Net Earnings	Interest	Balance.
Aug. 31, 1914....	\$983,156	\$424,117	\$332,163	\$91,954

*Net earnings are shown after deducting operating expenses and taxes.

Dividend Record.

Prof. 1907 to 1913., 6%; Common 1911-12-13, 2%.

Officers.

J. W. Farrell, Pres. R. C. Dawes, V. P. F. K. Lane, Treas.

Sierra & San Francisco Power Co.,

San Francisco, Cal.

The Company operates hydro-electric plants near San Francisco and a large steam power station in the City. It furnishes power to the United Railroads of San Francisco under a contract running until 1954 and general power and lighting service in its territory.

Capitalization.

Stocks—	Authorized	Outstanding
*Common.....	\$20,000,000	\$20,000,000
Funded Debt—		
Bonds.....	20,000,000	15,358,699

*The stock of this company is controlled by the United Rys. Inv. Co. through the Cal. Ry. & Power Co.

Physical Property.

The Company owns hydro-electric developments on the South and Middle Forks of the Stanislaus River, which, with the North Beach steam power station in San Francisco, give it generating capacity of approximately 75,000 H. P.; 500 miles of high tension transmission line, of which 234 miles are carried on steel towers; together with well constructed and equipped sub-stations and distribution systems. The property is in excellent condition, the greater part having been constructed within the past five years.

Earnings.

Year	Gross Revenue	*Net Earnings	†Interest	Balance
1912.....	\$ 945,938	\$570,559	\$345,724	\$224,834
1913.....	1,088,774	581,978	373,594	208,384

*Net earnings are shown after deducting operating expenses and taxes.

†Does not include interest on Series "B" mortgage bonds which is payable in bonds.

Officers.

G. W. Bacon, Pres. F. J. Blanchard, Sec'y and Treas.
C. N. Black, Vice-Ptes. T. R. Hilton, Asst. Sec'y & Asst. Treas.
H. F. Jackson, V. P. & Gen'l Mgr.

Southern California Edison Company,

Los Angeles, Cal.

The company furnishes electric light and power throughout Santa Barbara, Kern, Ventura, Los Angeles, San Bernardino, Orange and Riverside Counties, serving sixty cities, towns and intervening territory, with a population of about one million. Also operates gas distributing systems in 8 cities and towns.

Subsidiary Companies.

Long Beach Cons. Gas Company. Santa Barbara Gas & Electric Co.

Capitalization.

Stocks—	Authorized.	Outstanding.
Preferred 6%.....	\$ 4,000,000	\$ 4,000,000
Common 6%.....	26,000,000	10,400,000
Funded Debt—		
Bonds.....	30,000,000	16,302,000

Physical Property.

The company owns and operates in parallel six hydro-electric plants on the Kern and Santa Ana Rivers and on Mill and Lytle Creeks, with an aggregate development of 42,500 h. p.; steam plants at Los Angeles, Long Beach and Redlands developing 77,300 h. p.; aggregate present development of all plants 119,800 h. p.; valuable additional water rights on the Kern River capable of ultimate development of 111,000 h. p.; one of which, Kern River No. 3—33,500 h. p.—is actively under construction; also owns half interest in Union Power Co.; hydro-electric development with capacity of 10,000 h. p. The company owns controlling interest in both its subsidiaries (L. B. Gas \$640,200 preferred and common; Santa Barbara G. & E. \$736,500 preferred and common).

Statistics.

No. of Consumers—	Electric.	Gas.	Total.
December 31, 1910.....	55,338	12,065	67,403
December 31, 1911.....	66,398	9,318	75,716
December 31, 1912.....	80,995	11,623	92,618
December 31, 1913.....	96,851	13,532	110,383
June 30, 1914.....	102,642	13,846	116,488

Earnings.

Year—	Gross Revenue.	*Net Earnings	Interest and Amortization.	Balance.
1910.....	\$3,384,933	\$1,667,076	\$651,492	\$1,015,584
1911.....	3,738,165	1,902,280	624,829	1,277,451
1912.....	4,337,411	2,008,355	708,796	1,299,559
1913.....	4,779,280	2,348,989	813,969	1,535,020
Year ending				
June 30, '14	4,840,105	2,354,859	862,860	1,491,999

*After deducting operating expenses and taxes.

Dividends.

	1910.	1911.	1912.	1913.	1914.
Preferred %....	5	5	5	5	6
Common %....	5	5	5	5	6

Officers.

John B. Miller, Pres. Albert W. Harris, V. P.
W. A. Brackenridge, V. P., Gen'l R. H. Ballard, Sec. and Asst. Gen. Man.
J. C. Drake, V. P. W. L. Percey, Treas.
W. R. Staats, V. P.

Southern California Gas Co.,

Los Angeles, Cal.

The Southern California Gas Company furnishes gas to the city of Los Angeles and vicinity, which is now supplied with approximately a fifty per cent mixture of natural and manufactured gas, and in some localities with all natural gas.

In addition to the manufactured gas supplied on the above basis, the estimated output of natural gas for domestic and industrial purposes is over six billion cubic feet.

All of the natural gas is supplied by the Southern California Gas Company, either at retail to its own consumers in Los Angeles city and eighteen nearby cities and towns, or at wholesale to other distributing companies, including the Los Angeles Gas & Electric Company.

The Southern California Gas Company supplies all the manufactured gas in addition to the Natural gas distributed by the Economic Gas Company in Los Angeles City; the Long Beach Consolidated Gas Company in Long Beach and vicinity; the Southern California Edison Company in Santa Monica and vicinity; the Western Fuel & Power Company in Redondo and vicinity, and the Rodeo Land & Water Company in Beverly.

The company also supplies and distributes manufactured gas to the city of Riverside and surrounding towns in Riverside County, and in the city of San Bernardino and surrounding towns in San Bernardino County.

Capitalization.

Stocks—	Authorized	Outstanding
Preferred (6% cum.).....	\$ 4,000,000	\$ 875,000
Common.....	6,000,000	6,000,000
Bonds.....	10,000,000	4,030,000

*\$3,118,000 face value bonds deposited as collateral securing issue of \$2,338,000 Pacific Light & Power Company collateral bonds; \$882,000 face value with public.

Earnings.

Deficit reduced from \$131,701 in 1911 to \$78,529 in 1913. Operating ratio reduced in the same period from 68.22 per cent to 68.06 per cent.

Officers.

L. C. Gilman, Pres. W. F. Turner, Comptroller.
Waldo G. Paine, V. P. W. D. Scott, Gen. Mgr.
W. G. Davidson, Sec. & Treas.

Spring Valley Water Co., San Francisco, Cal.
The company furnishes water to the city of San Francisco.

Capitalization.

Stocks	Authorized	Outstanding
Common	\$28,000,000	\$28,000,000
Funded Debt—		
Bonds	28,000,000	21,277,000
Notes, 2 yr. 5½%, due Dec., 1915	2,000,000	1,000,000

Physical Property.

The company owns 14 pumping plants in San Francisco, San Mateo and Alameda counties, of a capacity of 75,000,000 gallons; eight city distributing reservoirs and 3 tanks. City system consists of 460 miles of pipe and 63,000 service connections. Properties in San Francisco, San Mateo, Alameda, Santa Clara and San Benito counties, 102,082 acres, and riparian rights on 51,558 acres. Reservoirs have a capacity of 32,100,000,000 gallons. The system, as at present developed, delivers approximately 40,000,000 gallons daily. Real estate water rights were appraised January 1, 1914, \$65,840,485. On December 31, 1913, a condemnation suit was commenced by the city of San Francisco to acquire the greater portion of the property owned by the company.

Earnings.

Year	Gross Revenue	*Net Earnings	Interest	Balance
1910	\$2,898,963	\$1,798,898	\$714,360	\$1,084,568
1911	2,993,336	1,936,149	714,360	1,221,789
1912	3,195,377	1,197,547	756,304	2,149,856
1913	3,400,680	2,149,856	714,971	1,434,885

*Net earnings are shown after deducting operating expenses and taxes.

Officers.

W. H. Bourn, Pres. J. S. Behan, Sec.
A. H. Payson, Vice-Pres. T. M. Edmunds, Asst. Sec.
S. P. Eastman, V.-P. & Gl. Mgr. Benj. Bangs Treas.

Standard Gas & Electric Company Delaware

The Standard Gas & Electric Company owns stocks, bonds and other securities of public utility corporations serving over 200 cities and towns, with a total population of approximately 1,656,000, situated in the states of Minnesota, Kentucky, Washington, Oklahoma, Alabama, Colorado, California, Arkansas, Iowa, North Dakota, Oregon, Illinois, Montana, Idaho and Wisconsin.

Subsidiary Companies.

Ark. V. Ry.Lt.& Pr.Co. Muskogee Gas & El.Co. *San Diego Consol. Gas Enid Elec. & Gas Co. No.Ida.& Mont. Pr.Co. & Elec. Co.
Everett Gas Company. North. States Fr. Co. Southwestern Gen'l Gas Ft. Smith Lt. & Tr. Co. Okla. Gas & El. Co. Co.
Louisville Gas & El. Co. Consumers Power Co. Tacoma Gas Company.
Miss. V. Gas & El. Co. Ottumwa Ry. & Lt. Co. *Western States Gas & Mobile Electric Co. Olympia Gas Co. Electric Co.
*See information below.

Capitalization.

Stocks—	Authorized	Outstanding
\$11,784,950 preferred (8%)	\$30,000,000	\$11,784,950
Par \$50.		
Common	15,000,000	9,343,150
Funded Debt—		
Conv. S. F. 1926 bonds (6 per cent)	30,000,000	9,969,500
Coll. Trust Gold Notes (6 per cent)	3,000,000	2,446,000

Physical Property.

All of the public utilities in which Standard Gas & Electric Company owns stocks, bonds and other securities have been thoroughly maintained in first-class physical condition. They operate under satisfactory franchises, serving communities which in the past have shown favorable increases in population, business importance and financial stability and offer every expectation of prosperous growth in the future. These companies operate in widely separated parts of the country and variously serve cities and towns of greatly diversified commercial and manufacturing interest.

Earnings.

Year	Gross Revenue	*Net Earnings
1911	\$11,939,999	\$5,727,794
1912	13,194,804	6,029,583
1913	14,060,442	6,316,448

*Net earnings are shown after deducting operating expenses and taxes.

Dividends.

Preferred (per cent)	1910	1911	1912	1913	1914
	3½ ¹	7½ ²	8	8 ³	6 ⁴

¹ Initial dividend, 1½ per cent, Sept. 15, 1910.
² Initial dividend, 2 per cent, Sept. 15, 1911.
³ Dividend last 6 months 1913 and 1914, payable in scrip, due Sept. 1922, interest 6 per cent.
⁴ Nine months.

Statistics.

	1913	1912	1911	1910
Electric Consumers	149,225	130,946	110,166	88,582
Gas Consumers	132,474	129,158	120,897	106,534
Water Consumers	2,290	3,145	2,702	1,626
Steam Consumers	883	826	835	755
Telephone Subscribers	2,660	2,473	2,138	2,385
Totals	287,532	266,548	236,738	199,882

	1913	1912	1911	1910
Kwt. Hour Output	339,977,796	291,366,636	251,728,523	210,841,243
Motors	18,784	15,890	13,069	9,758
H. P. Pr. in Motors	160,856	133,328	108,793	84,254
16 c. p. Eq.	2,727,970	2,441,758	2,082,932	1,658,576
City Arcs	10,854	10,146	9,529	8,816
City Inc's.	12,761	9,390	6,996	5,478
Gas Output (cu. ft.)	9,122,718,102	9,824,253,465	9,316,453,927	8,108,788,459
St. Railway Receipts	\$828,168.25	\$801,963.25	\$757,204.50	\$704,639.01

Officers.

H. M. Byllesby, Pres. Herbert List, Asst. Secretary.
J. J. O'Brien, Vice-Pres. R. J. Graf, Treas. & Asst. Sec.
F. C. Gordon, Vice-Pres. M. A. Morrison, Sec. & Asst. Treas.
Herbert List, Asst. Treasurer.

WESTERN STATES GAS & ELECTRIC COMPANY

(Delaware)

(The Company owns entire capital stock of Western States Gas & Electric Co. of California.)

This Company operates gas works and steam electric power house with distributing systems in Eureka, hydro-electric power plant on Trinity River, near Junction City, and electric distributing systems in Arcata, Blue Lake, Fields Landing and Fortuna; electric distributing systems in Richmond; gas works and steam electric power house with distributing systems in Stockton, and electric distributing systems in Elk Grove, Florin, Galt, Lockeford, etc.; also hydro-electric power plant on American River near Placerville and electric distributing system in Placerville, and appurtenant transmission lines and other properties. Population served app. 78,750.

Capitalization.

Stocks	Authorized	Outstanding
Conv. cumulative, pref. (7%)	\$10,000,000	\$2,125,000
Common	5,000,000	3,503,000
Funded Debt—		
Bonds	10,000,000	4,737,500

Physical Property.

Hydro-electric developments include 4,500 K. W.; steam electric stations 5,250 K. W. 1,118,000 cu. ft. holders gas. Company at Stockton owns 16 gas wells and supplies mixture of artificial and natural gas. Richmond division purchases electric energy at wholesale from Pacific Gas & Electric Company and distributes through Richmond and vicinity.

Statistics.

	1910	1911	1912	1913
Miles of Pole line	563	635	811	923
Electric customers	6,573	10,622	12,893	15,019
Motor load h. p.	10,737	12,382	15,070	21,581
Miles gas mains	65	102	123	123
Gas customers	5,239	5,940	6,862	7,463

Earnings.

Year	Gross Revenue	*Net Earnings	Interest	Balance
1910	\$750,696	\$417,815	\$143,429	\$274,383
1911	866,399	498,067	209,982	288,085
1912	978,862	515,786	196,479	319,307
1913	1,085,647	488,764	259,149	229,615

*Net earnings are shown after deducting operating expenses and taxes.

Officers.

H. M. Byllesby, President. R. J. Graf, Sec. & Treas.
F. C. Gordon, Vice-Pres. M. A. Morrison, Asst. S. & T.
Otto E. Osthoff, Vice-Pres. Herbert List, Asst. S. & T.

SAN DIEGO CONSOLIDATED GAS & ELECTRIC CO.

This Company operates a gas and electric plant in city of San Diego and serves both gas and electric energy to the following: San Diego, La Jolla, Pacific Beach, Old Town, Ocean Beach and Point Loma, Chula Vista, East San Diego, Encanto, La Mesa, Lemon Grove, Normal Heights and National City; electricity only to Bostonia, El Cajon, Foster, Imperial Beach and South San Diego, Lakeside and Lakeview, Nestor, Palm Station, Otay, Santee, San Ysidro and Helix, Del Mar; gas only to Coronado.

Capitalization.

Stocks—	Authorized	Outstanding
Preferred	\$ 500,000	None
Common	3,000,000	\$2,715,000
All common owned by Standard Gas & Electric Co.		
Funded Debt—		
Bonds	\$9,000,000	\$4,199,000

Physical Property.

Gas—Holder capacity, 2,650,000 cu. ft.; annual output, 733,293,000 cu. ft. Miles of mains, 420; combined daily capacity water and oil gas plants, 4,375,000.

Electric—8,470 K. W. power station; 12,350 H. P. in engines and turbines; 5,494 H. P. in Babcock & Wilcox boilers; miles of pole line, 401; annual output, 18,931,466 K. W. H. Oil is used as fuel, and boilers are equipped with grates for burning lamp black, being a by-product of gas plant. During present year company will install additional 4,000 K. W. General Electric turbo-generating unit.

The charter of the Company for both gas and electric lighting is for a period of 50 years from March 29, 1897.

Statistics.

	1910	1911	1912	1913
Electric consumers.....	7,139	9,885	14,321	17,199
Gas consumers.....	10,155	13,061	17,864	20,348
City arcs.....	369	425	621	707
Motors.....	648	904	1,284	1,633
H. P. motors.....	2,835	5,024	8,117	13,678

Earnings.

Year	Gross Revenue	*Net Earnings	Interest	Balance
1910.....	\$ 548,061	\$277,314	\$ 91,028	\$186,286
1911.....	753,820	387,714	111,573	276,141
1912.....	1,019,471	511,767	165,140	346,627
1913.....	1,326,970	625,768	223,129	402,639

*Net earnings are shown after deducting operating expenses and taxes.

Dividends.

	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914
Preferred..1¼	5	5	5	5 ½	7	7	None	None	None	None
Common.....	..	..	..	.. 5	6¼	7	7	8¼	10	10

Officers.

H. H. Jones, Pres.
 H. M. Byllesby, Vice-Pres.
 F. C. Gordon, Vice-Pres.
 A. H. Sweet, Vice-Pres.
 M. B. Fowler, Sec. & Treas.
 R. J. Graf, Asst. T. & S.
 Herbert List, Asst. T. & S.

TACOMA GAS COMPANY.

Capitalization.

Stocks—	Authorized.	Outstanding.
Preferred 7% cumulative.....	\$5,000,000	\$ 750,000
Common.....	2,500,000	1,550,000
Funded Debt—		
Bonds.....	3,000,000	2,095,000

EVERETT GAS COMPANY.

Capitalization.

Stocks—	Authorized.	Outstanding.
Preferred 7% cumulative.....	\$1,000,000	\$ 310,000
Common.....	1,000,000	1,000,000
Funded Debt—		
Bonds.....	2,000,000	762,000

Standard Oil Co. of California, San Francisco, Cal.

The company operates extensive oil producing properties in Southern California, pipe lines, three refineries, can plant, a fleet of steamers and barges, and other equipment. It distributes and sells petroleum and its products; operating 135 stations in California, 27 in Oregon, 42 in Washington, 14 in Arizona, 7 in Nevada, 6 in Alaska and 1 in the Hawaiian Islands, 9 additional stations in course of construction.

Capitalization.

Stocks—	Authorized	Outstanding
Common.....	\$100,000,000	\$49,814,000

Physical Property.

The company owns extensive oil producing properties with an average daily production of 26,575 barrels, in the Kern River district and had recently acquired the holdings of the Murphy Oil Co. in the Fullerton field. It owns refineries at Richmond, El Secundo and Bakersfield, with daily capacity of 65,000, 20,000 and 25,000 barrels respectively, and a can manufacturing plant with daily capacity of 30,000 one and five-gallon cans. The company owns 386 miles of pipe lines, storage tanks and other equipment; a fleet of steamers as follows: coastwise and foreign, 9 steamers (American flag), aggregate capacity 275,000 barrels; 3 barges, aggregate capacity, 95,000 barrels, and 13 river and harbor boats with aggregate capacity of 35,350 barrels. On December 31, 1913, the total plant investment of the company was \$50,268,456. Its inventories amounted to \$21,724,390, which included 24,310,310 barrels of crude oil in storage; the balance being stocks of all products on hand in its various sales stations.

Dividends.

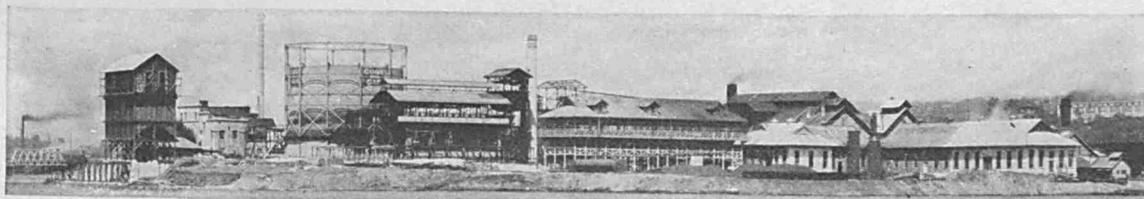
Per cent	'08	'09	'10	'11	'12	'13	'14
.....	10	46	2	0	10	10	10

Officers.

D. G. Scofield, Pres.
 K. R. Kingsburg, Vice-Pres.
 W. S. Rheens, Vice-Pres.
 F. H. Hillman, Vice-Pres.
 W. S. Miller, Vice-Pres.
 R. J. Hanna, Treas.
 H. M. Storey, Sec.

Union Oil Co. of California, Los Angeles, Cal.

The company is engaged in producing, transporting, manufacturing and marketing crude petroleum and its



SEATTLE'S rapid and sustained growth in population and in commercial and industrial progress is accurately reflected in the development of the artificial gas business. Since 1904, gas has been supplied to this city by the Seattle Lighting Company, and during that time the gross revenues of the company have increased more than fourfold. Today the annual revenues are approximately one million dollars, and showing steady increase, notwithstanding the low price at which gas is sold, the rate schedule beginning at \$1.00 for the first 5,000 cubic feet monthly consumption and going as low as 60 cents on larger quantities for industrial purposes.

These rates, put in force a little over a year ago, have had the effect of stimulating the sales of gas very materially and contributing to the general industrial development of the city.

It is fair to say that no city in America, or elsewhere, possesses a more complete, more modern or more efficient gas-making establishment than the Lake Union Station of the Seattle Lighting Company. It is generally believed that almost no other city has so large a mileage of mains for the population served. In both respects, therefore, the gas company is admir-

ably situated to meet and take care of the continued growth which all authorities unite in asserting is assured.

The accompanying photograph gives an excellent idea of the extent and capacity of the Lake Union works, though the large retort house, the principal building of the group, is not shown. This plant contains complete coal gas and water gas equipment, and within the past year there has been added to it, necessitated by the growing demand for gas and the expected large increase in population during the next few years, a chamber-oven coking plant of the most modern and most efficient type known, built on the lines of the Klönne ovens, a German system. The builders are the National Chamber Oven Co., of Cincinnati, Ohio.

Besides giving the gas company full capacity to meet any emergency, this addition to its works will give to Seattle a supply of home-manufactured metallurgical coke adapted to the most exacting demands of domestic and industrial use. It is the intention of the company to give such close attention to the selection of coals for use in this plant that the coke by-product will be superior, for the various purposes for which it will be used along the coast, to any coke that can be imported and sold here.

Adv.

Attention is called to the announcement on page 11

products throughout a large part of the Pacific Coast territory of the United States, Canada and South America.

Subsidiary Companies.

Mis. Tr. & Ref. Co.	Union S. S. Co.	Prod. Trans. Co.
Union Trans. Co.	United S. S. Co.	Union Tool Co.
Newlove Oil Co.	Claremont Oil Co.	So. Cal. I. & S. Co.
	Outer Harbor Dock and Wharf Co.	
	S'ta Maria O. & G. Co.	

Capitalization.

Stocks—	Authorized	Outstanding
Common	\$50,000,000	\$31,312,900
Bonds	20,000,000	8,348,000
Notes, collateral trust 6s.....	4,000,000	3,095,000

Physical Property.

Figures are as of June 30, 1914.

The company owns oil lands aggregating slightly more than 240,000 acres, but a small fraction of which is being utilized; 319 wells being in active production. These lands with leases and mineral rights owned by the company are valued at \$22,831,758; the wells, development and equipment at \$22,278,822. The company owns or controls more than 718 miles of pipe line extending from three tidewater ports to the four great oil-producing sections of California. Its storage system has a capacity of 13,043,450 barrels. The pipe lines and storage systems owned are valued at \$4,338,721. The company owns a large fleet of vessels with a total carrying capacity of over 500,000 barrels, and others are in course of construction. The fleet, together with the tank cars owned by the company, are valued at \$3,159,730. The company owns and operates four modern refineries and a compressor plant valued at \$2,639,355, and its market stations are valued at \$3,617,381.90. The company owns or controls 24 subsidiary companies, these holdings aggregate \$13,213,179. The inventory of crude oil and refined stocks on hand totals \$5,666,932.

Sources of Gross Revenue.

Year	Crude oil		Total
	Sales	Refined oil Sales	
1910	\$ 7,376,840	\$3,218,049	\$10,594,889
1911	10,109,563	5,746,310	15,855,873
1912	11,600,261	6,563,293	18,163,554
1913	13,494,240	6,449,201	19,943,441

Officers.

W. L. Stewart, Pres.	E. W. Clark, V. P.
Alex. Sclater, V. P.	Giles Kellogg, Sec.
	John Garrigues, Treas.

UNION OIL CO.—Continued.

Earnings.

Year	Gross Profit	*Net Earnings	Interest	Balance
1910	\$5,162,092	\$3,625,133	\$317,987	\$3,307,146
1911	4,227,093	2,438,401	365,911	2,072,490
1912	5,323,131	3,511,338	671,599	2,839,738
1913	4,803,537	4,246,254	648,742	3,597,512

*Net earnings are shown after deducting operating expenses and taxes.

United Railroads of San Francisco,

San Francisco, Cal.

The company operates the entire street railway system of San Francisco, with the exception of the California Street Cable Railway Company and the Municipal Railway, the latter being owned by the city. The company also operates a suburban line to San Mateo, San Mateo County.

Capitalization.

*Stock—	Authorized	Outstanding
1st Preferred (7% cum.).....	\$ 5,000,000	\$ 5,000,000
Preferred (4% cum.).....	20,000,000	20,000,000
Common	18,800,000	17,948,600

Funded Debt—		
Bonds	†60,725,000	\$36,474,000
Equip. trust cert.	†700,000	440,000
5% gold notes	1,000,000	1,000,000
7% notes to Cal. Ry. & P. Co.....	2,000,000	2,000,000

*All stock controlled by California Railway & Power Co.
†Retired and cancelled, \$4,055,000.
‡Retired and cancelled, \$260,000.
§Includes \$151,000 held as sinking fund investments.

Physical Property.

The company controls and operates 260.02 miles of electric street and suburban railway in San Francisco and San Mateo counties, all of which is overhead trolley. It also owns and operates 14.70 miles of cable line on Castro, Powell, Sacramento, Clay, Washington and Jackson streets, San Francisco. Total 274.72 miles of single track. Cars—electric passenger 703, cable passenger 57, and work 76; total 836.

Earnings.

Year	Gross Revenue	*Net Earnings	Interest	Balance
1910	\$7,862,796	\$3,133,525	\$2,042,410	\$1,091,115
1911	8,150,763	3,443,792	2,095,213	1,348,579
1912	8,756,998	3,878,416	2,071,099	1,807,317
1913	8,723,464	3,559,768	2,036,518	1,523,250

*Net earnings are shown after deducting operating expenses and taxes.

Officers.

I. W. Lilienthal, Pres.	A. M. Dahler, Treas.
Chas. N. Black, V.-P. & Gl. Mgr.	Geo. B. Willcutt, Sec. & Comp.
	Thornwell Mullaly, Asst. to Pres.

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United Railways Investment Co., Jersey City.

The company is a holding company and does not operate any properties.

Subsidiary Companies.

Philadelphia Co. United R. R.'s of San Francisco.
 California Ry. & Power Co. San Francisco Electric Railways.
 Sierra & San Francisco Power Co. The Railroads & Power Development Co.
 Coast Valleys Gas & Electric Co.

Capitalization.

Stocks—	Authorized	Outstanding
Preferred (5% cum.)	\$25,000,000	\$16,000,000
Dividend certificates		1,462,500
Common	31,000,000	20,400,000
Funded Debt—		
Bonds	26,250,000	*18,960,000
Notes, 6 per cent sr., '08	3,500,000	1,100,000
* \$752,000 Coll. Trust 5s held by trustee in sinking fund.		

Physical Property.

The company owns \$24,200,000 of the \$39,043,000 common stock of the Philadelphia Co., located at Pittsburgh. It owns, directly or indirectly, all the preferred and common stocks of its California subsidiaries. For the purposes of this issue the operating California companies will be separately considered.

Earnings.

Year	Gross Revenue	*Net Earnings	Interest	Balance
1911	\$2,136,536	\$2,065,999	\$1,225,172	\$840,827
1912	2,260,250	2,181,182	1,191,537	989,645
1913	2,134,224	2,070,497	1,164,159	906,338
*Net earnings are shown after deducting operating expenses and taxes.				

Officers.

Mason B. Starring, Pres. W. J. Duane, Sec'y & Asst. Treas.
 Geo. W. Bacon, Vice-Pres. M. V. R. Weyant, Asst. Sec'y and Asst. Treas.
 Benj. S. Guinness, Treas. P. M. Hoskins, Auditor.

U. S. Smelting, Refining and Mining Co., Boston.

This company and its subsidiaries are engaged in mining copper, lead, gold and silver ores on their various properties in Utah, Nevada, California and Mexico. They operate smelters, refineries and reduction plants; a large lime quarry and coal mines in Utah; and are building a railroad to provide outlet for their product to the lines of the Denver & Rio Grande and the San Pedro route.

Subsidiary Companies.

United States Metals Refining Co. Mammoth Copper Mining Co.
 United States Smelting Co. Gold Road Mines Co.

United States Mining Co. Needles Mining and Smelting Co.
 Real del Monte y Pachuca Mines Richmond Eureka Mining Co.

Capitalization.

Stocks—	Authorized	Outstanding
Preferred (7% cum.)	\$37,000,000	\$24,313,725
Common	37,500,000	17,553,787
Notes, 4-year gold, due 1918	6,000,000	4,000,000
Utah Co. 6% coll. Tr. due 1917	10,000,000	10,000,000

Physical Property.

The company and subsidiaries own a large group of mines, a lime quarry and smelter at Bingham, the Centennial Eureka Mine at East Tintic, the Mammoth Mine and Smelter at Kennet, Cal., a lead refinery at Chicago, and a controlling interest in the U. S. Metals refinery at Chrome, N. J. The company owns large coal properties in Utah aggregating 11,226 acres of which 7,526 acres are coal lands, which in 1913, produced 869,522 tons of coal. The company is now constructing 80 miles of railroad connecting these fields with the D. & R. G. and U. P. systems. The company owns the entire capital stock of its subsidiary companies with the exception of \$1,031,324 par value.

Dividend Record.

April, 1906, to October, 1914—	
Preferred	\$14,667,444.75
Common	6,362,189.18

Officers.

W. G. Sharp, Pres. & Ch'mn of Bd. Frederick Lyon, Vice-Pres.
 S. J. Jennings, Vice-Pres. F. Winthrop Batchelder, Sec'y & C. G. Rice, Vice-Pres. Treas.

Washington Water Power Co., Spokane, Wash.

The company operates a street railway system in Spokane, Wash., with connecting suburban and interurban lines. It owns and operates the electric light and power systems in 30 towns in Washington, including Spokane, and in 4 towns in Idaho. In addition it furnishes the power to systems not owned by it in 4 towns in Washington, and in 11 towns in Idaho.

Capitalization.

Stocks—	Authorized	Outstanding
Common	\$20,000,000	\$15,490,000
Funded Debt—		
Bonds	15,000,000	5,073,000
Notes		2,274,000

Physical Property.

The company's railway system consists of 112.30 miles of track. Its city lines occupy 49.51 miles of streets. The



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company owns and operates 627 miles of transmission lines and the following hydro-electric plants: Spokane, 12,000 H. P.; Post Falls, Idaho, 15,000 H. P.; Little Falls, Wash., 27,000 H. P. All of its water power is on the Spokane River. It owns a 19,000 H. P. steam turbine plant at Spokane and is constructing an additional hydro-electric plant of 66,000 H. P. at Long Lake, Wash. The company's franchises for light and power business run to 1944 and the street railway franchises run for an average of 20 years.

Statistics.
Electric Light & Power System.
Comparative Statement.

	1907	1908	1909	1910	1911	1912	1913	1912	Inc. over
Max. Station Load, H. P.	22,400	26,800	30,200	34,873	37,155	38,312	40,521	40,521	6%
H. P. of motors in Spokane	6,863	8,506	9,880	15,692	16,224	17,970	18,609	18,609	4%
H. P. of mot. on trans. lines	10,569	14,176	16,632	17,824	18,735	20,992	25,244	25,244	20%
*Number of accounts	10,350	12,684	15,584	18,080	19,105	20,222	22,640	22,640	12%
*Number of meters in use	10,503	12,843	15,502	17,852	18,850	19,965	22,244	22,244	11%

*Not including meters and accounts in towns recently acquired.

Earnings.

Year.	Gross Revenue.	*Net Earnings.	Interest.	Balance.
1910	\$3,155,223	\$1,476,683	\$241,144	\$1,235,539
1911	3,264,158	1,611,177	312,494	1,298,683
1912	3,170,246	1,567,892	276,648	1,291,244
1913	2,914,950†	1,623,277	259,219	1,363,958

†The apparent loss in gross due to change in methods of accounting.

*Net earnings are shown after deducting operating expenses and taxes.

Dividends.

1905 to 1910 inc. 7% 1911 to 1913 inc. 8%

Officers.

D. L. Huntington, Pres. Y. M. White, Treas.
H. L. Bleecker, V.-P. W. J. C. Wakefield, Ch. of Ex.
C. S. MacCalla, V.-P. & G. Mgr. Committee & V.-P.
A. F. S. Steele, Sec'y.

Weed Lumber Company, San Francisco, Cal.

The company is engaged in logging pine timber in Siskiyou County, Cal., and in the manufacture and sale of lumber, sashes and doors, boxes, etc.

Capitalization.

Stocks—	Authorized.	Outstanding.
Common	\$2,000,000	\$1,950,000
Funded Debt—		
Bonds	1,200,000	850,000

Physical Property.

The company owns 50,000 acres of timber land in Siskiyou county with 670,245,884 ft. of standing timber which they value at \$1,675,615; railroad and logging equipment, and 3 mills at Weed, California. They also own logged off and ranch land and townsite properties aggregating \$134,553.

Earnings.

	1913.	1912.	1911.
Gross earnings, all oper.	\$501,506.43	\$380,540.48	\$322,853.04
Less int., taxes, misc. losses.	208,134.53	115,881.83	122,414.12
Net earn., exclus. of deprec.	\$293,371.90	\$264,658.65	\$200,438.92
Less res. for plant deprec.	76,594.46	91,755.07	83,857.64
Net Earnings	\$216,777.44	\$172,903.58	\$116,581.28

Officers.

G. X. Wendling, Pres. H. Fleishhacker, V.-P.
S. O. Johnson, V.-P. H. Nathan, Sec'y & Treas.

Yukon Gold Co., New York, N. Y.

The company is engaged in the mining of gold by dredging, hydraulic, and other methods of operation on land owned or leased in Alaska and California.

Capitalization.

Stocks—	Authorized.	Outstanding.
Common	\$25,000,000	\$17,500,000*

*Controlled by Guggenheim Exploration Co.

Physical Property.

The company owns and operates hydraulic properties in the Klondike region in Alaska, and dredging properties at Dawson and Iditarod, Alaska, and at Oroville and on the American River in California.

Earnings.

Year.	Gross Revenue.	*Net Earnings.	Dividend.	Balance.
1911	\$1,462,042	\$1,316,733	\$1,312,500	\$ 4,233
1912	2,721,419	1,072,592	1,050,000	22,592
1913	2,583,837	1,130,300	1,050,000	60,300

*Net earnings are shown after deducting operating expenses and taxes.

Sources of Gross Production.

	Dredges.	Hydraulics.	Miscel.
1911	\$2,671,845	\$434,382	.....
1912	3,346,026	629,043	.....
1913	4,347,111	256,491	\$185,800

Officers.

S. R. Guggenheim, Pres. C. K. Lipman, Sec'y.
Dan'l Guggenheim, V.-P. Morris Guggenheim, Treas.
O. B. Perry, Gen'l Mgr.

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**PUBLIC SERVICE
COMPANIES**

PACIFIC GAS AND ELECTRIC COMPANY

445 SUTTER STREET

SAN FRANCISCO, CALIFORNIA

A Letter from the Treasurer to One of Our Stockholders

Dear Sir:

In your letter of August 28th, you express yourself as being very much interested in our offering of First Preferred Cumulative 6% Stock, and have asked me to give you an analysis of this security from an investor's standpoint.

As a purchaser of corporate securities, with many years of experience, you have undoubtedly trained yourself to look for certain fundamental requirements in deciding whether a security is worthy of your confidence. I believe, therefore, you will agree with me that every cautious investor should satisfy himself as to the following points which, to use your expression, "constitute the essential features of a sound and conservative investment."

1st. WELL DEMONSTRATED AND INCREASING EARNINGS WHICH SHOULD BE NOT ONLY SUFFICIENT TO PAY THE ANNUAL DIVIDENDS ON THE SECURITY, BUT SHOULD HAVE A MARGIN OF SAFETY, OVER AND ABOVE THE DIVIDEND REQUIREMENTS, TO INSURE THE REGULAR PAYMENT OF THE DIVIDENDS UNDER ALL CIRCUMSTANCES.

The annual reports of the Pacific Gas and Electric Company, particularly the report for the year 1913, have made the earnings of the Company since its organization in 1906 available to the public in detail, and, for the past three years, over the certificate of independent auditors, namely Messrs. Price, Waterhouse & Company, certified public accountants.

The following statement, which is a compilation for each of the past five years ended Sept. 30, 1914, will indicate to you very clearly that the earnings of the Company have not only grown steadily from year to year, but that in each one of these years the revenue available for dividends on the new preferred stock has been largely in excess of the required amount. Generally speaking, a bond is regarded as a safe investment if the issuing corporation can show that it is earning at least twice its bond interest. In fact, a great many bond issues which are regarded as high-class investments have a smaller margin of safety, with respect to earnings, than this. You can readily see from an examination of this earnings statement how much stronger even than this is the protection which our first preferred stock has with respect to earnings.

Year Ended September 30th	Gross Revenue	Net Revenue	Net Revenue After Bond Interest and Discount	Annual Dividends on New Preferred Stock	Balance Available for Dividends on Junior Stock Issues and for Depreciation or other Reserves
1910	14,122,173.46	6,110,917.48	3,128,876.84	750,000.00	2,378,876.84
1911	14,519,411.09	6,375,093.78	3,191,806.45	750,000.00	2,441,806.45
1912	14,718,797.16	6,361,581.78	2,813,574.31	750,000.00	2,063,574.31
1913	15,725,537.27	6,453,422.60	2,551,069.43	750,000.00	1,801,069.43
1914	17,066,906.77	8,093,271.59	4,083,570.04	750,000.00	3,333,570.04

2nd. INTRINSIC PROPERTY VALUE WELL IN EXCESS OF THE TOTAL OF THE SECURITY ISSUE.

Before authorizing security issues, the Railroad Commission of the State of California requires proof to be submitted to it of the intrinsic value of the property back of the security for the issuance of which authority is sought by the utility.

The Commission, as you may know, not only has authorized the issuance of this stock, but took occasion to commend our plan of junior financing as being worthy of emulation by other utilities. For your information I may add that the appraised value of our property is substantially in excess of the full liquidation value of \$100 per share of this new stock.

3rd. FRANCHISES EXTENDING WELL BEYOND THE MATURITY OF THE SECURITY ISSUE.

The following paragraph from our 1913 annual report will show you that for all practical purposes the franchise question may be regarded as non-existent with respect to this Company:

"By its unanimous decision of April 6, 1914, in the case of Russell v. Sebastian, in the argument of which counsel for this Company participated, the Supreme Court of the United States established the fact, beyond any further question, that the franchises secured under the authority of the State Constitution prior to its amendment on October 10, 1911, under which this Company is supplying gas and electric light and water in the large number of municipalities served by it, are vested property rights of perpetual duration and include the right of making all necessary extensions within such municipalities upon the terms of the original grant. By a general law of the State, no franchise of any description may now be granted except upon condition that the purchaser pay at least two per cent of the gross annual receipts derived from its exercise. In the case of cities governed by freeholders' charters, the conditions upon which franchises are granted, are in general more onerous than those prescribed by this general law of the State. The importance of this decision will, therefore, be more fully appreciated when it is considered that the above mentioned franchises of this Company are not only without time limit, but are also not subject to any specific rental, charge or burden of any kind.

4th. EARNINGS DERIVED FROM A GROWING AND DIVERSIFIED BUSINESS AND WHICH WILL CONSEQUENTLY NOT BE MATERIALLY AFFECTED BY DEPRESSION IN ANY ONE INDUSTRY.

The following statement will show you the diversified character of the Company's business:

DEPRIVATION OF GROSS REVENUES PAST SEVEN FISCAL YEARS.

SOURCES OF GROSS REVENUE					PERCENTAGE OF TOTAL GROSS REVENUE FROM					
Year	Electricity	Gas	Railway	All Other	Total	Elec- tricity	Gas	Rail- way	All Other	Total
1907	\$6,316,629	\$4,086,372	\$431,800	\$507,339	\$11,342,140	.56	.36	.04	.04	100
1908	7,059,088	4,494,945	414,326	688,946	12,657,305	.56	.36	.03	.05	100
1909	7,678,665	4,860,034	452,396	500,193	13,491,288	.57	.36	.03	.04	100
1910	7,899,224	5,202,284	509,152	433,936	14,044,596	.56	.37	.04	.03	100
1911	7,823,903	5,735,219	533,520	511,967	14,604,609	.54	.39	.04	.03	100
1912	7,672,570	5,805,865	547,187	719,029	14,744,651	.52	.39	.04	.05	100
1913	8,230,782	6,547,595	572,913	851,047	16,202,237	.51	.40	.04	.05	100
Gain 6 years	\$1,914,153	\$2,461,223	\$141,113	\$343,708	\$4,860,197					

There has been a very satisfactory growth in each line of activity, and at no time has it been a case of having to rely for the payment of charges and dividends upon one department to offset deficiency in another, although from the standpoint of the security purchaser the ability to maintain the stability of revenues in this way is a factor of much importance. During the nine months ended Sept. 30, 1914, our electric business increased \$400,919 and our gas business increased \$423,991. I merely mention this to lend point to the statement that while the possibilities of the future development of the electrical industry are universally recognized, no such general recognition has obtained with respect to the gas industry. In my opinion, which is supported not only by the foregoing figures, but by daily observation, the possibilities of the growth of the gas business are fully as great as in the electrical department. This is largely due to the increasing use of gas for cooking and industrial purposes, but more particularly to its use for heating of homes, apartment houses and other buildings in their entirety. Two things are responsible for this. One is our moderate California climate, which brings this method of heating within economical limits, and the other is the development of convenient and economical gas heating systems and devices. It may be of interest to you to learn that a large number of the buildings on the Exposition grounds are being heated, or will be heated, entirely by means of gas. As already stated, our climate is largely responsible for this, and where such a system in colder localities would be a luxury which very few could afford, it is within the reach of people with moderate means in California.

5th. A GROWING TERRITORY FOR THE COMPANY'S BUSINESS FIELD AND ONE WHICH IS SUFFICIENTLY EXTENDED AND DIVERSIFIED SO THAT EARNINGS WILL NOT BE MATERIALLY AFFECTED BY DEPRESSION OR BY SOME CATASTROPHE IN ANY PARTICULAR CITY OR OTHER LOCALITY.

The Pacific Gas and Electric Company operates in a territory approximately 37,000 square miles, and in this territory serves a very large number of cities and towns, as shown in the following table:

SERVICE FURNISHED	NUMBER OF CITIES AND TOWNS SERVED BY THE COMPANY			TOTAL POPULATION
	Directly	Indirectly	Total	
Electricity	152	62	214	1,221,123
Gas	49	2	51	1,124,893
Water (Domestic)	14	14	28	58,905
Railway	1	..	1	75,602

That the business field of this Company is one which has in the past grown steadily in population and in the development of new industries is known to you not only from personal observation of central and northern California, but is also attested by the growth in our gross revenues from year to year and by the large numbers of consumers added to our system.

In the seven years from 1906 to 1913, our business increased \$7,255,175, or at the annual rate of \$1,036,453.

In the last fiscal year the increase was \$1,457,686, and in the nine months ended Sept. 30, 1914, it was \$876,297.

In the last seven years (ended Sept. 30th) the number of our consumers has grown from 172,938 to 368,498, an increase of 195,560, or an average annual increase of 27,937 customers. During the last of these years the growth was close to 30,000.

6th. SAFEGUARDS TO INSURE ADDITIONAL ISSUANCE OF SECURITIES ONLY FOR PURPOSES THAT WILL ADD TO THE VALUE AND EARNING CAPACITY OF THE PROPERTY.

One of the things that has given investors confidence in bonds as an investment has been the vigilance of banking houses handling bond issues in properly safeguarding future issues. What the bankers have done in the past for bonds in this respect is now being done by the Railroad Commission. Under the Public Utilities Act of California, issues of this First Preferred Stock can be made only with the authority of the Railroad Commission for acquisitions, extensions, betterments and the refunding of existing obligations. The Commission also fixes the price at which this stock may be sold, and not only requires information to be presented to it as to the purposes for which the money realized from the sale of this stock will be used, but also requires monthly reports to be rendered to it showing in detail for what purposes the money has been expended. This insures to the investor the continuance of a safe and conservative relation of property values to any additional issues of preferred stock which may be put out.

Trusting that the foregoing will satisfactorily answer your inquiry, I am,

Very sincerely yours,

A. F. HOCKENBEAMER,
Second Vice-President and Treasurer.

Adv.

Attention is called to the announcement on page 11

Pacific Light and Power Corporation

Los Angeles, California

An H. E. Huntington Property

Supplies Electricity for Power, Light and Heat in Southern California

SECURITIES

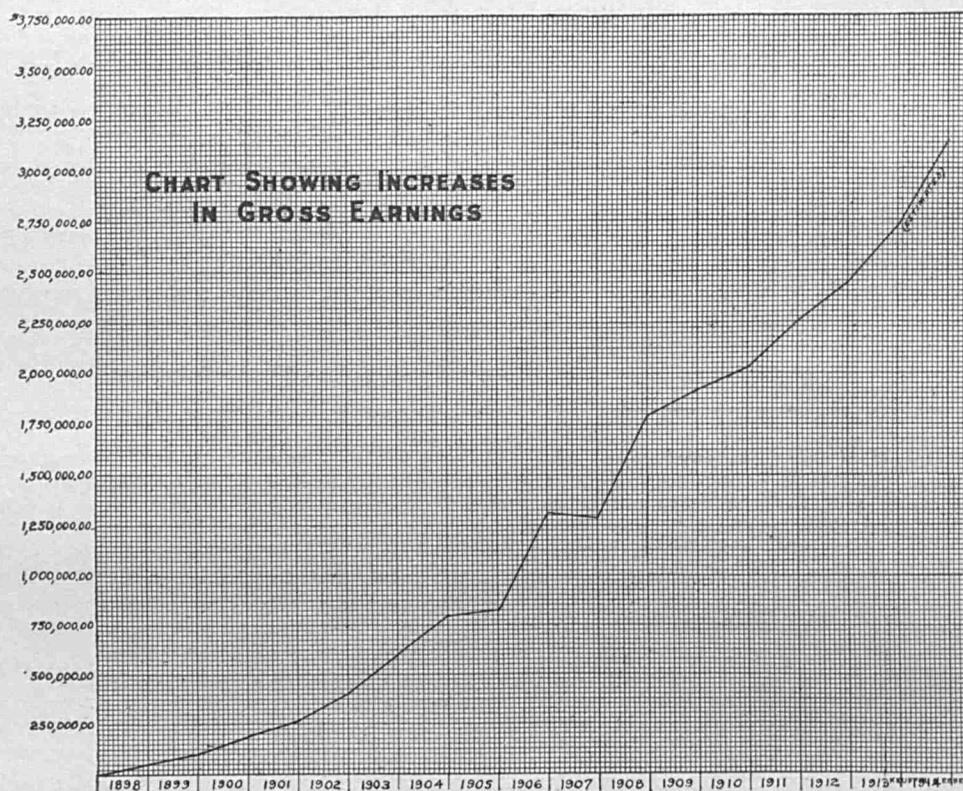
Stocks	\$23,591,500
Bonds	20,508,000

OPERATES

- 8 Hydro-Electric Plants of 99,631 H. P.
- 3 Steam Plants of 55,919 H. P.
- 25 Substations.
- 1450 Miles of Transmission Line.
- 1971 Miles of Distributing System.
- 58 Miles of Railroad.

SUPPLIES CURRENT FOR

- 36 Cities and Towns.
- 750,000 Population.
- 945 Miles of Electric Railway.
- 35,000 H. P. in Motors.
- 500,000 Lamps, 16 c. p. Equivalent.



Installed Capacity 155,000 H. P.
Undeveloped Water Power . 325,000 H. P.

Los Angeles Railway Corporation

Los Angeles, California

An H. E. Huntington Property

Street Railway System operating in and about Los Angeles, Cal.

SECURITIES

Stocks	-	-	\$20,000,000
Bonds	-	-	20,000,000

Operates

383 Miles of Track

874 Modern Street Cars

10 Sub Stations

Power furnished by the Pacific Light & Power Corporation

Serves

The City of Los Angeles and five other
Towns with a population of 516,000.
Average increase of population now 15%.

	1900	1913
Gross Income, -	\$835,627.35	\$7,005,433.26
Miles Road Operated, -	74.85	383
Cars Operated, - - -	110	874
Passenger Carried,	17,874,308	145,105,239

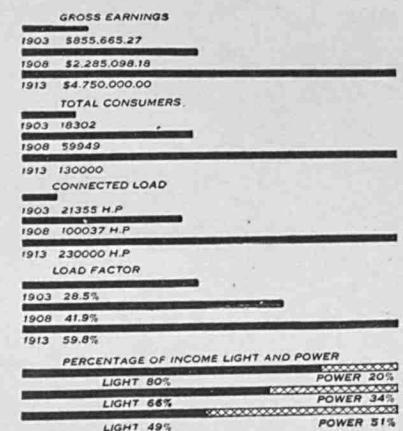
Southern California Edison Co

JOHN B. MILLER, PRESIDENT.

Upon Southern California it may be truly said the eyes of America are focused. The heart of this great domain is extensively served with electric energy for light, heat and power. Among the many reasons why this region is attracting world-wide attention are the wonderfully salubrious climate, the great agricultural and mineral wealth of the territory and the possibilities for the development of an empire where a few years ago there existed only what seemed to be arid deserts and waste plains. Added to this, Southern California has attracted a class of men who by their ability, perseverance and foresight have been able to understandingly grasp the conditions and spread the news to the world beyond the confines of the state of what has been done and what may yet be done in the way of development.

The census figures demonstrate that California is the second State in the Union in kilowatt rating of stations and in kilowatt hour output. It is the third state in the Union in aggregate income and twelfth State in the Union as regards population. The Southern California Edison Company is the second largest electric company on the Pacific Coast, and the seventh largest electric company in the United States in relation to gross earnings. The company's lines cover seven counties embracing an area of approximately 45,000 square miles, which contains a population of 1,030,000. The company has in operation hydraulic and steam

THE FOLLOWING TABULATION GIVES A GRAPHIC IDEA OF THE EXTRAORDINARY GROWTH OF THE COMPANY'S BUSINESS.



generating plants with a total capacity of 119,800 horse-power, and has hydraulic plants under construction of a total capacity of 116,000 horse-power, making a grand total of 235,800 horse-power. Southern California Edison electric service is supplied in THE CITY OF LOS ANGELES and about one hundred cities and towns and the intervening rural communities. ¶ The Company's General Offices are located in the Edison Building, Los Angeles, California.

Puget Sound Traction, Light & Power Company

Q Serves over 425,000 population in the Puget Sound District with Electric Power, Light and Transportation.

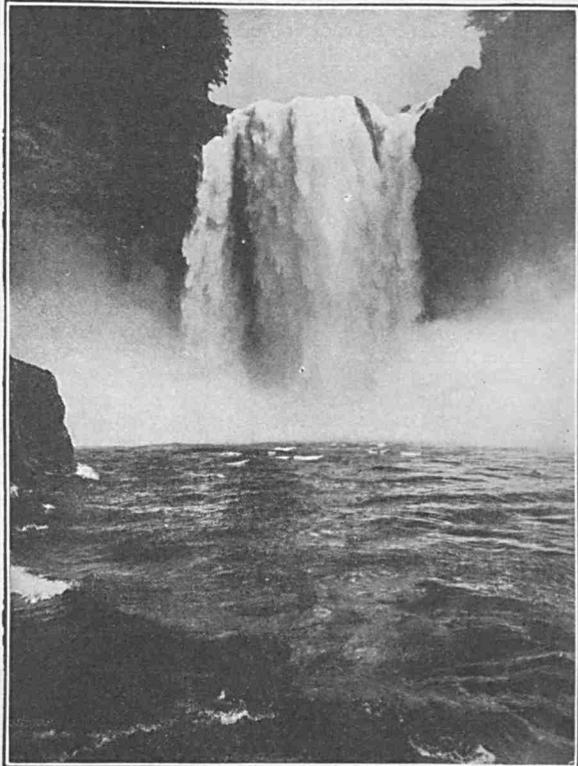
Q 74,000 horsepower developed at four hydro-electric plants, ultimate development 175,000 horsepower. Steam power developed, 34,900 horsepower.

Q Seattle, Tacoma, Everett, Bellingham and surrounding territory offer strong inducements to manufacturers to locate factories.

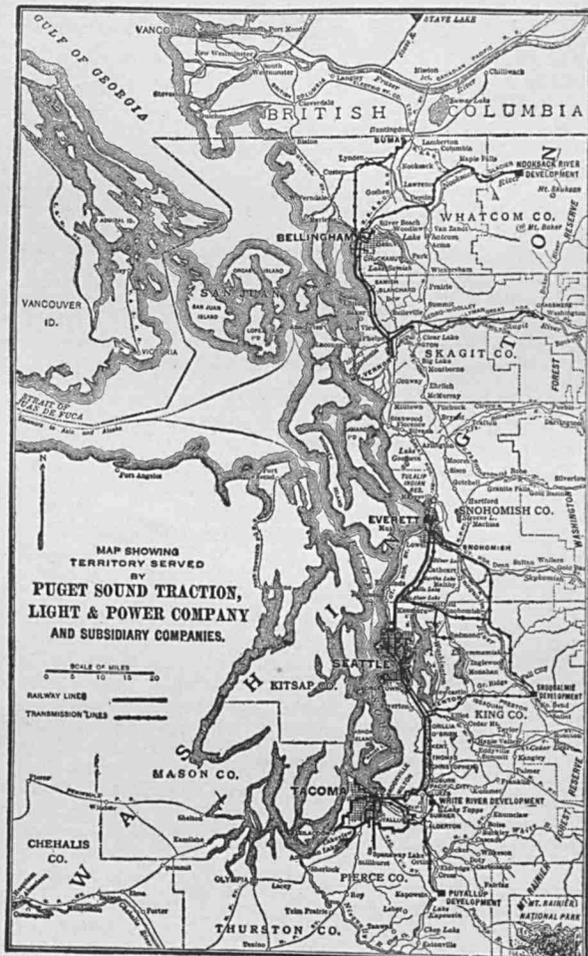
Q This company will supply complete information as to low power rates, raw materials, factory sites, transportation facilities and market for product.

**Puget Sound Traction,
Light & Power Company**

SEATTLE, WASHINGTON



SNOQUALMIE FALLS



The Portland Railway, Light & Power Company—Portland, Oregon

Served More Customers, on the Basis of Population, on January 1st, 1914, Than Any Public Utility in the Country Operating in a Large City

Its light and power customers totaled 42,063, an increase of more than 242 per cent compared with the number served on January 1st, 1908.

With 306 miles of track electrically operated and 90,000 developed horsepower, the PORTLAND RAILWAY, LIGHT & POWER COMPANY serves very completely the transportation and electric light and power requirements of the city of Portland and its prosperous surrounding sections. With the exception of three interurban lines, controlled by the Southern Pacific and the Northern Pacific Railroad Companies, the PORTLAND RAILWAY, LIGHT & POWER COMPANY operates all the street railways in Portland and vicinity, including interurban lines to Oregon City, Troutdale, Cazadero and Bull Run, Oregon, and in conjunction with the company's ferry on the Columbia river, to Vancouver, Washington. It does most of the electric light and power business in Portland; all of the electric light and power business in Oregon City, Salem and many other communities in the state of Oregon and in Vancouver, Washington. It operates the gas plant in Salem. Altogether, the company serves with light and power 26 cities and towns, which, including others supplied with interurban railway service, have a total population estimated at 305,000.

Power is sold to the three interurban lines above mentioned and also to the companies operating the street railways of Salem and Vancouver. At Willamette Falls, Oregon City, where the water power is owned by the company, direct water power is furnished to several large pulp and paper mills.

In 1913 the PORTLAND RAILWAY, LIGHT & POWER COMPANY bought the Yamhill Electric Company, serving a population of 5,000 at Newberg, Carlton, Lafayette, St. Paul and other communities in the Willamette Valley, and selling wholesale power to the Tualatin Electric Company. The Yamhill Electric Company has long-term franchises and municipal contracts in all the communities served. The company also obtained control of the Willamette Valley Southern Railway Company, which is constructing a standard gauge electric line on private right-of-way (except for a few blocks in Oregon City) from Oregon City to Molalla and Mt. Angel, a distance of 32 miles. The new line connects at Oregon City with the company's interurban service to Portland. The region tapped is one of the richest farming sections in Oregon, and besides passenger traffic, a large freight business will be developed, consisting mainly of hauling lumber.

The company's street railway franchises in Portland, expiring in 1932, contain valuable preferential rights covering subsequent franchises. No time limit is specified in the principal light and power franchises and under a recent decision of the United States Supreme Court, a similar franchise was held to be perpetual. The power plants, carhouses, shops and other real estate, high tension transmission lines and a large part of the interurban lines are owned in fee and are, therefore, not subject to franchise expiration.

There are ten generating plants, with 90,000 horsepower developed. Five of these are hydro-electric plants and five are steam stations. The company has

at least an equal amount of water rights in reserve. Approximately 83% of all the electric energy required in 1913 was generated by water power. In addition to these power plants and 22 sub-stations, the PORTLAND RAILWAY, LIGHT & POWER COMPANY owns 633 passenger cars, 522 cars and 12 locomotives for freight service; a commodious building for use of the light and power development; car shops, four carhouses, a nine-story building in the center of the business district, occupied by its offices; the only amusement park near the city of Portland; large tracts of land fronting for about four miles on the east side of the Willamette river, near the business center and valuable for terminal purposes, and considerable real estate in various parts of the city.

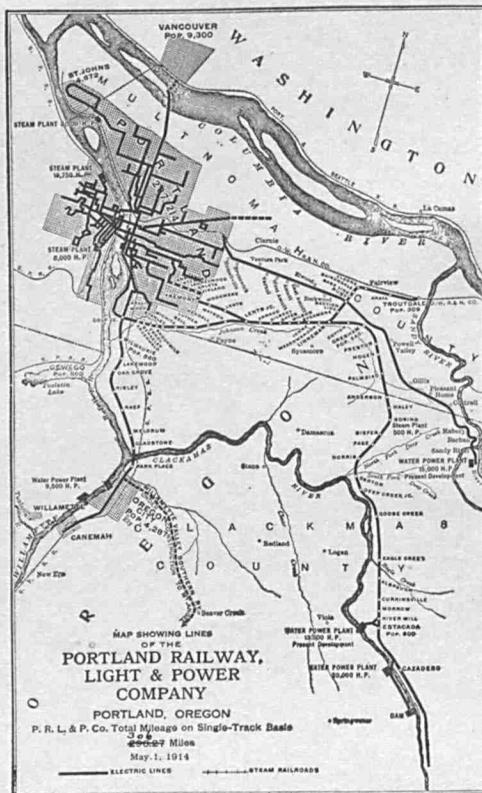
The company's properties and equipment are in excellent physical condition, of the most modern construction and as well maintained as any similar system in the United States. Through application of the principles of scientific efficiency, expenses of operation have, without impairing the service, been kept at a low percentage despite higher wages and the increased cost of materials.

Portland is one of the wealthiest cities of its size in the United States and the greatest manufacturing city in the Pacific Northwest. Its banks have deposits aggregating \$71,000,000; it has an assessed valuation of \$300,000,000; 48,000 telephones and 43,329 dwelling houses. Its bank clearances for 1913 exceeded \$600,000,000; its postal receipts, \$1,200,000; value of building permits for the year, \$13,400,000. These figures have few equals in the United States, when population is taken as the basis for comparison.

Portland is the greatest lumber shipping port in the world, many of the largest mills in the country being located there. The available forest wealth is practically inexhaustible. Its harbor is one of the largest fresh water basins in the world and can accommodate steamships drawing 25½ feet of water. Steamers leave its wharves for China, Japan, the

Philippines, Hawaii, Alaska and various Pacific coast ports. It has a large export business and is an important railroad center, being served by four trans-continental railways—the Union Pacific, Southern Pacific, Northern Pacific and Great Northern. Through the Columbia River valley it affords the only water grade railroad outlet to the Pacific coast for what is known as the Great Inland Empire of 250,000 square miles, comprising Eastern Oregon, Eastern Washington, Idaho and Western Montana.

Completion of the Panama Canal means the opening of a new gateway for commerce, one result of which will undoubtedly be a stimulus to business—foreign and domestic—that will manifest itself in improved general conditions throughout the Pacific coast. Development of Alaska and the inauguration of a new steamship line from Portland to that country will have its beneficial effects and the combination generally is being looked upon as among the most important factors in the future development of Portland and its surrounding territory, as well as other large cities on the Pacific coast.



The Portland Railway, Light & Power Company

Is Controlled and Managed by E. W. CLARK & COMPANY, Philadelphia, Pa.

MORRIS BROTHERS, Inc.

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Municipal *and* Corporation Bonds

of the Pacific Northwest

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C. L. CORY

Consulting Engineers

**Wells Fargo Nevada National
Bank Building**

San Francisco, Cal., U. S. A.

Attention is called to the
announcement on page 11

Pacific Power & Light Company

The Columbia, Walla Walla and Yakima Valleys, in which the Pacific Power & Light Company operates, are among the richest on the Pacific Coast.

The territory affords excellent opportunities for all industries depending for success upon raw materials, transportation facilities and low-cost power.

Pacific Power & Light Company has large electric power developments and furnishes power for industrial, irrigation and miscellaneous purposes at low cost.

This Company will supply complete information regarding natural resources, developed industries, transportation facilities and power rates.

Head Office, Portland, Oregon

LOS ANGELES GAS AND ELECTRIC CORPORATION

April 1, 1914

CAPITALIZATION

	Outstanding
CAPITAL STOCK:	
First Preferred 6% Cumulative	None
Second Preferred 6% Cumulative	None
Common	\$10,000,000
BONDED DEBT (Less Bonds in Sinking Funds):	
First and Refunding Mortgage 5% Bonds (Authorized \$15,000,000)	\$4,659,000
Underlying Bonds (Closed mortgages)	3,236,000
Total Bonds Outstanding	\$7,895,000
Bond Trustees:	
Union Trust Company of San Francisco, Harris Trust and Savings Bank, Chicago, Ill.	

EARNINGS AND EXPENSES

	Year Ending Dec. 31, 1912	Year Ending Dec. 31, 1913
Gross earnings	\$4,178,176	\$4,527,164
Operating Expenses and Taxes	2,335,212	2,589,594
Net Earnings	\$1,842,964	\$1,937,570
Annual Bond Interest Charge	396,405	400,943
Surplus	\$1,446,559	\$1,536,627

DEPRECIATION—SINKING FUND

The allowance for depreciation has amounted to \$4,676,074 since May 1, 1904.

The Corporation is required to make annual sinking fund payments, which began July 1, 1910, equal to 2% of the total amount of bonds outstanding. Up to the present time \$755,000 Underlying and Corporation Refunding Mortgage 5% Bonds have been cancelled or are held alive by their respective sinking funds.

PROPERTY AND BUSINESS FIELD

The Corporation has a thoroughly modern equipment for the manufacture and distribution of gas in Los Angeles, Pasadena, South Pasadena, Alhambra, San Gabriel, San Marino, Watts, Eagle Rock, Huntington Park, Inglewood and other suburban districts, aggregating a population of about 570,000, in which territory it controls about 85% of the gas business. It carries on an electric light and power business in the City of Los Angeles, a field served also by the Southern California Edison Company and the Pacific Light and Power Corporation. The physical property of the Corporation, without any allowance for franchise or good will, is conservatively valued at over \$20,400,000, or over two and one-half times the \$7,895,000 of outstanding bonds.

The following details as of Apr. 1, 1914, may be of interest:

Rated capacity of gas generating plant per 24 hours	31,140,000 cu. ft.
Holder capacity	15,000,000 " "
Miles of gas mains	1,239
Number of gas meters	123,621
Builders' rated capacity of electric plant	25,650 H. P.
Miles of electric overhead main wire	2,388
Miles of electric underground conduits	21
Number of electric meters	36,794
Total electric connected load	65,717 H. P.

MANAGEMENT

The principal officers of the Corporation are as follows:

President & General Manager, W. B. Cline.	Third Vice-President, C. S. Vance.
Vice-President, Wm. Baurhyte.	Secretary & Treasurer, R. M. Adams.
Second Vice-President, C. P. Houghton.	General Counsel, Wm. A. Cheney.

Attention is called to the announcement on page II

Associated Savings Banks of San Francisco

A Community Asset

A GREAT banking centre is the product of two elements: a productive land and a thrifty people. Where money is made and saved, there will be found the strongest banks to direct its proper use.

* * *

SAN FRANCISCO as the banking centre of the West had its beginning in the days following the discovery of gold in California, when the city was only an isolated collection of shacks on the edge of a wilderness. At that time a transcontinental railway was scarcely dreamed of, and the only inhabitants were the pioneers, who had traveled across the plains or by ship "around the Horn."

Even with the golden stream from the mines, capital was urgently needed and progress at first was slow. But the settlers worked and saved, until soon they were able to establish through sound banks a credit that is independent of the rest of the world.

With their own credit, secured by their own savings, they have built their city, not once, but *twice*, in the face of adversity.

* * *

THE test of the savings banks of San Francisco as an unfailling community asset came when the great fire of 1906 wiped out property values amounting to \$400,000,000—the accumulated wealth of two generations. How the banks passed through that crisis without loss to a single depositor must be convincing proof of sound and able management.

The greater part of the loss caused by the fire fell upon real estate; that is, upon the buildings that stood in the heart of the most valuable retail, commercial and residence districts. At the time of the fire, the banks had fifty per cent of their total assets loaned on the property that was destroyed. All that remained were blackened ruins and tottering walls.

* * *

DEPOSITORS had to be protected. So, too, the borrowers, who needed additional money to rebuild at once. The banks came forward with their strong reserves and convertible securities, and with the aid of the insurance, turned these elements of capital into a credit that has been used to build a finer and costlier city than before.

By reason of their demonstration of strength in this emergency, the banks have grown larger and more secure in the years that have passed, and better able to meet the needs of the growing community which they serve.

A more convincing record has never been made by the banks of any city in the world.

* * *

AT the close of 1905, the year before the fire, the total resources of the savings banks of San Francisco amounted to \$177,000,000. Since then they have increased nearly one-fifth, in spite of the losses sustained through the destruction of bank property—losses which were borne by the banks and not by their depositors.

Loans on real estate, meaning the money loaned for the improvement of property, have grown from \$97,000,000 to \$125,000,000.

Consolidated Statement Showing Condition of Eleven Institutions Composing the Associated Savings Banks of San Francisco on June 30, 1914.

RESOURCES	
Loans.....	\$133,896,748
Bonds and other securities.....	53,131,602
Bank premises.....	6,014,412
Other real estate.....	2,296,890
Due from reserve banks.....	6,027,934
Cash on hand.....	10,134,588
Other Assets.....	1,135,873
Total.....	\$212,698,052
LIABILITIES	
Capital.....	\$ 7,180,000
Surplus.....	8,475,819
Undivided Profits.....	661,799
Other Profits.....	984,959
Due to other banks.....	478,025
Individual deposits subject to check.....	11,863,866
Savings deposits.....	180,436,687
Deposits of public moneys.....	1,660,506
Other Liabilities.....	956,391
Total.....	\$212,698,052

Individual deposits, as shown by the last reports, have reached close to \$200,000,000, a growth of nearly 25 per cent.

* * *

FURTHER evidence that the savings banks of San Francisco possess the quality of safety requisite to obtain the confidence of the community is found in the California Banking Laws, which afford full and complete protection to every interest involved in bank management. The State Superintendent of Banks, in

his published report dated October 31, 1913, discusses the character of these Laws as follows:

"Under authority of the amended laws, state supervised banks, which necessarily are the support of private credit and the basis of industrial progress, are given as wide a range of activity as is consistent with absolute safety of deposits. The amended laws are designed with the primary objective that the safety of bank deposits must not be imperiled. Stability of investments and the possession of cash resources sufficient for the emergencies of business have been the guiding posts, in the amended act, where regulation ends and freedom of honest action for the banker begins."

* * *

IN point of size and strength, the institutions composing the Associated Savings Banks of San Francisco rival those of any community in America. The per capita deposits are the highest in the country, for the people believe in these banks and are glad to assume with them reciprocal relations that make towards the improvement and development of the city and state.

It is worthy of mention that the savings Banks, as heavy investors in the bonds of California enterprises, are an important factor in the commercial growth of the state.

* * *

KNOWLEDGE of these facts is important to the settler, the investor and the prospective visitor to San Francisco.

Sound banks mean that worthy enterprises will not lack for financial support. When they are of highest service to the community, as in San Francisco, they establish a beneficial union between capital and credit that opens the way to increased prosperity and wealth.

* * *

THE eleven banks composing the Associated Savings Banks of San Francisco exhibit a spirit of progress that constantly makes for the improvement of their service and facilities. The extraordinary growth of the past few years has been shared by all, and under their present able management all will continue to increase in size and strength.

Those operating strictly as savings banks are the Columbus Savings and Loan Society, founded in 1893; the Hibernia Savings and Loan Society, founded in 1864; the Mission Savings Bank, founded in 1906; the Mutual Savings Bank, founded in 1889; and the Security Savings Bank, which was organized in 1871.

The banks transacting a departmental business are the Bank of Italy, organized in 1904, commercial and savings; French American Bank of Savings, organized in 1860, commercial and savings; German Savings and Loan Society, founded in 1868, commercial and savings; Humboldt Savings Bank, founded in 1869, commercial and savings; Italian-American Bank, founded in 1899, commercial and savings; and the Savings Union Bank and Trust Company, founded in 1862, which transacts a full departmental business, including commercial, savings and trust departments.

Modern fireproof safe deposit vaults for the use of the public are maintained by the Savings Union Bank and Trust Company, the Bank of Italy, the Columbus Savings and Loan Society, the French American Bank of Savings and the Humboldt Savings Bank.

Adv.

Table Showing Strength of Associated Savings Banks of San Francisco with Deposits, Capital and Surplus, June 30, 1914.

Bank	Deposits	Capital and Surplus
German Savings & Loan Society.....	\$55,798,917	\$2,775,000
Hibernia Savings & Loan Society.....	55,122,574	3,694,819
Savings Union Bank & Trust Company.....	33,739,800	3,620,000
Bank of Italy.....	15,341,205	1,397,000
Mutual Savings Bank.....	8,723,286	925,000
Humboldt Savings Bank.....	6,870,497	1,000,000
French American Bank of Savings.....	6,155,936	944,000
Italian American Bank.....	4,949,519	940,000
Security Savings Bank.....	3,690,985	635,000
Columbus Savings & Loan Society.....	2,351,838	240,000
Mission Savings Bank.....	1,882,372	205,000

**BANK & TRUST CO.
SECTION**

The Bank of California

National Association

San Francisco, California

Founded in 1864

Having Branches at

Portland, Oregon

Seattle, Washington

Tacoma, Washington

Virginia City, Nevada

Capital paid in Gold Coin	\$8,500,000.00
Surplus	6,500,000.00
Undivided Profits, September 12, 1914 .	1,795,664.29

The Bank issues Merchandise and Travelers' Letters of Credit, available throughout the world and transacts legitimate banking of every nature.

Correspondence and accounts invited

STATEMENTS

of

Banks & Trust Companies of the Pacific Coast

These figures are compiled from the latest reports to the publishers.

CALIFORNIA—	Hundreds	Omitted	Throughout.		CALIFORNIA—(Cont'd)	Hundreds	Omitted	Throughout.	
	Capital	Surp. and Profits	Gross Deposits			Gross Resources	Capital	Surp. and Profits		Gross Deposits	Gross Resources
San Francisco—					Eureka— (Cont'd)				
American National Bank.....	\$1,000	\$ 450	\$ 5,050	\$ 8,000	Home Savings Bank.....	100	65	1,200	1,350
Anglo & London-Paris National Bank.....	4,000	1,809	30,995	41,467	Humboldt National Bank.....	200	80	600	900
Anglo California Trust Co.....	1,500	400	8,862	10,862	Savings Bank of Humboldt Co.	100	140	1,610	1,855
Bank of California, N. A.....	8,500	8,295	38,930	63,933	Fresno—				
Bank of Italy.....	1,250	340	15,379	17,171	Bank of Central California....	200	125	581	906
Canton Bank.....	123	33	694	902	Farmers National Bank.....	300	350	2,000	3,000
Crocker National Bank.....	2,000	3,263	20,615	29,120	First National Bank.....	500	445	2,744	4,039
Donohue-Kelly Banking Co....	650	200	1,706	2,670	Fresno National Bank.....	200	361	1,051	1,863
First National Bank.....	3,000	1,932	14,725	20,935	Fresno Savings Bank.....	67	5	535	600
First Federal Trust Co.....	1,500	316	4,062	6,379	Industrial Bank.....	30		34	64
Fugazi Banca Popolari.....	400	93	4,893	5,484	Peoples Savings Bank.....	100	151	1,906	2,198
International Banking Corp....	3,250	4,066	20,532	41,359	Union National Bank.....	150	124	950	1,389
Italian-American Bank.....	750	217	5,052	6,119	Grass Valley—				
Marine Trust & Savings Bank.	125	95	850	1,050	Nevada County Bank.....	150	14	1,197	1,361
Mercantile Nat'l Bank of S. F.	2,000	1,148	10,419	15,936	Hanford—				
Mercantile Trust Co.....	1,000	348		1,358	Farmers & Merchants Nat'l Bk.	100	66	745	961
Merchants National Bank.....	1,500	279	4,700	7,730	First National Bank.....	100	225	1,001	1,441
Mission Bank.....	200	91	1,320	1,757	Hanford National Bank.....	100	34	129	288
Portuguese-American Bank...	325	58	1,342	1,760	Peoples Savings Bank.....	25	44	75	144
Sav. Union Bank & Trust Co..	1,500	2,469	33,373	37,451	The Old Bank.....	50	55	545	726
Seaboard National Bank.....	500	213	1,585	2,798	Hanford Savings Bank.....	50	30	242	322
Union Trust Co. of S. F.....	1,200	1,718	20,058	23,217	Hollister—				
Wells Fargo Nevada National	6,000	5,148	29,070	48,941	Bank of Hollister.....	250	327	727	1,362
Columbus Savings & Loan....	130	157	2,328	2,650	First National Bank.....	100	50	328	468
French-American Bank.....	750	350	6,500	7,600	Hollister Savings Bank.....	25	35	387	437
German Savings & Loan Soc..	1,200	1,857	55,799	58,857	Savings & Loan Bank.....	50	136	634	825
Hibernian Savings & Loan Soc.		3,889	53,466	57,536	Long Beach—				
Humboldt Savings Bank.....	600	400	6,641	7,881	City National Bank.....	100	28	790	1,000
Mission Savings Bank.....	200	15	1,875	2,111	Exchange National Bank.....	100	65	1,001	1,267
Mutual Savings Bank.....	500	475	8,400	9,575	Farmers & Merchants Bank...	120	38	1,087	1,246
Security Savings Bank.....	500	423	3,580	4,564	First National Bank.....	200	100	1,150	1,500
Western Metropolis Sav. Bank	100	1	75	176	National Bank of Long Beach.	150	138	1,489	1,924
Alameda—					Long Beach Sav. & Trust Co..	250	114	1,761	2,146
Alameda National Bank.....	100	45	506	760	Los Angeles—				
Alameda Salvings Bank.....	236	146	2,537	2,918	Citizens National Bank.....	1,500	754	9,700	13,700
Citizens National Bank.....	100	17	421	537	Commercial National Bank....	300	180	3,000	3,782
Citizens Savings Bank.....	50	28	656	734	Eagle Rock Bank.....	25	2	56	95
Bakersfield—					Farmers & Merchants Nat'l Bk.	1,500	2,136	13,294	19,001
First Bank of Kern.....	100	33	616	750	First National Bank.....	1,500	2,543	18,962	25,401
First National Bank.....	150	175	1,276	1,814	Highland Park Bank.....	25	16	260	305
National Bank of Bakersfield..	100	5	275	455	Merchants National Bank....	1,000	646	6,937	9,292
Producers Savings Bank.....	100	86	982	1,168	National Bank of California...	500	216	4,786	6,674
Security Trust Co.....	400	136	1,980	2,557	Security National Bank.....	300	236	2,863	3,515
Berkeley—					Traders Bank.....	250	20	1,136	1,423
Berkeley National Bank.....	250	65	723	1,238	United States National Bank..	200	106	1,243	1,782
First National Bank.....	300	128	2,510	3,122	California Savings Bank.....	300	87	2,659	3,046
Homestead Savings Bank.....	90	14	368	472	Citizens Trust & Savings Bank	500	157	3,013	3,679
Berkeley Bank of Savings....	400	288	4,053	4,955	German-American Trust & Savings Bank.....	1,000	1,377	18,676	21,053
South Berkeley Bank.....	50	35	491	583	Hellman Commercial Trust & Savings Bank.....	750	295	5,175	6,335
University Savings Bank.....	100	48	531	690	Hibernian Savings Bank.....	325	45	3,010	3,379
West Berkeley Bank.....	55	7	316	379	Home Savings Bank.....	1,000	117	6,295	7,462
Chico—					International Savings & Exchange Bank.....	300	69	2,746	3,164
Bank of Chico.....	100	30	500	630	Los Angeles Title & Trust Co.	600	40	198	838
Butte County National Bank..	250	250	1,000	1,695	Los Angeles Trust & Sav. Bk.	1,500	1,539	17,113	20,234
Butte County Savings Bank...	100	19	682	802	Security Trust & Savings Bk.	1,800	1,868	42,263	45,931
*Peoples Savings & Com'l Bk.	65		94	168	Title Guarantee & Trust Co...	500	370	200	1,070
First National Bank.....	50	30	825	950	Martinez—				
*Opened July, 1914.					Bank of Martinez.....	100	121	852	1,086
Colusa					First National Bank.....	50	12	303	415
Colusa County Bank.....	500	350	1,110	2,250	Marysville—				
First National Bank.....	75	5	148	283	Decker, Jewett & Co. Bank...	150	65	513	728
First Savings Bank.....	35	3	148	186	Northern California Bank of Savings.....	130	64	1,876	2,070
Eureka—									
Bank of Eureka.....	200	100	875	1,187					
First National Bank.....	200	162	1,268	1,830					

CALIFORNIA—(Cont'd)	Capital	Surp. and Profits	Gross Deposits	Gross Resources	CALIFORNIA—(Cont'd)	Capital	Surp. and Profits	Gross Deposits	Gross Resources
Marysville—(Cont'd)					Richmond—				
Rideout Bank	250	339	1,716	2,396	Bank of Richmond.....	50	10	351	415
Merced—					First National Bank.....	100	24	400	625
Commercial Savings Bank....	100	43	807	953	Mechanics Banks	50	9	342	401
Farmers & Merchants National Bank	100	10	204	419	Richmond Savings Bank.....	50	7	390	455
First National Bank	100	41	585	827	Riverside—				
Merced Security Savings Bank	300	119	1,840	2,259	Citizens National Bank.....	150	174	1,364	1,835
Modesto—					First National Bank.....	300	90	1,430	2,290
Farmers & Merchants Bank..	49	37	190	305	National Bank of Riverside...	100	25	925	1,150
First National Bank.....	200	85	778	1,302	Peoples Loan & Trust Co....	100	3	.....	200
Modesto Bank	250	82	562	996	Riverside Savings Bank & Trust Co.	100	35	1,232	1,384
Modesto Savings Bank.....	100	20	544	690	Security Savings Bank.....	50	8	600	700
Security Savings Bank	25	24	160	197	Sacramento—				
Union Savings Bank	100	56	640	796	California National Bank....	1,000	349	6,851	9,958
Napa—					California Savings Bank.....	100	35	1,052	1,188
Bank of Napa	175	150	939	1,400	Capital Banking & Trust Co..	100	12	586	707
First National Bank.....	50	50	1,042	1,155	Capital National Bank.....	200	60	1,370	1,828
Napa Savings Bank.....	25	15	341	383	Farmers & Mechanics Savings Bank	350	40	1,853	2,243
Jas. H. Goodman & Co. Bank..	100	40	500	650	Fort Sutter National Bank....	200	79	2,422	2,891
Nevada City—					Nat'l Bank of D. O. Mills Co..	500	940	4,802	6,732
Citizens Bank	144	26	1,140	1,315	Nippon Bank	39	5	65	109
Oakland—					Peoples Savings Bank.....	500	104	3,858	4,541
Bank of Commerce	105	4	268	377	Sacramento Bank	500	761	7,592	8,854
Central National Bank.....	1,000	665	6,050	9,260	Sacramento Valley Bank	600	42	1,729	2,472
First National Bank.....	500	162	3,100	3,262	Salinas—				
Harbor Bank	110	8	225	360	First National Bank.....	100	100	623	863
Security Bank	420	84	1,451	2,112	Monterey County Bank	120	127	946	1,350
Twenty-third Avenue Bank....	25	5	260	295	Salinas City Bank.....	300	93	936	1,424
West Oakland Bank.....	26	10	158	199	Salinas Valley Savings Bank..	50	25	670	760
Central Savings Bank of Oakland	500	253	6,500	7,400	San Bernardino—				
Farmers & Merchants Savings Bank	189	13	1,857	2,101	California State Bank.....	100	17	480	604
First Savings Bank.....	500	82	3,690	4,280	Farmers Exchange Nat'l Bank	100	62	550	900
Oakland Bank of Savings....	1,150	1,258	21,619	24,551	San Bernardino National Bank	100	300	1,182	1,684
State Savings Bank	100	189	1,047	1,362	San Bernardino Co. Sav. Bank	150	72	1,526	1,748
Union Savings Bank.....	300	652	5,185	6,137	Sav. Bank of San Bernardino..	50	12	401	464
Oroville—					San Diego—				
Bank of Oroville Savings.....	25	7	103	135	American National Bank.....	200	178	1,693	2,271
Bank of Rideout, Smith & Co.	30	14	370	421	Bank of Commerce & Trust Co.	500	310	2,960	3,769
First National Bank.....	50	61	534	657	Citizens Savings Bank.....	100	35	800	900
Rideout-Smith National Bank..	300	49	647	1,046	East San Diego State Bank...	25	1	92	119
Oxnard—					First National Bank.....	150	323	2,828	3,459
Bank of A. Levy, Inc.....	250	210	1,050	1,500	Marine National Bank.....	100	40	875	1,140
First National Bank.....	250	65	903	1,551	Merchants National Bank....	100	535	1,982	2,717
Oxnard Savings Bank.....	25	46	304	377	San Diego Savings Bank.....	200	232	3,480	4,112
Pasadena—					Security Commercial & Savings Bank	111	18	573	702
Citizens Savings Bank.....	250	6	430	630	Southern Trust & Savings Bk.	350	100	2,250	2,700
Crown City Sav. & Trust Co..	200	30	680	910	United States National Bank..	100	26	410	650
First National Bank.....	200	137	1,799	2,353	University Avenue Bank.....	50	14	338	402
National Bank of Pasadena...	300	30	2,342	3,160	San Jose—				
Pasadena Savings & Trust Co.	200	136	2,122	2,466	Bank of San Jose.....	300	203	2,857	3,360
Security National Bank.....	100	5	450	705	First National Bank.....	300	275	3,600	4,400
State Bank of Pasadena.....	25	15	171	215	Garden City Bank & Trust Co.	300	297	2,323	2,920
Union National Bank	100	90	2,044	2,369	San Jose Safe Deposit Bank..	300	716	4,818	5,834
Union Trust & Savings Bank..	425	82	2,513	4,184	Security Savings Bank.....	100	82	1,335	1,517
Petaluma—					Security State Bank.....	100	79	525	704
California Savings Bank.....	100	30	1,187	1,317	San Leandro—				
Petaluma National Bank.....	200	38	1,127	1,565	Bank of San Leandro.....	100	43	1,154	1,297
Petaluma Savings Bank.....	100	55	847	1,002	First National Bank.....	50	35	353	498
Petaluma Swiss-American Bk.	250	49	1,194	1,514	San Leandro State Bank.....	50	8	232	301
Sonoma County National Bank	400	177	1,050	1,845	San Luis Obispo—				
Pomona—					Commercial Bank	300	130	2,788	3,234
American National Bank.....	100	13	390	675	Union National Bank.....	100	5	475	685
First National Bank.....	150	195	1,076	1,572	Santa Ana—				
Savings Bank of Pomona.....	50	22	300	372	California National Bank.....	100	25	500	700
State Bank of Pomona.....	75	19	550	650	Farmers & Merchants National Bank	200	115	1,357	2,010
Porterville—					First National Bank.....	300	298	1,860	2,758
First National Bank.....	100	112	890	1,238	Home Savings Bank.....	50	22	258	329
Pioneer Bank	105	45	450	630	Orange County Savings & Trust Co.	255	72	889	1,217
Red Bluff—					Santa Ana Savings Bank.....	40	21	365	426
Bank of Tehama County.....	300	232	1,600	2,310	Santa Barbara—				
Red Bluff National Bank.....	100	1	368	578	Central Bank	59	19	672	749
Redlands—					Commercial Bank	225	30	1,200	1,455
Citizens National Bank.....	200	125	600	1,125	First National Bank.....	100	104	1,062	1,439
First National Bank.....	150	135	900	1,500					
Redlands National Bank.....	150	227	781	1,409					
Union Savings Bank.....	50	50	675	775					

CALIFORNIA—(Cont'd)					CALIFORNIA—(Cont'd)				
Santa Barbara—(Cont'd)					Stockton—(Cont'd)				
	Capital	Surp. and Profits	Gross De- posits	Gross Re- sources		Capital	Surp. and Profits	Gross De- posits	Gross Re- sources
Santa Barbara County National Bank	100	113	730	1,161	Stockton Savings & Loan Soc.	500	373	4,218	5,091
Santa Barbara Savings & Loan Bank	225	28	2,400	2,653	Union Safe Deposit Bank.....	152	9	524	696
Santa Cruz—					Suisan—				
City Savings Bank	100	82	1,528	1,726	Bank of Suisan.....	100	581	956	1,645
First National Bank.....	100	85	462	755	First National Bank.....	100	17	190	380
Farmers & Merchants National Bank	100	30	184	318	Solano County Savings Bank.	25	7	151	183
Peoples Savings Bank.....	32	38	437	512	Turlock—				
Santa Cruz Bk. of Sav. & Loan	100	43	1,331	1,487	Commercial Bank	75	91	897	1,078
Santa Cruz Co. National Bank	150	107	437	795	Peoples State Bank	50	18	320	393
Santa Maria—					Vallejo—				
Bank of Santa Maria.....	200	200	1,750	2,300	First National Bank	100	25	750	980
First National Bank.....	50	42	368	510	First Savings Bank.....	40	7	430	498
Valley Savings Bank.....	25	36	261	321	Vallejo Commercial Bank.....	150	12	1,019	1,196
Santa Monica—					ARIZONA—				
Bank of Santa Monica.....	110	29	1,115	1,272	Bisbee—				
Merchants National Bank.....	50	7	350	450	Bank of Bisbee.....	\$ 50	\$ 170	\$ 1,541	\$ 1,771
Santa Rosa—					Douglas—				
Exchange Bank	150	117	932	1,199	Citizens Bank & Trust Co....	50	4	175	229
Santa Rosa Bank	200	27	965	1,210	Miners & Merchants Bank....	50	95	1,544	1,698
Santa Rosa National Bank....	200	40	1,050	1,615	Flagstaff—				
Savings Bank of Santa Rosa..	283	125	1,687	2,095	Arizona Central Bank.....	100	67	1,315	1,532
Union Savings Bank.....	50	32	655	738	Citizens Bank	50	3	382	455
Sonora—					Globe—				
First National Bank	100	70	780	1,100	First National Bank.....	100	57	599	909
Sonora National Bank.....	75	8	287	424	Old Dominion Com. Co.....	22	122	299	455
Tuolumne County Bank.....	50	20	450	550	Morenci—				
Stockton—					Nogales—				
Commercial & Savings Bank..	300	204	2,275	2,779	Gila Valley Bank & Trust Co..	100	127	2,324	2,558
Farmers & Merchants Bank...	500	290	1,525	2,329	State Bank of Morenci.....	30	6	132	168
First National Bank.....	200	342	950	1,572	Sonora—				
San Joaquin Valley Bank.....	264	458	3,911	4,758	First National Bank.....	50	134	2,162	2,398
Stockton Savings Bank.....	400	93	1,458	1,951	Santa Cruz Valley Bk. & Tr. Co	31	5	173	209
					Sonora Bank & Trust Co.....	100	6	709	815

American National Bank

San Diego, Cal.



Capital, Surplus and Profits
\$385,000.00

Total Resources
\$2,500,000.00

A Strong Commercial Bank Conducted Along Conservative and Modern Lines

Ladies' Department
Safe Deposit Department
Steamship and Tourist Department

Agents for all Atlantic and Pacific Steamer Lines
Special Department for Banking by Mail
Interest Paid on Time Accounts

We Invite Correspondence

Attention is called to the announcement on page 11

ARIZONA—(Cont'd)					NEVADA—(Cont'd)				
	Capital	Surp. and Profits	Gross De-posits	Gross Re-sources		Capital	Surp. and Profits	Gross De-posits	Gross Re-sources
Phoenix—					Goldfield—				
National Bank of Arizona.....	200	200	1,220	1,911	John S. Cook & Co.....	250	15	1,063	1,336
Phoenix National Bank.....	150	222	1,677	2,245	Reno—				
Phoenix Sav. Bk. & Trust Co..	100	64	627	795	Bank of Nevada Savings & Trust Co.	100	10	1,426	1,537
Prescott—					Farmers & Merchants National Bank				
Bank of Arizona.....	50	194	1,124	1,368	Nixon National Bank.....	700	7	1,976	3,426
Commercial Trust & Sav. Bk..	80	20	555	655	Scheeline Banking & Trust Co..	120	30	595	830
Prescott National Bank.....	100	205	976	1,385	Washoe County Bank.....	500	208	1,699	2,451
Yavapi County Savings Bank..	50	31	603	684	Winnemucca—				
Tucson—					First National Bank.....	100	235	1,500	1,900
Arizona National Bank.....	100	35	819	1,092	Winnemucca State Bank.....	100	3	130	233
Consolidated National Bank...	100	148	1,522	1,874	OREGON—				
Merchants Bank & Trust Co..	50	30	466	546	Albany—				
Southern Ariz. Bk. & Trust Co.	75	59	830	968	Albany State Bank.....	\$ 60	\$ 6	\$ 167	\$ 172
IDAHO—					First National Bank.....	100	114	700	1,075
Boise—					First Savings Bank	50	3	445	503
Boise City National Bank.....	\$ 250	\$ 249	\$ 2,280	\$ 3,025	J. W. Cusick Co.....	75	18	352	445
Boise Title & Trust Co.....	100	10	77	203	Astoria—				
First National Bank	300	380	1,826	2,706	Astoria National Bank.....	50	59	1,112	1,262
Idaho National Bank.....	100	25	266	517	Astoria Savings Bank.....	130	155	1,400	1,700
Idaho Trust & Savings Bank...	200	11	509	720	First National Bank.....	100	35	840	1,020
Pacific National Bank.....	300	144	973	1,717	Scandinavian-American Sav. Bk.	75	31	550	656
Lewiston—					Baker—				
Empire National Bank.....	100	15	250	475	Baker Loan & Trust Co.....	50	56	634	740
First National Bank.....	100	73	1,511	1,784	Citizens National Bank.....	100	19	370	595
Idaho Trust Co.....	50	10	101	164	First National Bank	200	200	1,160	1,760
Lewiston National Bank.....	100	55	800	1,000	Corvallis—				
Wallace—					Benton County National Bank...	60	19	475	609
First National Bank.....	100	85	1,317	1,590	Corvallis State Bank	100	3	125	235
Wallace National Bank.....	100	43	2,062	2,255	First National Bank.....	50	55	605	767
NEVADA—					Eugene—				
Elko—					Bank of Commerce.....	50	12	301	363
First National Bank.....	\$ 100	\$ 20	\$ 489	\$ 709	Eugene Loan & Savings Bank...	100	115	716	965
Henderson Banking Co.....	100	147	2,000	2,300	First National Bank.....	100	225	1,400	1,950
					U. S. National Bank.....	100	16	500	617

The
Northwestern National Bank
OF PORTLAND, OREGON

Total Resources over \$3,600,000

We will answer gladly any inquiries regarding the Resources, Investments and Industrial Prospects of the Pacific Northwest.

H. L. PITTOCK

President

JOHN TWOHY Vice President
F. W. LEADBETTER Vice President
EMERY OLMSTEAD Vice President

EDGAR H. SENSENICH Cashier
ROY H. B. NELSON Asst. Cashier
O. L. PRICE Asst. to the President

Attention is called to the announcement on page -II

OREGON—(Cont'd)					OREGON—(Cont'd)				
	Capital	Surp. and Profits	Gross Deposits	Gross Resources		Capital	Surp. and Profits	Gross Deposits	Gross Resources
La Grande—					Salem—				
La Grande National Bank.....	200	60	750	1,075	Capital National Bank.....	125	37	787	1,049
U. S. National Bank.....	100	14	400	600	Salem Bank of Commerce.....	50	5	226	281
Marshfield—					The Dalles—				
First National Bank of Coos Bay	100	20	679	911	U. S. National Bank.....	100	110	1,125	1,500
Flanagan & Bennett Bank.....	50	70	617	818	Ladd & Bush	500	121	2,275	2,950
Medford—					Washington—				
Farmers & Fruitgrowers Bank..	50	3	145	202	Aberdeen—				
First National Bank.....	100	57	651	950	Chehalis County Bank.....	\$ 25	\$ 1	\$ 200	\$ 226
Jackson County Bank.....	100	90	560	750	United States Trust Co.....	50	17	280	351
Medford National Bank.....	100	40	600	900	Hayes & Hayes	250	56	2,079	2,372
Oregon City—					Bellingham—				
Bank of Oregon City.....	50	6	368	424	Bellingham National Bank.....	200	280	1,500	2,146
First National Bank.....	50	85	841	1,059	First National Bank.....	200	136	1,845	2,230
Pendleton—					Centralia—				
American National Bank.....	300	130	1,700	2,500	Farmers & Merchants Bank....	75	6	255	336
First National Bank.....	250	300	2,500	3,200	Field & Lease	25	21	120	166
Portland—					Chehalis—				
Ashley & Rumelin	50	5	170	226	Chehalis National Bank	50	8	242	320
Bank of Kenton.....	50	5	175	230	Coffman, Dobson & Co.....	50	165	1,050	1,220
Bank of Sellwood.....	50	6	197	253	Security State Bank	25	24	232	282
Geo. W. Bates & Co.....	100	8	682	792	Colfax—				
Citizens Bank	100	19	670	790	Colfax National Bank	200	40	1,040	1,560
East Side Bank.....	50	32	500	582	Colfax State Bank	60	7	133	206
First National Bank.....	1,500	1,150	17,498	22,697	Farmers National Bank.....	100	50	628	854
Hartman & Thompson.....	100	18	389	507	First Savings & Trust Bank.....	50	22	486	563
Hibernia Savings Bank.....	200	93	2,701	3,040	Dayton—				
Ladd & Tilton Bank.....	1,000	1,300	13,200	15,500	Broughton National Bank.....	50	12	240	325
Lumbermen's National Bank....	1,000	233	5,212	6,696	Columbia National Bank.....	100	146	838	1,211
Lumbermen's Trust Co.....	500	134	.....	648	Everett—				
Merchants National Bank.....	500	110	4,310	4,920	Bank of Commerce.....	100	25	750	850
Montavilla Savings Bank.....	50	3	49	103					
Multnomah State Bank.....	15	3	49	100					
The Northwestern National Bank	500	112	3,457	4,155					
Portland Trust & Savings Bank.	300	52	1,275	1,627					
Scandinavian American Bank...	100	25	1,717	1,842					
Security Savings & Trust Co....	250	220	637	1,186					
United States National Bank....	1,000	1,292	9,195	12,778					



HOGE BUILDING
Owned and occupied by the
Union Savings & Trust Company

UNION SAVINGS & TRUST COMPANY

OF SEATTLE, U. S. A.

Capital and Surplus, \$800,000.00
Total Assets over, \$4,500,000.00

PUGET SOUND and ALASKA
business handled with promptness and efficiency.

Our BOND DEPARTMENT, under an experienced manager, specializes in the MUNICIPAL, RAILROAD, PUBLIC SERVICE AND TIMBER BONDS of the Pacific Northwest.

JAMES D. HOGE, President. N. B. SOLNER, Cashier.

Attention is called to the announcement on page 11

WASHINGTON—(Cont'd)					WASHINGTON—(Cont'd)				
Everett—(Cont'd)					Seattle—(Cont'd)				
	Capital	Surp. and Profits	Gross Deposits	Gross Resources		Capital	Surp. and Profits	Gross Deposits	Gross Resources
Citizens Bank & Trust Co.....	100	29	271	400	Rainier Valley State Bank.....	25	3	144	172
Everett Trust & Savings Bank..	25	36	425	492	Scandinavian-American Bank ...	500	559	11,018	12,078
First National Bank.....	250	101	3,046	3,615	Seattle National Bank.....	1,000	405	12,324	14,729
Hoquiam—					Seattle Trust Co.	250	82	.....	345
First National Bank.....	100	126	1,192	1,469	State Bank of Seattle.....	100	30	1,306	1,437
Lumberman's Bank	100	27	431	558	Union Savings & Trust Co.....	600	230	3,850	4,660
North Yakima—					University State Bank	50	5	510	565
First National Bank	100	225	2,000	2,500	West Seattle State Bank.....	10	1	60	75
Central Bank & Trust Co.....	50	3	179	255	Spokane—				
Yakima National Bank.....	50	227	1,381	1,658	Exchange National Bank	1,000	317	4,812	7,129
Yakima Trust Co.....	100	21	421	550	Farmers & Mechanics Bank.....	50	9	285	345
Yakima Valley Bank.....	100	89	598	712	Fidelity National Bank.....	200	66	2,145	2,638
Olympia—					National Bank of Commerce....	200	20	600	1,000
Capital National Bank.....	100	179	1,564	1,936	Old National Bank	1,000	547	10,185	12,733
Olympia National Bank	50	89	542	705	Scandinavian-American Bank ...	100	40	750	890
Seattle—					Spokane & Eastern Trust Co....	300	702	12,547	13,548
Amer. Savings Bank & Trust Co.	600	85	2,150	2,835	Spokane State Bank	50	15	200	265
Bank for Savings in Seattle....	400	21	660	1,075	Union Park Bank.....	25	2	105	132
Broadway State Bank	25	6	150	188	Union Trust & Savings Bank....	500	120	6,020	6,640
Citizens Bank	25	1	159	197	Washington Safe Dep. & Tr. Co.	100	142	.....	331
Dexter Horton National Bank...	1,200	280	9,761	11,289	Tacoma—				
Dexter Horton Trust & Sav. Bk.	400	150	6,600	7,300	Fidelity Trust Company Bank...	500	506	3,808	4,839
First National Bank.....	300	146	4,643	5,226	Bankers Trust Co.	300	35	765	1,100
Fremont State Bank.....	50	3	145	213	National Bank of Tacoma.....	1,000	185	8,000	9,700
German-American Bank	200	5	760	1,030	North Pacific Bank.....	25	26	175	228
Green Lake State Bank.....	25	12	142	179	Puget Sound State Bank.....	100	38	742	872
Japanese Commercial Bank.....	50	36	462	549	Tacoma Sav. Bank & Trust Co..	200	31	904	1,135
King County State Bank.....	20	1	70	91	Vancouver—				
Metropolitan Bank	100	136	2,163	2,413	United States National Bank....	100	30	450	615
Mortgage Trust & Savings Bank	100	7	1,373	1,480	Vancouver National Bank.....	100	25	615	922
National Bank of Commerce....	1,000	1,250	10,876	13,511	Washington Exchange Bank....	50	4	224	286
National City Bank.....	500	150	2,000	2,700	Walla Walla—				
Northern Bank & Trust Co.....	100	45	1,250	1,435	Baker-Boyer National Bank....	100	224	1,472	1,796
Northwest Trust & Safe Deposit	100	24	1,101	1,225	Farmers Savings Bank.....	200	114	716	1,000
Co.	100	24	1,101	1,225	First National Bank.....	200	312	1,410	2,100
Oriental-American Bank	40	2	197	239	Peoples State Bank.....	50	25	475	566
Peoples Savings Bank	100	238	2,327	2,665	Third National Bank	100	22	579	726

Babcock, Rushton & Co.

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THE CALIFORNIA NATIONAL BANK

Of Sacramento, California

**Was born in 1882 and
has total resources of**

MORE THAN TEN MILLIONS

Directors:

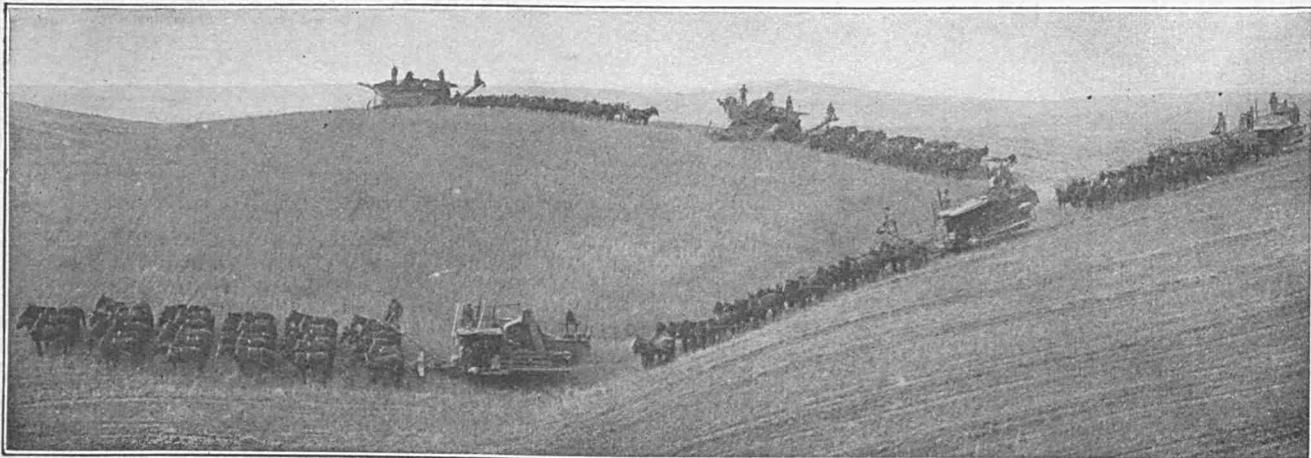
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FRED L. MARTIN.....Assistant Cashier
J. I. BRUNSCHWILER.....Assistant Cashier

Attention is called to the
announcement on page 11

**DESCRIPTIVE
SECTION**



Geo. Drumheller of Walla Walla, Wash., aims yearly to secure the largest wheat check ever given to an individual. All told, he has purchased nine of these Holt Combined Harvesters since 1899. His 1913 wheat check was for 173,431 bushels, amounting to \$137,632.24.

A UNIQUE CALIFORNIA INDUSTRY.

The Holt Manufacturing Company, at Stockton, Has World Market for Farm Machinery Specialties—Caterpillar Tractors and Combined Harvesters.

By L. E. Webster.

We expect the daring—the unconventional—from California, the unusual State. We look for surprises. We take for granted a change of climate from tropical to arctic as we ascend a main-traveled highway, and are not astonished at the "57 varieties" of agriculture we note along the road. Therefore, we should probably have been disappointed to find California's largest farm-machinery concern—in fact, the largest on the Pacific Coast—following the conventional lines of eastern manufacturers of similar products. But Benjamin Holt, the dominating mechanical mind of The Holt Manufacturing Company, is essentially a pioneer, and while sales and financial policies have necessarily been more or less tempered by external conditions, the products of the factories are typically Californian in their distinctiveness.

Many years ago "Ben" Holt saw a header cutting barley, while a big stationary threshing outfit in the same field separated the grain from the straw. "Those two machines ought to be in one," he said, and set about to combine them. His neighbors and associates objected vigorously, but Holt had a factor of obstinacy of the kind possessed by McCormick and Edison. He built the combined harvester, perfected it, and left it for others to market.

Steam became a necessity for plowing and freighting. The Holts made steam-plowing outfits as a matter of everyday routine, years before the opening prairies of Kansas, the Dakotas and Canada stimulated eastern thresher manufacturers to build plowing engines. Holt engines pulled the Holt harvesters. They furnished steam for auxiliary motors on the harvesters long before the gasoline motor came into its own. Other motors on heavy wagons—all fed from the tractor boiler—helped move big ore and lumber trains over steep mountain grades. Holt built wagons—there were no others equal to the severe demands.

Stockton, the principal seat of the business, lay at the gateway to the great valleys of the Sacramento and the San Joaquin, in early days the greatest wheat country in the world. It was a new country, with no machine shops at the cross-roads, and few mechanics outside of the cities—a great rough country, its great branches run by masterful men, who drove their way to fortune with a smashing hand. And Holt built big, rugged machines that withstood all manner of use and abuse.

The hills of California, Oregon and Washington grew splendid grain, but it was left to the Holts to adapt their harvester for safe use on steep hillsides, and thus add hundreds of thousands of acres to the available crop area.

THE GAS HARVESTER.

Gasoline came to replace steam. Horses and feed rose in price, and hot weather annually took its toll. The Holt answer was a separate gas engine mounted on the harvester frame. The engine drove the cutter bar and threshing mechanism—half the horses then pulled the machine. It cost less, and saved the down and tangled grain besides, for stopping the horses no longer stopped the cutting and threshing. Sales of the horse harvester fell rapidly before the gas harvester's advance, and owners of old models overtaxed the Holt manufacturing facilities in their eagerness to add this improvement and be profitably up-to-date.

So firmly established has the Holt Combined Harvester become that it is safe to say 90 per cent of the grain harvested in California, and three-quarters of all grown on the Pacific Coast, passes through its capacious maw. California alone kept 3,500 of these monsters at work for months, gathering this season's crop.

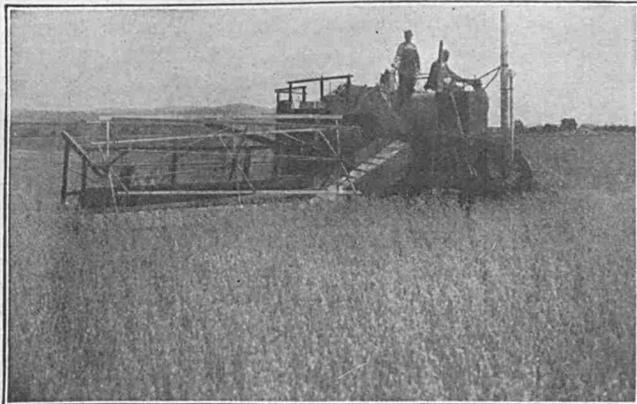
The history of this aggressive concern dates back to the sixties, when Charles H. Holt and Harrison Holt pooled their savings and started a hardwood lumber and wagon material business in San Francisco. Charles stayed in the West, the other brother going back to the home town of Concord, N. H., as buyer for the firm. Two other brothers, Frank and Benjamin, later joined The Holt Brothers Company as partners, Benjamin coming to California in 1883, when the trade in the Golden State seemed to justify a factory on the ground. Strangely enough, the dry climate that set the spokes a-rattling on prairie schooners in the Valley, is to blame for Stockton's taking away from the foggy Golden Gate the wheel works that has grown into a concern of such splendid proportions.

SMALL BEGINNINGS.

Yankee-bred, with New England notions of thrift, the Holts grew under the influence of the large ideas that California breeds in men, and their progress was steady and sure. Charles, the business man, and Benjamin, the inventor and mechanic, built well. One by one competitors sprang up, flourished awhile and fell. The Holts' only notice was to make arrangements to supply extras for the machines left in the field without a parent—a consistent policy which has won countless friends and customers among the users of twenty-odd makes of harvesters and engines, and a comfortable profit besides.

Close by Stockton lay the fertile delta islands, seemingly more fit for the production of frogs and tule thickets than of wheat. But wide wheels on engines and harvesters brought these lands into profitable subjection. Six—twelve—even eighteen feet of wheels on either side of a tractor—veritable monsters of the ranch—sent barge load upon barge load of grain up the Stockton Channel

to the railroad and down the river to the bay and waiting ships. But the Holts dreamed of a narrower wheel—not so high, not so wide—and finally threw away wheels altogether. Thus the Caterpillar track was born.



Holt Self-Propelled Harvester operating on Arthur D. Jones' ranch near Spokane, Wash. The last word in combinations—a combined harvester embodying a tractor. Made only by Holt.

The "Caterpillar," as the Holts and their followers know it, is not the larva of a dainty bat-wing butterfly, but the vital principle of a neat, compact tractor of strikingly unique design. The Caterpillar track is an endless belt of steel segments, which the tractor lays down, rolls forward upon, and picks up again. With it, The Holt Manufacturing Company again created a new industry, and opened up to cultivation by cheap mechanical power vast tracts that could not be farmed at all, or at least with great difficulty, by the use of animals.

THE CATERPILLAR TRACTOR.

Briefly, the Caterpillar is a tractor for pulling plows, harrows, seeders, harvesters, wagons or other machinery; for building roads; for threshing, and filling silos; crushing rock; uprooting stumps; building levees; hauling cannon or mixing concrete; shunting cars or baling hay; clearing sage brush and pumping water to make the desert bloom. With the proper tools, it has a variety of uses so great as to defy an attempt to catalog them. It does all the work of an ordinary tractor or stationary engine. It does infinitely more, because, owing to the length and breadth of its supporting track, it can work over land on which a horse cannot safely walk, and through conservation of power it can surmount grades impassable to any old-style tractor of feasible motor power.

There is no separate field for the Caterpillar. Its advantages appeal to every user of tractive power, and its owners include farmers; contractors; highway commissions; counties, townships and municipalities; armies and railways; lumbermen; drainage and reclamation organizations; agricultural colleges; great sugar companies; and others having similar power needs.

The site of the world's largest reservoir, that of Greater New York, was cleared by yanking out acres of trees with the Caterpillar. The famous Los Angeles Aqueduct was completed well within estimates, largely because twenty-eight Caterpillars cut the cost of hauling materials across the Mojave Desert to one-third the horse-haul figure. Arthur Brisbane, the great Hearst editorial writer, first by a challenge to all manufacturers, and then by a sweeping editorial statement, has drawn widespread attention to the success of the tractor on his New Jersey farm.

The American Beet Sugar Company bought seven Caterpillars, and stopped importing 30,000-dollar English cable-plowing outfits. The U. S. and Russian governments, the Southern Pacific Railway, and a list of millionaire farmers that resembles the Social Register, have testified by purchases to the outstanding quality of the tractor.

WORLD-WIDE EXPORTS.

The Caterpillar is now used on every continent, from Nome to Cape Horn, and from Manila to St. Petersburg.

It is working in Australia, the Philippines, Mexico, Chile, Hawaii, Argentina, Cuba, India, South Africa, Algeria, Russia, Austria, Hungary, Germany, Spain, Belgium—in fact, in every great agricultural district in the world. Fourteen foreign agents are financing its successful introduction, with the help of the company's experts or service men, and semi-occasional visits of sales representatives, who invariably have technical training, and thus combine engineering investigations with their other duties.

It is freely predicted that inside of 25 years the Caterpillar principle will prevail in the tractor field, owing to its advantage of being useful in soft ground where wheel tractors fail to get a footing, and to the additional percentage of motor power which it transforms into tractive effort, or pull. The early difficulties of complicated design and excessive wear have been successfully overcome. The cost of manufacture, and consequent selling price, has reached a competitive basis, and the enthusiastic loyalty of the two thousand-odd owners of Caterpillar tractors has given the machine a wide appeal.

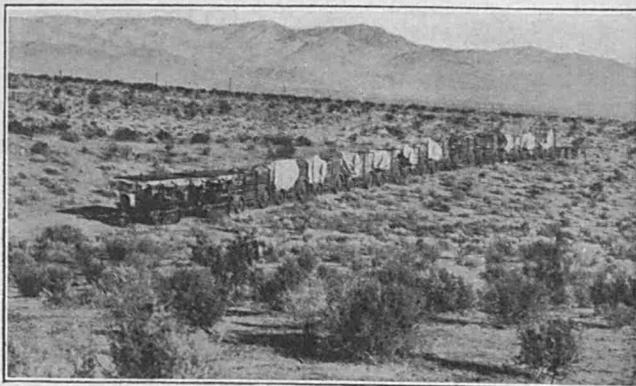
A Caterpillar, however, is useful only when furnishing power to an operative tool or machine. The Holt Company has long been aware of the advantages of selling in every case a complete outfit of dependable quality, and its disc plows, moldboard plows (the universal "Stockton Gang"), harrows, scrapers, freight wagons, etc., are important factors in the success of the Stockton plant.

Latest, but by no means last nor least, the company has now reached the apparent climax in combinations, that of a Caterpillar Tractor with a combined harvester. The self-propelled harvester reverses the original order, the mounted motor running the tractor parts as well as the knife and separator. Here is independence of animal power—and of human labor—carried to the extreme, and again Holt has a clear field. The idea is too daring as yet for imitation.

The Caterpillar name and trademark are, undoubtedly, two of the company's most valuable assets. They have been protected in all civilized countries and the translations in the different languages are included in the protection. For instance, in France the Caterpillar is known as "La Chenille"; in Latin countries, as "Oruga"; in Germany, as "der Raupe"; etc. The aggressive use of this name, and its fitness in suggesting the action of the propelling track has resulted in its general adoption as descriptive of all machines of this or similar type—in one way unfortunate, yet in another productive of intensely more rapid popularization of the Caterpillar idea.

CAREFUL EXPANSION.

The Company has always followed a conservative quality of expansion, first starting out toward the North, and, four years ago, to the East, then to foreign countries. It



Two 45-h. p. Caterpillars in the Mojave Desert, freighting material for the Los Angeles Aqueduct, one of the engineering wonders of the world.

is rather remarkable that, of all substantial farm machinery companies in America, The Holt Manufacturing Company is the first one to develop west of the Rocky Mountains and invade the East from that stronghold.

The eastern plant, at Peoria, Ill., is devoted entirely to the production of Caterpillars for the tributary trade and Atlantic exports. This auxiliary plant is of further distinct advantage in securing the Company's output against unfavorable local conditions in the labor or material markets. At the present time this plant makes only the 30 and 60-horsepower models, while at Stockton the sizes include also a 15 and a 75-horsepower size.

The Peoria plant was purchased from the Colean Manufacturing Company, which had equipped it for the building of steam traction engines and threshers. It is splendidly situated as to railroad facilities, and the buildings and equipment are unusually well arranged for economical production.

FACTORY ORGANIZATION.

The factory at Stockton, with yards and storage houses, covers an area of seven city blocks. The buildings are of as substantial nature as the mild climate demands. The shop equipment is modern in every respect, although installed with due regard for the basic idea of thrift and the practical needs of manufacture. In short, there are no frills, but all of the necessities.

The factory staff has been well selected. Besides an experienced photographer and a chemist, the Company has an engineering corps which, though largely made up of native Californians, has been educated in the best universities of the United States, and has had the advantage of study and field experience in Europe and South America, as well as in Canada and the United States.

The number of employees varies with the season, ranging from 600 to 750 at Stockton during the peak of the late spring months, and from 125 to 200 at Peoria. Counting the field sales force, the total is about 1,000 at the highest point of the year. There is a very small percentage of transient laborers, the great bulk being permanent residents, and a large number own their own homes. At Stockton, particularly, sufficient time has elapsed to allow of long individual experience, and the Company is fortunate in its large corps of workers who have been on the payroll ten, twenty and even forty years.

The wage scale is satisfactory to both employed and employer, and labor troubles have been few and unimportant. The men respond promptly to safety measures and are unusually faithful in utilizing the numerous safety devices installed, as well as in co-operating with the Company in the settlement of accident claims. The Stockton employees' picnic, last June, was attended by over three thousand people, including families of the workmen, and a monster parade, organized by men in the shops, publicly demonstrated a splendid esprit de corps.

SENSIBLE SALES POLICY.

The Holt sales policy is as unique in the agricultural field as the machines it covers. Contrary to the long-term, partial-payment policy of its large eastern competitors, the Holt practice produces short term or cash sales. Customers' notes maturing a year or more from date of sale are rare—so rare that their absence, with a rigid credit policy, renders a formal collection department unnecessary, and losses are practically nothing. As a result of this policy a large volume of sales is possible, practically equaling each year the capital and surplus invested, as compared with a ratio of one dollar of sales to two of capital and surplus in the farm machinery industry as a whole.

The sales organization is well-balanced, and is managed from three central points, Stockton, Calif., Spokane, Wash., and Peoria, Ill. Other branches, and district agencies covering one or more states, are maintained at San Francisco, Los Angeles, Portland, Walla Walla, and Calgary in the West, and Fargo, Denver, Omaha, Wichita, New Orleans and New York, in the East.

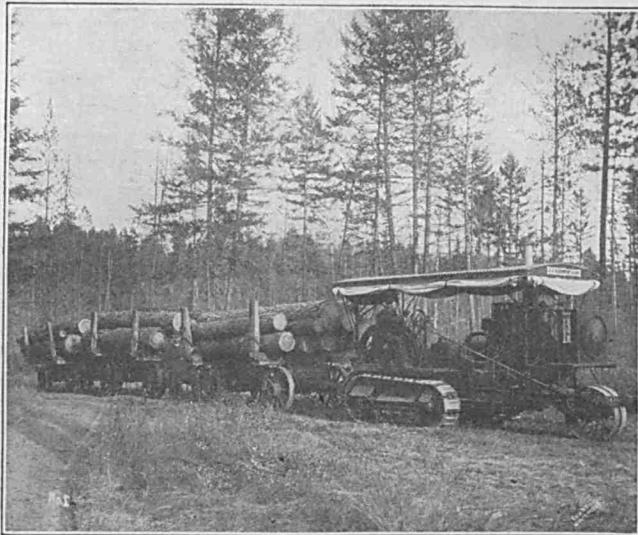
A consistent advertising campaign is being conducted from the home office, making use of farm, thresher, implement dealer, engineering, highway, lumber, sugar, mining, and export journals, in addition to a monthly magazine to prospects, and a well-directed follow-up of catalogs, folders and dictated correspondence. Perhaps the most unique and successful form of advertising employed is that of moving pictures. By the use of portable Edison Kinetoscopes, any office of the Company can show Holt machinery in operation, as well as details of construction that can scarcely be visualized otherwise.

Consistent with its position of leadership, the Company is installing a splendid exhibit at the Panama-Pacific Exposition. The entire area of Section 7, Agricultural Palace, will be devoted to a display of Holt products and the entertainment of visitors. The Company will exhibit also at the San Diego Exposition.

ADMINISTRATION.

The Company still maintains its headquarters at Stockton, where are located Benjamin Holt, President; P. E. Holt, Vice-President and General Manager; P. Ehrenfeldt, Secretary; C. L. Neumiller, General Counsel; and necessary home office employees. The Board of Directors comprises Benjamin Holt, P. E. Holt, C. L. Neumiller, C. Parker Holt, Treasurer, San Francisco, Calif.; T. F. Baxter, Boston, Mass.; Ben C. Holt, Spokane; M. M. Baker, Vice-President and Manager Eastern Division, Peoria, Ill.; R. S. Springer, Vice-President and Manager Northern Division, Spokane, Wash.; and D. N. Gilmore, Stockton, Calif. With few exceptions, the executive positions in the Western Division are cared for by the general officers.

A tremendous amount of detail has been accomplished during the last year in the matter of reorganization. On July 1, 1913, all of the allied Holt companies



45-h. p. Caterpillar with a load of logs in woods at Newport, Wash.

were brought into the parent company. The jobbing feature of the business was eliminated as soon as possible thereafter, and the entire effort devoted to building up the manufacture and sale of its own products. The Stockton plant has been rearranged on a more efficient basis and several departments added, to cut down the expenditures for outside work. Organization charts, a system of written standard-practice instructions, a practical cost system and other common-sense efficiency features have been installed.

The Company has enjoyed a steady growth, with no critical periods of depression or shrinkage in volume. The surplus has risen steadily until it nearly doubles the capital stock. Sales have shown a gain each year, and sales to the present date promise that the volume in 1914 will much more than equal that for last year, in spite of the elimination of a half-million-dollar jobbing business in hardware and kindred lines. The annual statement as of December 31, 1913, shows an extremely favorable situation, with nothing credited to good-will. The foundations of the business were well laid, and practically continuous management during its entire history has made this out-of-the-way concern one of the world's leaders.

DEUTSCHE BANK

Registered in Berlin as a Limited Company under Prussian Law, recognized in England by the Declaration exchanged between the British and German governments, March 27, 1874, and registered in London under the Companies (Consolidation) Act, 1908.

Capital Fully Paid - 250,000,000 Marks
Reserves about - 170,000,000 "

Head Office, BERLIN

London Bankers:

BANK OF ENGLAND. NATIONAL PROVINCIAL BANK OF ENGLAND, LTD.
 UNION OF LONDON AND SMITHS BANK, LTD.

Branches

Aix la Chapelle, Augsburg, Barmen, Berncastel-Cues, Bielefeld, Bocholt, Bonn, Bremen, Brussels, Chemnitz, Coblenz, Cologne, Cologne-Mulheim, Constantinople, Crefeld, Cronenberg, Darmstadt, Dresden, Dusseldorf, Elberfeld, Frankfort o/M., M.-Gladbach, Hagen, Hamburg, Hamm, Hanau, Leipsic, Meissen, Munich, Neheim, Neuss, Nuremberg, Offenbach o/M., Paderborn, Remscheid, Rheydt, Saarbrucken, Solingen, Treves, Wiesbaden.

London Agency

4 George Yard, Lombard Street, E. C.

The London Agency collects Bills and grants Drafts payable on the Continent and elsewhere, acts as **London Representative** of the **Banco Aleman Transatlantico** (Deutsche Ueberseeische Bank), Berlin; Buenos Aires, Bahi Blanca, Cordoba, Mendoza, Rosario de Santa Fe and Tucuman (Argentina); La Paz and Oruro (Bolivia); Antofagasta, Arica, Concepcion, Iquique, Osorno, Santiago de Chile, Temuco, Valdivia and Valparaiso (Chili), Arequipa, Callao, Lima and Trujillo (Peru); Montevideo (Uruguay); Barcelona and Madrid (Spain); and **Banco Allemao Transatlantico**, Petropolis, Rio de Janeiro, Santos and Sao Paulo; **Deutsch-Asiatische Bank**, Berlin, Calcutta, Canton, Hamburg, Hankow, Hongkong, Kobe, Peking, Shanghai, Singapore, Tientsin, Tsinanfu, Tsingtau, and Yokohama; and is prepared to transact Foreign Banking business of every description on terms to be ascertained on application at its office.

BANCA COMMERCIALE ITALIANA

Head Office, MILAN

1, OLD BROAD STREET, LONDON, E.C.

Manager-S. J. BIEBER. Deputy Manager-L. LICHTENSTADTER

Paid up Capital - - £6,240,000
 Reserve Funds - - £2,328,000

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Acireale.	Lecco.	Salerno.
Alessandria.	Leghorn.	Saluzzo.
Ancona.	Lucca.	San Pier D'Arena.
Bari.	Messina.	Sant' Agnello di
Bergamo.	Mestre.	Sorrento.
Biella.	Milan.	Sassari.
Bologna.	Naples.	Savona.
Brescia.	Novara.	Schio.
Busto Arsizio.	Oneglia.	Sestri Ponente.
Cagliari.	Padua.	Siracusa.
Caltanissetta.	Palermo.	Termini Imerese.
Carrara.	Parma.	Trapani.
Catania.	Perugia.	Treviso.
Como.	Pescara.	Turin.
Cremona.	Piacenza.	Udine.
Ferrara.	Pisa.	Venice.
Florence.	Prato.	Verona.
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