U.S. Federal Reserve Bank Organization
Committee.
Exhibits submitted at hearings...
(San Francisco)

v. 1

#68

Second Annual Statistical Report

OF THE

San Francisco Chamber of Commerce

1912

SECOND
ANNUAL STATISTICAL REPORT

OF THE

San Francisco
Chamber of Commerce

FOR THE YEAR ENDING DECEMBER 31, 1912

Officers, Directors and Staff, 1912

President	M. H. ROBBINS, Jr.
First Vice-President	WM. T. SESNON
Second Vice-President	HORACE H. ALLEN
Third Vice-President	CAPT. ROBT. DOLLAR
Treasurer	C. K. McINTOSH
Secretary	A. B. C. DOHRMANN
Executive Secretary	L. M. KING
Controller	T. C. FRIEDLANDER

W. M. ALEXANDER	C. F. MICHAELS
GEORGE C. BOARDMAN	W. N. MOORE
PAUL T. CARROLL	WILLIAM M. BUNKER
JOHN S. DRUM	ROBERT A. ROOS
W. J. DUTTON	A. L. SCOTT
M. H. ESBERG	JOS. SLOSS
CAPT. WM. MATSON	FRANK A. SOMERS

JAMES TYSON

San Francisco Chamber of Commerce

1913

President ..... WM. T. SESNON
First Vice-President ..... C. F. MICHAELS
Second Vice-President and Manager ..... ROBERT NEWTON LYNCH
Third Vice-President ..... JOSEPH SLOSS
Treasurer ..... C. K. McINTOSH
Secretary ..... GEORGE C. BOARDMAN
Engineer ..... HENRY A. CAMPBELL
Attorneys ..... WRIGHT & WRIGHT & STETSON

DIRECTORS.

W. M. ALEXANDER	CAPT. WM. MATSON
A. E. ANDERSON	C. F. MICHAELS
ROBERT NEWTON LYNCH	C. K. McINTOSH
R. I. BENTLEY	W. N. MOORE
GEORGE C. BOARDMAN	CONSTANT MEESE
PAUL T. CARROLL	WM. T. SESNON
JOHN S. DRUM	JOSEPH SLOSS
E. R. DIMOND	B. F. SCHLESINGER
M. H. ESBERG	F. A. SOMERS
F. J. KOSTER	MILES STANDISH

C. H. WORKMAN

TRANSPORTATION DEPARTMENT

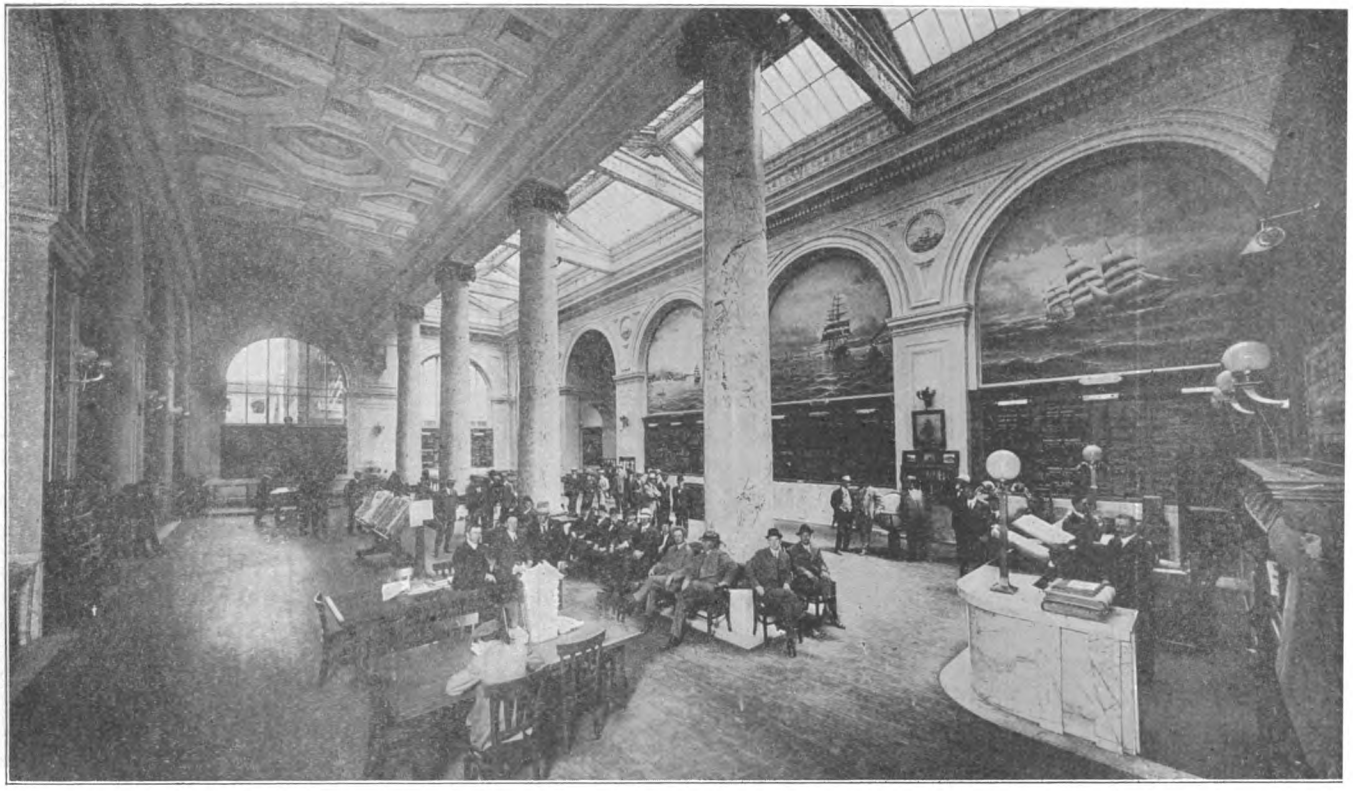
Manager ..... WILLIAM R. WHEELER
Attorney ..... SETH MANN

GRAIN TRADE ASSOCIATION.

Chief Inspector ..... HENRY C. BUNKER

WASHINGTON, D. C. BUREAU.

Washington Representative ..... IRA E. BENNETT



Hall—San Francisco Chamber of Commerce

SAN FRANCISCO STATISTICS

ASSESSED VALUES.

Year	Real Estate	Improvements	Personal Property	Total	Tax Rate 60% Valuation	Annual tax rate at 100% Valuation
1905	$304,136,185	$97,830,165	$122,264,596	$524,230,946	1.164	.698
1906	237,082,752	50,250,480	88,805,510	376,138,742	1.164	.698
1907	260,689,806	66,815,201	102,127,836	429,632,843	1.322	.793
1908	258,651,434	90,860,558	104,820,828	454,332,820	1.50	.90
1909	283,213,933	122,935,418	86,180,834	492,330,185	1.60	.96
1910	288,095,453	145,167,790	81,763,921	515,027,164	1.647	.9882
1911	288,653,725	137,179,725	117,223,901	545,057,401	2.00	1.200
1912	323,715,060	169,830,197	111,267,992	604,813,249	2.094	1.2564

BONDED INDEBTEDNESS.

1913—Jan. 2nd	$27,331,300
1912— "	19,835,100
1911—July 1st	18,800,200
1910— "	16,263,500
1909— "	12,576,300
1908— "	3,865,600
1907— "	4,296,600
1906— "	4,568,600
1905— "	4,673,600

PRIVATE BUILDING OPERATIONS.

These figures are for private building operations only and are exclusive of all Municipal, State, Federal or Exposition building. San Francisco ranked 4th among the cities of the United States in Building Operations in 1912.

1912	$26,269,006
1911	24,495,168
1910	22,873,942
1909	30,411,196
1908	35,128,549
1907	50,499,499
1906	39,254,467
1905	20,111,861
1904	16,916,118
1903	14,984,514
1902	14,289,938
1901	7,437,562
1900	6,390,705

POSTAL RECEIPTS.

1912	$2,782,949 41
1911	2,570,215 84
1910	2,488,224 54
1909	2,212,163 70
1908	2,010,833 12
1907	1,787,694 06
1906	1,509,595 90
1905	1,772,867 63
1904	1,572,976 81
1903	1,449,932 20
1902	1,296,389 08
1901	1,147,557 00
1900	1,051,567 00

MANUFACTURING.

San Francisco ranks eleventh among the cities of the United States in the number of manufacturing establishments.

	Census—		Per cent of increase
	1909	1904	
Number of establishments	1,795	2,251	[1]20
Capital	$133,760,000	$102,362,000	31
Cost of materials used	76,175,000	75,946,000	([2])
Salaries and wages	30,452,000	31,645,000	[1] 4
Miscellaneous expenses	13,053,000	12,474,000	5
Value of products	132,929,000	137,788,000	[1] 4
Value added by manufacture (products less cost of materials)	56,754,000	61,842,000	[1] 8
Employees:			
Number of salaried officials and clerks	6,116	5,190	18
Average number of wage earners employed during the year	28,239	38,429	[1]27

[1] Decrease. [2] Less than 1 per cent increase.

POPULATION.

1912 (according to school attendance)	462,560
1911 (Estimated)	430,000
1910 (U. S. Census)	416,912
1909 (Estimated)	375,000
1908 "	350,000
1907 "	300,000
1906 (After the fire, estimated by Gen. A. W. Greely)	175,000
1905 (Estimated)	450,000
1900 (U. S. Census)	342,782
1890 "	298,997
1880 "	233,959
1870 "	149,473
1860 "	56,802
1852 (State Census)	34,776

MORTGAGES.

Year	Number	Amount
1912	9,504	$58,920,242
1911	8,716	48,916,430
1910	8,690	44,899,847
1909	8,005	44,988,205
1908	6,257	41,841,729
1907	6,401	44,583,753
1906	5,488	35,825,680
1905	6,746	35,016,855
1904	6,116	32,977,736
1903	5,194	30,889,988
1902	4,783	25,254,542
1901	4,111	20,148,304
1900	4,010	17,034,453

SCHOOL CENSUS.

Pupils Enrolled.

During the year ending June 30, 1912	53,160
During the year ending June 30, 1911	51,462
During the year ending June 30, 1910	50,212
During the year ending June 30, 1909	48,509
During the year ending June 30, 1908	48,045
During the year ending June 30, 1907	45,633
During the year ending April 17, 1906*	57,782
During the year ending June 30, 1905*	55,067
During the year ending June 30, 1904*	49,600
During the year ending June 30, 1903*	48,345
During the year ending June 30, 1902*	48,893
During the year ending June 30, 1901*	48,517
During the year ending June 30, 1900*	48,058

*Note:—Previous to 1906 the figures are taken from the State Enrollment, which includes duplications. Private schools had an enrollment of 11,928 on June 30th, 1912.

PASSENGER TRAFFIC BY WATER

PASSENGERS CARRIED BY TRANS-PACIFIC STEAMERS.

	1912	1911
Pacific Mail Steamship Co	39,774	38,467
Matson Navigation Co	7,732	6,426
Oceanic Steamship Co	5,875	6,182
Toyo Kisen Kaisha	10,573	8,595
Union Steamship Co.	3,311	.....
Total	67,265	59,670

PASSENGERS CARRIED ON FERRIES.

	1912	1911
Santa Fe (Richmond)	296,220	244,369
Southern Pacific (Oakland and Alameda)	19,212,476	18,133,396
Key Route (Oakland)	13,770,863	13,383,656
Western Pacific (Oakland)	113,555	83,165
Northwestern Pacific (Sausalito)	5,551,910	5,316,815
Total	38,951,024	37,161,401

PASSENGERS CARRIED ON RIVER BOATS.

	1912	1911
Monticello S. S. Co. (Vallejo)	475,000	516,630
Southern Pacific Co. (Sacramento)	117,628	98,561
California Navigation & Impt. Co. (Stockton)	45,405	43,395
California Transportation Co. (Sacramento)		48,096
California Transportation Co. (Stockton)	70,935	21,419
Cal. Transportation Co. (Mokelumne River)		2,031
Total	708,968	730,132
Grand Total	39,727,257	38,310,833

BANKING STATISTICS

BANK CLEARINGS.

1912	$2,677,561,952
1911	2,427,075,543
1910	2,323,772,871
1909	1,979,872,570
1908	1,757,151,850
1907	2,133,882,625
1906	1,998,400,779
1905	1,834,549,788
1904	1,534,631,136
1903	1,520,198,682
1902	1,373,362,025
1901	1,178,169,536
1900	1,029,582,594

San Francisco ranked 8th among the cities of the United States in Bank Clearings in 1912.

SAVINGS BANKS

Number of Depositors, January 31st, 1912.....256,083

Date	Resources	Deposits
1912—December 31	$200,501,961 85	$184,955,220 61
1911—November 10	186,758,809 87	168,744,339 61
1910—October 10	175,088,722 87	158,986,196 59
1909—November 16	168,665,975 40	162,353,933 62
1908—December 21	150,876,046 63	134,454,584 40
1907—December 28	163,665,016 09	147,095,374 49
1906—December 31	175,309,224 27	160,965,128 50
1905—December 30	182,355,427 24	169,538,244 13
1904—January 5	172,180,930 58	160,026,863 15
1903—January 23	166,466,073 65	154,906,701 98
1902—December 31	154,762,790 48	144,295,034 57
1901—December 31	143,524,996 39	133,430,482 77
1900—December 31	134,498,940 61	124,580,434 81

NATIONAL BANKS.

Date	Resources	Deposits
1913—April 4	$229,292,094 60	$148,959,367 45
1912—June 14	220,003,000 00	149,082,000 00
1911—January 7	211,670,933 67	83,218,852 18
1909—November 16	142,980,426 21	54,265,802 25
1908—November 27	115,363,458 23	42,267,043 70
1907—December 3	98,451,612 88	31,502,547 98
1906—January 9	98,091,160 80	36,954,152 28
1905—January 11	61,008,181 39	22,463,816 12
1904—November 10	60,102,652 27	23,581,648 73
1903—November 17	54,597,516 16	23,148,450 14
1902—September 15	49,487,066 43	22,903,240 01
1901—December 10	39,793,283 35	18,085,890 49
1900—December 13	34,891,054 33	15,392,276 82

COMMERCIAL BANKS.

Date	Resources	Deposits
1913—January 31	$ 61,510,057 28	$ 39,729,068 86
1911—January 7	*57,380,449 73	*35,175,904 42
1909—November 16	116,694,820 91	65,085,266 26
1908—December 21	116,096,094 80	63,645,250 44
1907—December 28	130,631,194 27	70,224,725 20
1906—December 31	157,156,723 44	101,901,692 88
1905—December 30	131,409,473 26	80,874,847 38
1904—January 5	127,374,241 04	71,460,562 21
1903—January 23	117,476,092 25	65,122,974 68
1902—December 31	109,294,865 96	67,853,182 53
1901—December 31	90,185,766 73	55,545,547 72
1900—December 31	76,543,241 09	46,270,737 20

*On Feb. 5, 1910, the Bank of California changed from a commercial to a national bank with resources of $49,109,426.84 and deposits amounting to $32,036,673.66.

U. S. MINT, SAN FRANCISCO, CALIFORNIA.

Coinage calendar year 1912.

Gold	Pieces	Value
Eagles	300,000	$3,000,000 00
Half Eagles	392,000	1,960,000 00
		$4,960,000 00
Silver		
Half Dollars	1,370,000	685,000 00
Quarter Dollars	708,000	177,000 00
Dimes	3,420,000	342,000 00
		$1,204,000 00
Minor		
Five Cents	238,000	$ 11,900 00
One Cent	4,431,000	44,310 00
		$ 56,210.00
PHILIPPINE		
Pesos	680,000	P 680,000 00
20 Centavos	750,000	150,000 00
10 Centavos	1,010,000	101,000 00
PHILIPPINE (Bronze)		
1 Centavo	3,001,000	P 30,010 00

TOTAL U. S. COINAGE.

Mint of the United States, San Francisco, Cal.

Double Eagles	$1,401,930,520 00
Eagles	138,644,060 00
Half Eagles	134,765,040 00
Three Dollars	186,300 00
Quarter Eagles	1,861,255 00
Dollars	90,232 00
Total Gold Coinage to Dec. 31, 1912	$1,677,477,407 00
Dollars	$ 109,523,073 00
Trade Dollars	26,647,000 00
Half Dollars	30,987,445 50
Quarter Dollars	11,213,534 25
Dimes	8,280,218 90
Twenty Cents	231,000 00
Half Dimes	119,100 00
Total Silver Coinage to Dec. 31, 1912	$ 187,001,371 65
One Cent	$ 182,350 00
Five Cents	11,900 00
Total Minor Coinage to Dec. 31, 1912	$ 194,250 00
Total U. S. Coinage to Dec. 31, 1912	$1,864,673,028 65
Foreign Coinage to Dec. 31, 1912	82,514,284 42
Grand Total	$1,947,187,313 07

TREASURE

Imports at San Francisco

From	1912	1911	1910	1909	1908
British Columbia	$ 6,000	$	$ 2,192	$ 17,150	$
Costa Rica	218,930	134,909	48,300	6,210	4,700
Salvador	204,950	1,209,121	1,055,640	602,674	829,675
Mexico	2,553,801	1,867,928	2,496,319	3,165,478	4,391,506
Japan	510,900	3,879,229	1,576,000	57,940	109,345
Ecuador	29,302	124,313	78,983	38,522	111,726
China	8,154	663,288	855,574	95,894	167,403
Australia			207,200	407,565	1,462,653
Peru				1,580	
Honduras			3,713	2,330	6,857
Colombia		1,616	1,416	864	1,280
French Oceanica	21	250	10,250	8,928	15,390
Gautemala	24,000	46,200	12,000	1,410	
Manila	67,271	4,000	100,000	19,525	20,636
Nicaragua				200	177
Panama		615		560	
Hongkong				2,104	
Asiatic Russia				2,768	25,975
Chile		19,006			
Totals	$4,623,329	$9,097,580	$6,447,587	$4,431,702	$7,147,323

TREASURE

Shipments by Sea

FROM U. S. CUSTOM HOUSE RECORDS

To	1912	1911	1910	1909
Costa Rica			$ 200	$ 1,262
Guatemala	$ 415			2,412
Hongkong	7,270,709	$7,768,703	5,616,483	5,332,918
China	2,418,098	177,050	355,476	1,507,242
Fr. Oceania	5,000	10,000		160
Salvador	2,605			
Philippine Is	6,000		2,000	4,610
Japan	5,018,566	1,999,999	1,968,508	28,063,454
Mexico			220	1,240
Br. Oceania			1,500	3,180
India	1,139,379	1,428,200	1,501,700	1,341,261
Hawaii			100,000	75,000
Elsewhere				2,480
Totals	$15,860,772	$11,383,852	$9,557,967	$36,335,219

Year	Gold	Silver	Total
1912	$5,147,551	$10,713,221	$15,860,772
1911	2,013,596	9,370,256	11,383,852
1910	1,980,208	7,577,759	9,557,967
1909			36,335,219
1908	2,762,980	3,217,789	5,980,769
1907	1,317,420	3,064,374	4,381,794
1906	1,214,728	7,739,340	8,954,068
1905	2,077,663	14,263,550	16,341,218
1904	4,153,265	10,995,479	15,148,744
1903	1,818,737	1,862,018	3,680,755
1902	2,947,959	11,903,830	14,851,789
1901	246,182	10,988,526	11,234,708
1900	485,687	14,665,491	15,151,178
1899	2,775,754	7,884,477	10,660,231
1898	803,481	7,887,039	8,694,695
1897	1,088,333	17,668,003	18,756,336
1896	1,138,557	14,372,272	15,510,829
1895	558,570	18,241,101	18,799,671
1894	1,048,975	12,929,894	13,978,869
1893	1,153,509	11,899,433	13,052,942
1892	875,635	13,700,943	14,576,578
1891	1,318,287	7,756,019	9,074,306
1890	1,538,819	7,128,561	8,667,380
1889	1,679,636	18,586,221	20,265,857

CUSTOMS RECEIPTS

Receipts of Customs duties paid into the United States Treasury at San Francisco.

Months	1912	1911	1910	1909	1908	1907	1906	1905
January	$569,519 07	$ 583,511 94	$ 429,579 75	$ 518,924 77	$681,746 17	$754,727 75	$645,160 50	$658,990 04
February	432,391 21	506,617 61	461,919 22	459,755 08	513,027 87	756,286 95	673,571 41	493,289 39
March	577,185 40	631,445 77	572,400 41	708,118 31	605,418 71	690,383 49	721,132 11	552,445 58
April	538,659 86	442,358 35	619,445 28	496,532 50	509,064 47	720,406 12	406,853 67	515,684 72
May	494,663 57	447,847 94	590,357 91	492,485 61	659,373 69	831,866 00	537,368 33	628,937 01
June	521,833 60	559,067 73	456,820 39	558,774 25	553,430 70	634,982 32	632,560 84	603,593 24
July	581,705 78	485,335 55	711,309 89	795,592 45	466,967 26	821,047 74	627,038 28	501,855 11
August	625,339 59	513,489 40	877,724 92	484,440 39	519,354 75	702,814 52	1,171,705 04	576,468 94
September	461,009 84	619,484 82	605,700 17	492,501 33	551,436 57	577,070 87	878,126 31	602,528 34
October	590,121 58	782,437 76	467,102 04	533,411 51	538,451 04	681,876 66	972,562 36	606,707 20
November	635,334 28	541,847 31	765,808 98	622,344 82	606,773 05	495,740 54	801,230 43	580,028 85
December	522,204 07	559,911 59	519,979 77	535,211 74	625,077 38	657,778 92	1,024,174 94	810,798 86
Totals	$6,549,967 85	$6,673,355 37	$7,125,711 50	$6,698,092 76	$6,830,121 66	$8,324,981 88	$9,091,486 22	$7,131,327 28

SAN FRANCISCO'S COMMERCE

FROM U. S. CUSTOM HOUSE RECORDS

EXPORTS TO FOREIGN COUNTRIES.

	Exports
1912	$54,707,850
1911	43,427,033
1910	35,773,746
1909	30,431,489
1908	30,738,610
1907	29,838,469
1906	33,470,478
1905	46,888,504
1904	38,119,692
1903	31,772,113
1902	37,095,030
1901	36,784,072
1900	38,552,710

Annual valuations of merchandise traffic between San Francisco and foreign countries, the Atlantic States and non-contiguous territory:

	Exports	Imports
1912	$94,862,490	$62,744,188
1911	85,445,970	56,075,324
1910	65,008,518	50,669,435
1909	57,221,596	51,469,023
1908	48,464,161	44,403,197
1907	46,571,790	49,192,378
1906	49,562,403	54,207,011
1905	64,918,505	44,249,211
1904	56,661,481	43,409,980
1903	51,552,249	36,522,187
1902	47,601,422	36,078,270
1901	41,638,410	37,267,279
1900	41,419,679	39,424,435

IMPORTS.

Year	Free	Dutiable
1912	$47,464,578	$15,279,610
1911	40,783,758	15,291,566
1910	35,355,140	15,314,295
1909	37,354,238	14,114,785
1908	29,323,338	15,079,859
1907	34,092,992	20,114,019
1906	29,701,394	19,490,984
1905	29,097,175	15,152,036
1904	28,649,453	14,750,527
1903	20,572,291	15,949,896

Exports and Imports at San Francisco, to and from all countries

FROM U. S. CUSTOM HOUSE RECORDS

Destination	EXPORTS		IMPORTS	
	1912	1911	1912	1911
Australia	$2,776,762	$2,187,475	$719,470	$621,967
Argentine	68,060		66,064	
Aden			64,478	
Austria-Hungary	3,182		48,882	52,019
Belgium	379,797	513,224	237,213	639,768
Brazil			815,544	
British India	96,940	126,778	2,397,630	2,248,842
Br. So. Africa	84,180	38,096		
Canada	3,664,282	2,348,372	1,376,750	1,191,820
Cuba	16,861	20,640	397,475	380,102
Chile	1,201,457	658,588	1,464,491	1,126,772
Colombia	149,799	104,062	725	705
China	2,632,285	1,383,904	9,859,277	7,284,312
Costa Rica	168,088	160,570	127,947	151,176
Dutch E. Indies	128,803	88,402	280,160	770,066
Denmark	105,086	103,010	23,092	20,907
Ecuador	182,671	120,658	324,866	618,193
England	6,269,242	4,995,871	1,455,072	1,791,673
Egypt	6,924	3,260	880	1,598
France	767,501	643,590	1,587,102	1,688,525
French Oceania	588,498	615,713	1,046,990	848,026
Fr. East Indies	2,778	5,892		
Germany	2,316,350	3,179,076	1,717,623	1,728,814
Greece			51,123	
German Oceania	84,550	89,305	67,855	14,979
Guatemala	675,176	462,681	1,368,786	1,499,179
Honduras	149,339	123,457		
Hongkong	1,397,387	1,342,313		
Ireland	663,796	1,785,799	126,208	72,241
Italy	39,549	23,899	1,720,499	1,046,058
Japanese China	24,297	5,591		
Japan	18,182,316	12,382,222	25,844,698	24,095,918
Jamaica	18,606		15,671	
Korea	137,830	97,688		
Mexico	1,274,033	996,905	824,779	478,889
Netherlands	281,167	232,372	136,959	183,582
New Zealand	1,008,767	834,837		
Norway	20,109		128,294	91,561
Nicaragua	539,391	316,641	86,646	122,311
Oth. Br. Oceania	62,817		50,955	67,732
Oth. Br. E. Indies	16,967		238,849	
Philippine Is	4,783,428	4,597,286	3,715,838	2,720,113
Peru	408,340	401,919	856,162	344,970
Portugal	5,800		19,080	18,027
Panama	1,157,083	951,654	10,438	6,296
Russia in Asia	101,857	88,939	16,181	
Russia in Europe	1,210		6,323	
Spain	125	1,500	113,431	71,136
Siam	8,110	10,320		8,223
Scotland	264,021	60,496	209,613	205,179
Switzerland	6,824		261,710	239,148
Sweden	56,028	144,799	112,548	147,751
Salvador	663,753	494,547	1,438,943	1,372,278
St. Settlements	62,598	42,362	1,279,018	1,612,776
Trinidad & Tobago	25,193		5,303	
Turkey in Europe			26,454	
Turkey in Asia			90	
Miscellaneous	977,837	642,330		625,301
Totals	$54,707,850	$43,427,033	$62,744,188	$56,075,324
Hawaii	18,193,850	14,593,966		
Tutuilla	91,173	76,897		
*Alaska	2,550,644	3,246,799		
Foreign	1,051,561	882,439		
Atlantic States	18,878,262	23,218,836		
Grand Totals	$95,473,340	$85,445,970		

*These figures for Alaska do not include several million dollars worth of goods trans-shipped at other ports.

EXPORT AND IMPORT SUMMARY

FROM U. S. CUSTOM HOUSE RECORDS

COMBINED EXPORT VALUES

The combined exports, treasure and merchandise, exclusive of merchandise by overland railroads, during the past four years, were as follows:

	1912	1911	1910	1909
Merchandise	$94,862,490	$85,445,970	$65,008,158	$57,221,596
Treasure	15,854,567	11,383,852	9,557,967	36,335,219
Totals	$110,717,057	$96,829,822	$74,566,125	$93,556,815

COMBINED VALUES OF IMPORTS

The combined values of imports of merchandise and treasure from Foreign Countries during the last four years were as follows:

	1912	1911	1910	1909
Merchandise	$62,291,016	$56,075,324	$50,669,435	$51,469,023
Treasure	4,546,828	9,097,580	6,447,587	4,431,702
Totals	$66,837,844	$66,172,904	$57,117,022	$55,900,725

SAN FRANCISCO TRADE SUMMARY

The combined values of all exports of merchandise and treasure by sea and all imports of merchandise and treasure at San Francisco during the last four years make the following showing:

	1912	1911	1910	1909
Merchandise Exports	$94,862,490	$85,445,970	$65,008,158	$57,221,596
Treasure Exports	15,854,567	11,383,852	9,557,967	36,335,219
Merchandise Imports	62,291,016	56,075,324	50,669,435	51,469,023
Treasure Imports	4,546,828	9,097,580	6,447,587	4,431,702
Total trade	$177,554,901	$162,002,726	$131,683,147	$149,457,540

NOTE.—The exports of merchandise, commodities and supplies on United States Army Transports from San Francisco, which aggregates more than $800,000 per year are not included in the trade statistics, and the movement of treasure to and from non-contiguous territory of the United States is not included.

EXPORTS TO ORIENTAL COUNTRIES

Exports To	1912	1911	1910	1909
China	$ 2,632,285	$ 1,383,904	$ 540,123	$ 577,916
Hongkong	1,397,387	1,342,313	861,485	1,133,585
Siberia	101,857	.....	96,311	131,320
Japan	18,182,316	12,382,222	8,709,031	6,825,469
Philippine Islands	4,783,428	4,597,286	4,939,887	4,960,605
East Indies	194,398	112,773	204,825	76,730
Korea	137,830	97,688	94,937	111,733
Guam *	35	.....	300	.....
Total	$27,429,536	$19,916,186	$15,446,899	$13,817,358

* The U. S. Custom House does not include shipments of army supplies in U. S. army transports.

IMPORTS FROM ORIENTAL COUNTRIES

Imports From	1912	1911	1910	1909
China	$ 9,859,277	$ 7,284,312	$ 6,930,458	$ 7,333,563
Japan	25,844,698	24,095,918	20,535,300	24,020,740
Philippine Islands	3,715,838	2,720,113	2,715,710	1,258,526
East Indies	238,849	212,999	2,018,284	1,850,606
Asiatic Russia	16,181	.....	.....	637
Straits Settlements	1,279,018	1,612,776	1,340,261	990,238
Siam	.....	8,223	19,016	6,375
Aden	64,478	39,638	33,514	37,910
Dut. East Indies	280,160	770,066	966,942	225,991
Total	$41,298,499	$36,744,045	$34,559,485	$35,724,586

RICE

FROM U. S. CUSTOM HOUSE RECORDS

IMPORTS AT SAN FRANCISCO BY SEA

Sources	1912		1911	
	Pounds	Values	Pounds	Values
China	17,970,177	$658,591	12,607,471	$437,428
Japan	11,532,376	400,965	8,534,435	224,366
Italy	228,627	10,639	315,755	13,524
Elsewhere	50,180	319	134,900	2,770
Totals	29,781,360	$1,070,514	21,592,561	$678,088

EXPORTS FROM SAN FRANCISCO BY SEA

To	1912		1911	
	Pounds	Values	Pounds	Values
Hawaii	509,555	$ 24,290	236,600	$ 9,948
Central America	5,433,675	174,429	1,398,206	35,881
Mexico	1,571,457	49,433	1,341,052	33,988
Panama	1,203,373	35,333	888,955	22,266
South America	56,200	1,748	105,576	2,604
Pacific Islands	6,000	296	804,010	21,225
Canada	8,412	220	9,020	198
China and Hongkong	9,297	295	1,015	27
French Oceania	661,767	22,247	.....	.....
Alaska	157,925	7,834	255,010	8,885
Totals	9,617.661	$316,091	5,040,179	$135,022

SUGAR

FROM U. S. CUSTOM HOUSE RECORDS

EXPORTS FROM SAN FRANCISCO BY SEA

To	1912		1911	
	Pounds	Values	Pounds	Values
Mexico	2,137,594	$122,040	425,589	$22,578
Central America	204,587	7,525	314,870	16,516
South America	.....	.....	580	39
Hawaii	991,043	53,073	663,484	35,101
Pacific Islands	10,520	610	373,274	18,279
Japan	393,248	23,811	668,924	36,781
China	127,436	7,677	83,610	5,184
Alaska	1,280,531	70,388	.....	.....
Canada	30,000	1,748	45,800	2,415
Elsewhere	107,064	6,368	1,238,268	62,211
Totals	5,282,023	$293,240	3,814,399	$199,104

IMPORTS AT SAN FRANCISCO BY SEA

	1912		1911	
	Pounds	Values	Pounds	Values
Hawaii	442,886,200	$17,715,448	476,999,990	$19,079,999
China	738,979	27,268	887,488	26,934
Guatemala	1,208,377	33,274	323,260	8,503
Salvador	924	39	109,020	1,935
Dutch East Indies	.....	.....	17,431,515	379,541
Canada	.....	.....	947,608	21,241
Mexico	10,297	307	3,196	94
Peru	4,501,189	119,305	1,120,000	21,770
Philippines	28,517,506	893,250	.....	.....
Totals	477,863,472	18,788,910	497,822,077	$19,540,017

QUICKSILVER

	Exports from San Francisco by sea	Receipts at San Francisco from California mines	Production of California mines
1912	9,815	12,327	20,600
1911	7,856	13,321	19,109
1910	10,703	17,698	17,665
1909	10,371	16,143	16,217
1908	14,856	15,436	18,039
1907	11,784	13,042	17,379
1906	14,746	16,642	19,516
1905	16,832	19,276	24,655
1904	23,184	25,732	28,876
1903	16,741	26,534	32,094
1902	9,826	20,328	29,552
1901	5,337	21,224	26,720
1900	7,294	21,247	26,317

TEA

IMPORTS AT SAN FRANCISCO BY SEA

FROM U. S. CUSTOM HOUSE RECORDS

Sources	1912		1911	
	Pounds	Values	Pounds	Values
Japan	10,657,990	$2,019,185	13,298,763	$2,398,497
China	10,686,449	1,834,987	4,919,296	688,743
British East Indies	632,630	115,904	798,776	142,725
Elsewhere	186,332	61,459	361,098	108,784
Totals	22,163,401	$4,031,535	19,377,933	$3,338,749

IMPORTS AT SAN FRANCISCO BY SEA

YEAR	CHINA		JAPAN		TOTALS	
	Pounds	Value	Pounds	Value	Pounds	Value
1912	10,686,449	$1,834,987	10,657,990	$2,019,185	21,344,439	$3,854,172
1911	4,919,296	688,743	13,298,763	2,398,497	18,218,059	3,087,240
1910	8,302,678	1,641,720	13,914,268	2,786,312	22,216,943	4,428,032
1909	7,429,870	1,485,974	11,602,364	2,320,472	19,032,234	3,924,760
1908	3,928,642	785,728	6,279,864	1,256,072	10,208,506	2,041,800
1907	3,982,428	648,780	5,844,107	1,231,280	9,826,535	1,880,060
1906	3,417,862	571,608	5,265,384	1,169,714	8,683,246	1,741,422
1905	3,167,842	469,279	4,841,972	974,462	8,009,815	1,393,741
1904	2,784,614	401,210	5,214,182	1,020,362	7,998,796	1,421,572
1903	2,956,468	406,822	5,968,805	1,106,347	8,925,277	1,513,169
1902	2,226,584	287,530	3,554,620	581,215	5,781,204	868,745
1901	1,891,587	228,970	6,606,152	838,692	8,497,739	1,067,662
1900	4,435,220	506,757	10,127,267	1,346,596	14,562,487	1,853,353

COFFEE

IMPORTS AT SAN FRANCISCO BY SEA

Source	1912		1911	
	Pounds	Values	Pounds	Values
Central America	24,429,503	$2,933,127	28,153,052	$2,908,207
Ecuador	982,386	130,944	3 438,325	389,461
East Indies	394,128	63,338	626,634	90,138
Mexico	7,635,685	553,633	2,312,266	270,458
Elsewhere	.....	.....	2,883,244	410,699
Aden	371,767	64,478	.....	.....
Peru	9,900	1,255	.....	.....
Brazil	5,404,504	815,544	.....	.....
Totals	39,227,873	$4,562,319	37,413,521	$4,068,963

EXPORTS FROM SAN FRANCISCO BY SEA

	1912		1911	
	Pounds	Values	Pounds	Values
Alaska	118,405	$32,336	.....	.....
Mexico	844	244	7,162	$ 1,396
South America	.....	.....	1,600	352
Hawaii	87,096	16,123	81,290	14,643
Pacific Islands	4,569	1,127	11,726	1,872
Philippine Islands	747,609	152,988	296,235	61,050
Japan	5,565	1,243	12,425	2,018
China & Hongkong	2,459	519	129,735	18,513
Australasia	.....	.....	281,038	38,301
Canada	108,765	22,431	48,752	9,715
Elsewhere	1,830	509	138,210	35,229
Totals	1,077,142	$227,520	1,008,173	$183,089

HOPS

EXPORTS FROM SAN FRANCISCO BY SEA

To	1912		1911		1910	
	Pounds	Value	Pounds	Value	Pounds	Value
New Zealand	64,875	$ 20,456	23,572	$ 8,223	45,860	$ 4,872
Australia	689,588	183,383	145,755	39,974	152,574	17,498
Hawaiian Islands	23,971	5,664	21,797	4,921	38,895	4,609
China	5,120	1,516	2,490	585	16,348	1,864
Mexico	3,690	1,421	4,687	1,388	6,792	728
Central America	6,248	3,078	6,187	2,142	5,270	579
Japan	2,624	769	3,650	847	9,618	1,118
India	34,437	8,740	40,497	13,744	46,528	4,970
Canada	4,751	2,019	576	134	26,307	2,889
England	42,726	8,660	1,566,034	192,079	148,692	16,412
South America	2,291	759	1,918	684	8,212	904
Pacific Islands	.....	.....	1,330	338	2,708	306
Manila	9,090	2,796	6,796	1,483	2,918	325
Siberia	.....	.....	553	183	285	32
Hongkong	5,560	1,583	.....	.....	.....	.....
Eastern States	526,000	71,430	358,254	51,946	531,109	56,690
Elsewhere	3,326	2,814	1,154	257	34,705	4,326
Totals	1,429,297	$314,874	2,185,250	318,928	1,086,821	$118,122

COMPARATIVE STATEMENT OF HOP CROPS.

In Bales.

	1912	1911	1910	1909	1908	1907	1906	1905	1904	1903	1902	1901	1900
California ...	117,500	87,000	71,000	69,000	65,000	90,000	110,000	105,000	66,000	55,000	55,000	48,000	36,000
Oregon.....	115,000	75,000	100,000	82,500	90,000	130,000	150,000	125,000	88,000	88,000	85,000	72,000	80,000
Washington	38,000	20,000	20,000	17,000	15,000	35,000	50,000	50,000	35,000	35,000	35,000	30,000	35,000
Totals.....	270,500	182,000	191,000	168,500	170,000	255,000	310,000	280,000	189,000	178,000	175,000	150,000	151,000

CALIFORNIA WINES

FROM U. S. CUSTOM HOUSE RECORDS.

EXPORTS FROM SAN FRANCISCO BY SEA

To	1912		1911	
	Gallons	Values	Gallons	Values
Atlantic States	11,483,389	$3,859,221	11,157,705	$3,538,800
Germany	32,658	11,340	222,884	67,577
England	62,729	24,389	58,337	22,460
Switzerland	24,119	6,824	23,376	8,551
Belgium	1,000	300	8,750	2,830
France	11,203	3,350	6,874	2,413
Netherlands	1,025	310	5,750	2,400
China	26,662	10,903	30,191	11,681
Japan	29,029	10,164	224,224	66,399
Hawaii	957,291	405,417	810,579	354,965
Alaska	6,968	7,503	6,179	6,563
Philippines	22,642	10,066	15,622	8,790
Canada	56,820	22,407	45,336	18,569
Australia and Tasmania	412	315	1,103	440
Costa Rica	11,420	4,325	2,952	1,439
Guatemala	21,182	8,465	22,717	11,092
Honduras	4,708	2,440	4,817	3,172
Nicaragua	9,965	5,111	11,669	4,188
Salvador	35,521	14,226	36,114	16,517
Panama	266,957	80,664	236,565	66,928
Cuba	7,289	8,821	14,530	4,842
Mexico	53,341	18,284	48,962	18,515
Columbia	53,696	23,981	31,309	13,406
Ecuador	56,243	22,269	56,384	23,522
Dutch East Indies	2,619	1,055	2,873	1,906
Hong Kong	2,241	1,747	2,752	1,798
French Oceania	37,956	11,028	35,342	9,380
Miscellaneous	5,448	2,948	5,743	3,931
1912			13,274,533	$4,577,873
1911			13,129,639	4,293,063
1910			9,862,830	3,382,417
1909			7,298,620	2,518,436
1908			5,469,632	2,318,545
1907			3,721,841	1,502,355
1906			3,831,225	1,894,328
1905			7,061,156	2,614,971
1904			7,118,884	2,697,439
1903			6,938,746	2,567,228
1902			6,636,186	2,478,659
1901			5,839,447	1,993,327
1900			5,790,786	1,755,923
1899			3,518,631	1,157,965
1898			5,145,003	1,824,259
1897			5,462,686	1,988,197
1896			4,202,869	1,496,366
1895			4,015,126	1,323,223
1894			2,440,024	1,017,027
1893			3,666,412	1,527,678
1892			4,797,172	2,031,405
1891			4,918,222	2,160,516

CALIFORNIA WINES

Estimated Production

Vintage	Gallons	Vintage	Gallons
1879	7,000,000	1896	17,000,000
1880	10,200,000	1897	16,400,000
1881	8,000,000	1898	31,500,000
1882	9,000,000	1899	19,000,000
1883	8,500,000	1900	23,500,000
1884	10,000,000	1901	22,500,000
1885	11,000,000	1902	43,000,000
1886	18,000,000	1903	34,500,000
1887	15,000,000	1904	29,160,000
1888	17,000,000	1905	26,502,000
1889	15,000,000	1906	38,000,000
1890	17,500,000	1907	43,000,000
1891	20,000,000	1908	37,250,000
1892	15,000,000	1909	45,000,000
1893	24,700,000	1910	45,500,000
1894	14,000,000	1911	49,280,044
1895	18,000,000	1912	40,000,000

CALIFORNIA BRANDY

EXPORTS FROM SAN FRANCISCO BY SEA

To	1912		1911	
	Gallons	Value	Gallons	Value
Eastern States	55,545	$48,423	13,115	$25,136
England	48	35	7,617	4,783
Germany	1,021	1,022	1,021	669
Hawaii	27,074	55,743	21,827	33,559
Philippines	2,888	4,839	3,244	4,239
Canada	1,333	2,659	385	652
China	128	75	149	275
Japan	7	26	15	33
Australia	257	180	30	58
Central America	217	305	234	391
South America	40	47	40	110
Russia	.....	.....	1	15
Mexico	102	174	.....	.....
French Oceania	6	18	.....	.....
1912			89,666	113,546
1911			47,725	72,010
1910			25,331	23,755
1909			18,265	30,945
1908			16,424	28,223
1907			12,846	25,881
1906			14,234	28,892
1905			16,766	32,089
1904			27,922	31,069
1903			54,168	60,189
1902			24,349	36,423
1901			29,512	28,746
1900			56,776	54,536
1899			126,572	106,413
1898			120,046	117,149
1897			18,058	26,806
1896			72,998	78,871
1895			91,953	76,845
1894			357,102	374,153
1893			309,353	265,975
1892			532,347	495,368
1891			432,821	395,396
1890			303,425	324,462

CANNED SALMON

EXPORTS FROM SAN FRANCISCO BY SEA

	1912		1911	
	Cases	Value	Cases	Value
Eastern States	161,290	$761,987	287,388	$1,794,635
Hawaii	3,489	38,669	6,030	38,301
Alaska	399	2,140	348	2,319
Philippines	16,920	55,163	19,412	82,438
Cuba	290	1,128	240	1,008
England	306,653	1,585,483	181,756	1,029,248
Australia	124,506	795,918	92,906	606,548
New Zealand	4,827	24,616	1,449	8,308
British Guiana	3,720	17,649	950	5,010
British India	3,405	14,990	1,694	10,176
Straits Settlements	3,370	10,372	1,053	4,440
Hong Kong	1,450	7,211	1,059	6,834
Other British Oceania	614	3,791	1,367	5,237
Other Br. East Indies	1,063	3,835	1,465	7,173
Dutch Guiana	1,200	5,525	1,295	6,926
Dutch East Indies	1,829	10,475	1,223	7,349
Mexico	7,299	24,489	3,991	18,297
Costa Rica	1,766	7,374	2,334	12,245
Guatemala	729	2,935	339	1,731
Nicaragua	246	5,226	1,022	5,081
Salvador	360	1,437	176	1,074
Honduras	276	1,191	372	1,948
Panama	6,500	28,743	6,086	33,667
Jamaica	3,701	15,783	3,770	19,834
Korea	2,880	342	.....	.....
Canada	4,750	24,585	.....	.....
Barbadoes	22,848	2,177	.....	.....
British S. Africa	61,000	4,573	.....	.....
Egypt	10,992	1,021	.....	.....
Siam	1,920	271	.....	.....
France	470	58	.....	.....
Dutch West Indies	1,440	151	.....	.....
Chile	13,583	49,738	38,703	171,452
Columbia	2,301	9,815	1,457	7,428
Bolivia	619	1,691	225	1,057
Ecuador	4,315	15,326	3,143	14,575
Peru	5,581	14,308	3,375	14,843
China	1,622	6,744	598	3,819
Argentina	.....	.....	628	2,826
French Oceania	5,775	32,017	5,150	32,226
German Oceania	4,842	19,094	5,896	23,021
Trinidad and Tobago	472	23,905	2,875	15,800
Elsewhere	.....	.....	1,010	4,923
Total	702.124	$3,632,583	680,785	$4,001,753

SUMMARY OF ANNUAL EXPORTS

	Cases	Barrels	Values		Cases	Barrels	Values
1912..	702,124	....	$3,632,583	1900..	856,994	15,734	$3,602,562
1911..	680,785	....	4,001,753	1899..	694,866	27,146	2,946,028
1910..	685,124	9,298	2,740,018	1898..	703,442	16,727	2,921,178
1909..	993,732	12,664	5,493,086	1897..	789,252	17,066	3,338,331
1908..	576,255	9,206	2,389,073	1896..	707,903	10,693	3,026,888
1907..	644,560	11,890	2,597,378	1895..	902,089	11,072	3,711,686
1906..	568,025	13,236	2,304,640	1894..	640,163	7,753	2,704,728
1905..	679,846	16,624	2,883,024	1893..	203,316	7,373	1,027,051
1904..	940,969	11,998	4,121,569	1892..	758,517	5,946	3,490,877
1903..	748,706	11,819	3,136,542	1891	464,291	11,982	2,091,292
1902..	793,156	11,845	3,048,268	1890..	480,006	9,751	2,229,313
1901..	804,347	9,839	3,623,746	1889..	475,317	7,011	2,636,361

CANNED SALMON

Comparative Statement of Product of Pacific Coast, in cases.

Year	Columbia River	Sacramento River	Outside Rivers	Puget Sound	British Columbia	Alaska	Totals
1868	28,000	.....	.....	.....	.....	.....	28,000
1869	100,000	.....	.....	.....	.....	.....	100,000
1870	150,000	.....	.....	.....	.....	.....	150,000
1871	200,000	.....	.....	.....	.....	.....	200,000
1872	250,000	.....	3,000	.....	.....	.....	253,000
1873	250,000	1,000	6,000	.....	.....	.....	257,000
1874	350,000	2,500	9,750	.....	.....	.....	362,250
1875	375,000	3,000	16,800	.....	6,270	.....	401,070
1876	450,000	8,300	25,600	.....	9,847	2,800	496,547
1877	460,000	21,500	24,800	.....	67,387	5,200	578,887
1878	460,000	36,500	30,000	.....	113,601	8,159	648,260
1879	480,000	31,000	30,000	.....	57,394	12,530	610,924
1880	630,000	51,000	37,200	.....	61,300	6,539	786,039
1881	551,000	181,200	48,500	.....	175,675	8,977	965,352
1882	541,300	200,300	49,000	.....	255,061	10,244	1,055,905
1883	629,400	160,000	38,000	.....	243,000	36,000	1,106,400
1884	656,179	81,450	41,350	.....	138,945	54,000	971,924
1885	524,530	48,500	51,750	.....	106,865	74,850	806,495
1886	454,943	39,300	131,100	.....	163,004	120,700	909,047
1887	373,800	36,500	195,400	2,200	201,990	190,200	1,000,090
1888	367,750	58,000	154,000	4,000	135,600	427,372	1,146,722
1889	325,500	66,666	199,068	5,000	414,400	709,347	1,719,981
1890	433,500	35,006	67,117	8,000	409,464	688,332	1,641,419
1891	390,183	4,142	66,805	11,500	314,813	789,294	1,576,737
1892	481,900	4,600	144,200	15,000	221,797	461,482	1,325,979
1893	425,200	23,336	119,660	66,500	590,229	645,545	1,870,470
1894	511,000	28,463	118,500	67,933	494,470	678,501	1,898,867
1895	617,460	24,000	264,300	52,000	512,877	619,379	2,090,016
1896	463,621	13,387	115,400	248,200	598,300	958,700	2,397,608
1897	552,721	42,500	68,683	423,500	1,015,477	969,850	3,072,731
1898	473,230	28,000	78,600	417,700	454,500	956,979	2,409,009
1899	340,125	33,550	82,432	871,500	711,600	1,098,833	3,138,040
1900	313,417	34,000	106,300	478,742	527,281	1,534,534	2,994,485
1901	248,494	17,500	123,326	1,380,590	1,236,156	2,034,895	5,040,961
1902	367,241	14,043	134,190	625,982	2,554,423	563,307	4,259,186
1903	339,366	8,500	63,706	470,207	473,547	2,251,085	3,606,411
1904	423,073	19,698	164,791	296,272	465,894	1,953,746	3,323,654
1905	300,000	.....	190,000	430,602	500,000	2,215,201	3,635,803
1906	339,548	.....	155,506	441,414	629,460	2,208,495	3,774,423
1907	302,481	.....	127,591	721,666	547,459	2,170,272	3,869,469
1908	300,291	.....	105,381	314,281	542,689	2,622,487	3,885,129
1909	295,403	.....	103,604	1,568,051	967,920	2,354,230	5,289,172
1910	389,533	.....	209,919	540,592	762,201	2,410,729	4,312,974
1911	543,331	4,142	267,354	1,557,029	948,965	2,820,066	6,140,887
1912	285,666	.....	198,457	416,125	996,576	4,060,129	5,956,953

MISCELLANEOUS EXPORTS FROM SAN FRANCISCO TO FOREIGN PORTS—1912.

Agricultural Implements	pkgs.	1,571
Arms and Ammunition	pkgs.	6,270
Asphaltum	bbls.	5,944
Bags	bales	2,406
Bark	ctls.	31,229
Beer	cases	2,893
	casks	1,157
	bbls.	83
Wax	lbs.	1,338,583
Boots and Shoes	cases	4,176
Borax	ctls.	5,166
Bran and Feed	ctls.	1,674
Bread	ctls.	6,259
Building Material:		
Brick	M	89
Doors	No.	1,095
Laths	M	172
Lumber	M	35,848
Shingles	M	1,662
Various	pkgs.	158,393
Butter	ctls.	2,284
Candles	cases	30
Canned Goods	cases	1,308,780
Cement	bbls.	233,458
Cigars	cases	7
Coal	tons	131
Coffee	ctls.	11,046
Cordage	pkgs.	7,168
Cotton	bales	211,251
Drugs	cases	4,026
Codfish	ctls.	3,499
Dry Fruits:		
Prunes	ctls.	430,894
Raisins	ctls.	107,060
Various	ctls.	167,913
Fresh Fruits	pkgs.	142,843
Dry Goods	cases	9,272
Dynamite	cases	12,124
Fertilizer	tons	3,407
Fish:		
Salmon	cases	511,642
Various	pkgs.	13,230
Ginseng	lbs.	69,425
Groceries	pkgs.	39,117
Hardware	pkgs.	748
Hides	bales	5,721
Honey	cases	6,573
Hops	lbs.	826,154
Ivory	lbs.	3,104
Lard	ctls.	50,574
Leather	rolls	16,452
Lime	bbls.	708
Live Stock	No.	124
Machinery	pkgs.	13,078
Malt	ctls.	22,160

Meal	ctls.	10,868
Merchandise	pkgs.	146,003
Metals:		
Iron	pkgs.	96
Lead	ctls.	43
Steel	pkgs.	5,653
Various	ctls.	64,350
Nitrate of Soda	tons	480
Oils:		
Coal	cases	65,994
Various	gals.	96,052,931
	cases	39,184
	bbls.	2,481,883
Onions	sx.	62,915
Paints	pkgs.	11,496
Paper	pkgs.	1,370
Paste	ctls.	70
Pearl Barley	ctls.	2,850
Pipe c	pkgs.	180
Potatoes	sx.	31,532
Powder	cases	21,059
	kegs	5,506
Provisions:		
Beef	ctls.	12
Ham and Bacon	ctls.	15,695
Various	ctls.	2,347
Quicksilver	flasks	105
Railroad Ties	No.	76,337
Rice	ctls.	66,512
Rosin	ctls.	742
Salt	tons	10,566
Seed	ctls.	2,137
Shooks	bdls.	20,502
Soap	cases	4,979
Soda	ctls.	15,423
Spirits:		
Brandy	gals.	1,975
Whiskey	gals.	19,950
Various	gals.	6,299
Sugar	ctls.	24,363
Tallow	ctls.	65,512
Tea	ctls.	678
Tin	ctls.	6,974
Tobacco	ctls.	10,082
Treasure		$13,955,535
Wine	gals.	770,385
Wire	coils	356
Value		$55,387,972

EXPORTS BY SEA FROM SAN FRANCISCO TO ATLANTIC PORTS—1912.

Arsenic, crude	ctls.	1,218
Asphaltum	bbls.	46,300
Beeswax	ctls.	56
Boots and Shoes	cases	86
Bone black	ctls.	520
Building Material:		
Lumber	M	95
Various	pkgs.	1,022
Canned Fruits	cases	50,520
Canned Goods	cases	732,817
Casein	ctls.	11,943
Copper Matte	ctls.	94,999
Drugs	cases	50
Dry Fruits:		
Grapes	ctls.	420
Prunes	ctls.	67,411
Raisins	ctls.	118,985
Various	ctls.	43,211
Fish: Salmon	cases	153,878
Glue	ctls.	1,158
Groceries	pkgs.	4,765
Hair	bales	2,497
Hay	tons	20
Herbs	sx.	2,077
Hides	ctls.	1,157
Honey	cases	2,284
Hops	lbs.	420,517
Horns	sx.	2,831
Leather	rolls	912
Leather Scrap	pkgs.	1,131
Machinery	pkgs.	712
Malt	ctls.	4,386
Merchandise	pkgs.	14,484
Metals:		
Lead	ctls.	145,154
Various	ctls.	27,274
Mustard Seed	ctls.	1,319
Nuts	ctls.	26,646
Oils: Various	cases	168
Pearl Barley	ctls.	4,200
Quicksilver	flasks	9,565
Rice	ctls.	92
Shells	sx.	152
Spirits:		
Brandy	gals.	59,740
Whiskey	gals.	1,832
Various	gals.	1,871
Tallow	ctls.	1,227
Tea	ctls.	7,260
Tin Scrap	ctls.	55,495
Tobacco	ctls.	447
Wine	gals.	11,991,348
Wool	ctls.	137,476
Value		$17,891,031.00

IMPORTS OF RULING ARTICLES OF MERCHANDISE BY SEA FROM FOREIGN PORTS AT SAN FRANCISCO FOR YEAR 1912.

Bananas	bchs.	61,428
China Beans	pkgs.	13,393
China Merchandise	pkgs.	535,813
China Oil	pkgs.	50,814
Cement	bbls.	197
Cocoa	bags	8,771
Cocoanuts	M	2,807
Coffee	bags	186,482
Copra	bags	343,993
	tons	2,860
Cordage	pkgs.	12,980
Firebricks	M	1,369
Gunnies	bales	30,355
Hardware	pkgs.	149,084
Hemp	bales	36,228
Hides	pkgs.	3,145
Iron	tons	4,152
	pkgs.	252,992
Jute	bales	12,349
Kopak	bales	7,481
Limes	cs.	15,271
Lard	bbls.	2,410
Matting	rolls	203,704
Nails	kegs	148,018
Nitrate	sx.	239,684
	tons	17,550
Oil	cs.	34,383
	bbls.	299,751
Olive Oil	cs.	56,950
Opium	pkgs.	6
Pig Iron	tons	8,044
Rice	mats	494,068
Salt	bags	25,314
Silk	pkgs.	67,197
Soap	pkgs.	26,105
Spices	pkgs.	12,275
Steel	pkgs.	313,687
	tons	710
Sugar	bags	704,986
Sulphur	bags	191,085
	tons	6,314
Tea	pkgs.	543,435
Tin	ingots	28,301
Vermouth	cs.	32,450
Whiskey	bbls.	2,772

FOREIGN EXPORTS FROM SAN FRANCISCO, YEAR 1912.

	British Columbia	Mexico	Central America & Panama	South America, etc.	Europe	Australia & Pacific Islands	China	Japan	Philippines	Various Oriental Ports
Flour, Bbls	.....	11,251	257,418	47,105	.....	.....	42,296	1,760	12,619	93
Wheat, Ctls	.....	13,784	2,101	26	.....	16,537	.....	.....	.....	.....
Barley, Ctls	.....	116	9,533	118,518	1,830,081	.....	.....	2,501	1,389	.....
Oats, Ctls	.....	.....	.....	.....	35	.....	80	441	.....	.....
Corn, Ctls	.....	.....	55,866	1,265	.....	.....	.....	.....	.....	.....
Onions, Sacks	9,656	3,577	3,061	166	.....	.....	.....	.....	.....	.....
Beans, Ctls	5,356	1,103	11,672	337	.....	6,899	2,088	97	5,268	11
Bran Feed, Ctls	200	554	200	.....	.....	.....	.....	.....	.....	.....
Potatoes, Pkgs	1,780	8,327	9,157	.....	.....	4,219	1,181	.....	525	.....
Hay, Tons	.....	1,600	2,128	10	.....	.....	.....	12	809	.....
Hops, Lbs	21,348	3,004	14,066	3,098	42,726	723,186	30,740	950	7,671	34,441
Building Material—										
Lumber, M Ft	.....	1,434	7,403	6,202	765	15,867	3	55	880	11
Shingles, M	.....	475	12	.....	.....	1,103	.....	.....	.....	.....
Doors, No	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Various Pkgs	65,909	410	261	964	40	43,794	7,596	23,811	4,337	9,255
Brick, M	7	74	19	.....	.....	.....	.....	.....	.....	.....
Lath, M	.....	165	.....	.....	.....	.....	.....	.....	.....	.....
Soda, Ctls	542	815	1,184	100	.....	.....	1,140	11,005	604	.....
Coke, Tons	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Prunes, Ctls	38,279	791	618	438	386,683	11,267	.....	.....	.....	.....
Coffee, Ctls	1,109	3	12	.....	.....	606	1,609	86	7,312	40
Cement, Bbls	177,038	24,531	11,029	2,800	.....	400	.....	.....	.....	.....
Cordage, Pkgs	533	2,339	468	1,267	.....	.....	.....	.....	926	272
Cotton, Bales	.....	.....	.....	.....	.....	.....	15,192	197,459	900	.....
Dry Goods, Pkgs	313	196	305	12	29	284	14	50	7,810	19
Drugs, Pkgs	551	144	57	.....	4	129	394	258	1,675	55
Fruits—										
Raisins, Ctls	45,950	2,551	1,134	463	1,786	46,566	1,044	2,108	4,128	489
Dried Fruit, Ctls	43,049	1,522	1,250	4,463	93,793	8,633	2,867	1,538	765	6,553
Various Pkgs	26,779	18,267	9,163	.....	.....	.....	11,669	716	16,888	1,422

Fish—										
Salmon, Cases	4,305	6,494	9,169	35,522	335,080	93,954	4,889	63	16,113	6,732
Cod, Ctls		159	912	38		607	956	20	106	5
Various Pkgs							10,966	1,732	70	25
Canned Goods, Cases	195,742	8,218	18,312	25,892	951,069	74,682	38,589	4,715	104,162	42,905
Bags, Bls	85	468	220							
Ginseng, Lbs							69,398			
Groceries, Pkgs	21,047	2,362	3,554	1,072	3 694	139	2,826	339	3.429	206
Honey, Cases	1,232		120		4,369		280	75	503	176
Dynamite, Cases		3,600	5,586	2,028						
Fertilizer, Tons	410	642	1,704					50		
Lime, Bbls	480									
Leather, Rolls	557	37	154	12		45	1,639	12,573	1,046	91
Hardware, Pkgs										
Machinery, Pkgs	1,899	1,358	668	711	23	683	285	6,333	957	743
Metals—										
Various Pkgs	3,200	3,652	6,992	278	47,364		778	400	3,423	536
Malt, Ctls	6,311	3,792	6,510	3,594						21
Meals, Ctls	1,164		5						9,704	33
Seeds, Ctls	97	340	163	28	44	1,577				
Arms and Ammunition, Pkgs	64	574	391	113		15	954	145	3,581	126
Oils										
Coal Oil, Cases		2,455	40,484	14,175						
" Gals				5,734,911			14,306,175	74,020,845		
Oils—Cases	4,847	7,260	4,423	716	11	601	337	1,764	1,107	46
Paint, Pkgs	338	294	161	334			295	112	1,966	316
Tallow, Ctls	1,665	5,793	10,789	4,582	32,519		1,164	4,198	2,307	
Tin, Ctls	279									
Paper, Pkgs	161						1,179			
Powder, Kegs		335	1,508	3,794						
" Cases		126	19,276	1,947						
Pearl Barley, Ctls							2,792			
Rosin, Ctls	152	6	278	83						
Tan Bark, Ctls								29,729		
Provisions—										
Bacon and Hams, Pkgs		280	162	13		6	204		13,818	46
Butter, Ctls	1,831	184	11					33		
Wax, Ctls		18	23				11,371	150	1,853	673
Lard, Ctls		2,717	6,378	121		593	364	386	36,993	147
Various Pkgs	106	192	12			2	1,609	73	45	7
Quicksilver, Flasks		40	54	281						
Rice, Ctls	84	568	39,992	4,916		155				
Salt, Tons	9,741		297	5		11	8	20	268	

FOREIGN EXPORTS FROM SAN FRANCISCO YEAR 1912.—Cont'd.

	British Columbia	Mexico	Central America & Panama	South America, etc.	Europe	Australia & Pacific Islands	China	Japan	Philippines	Various Oriental Ports
Soap, Bxs			900	200			781	210	2,203	100
Sugar, Ctls	312	13,917	2,928				1,466	4,803	1,270	360
Paste, Ctls		30								
Shooks, Bdls		6,214	2,668		5,858		1,651			
Oil, Bbls	191,034	111	805,293	1,150,358	130	8,159				
R. R. Ties, No		9,620	250	61,448						
Agricultural Implements	3					261	277	136	713	10
Spirits—										
Brandy, Gals						257				
Whiskey, Gals	1,906		2,773	184		335		315	9,765	
Various, Gals	792	2,987	130	1,500			1,490		6,244	
Borax, Ctls	81	120	558			24	6	4,311	23	
Tea, Lbs		197	173	34						
Tobacco, Ctls	546	3	9	9		13		7,789	1,548	19
Wine, Gals	60,570	50,392	353,334	113,496		2,559	31,690	31,027	25,375	2,409
Boots and Shoes, Cases			62	9		147	181	22	2,822	
Merchandise, Pkgs	19,042	2,710	9,091	1,270			12,623	17,386	28,834	

IMPORTS INTO SAN FRANCISCO FROM INTERIOR CALIFORNIA COAST, OREGON, WASHINGTON AND ALASKA FOR YEAR 1912.

Almonds	sx.	6,131
Apples	bx.	552,346
Bark	cords	15,403
Broomcorn	bdls.	4,558
Butter	ctls.	247,755
Calf Skins	bdls.	1,933
Cheese	ctls.	121,074
Chicory	bbls.	245
Dry Fish	bdls.	141
Eggs	doz.	19,267,574
Furs	bdls.	8
Hides	No.	234,257
	bdls.	58,122
Honey	cs.	8,215
Laths	M	10,342
Leather	rolls	30,903
Lime	bbls.	228,325
Live Stock	No.	124,468
Malt	sx.	60,210
Oil	bbls.	5,870,064
Oranges and Lemons	cs.	295,911
Oysters	sx.	9,465
Paper	reams	319,156
Peas	sx.	3,004
Pelts	No.	226,556
Piles	No.	23,753
Poles	No.	52,042
Posts	No.	113,400
Quicksilver	flasks	12,327
Railroad Ties	No.	105,000
Raisins	cs.	1,323,403
Rice	sx.	3,102
Salt	tons	1,500
Seal Skins	No.	3,764
Shingles	M	82,872
Shooks	bdls.	367,346
Skins	No.	6,297
Stave Bolts	cords	7,650
Sugar	ctls.	2,173,948
Tallow	ctls.	51,568
Wood	cords	3,193
Walnuts	sx.	11,830

IMPORTS INTO SAN FRANCISCO FROM HAWAIIAN ISLANDS.

Year	Sugar, sks.	Coffee, bags.	Hides.	Bananas bunches.	Rice, bags.	Molasses, bbls.	Tallow, bbls.	Canned Pineapples, cases.	Honey, cases.	Wool, sks.
1912	4,428,862	13,459	15,800	218,299	38,131	59,601	368	647,627	5,482	5
1911	4,147,826	17,787	13,104	150,284	45,054	30,450	273	437,724	5,827	.....
1910	3,830,929	15,622	13,563	137,172	54,897	23,534	27	.....	4,637	22
1909	3,701,078	19,035	18,299	138,664	46,578	.....	7	.....	4,722	.....
1908	4,028,152	14,383	15,347	143,878	38,157	.....	219	17,943	5,082	576
1907	2,931,681	8,163	10,773	147,010	31,767	.....	304	.....	4,237	989
1906	4,189,286	9,995	13,124	148,277	26,493	96	372	.....	2,347	931
1905	4,627,088	8,819	11,633	165,138	46,393	4	155	.....	5,624	829

EXPORTS FROM SAN FRANCISCO TO HAWAIIAN ISLANDS—YEAR 1912.

Agricultural Implements	pkgs.	269
Arms and Ammunition	pkgs.	4,007
Bags	bales	1,438
Beer	cs.	2,137
	casks	2,186
	bbls.	463
Boots and Shoes	cs.	5,089
Bran and Feed	ctls.	22,361
Bread	ctls.	13,018
Building Material:		
Bricks	M	1,266
Doors	No.	1,801
Lumber	M	4,518
Shingles	M	1,833
Various	pkgs.	15,963
Butter	ctls.	7,979
Candles	cs.	1,524
Canned Goods	cs.	150,940
Cement	bbls.	135,509
Cigars	cs.	1,407
Coal	tons	152
Coffee	ctls.	859
Cordage	pkgs.	4,886
Drugs	cs.	10,588
Dry Fish:		
Codfish	ctls.	5,765
Dynamite	cs.	864
Dry Fruits:		
Prunes	ctls.	241
Raisins	cs.	1,333
Various	ctls.	2,439
	pkgs.	131,943
Dry Goods	cs.	8,710
Fertilizer	tons	21,205
Fish:		
Salmon	cs.	7,244
	bbls.	4,016
Various	pkgs.	960
Furniture	pkgs.	339

Groceries	pkgs.	20,397
Hardware	pkgs.	4,710
Hay	tons	8,795
Hops	lbs.	18,222
Lard	ctls.	14,480
Leather	rolls	1,585
Lime	bbls.	7,615
Live Stock	No.	822
Machinery	pkgs.	3,601
Malt	ctls.	7,275
Meal	ctls.	294
Merchandise	pkgs.	56,471
Metals:		
Iron	pkgs.	1,025
Lead	ctls.	4,953
Steel	pkgs.	6,297
Various	pkgs.	5,390
Nails	kegs	239
Oils:		
Coal	cs.	185,738
Various	bbls.	1,287,182
	cs.	27,130
Onions	sks.	17,606
Paints	cs.	15,086
Paper	pkgs.	578
Paste	pkgs.	359
Pipe	pkgs.	2,388
Potatoes	sks.	64,900
Powder	cs.	11,899
	kegs	5,768
Provisions:		
Beef	ctls.	27
Ham and Bacon	ctls.	8,414
Various	pkgs.	3,004
Railroad material	pkgs.	529
Railroad ties	No.	44,282
Rice	ctls.	5,142
Salt	tons	1,330
Seed	ctls.	533
Shooks	bdls.	22,267
Soap	cs.	23,981
Soda	ctls.	6,383
Spirits:		
Brandy	gals.	15,306
Whiskey	gals.	40,205
Various	gals.	12,850
Sugar	ctls.	12,732
Tallow	ctls.	436
Tea	lbs.	865
Tin	cases	4,312
Tinplate	cs.	11,932
Tobacco	ctls.	11,654
Treasure	$	27,000
Wine	gals.	914,649
Wire	coils	540
Value		$18,178,418

RECEIPTS OF PRODUCE AT SAN FRANCISCO, FROM ALL SOURCES, 1912

Date	Flour, Qrs.	Wheat Ctls.	Barley Ctls.	Oats Ctls.	Beans Sx.	Corn Ctls.	Rye Ctls.	Bran Sx.	Midd. Sx.	Potatoes Sx.	Onions Sx.	Hay Tons	Straw Tons	Hops Bales	Flax-seed Sx.	Mus-tard Sx.	Wool Sx.
1912																	
January	313,913	277,170	217,617	82,390	49,024	5,155	2,720	69,479	6,593	144,685	14,090	9,119	150	452	6	.....	5,289
February	412,289	219,65	245,228	28,750	19,873	7,900	1,980	48,510	6,355	100,297	8,940	8,569	259	260	.....	500	4,002
March	369,046	242,179	120,909	39,845	64,900	8,255	340	49,632	4,210	132,274	9,922	11,547	60	1,450	.....	.....	1,585
April	504,258	348,709	192,907	28,224	21,285	11,030	1,160	77,311	3,971	77,358	8,265	9,220	95	217	.....	.....	4,801
May	430,836	487,834	236,176	23,576	39,403	10,798	275	35,288	8,019	64,269	16,396	9,976	50	48	.....	.....	7,755
June	445,827	247,403	184,894	10,523	57,468	14,528	865	15,387	5,952	74,036	23,718	8,909	81	239	.....	.....	10,697
July	416,096	259,405	235,270	55,295	26,215	22,225	1,265	63,768	9,110	121,967	19,525	18,441	100	476	.....	.....	6,852
August	441,861	143,549	549,074	41,055	26,210	14,490	130	25,890	6,363	120,144	41,827	24,301	195	257	.....	104	5,064
September	354,481	374,194	541,968	87,170	32,968	5,934	535	38,972	7,424	95,992	38,284	14,038	289	3,186	.....	315	4,498
October	468,353	625,445	692,416	135,168	171,732	7,571	1,915	57,713	7,763	132,323	85,771	10,218	170	2,430	.....	.....	4,014
November	455,989	474,821	581,594	66,767	144,432	8,038	5,225	50,725	9,239	184,185	26,913	9,007	90	1,800	.....	93	2,989
December	494,256	490,142	714,336	74,547	57,615	11,914	2,240	27,493	8,313	112,514	17,687	8,480	103	3,273	427	1,353	971
Tot'l 1912	5,107,155	4,180,569	4,512,389	673,310	711,125	127,838	18,650	560,168	75,142	1,360,044	311,338	142,825	1,642	14,088	433	2,365	58,517
1911-1912	4,727,648	3,514,004	4,414,925	683,706	921,556	108,026	20,635	584,369	85,045	1,442,979	357,703	147,483	1,305	17,050	2,848	7,169	52,120
1910-1911	3,835,088	3,139,671	7,813,331	661,865	844,426	102,710	11,610	405,953	71,661	1,427,299	253,400	184,594	1,081	15,852	3,192	1,497	56,087
1909-1910	3,351,972	3,129,343	3,293,432	507,035	771,211	97,546	5,240	393,864	80,642	1,384,783	238,923	168,220	1,870	12,448	2,497	2,037	38,978
1908-1909	3,631,787	2,735,312	3,912,439	421,713	721,339	49,458	13,724	362,358	104,544	1,337,928	224,213	164,648	2,079	20,854	2,166	1,783	66,180
1907-1908	3,542,579	2,341,035	2,705,771	601,909	401,871	45,876	12,920	538,351	113,965	1,118,449	146,653	193,676	517	8,727	3,473	2,174	41,802
1906-1907	4,122,717	1,027,839	4,445,484	648,211	624,721	46,891	13,444	819,822	132,262	1,041,523	182,131	200,349	1,467	11,236	2,746	168	38,085
1905-1906	3,262,446	3,710,837	2,907,478	587,539	748,186	125,768	38,710	691,573	116,069	1,214,951	186,955	165,384	.....	44,090	12,988	2,704	33,272
1904-1905	4,749,728	2,840,918	3,591,523	866,414	666,348	324,588	57,745	463,428	136,071	1,323,218	159,037	179,622	.....	39,755	50,722	2,462	79,878
1903-1904	5,566,942	2,512,618	5,584,581	871,712	729,319	166,496	61,636	611,116	149,317	1,368,201	168,561	176,517	.....	28,458	19,391	4,556	73,845
1902-1903	6,062,804	6,242,859	5,000,500	777,774	704,837	139,145	187,428	606,078	204,596	1,344,710	229,666	166,437	.....	15,558	130,992	5,340	71,234
1901-1902	6,791,385	10,310,905	6,332,321	842,410	718,772	151,267	313,188	568,959	165,131	1,390,204	223,444	149,464	.....	8,942	99,515	9,772	76,258
1900-1901	6,627,493	8,918,523	3,731,347	661,139	543,100	139,132	181,368	651,162	148,379	1,530,090	184,667	162,892	.....	8,551	60,804	6,457	58,947
1899-1900	6,081,975	7,044,322	5,255,785	823,169	366,220	171,059	106,945	671,704	147,664	1,255,259	175,067	159,102	.....	11,707	36,864	21,683	61,533
1898-1899	5,654,585	3,164,712	1,386,643	638,139	407,566	202,251	38,486	547,414	130,868	1,142,712	198,662	133,560	.....	11,578	16,017	5,629	82,832
1897-1898	5,301,903	10,325,677	4,465,125	689,072	569,243	386,726	48,449	645,461	134,074	1,137,938	127,965	133,597	.....	8,857	23,360	10,886	77,935
1896-1897	5,840,683	10,851,287	5,081,697	545,848	588,138	342,537	222,937	592,135	.....	1,138,322	143,200	145,487	.....	7,738	35,565	36,770	89,439
1895-1896	5,452,574	10,566,180	3,419,104	666,254	536,147	258,606	101,589	590,290	.....	1,034,964	140,107	140,386	.....	11,863	100,358	58,126	76,945
1894-1895	5,162,439	11,315,592	1,850,518	701,051	493,883	208,821	44,860	557,707	.....	1,147,652	137,065	145,033	.....	13,298	45,990	53,945	98,243
1893-1894	4,213,022	10,712,778	3,628,110	644,752	535,967	374,536	41,102	.....	.....	1,308,700	.....	129,704	.....	8,725	10,578	69,769	92,143
1892-1893	5,512,921	12,155,559	3,386,821	594,383	577,315	312,447	109,779	.....	.....	1,277,067	.....	129,206	.....	8,913	19,388	27,864	99,420
1891-1892	5,190,045	13,813,751	2,611,056	575,211	500,780	319,920	121,238	.....	.....	1,199,788	.....	127,418	.....	9,714	66,108	21,481	94,641

CEREAL STATISTICS

CLEARANCES FROM SAN FRANCISCO

	Flour bbls.	Wheat ctls.	Barley ctls.	Oats ctls.	Corn ctls.	Rye ctls.
1911						
July	30,784	226	152,710	86	224	----------
August	29,325	16,114	820,104	122	168	----------
September	30,705	138,707	288,677	479	32	----------
October	33,141	67,243	287,698	140	32	----------
November	31,992	77,459	534,751	50	2,822	----------
December	31,884	184	307,657	300	1,393	----------
Total for six months	187,831	299,933	2,390,697	1,177	4,171	----------
1912						
January	32,518	7,189	140,894	185	----------	----------
February	39,405	145	153,781	----------	176	----------
March	38,669	5	54,275	255	127	----------
April	25,962	262	127,050	40	2,997	----------
May	38,812	7,190	50,301	----------	4,385	70
June	28,046	280	76,686	----------	18,593	----------
Total for six months	203,412	15,071	602,987	480	26,278	70
July	39,017	217	93,299	1,340	18,189	----------
August	58,276	2,388	323,009	107	10,890	----------
September	25,994	220	460,403	----------	2,494	----------
October	34,820	465	445,170	32,120	1,599	----------
November	25,592	241	400,158	4,650	645	----------
December	35,984	540	547,462	109	----------	----------
Total for six months	219,683	4,071	2,269,501	38,326	33,817	----------
Total 1911-12	391,243	315,004	2,993,684	1,657	30,449	70
Total 1910-11	278,559	209,293	5,962,292	88,334	51,896	----------
Total 1909-10	220,795	29,088	1,983,610	1,714	9,222	7
Total 1908-09	234,529	16,548	2,740,759	3,044	9,813	----------
Total 1907-08	305,826	518,510	1,782,104	4,701	6,172	1,222
Total 1906-07	455,967	254,353	3,237,397	5,212	18,061	16
Total 1905-06	540,669	262,176	1,418,790	23,427	43,788	
Total 1904-05	763,068	808,541	2,030,016	114,886	191,453	478
Total 1903-04	879,366	1,082,572	4,260,551	37,029	18,989	603
Total 1902-03	988,864	5,544,851	3,544,859	56,626	51,139	120,852
Total 1901-02	178,235	9,671,107	4,281,182	145,827	14,718	258,963
Total 1900-01	91,684	7,990,186	2,119,292	125,449	4,266	117,710
Total 1899-00	5,783	6,519,771	*4,251,236	220,795	20,220	54,215
Total 1898-99	9,416	2,285,862		23,905	46,339	
Total 1897-98	4,266	10,056,558		22,440		59
Total 1896-97	19,103	10,092,012				166,501

*Includes 248,100 centals by rail.

HIGHEST AND LOWEST PRICES NO. 1 FEED BARLEY. SELLER MAY 1912.

Day	July		August		September		October		November		December		January		February		March		April		May	
	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.
1	Closed		.....		1 72	1 72	Sunday		2 00	1 99½	1 90	1 88	Holiday		1 82½	1 81½	1 79	1 78½	1 88½	1 87½	1 87½	1 87
2	Sunday		.....		1 70½	1 70½	1 82½	1 82	1 98¼	1 97	1 87	1 86	.....		1 82½	1 80½	1 83	1 82	.....		1 86	1 85
3	Closed		1 48	1 47½	Sunday		1 83½	1 81¾	1 96½	1 94¾	Sunday		2 02	2 00¾	1 79¾	1 78¾	Sunday		1 84	1 82⅝	.....	
4	Holiday		.....	.....	Holiday		1 82	1 82	1 97½	1 97⅜	.....		1 96¾	1 96½	Sunday		1 82	1 80¼	1 83½	1 83½	.....	
5	.....		.....	.....	.....	.....	1 79	1 79	Sunday		1 84	1 82¾	2 00	1 97½	1 84	1 80	1 80½	1 79	1 85½	1 85	Sunday	
6	.....		Sunday		1 68	1 68	1 83¼	1 80	2 00⅛	1 98	1 83	1 80	2 01¼	2 01	1 85	1 85	.....		1 85½	1 85	.....	
7	.....		1 53	1 52½	1 68	1 67⅞	.....		.....		1 79	1 76⅜	Sunday		1 86	1 85	1 87½	1 85	Sunday		.....	
8	.....		1 54½	1 54½	1 70	1 69½	Sunday		2 05½	2 02½	1 84	1 77	2 02¼	2 02½	1 90	1 89¾	1 87½	1 86	1 87	1 85⅝	.....	
9	Sunday		1 58	1 57⅝	Holiday		.....		2 07½	2 06	1 85	1 84½	2 05	2 02½	1 86½	1 86½	1 87	1 87	1 87	1 86	.....	
10	.....		1 60	1 58½	Sunday		Holiday		2 07½	2 04½	Sunday		2 02½	2 02½	1 90	1 87½	Sunday		1 85¼	1 85	.....	
11	.....		1 64	1 62½	1 71¾	1 71½	1 80½	1 80½	2 06	2 04	1 88½	1 86½	2 01½	2 01½	Sunday		1 87½	1 86¼	1 87	1 87	.....	
12	.....		1 64½	1 64½	.....		Holiday		Sunday		1 87	1 86	2 03¼	2 03	Holiday		.....		1 89	1 89	Sunday	
13	.....		Sunday		.....		.....		2 05	2 02	1 85	1 84½	2 03⅝	2 03⅜	.....		1 85	1 85	1 90	1 89½	.....	
14	.....		1 63½	1 62	1 71¼	1 71¼	.....		2 03¾	2 01½	.....		Sunday		1 90	1 90	.....		Sunday		Holiday	
15	.....		.....	.....	1 73	1 72	Sunday		2 00	1 99½	1 85	1 87	2 02	2 01	1 88¾	1 87½	1 83½	1 82½	1 93	1 91½	1 93½	1 93½
16	Sunday		1 62⅝	1 61½	.....		1 86½	1 83¾	2 00	1 99	1 88½	1 87½	1 98	1 97	1 86½	1 86½	1 84½	1 84	.....		.....	
17	.....		1 63½	1 63½	Sunday		1 88¾	1 87½	1 98½	1 98	Sunday		1 97	1 95½	1 85¼	1 84⅞	Sunday		1 92½	1 92	.....	
18	.....		1 68½	1 65	1 75	1 74¾	1 89¾	1 88¾	2 03½	2 01	1 90	1 90	1 95	1 92½	Sunday		1 85½	1 85⅛	1 91¼	1 91½	1 89½	1 88
19	.....		1 70	1 70	.....		1 91½	1 90½	Sunday		1 91½	1 91	1 95	1 94	1 90	1 89	1 86¼	1 85½	1 89	1 89	Sunday	
20	.....		Sunday		1 74½	1 74½	1 95½	1 93½	2 04½	2 04½	1 94¼	1 94	1 95⅛	1 95	1 88¼	1 85¼	.....		1 88½	1 88	1 88	1 88
21	.....		1 69¼	1 69½	1 74⅞	1 74⅝	1 97⅞	1 96½	2 09	2 05	.....		Sunday		1 88	1 86⅞	1 84	1 84	Sunday		1 85	1 84
22	.....		.....	.....	.....	.....	Sunday		2 02	2 02	Sunday		1 95	1 92¼	Holiday		1 83	1 82¼	1 86	1 84	.....	
23	Sunday		.....	.....	.....	.....	.....		2 04½	2 04	1 97½	1 95¾	1 91	1 89	1 88	1 86¼	.....		1 84½	1 84	1 88	1 87½
24	.....		.....	.....	Sunday		2 00¼	1 99	2 02½	2 00	.....		1 87⅝	1 87¼	1 84	1 83	Sunday		1 83½	1 83¼	1 90	1 86
25	.....		1 63	1 63	1 81	1 81	.....		1 99½	1 99½	.....		1 87¼	1 85½	Sunday		1 83	1 82¼	1 84¾	1 84	1 86	1 86
26	.....		.....	.....	1 83¼	1 82½	.....		Sunday		2 00⅝	2 00	1 88	1 86⅜	1 84	1 83½	1 84	1 83⅝	1 90½	1 87½	Sunday	
27	1 43¾	1 43¾	Sunday		1 83⅝	1 83	1 99	1 98½	1 98	1 92½	1 98	1 94	1 90	1 89	1 81	1 80½	1 85	1 85	.....		1 88	1 87
28	.....		1 71	1 71	.....		.....		1 93	1 92	1 97	1 96½	Sunday		1 82	1 80½	1 87	1 85⅜	Sunday		1 89	1 87½
29	.....		.....	.....	.....	.....	Sunday		1 91½	1 90½	Sunday		1 90½	1 90¼	1 80	1 79½	.....		.....		2 08¾	1 88
30	Sunday		1 72⅝	1 71⅝	1 81	1 80½	2 00	1 99	Holiday		1 97	1 97	1 89½	1 89	.....		1 87	1 86¾	1 88	1 88	Holiday	
31	.....		1 71½	1 71½	.....		.....		.....		.....		.....		.....		.....		.....		2 00	2 00
	For Month		For Month		For Month		For Month		For Month		For Month		For Month		For Month		For Month		For Month		For Month	
	.....		1 72⅝	1 47½	1 83⅝	1 67⅞	2 00¼	1 79	2 07½	1 90½	2 00⅜	1 82¾	2 05	1 85¼	1 90	1 78⅝	1 87½	1 78½	1 93	1 83¼	2 08¾	1 84

HIGHEST AND LOWEST PRICES NO. 1 FEED BARLEY.
SELLER MAY 1913.

Day	June High.	June Low.	July High.	July Low.	August High.	August Low.	September High.	September Low.	October High.	October Low.	November High.	November Low.	December High.	December Low.
1	.....	.....	1 46¾	1 46	1 25⅝	1 24	Sunday		1 44¼	1 43¾	.....	.....	Sunday	
2	Sunday		1 45	1 43⅝	1 21⅝	1 20¼	Holiday		1 44⅝	1 42½	Closed		1 40	1 40
3	1 62½	1 62	.....	.....	1 21½	1 20⅜	Holiday		1 46¼	1 44	Sunday		1 40¼	1 39½
4	1 59¾	1 59⅜	Holiday		Sunday		1 50	1 47	.....	.....	1 48⅝	1 47⅜	1 40	1 39½
5	.....	.....	Closed		1 23¼	1 23	1 50¼	1 49½	.....	.....	Holiday		1 39½	1 39
6	1 55	1 55	Closed		1 21½	1 21	1 50⅜	1 50⅛	Sunday		1 47	1 46	1 35½	1 35
7	.....	.....	Sunday		1 24	1 24	1 48	1 47¼	1 43⅜	1 43⅜	1 47⅜	1 47½	1 36⅜	1 35⅞
8	.....	.....	1 40	1 39⅜	1 26¼	1 26¼	Sunday		1 44	1 44	1 46¼	1 46½	Sunday	
9	Sunday		1 41¼	1 41⅜	1 29	1 29	Holiday		1 46⅜	1 44½	.....	.....	1 36¼	1 35
10	1 52¾	1 52⅜	.....	.....	.....	.....	1 50½	1 49	1 47½	1 47	Sunday		1 36	1 35⅜
11	1 52¼	1 52⅜	1 44½	1 44	Sunday		1 48½	1 47	1 49	1 47½	1 49	1 47	1 35	1 32
12	.....	.....	1 42⅜	1 42¼	1 31½	1 31½	1 48¼	1 48⅜	Holiday		.....	.....	1 32½	1 30½
13	1 52	1 52	.....	.....	1 28½	1 26½	1 48	1 47½	Sunday		1 47½	1 47½	1 32½	1 30½
14	1 50⅝	1 50⅛	Sunday		1 25¼	1 24½	1 48	1 47⅜	1 51¼	1 50	1 46⅞	1 46⅞	1 30⅜	1 30
15	1 49¼	1 49¼	1 38¼	1 38¼	1 26½	1 26½	Sunday		1 51¼	1 50½	1 46	1 46	Sunday	
16	Sunday		1 40	1 40	1 30	1 30	.....	.....	1 52¼	1 51½	1 47	1 47	1 30⅜	1 28½
17	1 49	1 48½	1 39	1 38⅜	1 31¼	1 31	1 45½	1 45½	1 53½	1 53	Sunday		1 28½	1 28¼
18	1 49⅜	1 49½	1 38	1 37⅞	Sunday		1 42⅜	1 41¼	1 53⅜	1 53	1 48	1 46⅜	1 31	1 31
19	1 52¼	1 52¼	.....	.....	1 32⅜	1 32	1 42	1 41	1 53	1 52½	1 46	1 45⅜	1 34	1 32
20	1 53¼	1 52	1 37¼	1 37¼	1 31½	1 31½	1 40	1 39¼	Sunday		1 45½	1 45⅜	1 37	1 33
21	1 54	1 53⅞	Sunday		1 37½	1 32	1 39½	1 39⅜	1 53⅜	1 52	1 46	1 46	1 31½	1 31
22	.....	.....	1 35¾	1 35½	1 35	1 35	Sunday		1 51½	1 50½	1 43	1 42½	Sunday	
23	Sunday		.....	.....	1 36	1 35¼	1 42½	1 40½	1 49½	1 49½	1 41½	1 39½	1 30¼	1 30¼
24	1 52	1 51½	1 35	1 35	1 38⅞	1 48½	1 45½	1 44¼	1 48½	1 48½	Sunday		1 29¼	1 28½
25	.....	.....	.....	.....	Sunday		1 43¼	1 42½	.....	.....	1 42	1 41½	Holiday	
26	.....	.....	1 33	1 32½	1 41¼	1 39¾	1 42½	1 40¾	1 48	1 48	1 45	1 43¼	1 30⅜	1 30¼
27	1 51¼	1 51¼	.....	.....	1 43	1 43	1 40½	1 39½	Sunday		1 43½	1 43½	1 31¼	1 30½
28	.....	.....	Sunday		.....	.....	1 40	1 39¾	1 48¼	1 47½	Holiday		Sunday	
29	1 49	1 49	1 31½	1 31¼	1 47½	1 46⅝	Sunday		1 50½	1 50½	1 42	1 39	1 32	1 31⅜
30	Sunday		1 31½	1 30⅜	1 50	1 47½	1 43	1 42	1 51⅜	1 51¼	1 40⅜	1 39⅛	1 31½	1 31½
31	.....	.....	1 28⅜	1 28⅜	1 49½	1 48½	.....	.....	1 50½	1 50½	.....	.....	1 32	1 31½
	For Month		For Month		For Month		For Month		For Month		For Month		For Month	
	1 62½	1 48¼	1 46¾	1 28¾	1 50	1 20¼	1 50⅜	1 39¼	1 53⅜	1 42½	1 49	1 39	1 40¼	1 28¼

HIGHEST AND LOWEST PRICES NO. 1 FEED BARLEY.
SELLER DECEMBER 1912.

Day	January High.	January Low.	February High.	February Low.	March High.	March Low.	April High.	April Low.	May High.	May Low.	June High.	June Low.
1	Holiday		1 44	1 44	1 50	1 48¾	1 55⅞	1 54½	1 57⅛	1 56⅞	.....	.....
2	.....	.....	1 45	1 45	1 53½	1 53	1 52⅜	1 50½	1 58¼	1 58	Sunday	
3	.....	.....	1 44⅞	1 44⅞	Sunday		1 51⅜	1 51⅜	1 59¼	1 59¼	1 56⅜	1 56⅛
4	.....	.....	Sunday		1 51½	1 50	1 54⅜	1 54	1 60	1 59½	1 55¼	1 52⅞
5	.....	.....	1 48¼	1 47½	1 48⅞	1 47⅜	1 55¼	1 54	Sunday		1 50⅜	1 49
6	.....	.....	1 47	1 46½	1 48⅛	1 46⅜	1 55½	1 55	1 61½	1 61	1 50¼	1 50
7	Sunday		.....	.....	1 51	1 50½	Sunday		1 61½	1 60	1 50½	1 49½
8	.....	.....	1 47	1 46½	1 52½	1 52½	1 56½	1 55⅞	1 60⅜	1 60	1 49	1 47⅜
9	.....	.....	1 45⅜	1 45¼	1 52⅜	1 52½	1 54½	1 53	1 60⅜	1 60¼	Sunday	
10	1 45	1 45	1 47	1 47	Sunday		1 52	1 51	.....	.....	1 47½	1 47
11	.....	.....	Sunday		1 51½	1 50	1 53¼	1 50½	1 61⅜	1 61	1 48⅜	1 48
12	.....	.....	Holiday		1 48¼	1 47½	1 55	1 54⅜	Sunday		1 48	1 48
13	.....	.....	1 46¼	1 45	1 48⅜	1 48¼	1 53	1 53	1 65¼	1 62½	1 47⅜	1 47
14	Sunday		.....	.....	1 49½	1 48	Sunday		Holiday		1 45⅝	1 44⅜
15	.....	.....	1 47	1 47	1 46½	1 45	1 56	1 55	1 67	1 66	1 44½	1 44
16	.....	.....	1 46	1 46	1 46	1 45½	1 57	1 55	1 67¼	1 66⅜	Sunday	
17	.....	.....	1 46⅜	1 46	Sunday		1 57⅜	1 56½	1 65	1 64⅛	1 44⅜	1 43½
18	1 42½	1 42⅜	Sunday		1 48½	1 47	1 59	1 58½	1 63⅜	1 63	1 45	1 44½
19	1 40½	1 40	1 50⅜	1 49⅜	1 48½	1 47⅛	1 59½	1 58½	Sunday		1 47	1 45
20	.....	.....	1 50½	1 50	1 48⅜	1 47⅜	1 59	1 58¾	1 60	1 57⅞	1 47½	1 47
21	Sunday		1 52⅜	1 52	1 50	1 48⅜	Sunday		1 58½	1 57⅜	1 49⅜	1 48
22	.....	.....	Holiday		1 48½	1 48	1 58½	1 58	1 59⅜	1 58	1 49	1 47½
23	.....	.....	1 57	1 55	.....	.....	1 56⅞	1 56⅜	1 59½	1 59	Sunday	
24	.....	.....	1 57½	1 56½	Sunday		1 56½	1 56⅜	1 59½	1 58¼	1 47	1 46½
25	1 40	1 40	Sunday		1 49½	1 48½	1 57½	1 57½	1 57½	1 56⅜	1 47¼	1 46½
26	.....	.....	1 59½	1 57	1 50⅜	1 50½	1 58⅜	1 57	Sunday		1 46⅞	1 45
27	1 47½	1 47½	1 58⅜	1 56⅜	1 51⅜	1 50⅜	.....	.....	1 58½	1 57	1 46½	1 45¼
28	Sunday		1 57⅜	1 55	1 52¼	1 51⅜	Sunday		1 59⅜	1 58⅜	1 46	1 45⅜
29	.....	.....	1 52½	1 50⅞	1 53	1 52½	1 57¼	1 57	1 59¼	1 59¼	1 45	1 43¾
30	.....	.....	.....	.....	1 54	1 53⅜	1 56½	1 56½	Holiday		Sunday	
31	.....	.....	.....	.....	Sunday		.....	.....	1 59½	1 58¼	.....	.....
	For Month		For Month		For Month		For Month		For Month		For Month	
	1 47½	1 40	1 59½	1 44	1 54	1 45	1 59½	1 50½	1 67¼	1 56½	1 56⅜	1 43½

HIGHEST AND LOWEST PRICES NO. 1 FEED BARLEY
SELLER DECEMBER 1912

Day	July		August		September		October		November		December	
	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.
1	1 43	1 41½	1 19¾	1 17½	Sunday		1 40½	1 39	.....		Sunday	
2	1 40¼	1 38½	1 16¼	1 14¼	Holiday		1 40¾	1 38	Closed		.....	
3	1 38⅝	1 38	1 19	1 13¾	Holiday		1 43¼	1 41½	Sunday		1 44	1 44
4	Holiday		Sunday		1 46¼	1 42½	1 41½	1 41¼	1 48¼	1 47½	.....	
5	Closed		1 17½	1 16⅛	1 47	1 45⅜	1 42	1 41	Holiday		1 44⅛	1 43½
6	Closed		1 15⅛	1 14½	1 47½	1 46½	Sunday		1 46½	1 45	1 40	1 40
7	Sunday		1 18	1 17½	1 46	1 43½	1 42	1 41¼	1 46	1 45	1 37½	1 36⅜
8	1 36	1 35	1 21½	1 19⅜	Sunday		1 42⅜	1 42⅜	1 45½	1 44½	Sunday	
9	1 37½	1 35½	1 21	1 20⅜	Holiday		1 44⅞	1 42⅜	.....		1 37⅞	1 35
10	1 38¾	1 37½	1 25½	1 23	1 48	1 46	1 46	1 44⅜	Sunday		1 36	1 35
11	1 40	1 39½	Sunday		1 45½	1 43⅜	1 46½	1 45½	1 48½	1 45½	1 35	1 35
12	1 39	1 36½	1 23⅜	1 23	1 46	1 45	Holiday		1 48½	1 48½	.....	
13	1 37	1 36½	1 23	1 19⅜	1 45½	1 44½	Sunday		1 47⅜	1 47⅜	.....	
14	Sunday		1 19½	1 18	1 44½	1 44½	1 47	1 46	.....		1 39⅜	1 39
15	1 35½	1 34½	1 20⅜	1 20½	Sunday		1 47½	1 46½	1 46⅝	1 46⅛	Sunday	
16	1 36½	1 35½	1 24½	1 23½	1 43¼	1 41	1 48½	1 48	1 48	1 48	1 42½	1 39½
17	1 35	1 34½	1 20¼	1 25	1 41	1 39½	1 49½	1 49	Sunday		1 42½	1 42⅜
18	1 34⅛	1 33½	Sunday		1 39	1 38½	1 50	1 49⅜	1 48	1 47	1 45	1 45
19	1 34	1 33½	1 28⅜	1 26	1 37½	1 37	1 50½	1 50	1 47	1 47	1 50	1 50
20	1 33½	1 32⅜	1 29⅜	1 26	.....		Sunday		1 46⅜	1 46	1 45	1 45
21	Sunday		1 31	1 26½	Sunday		1 50⅜	1 49⅜	1 44	1 44	Sunday	
22	1 31⅜	1 30⅜	1 30½	1 29	1 39¾	1 38	1 49⅛	1 49	1 45½	1 45½	.....	
23	1 32	1 31½	1 32½	1 30	1 44	1 40½	1 50	1 49⅜	1 47¼	1 47	1 42	1 41⅜
24	1 31	1 29½	1 33½	1 32	1 41	1 40⅜	1 49¼	1 48½	Sunday		1 39⅜	1 35⅝
25	1 28½	1 27⅜	Sunday		1 39⅜	1 38½	1 49	1 49	1 48	1 48	Holiday	
26	1 28	1 27	1 35	1 33⅞	1 37½	1 36½	1 47½	1 47½	1 48½	1 47⅜	.....	
27	1 28	1 28	1 37½	1 36⅜	1 37½	1 36½	Sunday		.....		1 38	1 36½
28	Sunday		1 38⅜	1 37½	Sunday		1 48½	1 47½	Holiday		Sunday	
29	1 25½	1 25	1 41⅛	1 40	1 36⅜	1 36⅜	1 50⅜	1 49	1 47	1 46¼	1 38	1 38
30	1 25½	1 25	1 44½	1 43	1 39½	1 37	1 51⅜	1 50	1 44	1 44	.....	
31	1 24½	1 20½	1 45	1 43	.....		.....		.....		.....	
	For Month		For Month		For Month		For Month		For Month		For Month	
	1 43	1 20½	1 45	1 13¼	1 48	1 36½	1 51⅜	1 38	1 48½	1 44	1 50	1 35

PRICES CASH GRAIN IN SAN FRANCISCO

WHEAT				BARLEY			
Month	Average	High.	Low.	Month	Average	High.	Low.
January	1 51½	1 52⅜	1 50	January	1 91¾	1 95	1 87½
February	1 54⅜	1 57½	1 51½	February	1 88⅜	1 92½	1 85
March	1 58⅜	1 62½	1 55	March	1 83¾	1 87½	1 80
April	1 76⅜	1 90	1 63¼	April	1 91¼	1 95	1 87½
May	1 82½	1 90	1 75	May	1 85⅝	1 92½	1 78½
June	1 67½	1 75	1 60	June	1 62½	1 71½	1 52½
July	1 61¼	1 65	1 57½	July	1 36¼	1 47½	1 25
August	1 52½	1 57½	1 47½	August	1 30	1 45	1 15
September	1 47½	1 52½	1 42½	September	1 45	1 50	1 40
October	1 46¼	1 50	1 42½	October	1 46¼	1 52½	1 40
November	1 46¼	1 50	1 42½	November	1 47¼	1 52	1 42
December	1 42½	1 45	1 40	December	1 41¼	1 47½	1 35½
For Year	1 57½	1 90	1 40	For Year	1 62⅜	1 95	1 15

IMPORTS INTO SAN FRANCISCO BY SEA, 1912

From Oregon and Washington

Date	Flour Qrs.	Wheat Ctls.	Barley Ctls.	Oats Ctls.	Beans Sx.	Corn Ctls.	Rye Ctls.	Bran Sx.	Middlings Sx	Potatoes Sx.	Onions Sx.	Hops Bales	Flaxseed Sx.	Wool Sx.
January	242,529	219,765	.....	61,720	.....	.....	2,420	60,802	2,739	5,370	300	.....	.....	5
February	311,115	143,760	.....	10,950	500	.....	1,080	43,370	1,895	9,331	300	.....	.....	.....
March	385,211	184,969	2,185	16,650	.....	.....	.....	49,968	2,725	25,566	362	.....	.....	.....
April	356,193	277,270	.....	11,730	.....	.....	1,070	71,647	1,891	8,591	110	.....	.....	.....
May	337,684	451,605	.....	7,945	.....	.....	.....	32,915	4,889	5,478	.....	.....	.....	56
June	309,280	234,800	.....	.....	.....	.....	.....	13,265	2,127	12,346	.....	.....	.....	.....
Total for 6 months	1,942,012	1,512,169	2,185	108,995	500	.....	4,570	271,967	16,266	66,682	1,072	.....	.....	61
July	390,580	236,035	.....	5,095	.....	.....	.....	59,423	5,635	.....	.....	.....	.....	.....
August	312,372	113,845	.....	2,910	.....	520	130	14,370	2,085	1,140	.....	.....	.....	.....
September	264,189	320,198	.....	13,541	.....	640	.....	35,305	5,312	.....	.....	.....	.....	41
October	323,461	588,376	48,680	59,730	.....	.....	540	56,338	4,262	50	.....	200	.....	11
November	354,692	434,579	66,824	39,852	.....	.....	3,950	47,295	5,542	1,418	.....	.....	.....	2
December	357,442	444,320	287,326	30,088	.....	4,117	2,175	21,731	5,368	1,254	.....	.....	427	46
Total for 6 months	2,002,736	2,137,353	402,830	151,216	.....	5,277	6,795	234,462	28,204	3,862	.....	200	427	100
Total for year	3,944,748	3,649,522	405,015	260,211	500	5,277	11,365	506,429	44,470	70,544	1,072	200	427	161
Totals 1911-12	3,546,758	2,631,807	2,780	230,670	4,112	.....	6,065	584,018	39,016	69,979	1,072	.....	928	261
Totals 1910-11	2,577,560	2,423,455	660	38,654	4,856	.....	965	370,839	34,464	39,006	45	487	768	2,376
Totals 1909-10	2,052,780	2,865,080	855	179,264	.....	.....	545	266,748	29,381	31,265	1,018	327	1,184	570
Totals 1908-09	2,170,936	2,482,044	116,361	99,317	.....	.....	.....	.....	.....	18,142	.....	.....	1,870	604
Totals 1907-08	1,678,511	1,513,260	286,909	318,571	.....	.....	.....	.....	.....	28,810	.....	.....	3,473	1,422
Totals 1906-07	1,619,596	385,272	20,532	208,236	.....	.....	.....	.....	.....	74,218	.....	.....	2,746	827
Totals 1905-06	1,417,713	3,143,941	13,477	165,785	.....	.....	.....	.....	.....	88,976	.....	.....	12,769	977
Totals 1904-05	1,615,196	1,287,353	38,717	289,848	.....	.....	.....	.....	.....	100,200	.....	.....	44,522	1,187
Totals 1903-04	1,527,800	834,213	97,818	233,526	.....	.....	.....	.....	.....	233,526	.....	.....	13,919	1,302
Totals 1902-03	1,273,524	584,356	41,650	229,746	.....	.....	.....	.....	.....	175,440	.....	.....	122,997	1,894
Totals 1901-02	1,305,533	4,525	789	169,735	.....	.....	.....	.....	.....	262,894	.....	.....	94,656	2,581
Totals 1900-01	1,605,097	32,935	.....	154,677	.....	.....	.....	.....	.....	174,279	.....	.....	58,820	2,201
Totals 1899-00	1,572,890	201,697	80	233,635	.....	.....	.....	.....	.....	236,690	.....	.....	29,751	6,917
Totals 1898-99	1,643,868	964,858	548,380	533,492	.....	.....	.....	.....	.....	205,100	.....	.....	12,086	6,224
Totals 1897-98	1,453,240	1,209,382	251,471	519,491	.....	.....	.....	.....	.....	225,692	.....	.....	20,434	9,100
Totals 1896-97	1,261,117	575,282	.....	320,078	.....	.....	.....	.....	.....	139,818	.....	.....	11,423	11,993
Totals 1895-96	1,075,038	466,136	69,466	509,944	.....	.....	.....	.....	.....	266,149	.....	.....	93,188	4,902
Totals 1894-95	1,282,101	1,542,748	416,515	515,545	.....	.....	.....	.....	.....	212,540	.....	.....	44,145	8,588
Totals 1893-94	677,588	1,141,993	102,970	388,598	.....	.....	.....	.....	.....	106,053	.....	.....	8,516	12,250
Totals 1892-93	494,703	1,225,844	1,828	284,102	.....	.....	.....	.....	.....	231,164	.....	.....	18,060	10,073

EXPORTS FROM SAN FRANCISCO WITH DESTINATION.

WHEAT.

YEAR	Ports of Call	U. K. Direct	Contin'nt of Europe	South America	Australia	South Africa	India	Miscellaneous	Japan	Total
1911-12	276,377	15,154	---	5,601	---	---	---	17,872	---	315,004
1910-11	191,412	13,649	---	---	---	---	---	4,232	---	209,293
1909-10	---	24,350	---	---	---	---	---	4,738	---	29,088
1908-09	---	13,515	---	---	---	---	---	3,033	---	16,548
1907-08	361,026	151,520	---	---	---	---	---	5,964	---	518,510
1906-07	82,036	138,620	24,823	---	---	---	---	8,874	---	254,353
1905-06	204,879	35,739	---	---	---	---	---	21,558	---	262,176
1904-05	746,442	41,126	---	---	---	---	---	20,973	---	808,541
1903-04	850,806	166,080	25,760	12,988	---	---	---	17,728	9,210	1,082,572
1902-03	2,352,438	349,346	23,610	19,481	1,726,315	740,489	---	41,172	---	5,252,851
1901-02	8,447,826	630,525	227,426	182,197	18,257	144,443	---	20,433	---	9,671,107
1900-01	6,858,148	458,007	113,699	547,354	---	---	---	12,978	---	7,990,186
1899-1900	5,750,295	303,149	---	244,651	---	189,935	---	31,741	---	6,519,771
1898-99	1,619,756	408,091	---	---	---	240,223	---	17,792	---	2,285,862
1897-98	7,350,098	1,183,578	172,532	374,890	102,252	---	---	21,637	---	10,056,558
1896-97	6,292,496	1,372,375	---	---	892,151	1,011,265	480,947	42,778	---	10,092,012
1895-96	6,027,736	2,372,961	---	---	1,071,940	453,726	---	31,594	---	10,457,957
1894-95	7,775,806	1,764,532	---	---	---	---	---	58,285	---	9,598,623
1893-94	6,243,545	2,739,758	179,073	---	---	---	---	21,711	---	9,184,087

BARLEY.

YEAR	U. K.	Continent	Australia	Domestic	By Rail Overland	Russia	Atlantic	Hawaiian Islands	Miscellaneous	Japan	Total
1911-12	615,813	---	39,331	40,102	1,891,849	---	---	344,975	50,233	---	2,982,303
1910-11	4,089,830	254,644	36,182	514,414	827,660	---	1,062,357	---	4,865	---	6,789,952
1909-10	1,485,003	89,524	---	---	153,900	---	31,782	---	377,301	---	2,137,510
1908-09	2,443,463	22,400	---	---	199,500	---	---	---	274,926	---	2,940,289
1907-08	1,194,373	24,640	134,986	---	582,980	---	194,908	---	233,197	---	2,365,084
1906-07	2,545,579	188,124	---	---	270,080	---	---	---	503,694	---	3,507,477
1905-06	702,499	222,023	23,046	---	---	---	---	---	407,617	63,605	1,418,790
1904-05	1,221,795	---	13,440	---	192,400	40,000	---	---	481,723	270,058	2,219,416
1903-04	3,182,503	415,972	115,975	---	---	---	---	---	406,881	139,220	4,260,551
1902-03	2,359,403	280,792	348,631	---	---	---	---	---	501,922	---	3,544,859
1901-02	3,286,844	---	231,107	552,334	---	---	---	---	9,020	---	4,231,182
1900-01	1,880,303	*68,935	9,195	†154,693	227,840	---	---	---	6,166	---	2,347,132
1899-1900	3,549,538	68,768	---	---	248,100	---	---	---	384,830	---	4,251,236

*China. †New York. **South America. ‡Pacific Islands.

EXPORTS FROM SAN FRANCISCO WITH DESTINATION.

FLOUR.

YEAR	China	Japan	Hawaii and Pacific Islands	East Indies	Siberia	Mexico	Central Amer'a and P'n'ma	South Amer'a	U. K.	Australia	Africa	Miscellaneous	Total
1911-12	54,494	17	74,149	122	----------	8,920	214,236	39,185	----------	100	----------	20	391,243
1910-11	17,200	156	57,786	----------	----------	12,257	158,086	33,008	----------	----------	----------	61	287,557
1909-10	3,590	572	63,979	----------	3,928	12,217	111,619	24,850	----------	----------	----------	40	220,795
1908-09	35,129	287	62,448	----------	----------	10,175	117,702	14,583	----------	----------	----------	205	234,529
1907-08	60,145	8,749	78,103	----------	4,119	13,143	123,093	17,844	630	----------	----------	----------	305,826
1906-07	136,168	25,252	102,996	----------	2,673	10,300	147,375	31,183	----------	15	----------	----------	455,967
1905-06	153,234	10,117	91,271	----------	12,600	15,126	164,580	22,384	----------	----------	----------	70,357	540,669
1904-05	354,100	34,900	108,627	----------	17,176	8,369	201,356	33,218	5,008	----------	----------	314	763,068
1903-04	465,498	45,084	124,121	----------	5,305	8,635	169,143	21,802	36,051	11	----------	3,716	879,366
1902-03	547,811	31,581	128,822	----------	4,628	8,934	129,624	48,929	24,325	60,800	----------	3,410	988,861
1901-02	590,044	34,544	28,244	85,665	2,617	5,867	211,943	101,833	76,789	39,644	----------	1,025	1,178,215
1900-01	451,907	61,878	11,690	129,082	3,611	6,885	189,947	181,520	51,010	1,420	----------	2,634	1,091,634
1899-1900	598,225	79,720	131,406	116,779	6,656	7,421	161,721	39,406	50,638	2,551	260	990	1,195,783
1898-99	481,178	15,465	79,251	72,056	56,637	5,204	182,706	13,036	74,720	28,570	----------	593	1,009,416
1897-98	399,815	23,371	86,494	11,623	22,890	12,555	169,554	19,048	64,287	13,298	----------	1,328	824,266
1896-97	412,046	49,034	57,855	9,807	53,417	9,922	202,379	3,619	103,250	214,460	1,342	1,972	1,119,103
1895-96	378,678	25,351	55,232	16,565	56,901	11,261	197,599	16,577	92,098	106,002	1,500	6,368	964,032
1894-95	521,801	30,980	61,575	8,520	38,344	9,741	231,467	16,110	----------	----------	----------	3,846	922,384
1893-94	400,633	33,617	66,909	8,500	19,988	6,911	199,615	19,833	38,294	----------	----------	2,514	796,874
1892-93	376,613	30,461	60,565	4,100	12,231	9,753	176,640	40,211	371,940	358	----------	1,689	1,084,561
1891-92	389,823	22,885	72,104	1,667	11,587	12,135	196,598	89,355	255,822	784	----------	2,997	1,055,757

Note.—Shipments of flour to Hawaii and Pacific Islands include U. S. Government shipments.

REPORT OF FLOUR AND GRAIN REMAINING IN THE STATE OF CALIFORNIA ON DATES MENTIONED

COMPARATIVE STATEMENT.

	Flour Bbls.	Wheat Ctls.	Barley Ctls.	Oats Ctls.	Beans Sacks	Rye Ctls.
1912, Dec. 1	170,387	1,876,620	5,497,520	386,460	1,351,782	34,560
June 1	197,964	1,062,260	716,840	61,380	583,756	6,360
1911, Dec. 1	178,118	2,734,480	3,750,780	552,660	1,196,126	13,020
June 1	141,934	1,669,460	896,560	315,400	409,070	6,700
1910, Dec. 1	145,741	3,483,260	7,608,280	827,920	1,002,698	25,960
June 1	211,381	853,940	982,120	124,340	367,823	6,800
1909, Dec. 1	84,189	1,945,580	5,207,960	395,940	1,196,170	11,200
June 1	120,661	707,820	272,220	21,420	348,556	860
1908, Dec. 1	107,137	1,528,300	3,829,000	274,940	1,001,650	11,540
June 1	105,388	606,360	609,000	84,620	237,999	8,780
1907, Dec. 1	92,008	2,460,440	3,370,080	234,780	815,251	16,640
June 1	73,945	1,525,896	1,344,889	48,324	408,144	7,733
1906, Dec. 1	83,541	3,975,966	4,377,947	236,498	846,520	19,288
June 1	70,610	1,501,231	465,275	----------	303,463	----------
1905, Dec. 1	142,373	3,579,580	3,445,500	292,100	596,455	34,420
June 1	120,533	780,100	220,960	25,620	201,835	5,980
1904, Dec. 1	128,146	3,930,860	3,361,720	221,600	557,589	26,040
June 1	165,004	2,190,920	1,191,300	57,560	326,313	14,120
1903, Dec. 1	147,718	5,436,920	4,471,300	327,800	659,908	39,880
June 1	145,004	1,010,400	601,820	100,200	333,073	17,960
1902, Dec. 1	106,413	6,154,060	2,947,040	343,460	752,874	53,740
June 1	177,173	2,505,780	567,080	112,320	312,746	53,800
1901, Dec. 1	140,747	12,023,680	4,467,300	304,520	476,874	168,480
June 1	174,777	3,746,820	746,220	43,580	118,000	80,060
1900, Dec. 1	144,108	12,401,980	3,893,840	200,280	243,034	151,040
June 1	95,099	8,367,840	2,108,520	147,980	114,088	54,240
1899, Dec. 1	112,136	15,998,280	4,778,880	235,700	268,117	54,140
June 1	70,906	3,394,160	232,420	23,460	308,973	10,560
1898, Dec. 1	122,833	6,494,800	1,264,200	186,000	513,459	38,440
June 1	87,380	3,152,680	943,060	109,380	561,263	54,300
1897, Dec. 1	115,992	9,132,640	3,136,020	106,160	713,749	35,240
June 1	94,960	1,733,880	758,600	81,980	505,730	21,360
1896, Dec. 1	111,078	7,495,380	3,008,980	189,360	700,963	81,310
June 1	101,991	2,655,340	1,043,540	78,500	369,396	17,100
1895, Dec. 1	82,107	10,941,760	4,072,560	193,220	557,948	125,500
June 1	51,607	6,306,340	714,440	108,960	65,819	4,480
1894, Dec. 1	73,950	13,040,330	1,965,230	213,590	198,180	63,985
June 1	80,310	7,646,090	1,370,305	106,915	124,300	6,585
1893, Dec. 1	99,031	14,234,419	3,907,011	253,508	----------	22,967
June 1	83,327	4,485,923	1,309,102	57,240	----------	9,725
1892, Dec. 1	92,024	12,153,772	3,797,654	263,243	----------	57,988
June 1	120,517	2,100,149	913,049	48,786	128,182	5,831
1891, Dec. 1	140,043	9,964,575	2,883,602	168,404	275,126	39,545
June 1	121,166	1,626,562	352,882	45,074	46,682	14,136
1890, Dec. 1	118,123	12,168,993	1,615,655	61,085	174,291	37,150

ACREAGE AND PRODUCTION OF BARLEY IN CALIFORNIA

Compiled by the U. S. Department of Agriculture.

Year	Acreage	Aver. Yield per Acre Bushels	Production Centals
1912	1,253,000	30.	18,043,200
1911	1,260,000	29.5	17,841,600
1910	1,306,387	31.0	19,438,040
1909	1 180,800	26.5	15,009,600
1908	1,082,000	23.5	12,204,960
1907	1,040,000	28.9	15,028,000
1906	1,425,000	27.2	18,760,000
1905	1,237,533	21.5	12,771,340
1904	1,237,533	22.7	13,484,160
1903	1,201,488	25.7	14,821,556
1902	1,144,274	26.0	14,280,539
1901	1,089,785	26.0	13,600,526
1900	889,591	16.7	7,130,961
1899	855,376	26.0	10,675,092
1898	872,833	10.5	4,399,078
1897	881,649	23.0	9,733,404
1896	918,384	21.6	9,521,805
1895	937,127	20.3	9,131,365
1894	737,895	.....	5,323,681
1893	760,716	.....	8,215,732
1892	845,240	.....	9,737,164

SHIPMENT OF BEANS, FISCAL YEAR 1911-1912.

By Sea—		
From San Francisco,	Foreign	23,975
" "	Atlantic	120,286
" "	Hawaiian Islands	16,701
By Rail—		
From California		1,198,440
Total,	1911-12	1,369,402
"	1910-11	1,420,515
"	1909-10	1,744,328
"	1908-09	1,479,771
"	1907-08	1,420,003
"	1906-07	1,446,887
"	1905-06	1,105,120
"	1904-05	982,970
"	1903-04	1,097,576
"	1902-03	965,850
"	1901-02	851,872
"	1900-01	378,550
"	1899-1900	441,526
"	1898-99	430,615
"	1897-98	578,174
"	1896-97	719,747
"	1895-96	556,077

EXPORTS OF LUMBER (IN M FEET) FROM SAN FRANCISCO—YEAR 1912

Month	Central America & Panama	South America	Mexico	China	Japan	Australasia	Philippine Islands	Europe	Pacific Islands	South Africa	Hawaiian Islands	Various	Atlantic	Total
January	253	260	234			741	52	354	88		245		42	2,269
February	283	324	144	3	39	1,701	111		38	333	288			3,264
March	1,685	20	37		2	103	54		37	323	59			2,320
April	280	422	84			179			440		139	7		1,551
May	336	3,805	28			2,799	150	108	12	181	1,042	25	25	8,511
June	57	163	103		5	103	10	51	139		206	2		839
Total for six months	2,894	4,994	630	3	46	5,626	377	513	754	837	1,979	34	67	18,754
July	1,708	90	7			3,241	250		377		547			6,220
August	2,380	186	139			1,953			10		381	1	20	5,070
September	79	94	431			2,639		200	20		614		8	4,085
October	151	108	72		9	1,688	101		491	609	650			3,879
November	91	541	108			644	152	48	23		147			1,754
December	100	189	47			76		4	103		290			719
Total for six months	4,509	1,208	804		9	10,241	503	252	1,024	609	2,539	1	28	21,727
Total for year	7,403	6,202	1,470	3	55	15,867	880	765	1,788	1,446	4,468	35	95	40,481
Year 1906	3,099	1,477	1,942	35	32	7,623		370	405		3,212	1,384		19,577
Year 1907	2,662	767	5,388	8	188	4,807	173	714	853		1,643	1,868		19,071
Year 1908	1,115	1,056	9,123		161	12,608	2,082	2,223	909		3,558	429		33,264
Year 1909	954	975	11,822	53	29	9,876	65	419	1,285		3,798	754		30,029
Year 1910	1,086	2,951	1,926		36	11,988	261	1,040	1,064		6,323	1,079		27,754
Year 1911	4,965	2,685	1,258	57	8	17,821	2,284	1,176	2,782	333	4,037	36	3,911	41,353
Year 1912	7,403	6,202	1,470	3	55	15,867	880	765	1,788	1,446	4,468	35	95	40,481

RECEIPTS LUMBER AT SAN FRANCISCO

FROM

Year	California	Oregon and Wash.	Rail	Total
1912				
January	26,739	38,374	1,450	66,563
February	30,085	53,674	1,020	84,779
March	31,419	54,410	1,670	87,499
April	30,646	45,835	3,040	79,521
May	30,427	63,106	3,430	96,963
June	27,617	61,297	1,500	90,414
Total for six months	176,933	316,696	12,110	505,739
July	26,441	58,316	1,860	86,617
August	27,797	66,546	1,020	95,363
September	25,938	61,492	1,463	88,893
October	27,054	52,143	2,080	81,277
November	29,522	51,994	2,020	83,636
December	26,472	45,120	1,590	73,182
Total for six months	163,324	335,611	10,033	508,968
1912 Total	340,257	652,307	22,143	1,014,707
Year 1911	324,251	634,251		958,502
Year 1910	332,499	675,145		1,007,594
Year 1909	324,913	651,469		976,382
Year 1908	298,780	582,524		881,304
Year 1907	429,934	749,277		1,179,277
Year 1906	395,839	702,298		1,098,137

RECEIPTS OF SALMON, CODFISH, WHALE BONE AND WHALE OIL AT SAN FRANCISCO

Year	Salmon		Codfish	Whalebone	Whale Oil
	Cases	Bbls.	Number	Pounds	Bbls.
1912	1,692,067	22,525	1,724,000	75,844	1,276
1911	1,229,420	6,619	1,778,000	57,500	6,316
1910	1,537,902	11,190	1,437,000	55,115	2,748
1909	1,517,506	26,479	1,080,000	21,000	4,525
1908	1,355,758	28,358	2,160,000	45,700	2,200
1907	1,255,836	16,726	1,862,000	127,800	600
1906	1,316,612	15,579	2,382,000	34,170	1,935
1905	1,417,433	20,597	2,897,000	33,550	2,073
1904	1,435,157	14,820	1,889,000	75,688	3,180
1903				64,790	6,487

STATEMENT OF LUMBER CHARTERS FROM THE NORTH

January 1, 1912 to January 31, 1913.

From Shipping Points on Puget Sound, Columbia River and Grays Harbor. Dollars and Cents per M Feet Board Measure

	San Francisco	San Pedro	Guaymas	Hawaiian Isles	West Coast f. o.	West Coast Direct
1912						
January	$4.25 $4.50	$4.75 $5.00		$6.50	52/6 53/9	50/
February	4.50 4.75	5.25	$7.50	6.75	52/6 55/	52/6
March	4.75	5.25 5.50			55/	
April	4.75	5.50		7.25	55/ 57/6	
May	4.75	5.25		7.25	60/ 62/6	55/ 56/3
June	4.75 5.00	5.50 5.75		7.25	57/6 62/6	
July	4.75 5.00	5.50 5.75		7.50	60/ 65/	70/ Lebu.
August	4.75 5.00	5.50		7.50	62/6 65/	60/ 62/6
September	4.75 5.00	5.50	8.00		65/	62/6
October	4.75	5.50		7.50	63/9 65/	61/3 62/6
November	4.75	5.50		7.50	65/	62/6 63/9
December	4.75	5.50		7.50	63/9 65/	61/3 62/6
1913						
January	4.75	5.50			65/	60/ 61/3

STATEMENT OF LUMBER CHARTERS FROM THE NORTH

January 1, 1912 to January 31, 1913.

From Shipping Points on Puget Sound, Columbia River and Grays Harbor. Shillings and Pence per M Feet Board Measure

	Sydney	Newcastle	Melbourne	Adelaide	Brisbane	Zealand New	South Africa	United Kingdom
1912								
January								69/6 72/6
February	42/6 47/6				46/3		71/3	
March			48/9			57/6	72/6	73/9 80/
April								
May			48/6				75/	80/
June	48/9						80/	
July	47/6 51/3					62/6	75/ 85/	81/3
August	52/6	52/6				65/	80/	80/
September	53/ 57/6	53/				66/3 70/	80/ 83/9	80/
October	58/9		72/6 73/9	72/6 73/9		63/9 65/	*87/6	
November	61/3						*90/	83/9 85/
1913	57/6 61/3	57/6 61/3	70/	70/		63/9		
January						66/3	80/	82/6 **83/9**

*British Columbia Loading.

RECEIPTS OF COAL (IN TONS) AT SAN FRANCISCO FOR YEAR 1912.

	British Columbia	Australia	Great Britain	Japan	China	Washington	Oregon	Domestic Eastern	Rail	Grand Total
January	14,693	9,779				4,704	650	11,171	1,080	42,077
February	11,950	1,617			500	2,983	250		1,320	18,620
March	30,372	3,048				5,847		5,436	660	45,363
April	18,543	4,971				4,844		22,378	1,510	52,246
May	4,850	10,866				6,633		13,403	1,260	37,012
June	20,806	9,258				3,614			1,260	34,938
Total for six months	101,214	39,539			500	28,625	900	52,388	7,090	230,256
July	12,010	1,201				1,632		22,623	1,470	38,939
August	26,449	16,175				4,866		11,549	2,130	61,169
September	16,073	17,789		1,550		2,959		11,403	2,370	52,144
October	4,490	7,479		600		3,972	100	12,225	2,240	31,106
November	9,017	6,521				4,341	200	6,400	2,670	29,149
December	4,500	5,735				3,434		5,502	1,110	20,281
Total for six months	72,539	54,900		2,150		21,204	300	69,702	11,990	232,785
Total Year	173,753	94,439		2,150	500	49,829	1,200	122,090	19,080	463,041
Year										
1905	324,873	77,998	67,542	23,725		152,718	77,210	12,137		736,203
1906	311,099	72,638	37,215			110,670	42,975	11,455		586,052
1907	205,956	387,740	18,582	73,398		87,346	26,445	83,883		883,550
1908	167,415	228,174	15,110			29,426	24,885	171,875		655,801
1909	179,187	97,281		5		25,557	24,470	76,081		402,581
1910	166,443	154,603	2,564	39,077	6,170	65,085	13,572	86,744		534,258
1911	200,646	160,626	1,076	2,100	14	59,128	4,655	154,789	10,930	593,964
1912	173,753	94,439		2,150	500	49,829	1,200	122,090	19,080	463,041

RECEIPTS OF COKE AT SAN FRANCISCO YEAR 1912

	Great Britain	Australia	Total
	Tons	Tons	Tons
January	1,247	1,047	2,294
February	1,272	.....	1,272
March	1,772	.....	1,772
April	1,305	.....	1,305
May	484	.....	484
June	2,050	1,100	3,150
Total six months	8,130	2,147	10,277
July	2,491	.....	2,491
August	8,068	1,451	9,519
September	3,652	1,463	5,115
October	8,699	.....	8,699
November	991	30	1,021
December	7,057	.....	7,057
Total six months	30,958	2,914	33,902
Total year 1912	39,088	5,091	44,179

RECEIPTS OF PIG IRON AT SAN FRANCISCO FROM FOREIGN PORTS

Year 1912	8,044	Tons
" 1911	13,919	"
" 1910	15,447	"
" 1909	9,049	"
" 1908	20,347	"
" 1907	19,275	"
" 1906	14,289	"

ARRIVALS

From	Steam Tons	No. Vessels	Sail Tons	No. Vessels	Total
Australia	94,890	29	31,117	26	126,007
Alaska	26,261	26	55,005	53	81,266
Atlantic Ports	77,950	25	8,629	3	86,579
Belgium	43,811	12	12,395	6	56,206
British Columbia	222,994	107	2,987	1	225,981
China	76,809	20			76,809
Chile	93,134	25	1,680	2	94,814
France					
Great Britain	15,200	4	12,242	6	27,442
Germany	41,977	13	3,905	2	45,882
Hawaii	314,638	96	18,765	25	333,403
Holland	6,060	2	7,719	2	13,779
Hongkong	314,604	58			314,604
India	5,048	1			5,048
Italy					
Japan	80,755	22	3,156	2	83,911
Mexico	292,794	75	377	1	293,171
Panama	202,556	96	4,504	3	207,060
Peru	42,578	12			42,578
New Zealand	5,472	2			5,472
Philippine Islands	72,562	20			72,562
Pacific Islands			2,415	5	2,415
South Africa					
Sea in distress					
Siberia					
Tahiti	1,939	1			1,939
Ecuador					
Elsewhere	14,385	5			14,385
Total	2,046,417	651	164,896	137	2,211,313
Coastwise	4,124,024		436,214		4,560,238
Grand total	6,170,441		601,110		6,771,551

TONNAGE MOVEMENT ARRIVALS

Year	Foreign	Domestic & Eastern	Total
1904	1,169,545	2,081,848	3,251,393
1905	1,068,533	2,086,900	3,155,433
1906	1,106,325	2,683,085	3,789,410
1907	1,409,482	3,252,608	4,662,090
1908	1,380,988	3,205,667	4,586,655
1909	1,256,734	3,705,883	4,962,617
1910	1,454,814	4,259,318	5,714,132
1911	1,653,117	4,696,212	6,349,329
1912	2,046,417	4,124,021	6,771,551

TONNAGE MOVEMENT—PORT OF SAN FRANCISCO YEAR 1912.

DEPARTURES

For	Steam Tons	No. Vessels	Sail Tons	No. Vessels	Total
Australia	113,323	34			113,323
Alaska	25,820	27	47,978	47	73,798
Atlantic Ports	10,267	1	2,052	1	12,319
Belgium					
British Columbia	333,366	169	993	1	334,359
China	36,135	8			36,135
Chile	110,153	30	762	1	110,915
France					
Great Britain	73,298	23	24,680	12	97,978
Germany	48,406	15			48,406
Hawaii	379,067	132	32,358	32	411,425
Holland					
Hongkong	300,447	51			300,447
India					
Italy					
Japan	125,568	38	4,734	1	130,302
Mexico	132,595	47	91	1	132,686
Panama	194,722	91	2,511	2	197,233
Peru	12,158	5			12,158
New Zealand					
Philippine Islands	57,656	16			57,656
Pacific Islands			2,246	5	2,246
South Africa	1,885	1	1,862	1	3,747
Siberia					
Tahiti					
Various foreign	8,372	2	2,021	2	10,393
Total	1,963,238		122,288		2,085,526
Coastwise	4,138,163		486,744		4,624,907
Grand total	6,101,401	690	609,032	106	6,710,433

NAVAL CONSTRUCTION

The following is a complete list of warships built for the United States Navy by the Union Iron Works at San Francisco.

NAME	Displacement Tons	Type	Horse power	Speed Knots	Launched
Charleston*	4,040	Protected Cruiser	6,660	18.20	July 19, 1888
San Francisco	4,088	Protected Cruiser	10,604	20.17	Oct. 26, 1889
Monterey	4,350	Armored Monitor	5,810	16	April 28, 1891
Olympia	5,870	Protected Cruiser	17,313	21.68	Nov. 5, 1892
Oregon	10,500	Armored Battleship	12,000	16	Oct. 26, 1893
Marietta	1,000	Gunboat	1,040	12	March 18, 1897
Wheeling	1,000	Gunboat	1,003	12	March 18, 1897
Farragut	240	Torpedo Boat	5,600	30.60	July 16, 1898
Wisconsin	11,500	Armored Battleship	12,766	18.54	Nov. 26, 1898
Cheyenne	2,700	Harbor Defense Monitor	2,900	12.70	Sept. 8, 1900
Perry	420	Torpedo Boat Destroyer	8,000	29	Oct. 27, 1900
Preble	420	Torpedo Boat Destroyer	8,000	29	March 2, 1901
Ohio	12,440	Armored Battleship	14,600	18	May 18, 1901
Paul Jones	420	Torpedo Boat Destroyer	7,840	28.90	June 14, 1902
Grampus	120	Submarine Boat	70	8.50	July 31, 1902
Pike	120	Submarine Boat	70	8.50	Jan. 14, 1903
Tacoma	3,500	Protected Cruiser	4,500	16.50	June 2, 1903
California	13,800	Armored Cruiser	23,000	22.20	April 28, 1904
South Dakota	13,400	Armored Cruiser	23,000	22.24	July 21, 1904
Milwaukee	9,700	Protected Cruiser	21,000	23.07	Sept. 10, 1904
F-1	400	Submarine Boat	780	Contract 14	Sept. 6, 1911
F-2	400	....do	780	14	March 18, 1912
H-1	467	....do	950	14	May 6, 1913
H-2	467	....do	950	14	June 4, 1913
K-3	521	....do	950	14	
K-7	519	....do	900	14	
K-8	519	....do	900	14	

*Lost, November 7, 1899, on the north coast of Luzon, Philippine Islands.

SHIPBUILDING SUMMARY.

FROM U. S. CUSTOM HOUSE RECORDS

The following is a classified list of new vessels built on the Pacific Coast and documented at San Francisco for a series of years past.

YEAR	VESSELS		Total Vessels	TONNAGE	
	Steam	Sail		Gross	Net
1912	9	0	9	9,899	5,397
1911	17	0	17	15,756	9,874
1910	25	2	27	4,513	2,761
1909	19	2	21	387	275
1908	43	1	44	20,018	15,908
1907	22	...	22	27,549	17,412
1906	14	2	16	7,208	4,719
1905	19	3	22	9,030	7,375
1904	18	6	24	8 239	5,429
1903	21	4	25	21,025	14,210
1902	21	21	42	26,226	20,095
1901	25	16	41	11,519	9,669
1900	33	18	51	29,221	22,779
1899	13	7	20	6,675	5,701
1898	39	8	47	17,337	10,532
1897	4	6	10	961	705
1896	7	8	15	3,393	2,384
1895	6	16	22	1,584	1,350
1894	3	14	17	2,577	2,095
1893	6	15	21	2,897	2,394
1892	23	54	79	9,885	8,915
1891	9	35	44	8,939	8,585
1890	16	29	45	12,063	10,175
1889	28	18	46	8,544	7,091
1888	31	27	58	21,921	17,360
1887	23	31	54	17,629	13,908

INSURANCE

Statistics of the Fire and Marine Insurance business transacted in California as reported by the State Insurance Commissioner.

	1912	1911
FIRE INSURANCE		
Amount written	$1,037,122,915.31	$966,664,270.00
Premiums received	16,258,040.76	16,154,903.11
Losses paid	5,569,008.87	4,604,219.19
Ratio of losses to premiums	34.3	28.5
MARINE INSURANCE		
Amount written	$472,543,482.00	$412,159,573.00
Premiums received	2,667,902.00	2,321,318.35
Losses paid	779,238.00	1,375,225.59
Ratio of losses to premiums	29.2	59.2
This business was apportioned as follows:		
TO COMPANIES OF THIS STATE		
Fire Insurance—		
Amount written	$55,894,586.78	$35,051,042.00
Premiums received	951,016.18	867,818.64
Losses paid	321,597.00	259,944.19
Ratio of losses to premiums	33.8	29.9
Marine Insurance—		
Amount written	$99,294,159.00	$82,474,412.00
Premiums received	631,839.56	479,534.03
Losses paid	169,273.26	255,283.63
Ratio of losses to premiums	26.8	53.2
TO COMPANIES OF OTHER STATES		
Fire Insurance—		
Amount written	$658,001,997.53	$614,231,878.00
Premiums received	10,269,270.76	10,160,270.53
Losses paid	3,562,447.33	2,904,969.86
Ratio of losses to premiums	34.7	28.5
Marine Insurance—		
Amount written	$97,963,702.00	$70,899,408.60
Premiums received	890,594.49	757,729.16
Losses paid	256,144.21	439,650.80
Ratio of losses to premiums	28.7	58.0
TO COMPANIES OF FOREIGN COUNTRIES		
Fire Insurance—		
Amount written	$323,226,331.00	$317,381,350.00
Premiums received	5,037,753.82	5,126,813.84
Losses paid	1,684,963.92	1,439,305.14
Ratio of losses to premiums	33.4	28.0
Marine Insurance—		
Amount written	$275,285,621.00	$258,785,752.40
Premiums received	1,145,467.95	1,084,055.16
Losses paid	353,820.53	680,291.16
Ratio of losses to premiums	30.8	62.7

INTERNAL REVENUE COLLECTIONS

During the past years the collections of Internal Revenue in the San Francisco District were as follows:

1912	$7,782,197.40
1911	7,143,523.85
1910	6,823,477.68
1909	5,934,401.04
1908	6,623,558.01
1907	4,878,978.23
1906	4,542,255.87
1905	4,135,621.17
1904	3,181,653.83
1903	2,794,597.21
1902	2,892,760.33
1901	3,677,092.46
1900	4,019,086.30
1899	3,686,417.20
1898	3,023,902.20
1897	2,490,471.20
1896	2,410,019.46
1895	2,067,946.28
1894	1,692,796.07
1893	1,686,592.23
1892	1,818,351.43
1891	1,887,561.23
1890	1,858,852.48

Classified, the collections during the last three years were as follows:

For	1912	1911	1910
Lists	$1,023,654.14	$ 986,571.66	$ 899,525.01
Beer	797,125.00	731,036.75	740,429.50
Spirits	5,302,261.91	4,801,260.75	4,584,042.76
Cigars and Cigarettes	324,571.46	299,508.09	277,307.92
Snuff	178.87	219.91	224.99
Tobacco	20,731.12	22,569.58	18,080.58
Specials	312,330.74	301,088.19	301,344.04
Playing Cards	1,065.86	1,030.92	858.08
Export Stamps	42.30	46.00	62.20
Case Goods	236.00	192.00	124.00
Miscellaneous	.....	.....	1,478.60
Totals	$7,782,197.40	$7,143,523.85	$6,823,477.68

CALIFORNIA FRUIT AND VEGETABLE STATISTICS

From California Fruit Grower

FRESH DECIDUOUS FRUIT

RAILROAD SHIPMENTS—CARLOADS

From north of Tehachapi in actual carloads—apples not included.

Variety—	1906	1907	1908	1909	1910	1911	1912
Apricots	16	71	231¾	208¼	289¾	223½	195½
Cherries	150	98	208¼	249¾	250½	216¼	244¼
Grapes	2,052	3,460	3,816¼	5,875	4,947½	6,374½	6,357½
Peaches	584	699	1,980¼	2,599	2,517¾	2,027	1,621¼
Pears	1,513	1,039	2,701½	2,638	2,361	2,324¾	3,134½
Plums	1,220	1,039	1,763	1,526¾	1,552½	1,366	1,775½
Sundry	21	18	15	20¼	17	16¼	15¼
Total cars.	5,556	6,424	10,716	13,117	11,936	12,548¼	13,343¾

CALIFORNIA CITRUS FRUIT SHIPMENTS

(Includes Southern, Central and Northern California)

Season	Cars
1911-12	40,290
1910-11	46,394
1909-10	33,099
1908-09	40,516
1907-08	32,729
1906-07	29,820
1905-06	27,610
1904-05	31,422
1903-04	29,399
1902-03	23,871
1901-02	19,180
1900-01	24,900
1899-00	18,400
1898-99	10,875
1897-98	15,400
1896-97	7,350
1895-96	6,915
1894-95	7,575

CALIFORNIA CANNED FRUIT AND VEGETABLE PACK

(Compiled Yearly by California Fruit Grower from Individual Packers' Reports)

Fruits—	1912 Cases			1911 Cases			1910 Cases		
	Nos. 2½ and 3, etc. (all grades)	No. 8 (gallons) (all grades)		Nos. 2½ and 3, etc. (all grades)	No. 8 (gallons) (all grades)		Nos. 2½ and 3, etc. (all grades)	No. 8 (gallons) (all grades)	
Apples	9,500	70,750		8,750	56,550		6,280	70,550	
Apricots	772,775	125,230		708,500	149,825		544,530	198,630	
Blackberries	55,375	46,630		35,250	42,575		26,425	35,600	
Cherries, Royal Ann	215,640	21,820		99,700	11,740		123,240	13,050	
Cherries, black	52,670	4,050		26,860	2,005		18,110	1,510	
Cherries, white	51,025	6,690		49,730	8,770		33,410	5,875	
Grapes	40,960	6,225		62,115	8,800		39,285	6,360	
Loganberries	16,965	4,415		12,106	7,011		6,977	5,662	
Nectarines				5	18		.....	1	
Pears	832,350	41,850		579,960	38,960		568,125	51,230	
Peaches, free	480,660	103,140		582,200	156,200		553,000	195,825	
Peaches, cling	1,469,275	160,980		1,210,525	142,200		1,233,200	163,425	
Plums	148,990	26,300		143,350	22,490		65,550	14,810	
Raspberries	8,520	570		2,950	675		9,335	791	
Strawberries	25,800	8,670		6,505	1,210		13,225	848	
Other fruits	23,565	2,510		1,390	3,725		2,250	1,440	
Total fruits (cases)	4,204,070	629,830		3,529,896	652,754		3,242,942	765,607	
Grand total fruits			4,833,900			4,182,650			4,008,549
Vegetables—									
Asparagus	714,900	4,300		684,960	2,105		614,050	3,225	
Beans	76,690	7,665		53,110	12,710		41,610	4,640	
Peas	251,275	18,150		162,570	22,205		140,855	26,920	
Tomatoes	1,396,900	224,200		1,306,190	209,260		1,159,875	190,435	
Other vegetables	66,390	29,025		39,575	23,970		49,075	19,960	
Total vegetables (cases)	2,506,155	283,340		2,246,405	270,250		2,005,465	245,180	
Grand total vegetables			2,789,495			2,516,655			2,250,645
Grand total pack (cases)			7,623,395			6,699,305			6,259,194

FRUIT AND VEGETABLE PACK

Year	Cases	
	Fruits	Vegetables
1912	4,833,900	2,789,495
1911	4,182,650	2,516,655
1910	4,008,549	2,250,645
1909	3,047,001	1,242,720
1908	4,734,663	1,501,885
1907	2,982,955	1,941,755
1906	3,109,225	1,747,595
1905	3,283,296	1,192,455
1904	2,839,733	961,783
1903	2,733,504	1,343,574
1902	2,252,790	1,151,268
1901	2,677,072	1,076,058
1900	2,775,896	803,617

CALIFORNIA CURED FRUIT OUTPUT

	1907 Tons	1908 Tons	1909 Tons	1910 Tons	1911 Tons	1912 Tons
Apples	3,300	3,350	3,000	3,000	3,500	3,600
Apricots	1,100	19,000	14,000	15,250	11,000	19,750
Figs	4,500	2,900	4,000	3,775	5,500	5,000
Peaches	15,000	23,000	20,000	25,000	14,000	30,000
Prunes	53,000	28,500	75,000	40,000	95,000	102,500
Raisins	75,000	65,000	70,000	62,500	65,000	95,000
Various other	1,200	3,000	2,500	1,750	3,750	3,000
Total tons	153,100	144,750	188,500	151,275	197,750	258,850

CALIFORNIA RAISIN PACK

Year	Pounds
1912	190,000,000
1911	130,000,000
1910	125,000,000
1909	140,000,000
1908	130,000,000
1907	150,000,000
1906	100,000,000
1905	90,000,000
1904	80,000,000
1903	120,000,000
1902	108,000,000
1901	74,000,000
1900	94,325,000
1899	71,568,000
1898	80,631,000
1897	93,704,000
1896	68,250,600
1895	91,360,000
1894	103,000,000
1893	85,000,000

CRUDE OIL PRODUCTION

ANNUAL OUTPUT

YEAR	BARRELS	VALUE	YEAR	BARRELS	VALUE
1870...	3,600	$ 5,125	1892...	385,049	561,333
1871...	5,200	7,370	1893...	470,179	608,092
1872...	6,500	9,876	1894...	783,078	1,064,521
1873...	7,200	10,920	1895...	1,245,339	1,000,235
1874...	7,700	11,540	1896...	1,257,780	1,180,793
1875...	8,400	12,090	1897...	1,911,569	1,918,269
1876...	9,600	15,410	1898...	2,249,088	2,376,420
1877...	12,750	18,140	1899...	2,677,875	2,660,793
1878...	15,227	22,780	1900...	4,329,950	4,152,928
1879...	19,858	29,672	1901...	8,754,500	7,487,600
1880...	42,399	68,450	1902...	13,973,500	10,269,385
1881...	99,862	130,678	1903...	24,337,828	16,521,400
1882...	128,636	172,730	1904...	28,476,025	19,896,702
1883...	142,857	207,540	1905...	35,671,000	23,381,150
1884...	262,000	428,600	1906...	36,474,000	26,029,155
1885...	325,000	613,920	1907...	38,265,200	28,708,750
1886...	377,145	642,785	1908...	45,546,500	32,109,620
1887...	678,572	1,357,144	1909...	56,982,670	39,887,920
1888...	690,333	1,380,666	1910...	77,699,683	46,752,512
1889...	303,220	368,048	1911...	*79,148,145	37,920,820
1890...	307,360	384,200	1912...	94,074,439	42,410,000
1891...	323,600	401,264			

*In 1911, 5,500,000 barrels of petroleum were consumed in the oil fields for fuel. This figure should be added to get the actual total produced. The figures for previous years do not include oil consumed for fuel in the fields.

Valuations are based on selling prices at tidewater.

FUEL OIL

Exports by Sea

To	1912		1911	
	Gallons	Values	Gallons	Values
Panama	35,199,131	$ 519,067	36,734,880	$524,784
Chile	49,086,392	666,888	19,454,000	292,200
Peru	6,339,072	91,235	3,000,329	41,367
Guatemala	2,898,000	42,600	1,092,000	15,600
Canada	7,896,000	150,400	672,000	9,600
French Oceania	5,374	328	4,756	334
Salvador	4,898	140	4,655	240
German Oceania	1,740	160	3,278	98
Mexico	.....	.....	220	16
England	315	6	220	10
Nicaragua	3,781,559	53,447	.....	.....
Philippines	72,095	3,944	.....	.....
Aus. & Tasmania	14,210	966	.....	.....
Costa Rica	538	16	.....	.....
Totals	105,299,320	$1,529,197	60,966,338	$884,249

PRODUCTION BY DISTRICTS

(From California Derrick.)

Producing Fields	1912 Barrels	1911 Barrels	1910 Barrels
Kern River	12,446,445	14,078,390	14,776,435
McKittrick	6,462,350	5,447,532	5,471,613
Midway	25,948,945	21,584,566	11,174,207
Sunset	5,590,824	5,559,069	9,218,904
Coalinga	19,446,122	18,324,701	18,651,470
Watsonville	43,920	40,850	36,660
Arroyo Grande	1,950	20,500	22,310
Lompoc	1,013,880	795,000	698,210
Santa Maria	5,788,086	6,670,074	6,909,620
Summerland	65,715	71,255	74,725
Santa Paula	740,173	515,675	492,147
Newhall	119,712	146,110	160,428
Salt Lake	2,662,776	2,794,233	3,263,104
Los Angeles	410,661	429,528	466,514
Whittier–Coyote	1,125,769	1,069,437	1,198,260
Puente	29,650	32,895	38,960
Fullerton–Brea Canyon	6,764,360	5,978,823	5,044,001
Lost Hills	1,313,076	154,960	2,115
Totals	90,074,439	83,744,044	77,699,683
Avge. Daily Yield, bbls.	246,779	229,435	212,876

PRODUCTION BY WELLS

Districts	1911 Producing Wells	1910 Producing Wells	1909 Producing Wells
Kern River	1,605	1,566	1,324
McKittrick	178	189	134
Midway	447	318	119
Sunset	196	138	107
Coalinga	736	733	569
Watsonville		3	4
Arroyo Grande	4	6	3
Lompoc	20	20	16
Santa Maria	154	149	133
Summerland	131	134	112
Santa Paula	264	250	243
Newhall	76	77	70
Salt Lake	245	261	226
Los Angeles	415	416	450
Whittier–Coyote	141	140	134
Puente	56	55	54
Fullerton–Brea Canyon	250	237	221
Various	4	14	17
Totals	4,942	4,706	3,936

The production of the State varies in gravity from 9° Beaume, the lowest gravity in the Sunset field, to 38° B., the highest gravity in the Newhall field.

The bulk of the kerosene used on the Pacific Coast is now being refined from California oil. The lubricating oils used on the Pacific Coast are practically all of California production.

CALIFORNIA PROPERTY

Showing the State rate of taxation on each $100 of valuation from the organization of the State Government.

YEARS	Total Assessed Value of all Property in California	Value of Personal Property	Percentage of Personal Property	State Rate of Taxation
1850	$ 57,670,689	$ 13,968,797	24.22	$0.50
1851	49,231,052	20,935,116	42.52	.65
1852	64,579,375	24,213,395	37.49	.65
1853	95,335,646	33,674,000	35.32	.60
1854	111,191,630	39,040,428	35.11	.60
1855	103,887,193	34,858,319	33.56	.60
1856	115,007,440	40,942,699	35.60	.70
1857	126,059,461	59,149,630	46.92	.70
1858	125,955,877	54,185,728	43.01	.60
1859	131,060,279	56,580,344	43.17	.60
1860	148,193,540	68,369,383	46.06	.60
1861	147,811,617	73,350,591	49.62	.60
1862	160,369,071	74,014,666	46.15	.77
1863	174,104,955	80,496,645	46.23	.92
1864	179,164,730	78,117,375	43.60	1.25
1865	183,534,312	79,782,436	43.47	1.15
1866	200,368,826	92,490,635	46.15	1.13
1867	212,205,339	100,105,600	47.17	1.13
1868	237,483,175	105,112,083	44.26	1.00
1869	260,563,879	104,723,592	40.19	.97
1870	277,538,134	108,001,588	38.90	.865
1871	267,868,126	86,174,230	32.17	.865
1872	637,232,823	219,942,323	30.40	.50
1873	528,747,043	118,425,520	22.20	.50
1874	611,495,197	210,779,127	34.46	.649
1875	618,083,315	199,243,292	32.07	.605
1876	595,073,177	140,431,866	25.27	.735
1877	586,953,022	128,780,824	21.77	.63
1878	584,578,036	118,304,451	20.23	.55
1879	549,220,968	112,325,850	20.15	.625
1880	666,399,985	174,514,906	26.18	.64
1881	659,835,762	160,058,309	24.24	.655
1882	608,642,036	134,048,419	22.02	.596
1883	765,729,430	167,338,644	21.85	.497
1884	821,078,767	166,394,997	20.26	.452
1885	859,512,384	172,760,681	27.90	.541
1886	816,446,700	151,937,132	18.60	.56
1887	956,740,805	165,663,387	17.31	.608
1888	1,107,952,700	173,273,458	15.63	.504
1889	1,111,550,979	170,661,836	15.35	.722
1890	1,101,137,290	169,489,475	15.39	.58
1891	1,239,647,063	189,599,783	15.29	.446
1892	1,275,816,228	187,008,874	14.66	.434
1893	1,216,700,283	173,853,273	14.59	.576
1894	1,205,918,403	163,581,104	13.56	.493
1895	1,138,282,013	157,726,988	13.85	.685
1896	1,266,593,065	142,353,345	11.24	.429
1897	1,089,814,836	120,592,875	11.07	.51
1898	1,130,885,697	128,855,959	11.39	.488
1899	1,193,764,673	164,070,620	13.74	.601
1900	1,218,292,457	184,380,015	15.13	.498
1901	1,241,705,803	189,506,344	15.26	.48
1902	1,290,750,465	200,164,271	15.50	.382
1903	1,598,603,226	269,488,904	16.85	.561
1904	1,550,511,761	239,623,282	15.45	.535
1905	1,624,991,742	239,062,273	14.71	.49
1906	1,594,781,905	238,006,160	14.92	.476
1907	1,878,661,035	288,172,950	15.34	.445
1908	1,994,511,229	275,481,764	13.81	.40
1909	2,438,656,554	317,805,084	13.03	.364
1910	2,373,897,092	278,669,645	11.74	.353
1911	2,458,804,743	252,884,962	10.28	.05*
1912	2,919,342,889	313,100,040	10.72	.044

*Method of taxation changed in 1911.

CALIFORNIA'S GOLD

(All figures on minerals from State Mining Bureau.)

Gold was discovered by James W. Marshall on January 24, 1848, at Sutter's Mill, near Coloma, El Dorado County.

Year	Production	Year	Production
1848	$ 245,301	1881	$19,223,155
1849	10,151,360	1882	17,146,416
1850	41,273,106	1883	24,316,873
1851	75,938,232	1884	13,600,000
1852	81,294,700	1885	12,661,044
1853	67,613,487	1886	14,716,506
1854	69,433,931	1887	13,588,614
1855	55,485,395	1888	12,750,000
1856	57,509,411	1889	11,212,913
1857	43,628,172	1890	12,309,793
1858	46,591,140	1891	12,728,869
1859	45,846,599	1892	12,571,900
1860	44,095,163	1893	12,422,811
1861	41,884,995	1894	13,923,281
1862	38,854,668	1895	15,334,317
1863	23,501,736	1896	17,181,562
1864	24,071,423	1897	15,871,401
1865	17,930,858	1898	15,906,478
1866	17,123,867	1899	15,336,031
1867	18,265,452	1900	15,863,355
1868	17,555,867	1901	16,989,044
1869	18,229,044	1902	16,910,320
1870	17,458,133	1903	16,471,264
1871	17,477,885	1904	19,109,600
1872	15,482,194	1905	19,197,043
1873	15,019,210	1906	18,732,452
1874	17,264,836	1907	16,727,928
1875	16,876,009	1908	18,761,559
1876	15,610,723	1909	19,284,105
1877	16,501,268	1910	19,715,440
1878	18,839,141	1911	19,738,908
1879	19,626,654	1912	20,000,000
1880	20,030,761		
Total product in 65 years			$1,548,252,144

SILVER

Year	Production	Year	Production
1888	$1,700,000	1901	$1,229,356
1889	754,793	1902	616,412
1890	1,060,613	1903	517,444
1891	953,157	1904	873,525
1892	463,602	1905	678,494
1893	537,157	1906	817,830
1894	297,332	1907	751,646
1895	599,789	1908	873,057
1896	422,464	1909	896,250
1897	452,789	1910	993,646
1898	414,055	1911	673,336
1899	504,012	1912	750,000
1900	1,510,344		

Salt			Coal		
Year	Tons	Value	Year	Tons	Value
1887	28,000	$112,000	1887	50,000	$150,000
1888	30,800	92,400	1888	95,000	380,000
1889	21,000	63,000	1889	121,280	288,232
1890	8,729	57,085	1890	110,711	283,019
1891	26,094	90,303	1891	93,301	204,902
1892	23,570	104,788	1892	85,178	209,711
1893	50,500	213,000	1893	72,603	167,555
1894	49,131	140,087	1894	59,887	139,862
1895	53,031	150,576	1895	79,858	193,790
1896	64,743	153,244	1896	70,649	161,335
1897	67,851	157,520	1897	87,449	196,255
1898	93,421	170,855	1898	143,045	337,475
1899	82,654	149,588	1899	160,941	420,109
1900	89,338	204,754	1900	176,956	535,531
1901	126,218	366,376	1901	150,724	401,772
1902	115,208	205,876	1902	88,460	248,622
1903	102,895	211,365	1903	93,026	265,383
1904	95,968	187,300	1904	79,062	376,494
1905	77,118	141,925	1905	46,500	144,500
1906	101,650	213,228	1906	24,850	61,600
1907	88,063	310,967	1907	23,734	55,849
1908	121,764	281,469	1908	18,496	55,503
1909	155,680	414,708	1909	49,389	216,913
1910	174,920	395,417	1910	11,033	23,484
1911	173,332	324,255	1911	11,047	18,297
			1912	14,848	39,092

Clay (Pottery)			Gypsum		
Year	Tons	Value	Year	Tons	Value
1887	75,000	$37,500	1887	2,700	$27,000
1888	75,000	37,500	1888	2,500	25,000
1889	75,000	37,500	1889	3,000	30,000
1890	100,000	50,000	1890	3,000	30,000
1891	100,000	50,000	1891	2,000	20,000
1892	100,000	50,000	1892	2,000	20,000
1893	24,856	67,284	1893	1,620	14,280
1894	28,475	35,073	1894	2,446	24,584
1895	37,660	39,685	1895	5,158	51,014
1896	41,907	62,900	1896	1,310	12,580
1897	24,592	30,290	1897	2,200	19,250
1898	28,947	33,747	1898	3,100	23,600
1899	40,600	42,700	1899	3,663	14,950
1900	59,636	60,956	1900	2,522	10,088
1901	55,679	39,144	1901	3,875	38,750
1902	67,933	74,163	1902	10,200	53,500
1903	90,972	99,907	1903	6,914	46,441
1904	84,149	81,952	1904	8,350	56,592
1905	133,805	130,146	1905	12,880	54,500
1906	167,267	162,283	1906	21,000	69,000
1907	160,385	254,454	1907	8,900	57,700
1908	208,042	325,147	1908	34,600	155,400
1909	299,424	465,647	1909	30,700	138,176
1910	249,028	324,099	1910	45,294	129,152
1911	224,576	252,759	1911	31,457	101,475

Copper			Borax		
Year	Pounds	Value	Year	Pounds	Value
1887	1,600,000	$ 192,000	1887	2,029,380	$ 116,689
1888	1,570,021	235,303	1888	2,809,088	196,636
1889	151,505	18,180	1889	1,939,650	145,473
1890	23,347	3,502	1890	6,402,034	480,152
1891	3,397,455	424,675	1891	8,533,337	640,000
1892	2,960,944	342,808	1892	11,050,495	838,787
1893	239,682	21,571	1893	7,910,563	593,292
1894	738,594	72,486	1894	11,540,099	807,807
1895	225,650	21,901	1895	11,918,000	595,900
1896	1,992,844	199,519	1896	13,508,000	675,400
1897	13,638,626	1,540,666	1897	16,000,000	1,080,000
1898	21,543,229	2,475,168	1898	16,600,000	1,153,000
1899	23,915,486	3,990,534	1899	40,714,000	1,139,882
1900	29,515,512	4,748,242	1900	51,674,000	1,013,251
1901	34,931,788	5,501,782	1901	14,442,000	982,380
1902	27,860,162	3,239,975	1902	34,404,000	2,234,994
1903	19,113,861	2,520,997	1903	68,860,000	661,400
1904	29,974,154	3,969,995	1904	91,294,000	698,810
1905	16,997,489	2,650,605	1905	97,068,000	1,019,158
1906	28,726,448	5,522,712	1906	116,346,000	1,182,410
1907	32,602,945	6,341,387	1907	106,825,030	1,200,913
1908	40,868,772	5,350,777	1808	44,400,000	1,117,000
1909	65,727,736	8,478,142	1909	33,257,000	1,163,960
1910	53,721,032	6,680,641	1910	33,656,000	1,177,960
1911	36,838,024	4,604,753	1911	101,890,000	1,456,672
1912	.....	5,000,000	1912	.....	1,500,000

Asphalt			Bituminous Rock		
Year	Tons	Value	Year	Tons	Value
1887	4,000	$ 16,000	1887	36,000	$ 160,000
1888	3,100	39,500	1888	50,000	257,000
1889	3,000	30,000	1889	40,000	170,000
1890	3,000	30,000	1890	40,000	160,000
1891	4,000	40,000	1891	39,962	154,164
1892	7,550	75,500	1892	24,000	72,000
1893	9,150	161,250	1893	32,000	192,036
1894	11,698	233,800	1894	31,214	115,193
1895	25,525	170,500	1895	38,921	121,586
1896	20,914	362,590	1896	49,456	122,500
1897	22,697	404,350	1897	45,470	128,173
1898	25,690	482,175	1898	46,836	137,575
1899	15,060	308,130	1899	40,321	116,097
1900	12,575	253,950	1900	25,306	71,495
1901	21,634	313,219	1901	24,052	66,354
1902	34,511	349,344	1902	33,490	43,411
1903	41,670	503,659	1903	21,944	53,106
1904	56,187	672,910	1904	45,280	175,680
1905	40,304	285,290	1905	24,753	60,436
1906	77,756	777,560	1906	16,077	45,204
1907	79,718	1,058,400	1907	24,122	72,835
1908	105,443	1,082,376	1908	30,718	109,818
1909	136,664	1,707,159	1909	34,123	116,436
1910	184,967	2,125,122	1910	87,547	165,711
1911	.....	2,250,000	1911	75,125	117,279

Cement			Clay Brick		
Year	Barrels	Value	Year	Per M	Value
1887	4,500	14,000	1887	88,500	754,375
1888	4,200	13,500	1888	90,500	756,960
1889	4,800	14,200	1889	94,300	758,418
1890	4,500	13,600	1890	100,200	780,275
1891	5,000	15,000	1891	98,800	761,460
1892	5,200	15,600	1892	97,400	759,860
1893	7,100	18,750	1893	103,900	801,750
1894	8,000	21,600	1894	81,675	457,125
1895	16,383	32,556	1895	131,772	672,360
1896	9,500	28,250	1896	24,000	524,740
1897	18,000	66,000	1897	97,468	563,240
1898	50,000	150,000	1898	100,102	571,362
1899	60,000	180,000	1899	125,950	754,730
1900	52,000	121,000	1900	137,191	905,210
1901	71,800	159,842	1901	130,766	860,488
1902	171,000	423,600	1902	169,851	1,306,215
1903	640,868	968,727	1903	214,403	1,999,546
1904	969,538	1,539,807	1904	281,750	1,994,740
1905	1,265,553	1,791,916	1905	286,618	2,273,786
1906	1,286,720	1,941,250	1906	277,672	2,538,848
1907	1,631,563	2,585,577	1907	362,167	3,438,951
1908	1,629,615	2,359,692	1908	332,872	2,506,495
1909	3,779,205	4,969,437	1909	333,846	3,059,929
1910	5,453,193	7,485,715	1910	340,883	2,934,731
1911	6,371,369	9,085,625	1911	327,474	2,638,121
1912	.....	10,500,000			

Mineral Water			Marble		
Year	Gallons	Value	Year	Cubic Feet	Value
1887	618,162	144,368	1887	2,790	5,000
1888	1,112,202	252,990	1888	6,972	15,500
1889	808,625	251,241	1889	32,970	87,030
1890	258,722	89,786	1890	31,625	80,000
1891	334,553	135,959	1891	37,490	100,000
1892	331,875	162,019	1892	40,310	115,000
1893	383,179	90,667	1893	18,620	40,000
1894	402,275	184,481	1894	38,441	98,326
1895	701,397	291,500	1895	14,864	56,566
1896	808,843	337,434	1896	7,889	32,415
1897	1,508,192	345,863	1897	4,102	7,280
1898	1,429,809	213,817	1898	8,050	23,594
1899	1,338,537	406,691	1899	9,682	10,550
1900	2,456,115	268,607	1900	4,103	5,891
1901	1,555,328	559,057	1901	2,945	4,630
1902	1,701,142	621,477	1902	19,305	37,616
1903	2,056,340	558,201	1903	84,624	97,354
1904	2,430,320	496,946	1904	55,401	94,208
1905	2,194,150	538,700	1905	73,303	129,450
1906	1,585,690	478,186	1906	31,400	75,800
1907	2,924,269	544,016	1907	37,512	118,066
1908	2,789,715	560,507	1908	18,653	47,665
1909	2,449,834	465,488	1909	79,600	238,400
1910	2,335,259	522,009	1910	18,960	50,200
1911	2,637,669	590,654	1911	20,201	54,103

Lead		
Year	Tons	Value
1887	580	$52,200
1888	450	38,250
1889	470	35,720
1890	400	36,000
1891	570	49,020
1892	680	54,400
1893	333	24,975
1894	475	28,500
1895	796	49,364
1896	646	38,805
1897	298	20,264
1898	328	23,907
1899	360	30,642
1900	520	41,600
1901	360	28,820
1902	175	12,230
1903	55	3,960
1904	62	5,270
1905	266	25,083
1906	169	19,307
1907	164	16,690
1908	562	46,663
1909	1,343	144,897
1910	1,508	134,082
1911	702	63,173

Lime and Limestone	
Year	Value
1887	$368,750
1888	381,750
1889	416,780
1890	350,000
1891	300,000
1892	300,000
1893	301,276
1894	337,975
1895	457,784
1896	332,617
1897	291,456
1898	278,558
1899	343,760
1900	315,231
1901	434,133
1902	460,140
1903	592,268
1904	658,956
1905	878,647
1906	925,887
1907	1,162,417
1998	676,507
1909	997,745
1910	1,058,891
1911	843,786
1912	750,000

Granite	
Year	Value
1887	$ 150,000
1888	57,000
1889	1,329,018
1890	1,200,000
1891	1,300,000
1892	1,000,000
1893	531,322
1894	228,816
1895	224,329
1896	201,004
1897	188,024
1898	147,732
1899	141,070
1900	295,772
1901	519,285
1902	255,239
1903	678,670
1904	467,472
1905	353,837
1906	344,083
1907	373,376
1908	512,923
1909	376,834
1910	417,898
1911	355,742

All Minerals	
Year	Total Value
1887	$19,785,868
1888	19,469,320
1889	16,681,731
1890	18,039,666
1891	18,872,413
1892	18,300,168
1893	18,811,261
1894	20,203,294
1895	22,844,663
1896	24,291,398
1897	25,142,441
1898	27,289,079
1899	29,313,460
1900	32,622,945
1901	34,355,981
1902	35,069,105
1903	37,759,040
1904	43,778,348
1905	43,069,227
1906	46,776,085
1907	55,697,949
1908	66,363,198
1909	81,017,552
1910	88,419,079
1911	*87,497,879

*Asphalt amounting to $2,250,000 in 1911 not inc uded as in all previous years

BUTTER, EGGS, CHEESE—1912

Mo.	BUTTER			EGGS			CHEESE		
	Lbs. Receipts	Extras		Doz. Receipts	Extras		Lbs. Receipts	Fancy	
		High	Low		High	Low		High	Low
Jan ...	1,380,700	36½	33½	1,207,720	36½	28	549,000	17	15
Feb ...	1,444,900	36½	32	2,075,040	31	20	665,700	17½	15½
Mch...	1,826,700	33	30	2,410,200	22	20	662,400	19½	17½
April.	2,480,300	29½	24	2,307,832	22	20½	1,050,400	18	14
May...	2,505,100	26½	24	2,376,210	21	20	1,258,800	14	13
June..	2,526,000	30	26	1,813,252	24	21	1,721,300	14	13½
July...	2,844,200	29	26½	1,778,290	26	24	1,351,400	14½	14
Aug...	2,368,300	33½	29	1,359,990	30½	25	1,440,800	14½	14
Sept...	1,958,500	35	32½	1,013,734	41½	31	831,300	16	14
Oct....	2,035,900	35½	32½	954,820	52½	35	956,000	18	16
Nov...	1,819,900	33½	32½	849,660	53	43½	700,500	19	17½
Dec ...	1,696,500	35	32½	1,019,950	40½	27	757,800	17½	14½
Total..	24,887,000			19,166,698			11,945,400		
1912....	24,887,000			19,166,698			11,945,400		
1911....	21,118,350			17,613,442			9,630,680		

NORMAL CLIMATOLOGICAL DATA FOR SAN FRANCISCO, CALIFORNIA FOR FORTY-ONE YEARS

Compiled by the United States Weather Bureau.

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Temperature												
Mean for Month....	50°	52°	54°	55°	57°	59°	59°	59°	61°	60°	56°	52°
Highest mean.....	55°	57°	58°	59°	60°	62°	62°	63°	65°	64°	59°	54°
Year.....	1873	1886	1885	1880	1890	1888	1885	1894	1889	1887	1894	1885
Lowest mean.....	46°	48°	49°	52°	53°	56°	56°	56°	58°	57°	53°	49°
Year.....	1890	1887	1897	1896	1898	1894	1901	1891	1899	1881	1897	1895
Highest.....	78°	80°	80°	88°	97°	100°	98°	92°	101°	94°	83°	72°
Date and Year....	26th 1889	18th 1899	7th 1892	14th 1888	28th 1887	29th 1891	7th 1905	22d 1891	8th 1904	8th 1899	16th 1895	8th 1893
Lowest.....	29°	33°	33°	40°	42°	46°	47°	46°	48°	45°	38°	34°
Date and Year....	15th 1888	5th 1887	3d 1896	7th 1891	16th 1906	4th 1908	31st 1893	8th 1903	30th 1906	14th 1881	27th 1896	24th 1879
Precipitation												
Mean for Month....	4.53	3.50	3.05	1.85	0.76	0.21	0.02	0.01	0.31	0.31	2.72	4.44
Greatest fall.....	24.36	12.52	8.75	10.06	3.52	2.57	0.23	0.21	5.07	7.28	11.78	15.16
Year.....	1862	1878	1879	1880	1883	1884	1886	1864	1904	1889	1885	1866
Lowest fall.....	0.58	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Year.....	1852	1864	1898	1857	*	*	*	*	*	*	1890	1876
Greatest rainfall in 24 hours, date and year.....	4.67	3.60	3.61	2.43	1.29	1.23	0.23	0.06	3.09	2.03	3.98	3.14
	29th 1881	4th& 5th 1887	4th& 5th 1879	23d & 24th 1896	4th & 5th 1889	11th& 12th 1884	16th 1886	29th& 30th 1896	23d 1904	17th& 18th 1889	23d 1874	18th-19th 1871
Average No. days with .01 of an in. or more.....	11	10	10	7	4	2	1	0	2	4	7	11
Clouds & Weather												
Average No. Clear days.....	11	10	11	12	13	14	12	10	14	16	15	12
Average No. partly cloudy days.....	10	10	11	12	12	11	14	15	12	11	9	10
Average No. Cloudy days...	10	8	9	6	6	5	6	6	4	4	6	9
Wind												
Prevailing direct'n	N	SW	W	W	W	W	SW	SW	W	W	W	SE
Highest velocity.	57	49	60	47	45	48	41	42	40	44	64	60
Direction.....	SE	S	S	NW	W	SW	W	SW	W	NE	NE	SE
Date.....	3d	25th	1st	23d	11th	30th	15th	2d	27th	20th	30th	23d
Year.....	1901	1902	1902	1871	1897	1873	1898	1893	1899	1906	1906	1892

*Many years.

FROSTS

Average date of first "Killing" in autumn, December 10th.
Average date of last "Killing" in spring, January 25th.

RAINFALL IN SAN FRANCISCO.

Compiled by U. S. Weather Bureau.

STATIONS.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total 6 Mos.	Jan.	Feb.	Mar.	Apr.	May.	June.	Total 6 Mos.	Total Season.
1849-50	---	---	---	3.14	8.66	6.20	18.00	8.34	1.77	4.53	.46	---	---	15.10	33.10
1851-52	---	.02	1.03	.21	2.12	7.10	10.48	.58	.14	6.68	.26	.32	---	7.98	18.46
1852-53	---	---	---	.80	5.31	13.20	19.31	3.92	1.42	4.86	5.37	.38	---	15.95	35.26
1853-54	---	.04	.46	.12	2.28	2.32	5.22	3.88	8.04	3.51	3.12	.02	.08	18.65	23.87
1854-55	---	.01	.15	2.43	.34	.87	3.80	3.67	4.77	4.64	5.00	1.88	---	19.96	23.76
1855-56	---	---	---	---	.67	5.76	6.43	9.40	.50	1.60	2.94	.76	.03	15.23	21.66
1856-57	.02	---	.07	.45	2.79	3.75	7.08	2.45	8.59	1.62	---	.05	.12	12.83	19.91
1857-58	---	.05	---	.93	3.01	4.14	8.13	4.36	1.83	5.55	1.55	.34	.05	13.68	21.81
1858-59	.05	.16	---	2.74	.69	6.14	9.78	1.28	6.32	3.02	.27	1.55	---	12.44	22.22
1859-60	---	.02	.03	.05	7.28	1.57	8.95	1.64	1.60	3.99	3.14	2.86	.09	13.32	22.27
1860-61	.21	---	---	.91	.58	6.16	7.86	2.47	3.72	4.08	.51	1.00	.08	11.86	19.72
1861-62	---	---	.02	---	4.10	9.54	13.66	24.36	7.53	2.20	.73	.74	.05	35.61	49.27
1862-63	---	---	---	.52	.15	2.35	3.02	3.63	3.19	2.06	1.61	.23	---	10.72	13.74
1863-64	---	---	.03	---	2.55	1.80	4.38	1.83	---	1.52	1.57	.78	---	5.70	10.08
1864-65	---	.21	.01	.13	6.68	8.91	15.94	5.14	1.34	.74	.94	.63	---	8.79	24.73
1865-66	---	---	**.24**	**.26**	4.19	**.58**	**5.27**	**10.88**	**2.12**	3.04	.12	1.46	**.04**	**17.66**	**22.93**
1866-67	---	---	.11	---	3.35	15.16	18.62	5.16	7.20	1.58	2.36	---	---	16.30	34.92
1867-68	---	---	.04	.20	3.41	10.69	14.34	9.50	6.13	6.30	2.31	.03	.25	24.50	38.84
1868-69	---	---	---	.15	1.18	4.34	5.67	6.35	3.90	3.14	2.19	.08	.02	15.68	21.35
1869-70	---	---	.12	1.29	1.19	4.31	6.91	3.89	4.78	2.00	1.53	.20	---	12.40	19.31
1870-71	---	---	.03	---	.43	3.38	3.84	3.07	3.76	1.31	1.89	.23	.01	10.27	14.11
1871-72	---	.02	---	.07	2.81	14.36	17.26	4.00	6.90	1.59	.81	.18	.04	13.52	30.78
1872-73	.01	---	.04	.11	2.79	5.95	8.90	1.58	3.94	.79	.43	---	.02	6.76	15.66
1873-74	.01	.03	---	.83	1.16	9.72	11.80	5.66	2.21	3.36	.90	.66	.14	12.93	24.73
1874-75	---	---	.02	2.69	6.55	.33	9.59	8.01	.32	1.30	.10	.22	1.02	10.97	20.56
1875-76	---	---	---	.24	7.27	4.15	11.66	7.55	4.92	5.49	1.29	.24	.04	19.53	31.19
1876-77	.01	.01	.38	3.36	.25	---	4.01	4.32	1.18	1.08	.26	.18	.01	7.03	11.04
1877-78	.02	---	---	.65	1.57	2.66	4.90	11.97	12.52	4.56	1.06	.16	.01	30.28	35.18
1878-79	.01	Tr	.55	1.27	.57	.58	2.98	3.52	4.90	8.75	1.89	2.35	.05	21.46	24.44
1879-80	.01	.02	Tr	.78	4.03	4.46	9.30	2.23	1.87	2.08	10.06	1.12	---	17.36	26.66
1880-81	---	---	---	.05	.33	12.33	12.71	8.69	4.65	.90	2.00	.22	.69	17.15	29.86
1881-82	---	.	.25	.54	1.94	3.85	6.58	1.68	2.96	3.45	1.22	.21	.04	9.56	16.14
1882-83	---	---	.26	2.66	4.18	2.01	9.11	1.92	1.04	3.01	1.51	3.52	.01	11.01	20.12
1883-84	---	---	.42	1.48	1.60	.92	4.42	3.94	6.65	8.24	6.33	.23	2.57	27.96	32.38
1884-85	Tr	.04	.33	2.55	.26	7.68	10.86	2.53	.30	1.01	3.17	.04	.19	7.24	18.10
1885-86	.06	Tr	.11	.72	11.78	4.99	17.66	7.42	.24	2.07	5.28	.37	.01	15.39	33.05
1886-87	.23	Tr	.01	1.48	.84	2.07	4.63	1.90	9.24	.84	2.30	.06	.07	14.41	19.04
1887-88	Tr	.01	.29	Tr	.99	3.34	4.63	6.81	.94	3.60	.11	.38	.27	12.11	16.74
1888-89	.01	.01	.98	.13	3.99	5.80	10.92	1.28	.72	7.78	.96	2.17	.03	12.94	23.86
1889-90	.01	Tr	Tr	7.28	2.90	13.81	24.00	9.61	5.16	4.73	1.18	1.07	.10	21.87	45.85
1890-91	.02	---	.31	---	---	3.25	3.58	.98	7.26	1.96	2.44	1.25	.11	14.00	17.58
1891-92	.10	.02	.77	.04	.56	5.62	7.11	2.42	2.90	2.85	1.39	1.86	Tr	11.42	18 53
1892-93	---	---	.02	1.65	3.91	5.08	10.66	3.05	2.75	4.08	1.03	.15	.03	11.09	21.75
1893-94	.02	---	.21	.16	4.18	2.25	6.82	5.99	2.69	.60	.50	1.31	.56	11.65	18.47
1894-95	Tr	---	1.05	1.73	.88	9.01	12.67	6.99	2.31	1.89	1.24	.60	---	13.03	25.70
1895-96	.01	---	.77	.11	1.78	1.43	4.10	8.14	.28	2.85	5.16	.72	---	17.15	21.25
1896-97	.04	.03	.52	1.55	4.56	4.34	11.10	2.26	4.41	4.56	.27	.61	.22	12.33	23.43
1897-98	Tr	Tr	.10	1.70	1.05	1.22	4.07	1.12	2.13	.24	.19	1.44	.19	5.31	9.38
1898-99	---	Tr	1.06	.86	.46	1.62	4.00	3.67	.10	7.61	.62	.86	.01	12.87	16.87
1899-1900	---	Tr	---	3.92	3.79	2.65	10.36	4.11	.64	1.91	1.08	.32	.05	8.11	18.47
1900-01	Tr	Tr	.46	1.48	3.91	1.37	7.22	5.79	5.03	.80	1.61	.69	Tr	13.95	21.17
1901-02	Tr	Tr	.78	.64	3.48	.90	5.80	1.23	7.27	2.65	.98	1.05	Tr	13.18	18.98
1902-03	Tr	Tr	Tr	1.70	1.98	2.32	6.00	3.73	1.76	6.23	.56	Tr	Tr	12.28	18.28
1903-04	---	Tr	Tr	.17	4.25	1.63	6.05	1.05	5.89	6.01	1.29	.30	Tr	14.54	20.59
1904-05	.02	.06	5.07	2.37	1.07	1.59	10.18	4.04	2.70	3.15	1.33	2.05	.00	13.27	23.45
1905-06	---	Tr	Tr	Tr	.92	2.05	2.97	3.90	4.30	5.02	.92	2.75	.56	17.45	20.42
1906-07	.08	.11	.18	.03	1.59	6.90	8.89	4.41	3.02	8.42	.11	.04	1.28	17.28	26.17
1907-08	Tr	.02	.11	1.36	.04	3.66	5.19	4.88	5.39	.90	.22	.76	.01	12.16	17.35
1908-09	.02	.01	.13	.61	1.34	2.15	4.26	10.51	7.53	3.27	Tr	Tr	Tr	21.31	25.57
1909-10	Tr	0	.80	1.23	2.43	3.59	10.05	3.24	2.09	3.78	.31	.03	.02	9.47	19.52
1910-11	Tr	0	.0	.65	.48	1.73	2.91	13.79	3.02	1.57	.8	.28	.0	22.58	25.49
1850-51	---	---	.83	---	.92	1.05	2.30	.72	.54	1.94	1.23	.67	.02	5.12	7.42
1911-12	Tr	---	Tr	.28	.60	2.54	3.42	2.47	.41	1.10	1.38	1.47	.81	10.64	14.06
1912-13	Tr	---	1.25	.49	1.94	1.30	4.98	---	---	---	---	---	---	---	---

Tr indicates a trace of precipitation.

NORMAL CLIMATOLOGICAL DATA FOR SACRAMENTO, CALIFORNIA FOR FORTY-ONE YEARS

Compiled by the United States Weather Bureau.

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Temperature												
Mean for Month.....	46°	50°	55°	59°	64°	70°	74°	73°	70°	63°	54°	48
Highest mean.....	53°	55°	60°	63°	70°	77°	81°	77°	76°	78°	58°	51°
Year.....	1873	1877	1885	1857	1865	1853	1854	1888	1853	1853	1894	1861
Lowest mean.....	42°	46°	49°	53°	58°	65°	69°	66°	65°	58°	49°	43°
Year.....	1883	1880	1880	1896	1860	1894	1859	1873	1854	1881	1880	1890
Highest.....	72°	76°	80°	89°	103°	106°	110°	110°	106°	98°	81°	69°
Date and Year....	30th 1899	28th 1889	30th 1882	24th 1910	30th 1910	30th 1891	8th 1905	11th 1898	11th 1888	3d 1885	5th 1898	**8, 9th** 1893
Lowest.....	19°	21°	29°	35°	39°	44°	47°	48°	44°	36°	27°	24°
Date and Year....	14th 1888	13th 1884	15th 1880	4th 1910	9th 1896	1st 1890	3d 1901	30th 1887	18th 1882	14th 1881	28th 1880	14th 1883
Precipitation												
Mean for Month....	3.83	2.80	2.85	1.74	0.80	0.12	0.03	0.01	0.18	0.76	2.09	4.37
Greatest fall.....	15.04	8.50	10.00	14.20	3.25	1.45	0.63	0.20	3.62	6.02	11.34	13.40
Year.....	1862	1854	1850	1880	1889	1884	1860	1896	1904	1889	1885	1852
Lowest fall.....	0.15	0.04	0.04	T	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Year.....	1889	1899	1898	1875	*	*	*	*	*	*	1890	1876
Greatest rainfall in 24 hours, date and year.....	2.66	2.48	2.94	7.24	1.94	0.82	0.04	0.20	2.15	1.86	4.29	2.96
	29th	4th& 5th	8th& 9th	21st	5th	11th& 12th	4th	30th	23d	21st & 22d	17th& 18th	2d
	1881	1887	1884	1880	1889	1884	1895	1896	1904	1889	1885	1880
Average No. days with 01 of an in. or more.....	9	8	5	6	4	1	0	0	2	3	5	10
Clouds & Weather												
Average No. Clear days.....	12	12	14	15	20	24	29	29	25	22	19	11
Average No. partly Cloudy days.....	9	9	9	10	8	5	2	2	4	7	6	9
Average No. Cloudy days...	10	7	8	5	3	1	0	0	1	2	5	11
Wind												
Prevailing direct'n	SE	SE	SE	S	S	S	S	S	S	SE	SE	SE
Highest velocity	60	60	65	46	48	42	40	38	40	48	48	60
Direction.....	SE	SE	SE	S	SE	NW	NW	SW	NW	S	S	**SE**
Date.....	3d	25th	10th	7th	6th	12th	2d	9th	11th	20th	30th	9th
Year.....	1901	1902	1904	1902	1912	1886	1903	1908	1903	1894	1892	1894

*Many years.

FROSTS

Average date of first "Killing" in autumn, November 15th.
Average date of last "Killing" in spring, February 16th.

NORMAL CLIMATOLOGICAL DATA FOR RED BLUFF, CALIFORNIA FOR FORTY-ONE YEARS

Compiled by the United States Weather Bureau.

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Temperature												
Mean for Month....	45°	49°	55°	59°	67°	75°	82°	81°	73°	64°	54°	47°
Highest mean.....	50°	54°	61°	67°	73°	81°	86°	84°	81°	71°	59°	50°
Year.....	1881	1886	1885	1888	1897	1878	1887	1885	1888	1887	1894	1886
Lowest mean.....	39°	43°	48°	52°	60°	69°	78°	74°	60°	56°	50°	42°
Year.....	1890	1887	1897	1896	1899	1894	1884	1889	1882	1881	1897	1891
Highest	77°	82°	86°	96°	110°	110°	115°	114°	108°	97°	88°	79°
Date and Year....	27th 1899	25th 1888	9th 1892	24th 1898	29th 1887	30th 1891	8th 1887	22d 1891	1st 1891	5th 1892	3d 1890	5th 1885
Lowest	18°	22°	28°	34°	37°	44°	53°	52°	46°	32°	26°	25°
Date and Year....	14th 1888	14th 1884	16th 1880	15th 1896	7th 1879	1st 1898	1st 1881	27th 1881	12th 1893	14th 1881	30th 1880	13th 1884
Precipitation												
Mean for Month....	4.74	3.57	3.19	2.06	1.34	0.50	0.02	0.04	0.63	1.30	2.95	5.40
Greatest fall.....	20.71	16.66	12.84	7.05	3.11	2.61	0.17	0.54	4.86	8.41	17.05	12.85
Year.....	1878	1878	1906	1880	1906	1880	1891	1896	1904	1889	1885	1880
Lowest fall	0.51	0.01	T	0.03	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.52
Year.....	1887	1899	1885	1909	1884	*	*	*	*	1887	1890	1883
Greatest rainfall in 24 hours, date and year.....	5.11 16th 1878	4.12 2d & 3d 1909	2.17 9th 1884	2.03 20th 1880	1.67 9th & 10th 1890	0.84 3d & 4th 1888	0.10 9th 1891	0.54 29th & 30th 1896	3.86 23d 1904	1.70 20th 1889	4.73 9th & 10th 1885	5.09 19th 1879
Average No. days with .01 of an in. or more.....	11	9	11	9	6	3	1	2	2	6	6	11
Clouds & Weather												
Average No. Clear days.....	13	13	9	13	16	22	28	29	25	20	17	11
Average No. partly cloudy days	9	9	11	11	10	6	3	2	4	8	7	9
Average No. Cloudy days.....	9	7	11	6	5	2	0	0	1	3	6	11
Wind												
Prevailing direct'n	N	N	N	S	S	S	S	S	NW	N	N	N
Highest velocity	60	52	42	48	40	42	36	26	40	46	44	52
Direction.....	N	N	S	NW	S	S	S	S	N	N	N	N
Date	9th	18th	9th	15th	6th	14th	8th	31st	30th	14th	27th	19th
Year.....	1880	1880	1884	1880	1889	1888	1887	1889	1882	1878	1885	1879

* Many years.

FROSTS

Average date of first "Killing" in autumn, November 20th.
Average date of last "Killing" in spring, March 15th.

NORMAL CLIMATOLOGICAL DATA FOR FRESNO, CALIFORNIA, FOR TWENTY YEARS

Compiled by the United States Weather Bureau.

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Temperature												
Mean for Month....	45°	51°	54°	61°	67°	75°	82°	81°	74°	63°	55°	46°
Highest mean.....	51°	55°	60°	67°	72°	80°	86°	86°	83°	69°	59°	49°
Year.....	1896	1906	1910	1888	1897	1889	1906	1888	1888	1888	1894	1896
Lowest mean.....	42°	47°	49°	55°	63°	69°	79°	75°	68°	60°	51°	44°
Year.....	1898	1890	1897	1896	1899	1894	1895	1899	1893	1899	1906	1895
Highest.....	72°	83°	87°	101°	110°	112°	115°	113°	111°	100°	84°	74°
Date and Year....	8th	26th	31st	25th	31st	30th	8th	11th	24th	3d	4th	2d
	1911	1888	1900	1898	1910	1891	1905	1898	1888	1887	1908	1907
Lowest.....	20°	24°	28°	34°	38°	42°	51°	50°	44°	36°	27°	23°
Date and Year....	1st	6th	1st	5th	1st	14th	8th	31st	22d	17th	25th	21st
	1888	1899	1888	1895	1899	1907	1891	1887	1895	1892	1898	1897
Precipitation												
Mean for Month....	1.76	1.35	1.69	0.63	0.58	0.10	T	0.01	0.29	0.65	0.99	1.60
Greatest fall.....	4.44	4.35	4.22	3.42	1.69	1.16	0.07	0.15	1.78	3.21	9.54	4.09
Year.....	1909	1884	1893	1884	1884	1893	1896	1896	1904	1904	1885	1894
Lowest fall.....	0.34	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.33
Year.....	1889	1885	1887	1898	1897	*	*	*	*	1890	1884	1900
Greatest rainfall in 24 hours, date and year.....	1.46	1.48	1.22	1.68	1.02	0.74	0.06	0.15	1.12	2.38	1.33	2.10
	4th& 5th	9th	20th	24th	7th	5th	25th	30th	29th	6th	16th	29th-30th
	1895	1893	1893	1896	1905	1894	1896	1896	1890	1904	1888	1891
Average No. days with .01 of an in. or more.....	8	6	8	3	3	1	0	0	1	3	4	9
Clouds & Weather												
Average No. Clear days.....	9	15	13	19	21	26	29	25	25	20	17	9
Average No..... partly cloudy days.....	8	7	10	8	7	3	2	6	3	7	7	9
Average No. Cloudy days...	14	6	8	3	3	1	0	0	2	4	6	13
Wind												
Prevailing direct'n	NW	NW	NW	NW	NW	NW	NW	NW	W	NW	NW	NW
Highest velocity.	32	30	38	34	36	30	24	24	32	25	30	25
Direction.....	NW	NW	SE	NW	W	NW	E	N	NW	W	W	NW
Date.....	16th	10th	2d	15th	18th	17th	4th	4th	23d	16th	30th	29th
Year.....	1895	1894	1896	1906	1902	1891	1896	1891	1906	1892	1892	1887

* Many years.

FROSTS

Average date of first "Killing" in autumn, December 1st.
Average date of last "Killing" in spring, March 19th.

NORMAL CLIMATOLOGICAL DATA FOR LOS ANGELES, CALIFORNIA FOR THIRTY-FIVE YEARS

Compiled by the United States Weather Bureau.

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Temperature												
Mean for Month....	54°	55°	57°	60°	63°	67°	71°	71°	70°	64°	60°	56°
Highest mean.....	58°	60°	62°	64°	66°	71°	74°	75°	74°	68°	66°	61°
Year.....	1896	1896	1885	1910	1885	1883	1891	1885	1888	1890	1890	1890
Lowest mean.....	49°	51°	52°	56°	60°	63°	65°	68°	60°	60°	56°	53°
Year.....	1890	1888	1880	1896	1894	1891	1880	1900	1880	1886	1880	1891
Highest.....	87°	88°	99°	100°	103°	105°	109°	106°	108°	102°	96°	89°
Date and Year.....	9th	16th	29th	23d	25th	7th	25th	19th	21st	3d	3d	29th
	1896	1896	1879	1910	1896	1890	1891	1885	1885	1885	1890	1897
Lowest.....	30°	28°	31°	36°	40°	46°	49°	49°	44°	40°	34°	30°
Date and Year....	29th	6th	9th	28th	16th	13th	12th	30th	23d	22d	19th	14th
	1880	1883	1893	1901	1883	1894	1888	1901	1880	1892	1886	1878
Precipitation												
Mean for Month....	2.90	3.09	2.85	1.17	0.47	0.08	0.02	0.04	0.05	0.80	1.26	3.53
Greatest fall.....	7.83	13.37	12.36	5.06	2.06	1.39	0.24	0.28	1.23	6.95	6.53	15.80
Year.....	1890	1884	1884	1880	1892	1884	1886	1889	1911	1889	1900	1888
Lowest fall.....	0.20	T	0.01	T	0.00	0.00	0.00	0.00	0.00	0.00	0.00	T
Year.....	1887	*	1885	1909	1886	*	*	*	*	1891	*	1900
Greatest rainfall in 24 hours, date and year.....	4.17	3.94	3.18	2.20	1.76	0.87	0.24	0.61	0.71	3.62	3.75	4.30
	25th-26th	14th-15th	3d & 4th	9th & 10th	2d & 3d	13th	14th	31st	30th	21st	28th & 29th	11th-12th
	1890	1887	1884	1884	1892	1884	1886	1889	1894	1889	1892	1889
Average No. days with .01 of an in. or more.....	6	6	7	6	3	1	0	0	0	3	3	7
Clouds & Weather												
Average No. Clear days.....	17	14	12	11	11	10	12	14	17	18	19	17
Average No. partly Cloudy days.....	8	9	12	12	14	17	18	16	12	10	8	9
Average No..... Cloudy days.....	6	5	7	7	6	3	1	1	1	3	3	5
Wind												
Prevailing direct'n	NE	NE	W	W	W	W	W	W	W	W	W	NE
Highest velocity	48	42	46	42	36	34	25	24	38	34	43	38
Direction.....	NE	W	SW	W	NW	SW	W	NE	S	NE	NE	W
Date	8th	23d	12th	12th	1st	14th	14th	13th	22d	7th	9th	8th
Year.....	1882	1912	1881	1883	1904	1907	1894	1904	1908	1887	1881	1911

* Many years.

FROSTS

Average date of first "Killing" in autumn none reported.
Average date of last "Killing" in spring, March 19th.

MONTHLY AND SEASONAL PRECIPITATION AT CERTAIN STATIONS IN CALIFORNIA DURING SEASON OF 1912-1913.

Compiled by United States Weather Bureau

STATIONS	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	Total
Extreme Northern Counties:													
Eureka	10.17	5.73	4.73	5.92	1.98	1.29	.05	.08	2.40	1.55	6.86	5.83	46.59
Montague	1.31	.79	1.87	1.46	2.45	1.68	.07	.34	2.30	.54	2.35	1.13	16.29
Alturas	.99	.38	1.53	2.71	1.07	.90	.64	.53	.87	.24	.59	.58	11.03
Sacramento Valley:													
Redding	7.20	2.03	6.78	4.96	2.85	1.51	.02	0	3.62	1.41	5.73	2.73	38.84
Chico	3.27	.69	3.70	2.14	1.80	.12	Tr	0	4.84	1.23	3.14	1.02	21.95
Willows	1.95	.26	4.54	1.86	1.16	.19	Tr	0	3.37	.48	1.83	.42	16.06
Marysville	2.78	.62	3.06	1.85	1.15	.32	0	0	2.40	.75	1.78	.75	15.46
Sacramento	2.74	.23	1.97	1.69	.94	.58	0	0	1.25	.58	.80	.23	11.01
Davisville	2.08	.20	2.65	1.37	1.12	.74	0	0	1.22	.25	1.08	.33	11.04
Vacaville	2.73	.31	3.66	1.83	1.43	0	0	0	1.11	.47	3.69	.95	16.18
Northern Coast Valley:													
Ukiah	5.73	1.73	5.44	3.81	1.78	.44	0	0	2.93	1.89	7.05	5.45	36.25
Santa Rosa	3.39	1.09	4.69	1.54	2.88	1.14	0	0	2.99	1.47	5.11	1.78	26.08
San Joaquin Valley:													
Stockton	2.56	.16	1.57	1.54	1.32	.25	Tr	0	1.39	.40	.62	.24	10.05
Newman	1.95	.01	2.14	.99	.98	.11	0	0	.14	.16	.24	.04	6.76
Merced	1.55	0	2.64	1.67	.35	.04	Tr	0	.13	.20	.58	.34	7.50
Storey	.35	0	2.72	1.81	.40	0	0	0	0	0	1.00	0	6.28
Fresno	.72	Tr	3.02	1.86	.41	Tr	Tr	0	.10	.01	.85	.35	7.32
Visalia	-----	-----	2.21	1.12	0	0	0	0	0	0	.30	.80	-----
Bakersfield	.54	0	2.19	1.16	0	0	0	0	-----	-----	-----	-----	-----
Sierra Foothills:													
Oroville	3.81	.86	6.79	2.36	2.20	.25	Tr	0	3.43	1.00	3.18	.90	24.78
Auburn	3.75	.27	2.91	1.66	.90	.45	0	0	1.72	1.21	2.53	1.21	16.61
Lemon Cove	.91	Tr	5.12	3.11	1.17	0	0	0	Tr	0	.55	.48	11.34
Porterville	1.30	.11	3.12	2.33	.14	0	Tr	0	0	.12	.61	.49	8.22
Santa Clara Valley:													
San Jose	1.36	.30	2.80	1.95	.70	.46	Tr	0	.71	.21	.29	.43	9.21
Hollister	1.77	.18	2.25	2.30	.87	Tr	0	0	.15	.22	.57	.42	8.73
Salinas Valley:													
Salinas	2.31	.18	2.85	2.89	.70	.10	0	0	.07	.41	.33	.56	10.40
King City	2.83	0	3.03	2.78	.60	0	0	0	.02	0	.28	0	9.54
Paso Robles	1.40	0	5.14	2.89	.91	0	0	0	.04	0	.35	.12	10.85
South Coast Valleys:													
San Luis Obispo	2.80	.02	5.65	2.27	2.08	0	Tr	0	.04	Tr	.79	.24	13.89
Santa Maria	1.34	0	4.13	.69	1.60	0	0	0	0	-----	-----	-----	-----
Santa Barbara	.42	0	9.48	2.12	1.58	Tr	Tr	Tr	Tr	.28	.21	Tr	14.09
Ojai Valley	.24	0	8.43	1.91	1.12	Tr	Tr	0	0	.55	.20	.03	12.48
Southern California:													
Los Angeles	.07	0	6.99	1.66	.12	0	Tr	0	0	.56	.35	.03	9.78
Redlands	.37	0	5.87	2.85	1.73	0	.16	Tr	.03	1.11	.34	.01	12.47
San Jacinto	.15	0	7.29	3.24	1.18	0	0	.50	0	1.33	.48	0	14.17
San Diego	.66	0	5.72	2.13	.17	.16	.14	.26	0	.89	.40	.03	10.56
Imperial Valley:													
Brawley	0	0	.75	Tr	.45	.25	Tr	Tr	0	Tr	Tr	.10	1.55

Tr indicates a trace of precipitation.

MONTHLY AND SEASONAL TEMPERATURE AT CERTAIN STATIONS IN CALIFORNIA DURING SEASON OF 1912-1913.

Compiled by United States Weather Bureau

STATIONS.	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	Ann'l
Extreme Northern Counties:													
Eureka	49.6	48.9	46.3	48.4	52.1	54.8	55.2	57.2	57.2	50.8	52.4	46.6	51.6
Montague	34.4	42.0	41.0	45.5	54.8	62.1	69.2	66.1	59.5	45.6	42.4	34.2	49.7
Alturas	32.0	36.6	35.4	40.9	51.1	59.2	64.8	63.4	55.6	44.0	41.1	30.4	46.2
Sacramento Valley:													
Redding	47.2	52.7	52.2	56.3	67.1	75.8	80.0	79.4	72.2	61.0	53.4	48.1	62.1
Chico	47.2	51.4	50.8	54.2	64.3	72.7	78.0	76.2	69.4	59.1	51.4	45.7	60.0
Willows	47.3	53.0	51.3	55.5	67.0	74.8	80.2	79.9	75.3	65.8	55.4	47.8	62.8
Marysville	47.8	53.0	52.4	55.4	65.0	72.3	75.6	74.8	69.6	59.2	53.0	45.8	60.3
Sacramento	47.4	53.1	51.4	54.4	63.6	69.2	71.6	71.6	69.5	60.6	52.4	46.9	59.3
Davisville	46.2	51.2	50.4	53.8	63.7	69.6	73.0	72.3	68.2	57.3	50.0	43.8	58.3
Vacaville	48.4	53.5	51.8	54.2	64.0	70.4	73.2	73.2	69.8	59.0	52.3	45.6	59.6
Northern Coast Valley:													
Ukiah	48.2	50.8	49.8	52.0	60.8	66.4	70.9	70.4	65.5	54.4	49.7	44.6	57.0
Santa Rosa	50.0	51.2	49.8	51.3	58.5	63.2	63.6	65.4	64.1	56.7	51.8	46.6	56.0
San Joaquin Valley:													
Stockton	46.8	52.2	52.0	55.0	64.0	70.2	71.2	70.9	68.4	58.6	50.6	44.1	58.7
Newman	53.3	58.8	59.8	63.8	74.9	81.4	81.6	76.4	72.5	62.6	53.0	45.2	65.3
Merced	46.6	47.9	52.1	55.6	67.2	76.4	81.4	77.4	74.2	61.0	54.7	48.4	61.9
Storey	43.6	47.7	49.2	52.2	63.6	71.8	76.6	74.2	71.4	58.8	51.8	43.4	58.7
Fresno	48.5	53.0	53.2	56.8	67.4	75.2	79.8	77.7	73.2	61.6	55.2	45.5	62.3
Visalia	-----	-----	48.6	50.6	60.4	70.2	70.9	70.4	-----	54.0	49.6	48.0	-----
Bakersfield	49.5	58.2	57.6	58.9	71.8	76.7	80.2	75.6	73.2	62.9	57.4	47.2	64.1
Sierra Foothills:													
Oroville	47.4	52.2	52.2	56.0	65.5	73.1	76.8	75.0	70.0	60.4	52.6	45.9	60.6
Auburn	47.2	50.2	47.0	49.8	60.7	73.8	74.0	74.2	67.6	57.5	45.6	46.8	57.9
Lemon Cove	53.2	55.0	56.0	58.6	69.2	76.8	80.0	79.2	74.4	64.0	56.3	47.8	64.2
Porterville	52.0	55.0	56.4	57.4	72.2	75.8	81.2	78.9	74.6	61.4	55.7	46.2	63.9
Santa Clara Valley:													
San Jose	50.0	52.7	51.4	52.2	60.0	65.0	64.7	65.1	65.7	57.4	53.6	47.8	57.1
Hollister	50.4	52.0	50.2	51.5	58.8	64.4	63.6	63.8	65.4	58.0	54.0	45.8	56.5
Salinas Valley:													
Salinas	53.6	53.6	52.3	52.3	59.8	-----	59.6	63.3	66.4	59.6	56.4	47.7	-----
King City	43.3	44.0	55.8	61.6	68.8	76.2	78.4	80.1	71.3	64.4	60.0	53.4	63.1
Paso Robles	48.8	52.8	49.9	51.8	60.6	66.2	68.0	67.4	66.2	56.6	52.2	42.0	56.9
South Coast Valleys:													
San Luis Obispo	54.2	55.1	50.6	51.5	58.3	60.9	62.3	63.2	64.5	59.6	58.4	51.2	57.5
Santa Maria	50.5	53.3	49.8	56.0	61.4	63.4	61.6	63.0	67.6	-----	-----	-----	-----
Santa Barbara	55.1	57.6	52.8	54.6	59.2	60.7	63.5	63.4	63.7	61.2	58.7	52.4	58.6
Ojai Valley	53.8	55.6	51.5	53.6	60.9	65.3	70.0	68.5	68.4	62.4	60.4	51.6	60.2
Southern California:													
Los Angeles	59.0	59.8	54.2	56.4	62.9	65.4	68.8	69.2	68.6	65.2	65.1	56.6	62.6
Redlands	53.6	55.7	50.8	54.6	63.2	69.8	73.6	72.7	70.7	61.2	60.0	50.6	61.4
San Jacinto	54.8	55.6	52.8	56.6	64.2	71.7	74.8	73.9	71.4	61.2	60.0	50.6	62.3
San Diego	57.0	56.2	55.1	56.1	60.6	63.2	66.9	66.4	65.8	63.3	61.2	54.1	60.5
Imperial Valley:													
Brawley	55.0	50.0	58.1	65.6	75.0	84.1	86.4	86.2	79.9	68.8	61.8	50.3	68.4

MARINE CASUALTIES TO VESSELS BOUND TO OR FROM PACIFIC COAST PORTS FOR THE SIX MONTHS ENDING DEC. 31, 1912.

TOTAL LOSSES YEAR 1912.

Admiral, schooner, from Valparaiso went through the jetty at mouth of Columbia River on January 13, 1912. Was towed off by Tug Wallula. Later turned bottom up and drifted on Peacock Spit and became total loss. Crew saved.

Alsen, power schooner, with crew of 6 men reported lost prior to January 25, 1912.

Armeria, U. S. Lighthouse Tender, was totally wrecked on May 20, 1912, off Cape Henshinbrook Alaska. Crew saved.

C. L. Dwyer, steamer, totally wrecked at Nome prior August 15, 1912.

Carrier Dove, fishing schooner, was totally wrecked on February 14, 1912, at Otter Point. Crew saved by own boats and later picked up Br. Stmr. Quadra.

Condor, power schooner, went ashore at North Beach, Oregon, November 17th, 1912. Vessel total loss. Part of cargo saved.

Compeer, schooner, was driven ashore during heavy gale at Bristol Bay on July 18, 1912. Several attempts were made to float vessel without success.

Dolphin, power fishing schooner, went ashore at Plumper Pass, February 23, 1912, and was totally wrecked. Crew were picked up by stamer Joan and landed at Victoria.

E. K. Wood, from Tacoma for San Francisco, went ashore on Parier Reef, West Coast of Vancouver Island, November 17, 1912. Vessel total loss. Crew saved.

Endeavor, schooner, from Victoria, ran ashore at Ngau Reef Suva on September 13, 1912. Became total loss. Wreck sold for £350.

Guard, U. S. steamer, went ashore at Charles Island, San Juan Groupe, prior to January 10th, 1912. Total loss. Crew saved.

Gulf Stream, British Bark from Glasgow, for Victoria, was posted at Lloyds as missing on February 20, 1912. With all on board.

Hayden Brown, barge, went ashore and was totally wrecked May 12, 1912 on Montague Island, after breaking adrift from Tug Pioneer May 10, during heavy gale, only 2 of crew reached shore. One later dying from exposure.

Herald, river steamer, took fire at Oakland on November 4, 1912, and was totally destroyed.

Ida McKay, schooner, from Bandon, for San Francisco, was abandoned on February 2, 1912, in Lat. 41°N, Long. 132°W. Crew were taken off by schooner Azalea and landed at San Pedro. Vessel afterwards turned turtle.

J. J. Loggie, steamer, from Eureka for San Pedro, went ashore on October 19, 1912, off Point Arguello. Vessel and cargo total loss. Crew saved.

Joseph Russ, schooner, was totally wrecked on Chirikof Island, S. W. of Kodiak, on April 21, 1912, during heavy gale. Chief Officer drowned. Vessel high and dry on rocks.

Klitikitat, barkentine, bound out of Hilo, went on rocks opposite Honolii Gulch, Hawaiian Islands, on November 9, 1912, and became a total loss. Crew saved.

Lillebonne, barge, used as garbage carrier while being towed to sea on August 29, 1912, when between Point Bonita and Seal Rocks capsized. One of crew drowned. Vessel total loss.

Liscum, U. S. steamer, at Shanghai, August 27, 1912, repairing, sunk along side of dock.

Mary Sachs, schooner, went ashore at Teller (Seward Peninsula) prior October 23, 1912. Total loss.

Midge, British tug, went ashore at McCaully Point near Victoria, December 16, 1912. Total loss.

North Star, power schooner, broke down near Coos Bay Bar on January 20, 1912. Drifted out to sea and capsized. Four of crew lost.

Osprey, power schooner, went ashore on north jetty of Coos Bay on November 1, 1912, and became a total loss. All of crew lost.

Ruth E. Godfrey, from Tocopilla, August 28, 1911, for Port Townsend was posted as missing on January 9, 1912. With all on board.

Senator, tug owned in Seattle was sunk on December 9, 1912, in False Bay, following collision with scow which was in tow.

Siver Wave, power schooner, went ashore and became a total loss at York (Seward Peninsula) prior to October 23, 1912.

Torrisdale, British bark, from Caleta Colosa for Oregon, was driven ashore on South Jetty of Grays Harbor, December 28, 1912. Crew saved. Vessel total loss.

Valentine, power schooner, was totally wrecked on night of February 29, 1912, on reef one mile off Lopaz Island, Puget Sound, during heavy gale.

Vida, schooner, was wrecked on Tillamook Bar, on April 28, 1912. Crew saved.

Welding Bros., fishing steamer, went ashore on Widby Island on March 21, 1912.

Workman, British steamer, from San Francisco, November 16, 1912, for London ashore December 27, 1912, 15 miles south of Rio Janiero. Part of cargo salved, Balance with ship total loss. Crew saved.

PARTIAL LOSSES 1912.

A. F. Coats, schooner, was in collision during dense fog January 12, 1912, with British barkentine Everett G. Griggs and had bow damaged.

Aberdeen, while docking at Seawall on November 10, 1912, ran into dock and split stem.

Archer, power schooner, at San Francisco, November 19, 1912, from Roche Harbor had heavy weather on voyage. Engine broke down and lost some sails.

Acme, steamer, at San Francisco September 4, 1912, from Eureka, when between Point Gorda and Shelter Cove shipped a heavy sea which washed overboard 100 cords of bark, flooded engine room and done other slight damages.

Acme, ship from Baltimore, for Puget Sound, put into Montevideo on September 5, 1912 with cargo heated. Part of cargo lightened to ventilate.

Admiralen, Norwegian steamer, from Sanderford, for Alaska, lost rudder on April 28, 1912, was towed to San Francisco by steamer Catania for repairs.

Alaskan, steamer from Kahului, at Salina Cruz, April 4, 1912, had fire on board during voyage. Vessel and cargo slightly damaged.

Alaskan, steamer, returned to San Francisco November 24, 1912, with starboard tail shaft broken.

Alert, schooner, bound from Grays Harbor for Honolulu, collided with barkentine Gardiner City on April 11, 1912, and had jibboom carried away.

Algoa, British steamer, from Puget Sound for Naples put into Colombo, December 14, 1912, with boiler out of order.

Alliance, steamer from Columbia River for Coos Bay, lost rudder on January 7, 1912, 5 a. m., eight miles from Coos Bay. Was picked up on January 8, by Steamer Nome City and towed to Astoria.

Americana, schooner, at San Francisco April 11, 1912, from Newcastle Australia, lost several sails, two gaffs and sustained considerable damage about decks during heavy weather on voyage.

Antiope, British bark, at San Francisco March 14, 1912, from Newcastle, Australia, experienced a hurricane from December 25 to 28, 1911. Vessel was thrown on beam ends, sails blown away and considerably damaged about decks.

Arago, barkentine, from Coos Bay arrived at San Diego February 18, 1912, leaking badly, sails blown away. Jettisoned part of deck load and burned a portion to keep steam on donkey engine to work pumps.

Arctic Stream, British ship, at East London, February 28, 1912, from Victoria encountered gales on voyage. Lost sails, deck load shifted and received sundry damages about deck.

Argyll, steamer, from San Francisco for Seattle, broke tail shaft on April 13, 1912, off Cape Sebastian.

Argyll, steamer from San Pedro, for Seattle collided with steamer Gualala on October 15, 1912, off Point Arena, and received slight damage.

Ashtabula, British steamer, at San Francisco, February 10, 1912, from Shanghai had steam steering gear damaged on voyage. Was hove too for 16 hours making repairs.

Athena, schooner, from Boston for Seattle arrived at Montevideo December 28, 1911, leaking.

Balboa, schooner, was in collision with barkentine Koko-Head off Columbia River on October 16, 1912, and lost one mast.

Bangor, barge, went ashore on Brittina Beach, February 6, 1912. Was floated on February 25, 1912 and towed to Vancouver for temporary repairs.

Battle Abbey, British bark, from Newcastle Australia, at San Francisco May 30, 1912, experienced heavy gales, on May 29, during which lost several sails and damaged forequarter boat.

Beaver, steamer, crossing Columbia River bar on November 13, 1912, was struck by heavy sea. After cabin smashed and wireless equipment destroyed.

Bellerophon, British steamer, from Puget Sound ran aground in River Mersey, January 28, 1912. Was floated without damage.

Berengere, French ship, May 24, 1912, from Rotterdam for San Francisco put into Hobart damaged about decks.

Bertha Dolbeer, from San Francisco for Grays Harbor returned to San Francisco in tow of steamer Johan Poulson July 10, 1912 having been in collision with British steamer Tuscarora off San Francisco Lightship July 9, and having jibboom and head gear carried away and other damage about deck.

Bertha Dolbeer, schooner, at San Francisco November 16, 1912, from Northwest Harbor had heavy weather on voyage, lost steering gear, broke 2 gaffs, stove in boats and was damaged about decks.

Bertie Minor, schooner, at San Francisco February 13, 1913, from Coquille River had heavy gales on voyage. Lost 2 jibs and had head gear considerably damaged.

British Yeoman, British bark, bound from Oregon for Port Natal put into San Francisco on February 11, 1912, with steering gear badly damaged in heavy gale on January 24, 1912.

British Yeoman, British bark, lying at Folsom Street wharf took fire in sail locker December 9, 1912. Fire was extinguished with much damage to sails and slight damage to vessel.

C. A. Thayer, schooner, from Grays Harbor for San Pedro was spoken on January 13, 1912, 20 miles S. W. of Humboldt Bay, leaking badly. Was picked up on January 14, 1912, 25 miles off Cape Mendocino by steamer J. B. Stetson and towed to San Francisco. Upon arrival had 26 inches of water in hold.

C. T. Hill, schooner, went ashore on the South Spit, ½ mile below jetty at entrance of Nehalem River, on July 27, 1912.

Calcutta, British bark, at San Francisco, May 2, 1912, from Kobe, ran into gale on voyage and lost jib and lower topsail.

Californian, steamer, from Puerto Mexico, for Philadelphia, grounded near lower end of Tinicum Islands, March 23, 1912. Floated later damage if any was slight.

Camino, from Portland for San Francisco, lost propeller on October 19, 1912. Was picked up by steamer Watson and towed to San Francisco.

Casco, steamer, at San Francisco was run into by steamer Hanalei on December 9 and had guard and rail on starboard side also several knees badly damaged.

Catania, steamer, grounder at Astoria on December 19, 1912. Was towed off undamaged.

Chas. F. Crocker, barkentine, loaded and lying at Astoria January 30, 1912, lost both anchors and went ashore on Clatsop Spit inside No. 10 buoy in smooth water. Was floated with assistance of tugs Goliah and Tatoosh. Damaged slightly about deck.

Chas. F. Crocker, barkentine, bound from Columbia River for Eten Peru put into San Francisco on February 21, 1912. Had heavy S. E. gale on February 15, 1912 causing vessel to leak. Had to keep pumps going continually upon arrival had 3 feet of water in hold and one pump broken. Cargo was discharged and vessel dry docked for repairs.

Chas. Nelson, steamer, while docking in San Francisco on Dec. 13, ran into steamer Enterprise lying at dock. Nelson had part of bridge and rail on port side damaged also one life boat damaged.

Chas. R. Wilson, schooner, at San Francisco June 17, 1912, had heavy gale on June 13, during which lost foremost head.

Cheloshin, British steamer, struck rock in Skenna River on April 1, 1912. Stove hole in stokehold and bunkers.

City of Panama, steamer, from San Francisco at Mazatlan May 7, 1912, had high pressure rink block deranged on voyage. Repairs made at Mazatlan.

City of Panama, from San Francisco for Panama was towed back to San Francisco on July 10, 1912, with machinery disabled.

City of Puebla, steamer, at Seattle March 23, 1912, had small fire in after hatch this morning. Damage slight.

City of Seattle, steamer, from Skagway for Seattle went ashore August 15, 1912, 2 miles South of Ketchikan. Floated same day with assistance.

City of Topeka, steamer, while crossing bar at Eureka, December 18, 1912, struck heavily, rudder carried away, also stern frame and several plates badly damaged. Was towed to San Francisco by steamer Maverick.

Cleveland, German steamer, while coming to anchor in harbor at Honolulu on January 24, 1912 swung on United States Steamer Colorado, and had cabin damaged by gun.

Col. E. L. Drake, steamer, went ashore on Harbor Island, December 20, 1912. Was towed off by steamer Capt. A. F. Lucas undamaged.

Colorado, U. S. steamer, had propeller damaged by being fouled by German steamer Cleveland in harbor at Honolulu on January 24, 1912.

Coquelle, schooner, returned to San Francisco on September 5, 1912, on account of foremast head having been carried away.

County of Linlithgow, Chili ship from Antofagasta for Victoria went ashore on Otter Point on December 2, 1912. Was towed off December 3, slightly damaged. Proceeded to Esquimalt for repairs.

Crown of India, British ship, was in collision with British bark Inverclyde in Columbia River, December 27, 1912, and had several plates cracked, and fore and main rigging damaged.

Daisy, steamer, at Oakland December 3, 1912, took fire. Was beached on mud flats after being flooded. Hull and houses much damaged.

Daisy Freeman, steamer, from Columbia River for San Francisco towed back to Astoria October 12, 1912. Leaking badly and deck load gone. Damage was caused by vessel striking bar. Was dry docked at Portland for repairs.

Dauntless, schooner, from San Francisco, for Grays Harbor, returned to San Francisco July 14th, 1912, having been in collision with steamer Roanoke off San Francisco. Had hole 12 feet long and 4 feet wide torn on starboard side below forerigging. Sixteen planks gone, bulwarks waterways damaged. Also deck damage.

Dauntless, schooner, from Fort Bragg for Honolulu towed into San Francisco on October 14, 1912, by steamer St. Helens. Was in collision with latter on October 13 during heavy fog. Former had hole 8 feet stove in on port side aft of main rigging causing vessel to leak badly.

David Evans, British schooner, at Victoria November 12, 1912, from Japan encountered severe weather on voyage lost nearly all sails and was also damaged slightly about decks.

David Scannel, Fire tug, grounded on Anita reef, on March 15, 1912 was floated leaking slightly.

Defender, schooner, from Honoipu at San Francisco October 28, 1912, had hurricane on voyage. Blew away jib mizzensail, and staysail and washed overboard every thing movable about deck.

Defiance, schooner, stranded on Empire Spit, Willapa Harbor, October 19, 1912. Floated with assistance undamaged.

Den of Clamis, British steamer, was in collision at entrance of Shanghai Harbor on September 26, 1912. With Japanese steamer Shidzuoka Maru. Slightly damaged.

Dora, steamer, was driven ashore on beach at Seward on December 7, 1912, during heavy gale. Vessel partly filled with water and was much damaged. Was floated on December 27, 1912 and proceeded to Seattle under own steam.

Dunsyre, British ship at San Francisco June 3, 1912, carried away steering gear on April 2, south of Pitcairn Island in strong N. E. gale.

Edith, steamer, at Seattle May 15, 1912, lost 2 blades of propeller on May 10, 1912, 600 miles from Cape Flattery.

Edward Sewall, ship, at San Francisco March 10, 1912, from Philadelphia in Gulf Stream on October 9, 1911, encountered a hurricane lost fore and maintopgallant masts and whole suit of sails, broke 2 steel yards and washed overboard everything movable off the deck. Put back to New York for repairs. On November 4, sailed again and on November 11 encountered another hurricane losing foresail and three lower topsails.

Eldorado, schooner, in port at Iquique loading for Honolulu was damaged by collision with British steamer Foxley on February 24, 1912.

Enterprise, steamer, from San Francisco for Hilo broke tail shaft on March 25, 1912, 375 miles from San Francisco was picked up and towed back to port by steamer Lurline.

Enterprise, steamer, lying at dock in San Francisco was run into by Steamer Chas. Nelson. No damage.

Erskine M. Phelps, at San Francisco from Philadelphia, December 30, 1912, had heavy weather on voyage during which lost sails.

Everett G. Griggs, British barkentine, while bound in from Tulcahuano on January 12, 1912, collided with schooner A. F. Coats in Straits of Fuca during dense fog and had bows damaged.

Expansion, schooner, put into Tahiti prior July 10, 1912, while bound from Grays Harbor for Valparaiso leaking badly. Cargo discharged.

Expansion, schooner, put back August 18, 1912, to Honolulu from Tahiti for repairs.

F1, U. S. Submarine, dragged anchor at Port Watsonville October 11, 1912, and went ashore. Two of crew drowned. Was floated on October 19 and towed to San Francisco.

F. A. Kilburn, steamer, arrived at Eureka August 1, 1912, from San Francisco, had fire in engine room on voyage up. Same spread to state rooms on upper deck which were destroyed.

F. A. Kilburn, steamer, bound out from Eureka, on December 2, 1912, struck on bar, carried away rudder sprung a leak. Returned for temporary repairs.

F. S. Loop, steamer, bound from Tacoma for San Francisco, snagged propeller prior to April 13, 1912 and was dry docked.

Fairhaven, steamer, from Port Ludlow for San Francisco was in collision on September 14, 1912 off Point Arena damage slight.

Fitzclarence, British steamer, lying at Green Street wharf, San Francisco, took fire September 11, 1912 in No. 1 and 2 holds. Fire was got under control by chemicals. Fire extinguished on September 15, 1912. Vessel and cargo much damaged.

Forester, schooner, bound from Grays Harbor for Santa Rosalia, put into San Francisco February 20, 1912 had heavy gale on February 3, 1912 throwing vessel on beam ends flooding cabin and forecastle and causing vessel to leak. Deck lashings were cut and about 200,000 lumber of deckload was jettisoned to save vessel. On arrival vessel had about 8 or 10 feet of water in hold. Examination was made and found cause of leak was knot in one of bottom planks coming loose.

Fort Bragg, steamer, while leaving Fort Bragg on February 9, 1912, struck submerged rock on port side. Hung on rock for 5 minutes before floating. On arrival was leaking about foot an hour.

Francis H. Leggett, steamer, carried away steering gear on January 24, 1912, 12 miles South of Cape Flattery. Made temporary repairs and arrived at Astoria on January 26, 1912.

G. W. Watson, schooner, at Papeete, April 3, 1912, from Raymond after discharging cargo and bound to sea went ashore on reef. On voyage down lost portion of deck load in heavy weather.

Galilee, schooner, from San Francisco for Bering Sea returned to San Francisco, March 20, 1912 leaking—pumps being unable to keep vessel free. Returned for repairs.

Gardiner City, barkentine, from San Francisco for Port Gamble, returned to San Francisco on April 19, 1912 and reported on April 11, 1912 during heavy squall was struck on starboard side at fore rigging by schooner Alert carrying away starboard fore rigging, stove in bulwarks and rail also several planks on starboard side. Foremast was carried away at deckhouse, mainmast at main deck, and mizzenmast 15 feet above poop deck. Spar coming down went through forward

house, and falling mainmast stove in companionway and doors. Also did considerable other damage about deck.

General Frisbie, Bay steamer, collided with U. S. Steamer Iroquis in San Francisco Bay on February 2, 1912 during heavy fog off South end of Mare Island. Received slight damage.

Geo. E. Billings, schooner, at San Francisco April 9, 1912 from Newcastle, Australia, lost sails during heavy gales on February 12, 1912.

Geo. F. Haller, steamer, bound for Bristol Bay, returned to San Francisco on April 25, 1912 leaking, also broke steam pipe. Was dry docked for repairs.

Geo. R. Vosburg, steamer, went ashore at entrance of Nehalem River on May 3, 1912. Was towed off on May 13, badly damaged.

Graywood, steamer, ran ashore at West Point, Washington on September 19, 1912. Floated without assistance. Not damaged.

Gifford, British steamer, from Antwerp for San Francisco, grounded on Sunk Island, April 11, 1912. Floated with loss of both anchors and chains.

Gualala, steamer, was run into by Steamer Argyll on October 15, 1912, off Point Arena; vessel turned over on port side; two men injured. Later vessel was abandoned by crew and turned bottom up. Was towed into San Francisco by Steamer Brooklyn.

Hanalei, steamer, collided with Steamer Casco at San Francisco on December 9, 1912 and had bow badly stove.

Harlesden, British steamer, loading cotton at Santa Fe wharf had fire in after hold on March 27, 1912. Same was extinguished by crew. Damage slight.

Harold, British bark, arrived at Cape Town, November 26, 1912 from Vancouver. Lost deckload on voyage during heavy weather.

Harvard, steamer, at San Pedro April 28, 1912, took fire at dock. Fire was extinguished, damage about $8,000.

Hawaii, barkentine, from Sydney, at Newcastle, Australia, December 14, 1912 had steering gear disabled.

Hazel Dollar, British steamer, from Victoria for Taku, returned to Victoria March 27, 1912 with rudder stock broken. Having experienced a hurricane on March 7, off the Aleutian Islands. Also had blow flange coupling broken.

Henry K. Hall, schooner, at San Francisco, March 25, 1912, reports on March 5, in hurricane lost main and mizzen gaff and several sails.

Homer, steamer, from San Francisco for Seattle, broke port crank shaft on March 14, 1912. 50 miles northwest of Cape Mendocino; returned to San Francisco for repairs.

Homer, steamer, from Pribilof Island at San Francisco, September 27, 1912; broke tail shaft and port engine on September 24, 1912.

Hornelen, Norwegian steamer from Oregon arrived at Auckland on February 6, 1912, damaged a good deal about decks, loss of masts, and bulwarks, 2 boats smashed and 2 splintered and deck load lost in hurricane off Tongan Group.

Hugh Hogan, schooner, from San Francisco for Bandon, drifted ashore on beach below Cliff House on July 14, 1912. Was floated with assistance on July 14. Rudder keel, centerboard and one plank forward damaged.

Hugh Hogan, schooner, arrived at San Francisco November 21, 1912, had heavy gales on voyage causing vessel to leak. Steam pump kept working continually. Upon arrival was leaking about 3 inches per hour.

Hyades, steamer, from San Francisco for Seattle, struck bottom at 3 a. m. January 24, 1912, off Double Point. Received some damage but proceeded.

Iaqua, steamer, from Eureka for San Diego had heavy weather on March 10, 1912. Lost deck load of lumber and had Sampson post broken.

Iaqua, steamer, bound out of Eureka on August 5, 1912, went aground at entrance. Was floated with assistance and proceeded.

Ida A, power schooner, went ashore on beach in Drakes Bay on March 5, 1912; was floated with assistance on April 4, 1912; much damaged.

Ikala, British steamer, from Oregon for Melbourne put into Suva December 11, 1912, with machinery disabled.

Ikalis, British steamer, from Oregon for Australia put into San Francisco on October 23, 1912, having experienced heavy gales, during which deck load shifted, carrying away life boat, and lost one overboard. Flooded engine room and did other damage about deck. Put into San Francisco for repairs.

Independent, fishing steamer, sank at coal bunkers in Seattle on February 22, 1912, after coaling. Was raised on February 27, 1912 and beached at Harbor Island for temporary repairs.

Inverclyde, British bark, was in collision December 27, 1912 in Columbia River with British ship Crown of India and had bowsprit carried away, shrouds and two plates damaged.

Inverness-Shire, British bark, at Greenock January 16, 1912 from Victoria had hurricane on voyage. Lost sails and was much damaged about decks.

Iolani, fishing tug, had tail shaft broken outside San Francisco heads on February 20, 1912. Was towed in by fishing tug Henrietta.

Iroquois, U. S. steamer, was in collision with bay steamer General Frisbie on February 2, 1912, off south end of Mare Island. Had guard rail carried away.

J. J. Loggie, steamer, while bound into Eureka on February 5, 1912, struck the bar. Damaged rudder and is leaking.

J. M. Wilson, Sound steamer, was slightly damaged by collision with Steamer Mongolia December 7, 1912 in Seattle harbor.

James Johnson, barkentine at San Francisco February, 1912 had heavy gale on January 22, 1912 and had main and fore gaff carried away.

Jordanhill, British ship, from Cardiff at Guaymas February 27, 1912, had heavy weather off Cape Horn causing damage to sails, rigging, bulwarks and sundry losses and damages about deck.

John A, schooner, put into Kings Cove on July 8, 1912 to repair rudder which was damaged in heavy weather.

John Palmer, barkentine, from Callao at San Francisco October 29, 1912 had heavy gales on voyage, lost jibtop sail, lower topsail pennant brace carried away causing lower topsail yard to break. Also lost several head sails and mizzen sails.

John and Winthrop, whaling bark, at San Francisco October 25, 1912 had heavy gale on September 8, which caused vessel to spring a leak. Upon arrival vessel was leaking at rate of 2 feet per hour.

Kentra, British steamer, from San Francisco for Swansea arrived at St. Vincent, C. V., November 6, 1912, with machinery defective. High pressure cylinder and cylinder cover cracked, piston and piston rod bent. Proceeded under compound engine.

Kina, Danish steamer, bound from Portland, grounded on mud bank on October 24, 1912, below mouth of Williamette River. Floated night of October 28, undamaged.

Koko Head, was in collision with Schooner Balboa off Columbia River on October 16, 1912 and was slightly damaged.

Kumeric, British steamer, from Oregon for China had heavy weather on voyage in December, 1911. Houses on starboard side stove in by seas.

Lahaina, barkentine, from Newcastle, Australia at San Francisco February 1, 1912 lost several sails on voyage.

Lahaina, barkentine, while coming to anchor on October 1, 1912 off Meiggs Wharf fouled Schooner Annie Larsen at anchor. Latter had head gear and jibboom carried away. Former had after rail and davits carried away.

Lief E, power schooner, collided with British steamer Prince George at Seattle October 15, 1912 and was badly damaged.

Lord Curzon, British steamer, put into Yokohama November 20, 1912, short of fuel, consumed portion of cargo to keep fires going.

Lord Derby, British steamer, lying at Tacoma October 5, 1912, had fire on board. Was extinguished without damage.

Lurline, Columbia River steamer collided with barge near Rainier on October 19, 1912. Commenced to leak badly and was beached at mouth of Cowlitz River.

Mahukona, schooner at San Francisco November 20, 1912, lost complete suit of sails off Cape Flattery. Vessel also leaking.

Makaweli, barkentine, at Aberdeen May 7, 1912, had end of spike bowsprit carried away by steamer J. B. Stetson.

Manchuria, steamer, lying at Pacific Mail Dock March 17, 1912, took fire in hold among cotton and canned goods cargo. Hold was flooded and fire extinguished late same night. Cargo much damaged and discharged. Damage to vessel slight.

Manchuria, steamer, at Hongkong September 28, 1912 from San Francisco had fire on board on voyage, and was badly damaged.

Maweema, schooner, from Willapa Harbor arrived at San Diego February 18, 1912 had heavy gale on voyage. Lost lifeboat, compass, binnacle box and portion of cargo overboard.

Mariposa, steamer, ran into wharf at Valdez August 23, 1912 damaging same after got ashore on mud bank. Was floated uninjured.

Mary Dodge, schooner, arrived at San Francisco February 23, 1912 went aground on mud banks in Oakland Creek. Was towed off by tugs undamaged.

Marshfield, steamer, was in collision with steamer South Coast off Point Bonita August 21, 1912 and was slightly damaged.

Marshfield, steamer, from San Francisco for Hardy Creek returned to port October 13, 1912 with bow stove in and stern piece carried away above and below water line, also planking on starboard side started. Was leaking about 1 foot per hour. Damage was caused by vessel striking land west of Point Bonita.

Mayfair, steamer, from Willapa Harbor arrived at San Francisco on February 21, 1912 in tow of Steamer Willapa having broken low pressure crank shaft off Shelter Cove on February 19, 1912.

Mayflower, schooner, returned to San Francisco on May 12, 1912 in tow of Steamer San Pedro waterlogged. San Pedro having struck vessel on May 11, 1912, 5 miles N. W. of Point Reyes. Crew were taken off by San Pedro.

Melville Dollar, steamer, arrived at Port Townsend bound from Bellingham for San Francisco returned December 5, 1912 with propeller badly damaged.

Meteor, schooner, arrived at San Pedro February 19, 1912 from Grays Harbor had heavy weather off Oregon Coast, blew away several sails and causing vessel to spring a leak.

Minnesota, steamer, at Seattle March 7, 1912 had fire in bunkers, same was extinguished without damage to cargo.

Mongolia, Sound steamer, was slightly damaged by collision with Sound Steamer J. M. Wilson in Seattle Harbor on December 7, 1912.

Montara, steamer, bound from Selbys for San Francisco September 26, 1912 grounded on mud bank on North Side of Goat Island. Floated later with assistance. No damage.

Napa Valley, River steamer, bound to Vallejo on June 17, 1912 broke rudder stock when off Oleum. Was towed to San Francisco for repairs.

Nauplia, German steamer, went ashore December 12, 1912 at Point Wilson. Was towed off and proceeded to Seattle. Damage slight.

Navigator, tug, was towed into San Pedro on March 12, 1912 with hawser entangled in propeller.

Newport, steamer, sunk at dock at Balboa on August 16, 1912. Was fully loaded. Vessels sinking was caused by dock collapsing. Was floated on November 10, 1912 with assistance of British Steamer Salvor. Cargo almost total loss.

Nile, British steamer, while leaving Yokohama on March 7, 1912 for San Francisco steering gear got out of order and vessel ran aground. Floated later undamaged.

Northland, steamer, ran ashore near Ketchikan on September 9, 1912. Was floated with slight damage.

Oceania Vance, schooner from Astoria for San Diego towed into Port Townsend November 17, 1912 by Steamer Riverside with loss of main and mizzen masts in gale off Tillamook. Vessel was waterlogged.

Ockley, British steamer, from Oregon and Puget Sound for Hongkong, put into Mororan December 11, 1912 for fuel. On voyage during heavy weather lost deck load of lumber, had four boats stove and steering gear damaged.

Ockley, British steamer, arrived at Hongkong December 23, 1912 with fore and after peak leaking.

Oregon, schooner, from San Francisco for Bandon returned to San Francisco on September 23, 1912 on account of carrying away spanker off Point Arena in heavy N. W. gale.

Ottillie Fjord, schooner, at San Francisco September 5, from Bering Sea lost starboard anchor and 25 fathoms of chain on May 10. On July 30, lost port anchor and 30 fathoms of chain.

Oweenee, British ship, dragged anchor at Astoria November 12, 1912 and drifted ashore. Floated November 13, undamaged.

Pearl, launch, with scow in tow went ashore March 1, 1912 at Port Crescent.

Petroleum No. 2, steamer, went aground in Neah Bay on June 4, 1912 was towed off June 5, by U. S. Tug Snohomish and Tug Pioneer and towed to Seattle.

Pleiades, steamer, from San Francisco at Balboa had fire in cargo on February 27, 1912. Cargo slightly damaged.

Pleiades, steamer, from San Francisco for Balboa went ashore August 16, 1912, 12 miles north of Cape Lazaro. Sand banked around vessel. Deck load of lumber was jettisoned; was floated on September 8, leaking slightly. Arrived at San Francisco leaking in fore and after peak. Cargo was discharged and dry docked for repairs.

Poltalloch, British steamer, at San Francisco September 19, 1912 from Newcastle, Australia, lost sails during heavy gales on voyage.

Potlatch, Sound steamer, bound from Seattle ran into Schooner Stolof on October 10, 1912 and received slight damage.

Portland, steamer, from Norfolk, Va., for San Francisco put into San Juan prior to February 29, 1912 with machinery damaged.

Prince Albert, British steamer, while leaving Victoria on March 25, 1912 struck rocks. Was floated and discharged cargo.

Prince George, British steamer, collided with power schooner Lief E. in Seattle harbor on October 15, 1912 and was slightly damaged.

Prince John, British steamer, struck on Mossett Bar, Graham Island on May 19, 1912. Returned to Victoria leaking for repairs.

Renl, gas launch, ran ashore on Dungeness January 24, 1912. Was assisted off by U. S. Tug Snohomish on January 25, and turned turtle while in tow bound for Seattle.

Reliance, tug, went ashore in Powell River on December 9, 1912. Floated on December 10, slightly damaged.

Robert Dollar, British steamer, arrived at Yokohama on December 18, 1912 with loss of part of deck load, and bulwarks damaged.

Rochelle, from Oregon for San Francisco returned to Astoria October 8, 1912 leaking badly. Proceeded to Rainier for repairs.

Rochejaquelin, French bark, at Swansea, February 1, 1912 from San Francisco had heavy weather on voyage. Lost two boats and received some damage about deck.

Rosamond, schooner, at Raymond November 3, 1912 had fire on board. Fore mast, fore sail, boom and gaff damaged.

Rosecrans, steamer, at Gaviota March 12, 1912 parted mooring lines, anchors dragged and vessel was driven ashore during heavy gale, had large hole stove in bottom and two of crew drowned while trying to land. Was floated on April 2, with assistance of Tugs Navigator and Sea Rover. Was later towed to San Francisco for repairs.

Rosecrans, steamer, loading at Gaviota August 27, 1912 took fire and was seriously damaged. Was towed to San Francisco for repairs.

S. N. Castle, barkentine, from Fanning Island for San Francisco arrived at Honolulu March 22, 1912 for repairs vessel having been ashore between Fanning and Washington Islands. Lost anchors and chains and damaged rudder. Survey held and cargo discharged and permanent repairs made.

S. N. Castle, barkentine, at Honolulu was badly damaged by fire on May 11, 1912. Cargo was discharged to repair vessel.

Saginaw, steamer, while docking at San Pedro September 5, 1912 collided with Steamer Shasta and had stern damaged.

Saginaw, at San Francisco November 15, 1912 from Willapa Harbor had heavy weather on voyage. Vessel leaking slightly.

Saint Kilda, British steamer, while leaving Bellingham on January 23, 1912 for Everett struck bottom. Diver examined bottom and reported not damaged to any extent.

Sais, German steamer, from Hamburg for San Francisco returned to Punta Arenas on February 3, 1912. With machinery damaged.

Salatis, German steamer, arrived at Hamburg February 4, 1912 was badly damaged by collision in River Elbe. Was docked for repairs.

Salvator, schooner, grounded at entrance of Honolulu harbor on December 17, 1912 was floated undamaged same day.

San Pedro, steamer, bound out of Eureka on February 22, 1912 struck on bar. Returned to port with assistance of tug leaking. Discharged part of deck load.

San Pedro, steamer, from San Francisco collided with Schooner Mayflower on May 11, 1912, 5 miles N. W. of Point Reyes. Was undamaged.

Santa Ana, steamer, from Seward for Seattle went ashore at Karta Bay on January 25, 1912. Vessel struck at high tide. 400 tons of ore cargo was discharged into lighters and vessel floated on January 28, with slight damage.

Sausalito, schooner, at San Francisco December 15, 1912 from Coquille River, had heavy gale during which foresail and outer jib carried away.

Scotia, steamer, while crossing Humboldt Bay Bar on November 22, 1912 shipped heavy sea. Had upper works damaged.

Sebara, German steamer, while leaving Acajutla on November 24, 1912 struck uncharted rock causing tanks No. 1, 2, 5 and 6 to leak. Also did considerable damage to plates.

Sentinel, river steamer, sunk near Knights Landing on November 1, 1912, same was caused by seam opening.

Shasta, at San Pedro September 5, 1912 was run into by Steamer Saginaw and had stern damaged.

Shidzuoka Maru, from Hongkong for Puget Sound collided with British steamer Dan of Clamis at entrance of Shanghai Harbor on September 26. Was slightly damaged.

Shoshone, steamer, bound out from Aberdeen, broke tail shaft in lower harbor on July 11, 1912.

Sophie Christenson, schooner, from Seattle for Antofogasta put into Tahiti on August 8, 1912 leaking. Later returned to Honolulu for repairs.

South Coast, steamer, was in collision on August 21, 1912 off Point Bonita with Steamer Marshfield and had rail and bulwarks stove.

St. Helens, steamer, returned to San Francisco October 14, 1912 with bow slightly damaged, having been in collision with Schooner Dauntless.

Standard, ship arrived at mouth of Nushugak River on May 21, 1912 and while waiting to be towed up river heavy storm sprung up and vessel parted anchor. Had to sail up the river where was beached on May 22. Was floated on 24th with upper works damaged.

Stolof, schooner, was run into by Steamer Potlach on October 10, 1912 and badly damaged. Was towed to Port Ludlow.

Strathalbyn, British steamer, was in collision on January 12, 1912 near Three Tree Point, Puget Sound with Steamer Virginian, former had hole extending near length of No. 1 hole in side. Also stern broken starboard bow stove in collision bulkhead burst and No. 1 hold filled with water.

Strathallan, British steamer, at Norfolk, Va., got ashore February 24, 1912. Was floated without damage.

Strathdene, British steamer, from Tacoma for Calcutta put into Victoria, November 19, 1912 in distress. Part of deck load lost and vessel leaking.

Strathdon, British steamer, from San Francisco for Melbourne returned to San Francisco on December 3, account of lower piston breaking.

Strathgarry, British steamer, from Tacoma at Newcastle, Australia March 18, 1912 was damaged by collision with Norwegian Bark Bannockburn.

Strathord, British steamer, lying navy coal bunkers at California City August 28, 1912 was dismasted by steel arms of crane. Main mast in falling went through pilot house doing much damage.

Talthybius, British steamer, was run into by British Steamer Crown of Arragon at Vancouver on April 26, 1912 and had eight buttresses on starboard side aft buckled and plates bent.

Tamba Maru, Japanese steamer, grounded on Harbor Island on April 30, 1912. Floated undamaged.

Telegraph, Sound steamer, was run into and sunk at Seattle on April 25, 1912 by Steamer Alameda. Several passengers injured. Was floated on May 1, and beached at Harbor Island for repairs.

Temple E. Dorr, steamer, at San Francisco June 29, 1912 off Point Sur, struck a submerged rock on port side amidships causing vessel to leak slightly.

Thielbek, German ship, from Hamburg for Santa Rosalia put into Montevideo prior November 29, 1912 in distress. Damaged by heavy weather.

Tiverton, steamer, went ashore at Hospital Point entrance of Victoria on October 22, 1912. Floated leaking slightly and fore foot gone. Proceeded to Seattle for repairs.

Thos. L. Wand, steamer, returned to Port Towensed December 17, 1912 with deck load shifted and temporary stanchions broken. Discharged deck load for repairs.

Torrisdale, British ship, at Belfast March 10, 1912 from Oregon was damaged about decks in heavy weather on voyage.

Umatilla, steamer, ran into wharf at Tacoma December 7, 1912 and was slightly damaged.

Unimak, whaling steamer, ran ashore at Camp Reef on November 7, 1912. Floated on November 8, slightly damaged.

Vadsoe, British steamer, went ashore on October 16, 1912 at Reef Point Baynes Sound. Was floated and arrived at Vancouver October 26, slightly damaged.

Verona, German steamer, from Oregon for Yokohama put into Unalaska October 16, 1912 for fuel. When leaving port grounded floated undamaged.

Vicksburg, U. S. steamer, at Magdalena Bay August 26, 1912, had hole punched in bottom. Was towed to Mare Island for repairs.

Virginia, schooner, at San Francisco November 16, 1912 had hurricane on November 9, off Cape Blanco, lost deck load and was damaged about deck.

Virginian, steamer, was in collision on January 12, 1912 off Three Tree, Point Puget Sound with British Steamer Strathalbyn and had hole 12 feet long on starboard bow and 17 foot hole on port. Was not damaged below water line. Temporary repairs were made at Seattle and permanent repairs at San Francisco.

W. G. Irwin, brig, while in port at San Francisco July 1, 1912 caught fire in lime cargo. Hull and cargo badly damaged.

Sophie Christenson, schooner, from Seattle for Antofogasta put into Tahiti on August 8, 1912 leaking. Later returned to Honolulu for repairs.

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Tamba Maru, Japanese steamer, grounded on Harbor Island on April 30, 1912. Floated undamaged.

Telegraph, Sound steamer, was run into and sunk at Seattle on April 25, 1912 by Steamer Alameda. Several passengers injured. Was floated on May 1, and beached at Harbor Island for repairs.

Temple E. Dorr, steamer, at San Francisco June 29, 1912 off Point Sur, struck a submerged rock on port side amidships causing vessel to leak slightly.

Thielbek, German ship, from Hamburg for Santa Rosalia put into Montevideo prior November 29, 1912 in distress. Damaged by heavy weather.

Tiverton, steamer, went ashore at Hospital Point entrance of Victoria on October 22, 1912. Floated leaking slightly and fore foot gone. Proceeded to Seattle for repairs.

Thos. L. Wand, steamer, returned to Port Towensed December 17, 1912 with deck load shifted and temporary stanchions broken. Discharged deck load for repairs.

Torrisdale, British ship, at Belfast March 10, 1912 from Oregon was damaged about decks in heavy weather on voyage.

Umatilla, steamer, ran into wharf at Tacoma December 7, 1912 and was slightly damaged.

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Verona, German steamer, from Oregon for Yokohama put into Unalaska October 16, 1912 for fuel. When leaving port grounded floated undamaged.

Vicksburg, U. S. steamer, at Magdalena Bay August 26, 1912, had hole punched in bottom. Was towed to Mare Island for repairs.

Virginia, schooner, at San Francisco November 16, 1912 had hurricane on November 9, off Cape Blanco, lost deck load and was damaged about deck.

Virginian, steamer, was in collision on January 12, 1912 off Three Tree, Point Puget Sound with British Steamer Strathalbyn and had hole 12 feet long on starboard bow and 17 foot hole on port. Was not damaged below water line. Temporary repairs were made at Seattle and permanent repairs at San Francisco.

W. G. Irwin, brig, while in port at San Francisco July 1, 1912 caught fire in lime cargo. Hull and cargo badly damaged.

Washington, steamer, after crossing Coos Bay bar on October 31, 1912 was struck by heavy sea; began leaking badly and returned to Coos for repairs. Also lost about 20 M. of deck load.

Wasp, from Aberdeen for San Francisco returned August 16, 1912 leaking badly, pumps unable to keep vessel free. Deck load was discharged and damage found to be slight.

Wellesley, steamer, out bound from Eureka December 26, 1912, struck bar heavily. Returned leaking. Deck load discharged and survey held.

Wellington, British steamer, for San Francisco March 3, 1912 from Nanaimo, broke crank pin on voyage. March 5th returned to Victoria with babbit in main bearing burned out.

Whatcom, Sound steamer, ran ashore at Daugeness on January 23, 1912. Floated on morning of 24th, damage slight. Proceeded to Seattle.

Wilhelmina, power schooner, went ashore at 1 p. m. August 22, 1912, ½ mile north of entrance of Suislaw while making port.

Williamette, steamer, from San Francisco at Seattle April 15, 1912, was dry docked with propeller damaged on voyage.

Willapa, steamer, bound out from Astoria for San Pedro, struck on Columbia River bar on April 21, 1912. Was towed back by Tug Fearless with rudder gone, stern post cracked and other damage.

Wm. Renton, schooner, from Salina Cruz for Grays Harbor, put into San Francisco February 10, 1912, with loss of sails and deck damaged in gale on February 5, 1912 off Point Conception.

Wm. Renton, schooner, bound into San Francisco on December 10, 1912, struck on north shore. Was towed off by fishing boat. Damage slight.

Wiscombe Park, British ship, from Rochester, Eng., for Vancouver, put back to Stanley, F. I. with leaky upper works and cargo damaged. 25 tons of cargo was jettisoned; 150 tons was lightered. Several rivets started in shell plate. Steering gear slightly damaged.

Yosemite, steamer, while crossing Grays Harbor bar on October 1, 1912, struck same and damaged rudder. Jury rudder was rigged and vessel was towed to San Francisco by Steamers Klamath and Bee.

Yukon, steamer, from San Francisco for Seattle, collided with Steamer Fairhaven September 14, 1912, off Point Arena during heavy fog. Damage slight.

DISTANCES FROM SAN FRANCISCO TO DOMESTIC PORTS

Place.	Miles.	Place.	Miles.
Cape Flattery	680	Kotzebue Sound	2,927
Columbia River	545	Nome	2,731
Douglas Island	1,539	Portland	658
Glacier Bay	1,398	Port Clarence	2,723
Golofin Bay	2,757	Sitka	1,302
Grays Harbor	588	St. Michaels	2,705
Honolulu	2,100	Unalaska	2,086
Juneau	1,596		

DISTANCES FROM SAN FRANCISCO TO FOREIGN PORTS

Place.	Miles.	Place.	Miles.
Acajutla	2,505	Manila	6,221
Acapulco	1,833	Marshall Island	4,290
Adelaide	7,900	Marquesas Island	2,988
Antofagasta	4,762	Mazatlan	1,337
Apia	4,160	Melbourne	7,325
Auckland	5,680	Montevideo	7,500
Brisbane	6,400	Nagasaki	5,269
Calcutta	9,000	Ocos	2,348
Callao	3,987	Panama	3,245
Cape San Lucas	1,135	Port Arthur	5,477
Capetown	10,454	Punta Arenas (Chile)	6,193
Champerico	2,369	Salina Cruz	2,135
Coronel	5,290	San Jose de Guatemala	2,395
Fiji Islands	4,662	Santa Rosalia	1,468
Galapagos Islands	3,011	Shanghai	5,387
Guam	5,053	Singapore	7,353
Guayaquil	3,514	Sydney	6,744
Guaymas	1,466	Tahiti	3,658
Hiogo	5,100	Valparaiso	5,140
Hobart	7,382	Vladivostok	4,570
Hongkong	6,306	Wellington, N. Z.	5,909
Iquique	4,620	Yokohama	4,536

DISTANCE FROM SAN FRANCISCO TO EASTERN AND FOREIGN PORTS, DIRECT AND VIA PANAMA CANAL

	Direct	Via Panama Canal.		Direct	Via Panama Canal.
Antwerp	13,603	8,082	Liverpool	13,517	7,830
Boston	13,073	5,473	Marseilles	13,241	8,326
Constantinople	14,352	9,432	Montevideo	7,556	8,503
Genoa	13,399	8,484	New Orleans	13,524	4,680
Hamburg	13,870	8,349	New York	13,107	5,272
Havre	13,412	7,903	Rio de Janeiro	8,414	7,528

List of Newspapers on File in the Hall of the San Francisco Chamber of Commerce

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CALIFORNIA.

ALAMEDA COUNTY	Alameda Times-Star, Berkeley Independent, Oakland Enquirer, Oakland Tribune.
AMADOR COUNTY	Ione Echo, Jackson Ledger-Dispatch, Sutter Creek Record.
BUTTE COUNTY	Chico Enterprise, Oroville Mercury, Oroville Register,
CALAVERAS COUNTY	San Andreas Prospect.
COLUSA	Colusa Sun, Chico Enterprise.
CONTRA COSTA COUNTY	Contra Costa Gazette, Point Richmond Leader, Record, Herald, Martinez Standard.
EL DORADO COUNTY	Georgetown Gazette, Placerville Republican.
FRESNO COUNTY	Fresno Herald, Fresno Republican, Fowler Advocate.
HUMBOLDT COUNTY	Eureka Times, Eureka Standard, Fortuna Advocate, Eureka Herald.
KERN COUNTY	Bakersfield Echo, Bakersfield Californian.
KINGS COUNTY	Hanford Sentinel.
LAKE COUNTY	Lakeport Bee, Lakeport Press.
LASSEN COUNTY	Susanville Advocate, Mail, Big Valley Gazette.
LOS ANGELES COUNTY	Los Angeles Examiner, Los Angeles Express, Pasadena Star, Tribune of Los Angeles, Pomona Progress.
MADERA COUNTY	Madera Mercury, Madera Tribune.
MARIN COUNTY	San Rafael Independent.
MARIPOSA COUNTY	Mariposa Gazette.
MERCED COUNTY	Merced Sun, Merced Express, Merced Star.
MENDOCINO COUNTY	Mendocino Beacon, Ukiah Dispatch Democrat, Times, Republican.
MODOC COUNTY	Alturas New Record.
MONO COUNTY	Bridgeport Chronicle-Union.
MONTEREY COUNTY	Salinas Index, Salinas Journal, Democrat, Monterey American, Watsonville Register.
NAPA COUNTY	Napa Journal, Napa Register, St. Helena Star.
NEVADA COUNTY	Nevada Chronicle, Morning Union.
ORANGE COUNTY	Anaheim Gazette, Orange Post.
PLACER COUNTY	Auburn Herald, Auburn Republican, Newcastle News.
PLUMAS COUNTY	Quincy Independent.
RIVERSIDE COUNTY	Riverside Enterprise, Riverside Press.
SACRAMENTO COUNTY	Sacramento Bee, Sacramento Union.
SAN BENITO COUNTY	Hollister Free Lance, Advance.
SAN BERNARDINO COUNTY	San Bernardino Index.
SAN DIEGO COUNTY	San Diego Union, San Diego Tribune.
SAN JOAQUIN COUNTY	Stockton Record, Stockton Independent, Stockton Evening Mail.
SAN LUIS OBISPO COUNTY	San Luis Obispo Tribune.
SAN MATEO COUNTY	Redwood City Democrat, Redwood City Times-Gazette, San Mateo Times.
SANTA BARBARA COUNTY	Santa Barbara Independent.
SANTA CLARA COUNTY	San Jose Herald, San Jose Mercury, San Jose Times, Gilroy Advocate, Gilroy Gazette, Los Gatos News.
SANTA CRUZ COUNTY	Santa Cruz Surf, News.

SHASTA COUNTY	Redding Courier-Free-Press, Millville Tidings, Anderson News, Cottonwood Enterprise.
SISKIYOU COUNTY	Cedarville Record Weekly, Yreka News, Journal, Dunsmuir Dispatch-News.
SOLANO COUNTY	Benicia New Era, Suisun Courier, Vallejo Chronicle.
SONOMA COUNTY	Santa Rosa Press-Democrat, Santa Rosa Republican.
STANISLAUS COUNTY	Modesto Herald, Modesto News, Oakdale Graphic.
SUTTER COUNTY	Yuba City Farmer, Yuba City Independent.
TEHAMA COUNTY	Red Bluff People's Cause, Red Bluff News.
TRINITY COUNTY	Weaverville Journal.
TULARE COUNTY	Visalia Times, Porterville Enterprise.
TULOUMNE COUNTY	Sonora Independent.
VENTURA COUNTY	Ventura Democrat, Santa Paula Chronicle.
YOLO COUNTY	Woodland Democrat, Woodland Mail.
YUBA COUNTY	Marysville Appeal, Marysville Democrat.

NEVADA.

VIRGINIA CITY	Chronicle.
LOCKLOCK	Miner.
ROCHESTER	Miner.

OREGON.

BAKER CITY	Morning Democrat.
EUGENE	Eugene Register.
HEPPNER	Heppner Gazette.
KLAMATH	Klamath Republican.
PORTLAND	Oregon Journal, The Oregonian, Telegram.
ROSEBURG	Roseburg Review.
SALEM	Daily Oregon Statesman.
SUMPTER	Blue Mountain American.
MEDFORD	Medford Mail.

WASHINGTON.

PORT TOWNSEND	Port Townsend Weekly Ledger.
SEATTLE	Seattle Post Intelligencer, Seattle Daily Gazette, Seattle Times, Sun.
TACOMA	Tacoma Ledger, Tacoma News.
CHEHALIS	Lewis County Advocate.
SPOKANE	Spokesman Review.

ALASKA.

FAIRBANKS	Fairbanks News-Miner.

BRITISH COLUMBIA.

VICTORIA	The Colonist.

HAWAIIAN ISLANDS.

HAWAIIAN ISLANDS	Honolulu Star and Bulletin, Pacific Commercial Advertiser, Guide.

CANADA

WINNIPEG	Free Press Telegram.
CALGARY	Herald, News, Telegram.
SASKATOON	Phoenix, Moose Jaw, Times.
REGINA	Leader, Standard.
EDMUNDTON	Bulletin, Journal.
BRANDON	Times, Sun.
MONTREAL	Star.
ALBERTA	Lethbridge Herald.
TORONTO	News Star.
LETHBRIDGE	Herald.

EASTERN PAPERS.

ALABAMA	Birmingham Ledger.
ARIZONA	Phoenix Gazette, Nogales Vidette.
ARKANSAS	Little Rock Gazette.
COLORADO	Denver Weekly Republican, Denver Post.
GEORGIA	Atlanta Journal, Atlanta Constitution, Savannah News.
ILLINOIS	Chicago Record-Herald, Champaign Gazette, Chicago Tribune, Chicago Examiner, Centralia Evening Sentinel, Mattoon Journal-Gazette, Pekin Post-Tribune, Danville Commercial News, Joliet Herald, Rock Is. Union.
INDIANA	Fort Wayne Journal Gazette-Times, Indianapolis Star, South Bend Tribune.
IOWA	Dubuque Telegraph-Herald, Des Moines Tribune.
KANSAS	Wichita Eagle, Beacon Topeka Capitol.
KENTUCKY	Louisville Courier-Journal, Post.
LOUISIANA	New Orleans Picayune.
MAINE	Portland Daily Press, Main State Press, Portland Express.
MARYLAND	Baltimore American, Sun.
MASSACHUSETTS	Boston American, Boston Herald, Boston Post, Springfield Republican, Boston Advertiser, Boston Transcript, Christian Science Monitor, New Bedford Standard.
MICHIGAN	Flint Journal, Benton Harbor News, Detroit Free Press Journal, Allegan News.
MINNESOTA	St. Paul Pioneer-Press, News, Minneapolis Journal.
MISSOURI	Kansas City Journal, St. Louis Globe-Democrat, St. Louis Post-Dispatch, St. Louis Times, St. Louis Republican.
MONTANA	Butte Miner, Dillon Tribune.
NEBRASKA	Omaha Bee, Omaha News.
NEW YORK	Hay Trade Journal, New York Staats Zeitung, New York Sun, New York Evening Sun, New York Journal of Commerce, New York World, New York Herald, New York Tribune, New York Times, New York Commercial, New York Journal, Albany Times-Union, Buffalo Express.
NORTH CAROLINA	Charlotte Observer.
OKLAHOMA	Muskogee Phoenix.
OHIO	Cleveland Press, News, Plain Dealer, Cincinnati Price Current, Columbus Dispatch, Pittsburg Dispatch, Dayton News.

PENNSYLVANIA	Philadelphia Press, Philadelphia Telegraph, Philadelphia Ledger, Wilkesbarre Times, Philadelphia Commercial Price List, Enquirer, North American Record, York Gazette.
RHODE ISLAND	Woonsocket Call, Providence Journal.
SOUTH CAROLINA	Charleston News and Courier, Post.
TENNESSEE	Memphis Commercial Appeal.
TEXAS	El Paso Herald.
UTAH	Salt Lake Tribune.
WASHINGTON, D. C.	Post.

FOREIGN PAPERS.

AUSTRALIA.

MELBOURNE	Melbourne Argus.
SYDNEY	Sydney Evening News, Sydney Telegraph, Commercial News (shipping), Australian Star.

NEW ZEALAND.

WELLINGTON	Post.

CHINA.

HONG KONG	Hong Kong Daily Press.

JAPAN.

YOKOHAMA	Japan Daily Gazette, Japan Weekly Gazette, Japan Weekly Mail, Japan Herald.

ENGLAND.

LONDON	London Times.
LIVERPOOL	Liverpool Journal of Commerce, Corn Trade News.

SCOTLAND.

GLASGOW	Glasgow Weekly Herald.

MISCELLANEOUS.

Tariff Act.
Philippine Act.
Bulletin and Circular Price Lists.
U. S. Government Public Documents.

TELEGRAPH CODES.

A One.
A B C Code.
A B C, Fifth Edition.
J. K. Armsby, 1911.
Bedford-McNeil Mining and General Telegraph Code.
Lieber's Standard Telegraphic Code.
Lieber's Standard Telegraphic Terminal Index.
Lieber's Manual for January, 1906.
Lieber's Manual for October, 1907.
Moreing and Neal Mining Telegraphic Code.
Scott's Code.
Watkins Universal Shipping Code. Revised Edition, 1904.
International Cable Directory of Addresses.

SHIPPING REGISTERS.

Det Norske Veritas Skibs Register.
Det Norske Veritas Rules and Regulations.
British Corporation.
Bureau Veritas Register.
Bureau Veritas Repertoire General Sailing Vessels.
Bureau Veritas Repertoire General Steamers.
Germanischer Lloyd Internationales Register.
Lloyds Register Steam Vessels.
Lloyds Register Sailing Vessels.
Lloyds Register, Appendix.
Lloyds Register Rules and Regulations.
Records of American and Foreign Shipping.
List of Vessels Owned on the Pacific Coast.
List of Merchant Vessels of the United States.

DIRECTORIES.

BOSTON
CANADA (Buyers' Guide).
LOS ANGELES.
CALIFORNIA (Mercantile).
NEW YORK.
" " (Business).
OAKLAND, ALAMEDA AND BERKELEY.
HONOLULU AND HAWAII
CHINA & MANILA.
EXPORTERS DIRECTORY OF JAPAN.
PORTLAND.
SAN FRANCISCO.
SEATTLE.
TACOMA.
WORLD TRADE.

MAPS AND CHARTS.

ALAMEDA COUNTY.
AMADOR COUNTY.
BUTTE COUNTY.
BAY COUNTIES.
CONTRA COSTA COUNTY.
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DEL NORTE COUNTY.
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SOUTHERN CALIFORNIA.
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SAN FRANCISCO (Map).
SACRAMENTO RIVER (Chart).
SAN JOAQUIN RIVER (Chart).
SACRAMENTO RIVER (Upper).
SAN FRANCISCO WATERFRONT.
SUTTER COUNTY.
TEHAMA COUNTY.
TULARE COUNTY.
TUOLUMNE.
U. S. FOREST RESERVE.
VENTURA COUNTY.
WORLD TRACT (Chart).
WORLD (Map).
WASHINGTON (State).
YOLO COUNTY.
YUBA COUNTY.
SISKIYOU COUNTY

ATLAS.

MERCANTILE MARINE ATLAS OF WORLD.
RAND-McNALLY ATLAS OF WORLD.

MISCELLANEOUS MAGAZINES AND TRADE PUBLICATIONS

American Grower of New York.
American Lumberman of Chicago.
West Coast Lumberman of Tacoma.
Pacific Lumber Trade Journal of Seattle.
Northwestern Miller of Minneapolis.
Modern Miller of St. Louis, Mo.
American Elevator and Grain Trade of Chicago.
California Country Journal of San Francisco.
Wisconsin Agriculturist of Racine, Wis.
Orchard and Farm of San Francisco.
Coast Banker of San Francisco.
News Letter of San Francisco.
Pacific Wine and Spirit Review of San Francisco.
Furniture and Trade of New York.
Wholesalers and Retailers Review of San Francisco.
Grocers Advocate of San Francisco.
Pacific Fisherman of Seattle.
Commercial and Financial Chronicle of New York.
Pacific Coast Merchant of San Francisco.
Building Age of New York.
Marine Journal of New York.
Railway and Marine News of Seattle.
National Geographical Magazine of Washington, D. C.
American Forestry of Washington, D. C.

CUSTOMS DISTRICT OF THE PORT OF SAN FRANCISCO, CAL

The Customs District of the Port of San Francisco comprises all that portion of the State of California north of the Counties of Santa Barbara, with the exception of Humboldt and Del Norte, which form the Customs District of Eureka.

The principal officers of the Customs Service at San Francisco are as follows:

Frederick S. Stratton.....Collector of Customs
William B. Hamilton.....Special Deputy Collector
Duncan E. McKinlay.....Surveyor of Customs
Chas. A. Stephens.....Special Deputy Surveyor
George Stone .....Naval Officer
E. W. Maslin.....Deputy Naval Officer
John G. Mattos.....Appraiser
W. J. McBride.....Chief Boarding Officer

The ordinary entrance fees for vessels arriving from foreign ports with cargo are $5.70 for foreign vessels and $2.70 for American vessels.

The ordinary clearance fees for vessels going to foreign ports, either American or foreign vessels are $2.70.

Foreign vessels entering from a domestic port are charged a fee of $2.00; likewise a fee of $2.00 for clearing to a domestic port.

U. S. INSPECTOR OF STEAM VESSELS.
Office, U. S. Customs House.

John K. Bulger.....Supervising Inspector
James Guthrie .....Local Inspector, Boilers
Jos. P. Dolan.....Local Inspector, Hulls

U. S. SHIPPING COMMISSIONER
Office, U. S. Appraisers Building.

Walter McArthur .....Commissioner
Joseph F. Curtin.....Chief Deputy

U. S. IMMIGRATION SERVICE.
Office, Angel Island.

Samuel W. Backus.....Commissioner

U. S. QUARANTINE SERVICE
Office, Angel Island.

Dr. M. W. Glover.....Surgeon, U. S. M. H. Service in Charge

U. S. LIGHTHOUSE ESTABLISHMENT
Office, U. S. Customs House.

H. W. Rhodes.....Inspector

U. S. REVENUE CUTTER SERVICE
Office, U. S. Customs House.

Captain J. L. Sill.....In Charge

U. S. LIFE-SAVING SERVICE
Office, U. S. Customs House.

Captain. J. H. Quinan.....Inspector
Capt. Otto Wellander.....Superintendent

STATE BOARD OF HARBOR COMMISSIONERS.
Office, Ferry Building.

J. J. Dwyer.....President
J. H. McCallum.....Commissioner
Thos. Williams .....Commissioner
Leo V. Merle.....Secretary

PILOT COMMISSIONERS, PORT OF SAN FRANCISCO, CAL.

Office, Merchants Exchange Building.

H. C. Howard.....President
Wm. T. Lewis — Chas. Mayo
Hugh M. Burke.....Secretary
John W. Wallace.....Port Agent

RATES OF PILOTAGE

IN AND OUT OF PORT OF SAN FRANCISCO, CAL.

All vessels under five hundred (500) tons, three ($3.00) dollars per foot draught; all vessels over five hundred (500) tons, three ($3.00) dollars per foot draught and three (3c) cents per ton for each and every ton registered measurement; and every vessel spoken inward or outward bound, except as hereinafter provided, shall pay the said rates. A vessel is spoken by day by a pilot boat displaying a Union Jack, or by night by displaying a torch or flare-up within a distance of three (3) miles of the vessel. In all cases where inward-bound vessels are not spoken until inside the bar, the rates of pilotage herein provided shall be reduced fifty (50) per cent. Vessels engaged in the whaling or fishing trades shall be exempt from all pilotage except where a pilot is actually employed.

Any vessel in tow of steam-tug between the harbor of San Francisco and the ports of Mare Island, Vallejo, or Benicia, shall be exempt from all charges for pilotage, unless a pilot be actually employed.

All vessels sailing under an enrollment, and licensed and engaged in the coasting trade between the ports of San Francisco and any other port of the United States shall be exempt from all pilotage unless a pilot be actually employed. All foreign vessels and all vessels from a foreign port or bound thereto, and all vessels sailing under a register between the port of San Francisco and any other port of the United States shall be liable for pilotage.

RATES FOR DOCKAGE AT SAN FRANCISCO

The Chief or Assistant Chief Warfinger alone assigns berth to vessels. Office foot of Washington street, south side.

All vessels, steam or sail 200 tons or less, 2 cents per ton; over 200 tons, $4 for first 200 tons and ¾ of a cent for each additional ton, barges same rate.

Lighters 1 cent per ton a day.

Vessels while taking in cargo, or receiving or discharging ballast, or being idle, or occupying outside berths, or moored in docks, slip, basins or canals are subject only to half rates of dockage; provided that vessels not used for arraying freight or passengers shall not be entitled to such half rates.

Dockage commences when vessels make fast. Parts of a day are counted as full days. Every day in the year is charged for.

Vessels leaving wharves without paying charges will be put on black list, and must pay double the regular rates and $10 fine before they can dock again.

Merchandise cannot remain over 24 hours on the wharf except by permission from the wharfinger. If not removed within 24 hours after notice, will be removed and stored at the risk and expense of the owner or consignee, or sold at auction. No merchandise for outward ship-

ments shall be placed upon any wharf before day preceding the arrival of the vessel to carry such merchandise, without permission from the Chief Wharfinger.

Lumber discharged from vessels carrying 500 M or over, may remain on wharf 3 days following its discharge.

Tolls on merchandise (except where otherwise specified), a ton, 2,000 pounds, 40 cubic feet, 5 cents.

Coal, railroad iron, pig iron, gypsum, asphaltum, ores, crude or boiled sulphur, paving stones, sand, gravel, ballast, crushed rock, (long ton), 5 cents.

Agricultural implements (wheeled vehicles set up), 10 cents.

Grain, flour, millstuffs, beans and seeds at Sea Wall-2, free for first 3 days after discharge; 5 cents per ton for next 15 days or any part thereof, Sundays and Holidays excepted; for each additional day thereafter 5 cents per ton.

Hay, 10 cents per ton.

Lumber—fir, redwood, spruce and all soft wood and railroad ties per 1,000 feet, posts per 100, shingles per 40 bundles, laths per 60 bundles, shakes per 100 bundles, 10 cents; hardwood per 1,000 feet, 20 cents; piles, 6 cents each.

Cord-wood, tan-bark and stave bolts per cord, 5 cents.

Bricks (other than fire bricks) per 1,000, 10 cents. Fire bricks, 15 cents. Bricks (other than fire bricks), discharged from one vessel or lighter to another at a wharf, 5 cents per 1,000. Fire bricks discharged from one vessel or lighter to another at a wharf, 7½ cents per 1,000.

Charcoal, 35 sacks (of 55 pounds each), cement, 5 barrels, lime 8 barrels, sugar, syrup, beef, pork or fish, 6 barrels to the ton, 5 cents.

Cattle, horses and mules, 5 cents; colts and calves, 2½ cents; sheep and hogs, 1 cent.

Wool and cotton in sacks, 1 cent; wool and cotton in bales, 1½ cents.

Hides, ¼ cent; sheep, goat, deer and seal skins, 16 for 1 cent.

Empty barrels, under 16 gallons, ⅛ cents, 16 gallons or over, ¼ cents each.

Headers and Separators, each 20 cents.

Hops, 1 cent per bale.

Wines or liquors, 1¼ cents per bbl., 5 cents per pipe.

Cocoanuts unhusked, 15 cents per 1,000, husked 10 cents per 1,000. Bananas, ½ cents per bunch.

Empty packages, being returned to owner, no tolls charged.

Loads exceeding 7½ tons, except single packages, will not be allowed on the wharf.

FOREIGN CONSULS

Argentine—Boutwell Dunlap, Consul, First Nat. Bank Bldg.
Austria-Hungary—Dr. Joseph Goricar, Consul, 211 California St.
Belgium—Francis Drion, Consul-General, 311 California St.
Bolivia—Carlos Sanjines, Consul-General, 235 Montgomery St.
Brazil—Archibald Barnard, Vice-Consul, Monadnock Bldg.
Chile—Arturo Lorca, Consul-General, 311 California St.
China—Li Yung Yew, Consul-General, Cor. Clay and Stockton Sts.
Colombia—Raphial J. Prieto, Consul, 948 Market St.
Costa Rica—P. de Obarrio, Consul-General, 510 Battery St.
Denmark—J. E. Boggild, Consul-General, Mills Bldg.
Ecuador—Max Marin, Consul-General, 510 Battery St.
France—Raphael Monnet, Consul-General, 108 Sutter St.
German Empire—Franz Bopp, Consul, 201 Sansome St.
Great Britain—Alex. Carnegie Ross, Consul-General, 268 Market St.
Greece—Richard de Fontana, Consul, 693 Market St.
Guatemala—Juan Padilla, Consul-General, 235 Montgomery St.
Honduras—Fernando Somaza Vivas, Consul-General 1205 Leavenworth.
Italy—F. Daneo, Consul-General, 135 Stockton St.
Japan—Y. Numano, Acting Consul-General, 221 Sansome St.
Liberia—Ray P. Saffold, Consul, 568 Golden Gate Ave.
Mexico—Ant. L. Grajeda, Consul, 619 Monadnock Bldg.
Monaco—Ray P. Saffold, Consul, 569 Golden Gate Ave.
Netherlands—G. J. G. Marsily, Consul, 628 Montgomery St.
Nicaragua—Adolfo Vivas, Consul-General, Insurance Bldg.
Norway—Henry Lund, Consul, 214 Front St.
Panama—P. de Obarrio, Consul, 510 Battery St.
Peru—Enrique Grau, Consul, 510 Battery St.
Portugal—S. Le da Silva Ferreira, Consul, 347 Front St.
Russia—Pierre Rogestvensky, Consul-General, 461 Market St.
Salvador—E. Mejia, Consul-General, 460 Montgomery St.
Spain—Valle de Salazar, Consul General, 817 Pacific Bldg.
Sweden—William Matson, Consul, 268 Market St.
Switzerland—Antoine Borel, Consul, 440 Montgomery St.
Turkey—M. A. Hall, Acting Consul, 250 Powell St.
Uruguay—O. M. Goldaracena, Consul, 4 Columbus Ave.
Venezuela—Joseph L. Eastland, Consul, Merchants Exchange.

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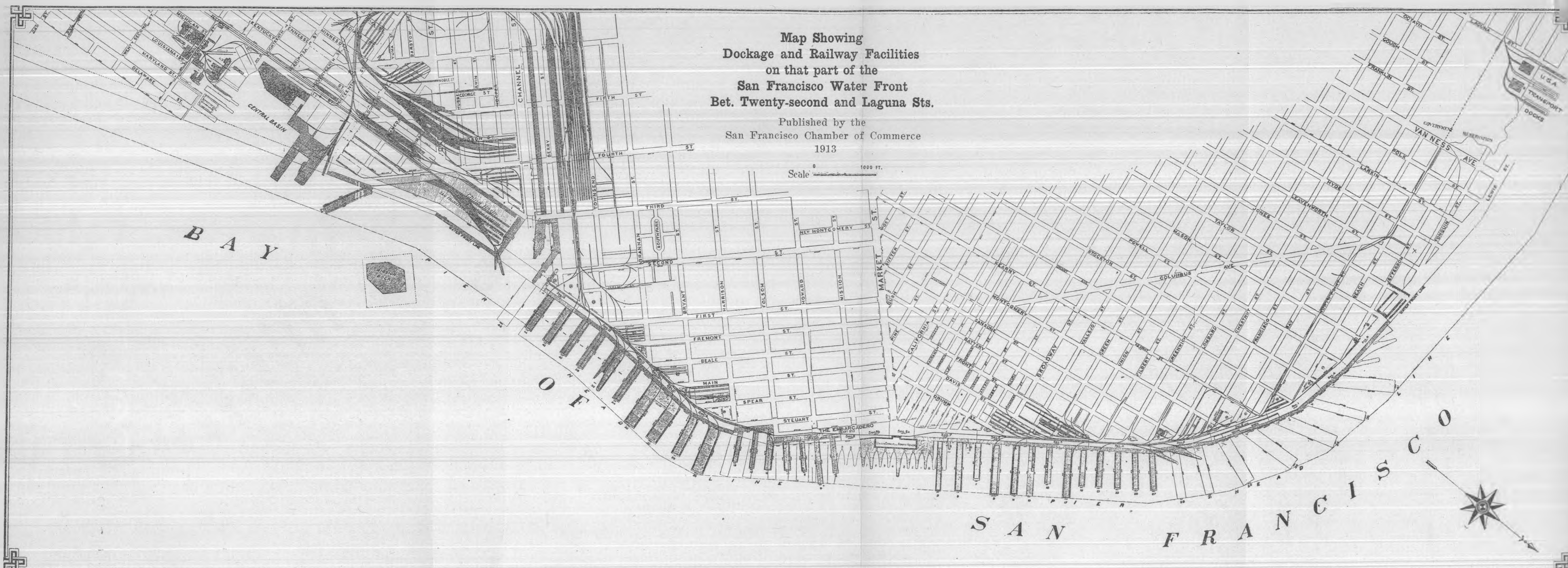
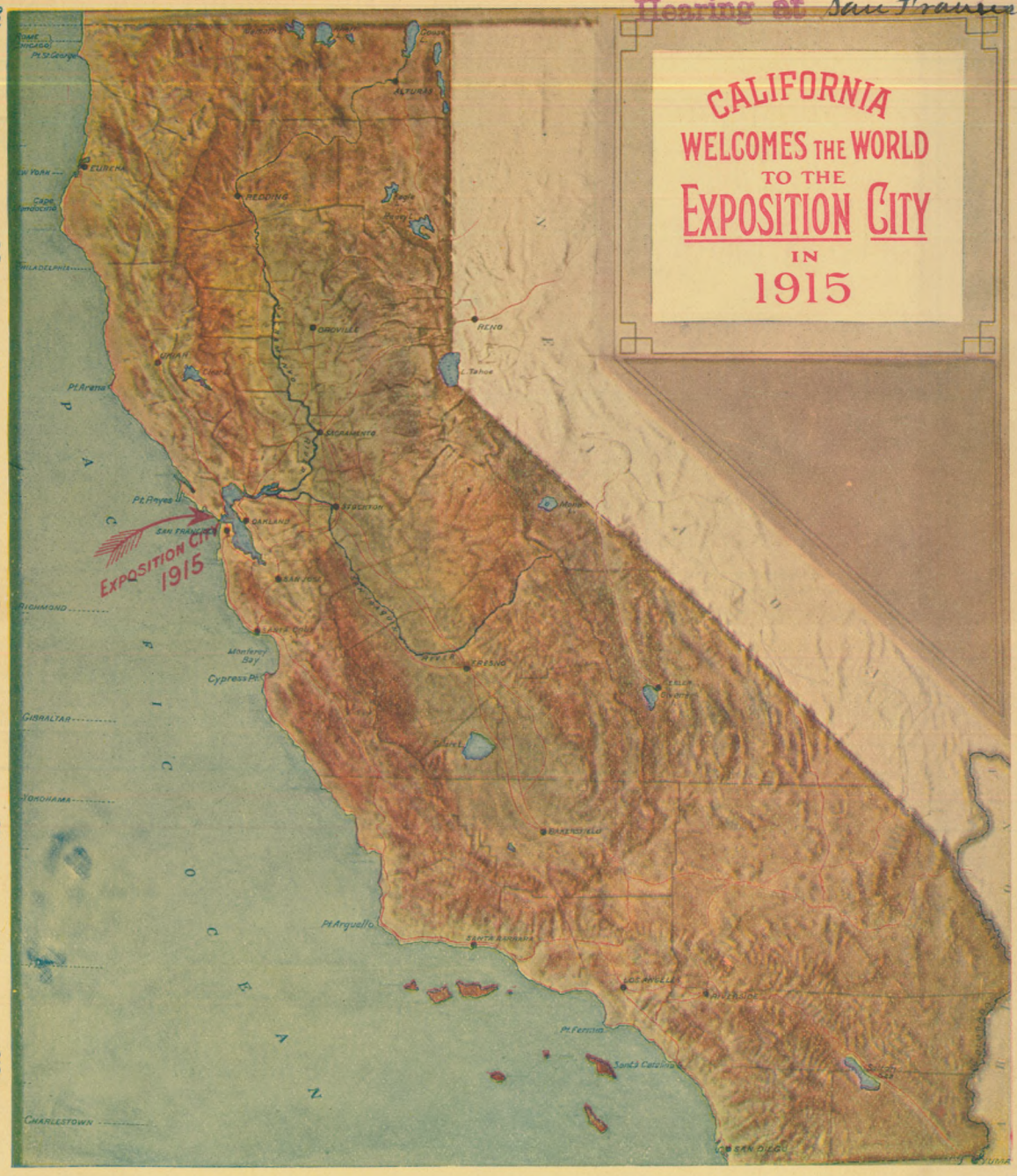


NOTE: Docks and Belt Line Railway connecting same with lines of Southern Pacific Company, Atchison, Topeka & Santa Fe Ry. Co., Western Pacific Ry. Co., and Northwestern Pacific Ry. Co. are owned and operated by the State of California and managed by the State Board of Harbor Commissioners.

CALIFORNIA
RESOURCES AND POSSIBILITIES

14

Exhibit No. 14
Hearing at San Francisco



ANNUAL REPORT
CALIFORNIA DEVELOPMENT BOARD
SAN FRANCISCO, CALIFORNIA - 1913

PANAMA-PACIFIC INTERNATIONAL EXPOSITION

SAN FRANCISCO, FEBRUARY 20 to DECEMBER 4, 1915

Great Cascade in the form of a staircase in the east or Festive Court at the Panama-Pacific International Exposition. This court will be one of the three great courts dividing the central group of Exposition palaces from north to south. The waters of the cascade, springing from a mysterious source, will flow into two great fountains. The court, representing the finest type of the architecture of the Spanish Renaissance, is designed for pageantry upon a colossal scale. Here pageants surpassing the Durbar of India will be enacted. The great tower, 270 feet high, at the northern entrance of the court, will contain a pipe organ with echo organs in the smaller towers. Mr. Louis C. Mullgardt, architect of the Fisheries building at the World's Columbian Exposition, is the designer of this court.

The site chosen for the Exposition at Harbor View on the bay of San Francisco will contain approximately 625 acres with a frontage of nearly three miles on the bay.

The chief exhibit palaces, fourteen in number, will contain a combined area of 3,731,500 square feet.

The live stock exhibit will cover 25 acres.

The amusement concessions will cover 65 acres.

The Exposition in every detail is twelve to eighteen months ahead of other World's Fairs and will be ready on time.

The people of the State of California have pledged themselves to give $17,500,000 to build the Exposition.

The 58 counties in the state will contribute another $5,000,000.

It will be a winter to winter Exposition.

The states of the Union and the nations of the world will be represented.

The exhibits will be selective rather than general, and the test one of quality rather than quantity.

Exhibits of every character from every part of the world will be landed directly at the Exposition docks. The same facilities will be offered in the case of railway shipments, which will enable cars to be lightered from the various tidewater terminals of the railroads to the Exposition.

There will be railroads tracks about the grounds and into the buildings, and large openings will be provided in the buildings to admit the large exhibits. These arrangements will make the facilities for reaching the Exposition and the delivery of freight far superior to that of any other in the past.

The exhibits in the Exposition will be installed according to a modern classification and according to modern methods. The departments will be eleven in number and these will be Fine Arts, Education, Social Economy, Liberal Arts, Manufactures and Varied Industries, Machinery, Transportation, Agriculture, Live Stock, Horticulture and Mines and Metallurgy.

Passenger transportation facilities have not been overlooked. For every transcontinental train now coming to San Francisco, the railroads will then run four. Extra ships are being built by the Ocean and Coastwise Steamship Companies to cope with the volume of traffic which will flow into San Francisco bay from all ends of the world.

General Information

General Offices, Exposition Building, Pine and Battery Streets, San Francisco. Office hours 8:30 to 5:15 P. M.

Information Bureau is located on ground floor, Exposition Building. Telephone Sutter 1915.

The Director of Works, Architectural and Engineering Departments are to be found in the Service Building (on Exposition Site) Fillmore and Francisco Streets. Telephone West 6911.

CALIFORNIA INVITES YOU TO THE EXPOSITION CITY, 1915

CALIFORNIA

RESOURCES AND POSSIBILITIES

TWENTY-THIRD ANNUAL REPORT

OF THE

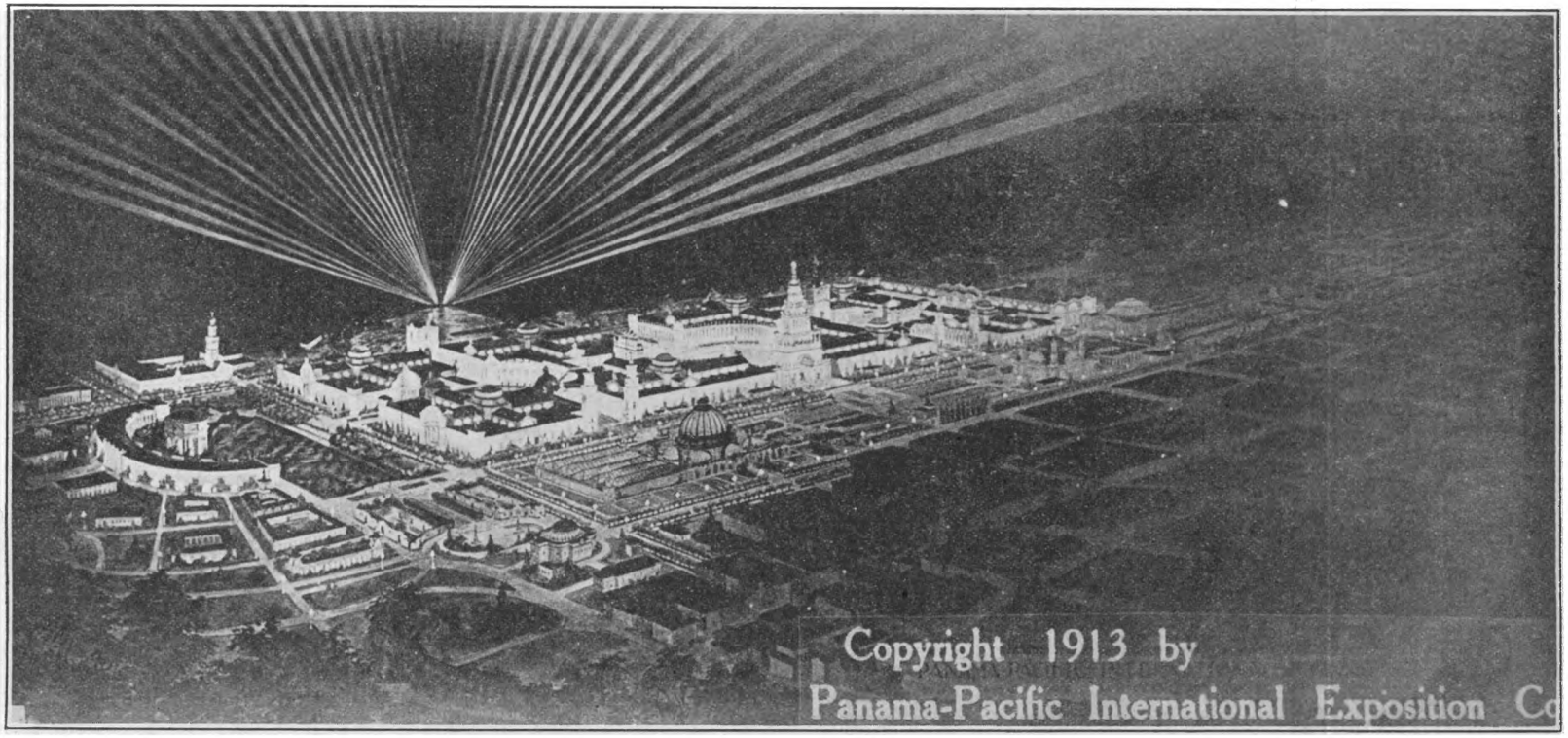
California Development Board

FOR THE YEAR 1912

Submitted as of March, 1913

PUBLISHED BY THE
CALIFORNIA DEVELOPMENT BOARD

OFFICE AND EXHIBITION HALL
Ferry Building, San Francisco
UPPER FLOOR



Panama-Pacific Grounds—Night Scene

State Capitol, Sacramento

TWENTY-THIRD ANNUAL REPORT OF THE CALIFORNIA DEVELOPMENT BOARD

To the Members of the Board:

The California Development Board has just completed a year of solid and substantial work. The various departments of the Board have increased in their organized efficiency and through publicity, exhibits, statistics and information and immigration departments have been zealous in supplying to the homeseeker, investor, manufacturer and tourist accurate information as to the State. The Board has made great progress during the year in realizing its true objects and functions. Though it has been called upon for many and varied services by individuals, firms and organizations, there has been a growing realization that we have a very definite work which is being emphasized. This work consists in the gathering of accurate and scientific information as to the resources and industries of the State. It is not necessarily gathered by the Board itself but is secured from counties, local organizations, state and federal officials and bureaus and from individuals. The activities of the Board for the year have been mostly directed in getting this information regarding the State. The successful termination of this campaign for the securing of information serves the following important purposes:

First. Accurate information is absolutely necessary to determine the publicity campaigns and other activities not only of this Board, but of all agencies operating to develop and advertise the State.

Second. This information is absolutely essential to intelligently answer the thousands of inquiries pouring in upon the Board from all parts of the world.

Third. It will be necessary by the 1st of January 1915 to have on hand very much greater knowledge of the intimate resources of the State than has ever been gathered together, in order to intelligently deal with the hundreds of thousands of visitors who will come to San Francisco to the Panama-Pacific Exposition.

Fourth. The coming in of the great body of immigration expected with the opening of the Panama Canal necessitates much more accurate information to properly direct the immigrant to his logical destination. A thorough knowledge of the adaptability of various foreign elements to the soil, climate and conditions of California could easily lead to a selective process of immigration.

Recognizing the importance of this matter the Board has been indefatigable in its efforts to find the proper methods, to get the proper contacts and stimulate official agencies to secure more intimate knowledge of the State. Representatives of the Board have visited repeatedly all sections of the State and are interesting county Boards of Supervisors and local organizations to supply responsible information as to their prospects and opportunities. The Board has thus laid a foundation for this important work, which will be prosecuted during the coming year with the greatest possible vigor.

Several valuable results have flowed from the Board's efforts in this direction during the past year. It has brought the Board and its representatives in very much closer contact with representative men and organizations in the interior of the State. Thus closer co-operation and co-ordination of interests has resulted which is greatly strengthening the work of the organization. Again, the efficiency of local organizations has been greatly stimulated as their efforts in the direction of getting knowledge of their own local situations tends to make them more intelligent in the prosecution of their work. Another important result which may be traced directly, is the awakening in San Francisco of a state-wide interest. The metropolis is realizing as never before the great contribution made to San Francisco by the interior and a new sympathy and recognition of common interests has been the result. The Development Board is constantly emphasizing the cardinal principle that the development of the city must depend on the development of the State.

Immigration

The Development Board has done pioneer work in preparing for the probable influx of foreigners after the opening of the Panama Canal. It is recognized that the Board will have many duties in informing the immigrant and directing him to the soil. The preliminary work of this Board in this matter, consisting of a well equipped Bureau of Immigration investgation, has given this organization a position of authority on this important question. The Governor of California appointed a State Immigration Commission durirg the year and your manager was made secretary of this Commission. The Board turned over its data and information upon the question to the State Commission and important legislation for the protection of the immigrant has been recommended to the current session of the Legislature. State and national contacts are constantly maintained on this subject and your Manager has conferred frequently with the Department of Commerce and Labor at Washington and participated in a national conference of State immigration commissioners held in Chicago in November, 1912. It is inevitable that this Board and its affiliated organizations will have grave duties and responsibilities when the immigrants actually arrive in California ports. The State of California will doubtless protect the immigrant from exploitation and many societies, philanthropic and racial, will doubtless assist in welcoming and educating the aliens who seek our shores. It will probably remain, however, for such organizations as the California Development Board to direct the immigrant to the soil and to give him the benefit of the best information which may be obtained.

Exhibit and Information Bureau

The exhibit rooms of the Board have been augmented by many new and impressive exhibits. Over 100,000 visitors have come to the rooms during the year, a great majority of whom were resident outside of San Francisco. The information desk in the exhibit rooms is being constantly extended with up-to-date material and a system of distribution of county and state literature is maintained. 139,862 pieces of literature were distributed over the counter averaging nearly 13,000 pieces per month. All sections of the State have splendid booklets. The Board maintains a lecture room and four lecturers have represented eighteen counties most of the year, giving stereopticon lectures hourly on the resources of the State. The Board has furnished, throught its Exhibit, Information and Lecture Bureau a very splendid and vital service to the counties of the State. Efforts are being constantly made to secure larger attendance not only from visitors to San

Francisco but from San Francisco people most of whom are unaware of the presence of the most complete and scientific exhibit of its kind in existence. Many newspapers give the Board the courtesy of a free advertisement of the exhibit, viz: Bulletin, Post,

The effectiveness of the Exhibit and Information Bureau will be greatly increased as the information campaign in the State proceeds.

Publicity

Through the activities of the Board wide publicity has been given to California throughout the United States and Europe. Numerous articles on California have been furnished to the newspapers in the East and abroad and the State and the Exposition has been widely exploited through many and diverse agencies. The Board has furnished exhibits, photographs, publicity material and stereopticon slides to many organizations and newspapers. The Monthly Bulletin of the Board has been issued month by month. Four hundred and fifty thousand of these bulletins have been issued during the year and are mailed regularly to similar organizations, newspapers, publicity officials, individual members, trade organizations throughout the world, consuls of the United States in foreign countries, and libraries. In the State the Board has been represented at practically all public gatherings connected with the promotion and development work and representatives of the Board are constantly going into all sections of the State.

The Board is undertaking at this time the representation of California at the Ghent International Exposition, to be held in Belgium April 27th to November, 1913. A large exhibit has been prepared and shipped to Belgium and a representative of the Board will install this exhibit and represent the State throughout the course of the Exposition.

Expositions

The Board has kept in close touch with the plans and progress of the Panama-Pacific Exposition and also the Panama-California Exposition at San Diego, and has co-operated in every way with these important enterprises. Your President, J. N. Gillett, and your Manager, visited five eastern states and the national capitol in the interests of the Panama-Pacific Exposition in February 1912 and many other services have been rendered by our Executive Committee and the equipment of the Board. The next two or three years will be most important for the development of California and it is necessary for this Board to thoroughly equip itself to meet the great opportunities which will arise.

General Work

During the year the Board has held two meetings of the Counties Committee, one in San Jose in June where the subject of "Good Roads" was discussed. The second meeting was held in Oroville in December in connection with the Orange and Olive Exposition. Representatives from all sections of the State were present at both these meetings and they were enthusiastically successful and assisted materially in closer co-operation for the benefit of the State. The annual banquet of the Board was held in May in San Francisco and was attended by upwards of a thousand guests. The guest of honor was Hon. Philander C. Knox, Secretary of State for the United States.

The office force of the Board is constantly increasing in efficiency. Most of those serving the Board have been with the organization for many years and labor loyally and effectively for the success of the organization.

The Executive Committee has given close attention to the affairs of the Board and to matters of state-wide significance coming to their attention.

The financial condition of the Board is good and the year closes with a good balance in the treasury. The activities of the Board, however, have now reached a point when it necessitates a much larger membership and a greater financial support. The present work is carried on with the most rigid economy and a more liberal support will aid in extending efficiency.

GROWTH IN POPULATION AND DEVELOPMENT SINCE CALIFORNIA BECAME A STATE.

(U. S. Census Returns.)

Year	Population of State	No. farms	Average acres per farm	Average value of land and buildings per acre
1850	92,597	878	4,465.6	0.99
1860	379,994	18,716	466.4	5.58
1870	560,247	23,724	481.7	12.36
1880	864,694	35,934	461.8	15.79
1890	1,208,130	52,814	405.	32.53
1900	1,485,052	72,542	397.4	24.56
1910	2,377,549	88,197	316.7	51.93

Irrigation. Of the 88,197 farms in the State, 39,352, or 46.6 per cent were irrigated in 1909. The acreage reported as irrigated in 1909 was 2,664,104 acres, or 23.4 per cent of the improved land in farms. The area to which enterprises existing in 1910 were capable of supplying water was 3,619,378 acres, and the total acreage included in irrigation projects, complete or under way, in 1910 was 5,490,360 acres. A revised statement of the status of irrigation in California in 1912 is given in the Appendix.

POPULATION, NUMBER OF FARMS AND FARM ACREAGE.

Census year	Population	Farms		Land in farms		Per cent of land area in farms	Per cent of farm land improved
		Number	Per cent of increase	Acres	Improved land (acres)		
1910	2,377,549	88,197	21.6	27,931,444	11,389,894	28.0	40.8
1900	1,485,053	72,542	37.1	28,828,951	11,958,837	28.9	41.5
1890	1,213,398	52,894	47.2	21,427,293	12,222,839	21.5	57.0
1880	864,694	35,934	51.5	16,593,742	10,669,698	16.7	64.3
1870	560,247	23,724	26.8	11,427,105	6,218,133	11.5	54.4
1860	379,994	18,716	2,046.3	8,730,034	2,468,034	8.8	28.3
1850	92,597	872	.....	3,893,985	32,454	3.9	0.8

FARM OPERATORS.

Color and nativity	Farm operators							
	Total		Owners	Tenants	Managers	Per cent of total		
	Number	Per cent distribution				Owners	Tenants	Managers
Total	88,197	100.0	66,632	18,148	3,417	75.5	20.6	3.9
Native white	58,926	66.8	45,780	10,505	2,641	77.7	17.8	4.5
Foreign-born white	26,193	29.7	19,914	5,565	714	76.0	21.2	2.7
Negro and other non-white	3,078	3.5	938	2,078	62	30.5	67.5	2.0

DENSITY OF POPULATION

In 1900, twenty States ranked ahead of California in population. In 1910, but eleven stood before her. In the ten-year period she had outstripped nine of them, taking twelfth place.

The density of population is still but 15.2 persons to the square mile.

LIST OF COUNTIES AND POPULATION IN 1910 AND 1900, WITH PERCENTAGE OF INCREASE OR DECREASE—COUNTIES' PROGRESS AS TOLD BY THE CENSUS.

Counties.	1910.	Per cent of Increase, 1900-1910.
Alameda	246,131	89.0
Alpine	309	—39.2
Amador	9,086	—18.2
Butte	27,301	59.4
Calaveras	9,171	—18.1
Colusa	7,732	4.7
Contra Costa	31,674	75.4
Del Norte	2,417	0.3
El Dorado	7,492	—16.5
Fresno	75,657	99.8
Glenn	7,172	39.2
Humboldt	33,857	24.9
Imperial	13,591	....
Inyo	6,974	59.4
Kern	37,715	128.0
Kings	16,230	64.4
Lake	5,526	—8.1
Lassen	4,802	8.6
Los Angeles	504,131	196.0
Madera	8,368	31.3
Marin	25,114	59.0
Mariposa	3,956	—16.2
Mendocino	23,929	17.4
Merced	15,148	64.4
Modoc	6,191	21.9
Mono	2,843	31.6
Monterey	24,146	24.6
Napa	19,800	20.6
Nevada	14,955	—15.9
Orange	34,436	74.8
Placer	18,237	15.1
Plumas	5,259	12.9
Riverside	34,696	93.9
Sacramento	67,806	47.6
San Benito	8,041	21.2
San Bernardino	56,706	103.0
San Diego	61,665	75.8
San Francisco	416,912	21.6
San Joaquin	50,731	43.1
San Luis Obispo	19,383	16.5
San Mateo	26,585	119.8
Santa Barbara	27,738	45.4
Santa Clara	83,539	38.7
Santa Cruz	26,140	21.0
Shasta	18,920	0.9
Sierra	4,098	0.2
Siskiyou	18,800	10.9
Solano	27,559	14.5
Sonoma	48,394	25.8
Stanislaus	22,522	136.7
Sutter	6,328	7.5
Tehama	11,401	3.7
Trinity	3,301	—24.7
Tulare	35,440	93.4
Tuolumne	9,979	—10.6
Ventura	18,347	27.7
Yolo	15,926	16.9
Yuba	10,042	16.5
California	2,377,549	60.1

The Governor of the State estimated in 1911 that the increase since the census was taken, would bring the total population up to 2,500,000.

Applying the census rate of increase the population of the State may be conservatively put now at 2,750,000. Other figures may be increased by a like reasonable proportion.

SUMMARY OF THE STATE

	Population		Increase	Square miles	Population per square mile	
	1910	1900	Per cent		1910	10 yr. inc.
Bay counties	925,708	658,156	40.6	7,108	130.2	37.6
South of Tehachapi	751,310	304,209	146.9	45,102	16.6	9.9
Sacramento valley	153,708	114,656	34.6	10,280	14.9	3.8
San Joaquin valley	261,811	143,179	80.2	27,176	9.7	4.4
Rest of the state	285,012	264,853	7.6	66,506	4.2	.4
	2,377,549	1,485,053	60.1	156,172	15.2	5.7

This segregation shows that the greatest gain per square mile has been in the counties about San Francisco Bay, while the greatest aggregate gain and the greatest rate of increase has been south of the Tehachapi.

Of the two great interior valleys, the San Joaquin Valley has made the greatest aggregate gain, 118,632, and the greatest gain per cent, 80.2; while the Sacramento Valley made an aggregate gain of 39,042, and a gain per cent of 34.6.

The remaining counties of the State, twenty-five in number, show an aggregate gain of 20,159, and a net gain of 7.6 per cent.

Irrigation, the development of agricultural lands, and the development of bountiful oil fields of the State, have been the main factors in attracting homeseekers and investors.

POPULATION OF CITIES OVER 5,000.

	1910.	1900.
Alameda	23,383	16,464
Alhambra	5,021	.....
Bakersfield	12,727	4,836
Berkeley	40,434	13,214
Eureka	11,845	7,327
Fresno	24,892	12,470
Long Beach	17,809	2,252
Los Angeles	319,198	102,479
Marysville	5,430	3,497
Napa	5,791	4,036
Oakland	150,174	66,960
Pasadena	30,291	9,117
Petaluma	5,880	3,871
Pomona	10,207	5,526
Redlands	10,449	4,797
Richmond	6,802	.....
Riverside	15,212	7,973
Sacramento	44,696	29,282
San Bernardino	12,779	6,150
San Diego	39,578	17,700
San Francisco	416,912	342,782
San Jose	28,946	21,500
San Luis Obispo	5,157	3,021
San Rafael	5,934	3,789
Santa Ana	8,429	4,933
Santa Barbara	11,659	6,587
Santa Cruz	11,146	5,659
Santa Monica	7,847	3,057
Santa Rosa	7,817	6,673
Stockton	23,253	17,506
Vallejo	11,340	7,965
Total	1,314,037	739,513

Class of places	Population		Increase 1900 to 1910	
	1910	1900	Number	Per cent
The state	2,377,549	1,485,053	892,496	60.1
Urban territory in 1910	1,469,739	810,193	659,546	81.4
Cities and towns of—				
100,000 inhabitants or more in 1910	886,284	514,008	372,276	72.4
25,000 to 100,000 inhabitants in 1910	183,945	90,813	93,132	102.6
2,500 to 25,000 inhabitants in 1910	399,510	205,372	194,138	94.5
Remainder of the state	907,810	674,860	232,950	34.5

THE GAIN ON THE PACIFIC SLOPE

While the gain in population for the whole of the Continental United States was 15,977,691, an increase of 21 per cent, the eleven States of the Pacific Slope, as given in the table below, show an aggregate increase of 2,734,567, an increase of 66.8 per cent.

The combined area is 1,175,742 square miles, which makes an average population per square mile of 5.8 per cent, while the average population per square mile for the Continental United States is 30.9 persons.

PACIFIC SLOPE STATES

	Population		Increase	Square miles	Population per square mile	
	1910	1900	Per cent		1910	10 yr. inc.
Montana	376,053	243,329	54.5	145,310	2.6	.9
Wyoming	145,965	92,531	56.8	97,575	1.5	.6
Colorado	799,024	539,700	48	103,645	7.5	2.3
New Mexico	327,396	195,300	67.6	122,460	2.7	1.1
Arizona	204,354	122,931	66.2	112,920	1.8	.7
Utah	373,351	276,749	34.9	82,190	4.5	1.1
Nevada	81,875	42,335	93.4	109,740	.8	.4
Idaho	325,594	161,772	101.3	84,290	3.9	2
Washington	1,141,990	518,103	120.4	66,880	17	9.3
Oregon	672,765	413,536	62.7	94,560	7.1	2.7
California	2,377,549	1,485,053	60.1	156,172	15.2	2.7
	6,825,916	4,091,349	66.8	1,175,742	5.8	2.4

Expansion of Agricultural Industries. The development of the agricultural resources of the State is exhibited in the following tables, comparing the acreage sown to certain crops in 1862 with those of 1910.

	1862 Agr. report acres	1910 Census report acres	
Indian corn	17,339	51,935	
Wheat	361,351	478,637	
Rye	1,415	7,027	
Oats	36,607	192,158	
Barley	223,217	1,195,158	
Hay and forage	250,464	2,049,213	
Potatoes	3,624	72,799	
Total	914,788		4,046,927
Add acreage of following not mentioned in report 1862:			
Hops		8,391	
Celery		5,600	
Beans		157,825	
Standing alfalfa		487,134	
Cotton		15,000	
Sugar beets		101,000	
Kaffir corn, mustard seed, etc		50,194	825,144
			4,872,071

Besides this increase in acreage of the staple crops, California had, according to the report of the State Board of Equalization, vines and fruit trees as follows, bearing and not bearing, in 1910:

VINEYARDS

	Acres
Table grapes	53,729
Raisin grapes	128,217
Wine grapes	160,573

ORCHARDS

Deciduous fruits—	No. of trees	Citrus fruits—	No. of trees
Apple	2,143,815	Orange	10,803,221
Apricot	2,593,884	Lemon	1,810,616
Cherry	601,520	Pomelo	18,886
Fig	549,875	Lime	1,716
Nectarine	63,773		
Olive	1,190,452	Total	12,634,439
Peach	10,922,994		
Pear	1,499,932	Nuts—	
Plum	1,059,453	Almond	1,204,382
Prune	8,998,831	Walnut	891,147
Total	19,624,529	Total	2,095,529
Grand total in 1909-10			34,354,497

The new plantings since that, will easily bring the total deciduous and citrus fruits and nuts up to 38,000,000.

Financial Conditions in California

The following table of California banking resources is compiled from the report of State banks as of August 14th and of the national banks as of September 4:

	State.	National.	Total.
San Francisco	$264,394,438.72	$240,847,989.14	$505,242,427.86
Los Angeles	123,760,000.79	80,037,174.26	203,797,175.05
Other California	287,914,129.04	179,581,562.44	467,495,691.48
Total California	$676,068,568.55	$400,466,725.84	$1,176,535,294.39

State Savings and Commercial

Of the 754 banks, 523 are State—savings, commercial and trust companies. Of these San Francisco has 37, Los Angeles 38, Oakland 17, Sacramento 10, San Diego 6, Stockton 6 and the other 409 are distributed. The aggregate paid-up capital is $61,537,742.47, surpassing many of the older States. The only ones that exceeded California in the number of depositors and the aggregate amount of deposits were Massachusetts and New York.

National Bank Statement

At the top of the following page is given the consolidated statement of the nine San Francisco national banks for the call of September 4th, the previous call and the corresponding call in 1911.

Abstract of the Condition of State Banks

At the bottom of the following page is given an abstract of the condition of 523 State banks, including sixty-three branches, as of August 14th, comprising the reports of 155 commercial banks, 131 savings banks, seven trust companies and 167 departmental banks, compared with totals as shown by the report as of June 14th.

Resources	June 14, 1912	Sept. 4, 1912	Sept. 1, 1911
Loans and discounts	$114,238,750.62	$119,616,132.07	$108,207,498.70
United States bonds	22,551,000.00	22,801,000.00	22,383,000.00
Bonds, securities, etc	16,393,386.39	16,634,317.17	15,273,140.59
Premiums on United States bonds	323,414.44	318,726.96	470,181.61
Bank house furniture and fixtures	4,680,303.41	4,666,921.59	4,720,207.65
Due from banks and bankers	23,035,685.01	22,747,536.36	20,170,894.70
Due from reserve agents	16,685,698.04	17,177,775.96	15,268,309.02
Cash and cash items	19,922,305.94	26,946,294.50	20,569,075.55
Redemption fund (5 pct. of circulation)	1,085,000.00	1,085,000.00	1,076,200.00
Letters of credit	9,176,996.82	7,879,588.97	8,669,685.95
Other assets, N. O. S	910,928.63	914,695.56	842,840.23
Totals	$229,003,469.30	$240,847,989.14	$217,651,034.00
Liabilities			
Capital stock paid in	$ 28,250,000.00	$ 28,500,000.00	$ 28,750,000.00
Surplus and undivided profits	20,883,584.86	21,023,781.27	20,413,194.72
Dividends unpaid	58,389.50	13,413.00	169,307.50
Circulation	21,598,207.50	21,903,807.50	21,267,820.00
Individual deposits	91,599,383.37	97,006,241.70	85,158,178.65
Due banks and bankers	55,365,640.23	62,075,826.78	51,747,285.35
Due to reserve agents	44,893.16	60,093.18	2,358.68
United States deposits	785,287.72	831,106.06	538,509.56
Letters of credit	9,632,125.02	8,114,652.77	8,903,187.16
City and state deposits	235,000.00	978,000.00	230,000.00
Other liabilities, N. O. S	550,957.94	341,066.88	471,192.38
Totals	$229,003,469.30	$240,847,898.14	$217,651,034.00

Location and Class		Total Resources and Liabilities	Capital	Surplus	Undivided Profits	Individual Deposits	Number of Depositors
San Francisco—	Commercial	$ 62,479,165.43	$8,468,650.00	$1,789,728.38	$ 754,242.65	$ 39,894,904.94	37,222
	Savings	194,026,784.02	5,301,600.00	8,295,534.33	1,421,962.75	177,746,387.43	253,400
	Trust	7,888,489.27	3,725,000.00	652,949.04	279,935.41	2,928,923.41	169
	Total	$264,394,438.72	$17,495,250.00	$10,738,211.75	$2,456,140.81	$220,570,215.78	290,791
Los Angeles—	Commercial	$26,475,630.40	$3,263,716.46	$1,103,357.28	$475,130.79	$19,776,010.71	59,807
	Savings	92,653,328.20	3,915,000.00	2,324,426.30	911,483.47	84,605,076.25	167,138
	Trust	4,631,042.19	2,300,000.00	624,137.95	354,962.85	1,242,304.72	19
	Total	$123,760,000.79	$9,478,716.46	$4,051,921.53	$1,741,577.11	$105,623,391.68	226,964
Oakland—	Commercial	$ 7,870,889.60	$ 942,620.00	$749,535.56	$195,701.81	$4,801,421.66	14,099
	Savings	39,643,918.47	2,110,620.00	954,039.20	380,839.47	35,287,076.24	81,610
	Trust	337,479.75	200,000.00	50,000.00	1,327.03	86,152.72	.....
	Total	$47,852,287.82	$3,253,240.00	$1,753,574.76	$577,868.31	$40,174,650.62	95,709
Sacramento—	Commercial	$ 1,140,626.73	$373,887.00	$ 3,000.00	$ 3,690.62	$ 598,905.42	2,495
	Savings	14,597,802.50	1,360,853.90	333,555.34	207,894.62	12,033,446.33	5,382
	Trust	202,210.09	200,000.00	.....	1,566.29	643.87	.....
	Total	$15,940,639.32	$1,934,740.90	$336,555.34	$213,151.46	$12,632,995.62	7,877
San Diego—	Commercial	$3,948,069.04	$562,500.00	$117,157.10	$48,278.55	$2,650,502.22	5,197
	Savings	8,161,235.55	527,500.00	311,967.51	60,202.29	7,008,861.88	19,479
	Total	$12,109,304.59	$1,090,000.00	$429,124.61	$108,480.84	$9,659,364.10	24,676
Stockton—	Commercial	$6,831,890.33	$1,367,000.00	$379,950.00	$236,482.05	$4,328,393.90	9,811
	Savings	9,654,141.11	750,000.00	286,250.00	129,135.16	8,235,994.50	13,551
	Total	$16,486,031.44	$2,117,000.00	$666,200.00	$365,617.21	$12,564,388.40	23,362
State (excluding above)	Commercial	$94,984,676.57	$16,846,451.73	$5,897,017.03	$2,691,876.17	$61,910,184.05	157,468
	Savings	99,918,048.55	8,722,343.38	3,124,402.30	1,141,684.71	84,077,206.56	216,553
	Trust	623,140.75	600,000.00	.....	840.38	20,372.47	.....
	Total	$195,525,865.87	$26,168,795.11	$9,021,419.33	$3,834,401.26	$146,007,763.08	374,021
State (as a whole)	Commercial	$203,730,948.10	$31,824,825.19	$10,039,745.35	$4,405,402.64	$133,960,322.90	286,099
	Savings	458,655,258.40	22,687,917.28	15,630,174.98	4,253,202.47	408,994,049.19	757,113
	Trust	13,682,362.05	7,025,000.00	1,327,086.99	638,631.89	4,278,397.19	188
Grand total August 14, 1912		$676,068,568.55	$61,537,742.47	$26,997,007.32	$9,297,237.00	$547,232,769.28	1,043,400
Grand total June 14, 1912		$666,998,510.30	$60,675,195.33	$26,315,612.49	$14,758,701.59	$532,951,777.00	1,075,774

Clearing House Exhibits

The bank clearings of San Francisco have more than doubled since 1900. Los Angeles, the other large financial center of the State, while showing a smaller aggregate, has a larger proportionate increase.

The San Francisco Clearing House was organized May, 1876. The clearings for the 8 2-3 months of that year were $176,125,237.97.

In 1890 they were $851,066,172.90.

In 1900 they were $1,029,582,574.78.

In the 37 years of its existence the total amount of clearings has been $40,463,687,161.13. The average daily clearings increased from $1,927,624 in 1876 to $8,895,554.66 in 1912.

The gain in volume of clearing house business for 1912 over 1911 was 10.32 per cent, which strongly reflects the increase in the mineral and agricultural products and the increase in the amount of exports and imports over 1911, as well as the sales of real estate and the building operations of the city.

Other cities of California show an increase that indicates the marvelous development of the State in the time.

The record of advancement in the two principal cities in the past twelve years is as follows:

San Francisco.		Los Angeles.	
Year.	Clearings.	Year.	Clearings.
1900	$1,029,582,594.78	1900	$ 122,692,555.55
1901	1,178,169,536.30	1901	161,466,671.54
1902	1,373,362,025.31	1902	245,516,094.85
1903	1,520,200,682.07	1903	307,316,530.90
1904	1,534,631,136.73	1904	345.343,956.35
1905	1,834,549,788.51	1905	478,985,298.40
1906	1,998,400,779.06	1906	578,635,516.82
1907	2.133,882,625.80	1907	581,803.982.00
1908	1,757,151,850.08	1908	505,588,756.02
1909	1.979,872,570.06	1909	673,165,728.81
1910	2,323.772,870.99	1910	811.377,487.47
1911	2.427.075,543.46	1911	942,914,424.19
1912	2,677,561,952.27	1912	1,168,941,700.02

While the total clearings for the United States for 1912 showed an increase as compared with 1911 of but 9 per cent, San Francisco had an increase of over 10 per cent and Los Angeles of over 23 per cent. For 1912 San Francisco was eighth in the list of clearing and Los Angeles twelfth.

The transactions of the U. S. Sub-Treasury since it became a member of the San Francisco Clearing House Association, were as follows:—

In Clearings.		Out Clearings.	
1910—	$ 66.983,003.69	1910—	$ 55.669,130.60
1911—	71,910,560.40	1911—	59.805,631.67
1912—	78,653,510.20	1912—	72,864,463.65
	$217,547,074.29		$188,339,225.92

Total for three years, $405,886,300.21.

The debit and credit balances amounted to $125,578,485.71, of which $33,320,000 was settled with U. S. Treasury House certificates, saving the four fold handling of that amount or 245 tons of gold coin.

Other Clearing House Cities

	1909.	1910.	1911.	1912.
Oakland	96,527,088.09	157,460,588.22	172,666,406.17	222,570,346.29
Sacramento	54,512,723.22	69,447,281.94	78,376,700.21	92,747,060.69
San Diego	52,094,521.00	66,708,874.00	82,724,333.47	131,894,087.00
Fresno	29,324,258.30	37,930,473.07	39,782,776.05	51,400,594.73
Stockton	28,195,022.20	32,277,582.58	40,356,582.58	45,064,374.68
San Jose	25,320,894.50	27,828,978.64	29,877,754.37	35,882,473.55
Pasadena	(With Los Ang.)	40,570,318.90	41,607,900.10	47,144,736.48

Bakersfield Clearing House organized in March 1912, did a business for the year of over $21,500,000.

Federal Business in San Francisco for 1912.

Postal receipts	$ 2,782,949.41	Internal Revenue Receipts	$ 7,782,197.40
Imports	61,267,798.00	Exports	73,302,300.00
Custom receipts	6,652,146.16	Tonnage movement for fiscal year ending June 30, 1912 (handled over state wharves)	6,798,726.00
Postal Savings Deposits	1,238,814.00		

The commerce of the port reached nearly every country in the world.

Commercial Movements By Sea at Other Ports in California.

	Imports	Exports
*Humboldt Bay	$ 5,095,392	$10,914,275
*Los Angeles	83,251,220	18,734,972
San Diego	937,655	1,401,600

*Fiscal year ending June 31, 1912.

PROGRESS IN THE METROPOLIS

The seventh anniversary of the great disaster of April, 1906, finds few vestiges of the ruin then wrought. A new city of imposing modern structures occupies the ground where before stood the many examples of architectural variety evolved during the last half of the nineteenth century.

San Francisco has won the admiration and wonder of the world by the courage and energy of her rebuilding, and stands today more fit than ever to occupy her proper place among the great cities of the world.

The disaster marked the beginning of a new era and made it possible to modernize a city which represented sixty-one years of growth. Already what was at the time regarded as an overwhelming calamity has brought its benefits. The confidence of her people has been justified and the promise of greater prosperity for the future is hers.

To this prosperity the whole State contributes and in it shares.

San Francisco can now claim to be, in character and equipment of her new structures, the most up-to-date city in the world. She is now authorized by the Federal Government to invite the nations of the world to come and see for themselves when she opens the **Panama-Pacific International Exposition in 1915,** which enterprise was inaugurated in the presence of a vast multitude in Golden Gate Park, October 14, 1911, by the turning of the first shovelful of earth by Wm. H. Taft, President of the United States.

RECONSTRUCTION OF SAN FRANCISCO

The reconstruction of the city involved vast expenditures by the municipality for streets, sewers, fire system, school houses and other municipal buildings, all of which has been of the most substantial character.

Private Construction. The buildings destroyed in San Francisco by fire of 1906 numbered 28,188 valued at $105,000,000. The money expended by private parties for labor on the new buildings has amounted to some $75,000,000, while the municipality has expended large sums on the same account.

The private construction as shown by the official permits issued, gives the record as follows, up to Dec. 31, 1911.

		April, 1906, to Dec. 31, 1910	1911
	Number Buildings	Cost	Cost
Class A	117	$ 24,927,260	$ 1,809,097
Class B	135	9,256,871	1,010,500
Class C	1,830	55,835,617	8,145,673
Frames	16,951	67,965,376	8,345,956
Alterations	11,280	18,897,080	1,604,248
Total	30,316	$176,882,204	$20,915,474
For 1911	6,079	20,915,474	
Grand total	36,395	$197,797,678	
Add 15 per cent for under valuation	.....	29,669,650	
		$227,467,328	

The city shows for itself as to the character of buildings erected up to the end of 1911 and the above figures give some of the details.

For 1912 permits were issued for buildings to cost $23,338,563.00. Contracts for the same were let and recorded as follows:—

Brick	$14,246,796
Frame	9,826,927
Alterations	2,195,283
Total for 1912	$26,269,006

Though San Francisco has always been famous for its hotels, it has added largely to the number and size and now has some of the finest and best equipped hostelries in the country, and can demonstrate its ability to comfortably house any number of visitors that may be drawn within her gates at any one time.

The hotels proper number over 320 with nearly 30,000 rooms, and accommodations for 60,000 guests at one time. There are also over 300 apartment houses and over 500 lodging houses, in which a large share of the floating population find shelter.

New hotels, apartment houses and lodging houses are under construction, and the number will be greatly augmented. By the time of the opening of the Panama-Pacific International Exposition, San Francisco will be in a position to sustain her prestige for care of her visitors in the face of multitudes that will be drawn to the city on that notable occasion.

The growth of building activities all over the State has been greatly stimulated by the publicity given to California by San Francisco's mishap and her reconstruction, as the following exhibit for Los Angeles, Oakland, and other leading cities of the State shows:

		Valuation.			Valuation.
Los Angeles...	1905	$15,382,057	Sacramento....	1906	$ 994,811
	1909	13,260,703		1909	2,063,394
	1910	21,684,100		1910	2,164,456
	1911	23,004,185		1911	3,087,392
	1912	31,367,995		1912	2,793,544
Oakland.....	1906	4,445,692	Pasadena.....	1905	1,953,532
	1909	5,318,512		1909	1,888,826
	1910	6,695,789		1910	2,133,528
	1911	6,202,685		1911	2,183,713
	1912	9,009,734		1912	2,166,352
San Diego.....	1905	1,193,170	San Jose.....	1905	908,525
	1909	2,632,100		1909	1,195,280
	1910	4,005,200		1910	1,750,000
	1911	5,703,685		1911	569,369
	1912	10,001,004		1912	857,166
Stockton.....	1906	488,372	Fresno.....	1907	129,880
	1909	565,195		1909	332.897
	1910	506,494		1910	990,040
	1911	938,857		1911	1,075,941
	1912	1,129,170		1912	1,697,294

Harbor Improvements Planned for San Francisco Bay.

The improvements to San Francisco harbor made possible by the $2,000,000 State bond issue of 1904 have been augmented by the State bonds to the amount of $9,000,000 authorized in 1910. At the same time $1,000,000 bonds were voted for the acquisition of Islais Creek lands for an inland basin.

Within the next two years, or by the time of the opening of the Panama-Pacific International Exposition in 1915, these extensions and improvements will be completed, giving San Francisco a wharfage line of 44.5 miles not including Channel Creek and the three basins. A belt road connecting the piers with the transcontinental railway lines is furnishing ideal facilities for handling the commerce of the port and the present plans provide for its expansion.

San Francisco deservedly ranks as one of the Great Cities of the World. She

is a Great City by reason of her position and power in the social, commercial and financial world. San Francisco is pre-eminently a commercial city. It is a foreign and domestic market without a peer on the Pacific Coast. The city has all the advantages of location possessed by any of the great commercial centers of the world. It is situated on the north end of a peninsula, six miles wide and twenty miles long, separating San Francisco Bay from the Pacific Ocean.

As a seaport it receives the commercial drainage of a region that has the greatest variety of natural resources of any part of the earth. That drainage is the great inextinguishable, economic fact that rebuilt San Francisco after the catastrophe of 1906 on greater lines than before. It was economic pressure that forced and inspired the energies which have made a new city that is the wonder of the World.

Oakland Harbor. The great seaport of Pacific America, with constantly expanding commerce demands ever-widening facilities for handling it. Fortunately this demand is being met by San Francisco and Oakland, the two great cities of the bay region. Formerly there was danger that much of our commerce would be alienated by the lack of adequate port and dock facilities. This risk is no longer imminent. The San Francisco Harbor Commissioners, watchful of the needs of trade, are wisely expanding its facilities on the water front within their jurisdiction. But when they have done all within their power, the expansion of commerce will not stop, and to meet it Oakland is wisely and watchfully moving to develop her splendid water front to secure deep water to accommodate the largest ships and to meet commerce by water and rail facilities that will give trade a line of least resistance.

The Oakland water front is a great asset of the Pacific trade, and its improvement now planned and in progress means that the commerce of all times is to have on San Francisco Bay every advantage that natural situation justifies and that enlightened public enterprise can supply.

For that improvement Oakland has voted a bond issue of $3,500,000, and the grantees of that city are beginning the expenditure of $20,000,000 additional on the western and southern water front. When these improvements are completed Oakland will offer facilities which may well rank with those of Hamburg, Havre, The Hague and Liverpool.

Hereafter, then, there need be no fear that any ship, however great her tonnage or deep her draught, will fail of accommodation in this bay, or that any cargo, in or out, will lack the latest and most economical device for handling and transfer. The same spirit is upon both cities, not in rivalry, but with the determination that this seaport, intended by nature to be one of the world's greatest, shall by art and enterprise fulfill its destiny.

GENERAL SUMMARY AND COMPARATIVE TABLE OF SHIPMENTS OUT OF STATE BY RAIL, OF FRUITS, WINE, BRANDY AND VEGETABLES FOR SIXTEEN CONSECUTIVE YEARS

Tons of 2000 pounds.

Kinds	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1910	1909 By rail	1911 By rail	1912 By rail
Green deciduous fruits	72,350.2	69,732.2	96,943.6	91,176.5	93,673.7	100,390.9	101,198.7	73,983.6	115,083.6	113,679.0	106,066.0	161,224.0	203,275	204,876	187,884	167,603.9
Citrus fruits	98,547.0	180,658.9	131,916.8	226,546.6	323,871.4	225,668.8	299,623.4	385,747.6	454,083.4	383,418.9	413,696.1	399,094.0	475,959	446,384	580,799	479,098.8
Dried fruits	75,159.7	76,662.7	86,925.3	90,052.8	106,987.1	151,944.5	149,531.1	156,769.3	118,479.3	112,176.9	184,821.6	133,846.0	154,756	128,892	114,483	194,175.2
Raisins	39,065.8	47,796.3	36,008.7	36,047.0	43,314.0	47,575.2	39,963.4	54,134.7	32,634.7	42,457.3	*	*29,601.0	61,584	67,278	*46,513	.....
Nuts and olives	5,808.6	5,815.8	6,608.4	6,518.4	8,462.4	10,918.9	9,377.4	9,810.5	7,610.5	5,131.5	7,198.0	10,887.5	12,438	12,308	12,751	15,399.1
Canned fruits and vegetables	73,464.7	52,219.7	75,240.0	75,556.9	83,229.1	80,634.8	94,204.8	86,077.9	91,877.9	77,626.5	104,624.6	†85,135.0	†71,223	†73,746	†83,258	89,946.1
Raw vegetables	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	93,500.8	86,014	78,829	130,738	129,659.6
Wine and brandy	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	70,758.2	75,656	82,144	83,952	93,249.8

The above figures for 1912 are those reported by the Southern Pacific, Santa Fe and Western Pacific lines. Previous to 1912 the figures reported were from the Southern Pacific and Santa Fe only.

CARLOADS 10 TONS EACH.

Total carloads fresh, dried and canned fruits and vegetables and wines and brandy since

1890.....16,195	1896.....38,254	1902.....77,538	1908..... 98,604
1891.....23,347	1897.....48,072	1903.....88,085	1909.....120,690
1892.....25,633	1898.....56,149	1904.....92,053	1910.....109,456
1893.....40,929	1899.....55,483	1905.....99,409	1911.....116,267
1894.....43,624	1900.....66,798	1906.....90,587	1912.....116,913
1895.....45,257	1901.....83,732	1907.....95,299	

Lack of uniformity in classification of some kinds of products by the several roads prevents their segregation more specially in this table. For instance "dried fruits" are made to include prunes and raisins, to comply with the economics and methods of accounts of the freight offices.

Previous to 1910 shipments of fruits, vegetables, etc. by rail and sea were not segregated.

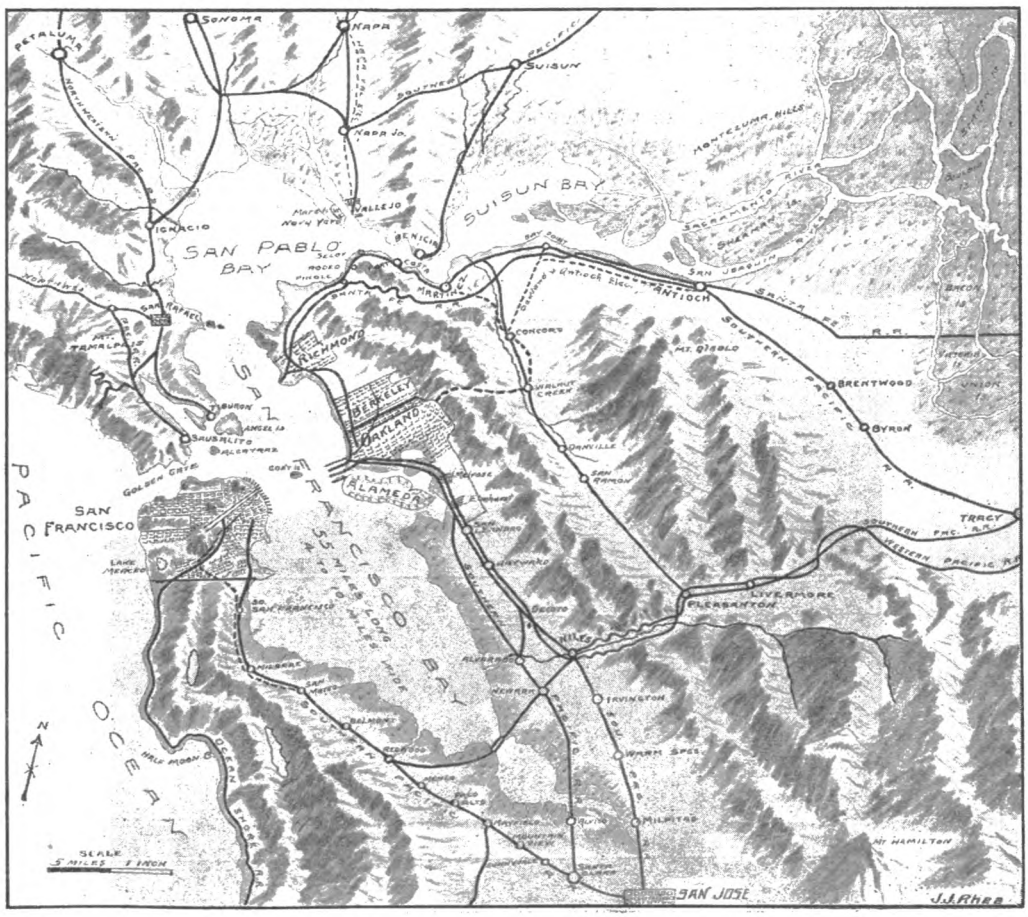
*All shipments of raisins and prunes by rail are included in dried fruits in 1907 and some in 1908. The 1911 raisin shipments are only reported in part; the rest are included under dried fruits as they are in 1912.

†Includes shipments of canned vegetables. The pack of canned fruits and vegetables for 1911 and 1912 is given on other pages.

Dairy and poultry products, fresh and canned fruits and vegetables taken on at this port as supplies and not included above, reach a value of about $1,650,000.

According to figures furnished by the three railroads above mentioned there were **brought into California** from other states, dairy produce and eggs, 20,597,800 lbs.; dressed and live poultry, game and fish, 9,039,200 lbs., an increase of some eight million pounds over 1911. This shows that there is no over production of these commodities in California.

One road reports nearly a million pounds each of potatoes and dried peas and beans as having been brought into the State during 1912.



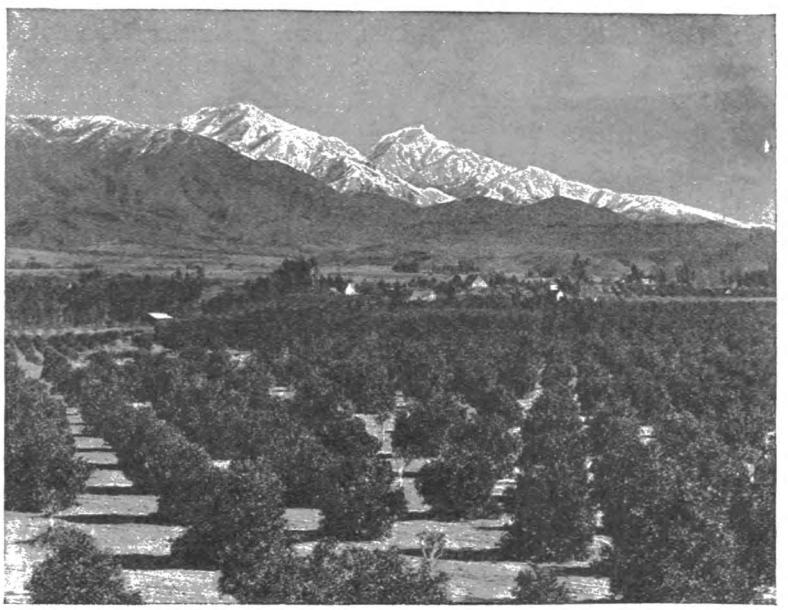
San Francisco Bay and Vicinity

CITRUS AND DECIDUOUS FRUITS

Citrus Fruits. The shipment of citrus fruits from California for the season November 1, 1911 to October 31, 1912 was well above the average of the last five years, but some 6000 cars short of the previous year which was the record by about that figure. 10,000 boxes went to New Zealand in October, 1911, on a rush order for the holiday trade. The crop totaled 40,176 carloads, of which 30,241 were of oranges and 5,941 of lemons went from south of Tehachapi. The balance, 3,994 carloads, went from Central and Northern California. The shipments from this section begin the first week in November and the oranges bring from $4 to $5 per box. These shipments were by freight and exclusive of what was marketed within the State and those shipped East by express. The development of the citrus industry in California, which now amounts to between 25,000,000 and 30,000,000 boxes, can be seen by reference to the table of shipments on another page. It is nearly three times as great as all the other states combined.

Fresh Fruit. The fruit distributing associations and others furnish statistics of shipments of deciduous fruits to Eastern markets for the year 1912, as given in the table herewith.

As the varieties are shown, they add to the value of the tables of shipments. The figures are for actual carloads without regard to tons in a car. The minimum fixed by the railway companies now is 13 tons, but a carload is often 30 tons. Other tables in the report retain the original 10-ton unit. As an illustration, the table on another page shows 16,122 carloads of fresh fruit for 1908, while the Fruit Association's table gives the number at 12,917 cars. An apparent discrepancy occurs in using actual carloads in one instance and the 10-ton unit in the other.



Variety of Climate—Oranges and Snow in Southern California.

SHIPMENTS FROM NORTH OF TEHACHAPI

Varieties	1905	1906	1907	1908	1909	1910	1911	1912
Cherries	79	150	98	208¼	250	250	216½	244
Apricots	279	16	71	231¾	210	290	214½	195
Peaches	1946	584	699	1980¼	2599	2518	2027	1621
Plums and prunes	1391	1220	1039	1763	1526	1552	1391	1775
Pears	1013	1513	1039	2701½	2638	2361	2324	3134
Grapes	1602	2052	3460	3816¼	5880	4948	6374½	6354
*Apples	1761	770	1085	2216	2188	2153	.....	.....
*Miscellaneous	.....	.....	.....	.....	19	.....	16¼	17
Total	8071	6305	7491	12917	15280	14072	12539	13340

*Includes Quinces, Persimmons and Figs previous to 1909 not counted separately.

While the above table includes no apple shipments for 1912, the Watsonville district reports 3331 carloads from the Pajaro Valley and adjacent region, and Sonoma County reports 645 carloads from that county. The total shipments by rail from all the State are seen on another page.

Dried Fruits. Nearly all kinds of deciduous fruits are dried for the market, but prunes, peaches and apricots are the most important. The dried output of all, except figs, varies largely according to the season, the demand of the Eastern market for fresh fruit, and the prices offered by the canners.

OUTPUT OF CURED FRUITS, INCLUDING PRUNES AND RAISINS, 1905-1912
In Tons

	1905	1906	1907	1908	1909	1910	1911	1912*
Apples	2,500	2,500	3,300	3,350	3,000	3,000	3,500	3,500
Apricots	18,000	3,000	1,100	19,000	14,000	15,250	8,800	18,500
Figs	3,200	3,000	4,500	2,900	4,000	3,775	5,250	5,000
Peaches	18,000	10,000	15,000	23,000	20,000	25,000	13,000	27,000
Prunes	31,250	92,500	53,000	28,500	75,000	40,000	88,000	97,000
Raisins	45,000	50,000	75,000	65,000	70,000	62,500	67,500	85,000
Various other, Pears, Plums, etc.,	2,750	2,700	1,200	3,000	2,500	1,750	1,750	3,000
Total tons	120,700	163,700	153,100	144,750	188,500	151,275	187,800	239,000

*1912 (Approximate).

Prunes. Of dried fruits, prunes come next in importance to raisins. Prunes are grown in many counties throughout the State; the largest center of this industry is the Santa Clara Valley. A good many prunes are grown in the San Joaquin and Sacramento Valleys and also in Contra Costa and Sonoma Counties.

The output varies largely in different years.

CALIFORNIA PRUNE OUTPUT

Year	Tons	Year	Tons
1898	45,210	1906	92,500
1899	56,863	1907	53,000
1900	87,000	1908	28,500
1901	40,800	1909	77,500
1902	98,500	1910	45,000
1903	82,500	1911	88,000
1904	67,500	1912	97,000
1905	31,250		

Interior of Cannery
By Courtesy San Jose Chamber of Commerce.

Exports and Imports of Dried Fruits. The following exhibit is of some interest in this connection as showing the trend of trade in dried fruits.

(Compiled by George Robertson, Fresno, Cal.)

EXPORTS AND IMPORTS OF CALIFORNIA RAISINS AND OTHER CURED FRUITS AND ORANGES

	RAISINS (Pounds)		EXPORTS (Pounds)			
Year	Export	Import	Apricots	Peaches	Prunes	Oranges (Boxes)
1905	3,978,645	11,511,347	13,616,010	700,902	34,820,748	.....
1906	9,749,690	4,537,648	3,268,457	1,819,863	31,777,704	.....
1907	4,720,606	9,927,771	1,540,471	1,354,317	37,674,800	.....
1908	7,084,178	4,875,693	14,463,948	1,296,095	18,087,319	714,365
1909	8,363,845	5,219,649	13,644,135	2,843,968	83,128,101	952,869
1910	15,547,074	3,022,918	18,366,055	4,946,406	64,470,370	962,229
1911	20,052,711	3,554,794	12,194,491	6,406,822	67,679,170	1,265,000
1912	19,949,046	3,255,861	13,413,430	4,425,803	74,328,074	1,197,363

California's export of cured fruits, especially prunes and raisins, is steadily increasing, while the importations are falling off. The quantity of fruit exported depends to a certain extent on the size of the crop.

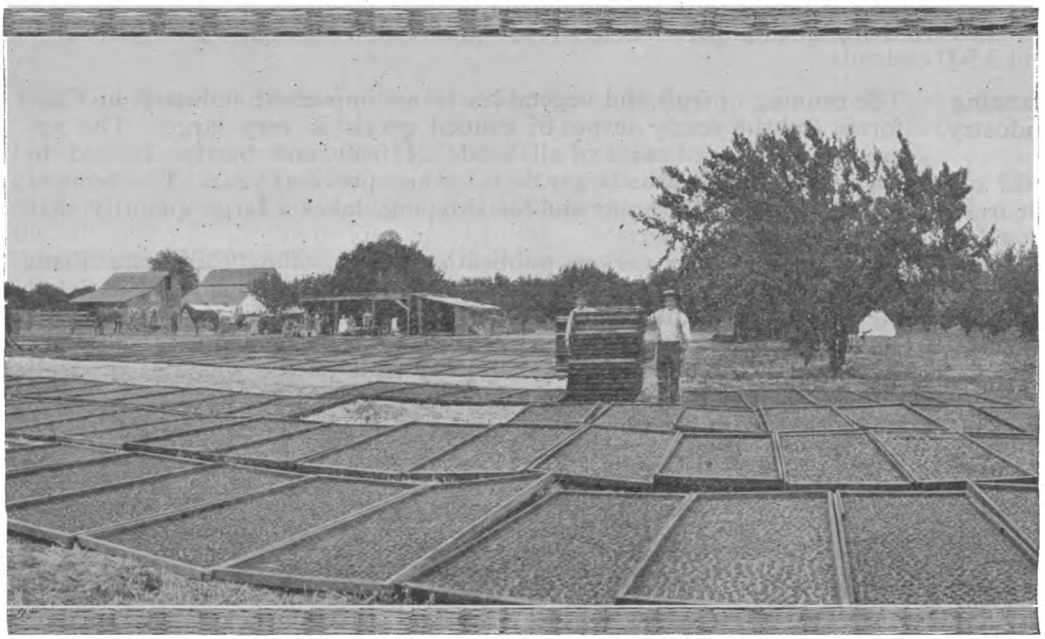
EXPORTS BY SEA 1912

Product.	Value	Shipped mostly to
Canned Fruits	$5,447,798	England
Fruit in Glass	77,493	New York & England
Canned Vegetables	1,587,166	New York & Canada
Pickles & Sauces	130,253	Oceanica & Hawaiian Is.
Canned Milk	280,325	Hawaiian Is. & Philippine Is.
Canned Meats	410,109	Alaska & Philippine Is.
Beans & Dried Peas	1,180,482	Alaska & New York
Dried Apples	98,583	New Zealand
Dried Apricots	1,100,266	Germany, Oceanica, Canada & New York
Dried Peaches	340,334	Germany, Canada & New York
Dried Prunes	2,719,692	Germany, Canada, Netherlands & New York
Dried Raisins	1,246,485	New York, England, New Zealand & Phil. Is.
*Other Dried Fruit	427,096	Germany, England & New York
Nuts	241,483	New York & Hawaiian Islands
Apricot Kernels	123,483	Germany & Netherlands

*(These do not include shipments for consumption "en voyage.")

It is worthy of note that Canada and Australasia are about our best customers for dried fruits and raisins, Germany only exceeding them in dried fruits.

The above will give some idea of the distribution of California products in addition to the rail shipments to New York where many orders from abroad are filled.



Drying Apricots, San Benito County
By Courtesy of "Sunset" Magazine.

FRESH FRUITS AND VEGETABLES

No other State in the Union and few other countries in the world offer such a variety of fresh orchard and garden products throughout the year as does California. In one or another section of the State, fresh fruits and vegetables of superior quality are to be had in every month of the twelve. "The Garden Calendar," by Prof. E. J. Wickson, shows that as far north as Red Bluff, conditions admit of planting for market eight kinds of vegetables in November, five in December, ten in January, eleven in February, fourteen in March, eighteen in April, and every month has something in the list, the smallest being August with four kinds.

Fresh Vegetables

Besides supplying the home markets abundantly the shipments of fresh vegetables to the Eastern markets in 1911 and 1912, amounted to some 130 tons, and are increasing year by year.

The principal kinds and the districts from which they go are as follows:

Asparagus.....Delta Region, Los Angeles, Alameda
Cabbage.....Los Angeles, San Francisco, San Jose
Cauliflower....Los Angeles, San Francisco and Alameda
Celery.....Los Angeles, San Francisco, Stockton
Melons.....Los Angeles, Stockton
Potatoes.....Los Angeles, San Francisco and Alameda
Tomatoes.....Los Angeles, Delta Region, Alameda
Onions.....San Jose, San Francisco, Delta Region and other points
Artichokes....Los Angeles, San Jose and other points
Lettuce.....Los Angeles, San Jose and other points
Rhubarb.....Alameda, Sacramento Valley, San Joaquin Valley and Central California

Shipments of melons, etc., from Imperial County and celery, etc., from Orange County are included in Los Angeles territory.

The "Delta Region" includes all the country of the lower Sacramento and San Joaquin rivers.

Shipments from North of Bay Counties by rail are included in those from San Francisco.

By potatoes is meant only the shipments of early potatoes.

In 1912 the total shipments out of the State of cantaloupes was between 3,000 and 3,500 carloads.

Canning Industry. The canning of fruit and vegetables is an important industry in California and the yearly output of canned goods is very large. The aggregate number of cases of all kinds of fruit and berries canned in 1912 and the vegetable output was larger than for any previous year. The demand for fresh fruit and vegetables at home and for shipping, takes a large quantity that would otherwise go to the canner.

The following exhibit from various publications, viz: the "California Fruit Grower," "Western Packer and Canner," etc., is made of the various kinds in detail of California fruits and vegetables canned in 1910, 1911 and 1912.

By permission we here give a summary of the California canned fruit and vegetable pack for 1910-11-12, and of the total California fruit packs, which is of itself very interesting and instructive. The pineapples are packed by California enterprise but are exported from Hawaii.

CANNED FRUITS—Cases.

	1910*	1911*	1912* (Est.)	Production During Last Twelve Years	
				Year	Cases
Apples	76,830	65,000	106,956		
Apricots	743,160	904,000	634,405		
Blackberries	62,025	77,000	120,810		
Cherries, Royal Anne	136,290	110,000			
Cherries, Black	19,620	29,000	235,094		
Cherries, White	40,285	60,000			
Grapes	45,645	70,000	45,038		
Loganberries	12,639	20,000	19,924		
Pears	619,355	620,000	704,782		
Peaches, Free	748,825	730,000	859,145		
Peaches, Cling	1,396,625	1,350,000	1,300,687		
Peaches, W. H.	.....	.....	28,058		
Plums	80,360	165,000	142,790		
Raspberries	10,126	3,000	10,596		
Strawberries	14,073	7,000	14,548		
Other Fruits	3,390	5,000	25,218		
Pineapples	.....	750,000	1,000,000		
Total Fruits	4,009,248	4,300,000	4,248,051		

Year	Cases
1901	2,677,082
1902	2,252,790
1903	2,783,504
1904	2,840,614
1905	3,283,296
1906	3,109,225
1907	2,982,985
1908	4,734,663
1909	3,047,001
1910	4,008,549
1911	4,182,650
1912	4,248,051

*Pie Fruits were included.

From the "California Fruit Grower" and "Western Packer and Canner" the following exhibit shows the kinds of vegetables canned in 1910-11-12:

CANNED VEGETABLES—Cases.

	1910	1911	1912
Tomatoes	1,350,310	1,500,000	1,574,444
Peas	167,775	185,000	272,070
Asparagus	617,275	700,000	750,000
Spinach	.....	.....	17,082
Squash	.....	.....	20,520
Beans and Other Vegetables	115,285	130,000	72,459
Total Vegetables	2,250,645	2,515,000	2,706,575

The pack of canned vegetables for the years 1910 and 1911 was: Cases, 1910, 2,250,645; 1911, 2,516,655, of which the tomato pack leads. Canned asparagus comes next with 50,000 more cases than in 1911.

Canning of fresh vegetables is carried on at various points where there is an ample supply grown.

Asparagus is mainly canned in the Sacramento district, San Jose and Orange Counties.

Peas mostly in Southern California.

Tomatoes in Southern California, Santa Clara Valley and Sacramento Valley.

The Vineyard. California is the most important factor in viticulture in the United States. It has over 90,000,000 vines, more than all the other States. It represents an investment of $150,000,000 which returns an annual income to the grower of over $15,000,000. Over 60,000 people are dependent upon California's viticultural industry. This includes our 10,000 grape growers, 600 wine makers, and the laborers who do the picking and hauling, those employed in the wineries and those engaged in handling the wine for distribution.

According to the 1910 report of the State Board of Equalization, nearly 350,000 acres are devoted to grape growing. Of this, 275,000 acres are in full bearing. 36,000 acres are devoted to table grapes; 109,000 to raisin grapes and 130,000 to wine grapes.

The shipments of table grapes out of the State by rail for 1912 amounted to 6,354 carloads.

Raisins. The center of the raisin industry is in Fresno County, although raisins are produced in other parts of the State. The crop varies from year to year, as the appended table shows; that for 1910 exceeds the average of the six preceding years:

CALIFORNIA RAISIN CROP

Year.	Tons.	Year.	Tons.
1897	46,852	1905	43,750
1898	40,365	1906	47,500
1899	35,784	1907	60,000
1900	47,167	1908	60,000
1901	37,125	1909	70,000
1902	54,375	1910	56,000
1903	60,000	1911	67,500
1904	37,500	1912	85,000

The above figures show that Fresno County now produces about 60 per cent of the California raisin crop, and nearly twice the quantity produced by Spain, which produces from 15,000 to 30,000 tons and has held the lead for centuries. It was in 1892 that the California raisin crop first equaled that of Spain, and it has been increasing the difference ever since.

Seeded Raisins

Fresno County is the center of the seeded raisin industry, where it originated. The following figures show the wonderful increase in this popular form of raisins during the last fifteen years:

Year.	Tons.	Year.	Tons.
1896	700	1905	21,000
1897	3,500	1906	24,000
1898	7,000	1907	26,000
1899	12,000	1908	24,000
1900	14,000	1909	28,000
1901	14,000	1910	31,500
1902	16,000	1911	33,000
1903	18,000	1912	35,500
1904	18,000		

(The above are only approximate figures.)

COUNTIES WHERE CALIFORNIA RAISINS ARE PRODUCED

County.	Crop of 1909—pounds.
Fresno	84,000,000
Tulare	20,000,000
Kings	18,000,000
Sutter	4,000,000
San Bernardino	3,600,000
San Diego	3,200,000
Madera	2,400,000
Yolo	2,000,000
Kern	1,100,000
Colusa	800,000
Los Angeles	300,000
Total crop	140,000,000

WINE AND BRANDY.

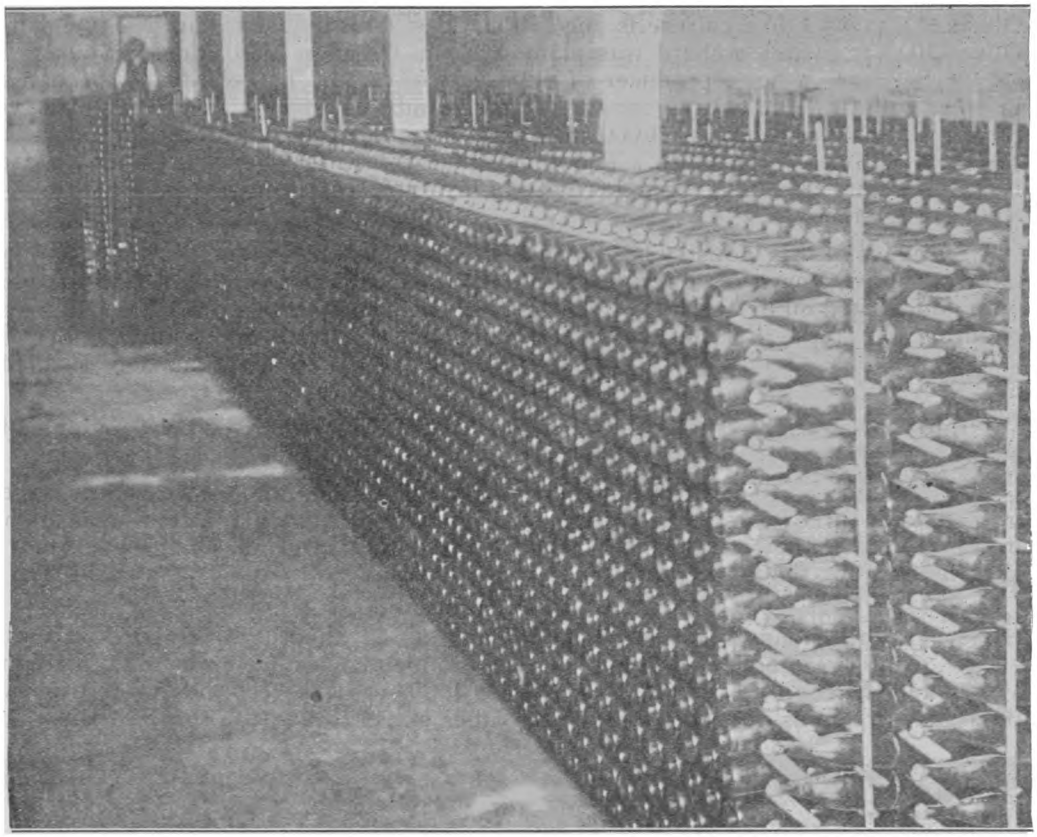
Wine and Brandy. During the past ten years the manufacture of California wines has more than doubled, as shown by the following table. The yield for 1911 was about 49,280,000 gallons. The production of sweet wines was the greatest in the history of the industry, viz: 23,280,044.48 gallons, while the dry wine output totaled about 26,000,000 gallons.

WINE AND BRANDY PRODUCTION 1897–1912

Year	Dry Wines Gals.	Sweet Wines Gals.	Brandy Gals.
1897	28,736,400	5,197,500	1,442,468
1898	10,750,000	7,779,000	1,250,000
1899	15,103,000	8,330,000	1,699,035
1900	16,737,260	6,940,300	3,256,513
1901	16,473,731	6,270,300	1,688,482
1902	28,224,146	14,835,146	4,564,173
1903	21,900,500	12,670,356	1,972,000
1904	15,589,342	13,571,856	4,420,839
1905	20,000,000	10,700,000	1,250,000
1906	26,000,000	15,000,000	1,345,000
1907	27,500,500	15,500,000	1,500,000
1908	22,500,000	14,750,000	1,750,000
1909	27,000,000	18,000,000	2,000,000
1910	27,500,000	18,000,000	2,500,000
1911	26,000,000	23,280,044	2,000,000
1912 (estimated)	22,500,000	17,797,781	1,799,539

California wines have a wide and growing market. The railroad shipments, on another page, go mainly to Eastern points, while those by sea go to the four quarters of the world.

In this connection the following is of interest:



Champagne Cellar near Asti

EXPORT OF WINE BY SEA

Year	Cases	Gallons	Value	Number of Countries Receiving
1908	.....	4,250,799	$1,657,089	12
1909	.....	7,440,294	2,386,111	23
1910	.....	9,866,539	3,162,600	26
1911	11,535	15,125,375	4,910,138	32
1912	11,388	13,238,223	4,537,753	33

The commercial brandy production of California during 1911 passed the 2,000,000 mark, while the brandy manufactured for the fortification of sweet wines was 6,100,521.31 gallons.

The shipments of wine out of California **by rail** during 1912 were about 19,600,000 gallons, while the exports **by sea** amounted to 11,388 cases and 13,238,223 gallons, valued at $4,537,753. To this must be added the brandy exported, which was 1,024 cases and 67,122 gallons, valued at $72,841. Thirty-three countries, besides the United States, received this wine.

The output of champagne naturally fermented in bottles for 1912 was about 750,000 bottles, or near 74,000 cases. This new industry will be greatly extended the coming season.

Three manufactories are at present engaged in making this champagne. Nearly 300,000 cases will be ready for the Exposition visitors in 1915.

Olives, Olive Oil, Etc. Olive culture is one of the oldest fruit industries in the State. The first orchard was planted in San Diego in 1769, and that county is a large producer of olives and olive oil. There are large orchards in other counties, and every year adds to the number of trees. There are thirty-three counties reporting over 1,000 trees each, ranging from Shasta on the north to the Mexican line on the south. The number of trees, as reported by the State Board of Equalization, is about 1,002,000 in bearing. Los Angeles leads with 320,800 bearing trees.

Statistics of this industry are difficult to obtain. This industry is becoming more attractive from a remunerative point of view, and the removal of competition with adulterated oil by the Pure Food regulations has given quite an impetus to planting new trees. Estimates of the production for 1912 range from 750,000 to 920,000 gallons of olive oil, and from 1,000,000 to 1,200,000 gallons of pickled olives.

Imports 1910-11 were 4,500,000 gallons of oil and over 3,000,000 gallons of pickled olives.

Uncertainty as to tariff changes on olive importations and other causes have in the two or three years induced some olive growers to turn their attention to other fruits. Recently, however, the new planting has been large in some more favorable districts for the industry.

Honey. While honey is produced for the market in all of the principal valleys, the great bulk of the commercial product comes from the San Joaquin Valley and the counties south. The crop for 1909 was the record crop and many thousands of stands of bees are sent from other states to winter in California.

Gathering Almonds near Lodi
By Courtesy of "Sunset" Magazine.

According to figures furnished by the State Bee-Keepers Association there are about 588,000 colonies of bees in the State with an average of 70 pounds of honey a year, valued at 6 cents a pound.

The estimates of the honey product for several years are:

Year.	Pounds.	Year.	Pounds.
1899	2,822,000	1906	5,250,000
1900	2,208,000	1907	8,700,000
1901	8,112,000	1908	5,250,000
1902	5,125,000	1909	11,532,000
1903	8,400,000	1910	5,500,000
1904	7,000,000	1911	9,500,000
1905	9,500,000	1912	4,710,000

Silk. The raising of silk worms which attracts some attention, is increasing slowly in California and though not yet on a commercial basis, it is likely to become a good industry. The climate in California is admitted to be adapted to the raising of silk. The season for production extends over a period of six to eight months, while in Europe it lasts only as many weeks.

Nuts. The production of almonds fluctuates greatly and the crop for 1912 equalled that of 1908, which was the record. The production of walnuts is more regular, and the crop for the year though less than that of 1911 was above the average and gave good returns.

ALMONDS AND WALNUTS

Year	Almonds Tons (2,000 lbs.)	Walnuts Tons (2,000 lbs.)	Year	Almonds Tons (2,000 lbs.)	Walnuts Tons (2,000 lbs.)
1895	825	2,310	1904	800	7,590
1896	1,605	4,115	1905	2,125	5,750
1897	2,375	3,985	1906	900	6,125
1898	450	5,650	1907	750	8,250
1899	2,320	5,530	1908	3,000	8,000
1900	2,740	5,430	1909	1,650	7,500
1901	1,560	6,910	1910	2,750	8,500
1902	3,270	8,520	1911	1,700	12,000
1903	3,200	5,500	1912	3,000	9,250

ALMONDS AND WALNUTS.

At an average value of $300 per ton, the aggregate of these crops is $4,110,000.

The average production of **walnuts** in California for the past fifteen years was about 7,668 tons.

The average importations for last eight years about 13,471 tons.

The average production of **almonds** for fifteen years in California was 1,982 tons.

The quantitity of almonds grown in California is so small, compared with the importations that prices vary according as the latter are light or heavy.

DAIRY INDUSTRY.

The dairy industry is year by year more extended and important. Comparative statistics of butter production of the State for a series of years beginning

with 1896 show the growth of the industry, and yet the supply falls so far short of the demand as to necessitate the bringing in of large quantities of butter from other States. At the same time large quantities of butter go East on special order from those who have tasted California creamery butter.

The season, as covered by the report of the State Dairy Bureau, ends September 30th of each year.

Despite the persistent efforts of that bureau some creameries and large producers in a number of counties failed to make report of their production for the year 1911.

Scientific Dairying. Scientific dairying has almost wholly superseded the old methods in California, as the following table, showing the number of pounds of butter produced in the State by the creamery method and the old method for seven years ending October 1, 1902, demonstrates:

Year	Creamery Method	Old method	Totals
1896	10,097,323	21,508,117	31,605,440
1897	10,866,646	17,811,793	28,678,439
1898	10,410,479	13,280,549	23,691,028
1899	12,725,814	12,143,270	24,869,084
1900	16,486,695	12,296,164	28,782,859
1901	19,017,512	10,713,370	29,730,882
1902	21,593,021	9,935,741	31,528,763

Since 1902 the growth is indicated in the following exhibit:

Year.	Pounds.
1903	34,676,311
1904	35,636,909
1905	41,961,047
1906	44,044,578
1907	44,599,211
1908	48,469,585
1909	49,595,869
1910	45,819,741
1911 (Reported by State Dairy Bureau)	50,380,736
1912 " " " " "	54,940,886

California is now well to the front as a dairy State. The production of butter for 1912 is the largest in the history of the industry. The increase is mostly in counties where irrigation is practiced.

IRRIGATION AND DAIRYING.

As showing the effect of irrigation on the dairy interests the following exhibit from the reports of the State Dairy Bureau, giving the product of butter in pounds by principal counties, in which irrigation is practiced, is instructive:

Counties	1907	1908	1909	1910	1911	1912
Fresno	2,786,817	3,315,926	3,721,262	3,290,825	3,803,644	4,144,404
Kern	372,569	521,495	545,900	565,900	693,413	732,059
Kings	1,960,364	2,419,651	3,432,879	3,218,036	3,552,542	3,069,881
Merced	2,469,726	2,831,846	1,396,865	2,510,269	3,102,222	1,351,049
Sacramento	1,060,098	1,277,771	1,592,138	1,102,012	1,405,054	1,900,417
San Joaquin	1,625,538	1,605,152	2,350,000	1,425,543	941,430	1,336,344
Stanislaus	3,615,469	4,113,866	4,155,701	*4,363,296	5,166,515	6,894,225
Tulare	2,522,707	2,729,377	2,307,238	3,072,198	3,955,583	3,947,284
Yolo	726,532	944,268	807,787	1,103,114	1,096,718	1,104,509
Imperial	.....	1,165,763	1,677,640	1,948,941	2,885,941	4,110,736
Totals	17,139,820	20,925,115	21,987,410	22,599,903	26,603,062	30,590,908
Humboldt (non-irrig.)	4,390,815	4,495,041	4,715,998	4,790,280	5,238,382	5,095,014

Imperial is entirely dependent on irrigaton, and its butter production, since its formation in 1908, has grown nearly four-fold as the above shows.

Evaporated milk was produced in the following counties; in 1911:

Humboldt	3,233,906 pounds	Marin	336,000 pounds
San Benito	4,914,404 pounds	Sonoma	336,000 pounds

While irrigation has been a most important factor in the increase of butter production, as shown above, Humboldt County, with its abundant rainfall rendering irrigation unnecessary, claims the position of the second county of the State in dairy products, as shown by the tables, and second in butter production.

SHIPMENTS OF DAIRY PRODUCTS FROM HUMBOLDT COUNTY, 1912.

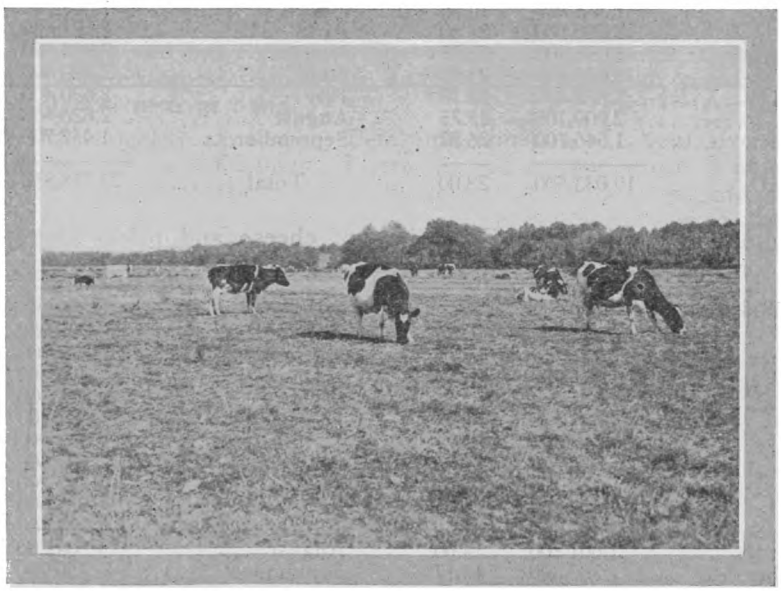
(From records of the Humboldt Chamber of Commerce.)

Article.	Weight, lbs.	Value.
Butter	5,112,960	$1,558,235
Cheese	162,820	26,050
Condensed Milk and Cream	2,791,010	218,665
Dry Milk	1,027,340	135,070
Fresh Cream and Milk and Buttermilk	136,490	4,170
Casein	1,497,870	89,870
Totals	10,728,490	$2,032,060

There is annually consumed within Humboldt County, of home produced butter, some 1,500,000 lbs. and a small percentage of cheese, condensed milk and dry milk.

A comparatively new branch of the dairy industry is the production of commercial casein. It is now produced extensively in the northern counties of the State. It is used as a sizing in making high-grades of paper, also for piano keys, billiard balls, and everywhere that ivory can be used.

Humboldt County in 1911 produced 1,953,500 lbs. of casein and Del Norte County produced 120,000 lbs. In 1912 Humboldt produced 1,497,870 lbs.



Holstein Dairy Herd, Sacramento Valley. (Courtesy of "Sunset" Magazine)

CHEESE PRODUCTION.

Although the State has nearly doubled in butter production in ten years ending 1910, the cheese production has not kept pace therewith. The cheese produced and reported to the State Dairy Bureau is, with a few exceptions, only that made by the ordinary Cheddar process. There is a considerable amount of fancy and hand made cheese which has not been reported. Out of the fifty-eight counties in the State, twenty-five produced cheese during the year. Monterey, Marin, Santa Clara, San Benito and Merced, in the order named, are the leading counties. Comparing the totals for the past fifteen years we have the following:

Year.	Pounds.	Year.	Pounds.
1897	6,399,625	1905	6,020,672
1898	5,148,372	1906	6,418,480
1899	5,294,938	1907	5,928,942
1900	4,989,960	1908	6,162,514
1901	5,681,366	1909	5,931,194
1902	6,503,441	1910	4,648,348
1903	7,218,639	1911	4,580,495
1904	6,133,898	1912	4,785,617

Large quantities of butter and cheese continue to come from the East, notwithstanding the superior advantages presented in this State for enlarging this branch of farming and for creamery development. It is interesting to note that 11,758,680 pounds of cheese, more than double the amount manufactured in this State, is received in the San Francisco market alone. All we need is more good cheese factories and 500 or 1,000 families to produce the milk.

The following are the monthly receipts of **butter** and prices therefor in San Francisco for the two years ending September 30, 1912:

1910-1911.	Pounds.	Price.	1911-1912.	Pounds.	Price.
October	702,900	34.53	October	1,946,800	30.68
November	968,600	35.12	November	1,300,350	31.39
December	731,400	35.03	December	1,114,900	33.03
January	1,036,000	32.08	January	1,236,400	35.38
February	1,296,100	30.16	February	1,723,400	34.60
March	1,553,500	26.86	March	1,645,900	31.42
April	2,190,500	21.60	April	2,183,600	27.71
May	3,088,800	22.73	May	2,883,600	25.29
June	2,036,600	21.92	June	2,309,400	27.60
July	1,873,400	23.10	July	2,620,400	27.82
August	2,009,100	25.75	August	2,626,400	31.31
September	1,546,700	26.82	September	1,957,700	33.08
Total	19,033,600	28.00	Total	23,548,850	30.77

The following are the monthly receipts of **cheese** and prices therefor in San Francisco for the two years ending September 30, 1912:

1910-1911.	Pounds.	Price.	1911-1912.	Pounds.	Price.
October	603,900	16.68	October	728,080	14.57
November	794,000	16.48	November	619,500	16.50
December	851,900	16.66	December	496,400	15.96
January	637,000	16.64	January	594,500	16.15
February	645,500	15.95	February	780,200	16.42
March	610,000	12.91	March	552,900	18.85
April	626,000	12.52	April	987,800	16.92
May	1,057,300	12.44	May	1,762,200	13.59
June	1,047,200	12.03	June	1,584,600	13.69
July	1,047,900	13.01	July	1,391,400	14.12
August	1,601,200	14.00	August	1,504,200	14.04
September	500,300	14.17	September	756,900	14.65
Total	9,632,200	14.50	Total	11,758,680	15.46

ANNUAL VALUE OF DAIRY PRODUCTS.

1911.

Butter, 50,380,736 pounds	$14,106,606
Cheese, 4,640,495 pounds	672,872
Evaporated and powdered milk, 8,820,310 pounds	793,828
Market milk, table cream and ice cream	10,000,000
Calves produced	2,000,000
Skim milk and butter milk	1,500,000
Casein	125,478
Total	$29,198,784

1912.

Butter, 54,940,886 pounds	$16,905,310
Cheese, 4,785,617 pounds	739,856
Condensed, evaporated and powdered milk, 9,770,784 pounds	961,662
Casein, 1,065,000 pounds	53,250
Market milk and cream	10,000,000
Calves produced on dairies	2,000,000
Skim milk and butter milk	1,500,000
Total	$32,160,078

POULTRY INDUSTRY.

In a more or less practical way the poultry industry has been carried on in all parts of the State, but in Sonoma, Los Angeles, Orange, Santa Clara, Merced, Sacramento, Colusa, Humboldt, San Benito and Inyo Counties, and to a less extent in some others, the latest scientific methods are generally practiced with gratifying results. The industry is constantly extending, as the demand for poultry products greatly exceeds the home supply. Turkey-farming, as it is called, is mainly in the grain districts where the fowls can range. Hatching by incubators prevails generally. The largest incubator factory in the world is in Petaluma and turns out about 100,000 chicks per month, and runs to full capacity most of the year.

A ranch which has recently been started in Inyo County with 400 acres and 12,000 laying hens selected from Petaluma and from Monroe, N. Y., is an enterprise that is bidding for patronage, and with its 200,000 incubator capacity and favorable climatic conditions, will do a large part in supplying the demand, especially for eggs and baby chicks. There are many places throughout California where like enterprises could be undertaken with a fair promise of success and a good market near at hand.

The average chicken ranch near Petaluma consists of about five acres, upon which are placed 500 to 3,000 hens. There are, of course, quite a number larger ranches which maintain 5,000 to 30,000 chickens. A person should have from $3,000 to $5,000 to equip a chicken ranch and get ready for a profitable business In case of renting, however, about $1,500 is needed to start the prospective poultryman. The average profit on each hen is about $1.00 per year.

Notwithstanding the remarkable development of the poultry business at Petaluma and other places, the increase is not sufficient to meet the demands of the immediate market. The rapidly expanding population of the State requires the importation in season of some 425 carloads of live and 75 carloads of dressed poultry to San Francisco and Los Angeles, besides several million dozen eggs each year from Eastern points, and there is no immediate prospect of the home supply overtaking the market. This fact insures the success of all practical poultrymen who engage in the industry in California.

Petaluma is the principal shipping point of Sonoma County and enjoys a freight rate by boat to San Francisco of ten cents per case of 36 dozen eggs. The market business done from that point, and its growth, is reflected in the following tables:

SHIPMENTS OF EGGS AND POULTRY FROM PETALUMA

Year	Eggs Dozen	Poultry Dozen
1903	3,407,333	32,535
1904	3,493,321	33,286
1905	3,837,061	39,392
1906	4,334,321	39,938
1907	4,422,968	59,198
1908	5,312,804	83,136
1909	7,159,481	120,018
1910	7,288,215	76,278
1911	8,134,129	80,553
1912	10,232,121	84,425

The above figures represent actual shipments of eggs to market. It is but fair to say that over one and one-half million dozen eggs are produced which are used for hatching and for home consumption. These added to the above, bring the total production of the Petaluma district up to near eleven and three-quarter million dozen, or about 141,000,000 eggs. 3,000,000 baby chicks are estimated to have been shipped away.

The daily food requirements for poultry in the Petaluma district for the year aggregate over 600 tons, or 1,200,000 pounds, of which wheat, corn, barley, bran and middlings form the largest part, viz: about 490 tons.

POULTRY PRODUCTION, 1912.

	Eggs, doz.	Poultry, doz.
Petaluma	10,232,121	84,425
Other points in Sonoma County	5,116,000	42,200
Total, other counties	26,750,000	167,500
Total for the State	42,098,121	294,125

White Leghorns,
Poultry Farm in Sonoma County, Cal.
Courtesy of Petaluma Chamber of Commerce

FISHING INDUSTRY.

Both the interior and the coastal waters of California abound in food and game fish, offering inducements both to the pleasure-seeker and the profit-earner.

There are about 165 species of cold-water fauna whose proper home is north of Point Conception, and 117 species of semi-tropical fauna found south of Point Conception, beyond the reach of the cold currents of the north.

Of these, one hundred and thirty-three varieties of food fish are found in the San Francisco markets, including oysters and shell fish.

Over-fishing and destruction of spawning beds through lumbering and placer mining caused a steady decrease in supply of salmon in the Sacramento basin. Through the work of the Federal and State Commissioners, however, the rivers have been re-stocked and now there are more salmon in the Sacramento River than ever before, but they are mostly marketed as fish.

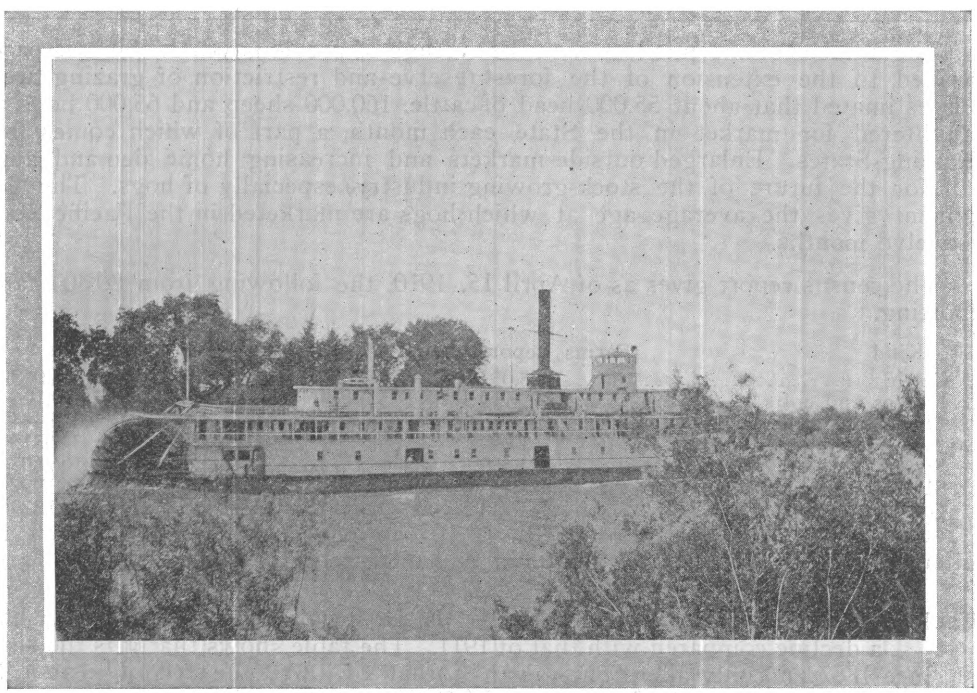
The State maintains seven hatcheries, at one of which, the Sisson hatchery, more salmon fry are hatched than at any other hatchery in the world. There is also one hatchery and two egg-collecting stations under Federal supervision. Some 30,762,000 fry of various kinds of food and game fishes were deposited in the streams in 1910. Over 30,000,000 pounds of the fish taken for the market are caught in the waters of the bay counties and the Sacramento River.

The Alaska Packers' Association maintains two large hatcheries in Alaska, and in 1912 nearly 137,830,100 salmon fry were liberated in the rivers.

Besides her home fisheries, packing salmon in Alaska waters and Puget Sound employs over fifty San Francisco vessels, many men and a large amount of California capital. The following tables show California's share of the industry, which is very large:

PACIFIC COAST FISHING INDUSTRY.

Extent of industry	California
Capital employed	$10,000,000
Number of persons employed	9,000
Earnings of labor employed	2,250,000
Value of output	7,000,000



Steamboat on Sacramento River Carrying Produce
Courtesy of "Sunset" Magazine

The California pack of mild cured salmon for 1912 was 3,374 tierces, 800 pounds each.

The San Francisco codfish fleet, consisting of 13 vessels, representing an investment of $475,000, in 1912 took 11,000,000 pounds of fish, valued at $350,000.

The San Francisco whaling fleet, consisting of 8 vessels, took in 1911 58,000 pounds of bone, valued at $188,500, and 2,300 bbls. of sperm oil, valued at $38,640.

Canned salmon and other fisheries products are sent by sea from San Francisco to nearly every country in the world. Shipments during 1911 were as follows:

	Quantity		
	Cases	Pounds	Value
Canned salmon and other salmon	700,063	18,561.611	$3,927,053

The Alaska Packers' Association report their pack for 1912 as 1,202,779 cases.

FARM ANIMALS

The following figures for 1911 from the Crop Reporter of the Department of Agriculture, revised by the light of the census, show an increase over 1910 in the number of all farm animals, except mules, an increase in average price of all except sheep and swine, and an increase in total number of 526,000 and an increase in total value of $28,744,000. We also give figures for 1912, which show a slight increase over 1911 in number and value.

Kinds	1910			1911			1912		
	Number	Average Price	Value	Number	Average Price	Value	Number	Average Price	Value
Horses	425,000	$117.00	$ 49,725,000	493,000	$117.00	$ 57,681,000	503,000	$109.00	$ 54,822,700
Mules	80,000	133.00	10,640,000	72,000	136.00	9,792,000	73,000	130.00	9,490,000
Milch Cows	500,000	48.00	24,000,000	505,000	53.00	26,765,000	510,000	53.50	27,285,000
Other cattle	1,100,000	23.50	25,850,000	1,515,000	26.70	40,450,000	1,454,000	29.20	42,457,000
Sheep	2,200,000	3.90	8,580,000	2,656,000	3.00	9,562,000	2,603,000	3.70	9,631,000
Swine	500,000	7.20	3,600,000	830,000	8.30	6,889,000	822,000	9.20	7,562,000
Total	4,805,000	.....	$122,395,000	5,331,000	.....	$151,139,000	5,965,000	.....	$151,247,700

The number of sheep is less than the average of previous years. This is partly ascribed to the extension of the forest reserve and restriction of grazing areas. It is estimated that about 55,000 head of cattle, 160,000 sheep and 65,000 hogs are slaughtered for market in the State each month, a part of which comes from adjoining States. Enlarged outside markets and increasing home demand auger well for the future of the stock-growing industry, especially of hogs. The Government gives the average age at which hogs are marketed in the Pacific States at twelve months.

The census report gives as of April 15, 1910, the following from 80,304 farms reporting.

Kind	Farms Reporting	Number	Value
Cattle	63,053	2,077,025	$52,785,068
Horses and colts	76,119	468,886	47,099,196
Mules and mule colts	11,015	69,761	9,016,444
Asses and burros	1,099	2,592	347,315
Swine	31,609	766,551	5,106,803
Sheep and lambs	3,857	2,417,477	8,348,997
Goats and kids	1,714	138,413	320,829

Dairy cows are included in cattle. 61,101 farms reported 467,332 cows and heifers, valued at $18,597,328. The number and price is increasing.

Wool. The wool clip, as estimated by Mr. E. H. Tryon of San Francisco, shows a decline compared with that of 1911. The table shows that it is the smallest since 1867 and only about one-fourth of that of 1876, the record year. The vast ranges that prevailed in the valleys of California at that time are now covered by small farms and orchards.

WOOL PRODUCTION OF CALIFORNIA—1854–1912

Year	Pounds	Year	Pounds	Year	Pounds
1854	175,000	1873	32,155,169	1893	33,169,375
1855	300,000	1874	39,356,781	1894	36,968,400
1856	600,000	1875	43,532,223	1895	35,856,690
1857	1,100,000	1876	56,550,973	1896	27,195,550
1858	1,428,000	1877	53,110,742	1897	34,882,325
1859	2,378,000	1878	40,862,091	1898	28,063,240
1860	3,055,327	1879	46,903,360	1899	28,332,090
1861	3,721,998	1880	46,074,154	1900	27,750,000
1862	5,990,300	1881	45,076,639	1901	26,900,000
1863	6,268,480	1882	40,529,119	1902	21,000,000
1864	7,923,670	1883	40,848,690	1903	22,000,000
1865	8,949,931	1884	37,415,330	1904	22,000,000
1866	8,532,047	1885	36,561,390	1905	22,000,000
1867	10,288,600	1886	38,509,160	1906	24,000,000
1868	14,232,687	1887	31,564,231	1907	15,000,000
1869	15,413,970	1888	32,569,972	1908	15,000,000
1870	20,072,660	1889	34,008,370	1909	16,000,000
1871	22,187,188	1890	34,854,640	1910	15,500,000
1872	24,255,468	1891	33,183,475	1911	14,000,000
		1892	35,802,930	1912	13,500,000

Note.—"Pulled" Wool not included in table.

FIELD CROPS

Grain. The following table from the records of the U. S. Department of Agriculture shows the yearly production of the four principal grain crops in the State since 1898 and of rye since 1907:

Year	Wheat Bushels 60 lbs.	Barley Bushels 48 lbs.	Corn Bushels 56 lbs.	Oats Bushels 32 lbs.	Rye Bushels 60 lbs.
1898	12,403,700	12,263,461	1,184,040	1,943,304	.....
1899	29,666,666	14,046,087	1,536,975	1,845,787	.....
1900	20,933,333	19,769,760	1,351,975	1,477,771	.....
1901	28,751,500	26,162,780	1,850,793	4,887,374	.....
1902	18,759,490	23,489,065	1,839,150	5,148,583	.....
1903	14,880,990	21,075,000	1,777,162	5,756,964	.....
1904	10,895,216	24,418,604	1,350,000	5,250,000	.....
1905	5,660,360	22,094,186	1,204,000	4,735,000	.....
1906	8,333,330	26,162,790	1,100,000	4,300,000	.....
1907	10,833,330	25,096,666	1,100,000	4,100,000	1,250,200
1908	11,680,000	25,427,000	1,600,000	6,700,000	792,000
1909	11,550,000	31,270,000	1,740,000	6,280,000	842,000
1910	17,100,000	43,400,000	1,838,000	8,325,000	986,000
1911	8,640,000	40,600,000	1,836,000	7,140,000	136,000
1912	629,000	41,760,000	1,924,000	7,800,000	141,000

In the Crop Reporter Supplement for December, 1911, the figures for the production of these grains for 1910 and 1911 revised by the light of the census showed a material decrease in production of all except barley from figures previously published.

The acreage devoted to wheat is falling off year by year. Competition with cheap land in other countries and other more profitable crops have caused the vast wheat ranches of a few decades ago to be cut up into small farms to meet the demand from the many homeseekers, who are pouring into California.

Grain Crops. The yield and values of the cereal crops sown for the harvest of 1912, as given by the Department of Agriculture, are as follows:

REPORT OF CROPS FOR 1912.

	Acres	Bushels	Value
Wheat	370,000	6,270,000	$5,850,000
Barley	1,392,000	46,760,000	29,232,000
Corn	52,000	1,924,000	1,635,000
Oats	200,000	7,800,000	4,200,000
Rye	8,000	141,000	127,000
Total value			$41,044,000

It appears from department reports that wheat, formerly the most important agricultural product of the State, has gradually given place to barley, which now equals in acreage and exceeds in yield and value all other grain crops combined.

In the seven years ended in 1906, according to the Year Book of the Department of Agriculture, the acreage in barley increased 60 per cent, the yield 160 per cent, and the value 230 per cent. The malting qualities of California barley give it a ready market abroad.

Oats are raised, in some parts of the State, more for hay than for threshing, while corn is but little used as food for work animals. Barley has long been the main grain food in California, but of late years oats have come into use to quite an extent.

HAY AND FORAGE CROP

The hay crop of California is one of her most valuable agricultural products. The census returns for the crop of 1909, a fair year, gave the yield at 4,327,130 tons valued at $42,187,215. These returns were as follows:

Crop	Farms reporting	Acres harvested	Quantity		Value
			Amount	Unit	
Timothy alone	370	13,725	20,001	Tons	$ 185,579
Timothy and clover mixed	958	46,661	73,183	"	629,575
Clover alone	703	8,519	20,380	"	213,289
Alfalfa	19,904	484,134	1,639,707	"	13,088,530
Millet or Hungarian grass	101	2,142	2,688	"	27,483
Other tame or cultivated grasses	2,274	90,414	119,415	"	1,253,428
Wild, salt or prairie grasses	3,679	253,127	281,033	"	2,028,494
Grains cut green	39,397	1,604,745	2,019,526	"	24,056,727
Coarse forage	2,175	25,868	60,611	"	438,095
Root forage	1,021	4,012	90,586	"	266,015
Total hay and forage	53,760	2,533,347	4,327,130	Tons	$42,187,215
Hay (Crop Reporter, 1912)	.....	2,500,000	3,825 000	Tons	$52,402,000

California grain cut in the milk is highly prized for hay and is sent East by the trainload for feeding race horses.

Dairying and hog raising in connection with alfalfa raising is becoming one of the leading industries of the State being one that is within reach of the man with comparatively small capital.

The acreage of standing alfalfa has probably increased 10 per cent since 1909, making it 580,910 acres. From these, five cuttings may be made yearly on irrigated ground with an average aggregate yield of six tons per acre. The yield and value of the crop for 1912 is probably 8 per cent over that of 1909.

Beans and Other Field Crops. California is famous for the production of dried beans, onions, potatoes, etc., and they add much to the resources of the State. From the "Crop Reporter" and leading authorities in the State in handling these products, the following figures are obtained of product and value for 1912:

Product	Quantity	Farm Value at Harvest Time
Lima Beans	1,150,000 sacks	$4,887,500
Pink Beans	350,000 "	1,225,000
Small White Beans	200,000 "	700,000
Other Varieties	840,000 "	2,582,750
Total Beans	2,540,000 sacks	$9,395,250
Sugar Beets	980,894 tons	5,086,650
Onions	3,167,000 sacks	2,582,000
Potatoes, Irish	11,360,000 "	7,816,000
Potatoes, Sweet	800,000 crates (2 bus.)	1,000,000
Field and Garden Seeds (estimated)	.....	2,500,000
Grand Total	.....	$28,379,900

Hop Crop. The hop crop in California, as elsewhere, varies greatly from year to year, influenced largely by market prospects. The crop of 1911 was very remunerative to those growers who had not contracted early in the season at prevailing prices. Short crops elsewhere sent prices to a very high figure.

The acreage and production by counties for 1912 is as follows:

County.	Acreage.	Production in Bales.
Sacramento	3,485	35,921
Yuba	1,328	12,321
Yolo	1,274	11,707
Butte	785	2,584
Tehama	214	1,862
Sutter	175	1,101
Shasta	42	150
Total Sacramento Valley	7,303	65,646
Sonoma	4,700	35,713
Mendocino and Lake	1,450	15,115
Alameda	160	896
Santa Cruz	50	400
Total Coast Counties	6,360	52,124

Total acreage grown in California 1912 crop, 13,667.
Total number of bales grown in California, 117,770.

Crop in 1912	117,770	Bales
Crop in 1911	93,981	Bales
	23,789	Increase over 1911 crop.

The following table gives California's crop for a series of years:

HOP PRODUCTION IN CALIFORNIA
1900–1912

Year	Bales	Pounds	Year	Bales	Pounds
1900	38,000	7,220,000	1906	108,000	20,000,000
1901	48,000	9,120,000	1907	90,000	16,650,000
1902	53,500	10,165,000	1908	63,200	11,692,000
1903	57,000	10,545,000	1909	69,688	12,892,280
1904	63,000	11,655,000	1910	71,511	13,229,535
1905	.....	13,135,000	1911	93,981	17,367,985
			1912	117,770	21,198,600

Tobacco Growing. The adaptability of the soil in certain sections and of the climate to the growing of tobacco has been successfully demonstrated in many sections of the State, though it is not yet grown to a sufficient extent to be rated by the Department of Agriculture among the commercial crops of the State.

The most notable and successful effort in this line is with Turkish Tobacco, and has been made in Tulare County and adjacent thereto, under the backing of the John Bollman Company of San Francisco. The production has been:

1909	7,000 lbs.
1910	15,000 lbs.
1911	45,000 lbs.
1912	150,000 lbs.
1913	225,000 lbs.

From the prospective acreage and better experience in handling, tobacco is without doubt destined to be one of the remunerative industries of the State when the culture and curing is more fully understood by the farmers in the sections where its success has been demonstrated. With imported free seed and the encouragement given by consumers the acreage for 1913 will be largely increased. This tobacco commands a large price and a crop can be handled successfully as a side issue by any farmer who will take the pains and advice and use his intelligence.

RICE, COTTON, FLAX, AND HEMP.

Rice. From experiments made in the Sacramento Valley during recent years by rice experts of the Department of Agriculture, the adaptability of soil and climate to the successful culture of rice has been demonstrated. Two tracts of twenty-five acres each were planted in 1908 in the vicinity of Biggs on black adobe lands. From one planting a yield of 3,000 pounds per acre was harvested.

This rice was awarded the gold medal at the Seattle Exposition in 1909.

Plantings made in 1910 justified the expectations of those interested both as to yield and quality.

The planting of 1911 given in the Crop Reporter as 150 acres yielding an average of 40 bushels per acre, 6,000 bushels in all, farm value $4,000.

The principal planting is given by the owner as 60 acres, yielding 2,750 pounds per acre or 16,500 pounds in all.

Three varieties, Wateribune, Shinriki and Patna, chosen from a number previously tried, were used for this planting.

As given by the U. S. Crop Reporter for 1912, the acreage planted was 1400.

Yield per acre (bushels) 50.

Total production 70,000 pounds.

Value on basis of price paid farmers, $64,000.

Rice bids fair to become one of the commercial crops of the State.

Cotton. The adaptability of soil and climate of California to the growing of cotton has been known for some years. Of late, planting has been begun on a large scale and the acreage is increasing.

In 1909 over 500 acres were planted in the Imperial Valley, Imperial County, with seeds from Georgia and Texas. The result was most gratifying, an average of over one bale, 500 pounds, to the acre being produced, some 600 bales in all, most of which found a ready market at the California Cotton Mills in Oakland. In 1910 some 12,000 acres were cultivated, producing 8,000 bales of excellent staple.

About 15,000 acres were planted in 1911, and according to the Crop Reporter, the production was 11,000 bales, 500 pounds each. It was valued for lint at $385,000, and for seed at $31,000; $416,000 in all.

The acreage is increasing every year.

The value of the export of cotton shipped from Imperial County and of a comparatively small acreage of the valley, but south of the boundary line, for the season 1912-13 is estimated at about $3,000,000.

The new industry has called for the erection of eight gins besides one or more cotton-seed oil mills.

The cotton growing has proved a success also in the Coachella Valley and at Semi-Tropic in Kern County, where a planting of 40 acres of Egyptian Cotton did well.

Cotton is being tried at other places in the State with encouraging results.

All the cotton produced in California will find a ready home market and probably cause additional factories to be added to the few already in operation in the State.

The Japanese are already in the field as buyers of California cotton.

Flax and Hemp. The culture of these valuable textile plants has lately received an impetus in several localities that promises important developments. Growers have received $120 and upward per ton, according to the quality and fineness of the fiber. The soil in some places along the Sacramento and San Joaquin Rivers is suitable for producing a fine quality of hemp. The California Cotton Mills of Oakland buy nearly all the hemp grown in this State, which is manufactured into twine of various kinds, for all of which there is a market in the State.

BEET SUGAR INDUSTRY.

The beet sugar industry of the United States was originated in California, at Alvarado, Alameda County, and here as elsewhere grows yearly in importance.

In 1911-12 the acreage in California was about 101,000, the yield over 1,000,000 tons of beets and the output 162,538.4 short tons of sugar, leaving her in the lead of the beet sugar producing States with 35 per cent of the total production of the United States, 572,415 tons.

For the campaign for 1912-13 California with 100,612 acres, produced 980,894 tons of beets, had a sugar output of 155,432 tons of sugar, gave first place to Colorado, with 142,369 acres, 1,683,158 tons of beets and a sugar output of 223,181 tons. Lack of winter rains in California and an increase of 719,158 acres in Colorado can account for the difference.

The California factories and their locations were:
Spreckels Sugar Co., Spreckels, Monterey County.
Spreckels Sugar Co., Watsonville, Santa Cruz County.
American Beet Sugar Co., Oxnard, Ventura County.
American Beet Sugar Co., Chino, San Bernardino County.
Union Sugar Co., Betteravia, Santa Barbara County.
Los Alamitos Sugar Co., Los Alamitos, Orange County.
Southern California Sugar Co., Santa Ana, Orange County.
Sacramento Valley Sugar Co., Hamilton, Glenn County.
Pacific Sugar Co., Visalia, Tulare County.
Pacific Sugar Co., Corcoran, Kings County.
Anaheim Sugar Co., Anaheim, Orange County.
Holly Sugar Co., Long Beach, Los Angeles County.

The plant at Watsonville and the plants of the Pacific Sugar Company at Visalia and Corcoran were not operated during 1911 and 1912, but will be ready for 1913. Two new plants entered the lists, the Anaheim Company at Anaheim, Orange County, and the Holly Sugar Company at Long Beach, Los Angeles County. One new factory is in course of construction at Irvine, Orange County for the coming campaign. Others at San Diego and at Woodland are mentioned as being projected. The prices paid to growers of sugar beets the past two seasons were the highest in the history of the industry.

The Alameda Company's plant has been moved from Alvarado and will operate the coming season near Meridian in Sutter County.

The plant at Spreckels in Monterey County is the largest beet-sugar factory in the world.

The average yield of sugar beets per acre and the average percentage of sugar in California beets is greater than in Colorado or Michigan. In some parts of Cali-

fornia the soil and climatic conditions are superior for the cultivation of sugar beets. The large average percentage of sunlight is probably the main factor in the results obtained.

The growth of the industry in California is shown in the following exhibit for twenty-five years, beginning with 1888, that being the first year statistics were obtained and published by the State Board of Trade:

BEET SUGAR PRODUCTION OF CALIFORNIA—TONS OF 2,000 LBS.

Year.	Tons.	Year.	Tons.
1888	1,910	1900	30,319
1889	2,457	1901	68,700
1890	3,351	1902	73,761
1891	5,224	1903	65,360
1892	10,761	1904	59,147
1893	17,420	1905	64,251
1894	18,615	1906	94,285
1895	23,827	1907	72,889
1896	31,815	1908	99,613
1897	35,280	1909	126,621
1898	18,086	1910	144,747
1899	42,100	1911	162,538
		1912	155,432

Taken altogether, the industry is on a most satisfactory basis and bids fair to become one of the large money producers of the State.

MINERAL INDUSTRY

The value of California's mineral product for late years shows a steady increase mainly due to petroleum. The five years ending December 31, 1912, shows values as follows:

1908	$66,363,150
1909	82,972,209
1910	88,419,079
1911	87,497,879
1912	91,500,000 (est.)

The value for 1912 will reach a total of well over $91,500,000, being an increase of $4,000,000 over the production of 1911. Great activity has been evident in the mineral industry and an increased production will undoubtedly be shown in every branch, with the possible exception of copper, (owing to the fact that the "fume trouble" has not been satisfactorily solved as yet), but the value of the copper produced will show a large increase due to the advance in the price received during the year, the average being close to 16 cents per pound as against 12½ cents per pound received in 1911.

A conservative estimate of the leading mineral products for 1912 is as follows: (From the State Mining Bureau).

Petroleum, 87,000,000 bbl., valued at	$41,000,000
Gold	20,000,000
Cement	10,500,000
Copper	5,000,000
Crushed rock, used for all purposes	4,000,000
Brick, of all kinds	2,500,000
Borax	1,500,000
Natural Gas	1,500,000
Quicksilver	750,000
Silver	750,000
Lime and Limestone	750,000
Mineral Water, Salt and Clay-pott ry	1,250,000
Miscellaneous minerals	2,000,000
Total	$91,500,000

The remaining 26 minerals, listed as many of them are known to have had a 1911 had a total value of $1,800,000, and miscellaneous, which were produced in greatly increased output during the year just passed, probably far exceeding the estimated $2,000,000.

Some minerals which have had little or no production in the past, and which have been receiving considerable attention from capital recently, are: Bauxite, for the manufacture of aluminum; various iron deposits throughout the State; Barytes; Feldspar; Natural Asphalt; Potash and Nitre deposits; Tellurium, Vanadium and Magnesite.

While practically all the asphalt used in the State is a refined product, it is often listed with the total mineral output, in which case the total figure would approximate $95,000,000.

PETROLEUM PRODUCTION

PETROLEUM The production of all the California Oil Fields for the years 1911 and 1912 was as follows:

(California Derrick)

Field	County	Wells	1911 Production	1912 Production
Midway	Kern	447	21,584,566	25,948,945
Coalinga	Fresno	736	18,324,701	19,446,122
Kern River	Kern	1605	14,978,390	12,446,445
Santa Maria	Santa Barbara	154	6,670,074	5,788,086
Fullerton	Orange	250	5,978,823	6,764,360
Sunset	Kern	196	5,559,069	5,590,824
McKittrick	Kern	178	5,447,532	6,462,350
Salt Lake	Los Angeles	245	2,794,233	2,662,776
Whittier	Los Angeles	141	1,069,437	1,125,769
Lompoc	Santa Barbara	20	795,000	1,013,880
Santa Paula	Ventura	264	515,675	740,173
Los Angeles	Los Angeles	415	429,528	410,661
Lost Hills	Kern	4	154,960	1,313,076
Newhall	Los Angeles	76	146,110	119,712
Summerland	Santa Barbara	131	71,255	65,715
Watsonville	Santa Cruz	4–5	40,850	43,920
Puente	Los Angeles	56	32,895	29,650
Arroyo Grande	San Luis Obispo	4	20,500	1,950
Total wells all districts in California and operations				
1911		4,942	83,744,044	90,074,439
1912		5,625	.....	.....

These figures are from private sources and are somewhat greater than those of the Geological Survey lately published.

The U. S. Geological Survey for 1911 (the latest) places the world's consumption at one million barrels per day. Of thi total 81,134,391 barrels (estimated) are credited to California. Special advices from local authorities give the California production for 1912 at 90,074,439 barrels.

The output of petroleum in California for the years 1900 to 1912 inclusive, from private sources, and the production of the United States from the U. S. Geological Survey, is as follows:

Year	California (barrels)	United States (barrels)	Year	California (barrels)	United States (barrels)
1900	4,000,000	63,620,529	1906	32,516,600	126,493,936
1901	8,000,000	69,389,194	1907	40,101,360	166,095,335
1902	13,973,500	88,766,916	1908	48,300,758	178,527,355
1903	24,337,828	100,461,337	1909	58,191,723	183,170,874
1904	24,423,860	117,080,960	1910	77,697,568	209,556,048
1905	34,275,701	134,717,580	1911	83,744,044	217,000,000
			1912	90,074,439	

Production of petroleum in the United States as above, shows a very material and constant increase during the last few years, due to the California production and is an important factor in industrial and commercial development.

Though since 1900 the California production of oil has increased from 4,000,000 to over 90,000,000 barrels, the consumption keeps up with the increase and the storage was less in 1912 than in the two previous years. For December, 1912, the consumption was reported as 6 per cent more than the production during that month.

	Production.	Per cent Consumption.	Per cent Storage.
1910	77,697,568	85.16	14.84
1911	83,744,044	87.09	12.91
1912	90,074,489	92.60	7.40

Consumption for 1912 was greater than for 1910 by 17,237,257 barrels and for 1911 by 10,449,259 barrels.

The total oil in storage December 31, 1912, was 46,698,054 barrels. The production above consumption for 1912 was 6,664,809 barrels. Visible supply December 31, 1912, was 186 days. The diminished production of other fields presages a prosperous era for the California fields for some time to come.

RANK OF STATES.

Total production of petroleum by States, in 1911, as compared with 1910 in barrels. (U. S. Geological Survey).

State.	Production. 1910.	Production. 1911.
California	73,010,560	81,134,391
Colorado	239,794	226,926
Illinois	33,143,362	31,317,038
Indiana	2,159,725	1,695,289
Kansas	1,128,668	1,278,819
Kentucky	468,774	472,458
Louisiana	6,841,395	10,720,420
Michigan, Missouri	3,615	7,995
New York	1,053,838	952,515
Ohio	9,916,370	8,817,112
Oklahoma	52,028,718	56,069,637
Pennsylvania	8,794,662	8,248,158
Texas	8,899,266	9,526,474
Utah, Wyoming	115,430	186,695
West Virginia	11,753,071	9,795,464
Total	209,557,248	220,449,391

Quantity

California not only led in quantity of product but produced almost half as much again as Oklahoma, the State second in rank. The Mid-Continent field omitted, California produced as much oil as the rest of the United States put together; the United States being omitted, California produced more oil than any entire nation, and if Russia and the United States are omitted, California far surpassed the combined production of all the rest of the world, including Mexico, India, Roumania, Galicia, Japan and South America.

WORLD'S PRODUCTION

Country	1909	1910	Barrels	Per Cent of Total Production
United States	183,170,874	209,557,248	220,449,391	63.80
Russia	65,970,350	70,336,574	66,183,691	19.16
Mexico	2,488,742	3,332,807	14,051,643	4.07
Dutch East Indies	11,041,852	11,030,620	12,172,949	3.52
Roumania	9,327,278	9,723,806	11,101,878	3.21
Galicia	14,932,799	12,673,688	10,485,726	3.04
India	6,676,517	6,137,990	6,451,203	1.87
Japan	1,889,563	1,930,661	1,658,903	.48
Peru	1,316,118	1,330,105	1,398,036	.40
Germany	1,018,837	1,032,522	995,764	.29
Canada	420,755	315,895	291,096	.08
Italy	42,388	42,388	*a*71,905	.02
Other	*a*30,000	*a*30,000	*a*200,000	.06
Total	298,326,073	327,474,304	345,512,185	100.00

The United States in 1911 produced nearly 64 per cent of the world's output of petroleum and of this California contributed about 30 per cent.

As illustrating the growing demand for fuel oil of which as shown above California furnishes the best part of the supply, we append the following from the U. S. Geological Survey, 1911:

"Thus far in locomotive use oil has simply replaced coal under boilers, but within the last year a locomotive has been constructed in Switzerland on the Diesel principle and is being subjected to thorough practical tests."

CONSUMPTION OF FUEL OIL BY THE RAILROADS OF THE U. S., 1906–11

Year	Length of Line operated by the use of Fuel Oil, Miles	Quantity of Fuel Oil consumed by Railroads, Barrels	Total Mileage made by Oil-burning engines Miles	Average No. of Miles per Barrel of Oil consumed Miles
1906	.....	15,577,677	.....	....
1907	13,573	18,849,803	74,079,726	3.93
1908	15,474	16,870,882	64,279,509	3.81
1909	17,676	19,905,335	72,918,118	3.66
1910	22,709	23,817,346	89,107,883	2.74
1911	27,368	27,774,821	104,270,964	3.75

Some of these lines also used coal.

According to Bradstreet the oil companies of California have returned to the stockholders over $60,000,000 in dividends in twenty years ended 1910.

PIPE LINES

To take care of California's great petroleum production a vast system of pipe lines has been constructed, a brief description of which may be of interest.

Four lines in operation are in the Coalinga field. The Standard Oil Company has two lines, one of 8-inch and one of 6-inch pipe, 133 miles in length, with terminals at Point Richmond on the Bay of San Francisco. The Associated Transportation Company has one 6-inch line in operation, 110 miles in length, with terminal at Monterey; also a line at Salinas, and another line of 8-inch rifled pipe in course of construction, which will be 198 miles long when completed, from Coalinga to the terminal at Port Costa. The Producers' Transportation Company has just completed (March, 1910) and put in operation an 8-inch pipe line from Coalinga to Port Harford, 100 miles in length, which makes a junction in the Devil's Den District with a line coming north from McKittrick, Midway and Bakersfield. It is said that the pipe line from the junction to Port Harford will soon be doubled. Shipments of crude oil are also made from this field by railroad.

The Associated Pipe Line Company has an 8-inch rifled line extending from the Kern River field to Port Costa, and the Standard Oil Company has lines running from this field to Point Richmond, a line from the Midway field connecting with them. The field is also tapped by the Southern Pacific Railroad. The crude petroleum produced in the McKittrick and Sunset fields in 1909 was shipped by rail.

Three pipe lines transport petroleum from the Santa Maria oil field. The Union Oil Company has two lines, one of 6-inch and one of 8-inch pipe, from Orcutt and Lompoc to Port Harford. The Standard Oil Company has an 8-inch line to Port Harford and the Associated Transportation Company has an 8-inch line to Gaviota. Shipments are also made from this field by rail from Careaga, Orcutt and Palmers.

FOREST PRODUCTS

The lumber cut of California for a series of years since 1880, as given by the U. S. Government reports, presents some interesting contrasts of amount of production:

LUMBER CUT IN CALIFORNIA FOR YEARS FROM 1880 TO 1912.

From Government Report.

	M. Feet.	Mill Value.
1880	304,795	
1890	515,823	
1900	734,232	
1905	1,077,499	
1906	1,348,599	
19[illegible]	1,345,943	$23,640,966
1908	966,115	15,211,055
1909	1,144,000	17,160,000
1910	1,270,000	18,050,000
1911	1,207,000	18,208,000
1912 (approximately)	1,140,000	

The cut for 1912 estimated from mill reports, cargo shipments and other sources of information, is given approximately.

The cut for 1912 as well as for 1909, 1910 and 1911 exceeded that of 1908, which for a number of reasons fell far below the three preceding years.

KINDS OF LUMBER CUT IN CALIFORNIA 1910.

(Quantities Approximated.)

Kinds	1910—Feet.
Redwood	600,000,000
Western Pine or White	350,000,000
Douglas Fir	110,000,000
Sugar Pine	100,000,000
White Fir	60,000,000
Spruce	30,000,000
Cedar	15,000,000
Western Hemlock	1,000,000
Oak	1,000,000
Ash and other	3,000,000
Total	1,270,000,000

Besides the home production, California absorbed in 1912, 1,168,106,814 feet of lumber by sea from outside. 565,736,824 feet were delivered in San Francisco Bay and 505,914,788 feet at San Pedro Harbor. 36,678,000 feet were exported, worth $1,049,613.

In addition to the lumber cut as above, in 1911 California produced about 450 million shingles and shakes, with a large number of poles, ties, etc. In 1912 something more.

The following estimate is given by the "Pacific Lumber Trade Journal" of January, 1907, as to the Pacific Coast States and Idaho, Montana and British Columbia:

	M. Board Feet.
Oregon	225,000,000
Washington	195,658,080
California	180,000,000
Idaho and Montana	100,000,000
British Columbia	150,000,000
Total	850,658,080

At the low estimate of $3.00 per thousand feet for stumpage, the value of timber in California as it stands in the forest is $540,000,000. This is a large sum, but is doubtless within the truth.

The estimated wooded area of California is 28,608,000 acres. Approximately 24,058,050 acres are in National forest reserves and 4,549,950 acres in private ownership or unreserved.

The conservation of the forest areas of California is most intimately related to the welfare of the State. No greater calamity could befall the State than the denudation of the wooded lands. On the other hand, incalculable benefit will come from wise conservation of the forests and a reforestation of the already denuded areas. Conservation of natural resources must of necessity include the forests and the streams. Happily a wise governmental policy has saved enough of these areas to give assurance that their relation to the common welfare will not be seriously impaired.

Redwood. It is seen from the tables that redwood leads in the lumber production of the State. It produces from 40 to 75 per cent of "clear lumber." The redwood (Sequoia Sempervirens) is indigenous to California, and except for a few stunted trees in Japan, is found in no other country. This growth covers a tract on the northwestern coast of California, beginning at the northern line (there being not over 2,000 acres over the line in Oregon) and occupies a continuous district from the seacoast eastward to the crest of the Coast Range of mountains about 240 miles long (north and south) and from 10 to 20 miles wide.

In this district there were originally about 1,200,000 acres of redwood timbered lands, comprising practically the world's entire supply of this magnificent wood.

The mills have removed probably not more than 20 per cent of the original standing timber, having during the fifty years averaged 220,000,000 feet per annum. The cut since 1903 from this district (comprising the counties of Del Norte, Humboldt, Mendocino and Sonoma), has averaged nearly 400,000,000 feet.

The following figures give the annual receipts at San Francisco from the California mills north of San Francisco Bay since and including 1900:

	Feet.
1900	
1901	209.001.022
1902	244,386,075
1903	262,597,015
1904	301,343,953
1905	324,676,960
1906	347,679,159
1906	409,702,573
1907	437,514,653
1908	356,549,880
1909	402,519,307
1910 (Estimated)	450,000,000
1911	311,174,000
1912	309,732,000

The above figures do not represent the actual cut, as there is about 40,000,000 to 50,000,000 feet sold in the neighborhood of the mills and about 20,000,000 feet annually consumed in San Mateo and Santa Clara Counties that is cut there. Then there is to be added still the quantity consumed in making ties, laths, shingles, shakes, etc., which will not fall far short of 90,000,000 feet a year.

Pine. The Western slope of the Sierras in California, Arizona and in Oregon are covered with a mighty forest where the Sugar Pine, (Pinus Lambertiana), the White Pine (Pinus Ponderosa), and the "Bull" Pine (Pinus Jeffri), flourish. Cedar is also found there and other woods. The woods with the best timber are found at elevations from 3,000 to 7,000 feet. The general run of sugar and white pine is from 3 feet to 8 and 12 feet in diameter, while the height sometimes reaches 250 feet. The territory covered is estimated to be about 400 miles in length with an average breadth of about 20 miles. The woods are white, soft and durable and are greatly in esteem in the East where practically the whole cut is sold, outside of the inferior grades which are disposed of locally. They are unsurpassed for doors, sashes, piano keyboards, matches, finish, ceiling, etc., in a word, wherever

strength, durability and ease in working, cleanliness and stability are required. There are many great plants in the interior, and one agency with $1,000,000 capital, does the selling for a large number of mills. This helps to keep prices steady and always finds a market. The great railroad lines carry their product to every part of the United States. The work of lumbering is practically the same as in the redwood districts, steam machinery as a rule getting the logs to the mills, though in some instances ox teams are still used. Here, as in the redwood country, there are immense log ponds where the logs are stored away for the mills. The cut has run from 300,000,000 to 500,000,000 feet a year, this including mountain pine and red fir, but owing to the bad weather in the mountains lumbering in 1909 did not generally begin until June and the cut was short. The financial panic in the East also helped to lessen it in 1908. The present year, however, will restore normal conditions in this great section of the lumber industry. The production of 1900 and since 1905 may be given as follows:

	Sugar Pine. Feet.	White Pine. Feet.
1900	53,558,000	200,000,000
1906	130,231,000	347,249,000
1907	115,005,000	381,700,000
1908	92,500,000	318,406,000
1909	95,000,000	225,000,000
1910	100,000,000	350,000,000
1911	90,000,000	325,000,000
1912	(no reliable figures)	

A California Lumbering Scene

Railways. The year 1912 saw notable progress in railroad extension and betterment in California. In 1911 in new electric construction, California led with 121 miles, followed by North Carolina and Illinois, with 104 miles each. The amount of money invested in California railroads is out of all proportion to the mileage, for one mile in the mountains costs more than twenty miles in the prairie States.

The following will give the facts relating to railway progress in California:

MAIN AND SECOND TRACKS ON JUNE 30, 1912.

Includes both owned and leased (as reported by Railroad Commission.)

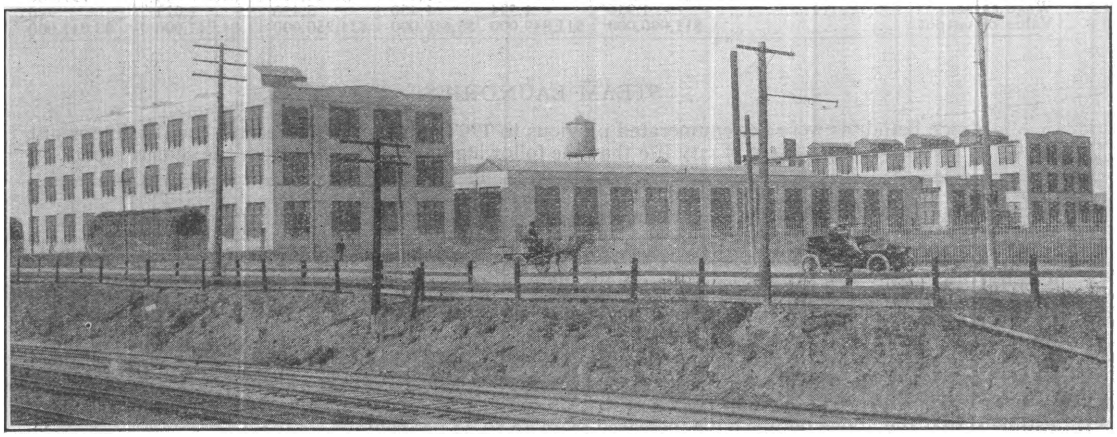
Steam Railroads	Miles
Southern Pacific Lines	4206.84
Santa Fe Lines	1385.68
Western Pacific Railway Company	390.62
Northwestern Pacific	413.60
San Pedro, Los Angeles & Salt Lake	246.41
Nevada-California-Oregon	196.92
Tonopah and Tidewater	144.60
Pacific Coast	103.05
San Diego & South Eastern and San Diego & Arizona	88.46
Yosemite Valley	79.17
Sierra Railway Company of California	75.64
Electric Interurban Railways	
Pacific Electric Lines	837.76
San Francisco-Oakland Terminal Rys	227.20
Northern Electric Lines	141.00
Central California Traction	63.56
Peninsular	63.15
San Francisco, Napa & Calistoga	33.84
Petaluma & Santa Rosa	31.60

MANUFACTURING

(U. S. Census Report, 1910)

Summary for the State, 1909

	Census, 1909	Per cent of increase 1904–1909
Number of establishments	7,659	12
Capital	$537,134,000	90
Cost of materials used	$325,238,000	51
Salaries and wages	$107,097,000	35
Miscellaneous expenses	$43,819,000	61
Value of products	$529,761,000	44
Value added by manufacture (products less cost of materials)	$204,323,000	35
Employees—		
Number of salaried officials and clerks	18,203	48
Average number of wage earners employed during the year	115,296	15
Primary horsepower	329,100	56



Pullman Car Shops, Richmond

Following are tables compiled to show the growth of manufacturing between 1850 and 1909:

Capital invested			Value of products		
Year	Amount	Increase over previous decade	Year	Amount	Increase over previous decade
1850	$ 1,006,197	.....	1850	$ 12,862,522	.....
1860	22,043,096	2097.7	1860	68,253,228	430.6
1870	39,728,202	80.2	1870	66,549,566	—2.4
1880	61,243,784	54.2	1880	116,218,973	74.5
1890	146,797,102	139.7	1890	213,403,996	83.6
1900	205,395,025	39.9	1900	302,874,761	41.9
1909	537,134,000	161.5	1909	529,761,000	74.8

	San Francisco		Los Angeles		Oakland		Sacramento	
	Census 1909	Per cent of increase, 1904–1909	Census 1909	Per cent of increase 1904–1909	Census 1909	Per cent of increase 1904–1909	Census 1909	Per cent of increase 1904–1909
Number of establishments	1,795	—20	1,325	63	441	78	211	35
Capital	$133,760,000	31	$59,518,000	111	$19,113,000	109	$10,097,000	37
Cost of materials used	$76,175,000	*	$38,913,000	108	$11,847,000	175	$6,893,000	34
Salaries and wages	$30,452,000	—4	$16,500,000	82	$6,618,000	167	$4,534,000	34
Miscel. expenses	$13,053,000	5	$5,649,000	106	$2,094,000	145	$1,356,000	77
Value of products	$132,929,000	—4	$68,586,000	97	$22,343,000	148	$13,977,000	39
Value added by manufacture (products less cost of materials)	$56,754,000	—8	$29,673,000	84	$10,496,000	123	$7,084,000	44
Employees:								
Number of salaried officials and clerks	6,116	18	3,367	68	1,079	177	533	42
Average number of wage earners employed during year	28,239	—27	17,327	66	6,905	106	4,514	7

—Decrease. *Less than one per cent increase.

OTHER PRINCIPAL MANUFACTURING POINTS.

	Fresno	Stockton	San Jose	Richmond	San Diego	Eureka
Number establishments	76	144	153	25	117	48
Capital	$4,933,000	$8,250,000	$3,815,000	$14,550,000	$5,326,000	$3,306,000
Salaries and wages	$1,431,000	$1,681,000	$1,152,000	$2,760,000	$1,069,000	797,000
Wage earners	1,936	1,594	1,430	3,420	1,071	946
Value of output	$11,090,000	$11,849,000	$5,610,000	$11,250,000	$4,741,000	$3,012,000

STEAM LAUNDRIES

Steam laundries were not enumerated previous to 1909, but they have become such an important factor in the domestic problem of city life that the following exhibit is made from the census report.

	San Francisco	Los Angeles	Oakland	Sacramento
Number of establishments	87	31	41	10
Capital invested	$1,497,000	$1,822,000	$682,000	$239,000
Value of output	$2,663,000	$2,364,000	$1,067,000	$334,000
Officials and clerks	169	155	98	22
Wage earners	2001	2,209	845	259
Salaries and wages	$1,503,000	$1,354,000	$584,000	$175,000

NOTE: Pending the next taking of the Manufacturing Census by the Government it is safe to estimate that the above figures have increased from 15 to 25 per cent.

CALIFORNIA'S WATER POWER.

Water-Power and Electrical Development. Closely connected with the future of manufacturing developments is the fuel and water-power supply convertible into electrical power. The statistics of oil production are given on a preceding page. The following extract from Water Supply Paper No. 234, in the report of the U. S. Geological Survey is of much interest:

CALIFORNIA'S WATER POWER.

Developed.			Undeveloped.		
Source.	Wheels.	Horsepower.		Minimum.	Maximum Developm't.
Sacramento River	576	280,735	Sacramento River	2,420,000	4,580,000
San Joaquin River	159	86,224	San Joaquin River (including Tulare Lake drainage)	759,000	3,140,000
Minor streams, southern	74	50,183			
Minor streams, northern	176	25,440	Minor streams, northern.	600,000	1,200,000
Sierra Nevada drainage	74	17,737	Sierra Nevada drainage	132,000	202,000
San Francisco Bay	11	6,455	Minor streams, southern.	36,400	88,300
Totals	1,070	446,744	Totals	3,947,000	9,210,300

California has not hitherto been classed among the States in which manufactures was a leading industry, but with abundant oil for fuel for manufacturing power and motive-power on the one side, and with 9,000,000 horsepower in water-power maximum development and a widening of markets both at home and in the Orient, California can face her industrial future with confidence.

A. L. McDonald, Statistician. Robert Newton Lynch,
Approved by the Board and ordered printed. Vice-Pres. and Mgr.

NOTE—For data and statistics used in this report we are indebted to the Controller of U. S. Treasury; Prof. Alexander G. McAdie, California Section U. S. Weather Bureau; U. S. Department of Agriculture; George Robertson, State Statistician; State Superintendent of Banks; State Mining Bureau; State Controller; San Francisco and other clearing houses; Superintendent of Public Instruction; State Dairy Bureau; State Railroad Commission; Auditing, Freight and Engineering Departments of Southern Pacific, Santa Fe and Western Pacific Railroads; United Railroads of San Francisco; Wine and Spirit Review, Petaluma Poultry Journal; H. P. Dimond, Secretary Dried Fruit Association of California; California Fruit Grower; Western Packer & Canner; Pacific Rural Press; Pacific Lumber Trade Journal; Okaland Tribune; Italian-Swiss Colony; Frank D. Flint & Co.; Wolf, Netter & Co.; Adolph Koshland; Peter J. Shields; T. A. Burns, San Francisco; E. W. Maslin; E. H. Tryon, E. Clemens Horst; J. K. Armsby Co.; A. K. Tichenor, Secretary Alaska Packers' Association; Pacific Fisherman; Frank Adams, Irrigation Manager Agricultural Experiment Station, U. C.; Edwin F. Adams, San Francisco Chronicle; W. D. McArthur, Dairy & Produce Broker, San Francisco; Sunset Magazine; various lumber dealers; the several beet-sugar refineries; Chamber of Commerce of San Francisco; Boards of Trade and Chambers of Commerce of various counties of the State; Board of Supervisors and Board of Public Works, San Francisco; Boards of Supervisors of various counties of the State; Sacramento Valley Development Association; and many growers, producers, and others throughout the State.

CLIMATE OF CALIFORNIA.

By N. P. Chipman.

The table on the following page is from the Annual Summary, California Section, of the Weather Bureau record for 1911. The comparative records in the article are from the Weather Bureau record for 1910, a fair average year.

California must be counted among the most valuable possessions of the United States for many reasons; chiefly, however, because of the matchless climate of the State and the high economic value it bestows upon a large area of arable land whose coast line measures 850 miles from point to point (about 1,000 miles of

CLIMATOLOGICAL DATA FOR 1911

Stations	Counties	Elevation, feet	Temperature Degrees Fahrenheit			Precipitation inches		Rainy days	Sky			Part of country
			Annual Mean	Highest	Lowest	Total for year, inches	Total snowfall inches		Clear days	Partly cloudy days	Cloudy days	
Independence	Inyo	3907	55.6	100	4	5.56	4.5	21	229	103	33	Mountain and high plateau.
Hornbrook	Siskiyou	2154	50.6	99	5	9.96	23.5	30	268	21	67	Mountain and high plateau.
Alturas	Modoc	4460	44.6	101	—21	10.13	63.0	74	204	106	55	Mountain and high plateau.
Dunsmuir	Siskiyou	2285	51.7	111	12	50.43	87.5	81	240	16	109	Mountain and high plateau.
Quincy	Plumas	3400	46.0	96	— 5	46.94	169.0	56	265	35	65	Mountain and high plateau.
Summit	Placer	7017	40.1	80	— 8	60.56	616.0	65	260	8	97	Mountain and high plateau.
Tamarack	Alpine	8000	35.2	86	—26	79.61	786.0	88	223	46	96	Mountain and high plateau.
Yosemite	Mariposa	3945	50.0	98	— 1	38.30	82.1	64	221	63	81	Mountain and high plateau.
Redding	Shasta	5052	61.9	108	25	28.76	6.8	66	233	45	87	Sacramento and San Joaquin valleys.
Red Bluff	Tehama	307	61.1	112	26	22.69	3.1	61	228	64	73	Sacramento and San Joaquin valleys.
Orland	Glenn	254	61.3	111	24	19.51	0	55	246	60	49	Sacramento and San Joaquin valleys.
Colusa (B. R.)	Colusa	60	.....	105	23	.....	.....	.....	.....	.....	.....	Sacramento and San Joaquin valleys.
Sacramento	Sacramento	71	58.4	100	30	21.11	0	53	255	56	54	Sacramento and San Joaquin valleys.
Stockton	San Joaquin	23	57.7	98	25	19.50	0	49	263	60	42	Sacramento and San Joaquin valleys.
Merced	Merced	173	60.6	105	24	16.67	0	44	286	18	61	Sacramento and San Joaquin valleys.
Fresno	Fresno	293	62.3	111	24	11.25	T	45	238	79	48	Sacramento and San Joaquin valleys.
Bakersfield (B. R.)	Kern	404	.....	105	30	.....	0	.....	.....	.....	.....	Sacramento and San Joaquin valleys.
Fruto	Glenn	624	60.3	114	25	20.68	3.0	40	283	0	81	Foothills Sacramento and San Joaquin valleys.
Oroville (near)	Butte	250	50.5	112	25	29.14	0	48	220	54	91	Foothills Sacramento and San Joaquin valleys.
Nevada City	Nevada	2580	53.1	102	13	64.97	52.5	84	231	45	89	Foothills Sacramento and San Joaquin valleys.
Rocklin	Placer	249	62.0	109	27	32.66	T	49	281	11	73	Foothills Sacramento and San Joaquin valleys.
Placerville	El Dorado	1875	55.5	114	18	51.01	0	64	233	43	89	Foothills Sacramento and San Joaquin valleys.
Jamestown	Tuolumne	1471	57.0	104	19	24.41	17.0	48	278	15	72	Foothills Sacramento and San Joaquin valleys.
Lemon Cove	Tulare	600	64.3	115	26	16.23	0	24	247	69	49	Foothills Sacramento and San Joaquin valleys.
Reedley	Fresno	347	61.1	108	22	13.14	0	21	254	23	88	Foothills Sacramento and San Joaquin valleys.
Caliente	Kern	1290	64.5	111	32	8.20	T	20	259	15	91	Foothills Sacramento and San Joaquin valleys.
Eureka	Humboldt	64	49.8	73	30	29.85	0.1	112	71	152	142	Sea coast.
Point Reyes	Marin	490	51.7	87	37	15.62	T	73	124	78	163	Sea coast.
San Francisco	San Francisco	207	55.2	87	38	26.00	T	70	158	125	82	Sea coast.
Monterey	Monterey	15	54.4	88	24	25.34	0	53	276	50	39	Sea coast.
Santa Barbara	Santa Barbara	130	58.8	94	32	30.74	0	60	233	91	41	Sea coast.
San Diego	San Diego	93	60.3	93	34	11.77	0	51	225	91	40	Sea coast.
Los Angeles	Los Angeles	293	62.2	95	38	17.85	0	44	173	125	67	Southern California.
Riverside	Riverside	851	62.2	110	21	11.81	0	43	202	122	41	Southern California.
Escondido	San Diego	657	60.9	104	17	13.86	0	43	54	290	21	Southern California.
Elsinore	Riverside	1234	61.1	111	17	12.41	0	31	267	68	40	Southern California.
Redlands	San Bernardino	1352	61.8	106	24	15.12	T	50	222	82	61	Southern California.
Santa Rosa	Sonoma	181	54.9	96	23	29.12	0	66	198	86	81	West of Coast Range.
Mt. Tamalpais	Marin	2375	53.8	94	28	26.61	9.4	76	213	68	84	West of Coast Range.
Lick Observatory	Santa Clara	4209	50.7	89	17	34.12	42.0	65	232	53	80	West of Coast Range.
San Jose	Santa Clara	95	55.8	91	25	24.41	0	68	233	65	58	West of Coast Range.
Hollister	San Benito	284	55.2	94	22	14.68	0	57	220	78	67	West of Coast Range.
Los Gatos	Santa Clara	600	57.2	93	30	53.62	0	63	246	33	86	West of Coast Range.
Paso Robles	San Luis Obispo	800	56.7	110	13	26.98	0	50	271	36	58	West of Coast Range.
Ojai Valley	Ventura	900	59.7	110	21	29.96	0	45	255	66	44	West of Coast Range.
Palm Springs	Riverside	584	70.3	117	26	4.83	0	14	233	88	44	Southeastern California.
Calexico	Imperial	0	70.9	113	25	2.35	0	8	284	33	48	Southeastern California.
Mecca	Riverside	185	70.7	116	17	1.65	0	9	162	83	30	Southeastern California.

T.—Indicates trace of precipitation.

B. R.—Broken Record

actual coast), the average width of the State being about 200 miles. The south boundary line of latitude emerges on the Atlantic Coast near Savannah, Georgia, and the north parallel near Boston, Massachusetts. Between these two latter points lie ten States of the Union. It accounts for something to the nation that this extended coast line, on the Pacific Ocean, is fortressed by a region capable of supporting many millions of people and that the coast to the Canadian boundary is backed by a country of almost boundless resources.

It is not generally appreciated that all of France, all of Italy north of Rome, and half of Spain lie **north of the north boundary of California.** This relative position on the west coast of our continent would suggest a mild climate, but not necessarily its unique and exceptional character. It is the purpose of the writer to bring to public attention the principal features of this climate and to show its economic value.

Professor Alexander G. McAdie, District Forecaster of the United States Weather Bureau, San Francisco, states that the climate of California is controlled by four great factors: (1) The movements of the great continental and oceanic pressure areas (commonly called "high" and "low"), together with the movements of individual pressure areas: (2) the prevailing drift of the atmosphere in temperate latitudes from west to east; (3) the proximity of the Pacific Ocean, with a mean annual temperature near the coast line of 55 degrees, Fahrenheit, a great natural conservator of heat, to which is chiefly due the moderate range of temperature along the coast from San Diego even to Tatoosh Island (extreme northwest coast of Washington); and (4), the exceedingly diversified topography for a distance of 200 miles from the coast inland. To this diversified topography is due the fact that California is a land of many climates, "from the hottest subtropical to the cold temperate, and from the driest desert to the most humid regions of the higher mountains and northern coast."

The Sierra Nevada Mountains form a natural boundary line on the east, rising gradually from the west to a height of from 8,500 to 14,000 feet, much above the snow-line, and falling off to the Nevada plateau, which is about 4,000 feet above sea-level. The Coast Range Mountains form a broad belt, traversing the entire coast, and consists of two or three parallel ranges from 3,200 to 5,000 feet high, and between these ranges are many rich valleys, some of large extent. The Coast Range emerges into the Siskiyou Mountains on the north, a connecting link with the Sierra Nevada, crowned by Mount Shasta; and the Tehachapi Mountains, far to the south, form another connecting link.

Between the Sierra Nevada and the Coast Range Mountains and these connecting mountain links lies the great central valley of California, about 400 miles long and from 50 to 60 miles wide; an agricultural district of great fruitfulness, comprising quite one-ninth of the State. There is but little waste land in it. The northern portion is blessed by ample rainfall, and the southern part, when watered, is everywhere very productive, as is the entire valley. The Sacramento River runs south through the northern portion (Sacramento Valley), rising near Mount Shasta; the San Joaquin River runs north through the southern portion (San Joaquin Valley); the two rivers uniting near the middle of the great valley and flowing westward into San Francisco Bay, and thence through the "Golden Gate" into the Pacific Ocean.

There is here a wide break in the Coast Range through which the summer trade winds find their way into the interior, an important factor in the climatic conditions of the valley. The sea-breeze blows up stream, north into the Sacramento Valley and south into the San Joaquin Valley, thus tempering the heat of the great valley. This influence, together with the dryness of the atmosphere, renders the occasional high temperatures of these two valleys more easily endurable at 110 degrees than is 95 degrees in the humid regions of the Eastern States.

South of the Tehachapi Mountains the Sierra Nevada Mountains continue at less elevation, and are locally called Sierra Madre. The wonderfully developed region known as Southern California lies west. On the east is the Mojave desert, and south and east the Colorado desert; important regions of the State are yet

but partially developed, but of great fertility by the application of water, which the genius and enterprise of the people are rapidly bringing in touch with the land. As in the north, the breaks in the Coast Range and in the Sierra Madre become important factors in modifying the climate of the interior. In Southern California and in Central California (San Joaquin Valley) extensive irrigation systems already in operation supply the comparative lack of rainfall. Irrigation is also being extensively developed in the Sacramento Valley.

Winds. The prevailing winds come from the ocean and are principally from the southwest landward, producing a cool summer climate along the immediate coast. Fogs sometimes sweep in from the ocean, more or less unfavorably affecting the enjoyment of the climate, but by their moisture contributing to the growth of vegetation. These fogs are less harsh on the south coast. The heat rising from the great valley draws a strong current from the trade winds through the Golden Gate that divides as it passes and extends south to the Tehachapi Mountains and north to Mount Shasta, rendering the air of the valley more delightful. The same drift of the trade winds tempers the air far into the interior in Southern California. The high mountain barrier on the east, through the length of the State, deflects the cold winds that sweep down over the Nevada plains in winter from Alaska and prevents their entrance into the valley regions of California. Dry north winds sometimes blow through the great valley in summer, raising the temperature, and are occasionally injurious to growing crops, but they seldom continue more than three or four days, when they are succeeded by the balmy and cool ocean breezes. Along the immediate coast the average winter and summer temperature differs only about four degrees, and one of the characteristic features of the San Francisco climate is exemplified by the sight of furs worn by ladies over summer garments, and fires in summer are not infrequent.

All over the coast, however, there are thousands of sheltered nooks and small valleys and sequestered spots where the fogs and harsh winds of the coast have no appreciable effect and where the climate is charming and sunny to the last degree, both in winter and summer.

Rainfall. The terms "winter" and "summer," as commonly used in the Eastern States, have no application in California. The year is more properly divided into "rainy season" (winter) and "dry season" (summer). Practically all the rain falls from about the first of November until April; the remaining months of the year are rainless, except in some parts of the mountains and on the Coast north of Cape Mendocino, where occasional summer showers occur. Cereal crops mature in early summer after rain ceases, and no housing of crops is necessary for protection against rain in harvest time.

The rainfall of California is a characteristic feature of the climate. A word as to its source and cause will be interesting. Professor McAdie points out that over the North Pacific Ocean in winter there exists an area of low barometer (latitudes 40 and 60 degrees north and 130 degrees west to 140 degrees east longitude), while an area of high pressure overlies the greater part of North America with a southwest extension to the tropics and west to the one hundred and sixtieth meridian. He says: "We shall find that typical wet winters on the California coast occur when this great North Pacific 'low' extends well eastwards, overlying the continent west of a line drawn from San Francisco to Calgary (Canada). At the same time the great continental high area apparently recedes to the southeast. On the other hand, the pressure distribution characteristic of a 'dry' winter on the California Coast is marked by the prevalence of the continental 'high' over the entire country west of the Rocky Mountains."

Our winter rain storms (barring an occasional one coming in from the ocean unheralded) have their origin off the coast of Vancouver, and curiously enough are attended in the Sacramento Valley by **south** winds. The storms diminish in intensity as they travel south, tapering off as they approach Southern California.

The Weather Bureau record for 1910 showed the great variations of rainfall within the State, and even within the great valley. For example, the rainfall at Eureka, Humboldt County, on the immediate coast, was 29.65 inches, and at San Diego but 5.75 inches. At Redding, Shasta County (interior), the rainfall was 24 inches; at Red Bluff, forty miles south, 14.59 inches; at Sacramento, 7.78 inches; Fresno (center of San Joaquin Valley), 4.88; Bakersfield (extreme southern point of valley), 5.31 inches. In the Sierra Nevada Mountains the rainfall increases about one inch for every hundred feet elevation. It will be observed that the rainfall south of the Tehachapi Mountains (Southern California) is greater than at the extreme southern portion of the San Joaquin Valley.

The direction of the Coast valleys exerts striking influence upon rainfall and temperature, dependent upon the facility for the trade winds to reach them. The climatic and agricultural character of the foothills, up to 2,000 or 2,500 feet, is much the same as in the valley, although the character of the soil is different. Even higher, fine deciduous fruits are grown. Still higher are the lumbering and mining camps, and thousands of cattle and sheep are herded in summer, where in winter the mountains are deeply covered with snow. Illustrative of the characteristic variations of climate, it may be stated that in the vicinity of Summit, Placer County, elevation 7,017 feet, the temperature was 2 degrees above zero, and the snowfall for the year was 257 inches. At Rocklin, Placer County, 30 miles west, elevation 249 feet, the lowest temperature was 24 degrees above zero. All the natural ice consumed in California was made near Summit, while oranges were being gathered for market around Rocklin.

Temperature. The foregoing table shows not only temperature, but also rainfall, elevation of points above sea, clear and cloudy days. I have taken illustrative points in Northern and Central California, the Coast country and the mountains. It will be noted that while the annual mean temperature of the Pacific Coast does not differ greatly from the annual mean of the Atlantic Coast, the average summer and average winter here and on the Atlantic Coast are wide apart, and the extremes between the highest and lowest temperature are here not very great. It is this exemption from extremes of temperature that constitutes the charm, and healthfulness as well, of the Pacific Coast.

In the interior, especially in the great valley, the seasons show greater extremes of temperature, but, as already suggested, the dryness of the air renders these extremes less felt than on the Coast where the air is more moist. The limit of winter cold is the test of what may be grown rather than the average temperature.

And so we find citrus fruit flourishing from the north to the south end of the great valley, and orange growing is a leading industry in several counties of that valley. In Southern California both the heat and the cold are comparatively milder, although the readings of the thermometer do not much differ from the points north of the Tehachapi. It is shown by the table that there were 211 clear days in San Jose as against 194 in Los Angeles during the year, although there were twice as many rainy days in San Jose. Abundant sunshine is also found in the interior. For example, Sacramento, in the north, had 230 clear days, and Riverside, in the south, 237. In truth, the California of "sunshine, fruit and flowers" is pretty nearly the whote State, below high mountain elevations.

Climate Unchanging. As far back as we have any recorded history, and behind this, embracing traditions coming through the early Mission fathers, we learn of the same equability of temperature, the same balmy atmosphere, the same luxuriance of vegetation. Our soil may require renewing by fertilization, but our climate is as constant as the sun. The conditions which have produced the result are themselves unchanging, and so must be the result.

It is Health-Giving. California is a universal sanitarium. The climate of the Coast is invigorating, stimulating and delightful, neither hot nor cold; the laborer knows no fatigue except from physical exhaustion resulting from over-taxed muscles. The brain worker yields only to failure of

mental powers. In the interior valleys in midsummer, the temperature is higher, and there is discomfort at time while working in the harvest fields and at the desk and behind the counter. But the dryness of the air robs the thermometer of much of its terror. The sensible temperature, i. e., the temperature we in fact experience or feel in the valleys, is less irksome at 100 or 110 degrees than in regions of greater humidity of the atmosphere where the reading is from 85 to 95 degrees. Sunstroke here is unknown. It is the common experience of persons coming into almost any part of the State that they increase in weight and strength, are less troubled with nervous affections, sleep and eat well, and improve in health if ailing from any cause.

Source of Happiness. The variety of temperature and climatic conditions existing in the mountains, valleys, and on the Coast, and the celerity and ease with which our inhabitants may change their immediate surroundings, constitute one of the great charms of California life. Thousands of families residing in the valleys find their way into the mountains or to the seacoast and have most delightful camping-out experiences; and this they do in a few hours or a day or two at most, with their own conveyances. Our valleys and mountains lie so related to each other that no spot can be found devoid of scenic beauty. There is no dull monotony in the farmer's life as there is from necessity in the lives of those who reside on the great plains, regions of the West, few of whom are ever permitted to enjoy the inspiring and elevating means of recreation and rest from labor which are a part of our life here.

Some Peculiarities. Degrees of latitude cut little figure in determining the readings of the thermometer, which is not at all true on the Atlantic Coast and in the West. The foregoing table tells the story from official sources for 1910 and is valuable as covering the whole distance and intermediate points, from San Diego, near the south line of the State, to Hornbrook, Siskiyou County, near the Oregon line, nearly ten degrees of latitude apart.

The fact that latitude has little to do with our climate is a remarkable feature. It is not true of Italy, for there is a great variation there between the temperature north and south. It is not true of France or elsewhere along the west coast of Europe. We believe this to be a peculiarity unique and found only on this Coast. This peculiarity is further attested by the fact that in nearly the whole length of this vast region the same fruits are grown. Within a radius of fifty miles around Oroville, which is 150 miles north of San Francisco, and 650 miles north of Los Angeles, there were nearly five hundred (500) carloads of oranges raised last year and shipped out of the State, and they ripen earlier than in the south. Elevation has much more to do with temperature than latitude, for in high altitudes we find snow. Our mountain summer climate is extremely delightful and is destined to draw many Eastern people to the numerous charming retreats in the Sierra Nevada and the Coast Range.

Economic Value. But, after all is said, it must be conceded that climate is our greatest resource because of its high economic value, as it is also our most valuable asset. The unthinking speak of climate as an attraction rather than a resource, but it is a resource because by its influence we are enabled to so marvelously diversify and increase the number of our agricultural products, and often, too, all these products may be grown on the same body of land. It is a resource, because man's labor here can be profitably employed every day in the year; because there is no month when vegetation in some form is not growing, and because it furnishes ideal conditions for the growth of irrigated crops. There is no time in California when all nature is at rest or plant life is sleeping. In the field, orchard, garden, factory, and in the mines; on the stock-farm and in the dairy, every day is a day of productive labor. We commence shipping fresh deciduous fruits in May and there is no cessation until December. In November we begin to ship citrus fruits, and they overlap the deciduous fruits and continue, in fact, the year through.

Professor E. W. Hilgard justly sums up the matter thus: "Taken as a whole, California corresponds in its climatic features and adaptation to the Mediterranean region of Europe and Africa—a grand Riviera, with a partial background of the desert as well, where the date palm and the ostrich find a congenial home, and alluvial plains equaling in richness the famed delta of the Nile."

IRRIGATED AGRICULTURE—THE DOMINANT INDUSTRY OF CALIFORNIA.

By SAMUEL FORTIER, Chief of Irrigation Investigations, U. S. Department of Agriculture.

California has always been considered a State of great possibilities. Her mines and her commerce and her climate and agriculture have long been the theme of inspiring pen-pictures. With a range of climate and soil and of mountain and valley more varied than that possessed by any of her sister States, with a geographical position and commercial facilities naturally favorable to intensive development, she has ranked as the leader in the upbuilding of Western America. But while her gold and her seaports and her forests and commerce have made her position unique among the States, her future has always been considered bound up in her agriculture. Over half a century of development has shown that if this agriculture is to be the best of which the State is capable, it must be founded on irrigation, and for years the careful husbandman has, over a large portion of the State at least, made the artificial application of water to land an important part of his industry. Hence it is that any treatment of irrigation in California must consider not only what has been accomplished, but what seems possible of accomplishment in the future.

The total land area of California is approximately one hundred million acres. According to the irrigation census of 1909, 2,664,104 acres were actually irrigated in 1909. According to investigations made in 1911 and 1912 for the Department of Agriculture and the State Conservation Commission of California, the area in the State now watered is upward of 3,150,000 acres. These statements, however, do not convey a true idea of the relative importance of irrigation to agriculture in California. Quoting the source of information last cited, the total area of irrigable agricultural land found in the zones of irrigation water supplies, which includes all of the valley lands, the rolling plains of the Great Valley, the arable portions of the Sierra foothills up to about 3,000 feet in elevation, and all of the plateau and desert lands to which some irrigation water supplies are available, is 21,866,000 acres. This estimate does not include the rolling and broken arable acres in the coast range mountains, on some of which small local water supplies may sometime be used for irrigation. Of the total area suited to irrigation, agents of the Irrigation Investigations of the Department of Agriculture estimate that upward of 9.500,000 acres will ultimately be watered. Yet this is not the whole truth. In 1909 about one-fifth of all the irrigated land in the United States was in California, and this State ranked first in the total number of irrigated farms and in the total construction cost of systems. The highest priced irrigated land in America is found in California, and in no other State has water for irrigation reached so high a value, or been as carefully and as economically used. And in no other State is there so great an area of fertile farming land for which the available supply is so large.

Irrigation, like any other development, has followed the lines of most evident financial returns. Hence the localities of least annual and summer rainfall were the first to be reclaimed by the artificial use of water. The tide of irrigation, however, has been moving steadily northward, and excepting in the sections of excessive rainfall, the necessity for irrigation, or at least the value of it where it is not a complete necessity, is almost universally recognized. While heretofore, then, irrigation has followed the line of the most evident return, in the future it will follow the available water supply.

The water supply of the State is in its streams and wells. The wells now dug and in use are chiefly in Southern California and in the Sacramento, the lower San

Joaquin and the Santa Clara Valleys. Only the larger streams of the State have been measured, and without reliable data it is impossible to estimate the flow in the hundreds of smaller streams.

The supply in the larger streams, as measured by the United States Geological Survey, is given in the following table. These figures give in round numbers the average annual flow in acre-feet for the past four to six years:

Irrigating an Orchard.
Courtesy of "Sunset" Magazine

TOTAL MEAN ANNUAL FLOW OF CALIFORNIA STREAMS IN ACRE-FEET.

Name of Stream.	Station.	Acre-feet.
San Joaquin River	Herndon	1,840,000
Tuolumne River	La Grange	2,130,000
Kings River	Sanger	2,138,000
Stanislaus River	Knight's Ferry	1,365,000
Merced River	Merced Falls	1,220,000
Kern River	Bakersfield	658,000
Kaweah River	Three Rivers	534,000
Tule River	Porterville	180,000
Salinas River	Salinas	200,000
American River	Fair Oaks (near)	3,610,000
Yuba River	Smartsville (near)	3,256,000
Feather River	Oroville	6,095,000
Cache Creek	Yolo	420,000
Stoney Creek	Fruto (near)	570,000
Sacramento River	Red Bluff (near)	10,175,000
Southern California streams		200,000
Colorado River at Yuma (one-half flow)		15,550,000
Total		41,866,000

Leaving out of consideration the water supply available in the creeks and smaller rivers, 42,000,000 acre-feet of water is sufficient to cover the 14,000,000 acres of agricultural land in California to depth of over 36 inches, which is ample for the growth of all crops. This vast quantity of water can never be entirely utilized in irrigation, because it cannot be fully controlled, but the statement of it

shows the tremendous potentialities of California irrigated agriculture.

Using the figures of the census of 1909 as a basis, the total cost of irrigation systems in California has been $72,445,669, or $20.02 per acre. From 1902 to 1909 the increase in the irrigated area averaged about 135,000 acres per year.

From the returns made by assessors and the shipments of products out of the State it is possible to form an approximate estimate of the value of a part of the irrigated product. Of the 300,000 acres in vines and an equal area in orchards, the annual gross returns to the growers would not vary far from $150 per acre, or $90,000,000 in all. Then, in addition, there is alfalfa, vegetables, small fruits and other crops, the greater part of which are irrigated. The gross returns from these would increase the annual value to the extent of $45,000,000.

It has already been stated that irrigation was first resorted to in California in those sections where a profit from irrigation was first most evident. These sections have, of course, been where the rainfall is least. In that portion of the State south of Techachapi, commonly known as Southern California, the development of irrigation was rapid, continuing with bounds until the water supply available in the streams was practically exhausted. Since then the irrigated area has been extended only by resort to pumping from wells and by endeavoring to make the water already diverted irrigate two acres where it irrigated only one acre before. The total area included within projects in various parts of the State in 1909 was 5,490,360 acres, of which about 70 per cent was actually irrigated in 1909. Outside of Southern California, the principal areas irrigated from wells and springs were located in the San Joaquin and Sacramento Valleys and in the Santa Clara Valley.

The General Summary on page 6 is a brief statement of what has been accomplished by private enterprise during less than half a century in reclaiming a portion of the irrigable lands in California. The attention of the reader has likewise been called to the natural resources in both land and water which remain undeveloped, awaiting the concerted action of industrious farmers. Notwithstanding the magnitude of this task, we believe that it can be accomplished. The same intelligence, energy and perseverance which wrested over 3,000,000 acres from barren sands and low-producing grain fields can reclaim other millions of acres.

Of late years large sums of money have been expended on both the northern and southern borders of California by the United States Reclamation Service in the construction of irrigation works. These will materially increase the revenues obtained from irrigated farms and orchards.

On the southern boundary of the State, over 16,000 acres of the Yuma Project are in Imperial County, California. This, with about 14,000 acres included in the Orland Project, makes a total of 30,000 acres under these projects. In addition, an area, whose exact acreage is not yet certain, will be watered in California by the Klamath Project, in Modoc and Siskiyou Counties.

The areas thus far developed may be divided into three general groups depending upon their geographical location. The first comprises the territory south of Tehachapi Pass which is dependent on small rivers, mountain streams, flowing wells and pumping plants for its supply of water for irrigation purposes. The second area includes that covered by the San Joaquin River and its tributaries known as the San Joaquin Valley. The third area is the drainage basin of the Sacramento River and its tributaries covering central and interior Northern California. A partial description of irrigation in the Sacramento Valley is given in Bulletin 207 of the Office of Experiment Stations, U. S. Department of Agriculture, and similar reports on the San Joaquin Valley and Southern California have been prepared by the same office. In 1912 an irrigation map of the State was published at the joint expense of the Department of Agriculture and the Conservation Commission. In addition reports prepared in the Irrigation Investigations of the Department of Agriculture and printed in the 1912 report of the State Conservation Commission and in Bulletin 254 of the Office of Experiment Stations of the Department of Agriculture, outline irrigation conditions and possibilities in every section of the State.

What is most needed in this State and what we should most highly prize is an influx of industrious settlers, each possessing sufficient means to enable him to make a fair start along the line of irrigated agriculture. The opportunities open to this class are exceptionally good. All of the natural advantages essential to the success of the irrigated farm are to be found in the great central valley of California—fertile soil, good climate and an abundant water supply. Yet these natural gifts count for little when not utilized. We need the intelligent brain and the trained hand of thousands of farmers to make the best possible use of these advantages. In much of this work no large amount of capital is required. In this connection it may be a surprise to some to learn that there are about 1,870,000 acres of rich valley land now included in California irrigation projects but not irrigated. Much of this land is for sale at reasonable prices. The water supply for a much larger area is readily accessible, and both land and water can be united under the most favorable circumstances whenever a sufficient number of citizens join to bring it about.

This dominant industry of California is in no danger of languishing for a few years to come on account of the lack of irrigation canals and storage reservoirs. The State is now filling up at the rate of about 100,000 people a year, and there is sufficient unirrigated land under canal systems to provide for this influx of settlers for the next ten years. The settlers should understand, however, that there are difficulties in the way of irrigation in California, as there are wherever irrigation is practiced. A brief review of some of these may not be out of place.

It has been stated that about 1,870,000 acres of fertile valley land are now included in irrigation projects but unirrigated. Much of this land has been cultivated for years, but it does not necessarily follow that it is ready to receive water. It may cost on an average of $15 per acre or more to construct permanent farm ditches to prepare the surface for irrigat on. Information regarding the methods of irrigation, cost of preparing the land, size and grade of farm ditches, etc., are available in a number of publications, but notably in Farmers' Bulletins 263, 373, 392, 399 and 404 of the U. S. Department of Agriculture. If the task of preparing land is attempted by settlers from the humid states without their first making every effort to avail themselves of the experience of older irrigators, partial failure, at least, will be very apt to result. And in addition to the perplexities of preparing land for irrigation, others equally trying are quite sure to be encountered in applying water to land. Most beginners use too much water. The evils of this, including the waste of valuable water and injury to crops and soil, are apt to be considerable, and every effort should be made to see that they are avoided. As the land adapted to agricultural purposes becomes settled and as the available water is appropriated, the irrigable area can only be increased by improved methods of use, making it possible to irrigate three acres with the supply now being used on two. Requirements and practice vary with localities, but in every locality there are some careful irrigators whose advice, well mixed with common sense, will help to guide the newcomer along a safe path.

Besides the practical difficulty of preparing land and applying water, the irrigator in California must give careful attention to problems of the rightful ownership and equitable distribution of water Nature usually provides an abundant quantity of snow on the elevated ranges to supply the soil of the valleys with the requisite amount of moisture, provided that it is properly husbanded and distributed or made available for use at the proper time by storage; but the State, unfortunately, has failed to make adequate provision for determining the rights of claimants to water, or for distributing to each his equitable portion. As conditions now exist, some receive too much, while others receive too little. It is to be hoped that before long the State will do as much toward protecting the rights of irrigators as some of the other Western States have done.

EDUCATIONAL FACILITIES IN CALIFORNIA.

The educational advantages found in California are many and of a high standard. Few States have made more liberal provision for a general system of public instruction. The law requires the establishment of schools and provides for their maintenance. Appropriations amounting to over twenty million dollars are expended for this purpose each year.

It may be truthfully said that no child in California is without school privilege and no community without a school. Whenever there are fifteen children in any district a school may be established and maintained as long as an average of five is in attendance. Industrial education has grown much in favor and now has strong support in most communities. The cities maintain well equipped polytechnic high schools.

Under a constitutional amendment recently passed all pupils in the primary and grammar schools of California are provided with free textbooks.

There are seven normal schools conducted by the State for the professional training of teachers of the grammar grades.

Higher education in California is represented by two great universities that are classed among the leading institutions of learning in America. The University of California at Berkeley is maintained at public expense, its doors open free to all students of the State of both sexes who are qualified by preparatory training. Not less noted is the Leland Stanford, Jr., University at Palo Alto.

The State maintains a University Agricultural School at Davis, a State Polytechnic School at San Luis Obispo. One of the Normal Schools, Santa Barbara, has for its special purpose the training of teachers to teach the manual arts and home economics.

Besides these public institutions there are a number of private academies, military schools, convents and religious schools and colleges of recognized merit in different parts of the State.

Twenty-two counties in California now have adopted the County Free Library system. Each of these counties has a trained librarian in charge of the work, and two hundred and fifty-five branch libraries have been established, most of them in small towns or rural districts. The County Free Library system guarantees free service to all residents in the counties which have adopted it, no matter how remote from towns and postoffices they may be. Co-operation between the County Libraries and the State Library at Sacramento is close, and the latter circulates its books in response to unusual demands for specialized reading, thus there is practically no limit upon the range of literature at the command of the person living within one of the counties having a Free Library. The County Free Library as organized in California is unique, and is recognized in other States and in foreign countries as the most important development that has taken place in the library world during recent years.

Religious Facilities.

The opportunities for religious instruction and worship are the same as in other States. Religion has played a large part in the life of California. The Roman Catholic Church made its dramatic entry in 1769 under the early Spanish Padres; the Greek Catholic Chuch established itself at Fort Ross in 1811. The first Protestant Church was organized at Benicia by the Presbyterians in 1849. The first meeting house built in the State was the First Baptist church of San Francisco in the summer of 1849.

The census taken in 1906 shows a church membership of 611,464, a net increase since the census of 1900 of 330,845 or a little over 20,000 a year. Population increase, a little over 58,000 a year.

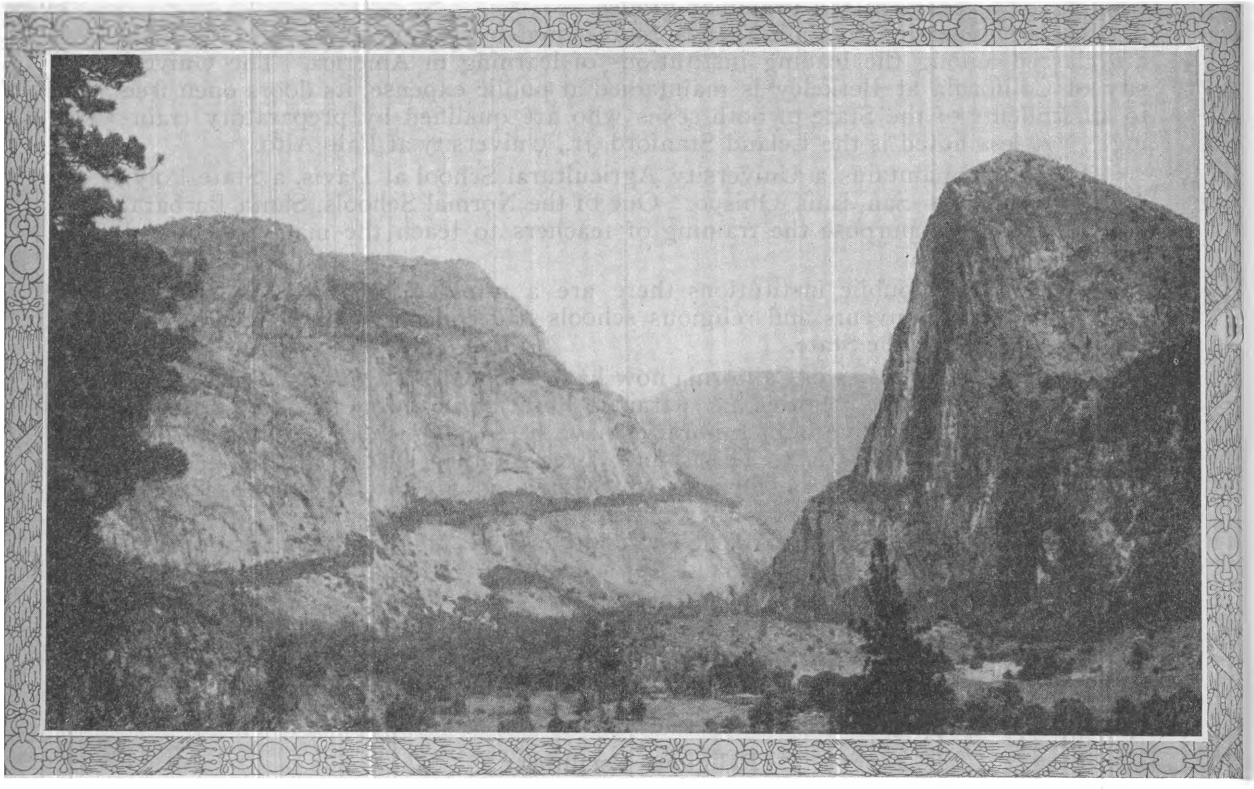
The church growth was a little more than one-third of the actual population growth from year to year.

The relative standing of religious bodies according to latest religious census is as follows:

Total Church Membership	611,464
Roman Catholic Membership	354,408, that is 58 per cent.
Protestant Membership	236,007, that is 38.6 per cent.

The leading Protestant bodies rank thus:

Name.	Numbers.	Per Cent.
Methodists	64,528	10.6
Presbyterians	37,682	6.2
Baptists	24,801	4.1
Congregationalists	23,690	3.9
Episcopalians	21,317	3.5
Christians	21,033	3.4
Lutherans	11,371	1.9
Total	204,422	33.6



View of the Hetch-Hetchy, Tuolumne Co., Proposed Head of San Francisco Water System
Courtesy of "Sunset" Magazine

SUMMARY OF VALUES.

Summary of the farm, packing house and factory values of products of California's soil and connected industries for 1912, marketed by the producer and for the most part shipped out of the State. Consumption by producers not included except in cases of animals slaughtered by rural population.

Compiled from data gathered from growers, dealers, distributors and other authoritative sources.

	Value.	Total Values.
Orchard Products:		
Fresh deciduous fruits, including apples	$10,016,750	
Citrus fruits	34,067,840	
Dried fruits	20,100,000	
Prunes	8,972,500	
Canned fruits and vegetables	18,000,000	
Olives and olive oil	2,350,000	
Nuts	3,650,000	
		$97,157,090
Vineyard Products:		
Table grapes	6,000,000	
Raisins	5,175,000	
Wine and brandy	15,000,000	
		26,175,000
Garden Products, fresh		6,842,950
Dairy and Poultry Products:		
Dairy products	32,160,078	
Poultry products	17,600,000	
Honey, wax, etc.	620,900	
		50,380,978
Farm Products:		
Barley	29,232,000	
Wheat	5,850,000	
Oats	4,290,000	
Corn, rye, rice	2,306,000	
		41,678,000
Farm Products, continued:		
Grain, grass hay and alfalfa	52,402,000	
Hops	4,477,000	
Sugar beets (paid growers $5,086,650)	14,737,500	
Broom corn, tobacco, etc.	176,500	
		71,793,000
Other Field Crops:		
Potatoes	7,816,000	
Potatoes, sweet	1,000,000	
Beans	9,395,250	
Onions	2,582,000	
Seeds and sundry other	2,275,000	
Melons	2,400,000	
Cotton	700,000	
		26,168,250
Fish Industry:		
Coast and interior (all kinds and products)	3,600,000	
Salmon fisheries, etc.	7,000,000	
		10,600,000
Forest Products:		
Lumber, mill value	12,680,000	
Other forest products (est.)	10,625,000	
		23,305,000
Petroleum: (90,074,439 bbls.)		$41,000,000
Other Mineral Products:		
Gold (report of Mining Bureau)	20,000,000	
Cement (report of Mining Bureau)	10,500,000	
Copper (report of Mining Bureau)	5,000,000	
Other minerals (report of Mining Bureau)	10,925,000	
		46,425,000
Farm Animals and Products:		
Increase over 1909 (U. S. Census Report)	33,844,450	
Slaughtered for market in cities	20,700,000	
Slaughtered in rural districts and towns	10,150,000	
Other animal products	4,600,000	
		69,294,450
Sundry Others, not included above:		
Nursery products	3,550,000	
Florist products	900,000	
Fruits marketed in cities	9,500,000	
Vegetables marketed in cities	14,750,000	
Cider, vinegar, etc.	2,000,000	
		30,700,000
Total		$541,519,718
Manufactures (as reported by Census, 1910)		529,761,000
Manufactures, increase 5 per cent, (1912)		26,488,050
Grand Total		$1,097,768,768

CALIFORNIA DEVELOPMENT BOARD.

Officers.

Wm. J. Dutton ..... President
Robert Newton Lynch ..... Vice-President and Manager
Wells Fargo Nevada National Bank ..... Depositary

Executive Committee.

N. P. Chipman,
Robert Newton Lynch,
James Irvine,
B. F. Walton,
John P. Irish,
M. F. Tarpey,
Mark L. Requa,
A. L. Scott,
Wm. J. Dutton,
Chester Rowell,
R. B. Hale,
A. B. C. Dohrmann,
Frederick J. Koster,
Miles Standish,
Mortimer Fleishhacker.

ACTIVE MEMBERS.

County Representatives.

Alameda ..... Theo. Gier, Oakland
Butte ..... E. A. Jackson, Oroville
Colusa .....
Contra Costa ..... E. B. Anderson, Walnut Creek
El Dorado .....
Fresno ..... Wm. Robertson, Fresno
Glenn ..... E. W. Maslin (Appraisers Bldg., San Francisco)
Humboldt ..... J. F. Coonon, Eureka
Kern ..... John P. Irish, Oakland
Lassen .....
Los Angeles ..... H. Z. Osborne, Los Angeles
Madera ..... H. H. Whitmore, Madera
Marin ..... John J. Mazza, Corte Madera
Mendocino ..... P. I. Lancaster, Willits
Merced ..... C. H. Edwards, Merced
Modoc .....
Monterey .....
Napa .....
Sacramento ..... James H. Devine, Sacramento
San Benito .....
San Joaquin ..... A. H. Wright, Stockton
San Mateo .....
Santa Clara ..... Jos. T. Brooks, San Jose
Shasta ..... W. Coyne, Redding
Solano ..... Thos. Smith, Vallejo
Sonoma ..... Thomas Maclay, Petaluma
Stanislaus ..... J. W. Davison, Modesto
Sutter ..... B. F. Walton, Yuba City
Tehama ..... N. P. Chipman, Sacramento
Tulare ..... Arthur E. Miot, Visalia
Yolo ..... T. B. Gibson, Woodland
Yuba ..... A. L. McDonald (Ferry Bldg., San Francisco)
North of Bay Counties Association ..... Robert Newton Lynch, Petaluma

Individuals, Firms and Corporations.

Representatives.

Anglo & London Paris National Bank ..... C. F. Hunt, Sansome and Sutter Streets
Baker & Hamilton ..... Wakefield Baker, Fourth and Brannan Streets
Bank of California ..... Chas. K. McIntosh, California and Sansome Streets
Bank of Daniel Meyer ..... Henry G. Meyer, 244 Pine Street
Brewers Protective Association ..... J. A. Hieronimus
Care Union Brewing & Malting Co., 18th and Florida Streets
Brown, Walker, Simmons Co. ..... Frank L. Brown, Crocker Bldg.
California Barrel Co. ..... Frederick J. Koster, 22nd and Illinois Streets
California Door Co. ..... E. H. Kittredge, 43 Main Street
California Pine Box & Lumber Co. ..... G. X. Wendling, Flood Building
Crocker National Bank ..... J. B. McCargar, Market and Post Streets
Emporium ..... Wm. Kaufmann, Market near Fourth

Fireman's Fund Insurance Co.....Wm. J. Dutton, California and Sansome Streets
First National Bank of San Francisco.....C H. McCormick, Montgomery and Post Streets
Fuller, W. P., & Co.....Frank W. Fuller, 301 Mission Street
German Savings & Loan Society .....Geo. Tourny, 526 California Street
Gunst, M. A., & Co.....A. I. Esberg, California and Front Streets
Hale Bros., Inc. .....R. B. Hale, Market and Fifth Streets
Halsey, N. W., & Co.....Cyrus Pierce, 424 California Street
Hibernia Savings & Loan Society.....R. M. Tobin, Jones and McAllister Streets
Hind, Rolph & Co. .....R. S. Clarke, 310 California Street
Hotel St. Francis .....James Woods, Geary and Powell Streets
Mercantile National Bank of San Francisco.....W. F. Berry, 424 California Street
Metson, Wm. H. .....Milton Bernard, 501 Balboa Building
Miller & Lux, Inc. .....Merchants Exchange Building
Nathan-Dohrmann Co. .....A. B. C. Dohrmann, Stockton and Geary Streets
Pacific Gas & Electric Company .....L. F. Walsh, 445 Sutter Street
Palmer Union Oil Co. .....Geo. L. Walker, Crocker Building
Realty Syndicate, The .....Oakland
Rollins, E. H., & Sons .....D. H. Dibblee, First National Bank Building
Savings Union Bank & Trust Co.....John S. Drum, Grant Avenue and O'Farrell Streets
Sloss Bros. .....Alaska Commercial Building
Standard Oil Co. .....W. S. Rheem, 461 Market Street
Tillman & Bendel .....Carl H. Schmidt, Pine and Davis Streets
United Railroads .....Wells Fargo Building
Wells Fargo Nevada National Bank .....Col. John P. Irish (Oakland)
Western Fuel Co. .....James B. Smith, 430 California Street
M. F. Tarpey .....Tarpey, Fresno County
Miles Standish .....Crocker Building
Chester Rowell .....Fresno
James Irvine .....Crocker Building
Mark L. Requa .....Crocker Building
Mortimer Fleishhacker .....134 Fremont Street
A. L. Scott .....Pacific Hardware & Steel Co.

HONORARY MEMBERS.

Hiram W. Johnson .....Governor of California
A. L. Scott .....President State Board of Agriculture, Sacramento
David Starr Jordan .....President Leland Stanford, Jr., University, Palo Alto
Benjamin Ide Wheeler .....President University of California, Berkeley
Luther Burbank .....Santa Rosa
A. J. Cook .....State Horticulturist, Sacramento
Judge N. P. Chipman .....Sacramento
Col. John P. Irish .....Oakland
E. W. Maslin .....San Francisco
F. McN. Hamilton .....State Mineralogist, San Francisco
J. A. Filcher .....Sacramento
J. N. Gillett (Former President California Development Board) .....Berkeley

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THE PANAMA-CALIFORNIA EXPOSITION

SAN DIEGO'S PANAMA-CALIFORNIA EXPOSITION was organized and incorporated in September, 1909.

The Exposition will open on January 1, 1915, and it will close on December 31st. The enterprise is completely organized, with U. S. Grant, Jr., as President and D. C. Collier as Director-General. There are two funds of $1,000,000 each from which the expenditures will be made for buildings and maintenance. The first of these funds was raised by subscriptions of stockholders of the corporation, and the second was voted in bonds for the improvement of Balboa Park, which will be the site of the Mission City in which the Exposition will be held.

The Exposition itself will be novel in character, comprising a distinctive exhibition of ethnological, aboriginal and archæological features peculiar to the countries included in the scope of the Exposition; a comprehensive demonstration of the great reclamation and irrigation projects of the Southwest and the arid regions of Mexico and a practical presentation of the handicrafts and industries of every section tributary to Southern California of which San Diego is the seaport destined to be the gateway of the Southwest when it shall be the first port of call in territory of the United States north of the Panama Canal and the terminal of the San Diego and Arizona Railway, closing the gap between Pacific tidewater and Yuma and connecting the transcontinental railroads with the shortest route between the Middle West and the new highway of commerce between the canal and the Orient.

CALIFORNIA THE PLAYGROUND

The Pacific Coast in 1913 celebrates the 400th anniversary of the discovery of the Pacific Ocean by Vasco Numez de Balboa. This celebration centers at San Francisco, October 22-25, in the Portola Festival. This, an annual event, is one of the biggest things of the kind the entire West has ever seen.

At the 1913 Portola Festival there will be a fleet of United States war ships, and fighting craft of other nations. There will be parades without parallel, a carnival of sports greater than ever before attempted except at the Olympic Games, and four days of festivities without one single minute of cessation.

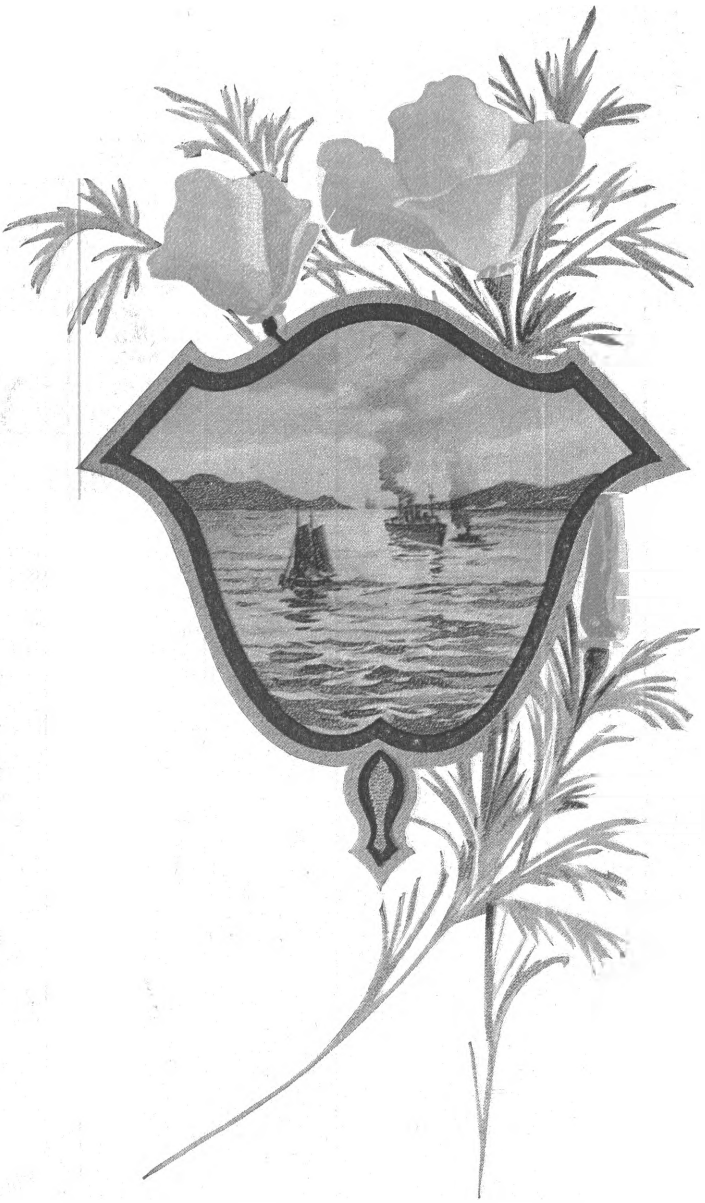
Out of this fete has grown a big idea. The formation of the California Celebration Committee, conceived by leaders in the Portola plans, heralds the development to the utmost of California's resources as a playground. This committee is co-ordinating festivals, spectacles, athletic events and native drama, throughout California and in the Northwest. The scope of the project includes the development of a series of holidays in every portion of the Pacific Coast, from Cabrillo Day in San Diego, to Portland's Rose Carnival, Seattle's Potlatch, and Tacoma's Montemaro Festo.

Motor and aviation races at Del Monte, Santa Barbara, Coronado and elsewhere; fiestas in the cities of Southern California, including the larger places as well as Los Angeles; the presentation of a series of open-air plays by Californian dramatists and actors; and the appearance of world-famous actors as, well, are a few of the features planned.

Nothing of equal scope has ever before been attempted, no such concerted action for the full development of the Pacific Coast as a holiday place has ever before been broached.

The consummation of this plan means that the tourist will have at his disposal a developed and unrivaled vacation region, appealing to him throughout the year, and the homeseeker will find in his newly adopted community conditions working for the fullest meaning of life in every sense.

California's shows include the National Orange Show at San Bernardino; the California Apple Annual at Watsonville, the Santa Cruz Water Carnival, the Gravenstein Apple Show at Sebastopol, the Petaluma Poultry Show, the Cloverdale Citrus Fair, the State Fair at Sacramento, the Santa Rosa Rose Carnival, the Tournament of Roses at Pasadena, Chico's Fiesta Arborea and the Christmas Carols of San Francisco.



Press of The Hicks-Judd Co., S. F.