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U. S. DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS

ROYAL MEEKER, Commissioner

MONTHLY REVIEW

OF THE

U. S. BUREAU OF LABOR STATISTICS

VOLUME II—MARCH, 1916—NUMBER 3



WASHINGTON
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1916

SERIES OF BULLETINS PUBLISHED BY THE BUREAU OF LABOR STATISTICS.

[The publication of the Annual and Special Reports and of the bimonthly Bulletin has been discontinued, and since July, 1912, a Bulletin has been published at irregular intervals. Each number contains matter devoted to one of a series of general subjects. These Bulletins are numbered consecutively in each series and also carry a consecutive whole number, beginning with No. 101. A list of the series, together with the individual Bulletins falling under each, is given below. A list of the Reports and Bulletins of the Bureau issued prior to July 1, 1912, will be furnished on application.]

Wholesale Prices.

- No. 1. Wholesale prices, 1890 to 1912. (Bul. No. 114.)
- No. 2. Wholesale prices, 1890 to 1913. (Bul. No. 149.)
- No. 3. Index numbers of wholesale prices in the United States and foreign countries. (Bul. No. 173.)
- No. 4. Wholesale prices, 1890 to 1914. (Bul. No. 181.)

Retail Prices and Cost of Living.

- No. 1. Retail prices, 1890 to 1911: Part I. (Bul. No. 105: Part I.)
Retail prices, 1890 to 1911: Part II—General tables. (Bul. No. 105: Part II.)
- No. 2. Retail prices, 1890 to June, 1912: Part I. (Bul. No. 106: Part I.)
Retail prices, 1890 to June, 1912: Part II—General tables. (Bul. No. 106: Part II.)
- No. 3. Retail prices, 1890 to August, 1912. (Bul. No. 108.)
- No. 4. Retail prices, 1890 to October, 1912. (Bul. No. 110.)
- No. 5. Retail prices, 1890 to December, 1912. (Bul. No. 113.)
- No. 6. Retail prices, 1890 to February, 1913. (Bul. No. 115.)
- No. 7. Sugar prices, from refiner to consumer. (Bul. No. 121.)
- No. 8. Retail prices, 1890 to April, 1913. (Bul. No. 125.)
- No. 9. Wheat and flour prices, from farmer to consumer. (Bul. No. 130.)
- No. 10. Retail prices, 1890 to June, 1913. (Bul. No. 132.)
- No. 11. Retail prices, 1890 to August, 1913. (Bul. No. 136.)
- No. 12. Retail prices, 1890 to October, 1913. (Bul. No. 138.)
- No. 13. Retail prices, 1890 to December, 1913. (Bul. No. 140.)
- No. 14. Retail prices, 1907 to December, 1914. (Bul. No. 156.)
- No. 15. Butter prices, from producer to consumer. (Bul. No. 164.)
- No. 16. Retail prices, 1907 to June, 1914. (Bul. No. 184.)

Wages and Hours of Labor.

- No. 1. Wages and hours of labor in the cotton, woolen, and silk industries, 1890 to 1912. (Bul. No. 128.)
- No. 2. Wages and hours of labor in the lumber, millwork, and furniture industries, 1890 to 1912. (Bul. No. 129.)
- No. 3. Union scale of wages and hours of labor, 1907 to 1912. (Bul. No. 131.)
- No. 4. Wages and hours of labor in the boot and shoe and hosiery and knit goods industries, 1890 to 1912. (Bul. No. 134.)
- No. 5. Wages and hours of labor in the cigar and clothing industries, 1911 and 1912. (Bul. No. 135.)
- No. 6. Wages and hours of labor in the building and repairing of steam railroad cars, 1890 to 1912. (Bul. No. 137.)
- No. 7. Union scale of wages and hours of labor, May 15, 1913. (Bul. No. 143.)
- No. 8. Wages and regularity of employment in the dress and waist industry of New York City. (Bul. No. 146.)
- No. 9. Wages and regularity of employment in the cloak, suit, and skirt industry. (Bul. No. 147.)
- No. 10. Wages and hours of labor in the cotton, woolen, and silk industries, 1907 to 1913. (Bul. No. 150.)
- No. 11. Wages and hours of labor in the iron and steel industry in the United States, 1907 to 1912. (Bul. No. 151.)
- No. 12. Wages and hours of labor in the lumber, millwork, and furniture industries, 1907 to 1913. (Bul. No. 153.)
- No. 13. Wages and hours of labor in the boot and shoe and hosiery and underwear industries, 1907 to 1913. (Bul. No. 154.)
- No. 14. Wages and hours of labor in the clothing and cigar industries, 1911 to 1913. (Bul. No. 161.)
- No. 15. Wages and hours of labor in the building and repairing of steam railroad cars, 1907 to 1913. (Bul. No. 163.)
- No. 16. Wages and hours of labor in the iron and steel industry in the United States, 1907 to 1913. (Bul. No. 168.)
- No. 17. Union scale of wages and hours of labor, May 1, 1914. (Bul. No. 171.)
- No. 18. Wages and hours of labor in the hosiery and underwear industry, 1907 to 1914. (Bul. No. 177.)
- No. 19. Wages and hours of labor in the boot and shoe industry, 1907 to 1914. (Bul. No. 178.)

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Women in Industry.

- No. 1. Hours, earnings, and duration of employment of wage-earning women in selected industries in the District of Columbia. (Bul. No. 116.)
- No. 2. Working hours of women in the pea canneries of Wisconsin. (Bul. No. 119.)
- No. 3. Employment of women in power laundries in Milwaukee. (Bul. No. 122.)
- No. 4. Hours, earnings, and conditions of labor of women in Indiana mercantile establishments and garment factories. (Bul. No. 160.)
- No. 5. Summary of the report on condition of woman and child wage earners in the United States. (Bul. No. 175.)
- No. 6. Effect of minimum-wage determinations in Oregon. (Bul. No. 176.)
- No. 7. Women in the boot and shoe industry in Massachusetts. (Bul. No. 180.)
- No. 8. Unemployment among women in department and other retail stores of Boston, Mass. (Bul. No. 182.) [In press.]

Workmen's Insurance and Compensation (including laws relating thereto).

- No. 1. Care of tuberculous wage earners in Germany. (Bul. No. 101.)
- No. 2. British National Insurance Act, 1911. (Bul. No. 102.)
- No. 3. Sickness and accident insurance law of Switzerland. (Bul. No. 103.)
- No. 4. Law relating to insurance of salaried employees in Germany. (Bul. No. 107.)
- No. 5. Workmen's compensation laws of the United States and foreign countries. (Bul. No. 126.)
- No. 6. Compensation for accidents to employees of the United States. (Bul. No. 155.)
- No. 7. Compensation legislation of 1914 and 1915. (Bul. No. 185.)

Industrial Accidents and Hygiene.

- No. 1. Lead poisoning in potteries, tile works, and porcelain enameled sanitary ware factories. (Bul. No. 104.)
- No. 2. Hygiene of the painters' trade. (Bul. No. 120.)
- No. 3. Dangers to workers from dusts and fumes, and methods of protection. (Bul. No. 127.)
- No. 4. Lead poisoning in the smelting and refining of lead. (Bul. No. 141.)
- No. 5. Industrial accident statistics. (Bul. No. 157.)
- No. 6. Lead poisoning in the manufacture of storage batteries. (Bul. No. 165.)
- No. 7. Industrial poisons used in the rubber industry. (Bul. No. 179.)

Conciliation and Arbitration (including strikes and lockouts).

- No. 1. Conciliation and arbitration in the building trades of Greater New York. (Bul. No. 124.)
- No. 2. Report of the industrial council of the British Board of Trade on its inquiry into industrial agreements. (Bul. No. 133.)
- No. 3. Michigan copper district strike. (Bul. No. 139.)
- No. 4. Industrial court of the cloak, suit, and skirt industry of New York City. (Bul. No. 144.)
- No. 5. Conciliation, arbitration, and sanitation in the dress and waist industry of New York City. (Bul. No. 145.)

Labor Laws of the United States (including decisions of courts relating to labor).

- No. 1. Labor legislation of 1912. (Bul. No. 111.)
- No. 2. Decisions of courts and opinions affecting labor, 1912. (Bul. No. 112.)
- No. 3. Labor laws of the United States, with decisions of courts relating thereto. (Bul. No. 148.)
- No. 4. Decisions of courts and opinions affecting labor, 1913. (Bul. No. 152.)
- No. 5. Labor legislation of 1914. (Bul. No. 166.)
- No. 6. Decisions of courts affecting labor, 1914. (Bul. No. 169.)
- No. 7. Labor legislation of 1915. (Bul. No. 186.) [In press.]

Foreign Labor Laws.

- No. 1. Administration of labor laws and factory inspection in certain European countries. (Bul. No. 142.)

Miscellaneous Series.

- No. 1. Statistics of unemployment and the work of employment offices in the United States. (Bul. No. 109.)
- No. 2. Prohibition of night work of young persons. (Bul. No. 117.)
- No. 3. Ten-hour maximum working-day for women and young persons. (Bul. No. 118.)
- No. 4. Employers' welfare work. (Bul. No. 123.)
- No. 5. Government aid to home owning and housing of working people in foreign countries. (Bul. No. 158.)
- No. 6. Short-unit courses for wage earners, and a factory school experiment. (Bul. No. 159.)
- No. 7. Vocational education survey of Richmond, Va. (Bul. No. 162.)
- No. 8. Minimum-wage legislation in the United States and foreign countries. (Bul. No. 167.)
- No. 9. Foreign food prices as affected by the war. (Bul. No. 170.)
- No. 10. Unemployment in New York City, N. Y. (Bul. No. 172.)
- No. 11. Subject index of the publications of the United States Bureau of Labor Statistics up to May 1, 1915. (Bul. No. 174.)
- No. 12. Regularity of employment in the women's ready-to-wear garment industries. (Bul. No. 183.)

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FEDERAL EMPLOYMENT WORK OF THE DEPARTMENT OF LABOR.

During January, 1916, the Division of Information of the Department of Labor placed 3,419 persons in employment as compared with 2,170 during December, 1915. As there were 15,015 applicants for work, 22.78 per cent were placed as compared with 18.23 per cent for December preceding. The operations of the division by months since May, 1915, when fuller reports began to be made, are contained in the following statement:

OPERATIONS OF THE DIVISION OF INFORMATION, BUREAU OF IMMIGRATION, DURING THE MONTHS OF MAY, 1915, TO DECEMBER, 1916.

Month.	Number of applications for help.	Number of persons applied for.	Number of applicants for places.	Number referred to employment.	Number actually employed.	Per cent of applicants placed.
1915						
May.....	638	3,826	12,132	3,752	3,495	28.81
June.....	1,249	3,601	14,530	5,131	4,646	31.98
July.....	1,160	8,665	18,061	6,360	6,035	33.41
August.....	1,279	7,931	17,827	7,321	6,757	37.90
September.....	1,201	4,551	13,334	5,671	5,405	40.54
October.....	1,104	5,423	12,215	5,460	5,006	40.98
November.....	847	4,650	11,908	4,459	4,146	34.82
December.....	698	3,588	11,902	2,622	2,170	18.23
1916						
January.....	933	5,063	15,015	4,300	3,419	22.78

The following statement of the employment work of the 18 separate zones of operation covering the whole country gives the usual details for December, 1915, and January, 1916:

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SUMMARY OF ACTIVITIES FOR THE MONTHS OF DECEMBER, 1915, AND JANUARY, 1916.

Zone.	Opportunities received.				Applications for employment.					
	Applications for help.		Number of persons applied for.		Applications received.		Referred to employment.		Number actually employed.	
	December.	January.	December.	January.	December.	January.	December.	January.	December.	January.
1. Boston, Mass.	1	2	15	3	52	44		1		1
Portland, Me.					4	3				
Total	1	2	15	3	56	47		1		1
2. New York, N. Y.	87	91	276	186	921	1,069	284	431	236	332
Buffalo, N. Y.	6	33	10	730	298	830	131	685	41	449
Total	93	124	286	916	1,219	1,899	415	1,116	277	781
3. Philadelphia, Pa.	28	74	551	773	839	559	359	271	303	231
Pittsburgh, Pa.	9	19	1,228	1,381	124	977	57	428	26	174
Total	37	93	1,779	2,154	963	1,536	416	699	329	405
4. Baltimore, Md.	5	21	23	33	246	354	182	264	182	264
5. Norfolk, Va.	3	12	3	92	36	64	20	15	17	20
6. Jacksonville, Fla.					19	34		1		1
Miami, Fla.	5	17	6	64	121	93	5	18	5	9
Charleston, S. C.	3	2	61	12	25	59	58	2	58	1
Savannah, Ga.	3	8	27	33	36	55	27	32	26	24
Mobile, Ala.					8	14				
Total	11	27	94	109	209	255	90	53	59	35
7. New Orleans, La.	3	7	4	7	11	36	6	12	3	3
Gulfport, Miss.	2		2		12	17				
Memphis, Tenn.		1		1		44				
Total	5	8	6	8	23	97	6	12	3	3
8. Galveston, Tex.	2	5	3	6	41	93	5	1	5	
Amarillo, Tex.						6				
Houston, Tex.						159				
Laredo, Tex.		1		1		1		1		1
Albuquerque, N. Mex.				1		6				
Total	2	7	3	8	41	265	5	2	5	1
9. Cleveland, Ohio.	25	23	146	82	149	126	39	38	17	15
10. Chicago, Ill.	31	76	258	654	4,436	5,299	501	1,083	461	1,032
Detroit, Mich.					84	77	9	19	5	14
Sault Ste. Marie, Mich.	7	9	8	45	54	44	8	14	8	14
Indianapolis, Ind.	18	31	103	159	239	279	114	148	105	138
Total	56	116	369	858	4,813	5,699	632	1,264	579	1,198
11. Minneapolis, Minn.	16	32	19	36	43	36	13	13	13	13
12. St. Louis, Mo.	8	9	71	18	174	212	169	16	73	15
Kansas City, Mo.	13	13	57	45	329	317	85	45	44	45
Total	21	22	128	63	503	529	194	61	117	60
13. Denver, Colo.	1	6	1	7	36	72	1	30		3
Salt Lake City, Utah.					6	10				
Total	1	6	1	7	42	82	1	30		3
14. Helena, Mont.		2		2	13	21	2	1		
Moscow, Idaho.	1		10				7	5		
Total	1	2	10	2	13	21	9	6		

SUMMARY OF ACTIVITIES FOR THE MONTHS OF DECEMBER, 1915, AND JANUARY, 1916—Concluded.

Zone.	Opportunities received.				Applications for employment.					
	Applications for help.		Number of persons applied for.		Applications received.		Referred to employment.		Number actually employed.	
	December.	January.	December.	January.	December.	January.	December.	January.	December.	January.
15. Seattle, Wash.....	22	23	28	25	527	346	27	24	26	22
Aberdeen, Wash.....	6	6	17	33	229	142	17	33	17	33
Bellingham, Wash.....	2	2	2	3	25	47	2	1	1	3
Everett, Wash.....	1	2	1	3	21	28	3	5	3	3
North Yakima, Wash.....	84	62	114	103	196	186	114	103	113	103
Spokane, Wash.....	13	3	24	3	135	79	16	2	16	2
Tacoma, Wash.....	4	7	5	16	38	141	5	16	5	16
Walla Walla, Wash.....	18	13	18	16	84	129	19	12	19	12
Total.....	150	116	209	199	1,255	1,098	203	195	200	191
16. Portland, Oreg.....	3	5	4	22	149	96	3	20	3	18
17. San Francisco, Cal.....	156	183	325	227	1,342	1,600	224	221	182	177
Fresno, Cal.....	1	2	1	3	5	5	1	1	1	1
Total.....	156	183	325	227	1,347	1,600	224	221	182	177
18. Los Angeles, Cal.....		5		6	295	432		5		4
San Diego, Cal.....	110	126	166	235	499	774	170	285	157	230
Tucson, Ariz.....	2	3	2	3	1	5				
Total.....	112	134	168	244	795	1,211	170	290	157	234
Total for month.....	698	933	3,588	5,063	11,902	15,015	2,622	4,300	2,170	3,419

CONCILIATION WORK OF THE DEPARTMENT OF LABOR, JANUARY 16 TO FEBRUARY 15, 1916.

On the authority contained in the organic act of the department to mediate in labor disputes and to appoint commissioners of conciliation in its discretion, the Secretary of Labor, through the commissioners of conciliation, exercised his good offices in five labor disputes between January 16, 1916, and February 15, 1916. The establishments involved in these controversies, the number of employees affected, and the results secured, so far as available, are shown in the following statement:

NUMBER OF LABOR DISPUTES HANDLED BY THE DEPARTMENT OF LABOR THROUGH ITS COMMISSIONERS OF CONCILIATION, JAN. 16, 1916, TO FEB. 15, 1916.

Name.	Workmen affected.		Result.
	Directly.	Indirectly.	
Bradford Mills, Philadelphia, Pa.....	175	900	Adjusted.
Brewery workers, Washington, D. C.....	58	680	Pending.
Clerks, the Big Four R. R.....	1,200		Unable to adjust.
Allied shopmen, Cincinnati, Hamilton & Dayton R. R., Cincinnati, Ohio.....			Pending.
Musical Instrument Manufacturers and Metal Polishers, Elkhart, Ind.....	456	751	Do.

There has been an adjustment in the following cases which were noted in the statement dated January 15, 1916:

Shirt-waist workers, Philadelphia, Pa., 5,000 directly and 5,000 indirectly involved.

New Haven Clock Co., New Haven, Conn., 40 directly involved.

IMMIGRATION DURING 1915.

Although it is doubtless true that the large decline in immigration during 1915 and the latter half of 1914 is due to the occurrence of the war in Europe, yet it is noticeable that an actual decline in immigration to the United States began in January, 1914. This decline continued during all of the months of 1914, as compared with 1913, but became very sudden in June, 1914, when the number of immigrant aliens admitted fell from 107,796 in May to 71,728 in June, the corresponding figures for 1913 being 137,262 and 176,261. It is noted in passing that these figures relate to immigrant aliens admitted or emigrant aliens departing as the case may be, as distinguished from all aliens arriving or departing from the United States, which latter would include transient itinerant arrivals as well as from permanent arrivals for purposes of residence.

Grouping the results of immigration by six-month periods during each of the years 1913, 1914, and 1915, the numbers admitted and departing and the excess of admissions over departures during each preceding semiannual period are as follows:

NUMBER OF ALIENS ADMITTED TO AND DEPARTING FROM THE UNITED STATES
JAN. 1, 1913, TO DEC. 31, 1915.

Semiannual period.	Aliens admitted.	Aliens departed.	Excess of aliens admitted.
January to June 30, 1913.....	786, 159	284, 082	502, 077
July to December 31, 1913.....	830, 744	314, 864	515, 880
January to June 30, 1914.....	572, 337	318, 941	253, 396
July to December 31, 1914.....	275, 894	255, 437	20, 457
January to June 30, 1915.....	158, 350	117, 737	40, 613
July to December 31, 1915.....	169, 291	166, 899	2, 392

These figures show quite clearly that the decline in immigration had begun prior to the outbreak of the European war and was probably a reflection of industrial conditions prevailing in the United States.

The table which follows shows the actual number of immigrant aliens admitted and emigrant aliens departing and the excess of the number admitted over the number departing for each of the years 1913, 1914, and 1915, by months.

IMMIGRANT ALIENS ADMITTED AND EMIGRANT ALIENS DEPARTING DURING THE YEARS ENDING DECEMBER 31, 1913, 1914, AND 1915, BY MONTHS.

Month.	1913			1914			1915		
	Ad- mitted.	De- parted.	Differ- ence.	Ad- mitted.	De- parted.	Differ- ence.	Ad- mitted.	De- parted.	Differ- ence.
January.....	46,441	29,730	16,711	44,708	34,216	10,492	15,481	17,238	1,757
February.....	59,156	15,253	43,903	46,873	17,074	29,799	13,873	7,086	6,787
March.....	96,958	15,044	81,914	92,621	13,500	79,121	19,263	7,755	11,508
April.....	136,371	18,331	118,040	119,885	22,801	97,084	24,532	8,331	16,201
May.....	137,262	19,131	118,131	107,796	23,544	84,252	26,069	8,747	17,322
June.....	176,261	22,930	153,331	71,728	38,413	33,315	22,598	10,830	11,768
July.....	138,244	26,434	111,810	60,377	28,601	31,776	21,504	9,861	11,643
August.....	126,180	23,242	102,938	37,706	30,307	7,399	21,949	29,293	17,344
September.....	136,247	19,241	117,006	29,143	18,212	10,931	24,513	22,156	2,357
October.....	134,140	26,998	107,142	30,416	20,046	10,370	25,450	13,887	11,563
November.....	104,671	27,632	77,039	26,298	23,100	3,198	24,545	14,483	10,062
December.....	95,387	30,243	65,144	20,944	23,821	12,877	18,901	10,974	7,927
Total.....	1,387,318	274,209	1,113,109	688,495	293,635	394,860	258,678	160,641	98,037

¹ Excess of departed aliens.

The first table following shows the number of aliens admitted classified by races for each month of the year 1915, total for the year and for 1914, while the second table shows, for 1915, immigrants admitted, classified according to occupations.

IMMIGRANT ALIENS ADMITTED EACH MONTH DURING THE YEAR ENDING DECEMBER 31, 1915, BY RACES.

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Race.	Janu-ary.	Febru-ary.	March.	April.	May.	June.	July.	August.	Septem-ber.	October.	Novem-ber.	Decem-ber.	Year ending December 31, 1915.	Year ending December 31, 1914.
African (black).....	113	89	159	256	817	487	486	327	424	491	331	174	4,154	8,271
Armenian.....	44	25	63	29	35	41	30	72	51	55	90	43	578	2,511
Bohemian and Moravian.....	42	70	81	102	111	77	54	65	96	27	72	48	845	4,888
Bulgarian, Serbian, Montenegrin.....	153	82	316	248	266	258	419	301	294	528	99	91	3,055	10,433
Chinese.....	225	138	135	142	218	293	357	246	127	311	164	210	2,566	2,284
Croatian and Slovenian.....	37	51	53	107	99	78	54	84	76	66	110	96	911	9,373
Cuban.....	78	70	85	97	188	432	454	493	525	340	257	108	3,127	3,583
Dalmatian, Bosnian, Herzegovian.....	5	5	2	8	8	4	12	17	4	27	8	12	112	1,872
Dutch and Flemish.....	422	553	499	605	626	288	548	568	472	332	782	665	6,360	10,080
East Indian.....	1	5	5	1	7	6	11	6	5	17	4	8	76	117
English.....	2,232	2,137	2,243	2,902	2,682	3,099	2,787	2,925	3,516	3,606	3,540	2,874	34,543	45,073
Finnish.....	114	155	250	238	418	368	341	362	335	369	397	644	3,991	6,358
French.....	681	695	820	1,114	1,139	889	834	1,050	1,588	1,849	2,260	1,215	14,134	14,592
German.....	1,068	860	928	1,176	1,168	1,034	798	931	1,024	823	1,092	989	11,891	48,747
Greek.....	915	313	1,488	989	2,460	998	2,314	2,180	1,759	2,219	853	521	17,009	37,154
Hebrew.....	753	641	733	585	766	811	1,357	1,425	1,202	1,130	1,576	1,230	12,209	71,183
Irish.....	867	923	1,097	2,075	2,050	2,648	1,590	1,701	2,303	2,841	2,896	1,149	22,080	29,430
Italian (north).....	734	657	670	1,087	1,046	485	423	346	532	484	431	191	7,086	24,638
Italian (south).....	2,994	2,448	3,118	5,480	4,886	2,358	1,913	1,316	2,028	1,958	2,441	941	31,881	123,968
Japanese.....	651	668	662	792	722	903	899	654	737	590	626	8,786	8,808	8,808
Korean.....	16	5	7	3	8	11	13	12	7	7	1	90	184	184
Lithuanian.....	35	15	57	23	18	36	35	65	57	36	53	39	469	7,793
Magyar.....	44	38	30	33	40	44	64	88	93	60	102	115	751	28,349
Mexican.....	712	484	996	686	806	1,076	1,121	1,098	765	1,032	1,008	1,538	11,322	11,789
Pacific Islander.....	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Polish.....	87	101	163	167	275	229	350	357	335	199	339	477	3,079	42,963
Portuguese.....	116	70	434	799	347	848	758	522	1,308	1,029	658	1,076	7,965	7,229
Roumanian.....	24	6	41	50	53	37	41	63	67	47	82	90	601	14,007
Russian.....	107	128	155	160	248	308	330	382	264	308	449	550	3,389	19,335
Ruthenian (Russniak).....	59	28	124	117	88	144	160	201	215	98	94	71	1,399	14,490
Scandinavian.....	666	1,107	1,885	2,236	2,006	1,875	1,027	1,652	1,729	1,832	1,318	1,260	18,593	31,373
Scotch.....	878	731	943	1,010	1,004	1,125	937	1,069	1,277	1,284	1,330	1,030	12,618	16,605
Slovak.....	25	25	6	27	18	12	42	22	51	24	99	66	417	11,823
Spanish.....	252	270	435	469	699	747	420	505	698	545	597	471	6,108	7,894
Spanish-American.....	100	56	173	157	213	139	143	156	192	197	119	84	1,789	1,474
Syrian.....	64	46	76	45	48	69	40	70	72	43	69	37	679	3,925

Turkish.....	7	21	7	7	28	21	20	11	21	7	5	9	164	963
Welsh.....	50	74	96	76	63	99	96	71	66	115	112	91	1,009	1,903
West Indian (except Cuban).....	29	30	55	60	64	115	84	78	91	82	64	39	791	987
Other peoples.....	81	56	175	280	264	230	198	212	185	295	47	21	2,044	2,044
Total, 1915.....	15,481	13,873	19,263	24,532	26,069	22,598	21,504	21,949	24,513	25,450	24,545	18,901	258,678	688,495
Total, 1914.....	44,708	46,873	92,021	119,885	107,796	71,728	60,377	37,706	29,143	30,416	26,298	20,944	.....	688,495
Total, 1913 ¹	46,441	59,156	96,958	136,371	137,262	176,261	138,244	126,180	136,247	134,140	104,671	95,387	.....	.....

¹ For year ending Dec. 31, 1913, 1,387,318.

8 MONTHLY REVIEW OF THE BUREAU OF LABOR STATISTICS.

IMMIGRANT ALIENS ADMITTED, BY OCCUPATIONS, AND BY MONTHS, JANUARY TO DECEMBER, 1915.

Occupation.	Janu-ary.	Feb-ru-ary.	March.	April.	May.	June.	July.	Aug-ust.	Sept-ember.	Octo-ber.	Nov-ember.	De-cember.
Professional:												
Actors.....	50	33	63	37	43	39	59	140	79	72	49	38
Architects.....	19	17	13	15	11	21	20	19	15	17	18	18
Clergy.....	63	59	64	61	62	71	55	81	127	113	76	33
Editors.....	11	11	8	6	7	8	12	13	17	26	12	14
Electricians.....	34	29	55	29	58	53	43	46	53	39	65	44
Engineers.....	100	94	114	128	138	138	155	123	181	133	184	191
Lawyers.....	15	11	24	19	17	22	37	31	33	17	25	13
Literary and scientific persons.....	17	17	12	16	20	16	23	28	41	18	24	14
Musicians.....	38	33	49	30	60	58	48	45	63	101	112	42
Officials (government).....	45	51	28	34	25	32	48	21	33	22	29	25
Physicians.....	37	21	37	22	30	45	46	36	33	39	16	20
Sculptors and artists.....	29	19	32	16	30	22	19	29	31	39	45	26
Teachers.....	108	93	99	116	115	154	164	173	236	160	125	95
Other.....	198	176	165	160	153	162	138	167	217	223	156	118
Total.....	764	664	763	689	769	841	867	952	1,159	1,019	936	691
Skilled:												
Bakers.....	59	48	76	77	75	75	85	61	53	62	49	51
Barbers and hairdress-ers.....	67	67	58	84	98	72	78	70	80	87	70	67
Blacksmiths.....	49	58	73	97	100	72	71	69	85	80	49	64
Bookbinders.....	6	6	6	8	1	4	5	6	6	8	7	7
Brewers.....	2	3	4	3	2	1	2	1	2	1	3	3
Butchers.....	51	38	30	38	50	63	38	50	49	47	56	44
Cabinetmakers.....	14	16	13	14	21	12	24	31	22	14	23	19
Carpenters and joiners.....	232	231	367	436	488	474	385	437	354	294	318	307
Cigarette makers.....	1	1	4	4	1	3	4	3	1	1	3	2
Cigar makers.....	45	18	22	27	28	26	39	69	55	184	163	34
Cigar packers.....	1	2	2	2	1	2	3	3	2	7	7	7
Clerks and account-ants.....	460	444	488	570	595	674	592	723	788	781	728	521
Dressmakers.....	101	91	102	158	134	127	111	115	164	151	157	88
Engineers (locomotive, marine, and station-ary).....	53	54	62	69	61	66	68	75	48	67	80	68
Furriers and fur work-ers.....	9	9	5	7	14	10	15	12	14	30	22	11
Gardeners.....	26	39	54	55	37	24	24	22	37	30	36	24
Hat and cap makers.....	13	5	10	12	12	5	26	9	11	10	13	10
Iron and steel workers.....	27	43	54	50	72	70	65	76	57	63	65	39
Jewelers.....	6	13	14	18	14	15	19	13	18	15	17	8
Locksmiths.....	2	4	4	9	1	4	1	8	8	8	8	4
Machinists.....	79	89	81	108	105	90	87	116	136	121	166	145
Mariners.....	206	161	195	286	284	303	163	197	172	174	190	181
Masons.....	72	57	99	150	152	162	142	127	114	86	109	68
Mechanics (not speci-fied).....	33	37	39	64	49	82	47	65	36	54	33	41
Metal workers (other than iron, steel, and tin).....	20	15	13	16	23	17	31	41	14	17	24	20
Millers.....	5	4	8	12	8	6	11	7	9	3	10	11
Milliners.....	26	28	24	16	18	30	30	29	43	30	26	24
Miners.....	140	149	170	190	185	225	165	216	204	255	205	163
Painters and glaziers.....	51	55	91	93	78	129	104	82	106	77	93	67
Pattern makers.....	2	1	2	1	3	3	2	3	3	4	1	4
Photographers.....	12	11	14	17	11	9	15	14	19	17	15	14
Plasterers.....	18	17	16	20	29	34	30	37	17	17	23	9
Plumbers.....	14	16	22	26	43	29	28	36	31	25	21	34
Printers.....	26	28	35	27	40	19	40	33	41	38	50	36
Saddle and harness makers.....	2	3	9	2	6	7	12	18	7	9	11	7
Seamstresses.....	69	69	85	103	92	149	140	120	134	123	129	80
Shoemakers.....	68	55	112	130	150	82	113	105	101	71	99	51
Stokers.....	151	42	66	72	97	63	44	44	78	44	58	41
Stonecutters.....	19	26	31	46	39	34	27	27	22	15	15	39
Tailors.....	171	142	183	188	202	172	272	286	236	199	330	185
Tanners and curriers.....	2	3	5	5	4	4	10	7	12	6	5	3
Textile workers (not specified).....	17	11	19	16	11	21	18	20	19	25	22	15
Tinners.....	5	8	8	14	19	13	24	17	9	13	10	16
Tobacco workers.....	2	2	2	4	4	2	3	5	3	6	6	2
Upholsterers.....	6	3	10	4	7	6	5	5	4	6	6	9
Watch and clock makers.....	5	10	14	5	15	8	8	13	12	7	11	7
Weavers and spinners.....	30	48	45	62	52	58	44	40	51	76	74	41

IMMIGRANT ALIENS ADMITTED, BY OCCUPATIONS, AND BY MONTHS, JANUARY TO DECEMBER, 1915—Concluded.

Occupation.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Skilled—Concluded.												
Wheelwrights.....		2	2	3	6		2	2	1	1	2	2
Woodworkers (not specified).....	9	10	8	18	16	11	28	15	17	13	15	10
Other skilled.....	106	137	167	170	206	150	181	206	162	168	206	163
Total.....	2,584	2,420	3,017	3,595	3,769	3,718	3,480	3,750	3,663	3,637	3,839	2,859
Miscellaneous:												
Agents.....	76	76	89	57	90	90	88	62	102	127	133	113
Bankers.....	17	19	10	22	21	20	20	25	11	33	31	20
Draymen, hackmen, and teamsters.....	28	29	38	36	64	39	42	45	35	25	30	23
Farm laborers.....	829	897	1,418	2,533	1,958	1,419	1,137	910	1,023	1,772	1,866	1,221
Farmers.....	379	400	485	551	475	558	383	438	408	445	667	773
Fishermen.....	16	24	112	172	90	46	24	49	39	41	56	55
Hotel keepers.....	24	24	30	25	33	29	24	26	22	15	24	20
Laborers.....	2,148	1,544	3,144	3,860	5,399	4,203	4,315	4,310	4,343	4,564	3,849	3,124
Manufacturers.....	27	31	18	17	20	17	26	11	30	33	29	20
Merchants and dealers.....	548	484	582	551	658	726	707	665	609	689	645	496
Servants.....	1,373	1,319	1,823	2,658	3,207	2,256	1,989	2,027	2,700	3,174	2,591	1,476
Other miscellaneous.....	772	655	680	808	747	848	740	1,102	930	964	886	722
Total.....	6,237	5,502	8,420	11,290	12,792	10,251	9,495	9,670	10,252	11,882	10,778	8,063
No occupations (including women and children).....	5,896	5,287	7,054	8,958	8,739	7,788	7,662	7,577	9,439	8,912	8,992	7,288
Total.....	15,481	13,873	19,263	24,532	26,069	22,598	21,504	21,949	24,513	25,450	24,545	18,901

TRAINING OF IMMIGRANTS FOR CITIZENSHIP.

Recent reports furnished by the Bureau of Naturalization show a very rapid development of its work for the better education of candidates for citizenship, in the principles of American life and government. The need for such work is evident. Each year approximately 100,000 certificates of citizenship are issued. Many of the candidates have only a minimum understanding of the rights and duties attaching to their new status, and, in any case, the great majority would vastly benefit by a more thorough training in these matters.

To some extent the need for such training had been met through the establishment of citizenship classes by public schools, associations, and individuals. These activities, however, covered only a small portion of the field, and, in addition, it developed that a number of them were not in good faith, being simply means for the exploitation of the immigrant.

About a year ago the Bureau of Naturalization, after consultation with various school authorities, worked out a comprehensive plan for the education of candidates for citizenship. Under this plan the bureau arranges to send to the public-school authorities of his community a statement showing the name, address, and nationality of each resident alien who has declared his intention to become a citizen or of each petitioner to be naturalized. At the same time it advises the declarant or petitioner of its action and of the public-school advan-

tages. It then rests with the school authorities to encourage the prospective citizens to enroll in the schools and, if necessary, to establish special courses for their accommodation.

During the fiscal year 1915 the Bureau of Naturalization received approximately 350,000 applications for citizenship. This number includes both declarations of intention and petitions for naturalization, a declarant having to wait two years before petitioning for naturalization. It is estimated that not less than 150,000 of the above applicants had wives, thus making a total of a half million adult alien residents coming within the province of the bureau as prospective citizens of this country.

Out of this number the bureau sent the names of approximately 122,000 to the public schools of the communities where the various applicants resided. The accompanying statement shows the distribution of this number among the States.

The public schools have shown an earnest spirit of cooperation. With the opening of the present scholastic year 50 cities and towns were cooperating. At the end of December this number had grown to 450 and by the end of January, 1916, to 566 cities and towns, representing 44 States. Hundreds of other localities have expressed their interest but have been deterred from cooperation by local conditions which render such work impracticable.

For the use of schools in the conduct of citizenship classes the bureau has published a tentative outline course in citizenship, based largely upon the experience of various schools where this kind of work has been carried on. The outline indicates briefly the more desirable subjects of study for citizenship courses. It emphasizes the teaching of the English language, American history, and the essential principles of American government, but aims also at an elementary general education for those who are in need thereof.

In addition to the class training indicated, the outline also suggests a laboratory method of teaching civics. This method calls for lectures by city officials upon the functions of their respective offices and for the organization of the students into mock governments, with nominations, elections, officers' meetings, etc., for the practical demonstration of governmental organization and purposes. It is also urged that graduates of the schools form alumni classes for continued association and discussion.

The primary purpose of the plan outlined above is to reach those resident aliens who are contemplating becoming citizens. In addition, however, the effort is also being made to reach all foreign-born residents, many of whom have no immediate intention of becoming citizens, but who are living in this country in various degrees of ignorance as to its institutions and political organizations. Also, it has

been found that there is a demand and need for such training even on the part of many native-born persons.

The bureau has planned to hold a convention next July in Washington, D. C., for the discussion of the various questions in regard to citizenship schools and for exhibiting the result of the work of various schools of this character. It is also the desire to develop out of the conference a more complete course of instruction based upon the experience of the several schools.

The table following shows the number of papers filed during the fiscal year 1915 and the number of names sent to school authorities:

NUMBER OF PAPERS FILED DURING FISCAL YEAR 1915, AND NUMBER OF NAMES SENT TO SCHOOL AUTHORITIES.

State.	Foreign-born white population (1910) in—		Papers filed during fiscal year 1915, in—				Number of names sent to school authorities.
	State.	Cities cooperating.	State.		Cities cooperating.		
			Declarations.	Peti-tions.	Declarations.	Peti-tions.	
Alabama.....	18,956	5,700	242	103	145	62	18
Arizona.....	46,824	3,474	1,526	476	491	191	19
Arkansas.....	16,909		150	78			
California.....	517,250	274,457	9,202	4,803	7,400	3,848	4,598
Colorado.....	126,851	47,272	1,825	988	679	328	271
Connecticut.....	328,759	239,203	3,874	1,724	3,874	1,724	1,840
Delaware.....	17,420	13,678	238	94	225	103	124
District of Columbia.....	24,351	24,351	385	225	385	225	299
Florida.....	33,842	12,640	413	197	191	85	95
Georgia.....	15,072	4,410	262	194	91	75	46
Idaho.....	40,427	2,283	956	498	94	21	4
Illinois.....	1,202,560	890,894	24,638	10,732	21,984	9,776	13,994
Indiana.....	159,322	76,317	4,194	936	2,935	559	310
Iowa.....	273,484	52,515	2,780	1,190	882	412	486
Kansas.....	135,190	15,634	1,407	640	417	123	127
Kentucky.....	40,053	17,436	233	155	119	65	88
Louisiana.....	51,782	28,534	462	345	416	294	382
Maine.....	110,133	44,321	892	512	771	400	353
Maryland.....	104,174	77,043	1,171	572	1,049	506	715
Massachusetts.....	1,051,050	920,922	14,697	6,165	14,654	6,155	8,665
Michigan.....	595,524	268,933	10,548	3,140	8,583	2,205	5,929
Minnesota.....	543,010	208,385	7,232	3,404	3,917	2,356	3,099
Mississippi.....	9,389	269	133	82	115	18	260
Missouri.....	228,896	153,561	3,222	1,034	2,864	867	1,077
Montana.....	91,644	2,059	3,334	2,418	74	55	
Nebraska.....	175,865	34,268	2,346	877	1,333	276	397
Nevada.....	17,999		417	155			
New Hampshire.....	96,558	55,700	1,004	350	891	292	267
New Jersey.....	658,188	456,821	10,958	4,805	8,290	3,635	5,279
New Mexico.....	22,654		214	103			
New York.....	2,729,272	2,392,579	80,950	24,880	79,616	24,364	47,328
North Carolina.....	5,942	146	78	53	2	1	95
North Dakota.....	156,158	8,143	2,177	1,394	452	143	95
Ohio.....	597,245	382,375	10,054	4,272	8,903	4,847	5,516
Oklahoma.....	40,084	1,406	346	221	68	46	2
Oregon.....	103,001	47,868	2,191	1,066	1,281	584	627
Pennsylvania.....	1,438,719	732,888	21,952	16,633	19,897	15,655	13,571
Rhode Island.....	178,025	132,464	1,887	816	1,887	816	830
South Carolina.....	6,054	2,850	85	64	72	48	35
South Dakota.....	100,628	4,191	1,532	863	256	87	56
Tennessee.....	18,459	2,993	177	80	30	17	25
Texas.....	239,984	37,549	2,885	716	1,010	287	561
Utah.....	63,393	20,338	878	500	457	260	382
Vermont.....	49,861	5,664	545	308	7		29
Virginia.....	26,628	8,419	841	246	730	181	219
Washington.....	241,197	118,429	4,827	2,289	3,506	1,613	1,437
West Virginia.....	57,072	7,964	820	360	290	146	65
Wisconsin.....	512,569	206,226	5,513	3,963	3,723	2,421	2,414
Wyoming.....	27,118		580	346			
Total.....	13,345,545	8,043,612	247,273	106,065	204,956	86,192	121,750

¹ Estimated.

² Enrolled.

EMPLOYMENT IN SELECTED INDUSTRIES IN JANUARY, 1916.

In continuation of plans outlined in preceding issues of the MONTHLY REVIEW, there are presented in this number data showing the fluctuations in the volume of employment as between January, 1916, and December, 1915, and between January, 1916, and January, 1915, in representative identical establishments in several of the principal manufacturing industries of the United States.

In the first table presented below, a comparison is made between the number of employees and total pay rolls in December, 1915, and January, 1916.

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS IN DECEMBER, 1915, AND JANUARY, 1916.

Industry.	Estab-lishments to which in-quiries were sent.	Estab-lishments reporting for Decem-ber and Janu-ary.	Period of pay roll.	Employees.			Earnings.		
				Number on pay roll in—		Per cent of increase (+) or decrease (-).	Amount of pay roll in—		Per cent of increase (+) or decrease (-).
				Decem-ber, 1915.	Janu-ary, 1916.		Decem-ber, 1915.	Janu-ary, 1916.	
Boots and shoes.....	85	63	1 week..	50,016	51,606	+3.2	\$641,191	\$654,732	+2.1
Cotton manufacturing..	92	56	...do....	43,702	42,370	-3.0	354,032	360,116	+1.7
Cotton finishing.....	19	16	...do....	12,051	11,937	- .9	135,300	132,315	-2.2
Hosiery and underwear	82	46	...do....	24,321	24,573	+1.0	227,935	224,935	-1.3
Iron and steel.....	139	93	½ month.	142,509	144,704	+1.5	4,843,420	4,560,916	-5.8
Silk.....	61	31	2 weeks.	14,789	15,211	+2.9	314,693	305,164	-3.0
Woolen.....	47	14	1 week..	9,398	9,769	+3.9	97,589	103,883	+6.4

Returns for January compared with December show an increase in the number of employees in five of the seven industries covered, the greatest increase being 3.9 per cent in the manufacture of woolen goods. Two industries show a decrease, the decrease in cotton manufacturing being 3 per cent. In earnings, however, four of the seven industries showed a decrease in January as compared with December.

In the table following, a comparison is made between figures for January, 1916, and January, 1915:

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS IN JANUARY, 1915, AND JANUARY, 1916.

Industry.	Estab-lishments to which in-quiries were sent.	Estab-lishments report- ing for Jan-uary both years.	Period of pay roll.	Employees.			Earnings.		
				Number on pay roll in—		Per cent of in-crease (+) or de-crease (-).	Amount of pay roll in—		Per cent of in-crease (+) or de-crease (-).
				Jan-uary, 1915.	Jan-uary, 1916.		January, 1915.	January, 1916.	
Boots and shoes.....	85	69	1 week..	56,929	65,097	+14.3	690,080	859,181	+24.5
Cotton manufacturing.....	92	63	..do....	59,694	58,847	- 1.4	496,349	504,515	+ 1.6
Cotton finishing.....	19	18	..do....	12,597	14,853	+17.9	132,768	164,249	+23.7
Hosiery and under- wear.....	82	56	..do....	27,467	31,526	+14.8	217,736	286,756	+31.7
Iron and steel.....	139	86	½ month.	100,792	135,831	+34.8	2,625,977	4,257,314	+62.1
Silk.....	61	42	2 weeks.	17,033	18,642	+ 9.4	306,260	367,560	+20.0
Woolen.....	47	21	1 week..	17,057	19,462	+14.1	165,421	204,400	+23.6

Each industry, except cotton manufacturing, shows an increase in the number of employees in January, 1916, as compared with January, 1915, the greatest increase being in the manufacture of iron and steel, where the increase was 34.8 per cent. In earnings, all industries covered showed an increase ranging from 1.6 per cent for cotton manufacturing to 62.1 per cent for iron and steel. As a whole the increase in earnings between January, 1916, and January, 1915, was not quite as great as between December, 1915, and December, 1914, as shown in the February REVIEW.

In addition to the data presented in the above tables for number of employees on the pay roll, 83 plants in the iron and steel industry returned 118,549 employees as actually working on the last full day of the pay period reported for in January, 1916, as against 85,730 for the reported pay-roll period in January, 1915, an increase of 38.3 per cent. Figures given by 91 establishments in the iron and steel industry for December, 1915, and January, 1916, show that 130,345 employees were actually working on the last full day of the pay period reported for in December, 1915, as against 127,323 for the reported period in January, 1916, a decrease of 2.3 per cent.

Returns from manufacturers for February have been much more satisfactory than for January. In December, 56 per cent of the establishments responded to the request for information, while in January 68 per cent of the establishments addressed furnished the desired information. This increase in cooperation is appreciated by the Bureau. It is the purpose of the Bureau to make this monthly compilation of service to the manufacturers of the country and it is hoped that there will be even a better response to inquiries sent out for February figures.

EMPLOYMENT IN THE STATE OF NEW YORK IN JANUARY, 1916.

An arrangement has just been completed between the United States Bureau of Labor Statistics and the Bureau of Statistics and Information of the New York Industrial Commission whereby certain manufacturers in the State of New York, who were being asked to supply the same information concerning the amount of employment to both offices in separate reports, will be relieved of such duplicate reporting. Under this arrangement, reports will be made only to the New York bureau, which will then furnish copies to the Federal bureau.

Forty-nine of the larger manufacturing firms of the State will be affected by this action. The principle involved is, however, more important than the number of firms affected in this particular case. It represents a move in the direction of coordination of Federal and State activity when applied in the same field and on the same subject, and the necessity of such coordination, for the sake both of economy and efficiency in Government work and of avoiding unnecessary burdens upon industry, is daily becoming clearer. It may be added that appreciative recognition of the desirability of the plan from the employers' point of view has been voiced by several of the firms affected in replies to a general letter from the New York bureau asking authorization to furnish copies of reports to the Federal bureau.

According to the New York bureau:

The remarkable gain in activity among the manufacturing industries of the State, which was the result of improvement all summer and fall and into December, was held from December to January, the volume of business in January standing practically the same as December. January pay rolls, however, carried 18 per cent more employees and 28 per cent more wages than the pay rolls of one year ago, and this comparison with last year is slightly more favorable than a similar comparison between December of 1915 and December of 1914.

The January pay rolls in the metal working and machinery group were about 2½ per cent larger than those of December; total wages paid in January were 52 per cent greater than a year ago. Within the metal working and machinery group the most striking improvement between December and January was recorded by concerns fabricating structural and architectural iron work; the greatest loss was recorded in the gold, silver, and precious stones industry. In comparison with January of 1915, the most marked improvement was shown by rolling mills, by manufacturers of automobiles and automobile parts, by concerns manufacturing cutlery, tools, and firearms, by shipbuilding concerns and by general machinery manufacturers.

The chemicals, oils, and paints group likewise improved from December to January, the January pay roll carrying 3 per cent more wages and 1 per cent more employees than the December pay roll. Marked increase in activity between December and January was recorded by the paper-making industry, in which the January pay rolls were about 2½ per cent larger than in December. In January this industry was doing

a considerably larger volume of business than last year. Printing and paper making, on the other hand, lost some ground between December and January, but the volume of business is greater than one year ago. The loss was greatest among paper box and tube manufacturers. The textile group employed a larger force and paid more in wages in January than in December. Despite this fact, however, a comparison with conditions a year ago was no more favorable in January than in December. The clothing and millinery group showed marked increase in volume of business between December and January. Inasmuch as this improvement was quite largely seasonal, the industry as a whole compared somewhat less favorably with last year than it did in December or November. The improvement was mostly among concerns manufacturing women's clothing and millinery. The women's clothing industry in January paid 18 per cent more in wages and employed 9 per cent more hands than last year.

The wood manufactures group was slightly less active in January than in December, but in comparison with a year ago this industry group is paying 23 per cent more in wages and employing 13 per cent more men, a far more favorable comparison than was shown in December. The furs, leather, and rubber goods group was slightly less active in January than in December, but the volume of business is a third greater than last year. The food, liquors, and tobacco group was decidedly less active in January than in December, the loss being well distributed among all industries within this group. The greatest decrease, recorded by the confectionery industry, was seasonal. This industry, however, is more active than one year ago. The cigar and tobacco industry, although somewhat less active in January than in December, and although employing a smaller force than one year ago, paid in January 18 per cent more wages than in January, 1915, indicating a resumption of full-time schedules. The stone, clay, and glass group lost markedly between December and January, this loss being shared by all the industries within the group. Despite these losses, however, the group as a whole is doing 14 per cent more business than a year ago. The increase in volume of business over January of 1915 was greatest in the brick and pottery industry.

WORK OF STATE AND MUNICIPAL EMPLOYMENT BUREAUS.

In the January, 1916, issue of the REVIEW the Bureau began the publication of reports of the operation of State and municipal employment bureaus in the different States. Publication of information of this character was continued in the February number, and returns from State employment bureaus in 11 States and municipal employment bureaus in 7 States were presented. In this issue of the REVIEW will be found data from State employment bureaus in 12 States and municipal employment bureaus in 8 States. Reports are given for December, 1914, and December, 1915, from bureaus not included in the preceding publication which have reported those data since the publication of the February issue of the REVIEW, and for January, 1916, for all bureaus rendering reports for that month. Figures for January, 1915, from such bureaus as have furnished that information are also presented for comparative purposes.

16 MONTHLY REVIEW OF THE BUREAU OF LABOR STATISTICS.

OPERATIONS OF FREE PUBLIC EMPLOYMENT OFFICES, DECEMBER, 1914 AND 1915,
AND JANUARY, 1915 AND 1916.

State and city.	Number of applications from employers.	Number of persons asked for by employers.	Number applying for work.		Number referred to positions.	Number of positions filled.
			New registrations.	Renewals.		
<i>California (State).</i>						
Los Angeles: January, 1916.....	(1)	3,261	(1)	(1)	3,315	2,856
<i>Colorado (State).</i>						
Colorado Springs:						
January, 1915.....	(1)	231	(1)	(1)	(1)	233
January, 1916.....	(1)	456	(1)	(1)	(1)	399
Denver, No. 1:						
January, 1915.....	(1)	199	(1)	(1)	(1)	174
January, 1916.....	(1)	138	(1)	(1)	(1)	100
Denver, No. 2:						
January, 1915.....	(1)	491	(1)	(1)	(1)	474
January, 1916.....	(1)	120	(1)	(1)	(1)	103
Pueblo:						
January, 1915.....	(1)	245	(1)	(1)	(1)	245
January, 1916.....	(1)	117	(1)	(1)	(1)	112
<i>Illinois (municipal).</i>						
Chicago: January, 1916.....	20	97	(1)	(1)	97	67
<i>Illinois (State).</i>						
Chicago:						
December, 1914.....	(1)	898	2,305	(1)	(1)	648
December, 1915.....	(1)	3,648	4,471	(1)	(1)	3,353
<i>Indiana (State).</i>						
Evansville:						
December, 1914.....	(1)	146	(1)	(1)	155	141
December, 1915.....	(1)	173	(1)	(1)	185	173
January, 1915.....	(1)	80	(1)	(1)	85	80
January, 1916.....	(1)	135	(1)	(1)	135	117
Fort Wayne:						
December, 1914.....	(1)	179	(1)	(1)	175	169
December, 1915.....	(1)	201	(1)	(1)	195	193
January, 1915.....	(1)	121	(1)	(1)	112	196
January, 1916.....	(1)	113	(1)	(1)	113	112
Indianapolis:						
December, 1914.....	(1)	103	(1)	(1)	115	95
December, 1915.....	(1)	274	(1)	(1)	270	240
January, 1915.....	(1)	87	(1)	(1)	91	74
January, 1916.....	(1)	175	(1)	(1)	184	158
South Bend:						
December, 1914.....	(1)	132	(1)	(1)	145	120
December, 1915.....	(1)	246	(1)	(1)	240	225
January, 1915.....	(1)	120	(1)	(1)	118	106
January, 1916.....	(1)	310	(1)	(1)	300	269
Terre Haute:						
December, 1914.....	(1)	324	(1)	(1)	335	318
December, 1915.....	(1)	388	(1)	(1)	368	338
January, 1915.....	(1)	183	(1)	(1)	178	166
<i>Kansas (State).</i>						
Topeka:						
January, 1915.....	15	15	60	5	20	13
January, 1916.....	8	8	48		12	8
<i>Kentucky (municipal).</i>						
Louisville: January, 1916.....	(1)	164	460	825	149	109
<i>Massachusetts (State).</i>						
Boston:						
January, 1915.....	701	809	2,429	(1)	³ 1,332	683
January, 1916.....	1,560	1,832	² 1,089	(1)	³ 3,128	1,430

¹ Not reported.

² Number who were registered.

³ Number of offers of positions.

MONTHLY REVIEW OF THE BUREAU OF LABOR STATISTICS. 17

 OPERATIONS OF FREE PUBLIC EMPLOYMENT OFFICES, DECEMBER, 1914 AND 1915,
 AND JANUARY, 1915 AND 1916—Continued.

State and city.	Number of applications from employers.	Number of persons asked for by employers.	Number applying for work.		Number referred to positions.	Number of positions filled.
			New registrations.	Renewals.		
<i>Massachusetts (State)—Concluded.</i>						
Fall River:						
January, 1915.....	78	78	1 11	(²)	³ 78	67
January, 1916.....	135	143	1 27	(²)	³ 134	111
Springfield:						
January, 1915.....	251	277	1 116	(²)	³ 353	209
January, 1916.....	592	821	1 335	(²)	³ 1,099	683
Worcester:						
January, 1915.....	226	304	1 543	(²)	³ 516	233
January, 1916.....	793	1,041	1 686	(²)	³ 1,356	692
<i>Michigan (State).</i>						
Jackson: January, 1916.....	406	500	128	9	461	461
Saginaw:						
January, 1915.....	1,076	1,076	(²)	(²)	(²)	535
January, 1916.....	572	572	(²)	(²)	(²)	572
<i>Montana (municipal).</i>						
Butte:						
December, 1914.....	158	158	(²)	(²)	146	146
December, 1915.....	405	405	(²)	(²)	330	330
<i>New York (municipal).</i>						
New York City:						
December, 1915.....	748	903	(²)	(²)	1,577	757
January, 1915.....	367	527	6,012	(²)	1,030	404
January, 1916.....	1,510	1,592	1,999	(²)	2,234	⁴ 1,283
<i>New York (State).</i>						
Albany: January, 1916.....	294	422	612	280	614	304
Buffalo: January, 1916.....	568	778	754	333	829	531
New York City (Brooklyn): January, 1916.....	886	1,489	1,530	564	1,683	828
Rochester: January, 1916.....	622	954	692	282	990	541
Syracuse: January, 1916.....	467	594	569	155	585	478
<i>Ohio (State-city).</i>						
Akron: January, 1916.....	(³)	1,481	949	1,767	1,276	938
Cincinnati:						
January, 1915.....	(²)	3,347	3,739	9,532	3,315	3,101
January, 1916.....	(²)	1,289	1,797	4,500	1,262	887
Cleveland:						
January, 1915.....	(²)	4,549	8,587	12,064	4,536	3,922
January, 1916.....	(²)	5,493	2,026	7,828	4,202	3,339
Columbus:						
January, 1915.....	(²)	738	1,249	3,854	680	614
January, 1916.....	(²)	1,457	743	2,629	1,371	1,147
Dayton:						
January, 1915.....	(²)	460	501	1,887	405	329
January, 1916.....	(²)	992	825	1,422	779	730
Toledo:						
January, 1915.....	(²)	374	832	748	359	336
January, 1916.....	(²)	1,786	1,252	2,350	1,602	1,199
Youngstown: January, 1916.....	(²)	1,073	663	1,041	984	756
<i>Oklahoma (State).</i>						
Enid:						
January, 1915.....	42	(²)	(²)	(²)	(²)	39
January, 1916.....	61	(²)	(²)	(²)	(²)	58
Muskogee:						
January, 1915.....	83	(²)	(²)	(²)	(²)	91
January, 1916.....	229	(²)	(²)	(²)	(²)	212
Oklahoma City:						
January, 1915.....	62	(²)	(²)	(²)	(²)	38
January, 1916.....	203	(²)	(²)	(²)	(²)	158
Tulsa: January, 1916.....	313	(²)	(²)	(²)	(²)	261

¹ Number who were registered.

² Not reported.

³ Number of offers of positions.

⁴ Includes day labor.

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OPERATIONS OF FREE PUBLIC EMPLOYMENT OFFICES, DECEMBER, 1914 AND 1915, AND JANUARY, 1915 AND 1916—Concluded.

State and city.	Number of applications from employers.	Number of persons asked for by employers.	Number applying for work.		Number referred to positions.	Number of positions filled.
			New registrations.	Renewals.		
<i>Pennsylvania (State).</i>						
Harrisburg: January, 1916.....	43	372	188	21	137	64
Johnstown: January, 1916.....	30	40	102	2	68	33
Philadelphia: January, 1916.....	110	481	1,277	190	466	267
<i>Rhode Island (State).</i>						
Providence:						
January, 1915.....	313	498	1,704	184	473	478
January, 1916.....	209	274	163	116	211	211
<i>Texas (municipal).</i>						
Dallas:						
January, 1915.....	60	92	261	99	108	92
January, 1916.....	106	167	102	11	160	145
Fort Worth:						
January, 1915.....	102	151	(1)	(1)	160	145
January, 1916.....	106	158	(1)	(1)	160	155
<i>Virginia (municipal).</i>						
Richmond: January, 1916.....	228	364	686	(1)	393	157
<i>Washington (municipal).</i>						
Spokane: January, 1916.....	436	709	349	54	695	689
Tacoma:						
December, 1914.....	494	545	(1)	(1)	548	545
December, 1915.....	256	330	(1)	(1)	334	330
<i>Wisconsin (State).</i>						
La Crosse:						
December, 1914.....	144	314	(1)	(1)	266	164
December, 1915.....	112	158	(1)	(1)	149	76
January, 1915.....	56	125	(1)	(1)	118	49
January, 1916.....	115	179	(1)	(1)	172	94
Milwaukee:						
December, 1914.....	756	1,230	(1)	(1)	1,329	989
December, 1915.....	1,158	2,006	(1)	(1)	1,986	1,712
January, 1915.....	652	1,288	(1)	(1)	1,071	992
January, 1916.....	1,231	2,807	(1)	(1)	2,535	1,917
Oshkosh:						
December, 1914.....	94	105	(1)	(1)	101	87
December, 1915.....	92	113	(1)	(1)	108	99
January, 1915.....	80	103	(1)	(1)	120	86
January, 1916.....	115	130	(1)	(1)	108	78
Superior:						
December, 1914.....	195	355	(1)	(1)	375	216
December, 1915.....	241	283	(1)	(1)	346	279
January, 1915.....	180	443	(1)	(1)	522	260
January, 1916.....	262	927	(1)	(1)	782	567

¹ Not reported.

UNEMPLOYMENT AMONG WOMEN IN RETAIL STORES OF BOSTON.

The extent and causes of unemployment among women in department and other retail stores of Boston and its relation to the rates of pay is the subject of Bulletin No. 182, issued by the Bureau of Labor Statistics of the United States Department of Labor. The study was undertaken in cooperation with the Massachusetts Minimum Wage Commission, which published in 1915 a report of the wages of

women in mercantile establishments in Boston and other Massachusetts cities, to serve as a basis in fixing a minimum wage.

Pay-roll data for a year were available for 15 department and other retail stores in Boston. Agents of the Bureau of Labor Statistics visited the homes of 1,763 of the women employed in these stores, and interviewed personally the women themselves or members of their immediate families. Information was secured concerning the kind of work done by these employees, the number of different positions held, the actual earnings for the year, the amount of time lost and the causes to which these losses were due. In addition, facts were secured bearing on the degree to which the employee depended on her own earnings, the degree to which her family depended on her help, and similar questions.

A striking feature brought out by the report is the numerical importance in department stores of the extra, i. e., the woman or girl who is employed only for special occasions. These extras may be employed for a rush season and at Christmas and Easter or for a special sale or for a single day or evening. Some stores regularly engage extras for one day of the week and the same woman may serve as an extra in several stores during the same week. The 15 stores covered by the investigation had on their pay rolls for the year studied 5,985 regular employees and about 5,600 extras; that is, extras formed 48 per cent of the total number employed. Of the 1,763 women studied in this investigation 1,156, or 65.6 per cent, were regular employees, 346, or 19.6 per cent, were employed as extras, but for part of the year had also some employment as regulars, and 261, or 14.8 per cent, had no employment at all during the year except as extras. These extras were mostly school girls who worked on Saturdays, or married women with some time to spare, or single women who did not depend entirely on their earnings.

The 1,156 women and girls employed as regulars only worked almost exclusively in retail stores. Only 92, or 8 per cent, reported some employment in other industries and this employment was trivial in extent. The amount of time lost while in the employ of stores was studied in detail. For the whole group an average of 2.4 weeks was lost either before entering or after leaving industrial pursuits; 2.4 weeks were lost while the worker was without a job; 3.9 weeks while the worker was in the employ of retail stores, and one-tenth of one week while in other employment. This gives 6.4 weeks out of 49.6 weeks of possible employment, lost either because the worker could not find a job or because she was not steadily employed while holding a job. The amount of time lost differs according to the occupation. Saleswomen lost 6.7 weeks; cashiers, messengers, etc.,

6 weeks; office employees, 3.3 weeks; workroom employees, 10.6 weeks; stock girls, 6.6 weeks; others, 5.8 weeks. For the whole group there were 43.2 weeks of employment during the year, but this was scattered throughout a period of 47.2 weeks during which the workers were nominally employed. These facts are shown somewhat more in detail in the table which follows:

AVERAGE WEEKS OF UNEMPLOYMENT REPORTED BY WOMEN AND GIRLS EMPLOYED AS REGULARS ONLY, BY OCCUPATIONS.

[Occupations shown in this table refer to work in stores only; the occupations while employed in other industries are not given. All who lost less than 6 days have been excluded from this table. Lost time for which the firm paid wages has not been included as unemployment.]

Items.	Sales-women.	Cashiers, examiners, etc.	Office employees.	Work-room employees.	Stock girls.	Others.	Total.
Number reporting	601	252	167	76	25	35	1,156
Per cent in each occupation	52.0	21.8	14.4	6.6	2.2	3.0	100.0
Weeks not in industrial pursuits:							
Before first employment .....	.3	6.3	1.9	.2	4.9	.....	1.9
After leaving industrial pursuits .....	.7	.2	.1	.1	.....	.....	.5
Total	1.0	6.5	2.0	.3	4.9	.....	2.4
Weeks of possible employment during year	51.0	45.5	50.0	51.7	47.1	52.0	49.6
Weeks in employ of—							
Stores	47.2	39.8	48.7	47.6	40.4	45.8	45.6
Other industries	1.3	2.6	.9	1.0	4.0	2.8	1.6
Total	48.5	42.4	49.6	48.6	44.4	48.6	47.2
Weeks of unemployment during period of possible employment:							
While without a job	2.5	3.0	.4	3.1	2.7	3.4	2.4
While in employ of stores	4.2	2.8	2.9	7.5	3.9	2.4	3.9
While in employ of other industries	(¹)	.2	(¹)	(¹)	(¹)	(¹)	.1
Total	6.7	6.0	3.3	10.6	6.6	5.8	6.4
Per cent of unemployment in period of possible employment	13.1	13.2	6.6	20.5	14.0	11.2	12.9
Full weeks actually worked (weeks of possible employment less weeks of unemployment) ..	44.3	39.5	46.7	41.1	40.5	46.2	43.2

¹ Less than one-tenth of 1 week.

The most important single cause of lost time is sickness, which accounted for 30.2 per cent. Next comes enforced lay-offs, accounting for 16.1 per cent. Closely connected with this last cause is the unpaid vacation, accounting for 13.1 per cent, of which it is very difficult to say whether the employee could have avoided taking it if she had wished. These two together accounted for a trifle more of the lost time than was due to illness. Inability to get work was responsible for 15.8 per cent of the time lost, sickness in the employee's family for 10.6 per cent, home responsibilities for 7.4 per cent, and other causes for 6.8 per cent. Distinctly personal reasons, it appears, accounted for 48.2 per cent of the lost time. If the unpaid vacation be counted as a matter of necessity 45 per cent was

due to economic or business reasons, while 6.8 per cent was due to unclassified causes.

Very little time was lost through changing positions. Of the 1,156 women studied 90.2 per cent worked only in one place during the year under investigation, 8.3 per cent worked in only two retail establishments, and less than 2 per cent were employed in three or more stores.

Earnings were affected by the amount of time lost. For 1,152 women and girls the entire earnings for the year were ascertained. These showed an average of \$316.77 earned in retail stores during the year. Eighty-eight of these employees also worked in other industries, earning therein an average of \$118.75 during the year. The average amount earned both in stores and in other industries is \$325.84, or a weekly average of \$7.54 for the 43.2 full weeks actually worked, and an average of \$6.57 for the 49.6 weeks of possible employment which, in addition to the time actually worked, includes all time lost, both voluntarily and involuntarily, amounting to 6.4 weeks.

For the saleswomen, who equal about half of those reporting earnings, the average amount earned in stores was \$370.27, and for the 31 who also worked in other industries the average amount earned therein was \$151.97. The average yearly earnings both in stores and in other industries was \$378.16, and the weekly average for the 44.3 weeks actually worked was \$8.54. The average for the 51 weeks of possible employment was \$7.41 per week for this occupation.

The workers included among these regulars were for the most part young; 43.7 per cent were under 21 and only 23 per cent were over 30. Only 9.9 per cent were, or had been, married, and only 11.4 per cent were living independently. The remainder lived either with their parents or some other relative. The majority, however, were depending upon themselves for support. Nine and three-tenths per cent had absolutely no one on whom they could call for help in case of need. Eighty-four and four-tenths per cent supported themselves entirely, although in case of an emergency their families could and undoubtedly would have given help; 5.2 per cent depended mainly on themselves and only 13, or 1.1 per cent, were not dependent for necessities on their own earnings. A number of the workers studied were not only wholly dependent but contributed largely to the support of their respective families. In 85 per cent of the cases studied the family would have found it necessary to lower its standard of living if the woman did not contribute, while in practically two-fifths of the cases from one-fourth to the whole of the family income was derived from the woman studied.

IRREGULARITY OF EMPLOYMENT.

The results of three separate inquiries into the problem of unemployment and the regularity of employment have recently appeared and are of interest by reason of the similarity of their conclusions concerning the extent of unemployment and the existence of irregular employment in certain industries. The first report is that made by the American Association for Labor Legislation, in cooperation with the Association on Unemployment, upon conditions during the winter of 1914-15. The second study was made under the direction of the department of public works of Philadelphia, and concerned itself with an investigation of unemployment in the textile industry in Philadelphia, particularly in relation to the problem of industrial management. The third is a study of the regularity of employment in the women's ready-to-wear garment industry by the Bureau of Labor Statistics.

IRREGULARITY OF EMPLOYMENT IN WOMEN'S GARMENT INDUSTRIES.¹

In spite of the great advances made in late years in the women's garment industries in the elimination of excessive overtime, the shortening of the regular hours of labor, and the raising of rates of wages, the problem of irregularity of employment at the present time seems to be quite as acute as ever. Shorter hours, better treatment, and better weekly pay have not been accompanied by a lengthening of the working season. A study of the extent and causes of irregularity of employment and of the attempts to regularize employment is published by the United States Bureau of Labor Statistics of the Department of Labor as its Bulletin No. 183.

The bureau's study is based upon data secured from employers' pay rolls showing the actual amount of wages paid from week to week for a period of 52 consecutive weeks. The study covered four out of the five so-called centers of manufacture of women's ready-to-wear garments, the cities of New York, Chicago, Cleveland, and Boston, the field thus covered embracing approximately 76 per cent of the industry of the country. In these four cities pay-roll data were secured from more than 500 establishments, representing approximately 150,000 workers and 17 groups of manufacturers.

Seasonal fluctuations of employment are shown throughout this report in terms of percentages of the average weekly pay roll. To obtain this the annual total of the pay roll of a single establishment or of an entire group was divided by 52 in order to obtain the pay roll of the average week, which was then taken as the unit of measure-

¹ Regularity of employment in the women's ready-to-wear garment industries. Washington, 1916. 155 pp. (Bulletin of the United States Bureau of Labor Statistics. Whole number 183.)

ment—100 per cent—and specific amounts indicating expenditures for all productive labor for individual pay-roll weeks were then reduced to a percentage of this unit.

IRREGULARITY OF EMPLOYMENT IN WOMEN'S READY-TO-WEAR GARMENT INDUSTRIES OF NEW YORK, AS MEASURED BY THREE DIFFERENT STANDARDS.

Industry.	Variation for year.			Number of weeks in which pay roll varied by at least 20 points from average.			Number of weeks in which a variation of at least 20 points occurred.
	Low point.	High point.	Range.	Below.	Above.	Total.	
Cloaks, suits, and skirts.....	43.2	164.4	121.2	19	19	38	8
Dresses and waists.....	52.6	137.2	84.6	8	9	17	2
Women's muslin underwear.....	70.9	119.8	48.9	3	.....	3	3
Children's and misses' dresses.....	53.7	127.3	73.6	6	7	13	3
House dresses and kimonos.....	45.3	139.9	94.6	7	13	20	5
Custom tailoring.....	12.3	195.5	183.2	23	20	43	10

It is evident that the relative irregularity of a given trade differs considerably according to the particular measure applied. Thus the manufacture of dresses and waists, which stands fourth in range of variation, stands sixth in number of sudden and violent fluctuations. Arranging the six industries, therefore, in the order of their irregularity by each standard, and averaging their numerical positions in each of these three categories, the following grouping is obtained, which probably represents, as nearly as can be ascertained from the data available, their comparative irregularity, beginning with the most irregular: (1) Custom tailoring; (2) cloaks, suits, and skirts; (3) house dresses and kimonos; (4) dresses and waists; (5) children's and misses' dresses; (6) women's muslin underwear.

Unemployment, on account of its chronic recurrence, has particularly serious consequences in the women's garment industries. In one of the industries where a special study was made it was found that one-tenth of the employees had work for less than 10 weeks, and less than one-fifth of those actually employed in the course of a year had work for as much as 40 weeks. In the cloak, suit, and skirt industry the report shows pay rolls in the dullest week amounting to less than one-half those of the average week and only a little more than one-quarter those of the busiest week. In the dress and waist industry pay rolls in the dullest week were found to be only a little over one-half those in the average week and only a little over one-third of those in the busiest week. With slight modifications similar fluctuations of employment were found in the other branches of the women's garment industries.

In spite of this extreme irregularity the matter of regularization of employment has so far received but scant attention from manufacturers or their organizations. Many individual employers, when first interviewed, were apparently unaware of the extreme irregularity of their pay rolls and stated that for the most part their business showed very little irregularity in the course of a year and that, generally speaking, employment in the garment trades is as regular as it could possibly be under the existing circumstances.

The matter of regularization of employment in these trades is of vital importance to the manufacturer as well as to the employees. The more regular the business the better the distribution of the overhead expense, an item amounting generally to not less than 10 per cent of the total sales. Seasonality of employment also means that wages in many instances during the height of the season must be high enough to support workers in comparative idleness during slack periods, a decided factor in increasing the cost of production and the price at which the goods must be sold.

There are, in general, two periods of the intense activity in the women's garment trades—one in the fall and one in the spring—due almost entirely to the changes in weather conditions, during which time the making up of heavy fabrics is undertaken for cold weather and of lightweight fabrics for summer wear. Specific degrees of variation in employment can be traced to various causes, changes in weather conditions primarily and, secondly, to changes in styles, the degree of specialization, scale of production, the method of production, and quality of the goods.

That considerable relief from the unemployment prevailing in these trades can be secured by the systematic dovetailing of occupations in some of the allied branches of the trades is evidenced by the experience of a number of manufacturers found in the course of this investigation. Dovetailing, as it was found in these establishments, consisted in utilizing the employees during the dull seasons of the year for the manufacture of garments of a simpler variety than the line ordinarily produced, such that a garment worker of average experience could easily adjust himself at short notice, or garments such that the manufacture in considerable quantities was possible regardless of seasonal demands—that is, in advance of sales.

One of the primary obstacles to dovetailing is the qualifications called for in skilled trades. The manufacturers also are somewhat reluctant to attempt it, firmly believing in specialization as the only method of achieving success in their business and sometimes knowing relatively little about materials, styles, marketing, or method of manufacture in other lines. The workers also are in some cases

opposed to it, hesitating to accept the relatively smaller rates of pay that usually prevail in trades where simpler garments are manufactured.

It was suggested by some employers that dovetailing could probably be materially assisted by industrial training of a general or technical character, which would increase the adaptability of the worker.

SURVEY OF THE AMERICAN ASSOCIATION FOR LABOR LEGISLATION.¹

The American Association for Labor Legislation based its report on information received from over 300 workers against unemployment in 115 different communities in the United States. Its information came from chambers of commerce, members of unemployment committees, police departments, and public officials. An unusual amount of idleness was indicated during the winter of 1914-15. Thirty-six charitable organizations in 29 cities reported that during the six months ended April 1, 1915, in 29,039, or 48 per cent of the family cases, the chief wage earner, though willing and able to work, was unemployed at the time the application for relief was made. "The average number of men looking for jobs," said the chairman of the Boston Overseers of the Poor, "has increased over 100 per cent and the jobs for these men have decreased about 50 per cent. The figures are even greater in some cases." This is paralleled by testimony from public employment exchanges and by returns from trade-unions in New York City, Washington, D. C.; Birmingham, Ala.; Dayton, Ohio; Louisville, Ky.; and St. Louis, Mo., as well as by an unemployment police census of Providence, R. I., and by a canvass of industrial policyholders made by the Metropolitan Life Insurance Co. for the Bureau of Labor Statistics in 15 manufacturing centers of the United States.

The report notes an awakening of public interest in the question of unemployment as having taken place throughout the country. The public interest was, however, handicapped, it is stated, by the failure to differentiate between the unemployable and the unemployed, resulting in an inadequate provision being made for the former class, and a considerable diversion to the unemployable of funds intended to help the unemployed. The unemployed were aided through industrial training in several different ways in a number of communities, a form of aid to be encouraged as tending to make a period of unemployment a time of benefit instead of loss. The unemployment situation in 1914-15 emphasized the necessity of establishing a nation-wide system of public employment exchanges,

¹ Unemployment Survey, 1914-15. New York, 1915. (American Labor Legislation Review, November, 1915, pp. 475-595.)

and it is seen that the increase of cooperation between public employment agencies, between city, State, and Nation in the management of local exchanges, and between citizens and exchanges to increase their usefulness, is a step in that direction. Legislation in the various States, during the winter, showed that the unemployment crisis was reflected in the passage of progressive laws.

The report emphasized particularly the significance of provision for public works in times of unemployment as a relief for the situation. It was noted in that connection that the greatest obstacle in the starting of public works was the failure to make plans for their conduct until the emergency was at hand.

As a result of the survey here reported there is recommended: (1) Organization in different municipalities of equipartisan committees on unemployment for coordinating the work of existing agencies. (2) Education of the citizen as to his civic and industrial responsibility for unemployment. (3) Provision for emergency relief, preferably in the way of odd jobs or regular work. (4) Separation of the unemployable and the unemployed, that different treatment may be given each class. (5) Industrial training classes with scholarships for unemployed workers. (6) Establishment of employment exchanges properly managed, with the ultimate view of developing a national system of employment exchanges. (7) Provision of public work consisting not of unnecessary work but of needed public improvement so adjusted as to allow the concentration in dull years and seasons. Laws restricting cities to contract work should be repealed. (8) Regularization of industries, suggesting the use of regular employees in times of depression in making repairs and improving the plant, and the policy of part-time employment rather than the reduction in numbers. (9) Unemployment insurance, which should be compulsory and supported by contributions from employers, employees, and the State, "as the most just and economical method for the proper maintenance of the necessary labor reserves and as supplying the financial pressure needed to secure the widespread regularization of industry."

THE UNEMPLOYED IN PHILADELPHIA.¹

The existence of unemployment in Philadelphia in good times as well as in bad times may be set down as clearly indicated by the investigation made by the department of public works in Philadelphia during the winter of 1914, under the direction of its special investigator:

¹ Philadelphia unemployment, with special reference to the textile industries: A report by Joseph H. Willits. Department of Public Works. Philadelphia, [1915]. 170 pp.

The textile industry and the clothing industry reveal chronic unemployment at its worst. It is very doubtful whether the lace weavers of Philadelphia have averaged more than three-fifths time in the last five years. One large carpet mill, selected to be as nearly representative as possible, has never failed to lose 20 per cent of its time any year in the last four years. The manufacturers of dress goods frequently do not make over three-fourths of the year's normal working time. The women's cloak and garment factories ordinarily run at 20 per cent of capacity, for four months of each year. One large railway-equipment plant has not averaged over 50 per cent capacity in the last five years. It is estimated that dock hands, on the average, do not work over two days a week. Every winter thousands of Italians return to Philadelphia from the truck farms in South Jersey and render the city's unemployment problem more acute.

The problem of unemployment, according to this report, interests every industrial center, because it menaces its leadership in competition with other rival centers; it is of concern to the workers because it tends to their degeneracy in skill, industry, thrift, standards of living, and public morality; and the industrial welfare of employers is eventually endangered.

The problem is one of industry and can be most effectively handled by the employers themselves, though a partial duty rests upon consumers who can contribute regularity in employment by refusing to follow extreme styles.

The report concludes that unemployment primarily can be reduced very greatly by the employer, and cites in support of its conclusion the practice of the most successful and thoughtful concerns in meeting the problem. The city government, however, has its task to fulfill in properly regulating its public work.

The report is divided into certain well-marked parts—part 1, presenting the facts of unemployment in different branches of the textile industry in Philadelphia and to a less extent in other industries; part 2, the cost of unemployment to the employee and to the employer; part 3, the increase of knowledge about unemployment; part 4, the management of the employing concern in its relation to unemployment; part 5, the duty of the civil Government.

A significant development of the survey was the conviction that the problem of regularizing employment in America must be met by private employers in their own establishments.

The conclusions of the author as to the amount and extent of unemployment in Philadelphia are based upon a survey made during March, 1915, by the Metropolitan Life Insurance Co., which in the course of its investigation canvassed 79,058 families, in which were found 346,787 persons and which represented 137,244 wage earners. The general results of this investigation showed 10.3 per cent of the wage earners as unemployed, and 19.6 per cent as part-time workers.

Regarding the problem of unemployment as primarily a question of industrial organization, the report criticises the failure of employers to keep adequate records of their employed force, hours worked, wages paid, numbers taken on and off the pay roll, etc., with a view to improvement in employment and its regularity and to the keeping of cost records in such a way as not to exaggerate expenses in slack time. It is recognized that the labor turnover of most employers is out of all proportion to the number employed. In compiling the records of one establishment furnished by its foreman, covering 1907 to 1915, it was shown that 75 per cent of the men and 66 per cent of the women employees remained in the employ of the firm less than one year. Yet it was stated by the foreman that most of the employees do not do good work until they have been with the firm eight weeks. The number of hirings per year was about 90 per cent of the number normally on the pay roll for this same establishment.

Another essential to secure regularity of employment is the necessity of coordinating the manufacturing ends of a business so as to make regularity of production possible through regularity of orders.

The report suggests, among numerous other methods, the practice of dovetailing of trades so as to permit of manufacturing simpler stock in slack times, and also notes the suggestion of a printing firm to train its employees in department-store work so as to allow of a shift to that line of work in dull times, and to act in cooperation with the department store.

But the problems of unemployment are not wholly those of the employer, but are partly to be met by the city. In this connection the report urges cooperation by the city with the State department of labor and industry and with the Federal Bureau of Immigration in establishing a public employment bureau. The city should arrange its own public works in such a manner as to minimize unemployment. This can be done by executing public works when other work is slack. As a concrete case, the city should not build its subway in such a way as to terminate the work suddenly and then throw a large labor force upon the market at one time, but should arrange to wind up the work gradually and give it out, furthermore, in even amounts. Relief works, the report concludes, are a mere makeshift in dealing with unemployment.

The labor exchange suggested by the report is one of wide and varying functions, and one which would need to be under efficient direction. It is proposed that it shall (1) endeavor to bring together employers seeking help and employees seeking work; (2) act as the city's headquarters in a steady fight against unemployment; (3) endeavor to establish a clearing house for dock labor; (4) endeavor to bring about regular seasonal transfer of workers between trades

whose seasons dovetail; (5) cooperate with the department of vocational guidance and instruction in the board of education, and act as a vocational guidance bureau for young people; (6) assist in the collection and dissemination of knowledge concerning unemployment; (7) eventually administer an unemployment-insurance system when the plan shall have become practicable.

STRIKES AND LOCKOUTS FROM AUGUST, 1915, THROUGH JANUARY, 1916.

According to data compiled from various sources by the United States Bureau of Labor Statistics, the number of strikes and lockouts during the six months, August, 1915, to January, 1916, inclusive, was 763. The total number occurring during the twelve months of the calendar year, 1915, including a few that began prior to January 1, 1915, but were settled during the year, was 1,404, a number that may be somewhat increased when the records are finally made up.

The following table, which has been corrected for months previous to January, 1916, as reports have come in during the latter month, shows the number of strikes and lockouts begun in each of the months of August, 1915, to January, 1916, inclusive, but excluding 59 strikes and 10 lockouts which started during months not specified. The strikes and lockouts were distributed among the months as follows:

NUMBER OF STRIKES AND LOCKOUTS, AUGUST, 1915, THROUGH JANUARY, 1916, BY MONTHS.

	August.	Septem-ber.	October.	Novem-ber.	Decem-ber.	January.	Total.
Strikes.....	137	155	98	92	62	111	655
Lockouts.....	6	10	8	6	6	3	39
Total.....	143	165	106	98	68	114	694

A brief account of the character of the strikes occurring from August to December, 1915, may be found in preceding numbers of the REVIEW. The data in the tables which follow relate to 145 strikes and lockouts concerning which information was received by the Bureau during the month of January, and include 15 which occurred in previous months but were not before reported, as follows: December, 12; November, 2; October, 1; and 16 others for which the dates of commencement were not reported but most of which probably occurred in the months of December, 1915, or January, 1916. Inasmuch as strikes which start toward the end of a month are frequently not brought to the attention of the Bureau until after the report for the month has been prepared, it is probable that the

corrected figures for the month of January will show a material increase over the number of strikes herein reported for that month.

Most of the disputes reported during January were in the north-eastern section of the country, and all but 15 were in States east of the Mississippi and north of the Potomac and Ohio Rivers. The following table shows the States in which five or more strikes and lockouts occurred:

STATES IN WHICH FIVE OR MORE STRIKES AND LOCKOUTS OCCURRED DURING JANUARY, 1916.

State.	Strikes.	Lockouts.	Total.
New York.....	29	2	31
Pennsylvania.....	28		28
Massachusetts.....	25		25
Ohio.....	12	1	13
Illinois.....	10		10
New Jersey.....	9	1	10
15 other States.....	25	3	28
Total.....	138	7	145

Four of these strikes were confined to women and three included both men and women. No lockouts were reported in which women were concerned.

The industries in which four or more strikes and lockouts were reported were as follows:

NUMBER OF STRIKES AND LOCKOUTS IN SPECIFIED INDUSTRIES, REPORTED DURING JANUARY, 1916.

Industry.	Strikes.	Lockouts.	Total.
Metal trades.....	32	3	35
Clothing industries.....	20	1	21
Building trades.....	16		16
Iron and steel mills.....	12		12
Textile industries.....	9		9
Paper workers.....	6		6
Mining.....	4		4
All others.....	34	2	36
Total.....	133	6	139

Included in the above are 15 strikes of machinists, 16 strikes and 1 lockout of garment workers, 6 strikes of weavers, and 5 strikes of carpenters.

In 54 strikes and 7 lockouts the employees were connected with unions; in 9 strikes they were not connected with unions; and in 3 strikes they were not connected with unions at the time of striking but organized themselves into unions as a result of the strike; in the remaining strikes and lockouts it was not stated whether the strikers had union affiliation or not.

In 117 cases the causes of the strikes and lockouts were given. In 80 per cent of these the question of wages or hours or both was the

paramount issue. The leading causes are shown in the following table:

PRINCIPAL CAUSES OF STRIKES AND LOCKOUTS REPORTED DURING JANUARY, 1916.

Cause.	Strikes.	Lockouts.	Total.
Increase in wages.....	70	2	72
Reduction of hours.....	3	2	5
Wages and hours.....	11		11
Wages, hours, and recognition.....	2		2
Recognition.....	5	1	6
Discharge of employees.....	6		6
Because of wage reduction.....	2		2
Jurisdictional.....	4		4
Other causes.....	8	1	9
Total.....	111	6	117

In 89 of the strikes the number of the persons involved was reported to be 81,665, an average of 918 per strike. In 12 strikes, in each of which the number involved was over 1,000, the strikers numbered 67,350 persons, thus leaving 14,315 involved in the remaining 77 strikes, or an average of 186 to each. In 4 lockouts the number of employees involved was reported as 145, or an average of 36 in each.

The duration of 44 strikes and 1 lockout ending in January was given as 1,457 days, or an average length of 32 days for each disturbance. If, however, the time of four strikes, each amounting to more than 100 days, is deducted from the total, the average length of the remaining 41 strikes is 19 days.

Three strikes were reported lost to the strikers; three others were reported as won in every demand made; in another the strikers returned under the promise of the employer to compromise later; one lockout was lost to the employer; in the remaining 81 strikes reported as settled in January, most of which related to wages or hours, a compromise was reached which enabled both sides to the controversy to claim a victory.

RETAIL PRICES OF FOOD IN THE UNITED STATES.

Reports to the Bureau of Labor Statistics of 17 of the principal articles of food during the year 1915, covering 44 important industrial cities throughout the United States, show a decrease of 1 per cent in the price of all articles combined from 1914 to 1915. Only 3 articles were higher in 1915 than in 1914; flour, which was 20 per cent higher, sugar, 11 per cent higher, and corn meal, 3 per cent higher. It is interesting to note that although flour was higher in 1915 than in 1914 it reached its highest point in May, 1915, and was 18 per cent lower in December than in May.

A comparison of prices in December of each year from 1911 to 1915 shows an upward trend for all articles combined, with an increase of

3 per cent from December, 1914, to December, 1915, although only 4 of the articles advanced in price; flour and hens but slightly, and sugar and potatoes to such a marked degree as to offset the decline in other articles. Yet December of 1914 seems to have been a low point in the price of potatoes, and while the price in December, 1915, shows a decided increase over the price in December, 1914, there was almost no change in December, 1915, as compared with December, 1913.

The table following shows the relative retail prices of each of the 17 articles and of all articles combined in each year, 1907 to 1915, inclusive:

YEARLY AVERAGE RELATIVE RETAIL PRICES OF FOOD, 1907 TO 1915, AS COMPARED WITH AVERAGE PRICES FOR 1915.

(Average price for 1915=100.)

Article.	1907	1908	1909	1910	1911	1912	1913	1914	1915
Sirloin steak.....	71	73	76	79	80	90	99	101	100
Round steak.....	66	69	71	76	76	87	97	103	100
Rib roast.....	75	77	80	83	84	92	99	102	100
Chuck roast.....								105	100
Plate boiling beef.....								103	100
Pork chops.....	77	79	86	95	88	95	104	109	100
Bacon.....	75	77	83	95	92	91	100	102	100
Ham.....	78	80	84	94	92	93	103	105	100
Lard.....	86	86	96	111	95	100	107	106	100
Hens.....	84	85	91	96	93	96	103	105	100
Flour.....	76	81	87	86	81	84	80	83	100
Corn meal.....	81	85	87	88	87	94	92	97	100
Eggs.....	85	87	94	99	95	100	101	104	100
Butter.....	91	92	97	101	94	105	107	101	100
Potatoes.....	119	125	126	114	147	149	113	122	100
Sugar.....	88	90	89	91	98	96	83	90	100
Milk.....	88	90	92	95	96	98	101	101	100
All articles combined.....	81	83	87	91	90	96	98	101	100

In the table following is shown the relative retail prices of each of the 17 articles and of all articles combined, in December of each year, 1911 to 1915:

RELATIVE RETAIL PRICES OF FOOD IN DECEMBER OF EACH YEAR, 1911 TO 1915, AS COMPARED WITH AVERAGE PRICES FOR THE YEAR 1915.

(Average price for 1915=100.)

Article.	Decem-ber, 1911.	Decem-ber, 1912.	Decem-ber, 1913.	Decem-ber, 1914.	Decem-ber, 1915.
Sirloin steak.....	79	91	98	100	98
Round steak.....	75	83	99	100	98
Rib roast.....	83	92	99	100	99
Chuck roast.....				102	98
Plate boiling beef.....				103	101
Pork chops.....			100	96	91
Bacon.....	80	89	99	103	101
Ham.....	87	96	102	103	103
Lard.....	89	96	107	104	98
Hens.....	92	107	107	104	98
Flour.....	88	94	100	96	98
Corn meal.....	82	80	78	90	81
Eggs.....	89	92	96	99	99
Butter.....	133	124	140	140	137
Potatoes.....	114	116	111	110	108
Sugar.....	147	101	119	94	120
Milk.....	104	91	82	92	103
	98	101	103	102	100
All articles combined.....	96	97	102	103	106

The relative prices in each month of 1915 of the same 17 articles and of 9 other articles for which prices were secured beginning with January, 1915, are given in the table which follows:

RELATIVE RETAIL PRICES OF FOOD IN THE MONTHS OF 1915 AS COMPARED WITH AVERAGE PRICES FOR THE YEAR 1915.

(Average price for 1915=100.)

Article.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Sirloin steak.....	99	97	96	98	100	102	104	103	103	102	100	98
Round steak.....	99	97	96	97	100	102	104	104	103	101	99	98
Rib roast.....	99	98	97	98	100	101	102	102	102	101	100	99
Chuck roast.....	101	99	98	98	100	102	102	102	101	101	99	98
Plate boiling beef.....	102	101	99	100	101	101	101	101	100	100	99	98
Pork chops.....	92	88	88	97	103	102	104	107	111	114	103	91
Bacon.....	101	99	98	98	99	100	101	101	100	102	102	101
Ham.....	101	99	98	97	98	100	101	101	100	101	103	103
Lard.....	104	104	103	102	102	102	99	96	94	97	98	98
Hens.....	98	100	102	103	103	101	99	99	100	99	98	98
Flour.....	99	110	108	109	111	103	99	99	93	90	90	91
Corn meal.....	100	101	101	101	101	100	100	100	99	99	99	99
Eggs.....	131	99	75	77	77	79	82	90	102	118	135	137
Butter.....	108	105	100	101	97	97	96	94	94	98	102	108
Potatoes.....	95	94	93	97	100	111	95	92	89	106	109	120
Sugar.....	91	98	100	101	103	105	106	102	98	93	99	103
Milk.....	101	101	100	100	99	99	99	99	100	100	101	100
Cheese.....	100	101	101	100	101	101	100	98	98	99	100	102
Rice.....	100	100	100	100	100	100	100	100	100	100	100	100
Beans.....	93	98	98	99	98	98	98	97	98	101	109	114
Coffee.....	100	100	100	100	100	100	100	100	100	100	100	100
Tea.....	100	100	100	100	100	100	100	100	100	100	100	100
Canned salmon.....	100	100	100	100	100	100	100	100	100	100	100	100
Onions.....	98	97	95	104	123	116	101	89	86	94	96	101
Prunes.....	101	101	101	101	101	100	100	100	100	99	98	98
Raisins.....	100	100	100	100	100	100	100	100	100	100	100	100
All articles combined.....	101	99	96	97	98	98	99	99	100	103	105	106

SUMMARY OF REPORT ON WOMAN AND CHILD WAGE EARNERS.

The Bureau of Labor Statistics of the United States Department of Labor has just issued as its Bulletin No. 175 a summary of its 19-volume Report on Condition of Woman and Child Wage Earners in the United States. The volumes of the original report, giving the results of the Bureau's investigations, which had been made under the instructions of an act of Congress, were issued during the years 1910 to 1912, but as no special appropriation was made for the printing and distribution of these volumes, only a limited number of copies of each volume was published. The many and continued demands for the report have seemed to require its reprinting in some form. The Bureau has, therefore, published a summary presenting briefly the more important results of the investigation within limits which will permit printing in sufficient quantity to supply reasonable demands.

While each of the 19 volumes of the report relates to a distinct subject, the subjects considered together fall into several groups, the first volumes dealing with four important industries: Cotton, men's ready-made clothing, glass, and silk, all employing large numbers of

women and children. With these may also be grouped three other volumes: Women in stores and factories; women in the metal trades; and women and children in miscellaneous factory industries. Two deal with special child labor problems: The reasons why children leave school to go to work; and the connection between the employment of children and juvenile delinquency. Three are historical, dealing with the history of child labor legislation; the history of women in industry; and the history of women in trade-unions. Four deal with questions of health; the effect of laundry work upon women; a study of infant mortality in Fall River; a study of the causes of death among cotton-mill operatives; and a study of hookworm disease as found in southern cotton-mill communities. Three others—a study of family budgets of cotton-mill workers; a discussion of the connection between occupation and criminality of women; and a study of labor laws and factory conditions in the States visited—complete the list.

The establishments included in the Bureau's investigation employed over 335,000 persons, of whom over 167,000, or approximately 50 per cent, were females. The most striking feature of this great labor force was the extreme youthfulness of those employed. In three of the industry groups, the southern cotton group, the glass industry, and the Pennsylvania silk group, more than two-thirds of the female employees were found to be under 20 years of age. On the other hand, the proportion 25 years of age and over was large enough to suggest the need for vocational training for girls. The importance of married women among these wage earners is shown by the fact that of 27 industries studied, only three were found in which the proportion of married women among those 20 years of age and over was under 10 per cent, and from this it runs up to two-fifths, and in one industry even to three-fifths.

Among the families from which the wage earners in these industries come, the industrial employment of girls is well-nigh universal. Thus, in the four industries which were the subject of intensive study, it was found that in some 5,000 families from 82 to 98 per cent of the families had girls 16 years of age and over at work, and that from 80 to 95 per cent of all the girls of this age group in these families were wage earners. That this employment was a matter of economic necessity is indicated by the fact that from 27 to 43 per cent of the total family income was contributed by girls in this age group, and that approximately 90 per cent of all the earnings were contributed to the family.

One of the most significant facts disclosed by the investigation in practically all industries was the large proportion of women wage earners who were paid low wages, wages in many cases inadequate

to supply a reasonable standard of living for women dependent upon their own earnings for support. In the group of women employed in the four great industries: Cotton; men's ready-made clothing; glass; and silk, from two-fifths to two-thirds of those 16 years of age and over earned less than \$6 in a representative week. In another group of 23 industries, an examination of the earnings of over 38,000 women 18 years of age and over showed that over 41 per cent earned less than \$6 in a representative week.

The report shows that the employment of children was both extensive and serious, not only were children found employed in great numbers, but they were found employed below the legal age; employed at work legally prohibited to children of their years; employed for illegally long hours and at illegal times; employed through evasion of the law and under false certificates of age, as well as under many other undesirable conditions. In spite of all of this, evidence was found of a decrease in the relative number of children employed, and very plain indications that a public sentiment against their exploitation is making itself felt effectively.

Since the publication of the Bureau's report many and important changes have been made in labor laws, especially in those affecting the conditions of employment of women and children and the health and safety of wage earners, regardless of sex and age.

It is not possible to say how far the findings of these reports have been directly instrumental in securing new labor legislation, for within the period since 1908 many agencies have been active in the work of investigation, discussion, and propaganda, in many cases using the data of these reports, in other cases supplementing them by further investigation along the same or other lines.

Most important of such supplementary investigations of an official character have been those of the various State minimum wage commissions, the workmen's compensation or accident commissions, some of the State bureaus or departments of labor, and the New York State Factory Investigating Commission. Most important of the unofficial agencies in the work of investigation and propaganda have been the National Child Labor Committee, the National Consumers' League, and the American Association for Labor Legislation. All of the agencies mentioned have contributed in an important way to the progress in labor legislation affecting women and children which has been so marked during the last seven or eight years.

Some definite idea of the breadth and strength of the movement for protective labor legislation during recent years may be gained by an examination of the legislation of the various States from 1908 to 1915. Thus, taking as examples some of the more important provisions for the protection of woman and child wage earners, we find

within this period the number of States prohibiting factory employment under 14 years of age increasing from 30 on January 1, 1908, to 41 in 1915, the number requiring medical examination or a certificate of physical fitness preliminary to the issue of work permits from 8 to 35, the number prohibiting night work under 16 years from 18 to 36, and the number limiting hours of work under 16 years to 8 per day from 3 to 21. Changes quite as striking are found in provisions affecting women. Since 1908 the number of States prohibiting night work for women increased from 3 to 6, the number limiting the hours of work in factories to 8 per day increased from none to 4, the number limiting hours of work to 10 a day increased from 15 to 34, while two classes of laws not known in any State in January, 1908, namely, minimum wage and mothers' pension laws, have been enacted, the former in 11 States, the latter in 29 States.

PROGRESS OF LEGISLATION AFFECTING THE EMPLOYMENT OF WOMEN (WITHOUT REGARD TO AGE) AND CHILDREN, 1908 TO 1915.

Subject of labor legislation.	States having laws Jan. 1, 1908.	States first enacting laws in specified years.								States having laws, 1915
		1908	1909	1910	1911	1912	1913	1914	1915	
Employment in factories prohibited under 14.....	30	1	1	.....	3	2	2 ^a	2	.....	41
Medical examination of children required for work permits.....	.....	.....	.....	1	1	4	4	1	2	13
Certificate of physical fitness of children required for work permits.....	28	1	3	1	4	1	3	.....	1	22
Night work prohibited under 16.....	18	2	4	.....	4	1	3	.....	1	36
Night work prohibited for women.....	3	.....	.....	.....	1	.....	2	(⁴)	.....	6
8-hour day under 16.....	3	.....	4	.....	3	3	4	2	.....	21
8-hour day for women in factories.....	.....	.....	.....	.....	2	.....	5	(⁴)	.....	4
10-hour day for women in factories.....	15	.....	3	.....	4	3	5	.....	4	34
Minimum wage.....	.....	.....	.....	.....	.....	1	8	.....	2	11
Mothers' pensions.....	.....	1	.....	.....	3	1	16	.....	8	29
Factory inspection.....	23	1	3	.....	4	1	2	1	1	42
Workmen's compensation.....	.....	(⁶)	.....	1	10	4	7	1	8	31
Occupational disease reporting.....	.....	.....	.....	.....	6	2	7	.....	1	16

¹ Also the District of Columbia; employment forbidden only during school time in 3 States.

² Also District of Columbia.

³ Applies only to mercantile establishments and bakeries in 1 State.

⁴ District of Columbia.

⁵ Law of Arizona applies to bakeries, laundries, mercantile establishments, hotels, restaurants, and telephone and telegraph offices; factories are not mentioned.

⁶ United States law of May 30, 1908, covering Federal employees, was first compensation act.

The progress in labor legislation affecting women and children within this period is not adequately measured by the number of States enacting new laws, for much more effective enforcement has also been provided for by the creation of factory inspection in 13 States where formerly there were no inspectors, by increases in the personnel in other States, and by giving to factory inspectors in several of the States greatly increased powers.

The movement for workmen's compensation legislation and occupational disease reporting, which is entirely new within this period, is scarcely less important than that which has secured the classes of

laws already named, for the compensation laws have brought new standards of safety and sanitation affecting all employees, with new methods and powers of enforcement. Furthermore, the guaranty of compensation payments in case of fatal and serious accidents helps to maintain reasonable standards of living without forcing the dependent women and children of the injured workman's family into industrial employment.

SURVEY OF WAGE-EARNING GIRLS IN WILKES-BARRE, PA.¹

The National Child Labor Committee, with the cooperation of the National Consumers' League, made during the months of February to May, 1914, a statistical investigation of wage-earning girls 14 to 16 years of age in Wilkes-Barre, Luzerne County, Pa.

In the first part of the published report an attempt is made to give the setting of these workers—where they are working; the native country of their fathers; their family incomes; the disposal of their wages; the occupations of their parents; how they are housed. The second part is a study of the girls themselves—why they leave school; the grade reached at the time of leaving school; how old they are; how many of them take advantage of opportunities offered for further education; how widely they continue to speak the language of their foreign-born parents; why they choose their employment; hours of work; health conditions; and how much influence education and industrial experience have on their wages.

Specific information was received from 256 girls 14 to 16 years of age who had left school with labor certificates for the purpose of going to work, of whom 202 were employed in the silk and lace mills and 54 in 14 other industries. All of the girls scheduled were born in the United States, more than one-half of them being of foreign parentage.

Of the 302 girls reporting the disposal of their wages, 239, or 79.1 per cent, handed their wages over to their parents or guardians, while only 26, or 8.6 per cent, kept their wages.

Of 248 girl workers reporting the grade at which they left school, 106, or 42.7 per cent, had not reached the seventh grade, and the investigation showed that more left school (29.4 per cent) at that grade than at any other. Only 27.8 per cent remained in school beyond the seventh grade. At the time of the survey children were permitted by law to leave school with working papers at the age of 14 years, irrespective of grade, but without certificates they must attend school from the sixth to the sixteenth birthday.

¹ Survey of Wage-earning Girls Below 16 Years of Age in Wilkes-Barre, Pennsylvania, by Sarah H. Atherton. Published by the National Child Labor Committee, 105 East Twenty-second Street, New York City. 1915. 65 pp.

In that portion of the report devoted to industrial experience, after suggesting, as already noted, that most of the girls (202, or 78.9 per cent, of the 256 girls giving specific information) are employed in the silk and lace mills, it is pointed out that of 302 girls reporting 14.6 per cent had an opportunity to choose their work, while 33.1 per cent had no such opportunity. It was found that the grade at which these girls left school had very little effect upon the wage received, and also that the length of their industrial experience as a whole seemed to bear no direct relation to wages. In Pennsylvania, at the time of this investigation, the legal limit for female labor was 54 hours per week, and the investigation seemed to indicate that in general the majority worked the full number of hours—10 hours per day on 5 days and 4 on Saturday.

Of the girls reporting, 27.9 per cent indicated a preference for moving pictures as a means of recreation, with reading, music, and sewing following in the order named. Of the 267 answering the question as to dress, 215, or more than 80 per cent, are classed as "neat," 2 as "showy," 15 as "untidy," and 22 as "shabby."

In conclusion the report gives a summary of the child-labor law of Pennsylvania as amended in 1915, together with some suggestions for its improvement, and a summary of the more important results of the survey. The suggestions offered are as follows:

1. More adequate provision for factory inspection. The intricate laws dealing with safety in industry, ventilation, fire protection, sanitation, and the hours of labor for women and children are to be enforced throughout the factories, stores, hotels, amusement halls of three counties in a highly industrialized region. Good laws without provision for adequate enforcement are almost more pernicious than bad laws, since they give a sense of false security.

2. Improved administration of the widows' pension fund, so that a widow need not in future do the work of two persons to support her children.

3. Vocational training designed not merely to increase earning capacity.

4. Annual medical examination of girls under 16 in mills.

5. Compulsory courses in home economy required of all girls before they leave school.

6. A living wage to men. Wherever a living wage is not paid, that industry is subsidized either by industries which do pay a living wage, i. e., family incomes are eked out by those with higher wages sharing with those who have less, or by the public, who eke out insufficient wages by supporting hospitals and poor boards, etc.

The findings of the survey are summarized as follows:

Industry and school.—Of girls 14 to 16 years of age there are 40.9 per cent in industry and 59.1 per cent in school.

Dependence on girls under 16 years of age.—Silk industry is dependent for 12.8 per cent of its labor force. The lace industry is dependent for 7.5 per cent of its labor force. In all industries where girls are employed the percentage under 16 is 8.8.

Distribution according to occupation of fathers.—The charge that industries move to mining regions for labor of miners' families is partially justified—more miners have children in the mills than other men.

Population.—In every 46 males of voting age—native, white, of native parentage—there is a girl of similar parentage under 16 at work; in every 72 males of voting age—foreign born and naturalized—there is a girl of foreign parentage under 16 at work.

Weekly income of family with girl's wages and rent deducted.—Forty-six and four-tenths per cent of the families get under \$2 a week per capita income.

Weekly income of family with rent deducted and girl's wages included.—Thirty per cent of these families get under \$2 per capita income.

Disposal of wage.—All parents, save six, use part or all of their daughters' wages.

Fathers.—Sixty-two and seven-tenths per cent are at work; 8.1 per cent are idle; 18.5 per cent dead; 2 per cent deserters or away; 8.7 per cent do not report.

Causes of nonsupport by fathers.—Seventy per cent, death; 21.3 per cent, illness or accident; 3.8 per cent, slack work, etc.

Mothers.—Eighty-two and four-tenths per cent are at home; 11 per cent are at work; 0.7 per cent are deserters or away; 5.9 per cent are dead.

Crowding.—Austro-Hungarians show worst crowding; then Italian; then English and Irish.

Reasons for leaving school.—"Necessity" is the most frequent, then discontent with school.

Number leaving school according to grade.—More leave at the seventh grade than any other. The highest per cent of English, Swedish, and Welsh leave at the eighth grade. Forty-two and seven-tenths per cent leave before they reach the seventh grade.

Number leaving school according to age.—Twenty-one and nine-tenths per cent leave before they attain the required age of 14 years.

Boys and girls illegally out of school.—The law requires children who are not at work to be in school. Over 50 per cent who left school on labor certificates do not appear in list of employees under 16, required of employers.

Use of outside educational agencies.—Ten and nine-tenths per cent have taken advantage of any opportunity for further education in the way of night school, Y. W. C. A., etc.

Age of girls at work.—Twenty-nine and seven-tenths per cent are 14; 48.8 per cent are 15.

Industry and age.—Of 76 girls of 14 years, 61 are in the lace and silk industries. Of 125 girls of 15 years, 101 are in these industries.

Why places of employment were chosen.—Thirty-three per cent had no opportunity for choice; 14 per cent had opportunity for choice.

The relation of wage, age, and grade.—The highest per cent of those now 14 who left at the sixth grade get from \$3 to \$3.49, while those now 15 who left at the seventh grade get from \$4 to \$4.49. Those 15 years of age leaving at the sixth grade get \$3.50 to \$3.99; here one grade more seems an advantage. As a whole, however, grade has no consistent relation to wage. Those 14 years of age leaving at the fifth grade show highest per cent in the same [wage] column as those 15 years of age leaving at the eighth grade.

Grade, wage, and length of time since leaving school.—Neither grade nor length of time since leaving school has any consistent influence on wage.

Amusements.—Moving pictures are the most important; dancing, cards, and outdoor exercise of all kinds are conspicuously rare.

Dress.—Two were "showy" in comparison to 22 "shabby."

Ambitions.—Dressmaking is the favorite career. The second favorite among girls is musician, among parents "business course." Ten per cent of the girls report that they have none; 7.4 per cent of the parents report that they have none.

RECENT REPORTS RELATING TO WORKMEN'S COMPENSATION AND INDUSTRIAL ACCIDENTS.**MASSACHUSETTS.¹**

During the operation of the workmen's compensation act for the year ending June 30, 1914, as set forth in the second annual report of the State industrial accident board issued on January 20, 1915, 96,382 nonfatal and 509 fatal injuries were reported, the total representing an increase of 7.4 per cent over the previous year. Of the nonfatal cases 83,920, or 87 per cent, were insured and of the 509 fatal cases 371, or 72.88 per cent, were insured and 138 were not insured, the only method for recovering damages open to the latter being in suits at common law, in which event the three common-law defenses formerly available to employers would be removed. Of the 138 not insured 57.2 per cent were employed on steam railroads.

Based on mean duration of total disability, the aggregate number of days lost as a result of nonfatal industrial accidents was 1,336,966 and the aggregate number of weeks lost was 190,995. This loss of time represented a total wage loss of \$3,172,440. Of this total loss of wages \$2,760,023 was suffered by insured employees. The average duration of total disability per reported nonfatal case was 13.87 days, but eliminating those cases in which incapacity extended for less than one complete day the average number of days lost per case was 24.26. The following table presents a comparison of the duration of total disability for the year ending June 30, 1913, and June 30, 1914, showing that the noncompensable cases, that is, those injuries lasting less than two weeks, were fairly constant for each period.

¹ Second annual report of the industrial accident board, July 1, 1913, to June 30, 1914. Boston, 1915. 483 pp. Illustrated.

COMPARISON OF DURATION OF TOTAL DISABILITY FOR YEARS ENDING JUNE 30, 1913, AND JUNE 30, 1914, SHOWING PER CENT OF DISABILITY LASTING ONE DAY OR OVER.

[Based on injuries reported to the board and not on cases handled by insurance companies.]

Length of disability.	1913			1914		
	Number of cases.	Per cent.	Per cent disabilities 1 day and over.	Number of cases.	Per cent.	Per cent disabilities 1 day and over.
Less than 1 day.....	36,901	40.92	.....	41,269	42.59	.....
1 to 3 days.....	.....	.....	.....	11,458	11.83	20.60
4 to 7 days.....	.....	.....	.....	12,843	13.26	23.09
8 to 10 days.....	.....	.....	.....	4,517	4.66	8.12
11 to 14 days.....	.....	.....	.....	5,236	5.40	9.41
Total, 1 to 14 days.....	31,685	35.14	59.48	34,054	35.15	61.22
Total, 2 weeks and under (noncompensable).....	68,586	76.06	59.48	75,323	77.74	61.22
15 to 28 days.....	10,568	11.72	19.84	9,222	9.52	16.58
5 to 8 weeks.....	6,638	7.36	12.46	7,066	7.29	12.70
9 to 13 weeks.....	2,355	2.61	4.42	2,549	2.63	4.58
14 to 26 weeks.....	1,275	1.41	2.39	1,491	1.54	2.68
Over 6 months.....	272	.30	.51	731	.75	1.31
Fatal.....	474	.53	.89	509	.53	.92
Total, 15 days and over (compensable).....	21,582	23.93	40.51	21,568	22.26	38.77
Grand total.....	90,168	100.00	100.00	96,891	100.00	100.00

It is interesting to note that while the total number of cases in which the injury lasted more than two weeks is almost identical for each year, the number of injuries lasting six months and over increased from 272 to 731, or 16.87 per cent.

Returns from insurance companies show that the estimated payments for medical and hospital attention, compensation for disability and dependency, together with outstanding losses payable to dependents and to those with continuing disabilities for the year ending June 30, 1914, amounted to \$2,621,752.91. This amount does not include any of the expenses of insurance administration.¹ The in-

¹ In the report of the Massachusetts insurance commissioner for the year 1914 it is stated that insurance companies transacting workmen's compensation business covering a period of 27 months collected in premiums \$8,892,535 and paid out in benefits \$3,497,063, thus requiring only 39.3 per cent of actual earned premiums to pay all their losses. Based on figures contained in that report the amount of premium earned in the nine months ending September 30, 1914, was \$3,639,868, and the total benefits paid amounted to \$1,783,220, or approximately 49 per cent of the earned premiums. So far as the expense of conducting the business is concerned the commissioner is of the opinion that "30 per cent of the premium ought to be an outside allowance to the companies, and that at least 70 per cent ought to be available for payment of benefits. No stock company has yet kept its expense within that limit, and while they continue to pay 17½ per cent for getting the business, leaving only 12½ per cent for all other expenses and for profits on the basis of a 70 per cent loss ratio, it is evident that closer figuring on expenses than has yet been made will have to be adopted unless they cut the acquisition cost. For workmen's compensation insurance it should be reduced, for it is in effect compulsory upon employers. There is no reason for taking \$17.50 out of every \$100 the employer pays for his insurance and handing it over to a middleman. The total acquisition cost for this business should be limited to 10 per cent. This is public-welfare business and not agency-welfare business, and all unnecessary burdens should be removed."

crease in payments and estimates on outstanding losses, including medical service, over the first year of the act amounted to 56.3 per cent, which increase is probably due largely to the very considerable increase in the proportion of those injured who were insured.

Based on the 41,383 fatal and nonfatal injuries handled by the insurance companies during the year ending June 30, 1913, the average compensation paid per case, including medical and hospital service, was \$40.50, while the average per case for the 60,160 handled during the following year was \$43.57. The result of the operation of the workmen's compensation law for the year ending June 30, 1914, is indicated by the following transactions of all insurance companies doing business in the State:

Number of employees receiving medical service only...	42, 798	
Number of employees receiving compensation only.....	3, 008	
Number of employees receiving both medical services and compensation.....	14, 029	
Total receiving benefits.....		59, 835
Number of cases reported requiring neither payment of compensation nor medical expense.....	28, 118	
Number of fatal-injury cases reported in which dependents totally dependent for support upon the employee were left.....	219	
Number of fatal-injury cases in which dependents partially dependent were left.....	69	
Number of fatal-injury cases in which no dependents were left.....	37	
Total fatal-injury cases in which compensation was paid.....		325
Total fatal and nonfatal cases receiving benefits.....		60, 160
Total compensation paid all injured employees and dependents of all fatally injured employees.....	\$882, 162. 30	
Payments covering medical and hospital services and medicines.....	446, 171. 52	
Estimated liability on account of compensation due injured employees and their dependents covering the amount of deferred payments for losses incurred and the estimated cost of undetermined losses.....	1, 183, 340. 16	
Estimated liability on account of medical services rendered but not yet paid.....	110, 078. 93	
Total benefits paid and estimated liability outstanding.....		\$2, 621, 752. 91
Compensation paid in fatal-injury cases in which dependents totally dependent survived.....	57, 396. 33	
Estimated liability on account of deferred payments under item 12.....	440, 279. 74	

Compensation paid in fatal-injury cases in which dependents partially dependent survived.....	\$12, 171. 25
Estimated liability on account of deferred payments under item 14.....	59, 830. 26
Payments covering fatal-injury cases where no dependents survived.....	3, 611. 03
Estimated liability on account of deferred payments under item 16.....	5, 417. 14

Total paid and estimate liability in fatal cases
(included in total of items 8 to 11)..... \$578, 705. 75

In the classification of nonfatal accidents by industries, iron and steel ranks first with 17,176 injuries and the textile industry comes second with 14,508 injuries. Of the fatal injuries, 174 occurred in road, street, and bridge transportation, 74 occurred in the building trades, and the remaining 261 were scattered among 20 other industries, including the miscellaneous group. The number of accidents per 1,000 employees for 25 selected branches of industry was highest in the automobile factories, being 287, and lowest among the clothing makers, being 22. The value of these figures, however, is seriously impaired because the factor of the number of hours or days worked is not available for the purpose of weighting the element of exposure.

An analysis of causes of nonfatal accidents shows that 32 per cent were due to hand labor, 25 per cent were caused by machinery, and 43 per cent were due to all other causes. Of the 509 fatal accidents hand labor was responsible for 5 per cent, machinery for 17 per cent and all other causes for 78 per cent. More than 91 per cent of the nonfatal cases and 99 per cent of the fatal cases were males. In both the fatal and nonfatal groups the largest number of persons affected were receiving between \$11.01 and \$12 per week, the per cent in the former group being 15.3 and in the latter, 12.1. The largest number, 23.3 per cent, of those fatally injured were between the ages of 40 and 49, while of those nonfatally injured the largest number, 37 per cent, were from 21 to 29 years of age.

The report suggests that workmen's compensation has to a large extent superseded the system of employers' liability. In 1911 there was collected in premiums for employers' liability insurance \$1,680,-280, while the net recovery by employees, after the different expenses of litigation were deducted, was estimated to be about \$400,000, or 23.8 per cent of the premiums. This amount represents about 15 per cent of the payments and estimates on outstanding losses received by employees under the benefits of the workmen's compensation act for the second year ending June 30, 1914. During the first year of the compensation act, ending June 30, 1913, it is estimated that the premiums collected for employers' liability insurance decreased 87

per cent, while the decrease in the losses paid was estimated at 54 per cent. On the other hand, according to the report of the State insurance commissioner, insurance companies collected in premiums, under the compensation law, during 27 months ending September 30, 1914, a total of \$8,892,535, and paid in benefits \$3,497,063, or 39.3 per cent of earned premiums. Thus under the liability law a much lower percentage of benefits was available to the injured employee than under the compensation act, while a correspondingly higher percentage was absorbed in expenses of administration, litigation, etc. The payments during the year ending June 30, 1914, namely, \$2,621,752.91, represented an increase of \$944,372.09 over the first 12-month period, which increase was due to the greater number of injured employees insured under the act, to increasing efficiency in administration, to an increased number of agreements in proportion to the number of injuries, and in general to the better understanding on all sides of the scope and real intent of the law. In the year July 1, 1913, to June 30, 1914, the employees of Massachusetts lost in wages \$3,172,440. In addition to the suffering and other intangible results of injuries in the aggregate there was a money loss to employees, contributed as their share of the cost of industrial injuries, of at least \$1,000,000. The cost of providing compensation benefits borne in the original instance by the employers, but ultimately intended to be shifted to the consumer, amounted to \$4,590,000, which on a total pay roll of \$450,000,000 represented an average rate of approximately 1 per cent. The value of manufactured products reported by the Massachusetts bureau of labor statistics for the year 1913 was \$1,658,728,363. The total amount of wages earned was \$351,299,706. By reducing this figure to the probable amount covered by insurance, and estimating the premium in accordance with the average rate, it is found that in manufacturing industries the premiums would aggregate at least \$3,000,000. According to the returns for 1913, therefore, the cost of insurance shifted to the consumer of manufactured product would amount to only 18 cents per \$100 value. This includes both the cost of losses and the cost of insurance administration.

One feature of the payment of compensation in Massachusetts is the authority granted the board to make lump-sum settlements. These, however, must be approved by the full board before they become effective, and the conditions under which the payments are made are three: (1) The case must be unusual, (2) the settlement must be for the best interests of the employee or his dependent, and (3) the amount fixed must be adequate. The determination of this last point was found to be difficult, because it is almost impossible to tell in advance how long the injured employee will be incapacitated, to what extent the reparative process has developed at the time of

the award, and to what extent there will be impairment in earning ability, etc. In this connection computed percentages of disability for specific injuries based on compensation awards in various State and according to various foreign standards and authorities are used.

The board made a study of cases of fatally injured employees whose employers were not insured under the workmen's compensation act, and secured information from 75 dependents of the 138 workers in this group. The average age of the deceased employees was 37.6; the average weekly wage was \$14.94. In 10 of the cases there were no dependents; in the remaining, 39 widows, 83 children, and 28 parents, brothers, and sisters were dependent upon the deceased employees. The total amount paid to dependents was \$35,885, an average of \$478.47 per case. Under the workmen's compensation act these dependents would have received \$122,357.75, an average of \$1,631.44 per case. In these 75 cases considered there were 31 settlements made. The report suggests that the reason no settlement was made nor information received in a number of cases may be attributed to the fact that many of the injured workmen were foreigners whose families were living in Europe and who, through ignorance of the law or method of procedure in this country, neglected to make any claim. It was found that the actual settlement made in many cases was in no way proportionate to the wages received and the dependency involved. In 10 cases in which settlements were made in excess of the amount which would have been due under the act the total amount paid was about 68 per cent more than the amount payable under the act, whereas in the remaining cases the settlements made were less than one-third of the amount which these dependents would have received had the employees been insured. "Some large awards were made in cases where the dependency was comparatively slight, while families totally dependent upon the wages of the employee received a pitifully small amount, if any."

In Massachusetts compensation is paid to all employees who are incapacitated for work by reason of occupational diseases arising "out of and in the course of their employment." In all, 354 non-fatal and 8¹ fatal cases were registered with the board during the year covered by the report. These were grouped into three main divisions: (1) Those due to harmful substances causing constitutional disturbances, (2) those due to harmful conditions, and (3) those due to irritant fluids and substances resulting in local affection. The experience of the board in this connection is indicated by the following summary:

¹ This is quoted from the text of the report. In the table which follows, also taken from the report, 10 fatal accidents are shown. No explanation is offered for this difference.

46 MONTHLY REVIEW OF THE BUREAU OF LABOR STATISTICS.

PERSONAL INJURIES BY DISEASES OF OCCUPATION, JULY 1, 1913, TO JUNE 30, 1914.

Classification.	Industry.	Cases.				Nonfatal cases.			
		Non-fatal.	Total.	Fatal.	Total.	Days lost.	Total.	Wages lost.	Total.
<i>Harmful substances.</i>									
Arsenic.....	Other chemical workers.....	1	1			12	12	\$19	\$19
Dusts.....	Marble and stone cutters.....				1				
	Flour and grain mills.....	1				21		42	
	Foundries and metal working.....	1	2		1	365	386	954	996
Gases, vapors, and fumes.	Building and hand trades.....	1				196		280	
	Paint makers.....	1				1		2	
	Other chemical workers.....	1							
	Automobile factories.....	1				85		151	
	Other iron and steel workers.....	1				6		12	
	Printing and publishing establishments.....	1							
	Rubber factories.....	1				31		53	
	Construction and maintenance of streets, roads, sewers, etc.	1	8			2	321	7	505
Hides (anthrax) ...	Tanneries.....	3		1		132		158	
	Water transportation.....	3	6	1	2	69	201	142	300
Lead.....	Building and hand trades.....	3				175		472	
	Paint makers.....	1		1		18		35	
	Glass makers, workers.....	1				26		56	
	Car and railroad shops.....	3				96		272	
	Foundries and metal working.....	1				30		49	
	Wagons and carriages.....	1				67		145	
	Jewelry factories.....	1							
	Printing and publishing establishments.....	3				176		418	
	Electrical supplies.....	1				42		63	
	Construction and maintenance of streets, roads, sewers, etc.	1				45		108	
	Street railways.....	2				390		827	
Mercury.....	Wholesale and retail trade.....	1	19		1	28	1,093	60	2,505
	Ship and boat building.....			1	1				
<i>Harmful conditions.</i>									
<i>Extreme cold.....</i>									
	Ice harvesting.....	8				364		560	
	Building and hand trades.....	4		1		336		447	
	Fertilizer makers.....	2				137		232	
	Bakeries.....	1							
	Fish curers and packers.....	1				70		120	
	Flour and grain mills.....	1				63		108	
	Slaughter and packing houses.....	2				2		5	
	Sugar makers and refiners.....	1				3		5	
	Foundries and metal working.....	4				6		10	
	Ship and boat building.....	1				88		138	
	Tanneries.....	3							
	Breweries.....			1					
	Box makers (wood).....	1				21		26	
	Furniture.....	2				4		8	
	Cotton mills.....	3				66		106	
	Print works.....	1				13		18	
	Woolen and worsted mills.....	2				8		15	
	Electric light and power companies.....	4							
	Gas works.....	4				20		54	
	Water transportation.....	6				203		345	
	Construction and maintenance of streets, roads, sewers, etc.	15				474		970	
	Truck, transfer, cab, and hack companies.....	7							
	Streets railways.....	11				407		794	
	Steam railroads.....	4				128		238	
	Express companies.....	1				58		112	
	Telegraph and telephone.....	1				4		7	
	Wholesale and retail trade.....	30				42		104	
	Warehouses and cold-storage plants.....	3				507		975	
	Other persons in trade.....	1				19		68	
	Professional service.....	1	125		2	14	3,057	28	5,493
Extreme heat.....	Fertilizer makers.....	1				4		6	
	Bakeries.....	3				30		39	
	Sugar makers and refiners.....	1				6		10	

PERSONAL INJURIES BY DISEASES OF OCCUPATION, JULY 1, 1913, TO JUNE 30, 1914—
Continued.

Classification.	Industry.	Cases.				Nonfatal cases.			
		Non-fatal.	Total.	Fatal.	Total.	Days lost.	Total.	Wages lost.	Total.
<i>Harmful conditions—Continued.</i>									
Extreme heat.....	Breweries.....			1					
	Printing and publishing establishments.....	1				5		6	
	Cotton mills.....			1					
	Woolen and worsted mills.....	1							
	Rubber factories.....	3				7		13	
	Gas and electric light companies.....	2		1		8		20	
	Street railways.....	3							
	Steam railroads.....	2				6		12	
	Wholesale and retail trade.....	2				7		13	
	Occupations not in industries.....	1	20		3	4	77	7	126
Eye strain.....	Electrical supplies.....	1	1						
	Building and hand trades.....	1				365		1,300	
	Foundries and metal working.....	2				5		9	
	Ship and boat building.....	1				23		18	
	Other iron and steel workers.....	1				17		24	
	Shoes.....	1				37		56	
	Wholesale and retail trade.....	1	7			7	454	10	1,417
<i>Irritant fluids and substances.</i>									
Brass.....	Brass mills.....	1				38		73	
	Other metal workers.....	1				38		38	
Chrome.....	Electrical supplies.....	1	3			2	78	5	116
	Tanneries.....	21				320		390	
	Printing and publishing establishments.....	1				30		111	
Cyanide and plating solutions.....	Cotton mills.....	2							
	Woolen and worsted mills.....	1	25				350		501
	Other iron and steel workers.....	3				32		38	
	Other metal workers.....	1						4	
Dyes.....	Other miscellaneous industries and occupations.....	1				3			
	Wholesale and retail trade.....	1	6			24	59	31	73
	Shoes.....	1				14		21	
	Tanneries.....	1							
	Cotton mills.....	1				28		46	
Hides.....	Print works.....	5				157		202	
	Woolen and worsted mills.....	7				98		134	
	Wholesale and retail trade.....	1	16			18	315	18	421
	Shoes.....	3				16		26	
	Tanneries.....	12	15			45	61	71	97
Lime.....	Other iron and steel workers.....	1				4		7	
	Harness and saddle makers and repairers.....	1				7		13	
	Shoes.....	1				4		5	
	Tanneries.....	3	6			19	34	27	52
Oil.....	Iron and steel mills.....	1							
	Other iron and steel workers.....	5	6			45	45	93	93
Paint.....	Building and hand trades.....	2				84		205	
	Electrical supplies.....	2	4			7	91	16	221
	Building and hand trades.....	1				32		96	
Poisonous vines, trees, shrubs, etc.	Foundries and metal working.....	1				19		23	
	Other liquor and beverage workers.....	1				14		21	
	Other woodworkers.....	1				3		5	
	Construction and maintenance of streets, roads, sewers, etc.....	2				44		71	
	Real estate.....	1	7			4	116	8	224
Raw wool.....	Tanneries.....	11	11			14	14	24	24
	Print works.....	1				17		33	
Washing and cleaning fluids.....	Woolen and worsted mills.....	3				136		178	
	Banking and brokerage.....	2	6			9	162	11	222

PERSONAL INJURIES BY DISEASES OF OCCUPATION, JULY 1, 1913, TO JUNE 30, 1914—
Concluded.

Classification.	Industry.	Cases.				Nonfatal cases.			
		Non-fatal.	Total.	Fatal.	Total.	Days lost.	Total.	Wages lost.	Total.
<i>Irritant fluids and substances—Con.</i>									
Local irritation from constant vibration, blows, pressure, etc.	Building and hand trades.....	1							
	Foundries and metal working	2				75		299	
	Other iron and steel workers..	4				176		342	
	Shoes.....	1				28		56	
	Jewelry factories.....	1				21		33	
	Gas ton mills.....	1				5		6	
	Gas works.....	1				13		33	
	Other miscellaneous industries and occupations.	1				14		19	
	Street railways.....	1				35		69	
	Steam railroads.....	3				31		42	
Miscellaneous.....	Laundries and laundry work.	1	17			25	423	43	942
	Forestry.....	1							
	Building and hand trades.....	4				15		31	
	Other chemical workers.....	3				52		91	
	Other food preparers.....	1				28		48	
	Foundries and metal working.	3				7		10	
	Other iron and steel workers..	5				74		104	
	Leather belt, leather case, and pocketbook makers.	1				9		15	
	Shoes.....	8				343		553	
	Tanneries.....	1							
	Furniture.....	2				27		79	
	Box makers (paper).....	2				58		49	
	Printing and publishing establishments.	3				37		47	
	Electrical supplies.....	4				9		22	
	Gas works.....	1				77		154	
	Other miscellaneous industries and occupations.	1							
	Workers in "not specified" manufacturing and mechanical industries.	1							
	Wholesale and retail trade....	1				49		32	
	Occupations not in industries.	1	43						1,235
Total.....			354		10		8,134		15,582

In a chapter on compensation benefits the statement is made that from the point of view of administration the Massachusetts law is good, but that its provisions for permanent disability should be improved. By an amendment which went into effect October 1, 1914, the rate of compensation was increased from 50 per cent to 66 $\frac{2}{3}$ per cent of the loss in average weekly wages. Moreover the maximum period of payments in case of death and either partial or total disability has been extended to 500 weeks, with \$4,000 as the maximum amount of compensation which may be paid. For the purpose of determining the adequacy of the provisions of the compensation law this chapter is devoted to a comparison between it and the California workmen's compensation, insurance, and safety act. It is explained that the California law is chosen because it is the only such law in force in this country wherein an attempt is made to construct a schedule of benefits in which weight is given to the varying effects of different kinds of injury on persons of different

ages and engaged in different kinds of occupation. Examples are given to indicate the probable award which would be made in California in a few actual cases of permanent disability taken from the Massachusetts experience. A tabulated comparison of the benefits under the two laws is presented.

During April, May, and June, 1914, the board, operating through its inspection department, carried on a campaign of factory inspection for the purpose of promoting accident prevention and encouraging employers to form safety committees to assist in reducing the number of accidents in their plants. The data were collected from 48 factories employing 56,587 workers, and covered two 6-month periods, one ending December 31, 1913, preceding the inspection, and the other ending December 31, 1914, after the inspectors had conferred with employers and suggested methods for eliminating causes of accidents. This information is summarized in the following table:

COMPARATIVE NONFATAL ACCIDENT EXPERIENCE OF 48 SELECTED FACTORIES FOR TWO 6-MONTH PERIODS, ONE BEFORE AND ONE AFTER THE ACCIDENT PREVENTION METHODS WERE IN FORCE.

[A reported accident is a notice of injury made to the board by the employer and all reports so made are included whether or not there was any disability or charge on account of medical attention. A disability case is one in which there was disability on any day or shift other than the one on which the injury occurred. A compensation case is one in which compensation was paid for total disability when this disability was still existent or after the fifteenth day following the occurrence of the injury. A lost day is one in which there was disability on any other day than the one on which the injury occurred. A compensation day is one on which compensation was paid for one day to one person for total disability. The wage loss is based on the average weekly earning shown on the various accident reports taken in conjunction with the period of total disability. Compensation paid is derived from the amount so paid in each case on account of total disability.]

Classification.	Number for 6 months ending—		Per cent of decrease.	Average per concern for 6 months ending—		Average per 100 employees for 6 months ending—	
	1913	1914		1913	1914	1913	1914
Reported accidents.....	2,403	1,901	20.89	50.06	39.60	4.24	3.35
Disability cases.....	1,138	907	20.30	23.70	18.89	2.01	1.60
Compensation cases.....	422	301	28.67	8.79	6.27	.74	.53
Days lost.....	22,548	14,237	36.85	469.75	296.60	39.84	25.15
Compensation days.....	11,476	6,401	44.21	239.08	133.35	20.28	11.31
Wages lost.....	\$34,667	\$22,195	35.98	\$722.22	\$462.39	\$61.26	\$39.22
Compensation paid.....	\$9,035	\$5,329	41.02	\$188.21	\$111.02	\$15.96	\$9.41

In this comparison no serious attempt was made to procure the average number of full-time workers in each concern, and the total number of employees given, 56,587, represents the average at any one time in the course of the year. The number reported to the board at the time of the inspection has been made to serve for the two periods considered. This being the fact and no account therefore having been taken of the inevitable fluctuation in the number of persons employed and in the number of days in operation of the various factories, thus eliminating the element of exposure, the comparisons of the above table are rather unsatisfactory.

The costs and wage loss given above show only that part which is due to lost time for total disability and do not include the entire money loss due to accidents.

Other real costs not included are those on account of medical and hospital service, additional compensation for specific injuries and compensation for partial disability. Likewise time lost on account of partial disability is not included. These figures, while necessary for computing the cost of insurance, were not considered essential for the purpose of the study here made. While the cost of medical attention might well be included, such information was not readily available when the data were compiled. In this campaign the ultimate aim of the board was to impress upon all concerns the fact that a real reduction of accidents may be accomplished, first, through the agency of eliminating unsafe conditions, and second, by organizing for safety. Efficient organizations in which conditions are kept up to a standard which should be constantly raised is a most vital factor for the reduction of accidents and the enormous economic loss thereby entailed and for the ultimate solution of the problem of reducing the cost of insurance.

In connection with accident prevention in industries the report shows, as already indicated, that the average amount of compensation benefits for the 60,161 cases handled by insurance companies was, in 1913, \$40.51, and in 1914, \$43.57. It is stated that two years of extensive and classified study has led the board to conclude that at least 40 per cent of the accidents arising out of and in the course of employment may be avoided and prevented by the introduction of efficient safety devices and the organization of safety committees in cooperation with the board. During the first two years, administration of the workmen's compensation act 186,076 nonfatal and 983 fatal injuries were reported, although the total reported by insurance companies as receiving benefits was 101,544. Based on this figure the average sum paid for and estimated as outstanding in compensation benefits per case was \$42.33, while the actual premium cost was slightly in excess of \$107 for each case. By reason of the injuries above referred to employers lost the services of experienced workmen for a total of 2,493,753 working days, and the actual wage loss to the employees was \$6,137,665. The value of the economic loss to the employer by reason of the substitution of less efficient employees constitutes a heavy tax on industry often overlooked. At least 50 per cent of this loss, it is believed, may be saved to employers and employees. A detailed plan for the organization of safety committees is given, and it is the opinion of the board that if such plan were put into effect it would eventually result in a saving by employers of an average of nearly \$40 on every injury reported to the board which

subsequently is prevented. It is also claimed that the employers may save through such organizations at least 50 per cent of loss in wages sustained by them on account of injuries.

The inspection department was organized at the beginning of 1914, and its work covering nearly 11 months is reported. During that time 3,157 investigations were made in every part of the State. Among matters investigated were circumstances and facts of particular accidents necessary to determine whether they occurred "out of and in the course of employment," whether either employer or the employee was guilty of serious and willful misconduct, the extent and duration of the disability, both total and partial, the average weekly rate of wages of the injured employee on which his compensation should be based, the extent and reasonableness of medical and hospital services rendered, and, in fatal cases, all the facts relating to dependency. In addition, 145 industrial establishments, employing 110,000 workers, were inspected and a copy of the inspector's report and recommendations was sent to each employer. The replies received indicate that this feature of the work is meeting with general cooperation on the part of employers.

The cooperation of insurance companies in the matter of accident prevention and reduction is commended, and evidence of this assistance is furnished in statements submitted for publication in the report giving the attitude of the various companies toward accident prevention and reciting some results accomplished. About 100 pages of the report are devoted to these statements, including illustrations of various methods of safeguarding machinery.

Two years experience in Massachusetts has prompted the industrial accident board to make certain recommendations for changes in the compensation law. For many accidents no compensation is available either to the injured employee or his dependent family in case of death. The board believes that this condition is due to the fact that the law is elective and not uniform in its application, and recommends that legislation be enacted to make the statute apply to all employers and to employees and their dependents within the classes mentioned in the present elective act, and to such others who on conditions may be included.

Of several other recommendations included in the report two are of sufficient importance to merit specific reference. The present act provides a waiting period of two weeks during which medical attendance is furnished but no compensation paid. The important reason for a waiting period is to discourage malingering, and since it is stated that "such cases are practically unknown in this Commonwealth" the board recommends that the law be changed so as to provide for a waiting period of 10 days in all cases in which the incapacity does not

exceed 28 days, and in all other cases where the period of incapacity exceeds such period of 28 days from the date of injury compensation should date back to the day of injury.

The board also recommends that the maximum weekly amount payable in all cases under the statute be changed from \$10 to \$14, the minimum payment to remain as it now is, at \$4 weekly. When the general statute was amended increasing the rate of compensation from 50 per cent to 66 $\frac{2}{3}$ per cent of the average weekly wage of the injured employee no change was made in the minimum and maximum weekly payments and it is believed that the skilled employee should receive at least a share of the benefits provided by the increase in the rate of compensation.

In a chapter devoted to the comparative cost of compensation under different scales of benefits, an analysis is presented to establish a reasonably accurate set of loss cost differentials which will indicate the effect of changes in the law as suggested above. The board estimates that—

If the benefits which went into effect October 1, 1914, had been operative in the period July 1, 1913, to June 30, 1914, the increase in the cost of compensation would have been approximately 40 per cent and the increase over the cost of the present law due to proposed amendments would have been 12 per cent. Insurance companies have reported to the Industrial Accident Board figures which show the paid and estimated outstanding losses in compensation claims. If we take their figures for the year July 1, 1913, to June 30, 1914—\$2,299,330.60¹—and increase this amount by 40 per cent, we get \$3,219,330.60, as an estimate of payments which would have been made in this period if the present law had then been in effect. The addition of 12 per cent to this amount results in the estimated cost under the proposed amendments if effective in this period. Such increase makes the total estimate of cost under the changes considered \$3,605,650.27, or an additional cost of \$386,319.67. Analysis of the factors which result in the increase of 12 per cent shows that the total increase would be 3 per cent if no change were made in the waiting period. Since 3 per cent is one quarter of 12 per cent, and the total increase in dollars is estimated at \$386,319.67, one-quarter of this amount, or \$96,579.91, represents the increased cost due to increasing the maximum weekly compensation to \$14. The balance of \$289,799.76 is the estimated cost due to a reduction in the waiting period.

As indicating the manner in which the act has been interpreted by the board and applied in cases arising for settlement, 27 pages of the report are devoted to a statement of rulings and decisions under the act. This is followed by a chapter presenting a survey of workmen's compensation legislation in the various states.

Included in the report is a gallery of injured workmen with a brief comment on each case.

¹ This does not agree with the amount given on pp. 24 and 472 of the report, and the discrepancy is not explained.

OHIO.

In the Statement of the Condition of the Ohio State Insurance Fund, as of November 15, 1915, it is asserted that had the plan ceased operating on that date it would return to the employers \$697,279.36, which would be over and above all amounts necessary to bring to full maturity every single claim and all collected unearned premiums, and would be made up of the following items:

Interest received from premium deposits.....	\$182,408.26
The 5 per cent premium required of all self-insurers.....	142,174.27
Catastrophe reserve developed by State risks.....	346,003.48
Net surplus premium.....	26,693.35
Total.....	697,279.36

It is explained that this total will be very substantially increased when all additional premiums due the fund as of November 15, 1915, as a result of very heavy underestimates of pay rolls, are collected. Based on a large number of pay roll reports that have been recently completed by the employers and returned to the commission, the actual pay-roll total would be increased approximately 44 per cent over the estimated pay roll.

"Most of the 209 rates which have been increased can be substantially reduced and that the 253 rates which have been reduced as of January 1, 1916, can be still further reduced."

A tentative "statement of the conditions of the employers' fund as a whole" as of November 15, 1915, issued by the commission, is as follows:

ASSETS.

Premiums received.....	\$6,064,145.81
Premiums in course of collection.....	453,237.79
Additional premium factor.....	159,607.22
Interest from premium deposits.....	182,408.26
Total.....	6,859,399.08

LIABILITIES.

Warrants issued.....	3,695,885.60
Reserve for losses (to bring all claims to full maturity).....	1,875,410.58
Catastrophe reserve developed by premium of State risks.....	346,003.48
(a) Interest received from premium deposits.....	182,408.26
(b) 5 per cent premium from self-insurers.....	142,174.27
Unearned premiums.....	590,823.54
Net surplus premiums.....	26,693.35
Total.....	6,859,399.08

This statement, it is explained, involves the factor of underestimated pay rolls as applied to both earned and unearned premiums. It shows an unearned premium total of \$590,823.54 and it is suggested that when all additional premiums due the fund as of November 15,

1915, have been collected, the total unearned premiums will be near \$1,000,000.

The tentative statement of unearned premiums versus loss cost as of November 15, 1915, covering employers' fund only, shows gross earned premiums amounting to \$5,943,993.01; awards made, including paid and deferred, amounting to \$5,018,040.56;¹ pending claims, including unreported, amounting to \$553,255.62; total losses amounting to \$5,571,296.18; surplus of \$372,696.83, and gross loss ratio of 93.7 per cent. The net earned premiums versus loss cost, showing a net loss ratio, is set forth in the following table:

STATEMENT OF NET EARNED PREMIUM VERSUS NET LOSS COST AS OF NOV. 15, 1915
(EMPLOYERS' FUND ONLY).

Schedule.	Gross earned premium.	Catastrophe reserve.	Net earned premium.	Total losses.	Surplus.	Loss ratio.
Bakers.....	\$53,649.87	\$3,119.52	\$50,530.35	\$49,621.81	\$908.54	98.2
Chemical—paint and drug.....	26,417.12	1,602.45	24,814.67	26,862.22	- 2,047.55	108.3
Coach (carriage and wagon).....	149,189.39	8,383.52	140,805.87	142,068.93	- 1,263.06	100.9
Coal mines.....	442,756.43	22,917.03	419,839.40	498,387.15	- 78,547.75	118.7
Contractors.....	1,105,806.57	61,255.84	1,044,550.73	920,060.22	124,490.51	88.1
Electric.....	117,380.45	6,881.56	110,498.89	87,619.35	22,879.54	79.3
Leather (shoes).....	63,848.01	3,820.27	60,027.74	45,599.94	14,427.80	76.0
Lumber.....	187,926.75	11,231.68	176,694.77	200,553.15	- 23,858.38	113.5
Meat.....	54,350.49	2,659.42	51,691.07	36,594.58	15,096.49	70.8
Metal.....	1,744,527.12	105,152.37	1,639,374.75	1,638,045.56	1,329.19	99.9
Milling.....	34,464.70	2,104.25	32,360.45	41,062.30	- 8,701.85	126.9
Mining (not coal).....	19,755.03	1,171.57	18,583.46	21,518.76	- 2,935.30	115.8
Miscellaneous.....	427,853.29	24,440.86	403,412.43	456,304.26	- 52,891.83	113.1
Oils.....	68,122.32	3,902.48	64,219.84	70,883.26	- 6,663.42	110.4
Ore and blast furnace.....	125,555.94	8,570.05	116,985.89	137,009.36	- 20,923.47	117.9
Paper.....	120,996.14	7,884.88	113,111.26	129,599.33	- 16,488.07	114.6
Pottery (glass).....	221,997.97	13,000.47	208,997.50	248,474.82	- 39,477.32	118.9
Printing.....	67,560.82	3,997.32	63,563.50	61,870.39	1,693.11	97.3
Rubber.....	107,255.28	6,240.24	101,015.04	95,471.77	5,543.27	94.5
Stevedore.....	22,548.15	1,254.61	21,293.54	13,715.89	7,577.65	64.4
Stone.....	138,951.39	8,787.45	130,163.94	189,820.73	- 9,656.79	107.4
Textile.....	68,393.80	4,086.21	64,307.59	45,253.34	19,054.25	70.4
Tobacco.....	14,240.94	807.60	13,433.34	3,546.22	9,887.12	26.4
Vessel.....	11,042.16	581.36	10,460.80	15,859.68	- 5,398.88	151.6
Warehouse.....	364,818.42	20,972.45	343,845.97	293,684.51	50,161.46	85.4
Wood.....	152,367.35	9,252.66	143,114.69	131,868.12	11,246.57	92.1
Abstract.....	32,217.11	1,925.06	30,292.05	19,040.53	11,251.52	62.9
	5,943,993.01	346,003.48	5,597,989.53	5,571,296.18	26,693.35	99.5

In this table the total catastrophe reserve is that accruing from premiums on State risks. To this must be added interest received on premium deposits, amounting to \$182,408.26; self insurance 5 per cent catastrophe reserve, amounting to \$142,174.27; making a total catastrophe reserve of \$670,586.01. The net surplus is the source from which liability insurance companies would declare dividends to stockholders. The reduction of rates from time to time has been based on this surplus. The statement of May 15, 1915, showed a net surplus premium of \$284,206.06, and as of July 1, 1915, the commission made its fifth reduction of rates.

¹Including awards made to the middle of December, 1915, on all accidents occurring on or before Nov. 15, 1915.

OREGON.¹

The first annual report of the Industrial Accident Commission is a pamphlet of 44 pages setting forth the operations of the workmen's compensation law for the 12 months ending June 30, 1915. This law creates an industrial fund from which the benefits of the act are provided for workmen who are injured by accidents arising out of and in the course of their employment. These benefits have been paid promptly, without litigation of consequence and irrespective of the question of negligence or fault. The fund is made up by payments from the employer, the workman, and the State. During the first year the employee paid one-half of 1 per cent of his wages but not less than 25 cents per month, while the employer paid six times as much and the State contributed a subsidy. At present the employer pays a percentage of his pay roll, which varies in rate according to the hazard of his operations. The workman's payment is 1 cent for each day or part of day employed, his employer paying the assessment and deducting it from his wage. The State appropriates one-seventh of the total payments of employers and workmen. While the law is optional in character employers and workmen are presumed to have elected to become subject to the act where they fail to serve written notice of rejection. The provisions of the law apply to occupations named in the act, embracing factories, mills, and workshops where power-driven machinery is used, construction work, and certain other occupations. Employments not subject to the act may secure its protection and benefits by application, the commission being authorized to fix the rates therefor.

While many employers at first filed formal notice rejecting the provisions of the law, a large number later decided to come under its protection, and when the law became effective July 1, 1914, employers to the number of 4,384 were contributors to the State industrial accident fund. During the year the number increased to 5,088, and it is estimated that between 80 and 85 per cent of the employers and workmen subject to the law operated under its provisions during the first 12 months. During the year the compensation benefits paid out or set aside amounted to \$370,200.46. The administrative expense amounted to \$49,528.05, making the total benefits and expense \$419,728.51, the administrative expense being 11.8 per cent of this amount.

¹ State of Oregon: First annual report of the State Industrial Accident Commission for the year ending June 30, 1915, including also the period of organization from Nov. 5, 1913, to June 30, 1914. Workmen's compensation law. Salem, 1915, 44 pp.

The following is a recapitulation of the financial statement of the State industrial accident fund at the close of business June 30, 1915.

RECEIPTS.	
Contributed by the State.....	\$90,345.22
Employers' contributions.....	450,932.49
Workmen's contributions.....	78,754.33
	\$620,032.04
DISBURSEMENTS.	
Set aside in reserve to guarantee pensions.....	174,843.99
Compensation for time loss.....	121,638.27
First aid to injured workmen.....	61,438.70
Burial expenses.....	5,219.23
Pensions paid.....	7,060.27
Cost of administration to date.....	170,129.22
	440,329.68
Balance.....	179,702.36

As already suggested, the law provides for a payment to the industrial accident fund by the State of an amount equal to one-seventh of the total payment made by employers and employees. From this fund are made all payments authorized by the act, including the cost of administration. The item of \$90,345.22 appearing above includes the original appropriation of \$50,000 made by the legislature and \$40,345.22 as the State's contribution from July 1, 1914, to December 31, 1914. On June 30, 1915, the secretary of state credited to the fund \$40,910.38 to cover the State's contribution for the preceding six months. Therefore the contribution made by the State for the year under consideration would be the total of \$40,345.22 and \$40,910.38, or \$81,245.60. The report states, however, that while the payments for compensation benefits as shown in the above statement represent a period of one year, the receipts from employers and workmen were for 11 months only.

The fact that during the period from November 5, 1913, to June 30, 1915, the insurance features had been operative for but 12 months, suggests several methods of stating the cost of administration. The total expense during the entire period, amounting to \$70,129.22, including original organization expense and the cost of permanent adjustment, shows a ratio of expense to receipts of 10.6 per cent.² For the year ending June 30, 1915, the administrative expense rep-

¹ This figure represents the cost of administration from Nov. 5, 1913, to June 30, 1915. As noted elsewhere the administrative cost for the year ending June 30, 1915, was \$49,528.05.

² If this is based on the receipts for 11 months as shown in the recapitulation of the financial statement the ratio of expense to receipts is 11.3 per cent, instead of 10.6.

represented 8.69 per cent¹ of the moneys handled by the commission during that period. Using still another method of stating the cost of administration, it required during the year ending June 30, 1915, \$1.337 to carry \$1 in benefits to injured workmen.

Where workmen are permanently partially disabled, as in the loss of an arm or foot, the law provides a monthly payment of \$25 for periods of time which vary according to the severity of the injury. The awards range from six months at \$25 per month for the loss of a little finger to 96 months for the loss of an arm at or above the elbow. Where the loss of fingers, toes, or an eye is involved, the workman has the option of taking the sum awarded in installments of \$25 per month or a single payment somewhat less than the total of the installment payments. During the year 66 per cent chose to take payment in a lump sum. While authority is given the commission in its discretion to make lump-sum payments under certain conditions in fatal cases, no applications for such awards were made during the first 12 months.

The Oregon law authorizes the commission to provide medical and surgical attendance, transportation, and hospital accommodations for injured workmen, the expenditure in any one case being limited to \$250. The charges of surgeons for their services are made in accordance with a fee schedule which was adopted by the commission after securing the views of physicians in various parts of the State and conferring with a committee from the State Medical Society. Of the total number of claims filed during the year there were 12 cases in which the cost of treatment would have exceeded the limitation of \$250. The total cost of medical, surgical, hospital, and similar service during the year was \$61,438.70, or 16.59 per cent of compensation cost.

During the year but four appeals were made from decisions of the commission. In only a few instances did workmen ignore the compensation act and bring suit against their employers, and the report states that this litigation was generally unsuccessful.

Reserves are set aside in all permanent partial disability cases where the payments extend over two years. Where workmen are disabled for short periods compensation is awarded and paid as promptly as possible after the workman has resumed his employment. There is no waiting period. In cases of serious injury extending over

¹ This is not apparent from the above recapitulation of the financial statement, since the receipts there indicated, as already shown, cover a period of only 11 months. Based on the estimated receipts, \$659,076.67, indicated in the last table, the administrative expense represented 7.5 per cent of moneys handled by the commission. Based on the receipts from employers and workmen as shown in the recapitulation and taking the amount received from the State for the 12 months ending June 30, 1915, namely, \$81,245.60, the ratio of expense to receipts is 8.11 per cent.

one or more months compensation is paid at the expiration of each month.

During the year a total of 4,546 claims were reported to the commission. The following table shows the disposition of these claims:

CLAIMS REPORTED AND DISPOSED OF FOR THE YEAR ENDING JUNE 30, 1915.

Claims.	Number.	Per cent.
Received.		
Nonfatal accidents reported.....	4,475	98.44
Fatal accidents reported.....	71	1.56
Total.....	4,546	100.00
Disposition.		
Final settlement.....	2,714	59.70
Suspensions (no claim for compensation received).....	237	5.21
No time loss but first aid paid.....	876	19.27
Claims in process of adjustment.....	324	7.13
Rejection for cause.....	155	3.41
Settled by third party.....	1	.02
Monthly payments continued July 1, 1915 (disability still existing).....	152	3.35
Awards made and amounts set aside:		
Permanent partial.....	15	.33
Permanent total.....	1	.02
Fatal cases.....	27	.59
Fatal cases:		
Finalled by remarriage.....	1	.02
Finalled by expiration.....	1	.02
In process of adjustment.....	19	.42
Suspended (no record of dependency).....	20	.44
Rejected.....	3	.07
Total.....	4,546	100.00

Of the 155 claims rejected by the commission 32 of the claimants were not injured in the course of their employment, 31 furnished insufficient evidence of injury by accident, 23 were not disabled, 21 suffered from disease, 16 were not subject to the act, the employers of 8 workmen had rejected the law, two claimants were employers, in two cases the injury had been received while fighting, one claimant had personally rejected the act, and one claim was rejected because the workman had been injured while in the service of an employer in another State. The remaining 18 cases were trivial—chapped hands, lime and cement poisoning, and infection not resulting from an accident. In the case of hernia, the commission ruled that the evidence must show that hernia resulted or developed through accident and had not existed prior to the accident.

Of the 4,546 claims reported to the board during the year, 2,793 were definitely passed upon, for which compensation was paid. Of these 60 were fatal, 110 were permanent partial disabilities, 1 was permanent total disability, and 2,622 were temporary disabilities. The total receiving compensation includes cases in which the claimant lost time for as brief a period as one-half day. The summary of injuries, awards, and first-aid cost is presented in the table following.

SUMMARY OF INJURIES, AWARDS, AND FIRST-AID COST, BY NATURE OF INJURY, FOR YEAR ENDING JUNE 30, 1915.

Kind of injury.	Number of cases.	Amount of awards.				First-aid cost.	Total benefits.	Average benefits per case.	Per cent of total benefits.
		Pension reserves.	Burial (57cases).	Disability.	Time loss.				
Fatal.....	60	\$156, 713. 93	\$5, 419. 23	.....	.....	\$677. 70	\$162, \$10. 86	\$2, 713. 51	49. 7
Permanent total.....	1	7, 346. 31	.....	.....	.....	250. 00	7, 596. 31	7, 596. 31	2. 3
Permanent partial.....	110	.....	.....	\$54, 811. 20	\$3, 998. 02	3, 978. 00	62, 787. 22	570. 79	19. 1
Temporary.....	2, 622	.....	.....	.....	75, 130. 73	19, 511. 37	94, 642. 10	36. 09	28. 9
Total.....	2, 793	164, 060. 24	5, 419. 23	54, 811. 20	79, 128. 75	24, 417. 07	1 327, 836. 49	1, 173. 77	100. 0

¹ This total does not include 876 cases in which no time was lost but which involved a first-aid cost of \$1,607.20; nor does it include \$35,841.52 paid on account of hospital contracts. Adding these two items a total of \$365,285.21 is obtained, which is \$4,915.25 less than the total compensation paid, namely, \$370,200.46. The report does not explain this difference.

Of the 2,732 nonfatal accidents 110 classified as permanent partial disabilities and 2,622 classified as temporary disabilities are shown according to the member of the body affected and the nature of the injury. Without giving the details of these tables, the number of cases, average disability award, average number of work days lost, average time award, number of first-aid cases in which first-aid bills were paid by the commission, and the average first-aid cost are indicated in the following table:

CASES, AWARDS, DAYS LOST, AND FIRST AID IN PERMANENT PARTIAL AND TEMPORARY DISABILITY CASES.

Nature of disability.	Number of cases.	Average disability award.	Average number of work days lost.	Average time award.	Number of first-aid cases.	Average first-aid cost.
Permanent partial.....	110	\$498. 28	47. 5	\$36. 35	52	\$76. 50
Temporary disability.....	2, 622	.....	17. 1	28. 65	1, 057	18. 46
Total.....	2, 732	498. 28	18. 4	25. 30	1, 109	21. 16

Of the 2,622 temporary disabilities, 814, or 31 per cent, lasted one week or less and would have been eliminated by a one week waiting period; 1,497, or 57 per cent, lasted two weeks or less and would have been eliminated by a two weeks' waiting period. In addition, the longer term disabilities would have been reduced, for the purpose of computing compensation, by one or two weeks had there been a one or two weeks' waiting period. The compensation for temporary disabilities would have been reduced approximately \$21,000 with a one week waiting period, and \$34,600 with a two weeks' waiting period. The length of disability by weeks for fatal, permanent partial, and temporary disabilities is shown in the following table, one permanent total disability case being omitted.

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DURATION OF FATAL, PERMANENT PARTIAL, AND TEMPORARY DISABILITIES FOR THE YEAR ENDING JUNE 30, 1915.

Duration of disability.	Permanent partial.		Temporary.		Fatal (disability before death).		Per cent of all disabilities.
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	
No time loss.....	4	3.7	.....	.....	55	91.6	2.1
One week or less.....	1	.9	814	31.0	2	3.3	29.3
Over 1 to 2 weeks.....	4	3.7	683	26.0	.....	.....	24.6
Over 2 to 4 weeks.....	16	14.5	599	22.8	.....	.....	22.0
Over 4 to 8 weeks.....	38	34.5	357	13.6	2	3.3	14.2
Over 8 to 13 weeks.....	35	31.8	107	4.1	1	1.7	5.1
Over 13 to 26 weeks.....	12	10.9	50	1.9	.....	.....	2.2
Over 26 weeks.....	.....	.....	12	.5	.....	.....	.4
Total.....	110	100.0	2,622	100.0	60	100.0	100.0

In the classification of accidents according to industry, 1,378, or 49.3 per cent, occurred in the lumber industry, including logging and logging railroads, and lumber manufacture and the manufacture of lumber products. Five hundred and two, or 18 per cent, were due to miscellaneous construction work. The accident frequency is indicated in the following table.

Fatals per 1,000 full-time workers.....	2.86
Permanent totals per 1,000 full-time workers.....	.05
Permanent partials per 1,000 full-time workers.....	5.24
Temporary disabilities per 1,000 full-time workers.....	124.85

Total accidents per 1,000 full-time workers..... 133.00

One hundred and sixty-two, or 5.8 per cent, of the injuries passed upon were aggravated by infection. The cost of these injuries is here indicated:

Number of injuries which were aggravated by infection.....	162
Compensation awarded (including reserve set aside in one fatal case)....	\$11,911.39
First-aid cost to the commission in 71 cases.....	2,051.05
Burial in one fatal case.....	100.00
Total cost to the commission.....	14,062.44

The report shows that mechanical accidents were the most costly, the average for the 661 thus classified being \$203.80, while the average cost of 2,132 nonmechanical accidents was \$79.13. Although the nonmechanical accidents were greater in number the mechanical accidents were decidedly more severe. The following table shows the classification of accidents according to cause, presenting the relative importance as indicated by the cost of compensation. In fatal cases the cost of the average fatal case has been used in each instance, as the cost of individual cases varies too greatly to be of any value as an index of severity. First-aid expense is not included in the cost.

CLASSIFICATION OF ACCIDENTS ACCORDING TO CAUSE, SHOWING RELATIVE IMPORTANCE AS INDICATED BY THE COST OF COMPENSATION.

Cause.	Number of accidents.			Cost of compensation.	Per cent of total cost.
	Fatal.	Nonfatal.	Total.		
Mechanical accidents.					
Boilers and steam pipes.....	1	9	10	\$2,996.65	0.99
Prime movers (engines and motors).....		21	21	1,561.31	.51
Transmission apparatus.....	2	64	66	18,411.43	6.17
Saws.....	1	136	137	21,596.70	7.12
Working machinery (other than saws).....	2	109	111	13,691.37	4.51
Hoisting and conveying apparatus.....	14	247	261	56,078.41	18.48
Power vehicles.....	6	37	43	20,052.40	6.61
Miscellaneous mechanical accidents.....		12	12	321.01	.11
Total, mechanical accidents.....	26	635	661	134,709.28	44.50
Nonmechanical accidents.					
Explosives, fires, corrosive substances, electricity.....	4	71	75	14,539.78	4.79
Falling objects.....	9	396	405	35,426.18	11.68
Falls of persons.....	6	371	377	32,438.29	10.69
Hand tools.....		393	393	19,166.07	6.32
Handling materials and objects.....	1	303	304	9,795.72	3.23
Rolling objects.....	5	82	87	17,368.73	5.72
Striking against or being struck by objects; stepping on sharp objects.....		214	214	5,633.35	1.86
Drowning.....	8		8	21,617.76	7.12
Miscellaneous nonmechanical accidents.....	1	268	269	12,724.26	4.19
Total, nonmechanical accidents.....	34	2,068	2,132	168,710.14	55.60
Total, all accidents.....	60	2,733	2,793	303,419.42	100.00

Hospital fees were paid by the injured workmen in 1,520, or 57 per cent, of the 2,675 cases in which information was available. The fees amounted to \$1 per month in 1,276, or 47.7 per cent, of the cases and the average paid per case reported was 97 cents per month. These fees are in addition to the regular contributions which all employees make under the compensation act. In all except one instance it will be observed the hospital fees are in excess of these regular legal contributions. In some cases they were probably equal to half of the contributions paid by the employer under the law as in effect during the period covered by the report. The following table indicates the distribution of these payments:

MONTHLY HOSPITAL FEES PAID BY INJURED WORKMEN.

Dues.	Number of cases.	Per cent.	Dues.	Number of cases.	Per cent.
25 cents.....	1	0.04	90 cents.....	6	0.22
30 cents.....	2	.07	\$1.....	1,276	47.71
35 cents.....	1	.04	\$1.25.....	14	.52
50 cents.....	49	1.83	\$1.50.....	14	.52
65 cents.....	22	.82	\$2.....	4	.15
72 cents.....	1	.04	\$2.75.....	1	.04
75 cents.....	123	4.60	\$3.....	1	.04
80 cents.....	2	.07	No dues.....	1,155	43.18
85 cents.....	2	.07			
87 cents.....	1	.04	Total.....	2,675	100.00

The Oregon law has adopted in general a pension system of compensation. This is essentially different from the system which bases awards on a percentage of wage and which is largely in use in other States. A pure premium system is intended to pay compensation from the standpoint of public policy. The system based on a percentage of wage is intended to remunerate the injured or his dependents in rough proportion to the economic loss suffered. The pensions awarded under the Oregon law to dependents in fatal cases are, roughly speaking, as follows: \$30 per month to surviving widows or invalid widowers; \$6 per month to children under 16; 50 per cent of the average monthly support to actual dependents or single workmen, but not to exceed \$30 per month.

Awards for temporary disabilities partake of both the pension system and that based on a percentage of wage. The pensions granted vary with the marital condition and the number of children under 16 years. However, the law provides that in a vast majority of cases—disabilities during the first six months—this pension may be increased one-half provided it does not exceed 60 per cent of the wage. This means that in effect the Oregon law grants to the injured person 60 per cent of his wage with the following principal minimum and maximum limitations:

MINIMUM AND MAXIMUM AMOUNTS OF PENSION FOR TEMPORARY DISABILITY.

Marital condition and number of children under 16.	Minimum pension.	Maximum pension.
Unmarried.....	\$30.00	\$45.00
Married and no children.....	35.00	52.50
Married and 1 child.....	41.00	61.50
Married and 2 children.....	47.00	70.50
Married and 3 children.....	50.00	75.00

It will be seen that the minimum limitations are high, in some cases \$50 per month. This, coupled with the fact that Oregon has no waiting period and that the wage per month is estimated on the basis of 26 days, or 312 days per year, raises the aggregate Oregon awards for temporary disabilities above the level of those granted in other States. The wage loss for 2,622 temporary disability cases during the year amounted to \$125,287.63. The compensation paid to cover this loss was \$75,130.73, or 60 per cent of the wage loss. Under the Washington law, in which the system of awards is the same as in Oregon with some decrease in pensions, the percentage of wage loss paid in compensation is 47.6 per cent. A comparison with the percentage of wage loss that according to estimates would have been granted in the Oregon cases under the schedule of a few typical laws in other States may be useful, and the following is quoted from the report:

One type of law, adopted in a number of States, pays compensation on the basis of 50 per cent of the average wage, with a maximum limit of \$10 per week, a minimum limit of \$5 per week, and a two weeks' waiting period. Such a schedule applied to the Oregon cases would have paid 25 per cent of the wage loss.

A more liberal type of law is that of New York, in which the awards are based on 66 $\frac{2}{3}$ per cent of the average wage, with a maximum limit of \$15 per week, a minimum limit of \$5 per week, or full wages and a two weeks' waiting period. Such a schedule applied to the Oregon cases would have paid 34 per cent of the wage loss.

One of the most liberal of the laws that pays a percentage of the wage is that of Ohio. The awards are based on 66 $\frac{2}{3}$ per cent of the average wage, with a maximum limit of \$12 per week, a minimum limit of \$5 per week, or full wages and a one week waiting period. Such a schedule applied to the Oregon cases would have paid 42 per cent of the wage loss.

In these last three typical cases the average weekly wage is taken to be based on 300 work days per year. Some of the facts to be noticed in the above comparison are:

The awards for temporary disability granted under the system of pensions in Washington and Oregon result in liberal compensation as compared with the awards granted in States in which compensation is based on a percentage of wage and in which waiting periods exist. The percentage mentioned in the law is not always a true index to the percentage of wage loss which is paid to injured workers. The standard of 66 $\frac{2}{3}$ per cent of wage loss which has been set by some federations and associations has not as yet been reached in any State.

PHYSICAL EXAMINATION OF WAGE EARNERS IN OHIO.

A recent report by the Department of Investigation and Statistics of the Industrial Commission of Ohio presents an account of an investigation of the results of physical examination of applicants for work and of employees at work in certain establishments in Ohio during the year 1914.¹

According to this report "the movement for physical examination of applicants for work and of employees has grown rapidly in Ohio." Thus, prior to April of 1914, excluding railroads and street railways, only 4 establishments required applicants for work to undergo a physical examination. During that year, however, 11 establishments began physical examinations of applicants for work and of employees; 14 began the physical examination of applicants for work only, and 1 establishment the examination of employees. In the course of collecting data for this report, it was found that in the first eight months of 1915 six establishments began the physical examination both of applicants for work and of employees, 4

¹ Physical Examination of Wage Earners in Ohio in 1914. Columbus, 1915. 29 pp. (Bulletin of the Industrial Commission of Ohio, Vol. II, No. 6; Department of Investigation and Statistics, Report No. 18.)

others began the physical examination of applicants for work alone and 2 others of employees alone. There were, therefore, in Ohio at the time of the investigation 42 establishments, normally employing approximately 68,500 persons, which required physical examination of applicants for work or of employees or of both.

The distribution by industries of the establishments which were covered by the investigation was as follows:

Industry.	Number of establishments reporting examination of—	
	Applicants for work.	Employees at work.
Steel works and rolling mills.....	13	5
Foundry and machine shop products.....	4	1
Rubber goods manufacture.....	4	3
Telegraph and telephone companies.....	2	.....
Wire works.....	1	1
Electrical machinery and supplies.....	1	1
All others, including cash registers, calculating machines, cutlery and tools, transportation by water, maintenance of buildings and office work, and clothing manufacture.....	4	1
Total.....	29	12

Complete records are not available for all these establishments. Twenty-six establishments, which required applicants to undergo a physical examination and which kept records, examined 23,118 persons during 1914, and rejected 1,040 because of physical inefficiency. Six establishments, which required employees to undergo a physical examination and which kept records, examined 8,054 during 1914 and reported 791 physically unfit for the work at the time of the examination, but discharged only 118 as a result of the examination. The remaining 673 were allowed to remain on the work on which they were engaged, but were given advice concerning treatment or were furnished treatment, or were transferred to work for which they were better fitted.

The purposes of the physical examination of workmen were declared to be (1) to enable the employer to select men physically fit for the work he wants them to do, (2) to determine their physical condition so as to avoid unjust claims for injuries, (3) to adjust the employee to the work for which he may be physically best suited, and (4) to maintain the health of employees by preventing the introduction of communicable diseases, by advising and educating industrial workers to care for their physical well being, and to reduce the hazard to the individual employee and his fellow workmen arising from physical defects.

The investigation showed that these physical examinations varied greatly in the various establishments, both as to the character of the

person by whom they were conducted and as to the degree of thoroughness observed. The report does not relate the results of the examinations to the degree of thoroughness in the methods employed, nor does it show results by establishments or industries. In 11 of the 29 establishments male applicants for work were examined physically by graduate physicians employed on full time; in 8 establishments practicing physicians were retained on a fee basis; in 5 establishments graduate trained nurses made the examinations; in 4 establishments employment officers who were not medical graduates made the examination, and in 1 establishment a practicing physician, who took charge of the general medical work of the establishment, was retained on annual salary. In the 12 establishments which examined employees at work, graduate physicians were employed to do the work. As to degree of thoroughness, it is noted that the time of each examination ranged from about 5 to 30 minutes.

It is pointed out that as a general rule "the examinations were not conducted along exact lines of scientific investigation, but, instead, each type of examination was arranged to point out the defects it seemed important to disclose in relation to the particular requirements of the establishment or the ideas of those in charge."

The results of the examinations, both of applicants for work and of employees at work, may be summarized in the following table:

CAUSES OF REJECTIONS OF APPLICANTS FOR WORK AND CAUSES RENDERING EMPLOYEES AT WORK UNFIT FOR TASKS AT WHICH ENGAGED AT TIME OF EXAMINATION.

Cause.	Applicants rejected.			Employees found unfit for work at which engaged.		
	Male.	Female.	Total.	Male.	Female.	Total.
General diseases:						
Syphilis	20		20	11		11
Tuberculosis	21		21	10	2	12
Other general diseases	15		15	15	1	16
Total	56		56	36	3	39
Circulatory system:						
Organic disease of the heart	98	4	102	26		26
Organic disease of the heart, with complications	58		58			
Other diseases of the circulatory system	10		10	4		4
Total	166	4	170	30		30
Nervous system, diseases of	14		14	3		3
Eye:						
Impaired vision	125	77	202	249	71	320
Trachoma	10		10	3		3
Other diseases of the eye	14		14	6		6
Total	149	77	226	258	71	329
Ear (impaired hearing)	6	1	7	10	5	15
Mouth and throat, diseases of	3	2	5			
Chest (poor chest)	19		19	2		2

CAUSES OF REJECTIONS OF APPLICANTS FOR WORK AND CAUSES RENDERING EMPLOYEES AT WORK UNFIT FOR TASKS AT WHICH ENGAGED AT TIME OF EXAMINATION—Concluded.

Cause.	Applicants rejected.			Employees found unfit for work at which engaged.		
	Male.	Female.	Total.	Male.	Female.	Total.
Hernia:						
Inguinal hernia.....	230		230	218		218
Hernia, with complications.....	30		30	46		46
Other forms of hernia.....	7		7	8		8
Total.....	267		267	272		272
Genito-urinary:						
Gonorrhoea.....	77		77	11	3	14
Other genito-urinary diseases.....	9	1	10	3		3
Total.....	86	1	87	14	3	17
Varicose veins.....	20		20	14		14
Glands, diseases of.....	6	4	10			
Skin, diseases of.....	18	1	19			
Abnormal growths (tumors).....	3		3			
Infections.....	3		3			
Occupational diseases:						
Benzine poisoning.....	1		1			
Lead poisoning.....	2		2			
Total.....	3		3			
Convalescent.....	31		31			
Deformities or maimed conditions.....	54		54	61		61
Not specified.....	34	12	46	8	1	9
Grand total.....	938	102	1,040	708	83	791

SANITARY STANDARDS FOR THE FELT HATTING INDUSTRY IN NEW JERSEY.¹

In an effort to safeguard the health of New Jersey's half million workers, and in the hope of promoting a spirit of cooperation among those engaged in manufacturing processes offering sanitary problems of peculiar difficulty, the New Jersey Department of Labor has in preparation a series of bulletins intended not only to prove helpful in establishing the claims to protection of certain workers who have been too long sacrificed to supposedly "necessary hazards," but also to enable employers to compare their methods with the latest hygienic standards now prevailing in their respective trades. One of these bulletins, issued in July, 1915, is an illustrated pamphlet of 94 pages which sets forth in detail all phases of the felt hatting industry, and presents the sanitary standards to be maintained in order to render employment reasonably safe and free from health-destructive menaces.

The report is based largely upon an investigation of conditions existing, experiments tried, and results achieved in hat factories of the Orange Valley and Newark, N. J., Danbury, Conn., Philadel-

¹ Sanitary Standards for the Felt Hatting Industry, published by the Department of Labor, State of New Jersey. Trenton, 1915. Illustrated. 94 pp.

phia, Pa., and Fall River, Mass., supplemented by other facts gathered by experts of the department.

Following a chapter describing the felting of fur, the report presents in order a brief description of each process employed in fur cutting from the time the skins are received to the time they are sacked and stored ready for the hat maker. After being dampened and opened, the skins are "tumbled" or "carded" (an extremely dusty process) to smooth out the little bunches of matted hair, and are then fed into the "plucking" machine to be rid of the excess of hair found in all pelts. In the "carrotting" process which follows, the worker encounters the first great hazard connected with the hatting industry, namely, mercurial poisoning. The carrot, so called from the carrot-yellow color of the treated skins which have been subjected to heat, is a diluted solution of nitric acid and mercury applied by hand to the fur side of the skin for the purpose of opening up the scales of the fur fiber in order to facilitate their tendency to interlock, which is the secret of the felting process. Machine carrotting is even more dangerous than that done by hand, because the machines as a rule are operated without mechanical exhaust ventilation and the brushes which apply the liquid throw off a fine spray of mercury, much of which the worker is compelled to inhale. The skins are then dried. Here again the fumes are extremely dangerous and exhaust ventilation or a powerful natural draft is imperative. Brushing the felt to smooth out the matted hair so that the fur will later come from the cutter with each filament separate generates a highly dangerous dust heavily charged with crystallized nitrate of mercury, and in the subsequent cutting process the workers are liable to accident resulting in loss of the ends of fingers or even an entire hand. The sorting of fur is done by girls and women and the sacking and storage by men, both occupations being highly injurious because of exposure to a mercury-impregnated atmosphere.

One of the most obstinate problems in the fur-cutting trade is stated to be found in the blowing room where the marketable hatters' fur is reclaimed from the sweepings and refuse destined for the fertilizer plants. Not only floating fur but great quantities of mercurialized dust are thrown into the air of the workroom during the process. In some factories the danger to health resulting from inhaling this dust has been largely eliminated by the installation of machines equipped with some type of mechanical exhaust ventilation, illustrations of which are presented in the report.

The department of labor presents the following summary of sanitary standards established for the purpose of making fur cutting reasonably safe and sanitary:

- Inclosure, and standard exhaust ventilation on tumbling drums.
- Standard exhaust ventilation for the fur-plucking machine.

Mixing the carrot outside the shop.

Storing the carrot in ventilated chambers.

Rubber gloves and impervious aprons for the carrotter.

A drained bench of impervious material slanting away from the carrotter.

Ventilating hood with efficient exhaust above the carrotting table for both hand and machine work.

Efficient draft to carry off all fumes from drying ovens.

Standard exhaust ventilation on the brushing machines.

Exhaust ventilation on the cutting machines.

Mechanical exhaust ventilation on all blowing machines.

Removal of steam by means of ventilating hoods from all boiling tanks in the treatment of "roundings."

Mechanical exhaust ventilation on all tearing machines, teasing blowers, choppers, and grinders.

No raising of the temperature of the workroom above 60 degrees by means of artificial heat.

Wearing of overalls and head coverings.

Abundant natural or mechanical ventilation in the storeroom for sacked fur, and wherever "white-carrotted" skins are drying.

Daily gathering up of all waste, vacuum cleaning, or wet sweeping of the whole shop at noon and after work hours daily.

Separate washing facilities for both men and women, with hot and cold water; modern toilet accommodations; and pure, cool drinking water, preferably bubbling fountains.

Separate lunch rooms outside of the rooms where mercury and carotated fur are handled.

Warning notices (such as this one posted in certain English shops) which would call the attention of workers to the need for cleanliness and personal hygiene:

Fur cutters are warned of the danger of mercurial poisoning of which the principal symptoms are soreness of the gums, offensive breath, increase in the amount of spittle, and trembling of the fingers.

Workers are warned of the danger arising from the chewing of tobacco, and of eating food with unwashed hands.

Mercury has a tendency to destroy the teeth, and this can be best obviated by the use of a toothbrush once every day.

The processes of hat manufacture are carried on in two general departments, namely, the "back shop" and the "front shop," in each of which are found health hazards peculiar to the work performed. In the back shop the various kinds of graded fur, which have been purchased from the cutters but which must be refined before being fit for hat making, are mixed by hand,¹ subjecting the mixer to extreme danger because of the cloud of poisonous fur and dust thrown into the air, and then in the blowing machine cleaned of every bit of foreign matter, after which the mixture is weighed out in the quantity required for one hat. This mixed fur being fed into a machine is drawn by powerful fan suction and deposited on a rapidly revolving slightly dampened copper cone where, under the

¹ It is stated that one firm handling the finest grades of fur mixture is now using for this purpose a machine which does the work as satisfactorily and more cheaply than hand labor and keeps the room free from dust and fur.

eyes of the "coner," it assumes the shape of a huge fool's cap. This is removed and hardened and then passed on for the so-called "wet" processes, performed in that portion of the back shop called the "plank shop." After being dried, brim stiffened, dyed and finally blocked, the hat is ready for the "pouncer" who removes all hair which, during the sizing operation, worked through the felt and was left protruding from the surface. In the front shop the hat undergoes the finishing processes, including steam blocking, crown and brim ironing, surface finishing, curling (in the case of derbies), trimming, and flanging by which the curl is set and the desired curve given to the brim.

In most of the above processes, to a much less degree however in the front shop than in the back shop, the chief dangers to health which are noted are the mercurialized-dust hazard and the steam hazard, both of which result from essentially necessary factors in the making of hats. In many of the processes performed in the back shop the workers are constantly exposed to poisonous dust, although in some cases this is minimized by properly constructed machinery, and it is stated that no single department ordinarily contains more serious health hazards (both mercury poisoning and consumption) than the blowing room, owing to the quantity of carroted fur and dust thrown out by the machine while in operation.

Some idea of the dangers of the work in the back shop may be gained from the following excerpt from the report:

To those outside the trade no adequate conception of the discomforts of the typical plank shop can be conveyed by the mere statement that—from starting to blocking—the makers work over kettles of water kept at the boiling point. For the greater part of the year the average sizing and dye rooms are filled with an impenetrable fog. The starters at the octagonal battery (their shoulders almost touching), may each one be conscious of his speeding mates, but can only identify them by sense of touch. The machine sizers only hear the clatter of their revolving "lagged" rolls; and divine the aisle guarded by a vibrating line of invisible and, therefore, dangerous power-driven belts. In cold and damp weather, in dye room or plank shop, there is no escape for the worker from the hot, podgum-scented fog; through which the strongest electric spot light shows blurred and ineffectual. In addition, all kettles are drained twice a day, but without direct sewer connections; the hot water flowing through open drains in the cement floors of the best shops, or spreading out over the whole department in the majority of cases. The same traditional practice also obtains in the dye room. Moreover, the brim and tip stretching and blocking machines are continually stopping over; condensed steam drips from ceiling and rafters; while each starter and sizer contributes his quota of sousing and splashing to a resulting unparalleled total of handicaps to health and industrial efficiency.

There are few familiar with earlier winter trade conditions at their worst who can not recall seeing highly skilled American workers standing with chilblained feet in water but little above the freezing point; dripping with steam and sweat from the waist upward; their hands raw from the friction of their plank pins and wooden or leather shields (called gloves); an old umbrella hung overhead to keep off the trickling condensation from the roof; uncomplainingly paying their physical toll of colds,

coughs, bronchitis, pneumonia, consumption, and mercury "shakes," to the so-called "necessary hazards" sanctioned by centuries of hat making.

On the other hand, there is none familiar with certain of our largest factories (whose model concrete-floor construction, free outside ventilation, ample light, and location of the sizing department in the upper story would seem to possess all the obvious advantages due to modern sanitary standards) who does not know that when natural draft hoods alone are relied on for steam removal, the results are distinctly unsatisfactory. Even in such shops, for at least five months of normal winter weather, the workers must rely on sense of touch rather than vision in the operations of starting and sizing. Tests have shown that the humidity in the vicinity of the worker approaches the saturation point; although health risks are lessened by other sanitary provisions, at all seasons they are subjected to the almost daily discomfort of steam and excessive heat.

Serious as are the physical effects of such habitual exposure to heat and humidity during working hours, there are also allied risks incidental to the ordinary back-shop practices which for generations have been ignored alike by employer and employees. While a lack of proper washing facilities and the prevalence of unsanitary toilets (including those in detached buildings that involve chilling exposure of workers to inclement weather) are a health menace, the absence of airy, well-heated dressing rooms (where street clothing may be kept during the day and wet working clothing be changed and hung to dry over night) is largely responsible for the back-shop's sickness and death record from respiratory diseases.

The report states that efforts to control the steam hazard have almost universally resulted in failure. An account is given of a costly failure in the Danbury district which was based upon the scientifically correct principle that raising the temperature of the atmosphere immensely increases its moisture-carrying capacity. However, its successful operation was found to be almost impossible owing to the difficulty of maintaining a purely mechanical means of air exchange, for which closed windows and tight walls are the first requisite.

After months of investigation, experimentation, and discussion with ventilation experts the New Jersey Department of Labor decided upon the direct method of steam control at the point of origin rather than the adoption of the warm-air system. Briefly stated, this system is based on the idea that the place to control steam is at the point where it is generated, and that it should be confined at that point and drawn off before it has a chance to circulate in the air of the workroom. The report indicates that practical experience has proved this method to be a complete success, and it is stated that nearly all the New Jersey felt hat factories have been equipped with this system.

That the hazard of dust and steam may be largely eliminated is emphasized by reference to a single Philadelphia hat factory in which, it is stated, "all the health problems of the blowing room have been solved."

The methods employed in meeting the problems of dust and humidity are described in detail.

The universal practice of running the waste water from sizing kettles and dyeing vats over the floor through open drains is not approved by the department.

Workers in the front shop are in many factories subjected to dust and heat hazards, although to a much less degree than in the back shops, and in addition the air in rooms where crown and brim ironing are done is vitiated by the long lines of gas-heated ironing machines. Not only is the oxygen exhausted by combustion but it is an exception, declares the report, to find installations entirely free from gas leaks. Furthermore, the fire hazard must be considered. In some establishments these dangers have been eliminated by the use of electricity instead of gas, and where the use of gas is continued the department of labor requires efficient exhaust ventilation.

In the surface-finishing department the hat is singed by the use of naphtha, the fumes of which must be carried outside. In the trimming room, where women only are employed, it was found that in New Jersey factories ventilation is sometimes inadequate but that few such rooms are other than well lighted and cheerful. Toilet facilities were too often found to be inadequate or unsanitary, washing arrangements below standard, and dressing and lunch rooms absent or cheerless. However, it is noted that these disadvantages to health and efficiency are being done away with as rapidly as trade conditions permit.

To eliminate the dangers to health mentioned in the report and thus make the various occupations of the hatting industry safe and sanitary the department of labor has issued the following summary of sanitary standards, which it requires all shops to observe:

All mixing should be done mechanically in an inclosed device. There should be no layering-down or mixing in the open.

The fur mixture should be fed into the "devil" by means of an inclosed automatic device.

The "devil" should be tightly housed and the feed opening properly safeguarded. All settling chambers should be rendered as dust proof as possible by means of cheesecloth coverings over the necessary wire-mesh openings.

All boxes containing fur mixture should be kept tightly covered during transportation or while standing in the workroom.

All blowing machines should be fed by means of an automatic device; and all dust and fur fiber liberated during the blowing and cleaning operations should be removed from the air of the workroom either by means of the exhaust system standardized in the bulletin, or other approved and equally efficient device.

Vacuum or wet cleaning only should be employed in the dusty departments; and no dry sweeping during working hours or cleaning by means of compressed air should at any time be permitted.

The temperature of the blowing room (when due to artificial heat) should not be permitted to exceed 75°, and when live steam is employed to increase the humidity, excess temperature should be prevented by means of a cold-water spray, or other efficient device.

Fourteen feet should be the minimum height of ceiling in all mill forming-rooms where the feeder stands on a raised platform at the rear of the forming-machine. When the ceiling is lower than this requirement, the platform should be lowered, and a double inclined apron attachment to the forming machine or other device be adopted.

The temperature of the mill room (when due to artificial heat) should not be allowed to exceed 75 degrees; and when live steam is employed to increase the humidity, excess temperature should be prevented by means of a cold-water spray or other efficient device.

All steam generated in the operations of starting, first and second sizing, dyeing and blocking should be controlled and eliminated by means of efficient mechanical exhaust ventilation, such as have been standardized in the bulletin.

Wherever factory construction permits, all kettles should be emptied through closed drains to central traps with convenient clean-outs, and thence to the sewer. In all shops where the contents of the kettle is pulled and allowed to flow over the floor or in open drains, substantial wooden floor-gratings should be provided.

Fixed pegs should not be permitted in any drying room which must be entered while hot by the worker. Unless it is the invariable custom of a factory to only turn on steam outside of work hours, movable racks or other devices are required, and the dry room should be of a type standardized in the bulletin.

Wood alcohol fumes should not be permitted to pollute the air of the workrooms either during the shellacking or drying operations. Efficient means for their removal should be installed, and care exercised to safeguard against the hazard of explosion.

All dust generated in the operation of pouncing and sandpapering machines should be controlled and eliminated by means of the efficient mechanical exhaust ventilation standardized in the bulletin.

All steam pots and singeing flames should be hooded and have direct connection to the outer air by means of pipes not less than 12 inches in diameter, with efficient natural draft ventilation.

All hand or mechanical ironing shells should be heated by means of electricity. Wherever gas is employed for ironing purposes, the health of the worker should be safeguarded by means of efficient mechanical ventilation.

When the grade of hats handled makes powdering necessary, the dust generated should be drawn away from the workers by means of efficient exhaust ventilation.

To control the excessive heat generated in the flanging and matricing operations, ample ventilation should be provided by means of windows, wall fans, or other devices; all steam plates should be covered on bottom and sides with asbestos to prevent direct radiation; and wherever possible an electrical device for heating the flange bags should be installed.

There should be daily gathering up of all waste; and only vacuum cleaning of dry departments should be permitted during working hours.

There should be separate washing facilities for men and for women, with hot and cold water; and separate dressing rooms, lockers, modern toilet accommodations, and pure, cool, drinking water, preferably bubbling fountains.

Standard safeguarding should be installed on all shafting under power-driven sewing machines, and on all belts, gears and wheels; and all set screws should either be removed or countersunk.

In the appendix of the report is a chapter in which are described the symptoms of mercury poisoning both as affecting the mouth and alimentary canal and the nervous and muscular systems. Asserting that "pitiful as are the physical effects of mercury poisoning, the great scourge of the felt-hatting industry is induced tuberculosis of the lungs," a statement which is amplified and supported by quotations from various medical authorities.

A method and table are presented for ascertaining the content of moisture in the air of a workroom. A certain amount of humidity is absolutely essential, but the danger sought to be guarded against as prejudicial to health is the combination of humidity and excessive heat. Experiments have seemed to prove that a requisite humidity may be attained without excessive heat.

The hatting industry is seasonal, practically no worker being employed for 12 months in the year. The enforced periods of rest, it is pointed out, while a hardship to the trade as a whole, are, from the health standpoint, physically beneficial to the workers.

THE HEALTH OF GARMENT WORKERS.¹

The Surgeon General undertook these investigations of the health of garment workers at the request of the Joint Board of Sanitary Control of the cloak, suit and skirt, and dress and waist industries in New York City. (See bulletins of this bureau Nos. 146 and 147.) The cloak, suit and skirt trades included in 1913 1,735 shops, employing 48,967 persons; the dress and waist industry included 700 shops, employing 36,868 persons. Thus both combined operated 2,435 shops with 85,835 workers.

The investigation began April 13, 1914, and lasted until November 1 of that year. It consisted of five principal inquiries: (1) Complete physical examination of about 2,000 male and 1,000 female workers in the industries concerned; (2) detailed studies of conditions of illumination in the shops of both industries; (3) test of the air, particularly as to carbon monoxide gas, in the shops of the cloak, suit and skirt and waist industries; (4) conditions of heat and humidity in the shops; and (5) a general sanitary inspection of the shops.

The physical examination made is said to have been thorough, and was conducted by the writers of the monograph, assisted by physicians of the Public Health Service and one from the Joint Board of Sanitary Control. An average of 40 to 50 minutes was given to each worker examined. It consisted in careful physical examinations with a view to recording physical data, the incidence of defects and diseases, the present state of health of each individual, and certain social data in relation to the social and economic status and the general standard of living of the workers.

Male workers in the cloak and suit trades are divisible into the following groups: Cutters; operators, who sew the garments together on electrically-driven sewing machines; finishers; pressers;

¹ Studies in vocational diseases. I. The health of garment workers, by J. W. Schereschewsky; II. The hygienic conditions of illumination in workshops of the women's garment industry, by J. W. Schereschewsky and D. H. Tuck. Prepared by direction of the Surgeon General. Washington, 1915. 224 pp. (Treasury Department, United States Public Health Service. Public Health Bulletin, No. 71, May, 1915.)

and miscellaneous workers engaged in various other operations, such as buttonhole making, draping, and the like. Females are classified into but three groups of workers, i. e., operators, finishers, and miscellaneous workers. Their duties are similar to the corresponding groups in the cloak and suit trades.

The data are presented separately for males and females. The results of the physical examinations are presented in relation to the various occupations of the two industries which formed the subject of the investigation, but are not related to the age of the persons examined.

The incidence of defects and diseases was noted in the cases of 3,086 workers (2,086 males and 1,000 females), and showed an average of 4.36 defects to each individual. Only about 2 per cent of those examined were found free from defects or diseases. The examinations, however, showed no vocational diseases peculiar to garment workers. The results are thus summarized, with some slight unimportant changes in percentages appearing in the original:

FREQUENT OR SIGNIFICANT DEFECTS OR DISEASES AMONG 2,086 MALE AND 1,000 FEMALE GARMENT WORKERS.

Defect or disease.	Males.		Females.	
	Number.	Per cent.	Number.	Per cent.
Anemia (1,998 males, 999 females).....	96	4.8	118	11.8
Albuminuria (1,512 examinations).....	45	3.0	.....	.....
Appendicitis, chronic.....	13	.6	17	1.7
Arteriosclerosis.....	65	3.1	3	.3
Bronchitis, chronic.....	81	3.9	11	1.1
Color blindness.....	56	2.7	1	.1
Constipation, chronic.....	466	22.3	268	26.8
Defective hearing.....	281	13.5	65	6.5
Defective posture.....	582	¹ 27.9	114	¹ 11.4
Defective teeth (1,911 males, 955 females).....	516	27.0	226	23.7
Pyrorrhea alveolaris.....	480	25.1	158	16.5
Defective vision.....	² 1,422	² 68.2	² 741	² 75.5
Deflected nasal septum.....	217	10.4	36	3.6
Diabetes mellitus (1,392 tests for sugar).....	17	1.2	.....	.....
Emphysema of lungs.....	70	3.4	2	.2
Flat and weak feet (all degrees).....	599	28.7	208	20.8
Gastric ulcer.....	2	.1	5	.5
Hernia (all varieties).....	152	7.3	3	.3
High blood pressure (150 mm. and over).....	165	7.9	14	1.4
Hyperthyria.....	.....	.....	12	1.2
Hypertrophy of tonsils.....	268	12.8	204	20.4
Low blood pressure (below 100 mm.).....	46	2.2	15	1.5
Menstrual disorders:	.....	.....	.....	.....
Amenorrhea (not physiological).....	.....	.....	4	.4
Delayed menstruation.....	.....	.....	10	1.0
Dysmenorrhea.....	.....	.....	200	20.0
Irregular menstruation.....	.....	.....	22	2.2
Menorrhagia.....	.....	.....	31	3.1
Nervous affections.....	207	10.0	32	3.2
Otitis media (chronic catarrhal, and suppurative).....	122	6.8	74	7.4
Pharyngitis and naso-pharyngitis.....	381	18.2	99	9.9
Piles, external, internal, and mixed.....	241	11.6	66	6.6
Pleurisy, fibrinous.....	51	2.4	25	2.5
Rhinitis, atrophic, and hypertrophic.....	612	29.3	198	19.8
Spinal curvature (all grades).....	1,050	50.8	205	20.5
Trachoma:	.....	.....	.....	.....
Active.....	8	.4	.....	.....
Old.....	6	.3	2	.2
Tuberculosis.....	65	3.1	12	1.2
Valvular disease of heart.....	37	1.8	23	2.3
Varicose veins of legs.....	62	3.0	23	2.3
Visceroptosis, including gastroptosis and nephroptosis.....	54	2.6	21	2.1

¹ Further examinations shown in the text indicate a ratio of 50 per cent for both males and females.

² Thus in the original. Comparing p. 75 of the report, it appears that the percentages should be respectively 74 for males and 75.5 for females.

Apart from tuberculosis, with which 3.1 per cent of the males examined and 1.2 per cent of the females were found to be afflicted, the most common defects and diseases among garment workers were, in order of frequency for both sexes combined, defective vision (74 per cent), faulty posture (50 per cent of males), chronic nose and throat affections (26.2 per cent), defective teeth (26 per cent) and pyorrhea alveolaris (20 per cent), weak and flat feet (26 per cent), chronic constipation (23.7 per cent), dysmenorrhea (females, 20 per cent), hypertrophied tonsils (15.3 per cent), defective hearing (10 per cent), nervous affections (7.75 per cent).

The degree of physical development of garment workers is only fair, the average expansion of the chest for both males and females not being high. There appeared to be a great prevalence of faulty posture, particularly among male finishers, who showed the higher percentage. Chronic catarrhal affections of the nose and throat were found very common among garment workers, although the garment trades in themselves did not seem directly responsible for the existence of these conditions. The great prevalence of these diseases may be partly accounted for from the fact that the majority of garment workers have been city dwellers from birth and exposed to crowded and congested conditions, which are said to favor the occurrence of chronic nose and throat affections. Also common among garment workers are defective teeth and pyorrhea, as well as defective hearing and nervous affections, particularly neurasthenia. The prevalence of syphilis was decidedly low.

As to preserving the health of garment workers, the report concludes with certain recommendations, urging the necessity for the correction of physical defects and for the formation of correct postural habits, necessity for attention to oral hygiene, attention to the elimination of dust or "fly" from the air of the workshops, enforcement of regulations to guard against the spread of communicable diseases in workshops, necessity of maintaining the temperature of the shops in the cold season between 62° F. and 70° F., promotion of the use in the garment trades of adjustable seats with backs, establishment of a special dispensary for garment workers, establishment of sick benefit funds as inaugurated at present in some of the locals of the cloak, suit, and skirt makers' unions for the treatment of tubercular workers, and the extension of the system of physical examinations by the Joint Board of Sanitary Control so as to make it applicable to all workers who may apply.

The second part of the above study on occupational hygiene, concerning conditions of illumination in the workshops in the women's garment industry, urges, as the result of the examination of the workshops, adequate provisions for illumination, because of the existing

visual demands of the occupation and because of the presence of a large number of visual defects among the workers in the industries as disclosed by the investigation reported in Part I of the study. This study also showed that as the result of photometric measurements made during the summer of 1914 in a group of 34 typical workshops the illumination was inadequate in the case of a little over one-half the working planes measured and that departures from correct principles in illumination were common in the shops. The effects of these departures were such as to produce inadequate illumination, glare effects, lack of uniformity of distribution of illumination, and troublesome shadows.

In view of these findings the report makes recommendations both as to improving the daylight illumination of workshops as well as to improving the artificial illumination.

The report contains a group of appendixes dealing with matters of technical interest in producing adequate and proper illumination.

OLD-AGE RELIEF IN WISCONSIN.¹

In a pamphlet of 76 pages the Industrial Commission of Wisconsin presents the results of an investigation into the problem of relief for aged persons, the work having been undertaken in compliance with the provisions of a law (ch. 185, Acts of 1913), directing such an inquiry. The act prescribes "a thorough and complete investigation of the number, condition, and welfare of the aged and infirm in this State with a view of establishing old-age pensions." It was also directed that such recommendations and bills as the commission should deem necessary to offer should accompany the report.²

The commission is a permanent one, charged with the administration of all labor laws of the State, including the workmen's compensation law. The present report was made, therefore, by men who are in direct contact with the great body of wage earners, for whom the question of old-age relief is not to be answered by improved methods of charity, but by what the commission designates a "dignified form of support," in keeping with the character and habits of those who have rendered worthy industrial service, but whose declining years are without adequate provision for their material needs. The report does not claim exhaustiveness, nor does it advocate any existing plan or scheme of old-age pensions, but it offers suggestions favorable to the idea, and submits a rough estimate of the probable cost of such pensions on plans that might prove to be feasible.

¹ Wisconsin: Industrial Commission. Report on old-age relief, issued Mar. 1, 1915. Madison, 1915. 76 pp.

² An earlier study in the same field is the report of the Massachusetts Commission on Old-age Pensions, Insurance, and Annuities, Boston, 1910.

The reason for some provisions of the sort is found in five principal causes arising out of modern industrial conditions. In brief, these are (1) the great and increasing number of persons dependent upon the returns of their daily labor for the supplying of current needs; (2) the shortening of the effective working life by reason of the demand for speed in the performance of industrial operation, so that men not in any sense decrepit are none the less unable to secure employment because of the physical necessity of a degree of slowing up; (3) the generally increased longevity of human life, prolonging the unproductive period induced by the second cause; (4) the tendency of home and neighborhood ties to be broken, due to the mobility of our population, so that one may find himself in his declining years isolated from those to whom he might naturally and successfully look for needed assistance; (5) the more humane attitude toward poverty, especially where coupled with age, so that the aged poor are not so readily consigned to the almshouse as formerly. The result of these conditions has been the adoption of systematic measures in most industrial countries other than our own.¹ In Great Britain, Denmark, Australia, and New Zealand, State pension systems exist. Belgium, France, Germany, Italy, Spain, and Sweden provide old-age insurance under State management.

In discussing the present means of support for the aged in Wisconsin, seven principal sources are considered: (1) Individual savings, characterized as an uneconomic method because by it every person is charged with providing, by a lifetime of effort and often of painful frugality, against a contingency which only a few persons will survive to experience; this uncertainty, and often the impracticability, combines with other causes to render this an inadequate general dependence; (2) private insurance, which has been but little practiced in this country, either by purchasing annuities or through trade-unions or by fraternal organizations; (3) support by children and relatives, which in many cases doubles the burden to be discharged by those undertaking to provide for a growing family, even if there be those in existence who could be called upon for aid;

¹ Action has been taken in one State of the Union, Arizona having enacted by initiative petition and popular vote an act granting to needy citizens of the United States, 60 years of age and over, who have resided in the State for five years prior to application therefor, a pension of \$15 per month so long as they continue to live in the State.

An act of the Territory of Alaska also provides a form of old-age pensions for "any pioneer of Alaska, regardless of sex, who has attained the age of 65 years and shall have resided in Alaska for 10 consecutive years or more since the year 1905." An act of 1913 provided for the establishment of a pioneers' home at Sitka, and proposed another for indigent pioneers in the interior of the Territory. These are for the relief of indigent persons who have no relatives or members of their families required by law to support them. The present act provides that persons entitled to the benefits of these homes may in lieu of taking residence therein receive a pension not exceeding \$12.50 per month in amount, the same to be paid quarterly. The board of trustees of the home receives and investigates applications, and makes payments through the commissioners of the several precincts of the Territory. The sum of \$10,000 yearly is appropriated, arrears of payments, if any, to be a claim on future funds when available (ch. 64, Acts of 1915).

(4) retirement or service pensions provided by employers, which is in practice and of necessity a restricted resource; (5) United States military pensions, which are now paid to some 19,000 residents of Wisconsin—a number which must decrease from year to year; (6) public poor relief, mainly by means of almshouses; and (7) private charity, either through the maintenance of "old people's homes" or more uncertain and transitory agencies.

The inadequacy of these methods to meet the needs of the indigent portion of the 185,000¹ inhabitants of the State 60 years of age and upwards is so evident as to require little more than their statement to raise the question as to what other measures may be adopted. Four forms of relief are discussed: (1) Voluntary insurance under the supervision and encouragement of the State; (2) compulsory insurance of wageworkers; (3) universal compulsory insurance; and (4) gratuitous pensions.

Those who advocate the first method claim that it encourages thrift and maintains the self-respect of its beneficiaries. In practice, but little success has attended a half century of effort for its development, and it has in some countries been partly or entirely superseded by other methods. The compulsory insurance of wage earners, chiefly practiced in Germany, though France adopted this plan in 1910, is also commendable in that it avoids the idea of dependence on charity, even though it can hardly be said to encourage voluntary thrift. Objections pointed out are its omission of many who may need such protection no less than wage earners, as women who are home workers not for wages, small craftsmen, peddlers, and the like; the inapplicability of such a system to a country in which labor is so largely migratory as in Wisconsin; and the length of time—at least 30 years—that must elapse before substantial annuities begin to mature, thus leaving without adequate protection those who are already old. Universal compulsory insurance meets the first objection but not the other two. It is stated in the conclusion, moreover, that the contributory systems of foreign countries do not receive from the beneficiaries more than 30 per cent of the benefits secured to them, so that it would appear "that the value of the contributory principle is more sentimental than practical."

The remaining method, gratuitous or noncontributory pensions, is on the other hand, both comprehensive and immediately effective. While nominally noncontributory, it is argued that all have contributed in so far as they have paid taxes, and further that as laborers they have helped create the body of wealth out of which all taxes are paid. The conditions of the receipt of such a pension relate to age, residence, property, character, and conduct. The objections

¹ Estimated by the commission. The number returned by the census of 1910 was 176,864.

commonly urged are its cost, the discouragement of thrift, an unfavorable effect on character, and a tendency to weaken family ties.

As to cost the report argues that it is rather a matter of incidence than of amount, the British pension law bearing more heavily on the general revenue, while the German compulsory insurance system takes its toll from wages and the employer's profits. It is also urged that the relief proposed will not discourage saving, since it will meet only bare necessities, and must be coupled with a modest provision by the recipient to afford a fair degree of comfort. After 20 years of experience in Denmark the number of applicants for old-age pensions shows a tendency to decrease rather than the contrary, so that it can not be said that habits of thrift have declined. As to the effect on self-respect, it is submitted that this will depend mainly upon public opinion. If considered in the light of deferred real wages instead of poor relief, no debasing effect is anticipated. The argument as to the influence on family ties seems of doubtful merit to the writer of the report, as it would be a strange theory to suggest that a parent or grandparent is dearer and welcomed into one's home the more readily as he is the more burdensome.

Setting aside speculative theories, the report proposes two methods, not mutually exclusive, the one providing for voluntary insurance under State management, and the other for a system of old-age pensions resembling that in operation in Denmark. Under the second plan which is considered at some length actual indigence is not required, nor may those who can adequately support themselves receive pensions. Vagrants, idlers, and others who can not pass prescribed character tests receive nothing from this "dignified form of support," but must have recourse to poor relief of the old type. A maximum benefit of \$150 per annum is proposed, the probable average being \$10 per month, the amount to be raised one-half by a general poll tax, and one-half from the revenues of the State, the aggregate cost being estimated at \$3,600,000 per annum. The administration proposed is by the State board of control, probably through a superintendent of old-age support, acting locally through the county judges. Pensions are to begin at the age of 65, or 60 if permanently incapacitated for gainful labor, their receipt not to affect civil or political status.

The plan is worked out in considerable detail as to conditions of receipts of benefits, the disposition of any property owned, etc. Less complete is the discussion of the plan for voluntary insurance under State management. It is pointed out, however, that 400,000 wage earners of the State pay \$1,600,000 annually for "industrial insurance," of which amount only \$350,000 was returned to policyholders in 1913. It is argued that with proper administration this

sum could ultimately endow every wage earner in the State with a monthly income of \$6 at the age of 65 years.

Twenty pages of the report are given to a discussion, chiefly statistical, of the condition of the aged in Wisconsin, while in the last 33 pages are summarized the history and results of the various systems of old-age relief in use in foreign countries, with conclusions based thereon.

These conclusions are, in brief, that voluntary insurance has been inadequate as a general means of relief, any success which it may have attained being nearly in proportion as it has been subsidized by the State, and that even under compulsory insurance not more than a fraction of the benefit fund is raised from the beneficiaries themselves; that no system can meet the problems of old-age relief without taking into account unmarried, widowed, and divorced women; that the pension age should be set not later than the age of 65; and that in most foreign countries the provision for pensions is inadequate in amount, though in passing upon this, differences in the standards of living and the costs of necessities must be taken into consideration.

RETAIL PRICES OF FOOD IN FOREIGN COUNTRIES.

AUSTRIA (VIENNA).

The prices quoted in the table below are, in the case of meats, from the central meat market, and those for other articles are from the public markets. They show the general increase in prices in Vienna in November and December, 1915, as compared with those months in 1914. If compared with 1913, when no war was in progress, the increases would probably be even greater. The prices show lowest and highest points.

RETAIL PRICES OF FOOD IN VIENNA MARKETS NOV. 6 AND DEC. 12, 1914, AND NOV. 6 AND DEC. 4, 1915.

(Source: Neue Freie Presse, Nov. 8 and Dec. 13, 1914, and Nov. 7 and Dec. 5, 1915.)

Article.	Unit.	Nov. 6, 1914.	Nov. 6, 1915.	Dec. 12, 1914.	Dec. 4, 1915.
		<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>
Beef, fore quarter.....	Pound....	11.4-20.1	31.3-49.7	11.0-20.3	33.1-47.9
Beef, hind quarter.....	do.....	11.3-21.2	32.2-55.2	14.8-21.2	34.1-51.6
Beefsteak.....	do.....	16.6-19.5	58.0-58.9	18.4-20.3	47.9
Veal.....	do.....	13.6-19.8	34.1-42.4	13.6-20.3	29.5-38.7
Pork.....	do.....	14.1-22.1	45.1-51.6	15.5-22.1	38.7-51.6
Cabbage, white.....	Each.....	1.6-5.3	.8-7.1	1.2-3.2	1.2-4.9
Cabbage, red.....	do.....	2.4-8.1	4.1-12.2	2.0-10.2	4.1-10.2
Lemons.....	Dozen.....	9.6-19.2	19.2-28.8	9.6-14.4	24.0-28.8
Potatoes.....	Bushel.....	66.3-132.6	82.9-176.8	66.3-154.7	82.9-176.8
Onions.....	Pound.....	2.9-4.1	5.2-6.1	3.3-4.2	5.5-6.3
Beans, green.....	do.....	5.5-7.4	6.1-7.0	11.0-12.9	.....
Sauerkraut.....	do.....	.....	3.7-4.4	.....	4.4
Tomatoes.....	do.....	2.8-4.6	6.4-7.0	3.3-5.2	.....
Peas, yellow.....	do.....	5.5-11.0	16.6-22.1	5.5-12.5	.....
Butter.....	do.....	17.3-39.8	55.2-84.7	31.3-44.2	57.1-81.0
Peas, green, unshelled.....	do.....	5.5-7.4	11.0-12.2	11.0-12.9	.....
Eggs, fresh.....	Dozen.....	32.5-37.5	48.7-54.1	37.5-48.7	58.5-60.9

CANADA.

The chief feature of Canadian prices during 1915 as reported by the Labor Gazette of the Department of Labor was the continued advance in materials, especially of iron and steel and their products. Advances were also noted for wheat, oats, flour, and oatmeal.

In retail prices the weekly cost of 29 staple foods arose from \$8.02 to \$8.13 from November to December, 1915. From December, 1914, to December, 1915, the rise was from \$7.95 to \$8.13. Eggs, butter, cheese, bread, flour, rice, beans, evaporated apples, potatoes were slightly higher, while meats were generally lower during December than in November. Coal and wood were higher and rents remained unchanged. The following table shows the cost per week of a family budget of 29 staple articles of food in terms of the average price prevailing in some 60 industrial centers in the nine provinces of Canada, 1910 to 1915:

COST PER WEEK OF A FAMILY BUDGET OF STAPLE FOODS IN TERMS OF THE AVERAGE PRICES OF THE CITIES IN EACH PROVINCE, 1910 TO 1915.

Province.	1910	1911	1912	1913	1914	1915	December, 1914	November, 1915	December, 1915
Nova Scotia.....	\$6.817	\$6.776	\$7.166	\$7.289	\$7.475	\$7.826	\$7.806	\$8.071	\$8.239
Prince Edward Island.....	5.812	5.795	6.107	6.338	6.693	6.617	6.894	7.023	6.953
New Brunswick.....	6.548	6.836	7.130	7.041	7.443	7.682	7.755	7.866	8.108
Quebec.....	6.331	6.457	6.968	6.870	7.158	7.387	7.310	7.578	7.760
Ontario.....	6.504	6.666	7.251	7.203	7.479	7.676	7.742	7.947	8.114
Manitoba.....	7.462	7.405	7.884	7.873	8.149	8.071	8.269	8.19	8.427
Saskatchewan.....	7.859	8.083	8.164	8.250	8.327	8.299	8.505	8.181	8.315
Alberta.....	7.998	8.081	8.147	8.327	8.266	8.209	8.467	8.175	8.356
British Columbia.....	8.321	8.789	9.028	9.128	7.606	8.807	8.796	8.618	8.649
Total.....	6.954	7.138	7.339	7.337	7.731	7.866	7.951	8.016	8.128

FRANCE (PARIS).

The bulletin of the Ministry of Labor reports a very sharp advance in the prices of many of the necessaries during the third quarter of 1915. In one community the average price of all food products is reported as having increased 50 per cent during the quarter. In general the cost of living has increased from 25 to 33 per cent over a year ago.

No presentation of actual retail prices is given, but the following table affords a comparison of wholesale prices of certain commodities in Paris during the months indicated in 1914 and 1915 and of the general average in September and October for the period 1901 to 1910.

WHOLESALE PRICES—SEPTEMBER AND OCTOBER, 1914, 1915, JULY, 1914, AND AVERAGES, SEPTEMBER AND OCTOBER, 1901-1910.

Article.	1915		1914			1901-1910	
	Sep-tem-ber.	Octo-ber.	July.	Sep-tem-ber.	Octo-ber.	Sep-tem-ber.	Octo-ber.
Sugar, white, No. 3.....per 100 pounds..	(1)	\$6. 670	\$2. 950	\$3. 670	\$4. 620	\$2. 550	\$2. 450
Oil, linseed.....do.....	\$7. 700	8. 120	5. 340	5. 340	5. 340	5. 300	5. 340
Oil, rapeseed.....do.....	11. 560	12. 810	6. 390	7. 510	7. 680	5. 400	5. 430
Wheat.....per bushel.....	1. 440	1. 470	1. 510	1. 460	1. 470	1. 200	1. 220
Flour.....per 100 pounds.....	(1)	(1)	3. 040	3. 330	(1)	2. 710	2. 730
Barley.....per bushel.....	(1)	(1)	(1)	(1)	. 760	(1)	(1)
Oats, black.....do.....	(1)	(1)	. 610	. 660	. 640	. 500	. 500
Beef ¹.....per pound.....	. 182	. 186	(1)	. 149	. 151	(1)	(1)
Veal ².....do.....	. 235	. 214	(1)	. 166	. 182	(1)	(1)
Mutton ².....do.....	. 197	. 183	(1)	. 214	. 175	(1)	(1)
Pork ².....do.....	. 205	. 193	(1)	. 151	. 131	(1)	(1)
Poultry ².....do.....	. 285	. 272	(1)	(1)	(1)	(1)	(1)
Cabbage ².....per 100 pounds.....	6. 760	6. 560	1. 930	1. 740	1. 160	(1)	(1)
Beans, green ².....do.....	4. 810	5. 690	4. 380	2. 190	4. 380	(1)	(1)
Potatoes, Holland ².....per bushel.....	. 870	. 950	1. 160	. 740	. 790	(1)	(1)
Potatoes, round, green, white ².....do.....	. 790	. 760	. 630	. 500	. 530	(1)	(1)
Fish, select ².....per pound.....	. 438	. 569	. 350	. 219	. 306	(1)	(1)
Fish, ordinary ².....do.....	. 109	. 131	. 066	. 070	. 070	(1)	(1)
Butter, Isigny.....do.....	. 361	. 398	. 263	. 229	. 255	(1)	(1)
Butter, common.....do.....	. 338	. 350	. 256	. 186	. 233	(1)	(1)
Eggs.....per dozen.....	. 352	. 405	. 226	. 267	. 328	(1)	(1)
Cheese, green.....per pound.....	. 164	. 200	. 079	. 130	. 146	(1)	(1)
Cheese, dry.....do.....	. 269	. 309	. 193	. 193	. 172	(1)	(1)

¹ Not reported.² At the stockyards.³ Central depots.

GERMANY (BERLIN).

The following table shows the average retail prices of certain foods, principally meats, in the municipal market of Berlin during the months of November and December, 1915, as compared with the same months of 1914. The increases are considerable and would be somewhat greater if comparison were made with the corresponding months of 1913, when no war was in progress. Lack of official sources has made necessary the use of newspaper quotations.

RETAIL PRICES OF FOOD IN THE MUNICIPAL MARKETS OF BERLIN.

[Source: Vossische Zeitung, No. 616, Dec. 2, 1915, and No. 10, Jan. 6, 1916.]

Article.	Unit.	Week of—			
		Nov. 23 to Nov. 28, 1914.	Nov. 22 to Nov. 27, 1915.	Dec. 28, 1914, to Jan. 2, 1915.	Dec. 27 to Dec. 31, 1915.
Beef:		<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>
Sirloin, round steak, rump.....	Pound..	22. 2	32. 6	22. 5	26. 3
Breast.....	do.....	18. 8	28. 7	18. 8	31. 5
Veal:					
Cutlets, loin.....	do.....	21. 4	33. 5	22. 0	38. 9
Breast.....	do.....	20. 1	31. 8	20. 3	36. 5
Mutton:					
Chops, loin.....	do.....	21. 2	34. 1	21. 8	37. 2
Breast, flank.....	do.....	19. 0	31. 5	19. 7	34. 2
Pork:					
Loin, spareribs.....	do.....	20. 3	1 30. 2	21. 0	1 30. 2
Ham, fresh.....	do.....	18. 1	1 30. 2	19. 0	1 30. 2
Shoulder, belly.....	do.....	17. 7	1 30. 2	18. 4	1 30. 2
Bacon, smoked.....	do.....	23. 8	56+6	23. 3	1 49. 7
Ham, smoked, sliced.....	do.....	37. 2	65. 4	37. 8	1 64. 8
Butter.....	do.....	33. 5	54. 9	36. 3	1 57. 9
Lard.....	do.....	21. 6	59. 4	23. 8	1 54. 0
Potatoes.....	Bushel..	1 51. 8	1 51. 8	1 51. 8	1 51. 8
Eggs.....	Dozen.....	37. 1	62. 8	40. 0	80. 0

¹ Legal maximum price.

GREAT BRITAIN.

On January 1, 1915, the retail prices of food had increased approximately 18 per cent over the average prevailing price of July, 1914, according to the Board of Trade Labor Gazette. Since that time there has been a comparatively steady advance in prices until January 1, 1916, when the increase amounted to 45 per cent of the price of July, 1914. These data are based on reports of 500 to 600 returns of prices from every town in the Kingdom having a population of over 50,000, about 200 towns with a population ranging from 10,000 to 50,000, and about 250 places having a population less than 10,000. The following summary shows the increase at the first of each month during 1915 over the corresponding months of 1914:

PER CENT OF INCREASE IN 1915 OVER 1914, BY MONTHS.

January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
18	22	24	24	26	32	32½	34	35	40	41	44

Taking the price of each article as reported in July, 1914, as a base the following table shows the per cent of increase, by half-yearly periods, in towns having a population of over 50,000, and separately for small towns and villages:

AVERAGE PER CENT OF INCREASE IN PRICES OF CERTAIN ARTICLES SINCE JULY, 1914, ON JANUARY 1 AND JULY 1, 1915, AND JANUARY 1, 1916.

Article.	In cities having a population of over 50,000.			Small towns and villages.		
	Jan. 1, 1915.	July 1, 1915.	Jan. 1, 1916.	Jan. 1, 1915.	July 1, 1915.	Jan. 1, 1916.
Beef, British:						
Ribs.....	8	39	37	6	36	34
Flank, thin.....	15	51	51	8	41	39
Beef, chilled or frozen:						
Ribs.....	18	49	51	15	44	43
Flank, thin.....	32	70	70	21	58	57
Mutton, British:						
Legs.....	6	28	27	5	30	28
Breast.....	16	49	48	7	35	34
Mutton, frozen:						
Legs.....	19	44	45	14	38	38
Breast.....	23	66	70	21	57	56
Bacon, streaky.....	9	20	34	5	15	28
Fish.....	51	78	119	31	51	75
Flour, household.....	18	46	46	23	51	52
Bread.....	18	43	45	14	38	39
Tea.....	14	29	49	13	26	48
Sugar, granulated.....	69	70	97	65	65	89
Milk.....	6	11	30	7	9	28
Butter:						
Fresh.....	12	15	32	16	15	36
Salt.....	10	15	30	14	17	33
Cheese.....	10	34	32	10	33	32
Margarin.....	5	5	8	4	4	6
Eggs.....	62	27	108	65	20	102
Potatoes.....	1 11	4	.....	1 22	1 8	1 10
All articles (weighted increase).....	19	35	48	17	30	42

¹ Decrease.

The following shows the trend of prices by means of index numbers for the period of 1900 to 1915. These numbers are based on the average of annual retail prices of 23 articles, the prices for the year 1900 being taken as 100.

INDEX NUMBERS FOR THE PERIOD OF 1900 TO 1915.

Year.	Index No.	Year.	Index No.	Year.	Index No.
1901.....	100.4	1906.....	102.0	1911.....	109.4
1902.....	101.0	1907.....	105.0	1912.....	114.5
1903.....	102.8	1908.....	107.5	1913.....	114.8
1904.....	102.4	1909.....	107.6	1914.....	116.8
1905.....	102.8	1910.....	109.4	1915.....	148.6

ITALY.

The semimonthly bulletin of the Italian Labor Office publishes at the beginning of each month a short table of retail prices of seven articles of ordinary consumption, showing average prices in several cities (40 to 43) as furnished by cooperative stores, local labor unions, and chambers of commerce. Relative prices of these same commodities are also shown in parallel columns, the base from which changes are reckoned being the average prices for the year 1912.

The following table shows the actual and relative prices of the seven commodities for each of the months September, October, and November, 1914 and 1915.

ACTUAL AND RELATIVE PRICES OF 7 ARTICLES OF FOOD BASED ON AVERAGE PRICES IN CITIES IN ITALY, SEPTEMBER TO NOVEMBER, 1914 AND 1915.

AVERAGE ACTUAL PRICES.

Article.	Unit.	September.		October.		November.	
		1914	1915	1914	1915	1914	1915
		<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>
Bread, wheaten.....	Pound..	3.5	4.3	3.6	4.2	3.8	4.3
Flour, wheat.....	do.....	3.6	4.7	3.7	4.7	3.8	4.9
Macaroni, spaghetti, etc.....	do.....	4.8	6.1	5.0	6.2	4.9	6.2
Beef.....	do.....	13.0	19.7	13.4	20.0	13.8	20.0
Bacon.....	do.....	18.4	23.5	18.6	23.6	18.5	23.8
Oil, table.....	Quart..	35.6	38.2	34.2	39.3	34.5	39.8
Milk.....	do.....	6.4	6.7	6.5	6.6	6.6	6.7

RELATIVE PRICES.

(Average prices for 1912=100.)

Bread, wheaten.....	Pound..	94.6	114.8	98.0	113.6	101.1	115.5
Flour, wheat.....	do.....	93.2	121.9	94.7	121.9	99.1	125.8
Macaroni, spaghetti, etc.....	do.....	98.1	124.7	102.0	128.2	101.0	127.5
Beef.....	do.....	86.0	130.8	89.3	133.1	91.9	133.1
Bacon.....	do.....	100.9	128.8	102.5	129.8	101.3	130.8
Oil, table.....	Quart..	96.0	104.5	93.6	107.5	94.3	109.0
Milk.....	do.....	102.3	106.6	103.4	105.8	105.0	107.5
General average.....		96.0	118.8	97.6	120.0	99.1	121.3

NETHERLANDS.

No actual retail prices of any considerable scope are available for the Netherlands, although the Maandschrift of the Dutch Statistical Bureau reports each month the relative retail prices of 28 articles of ordinary consumption from two cooperative stores doing a retail business in Amsterdam, Haarlem, Arnhem, Utrecht, Leeuwarden, and at The Hague. The base price on which the changes have been calculated is the average monthly price for the year 1893. No data are available for seasonal comparison. The index prices for 1913 and for the period comprising the first seven months and the last five months in 1914 and for June to November of 1915 are given in the table which follows:

RELATIVE PRICES OF 28 ARTICLES OF HOUSEHOLD NECESSITY, NETHERLANDS, 1913, 1914, AND THE LAST HALF OF 1915.

(Average monthly prices for 1893=100.)

Article.	1913	January to July, 1914.	August to December, 1914.	June.	July.	August.	September.	October.	November.
Beans:									
Brown.....	154	150	164	171	171	171	175	186	193
White.....	166	169	179	207	214	214	210	203	203
Peas.....	150	167	161	181	186	172	181	175	178
Peas, yellow.....	125	152	139	175	182	182	170	159	159
Peas, green.....	157	140	147	150	160	160	170	167	180
Barley, pearl.....	113	110	126	145	145	145	145	148	148
Buckwheat, hulled, cleaned.....	104	104	137	162	167	167	175	179	187
Oatmeal.....	103	103	107	140	140	140	143	143	140
Cheese:									
Leyden.....	140	140	139	167	164	160	160	164	167
Full cream.....	124	126	124	149	145	138	137	135	135
Coffee.....	94	87	89	91	91	91	92	93	94
Oleomargarine.....	127	98	101	102	102	102	102	102	102
Flour:									
Rye.....	85	78	85	115	115	115	119	119	119
Wheat.....	124	124	141	171	182	171	159	153	147
Buckwheat.....	105	105	119	143	143	152	167	176	176
Butter.....	94	94	101	136	140	147	145	129	131
Oil, rapeseed.....	136	133	142	208	215	216	216	192	199
Rice.....	116	112	119	128	128	116	119	119	125
Soda.....	83	83	100	100	100	100	100	117	150
Starch.....	103	103	107	133	137	137	140	137	137
Sirup.....	100	100	100	129	129	136	136	136	136
Sugar:									
Moist.....	89	89	95	111	115	115	115	115	115
Granulated.....	85	87	92	97	100	100	100	102	100
Tea.....	112	112	114	115	117	120	120	119	120
Vermicelli.....	121	117	141	214	210	210	210	207	207
Soap:									
White, Bristol.....	100	100	100	117	123	126	134	128	128
Green, soft.....	87	83	92	146	154	129	112	100	112
Salt.....	80	80	90	90	90	90	90	90	90
All commodities.....	114	113	121	145	148	147	147	145	148

EMPLOYMENT IN FOREIGN COUNTRIES.

The REVIEW has reported from time to time conditions of employment in foreign countries, as shown by statements found in the official labor periodicals of those countries. These summaries were given at some length in issues of the REVIEW for July, October, and December. Summaries, for recent months, of conditions in Canada, Germany, and Great Britain follow:

CANADA.

The Labor Gazette of the Canadian Department of Labor summarizes employment conditions throughout the Dominion in 1915 in these words:

The opening of the year 1915 showed a marked change from the conditions existing at the commencement of 1914. At the beginning of that year the depressed conditions of the previous year were still apparent, but in 1915 the improvement which became noticeable from month to month during the latter part of the previous year had become fairly well pronounced and the close of 1915 witnessed a return to almost normal conditions in many respects. While at the close of 1914 there was still considerable unemployment, and in some localities this condition existed during the early months of 1915, the gradual enlistment of men for over-seas service, the employment of others in the manufacture of munitions and other military supplies, in agricultural and lumbering operations and the heavy falling off in immigration, all combined to bring conditions in many parts of the Dominion back to almost a normal basis so far as employment was concerned. Manufacturing in many lines outside of special activity in the manufacture of munitions of war was improved; lumbering showed activity practically throughout the year; fishing on the whole was good; mining, both coal and metal, showed great improvement, and toward the latter part of the year was back to, if not above, the normal activity of previous good years. Outside of building operations, which continued to be dull, practically all the Dominion's industries showed great improvement.

As the department has but recently commenced the publication of the activities of employment bureaus throughout the Dominion, only a limited amount of statistical data is available. Eleven employment bureaus of the Young Women's Christian Association reported 1,217 vacancies notified and 253 women and girls placed during November, 1915. Twelve bureaus of the Salvation Army reported the distribution of 1,402 casual jobs to 870 persons. The nine public employment offices cooperating with the department reported 4,668 vacancies and 3,782 individuals placed. The operations of the last-named offices are here summarized:

REPORTS OF PUBLIC EMPLOYMENT BUREAUS FOR THE MONTH ENDED NOVEMBER 30, 1915.

Location and name.	Days open for business.	Individuals on register at beginning of period.	Individuals registered during period.	On register at end of period.	Vacancies notified.	Vacancies filled.	Individuals placed.	Individual placed outside city.
Quebec: Provincial free employment bureau.....	25	91	197	154	63	46	43	.....
Sherbrooke: Provincial free employment bureau.....	24	.....	168	168	174	.....	124	.....
Montreal:								
Provincial free employment bureau.....	25	.....	341	.....	421	.....	306	.....
Municipal employment bureau.....	25	169	341	164	791	765	226	5
Toronto: Civic employment bureau.....	26	.....	.....	.....	756	735	674	180
Winnipeg: Free employment bureau.....	26	.....	.....	.....	1,665	.....	1,343	65
New Westminster: Public employment bureau.....	25	.....	17	407	32	19	19	.....
Vancouver: Free employment bureau.....	26	.....	315	451	366	359	359	34
Victoria: Public employment bureau.....	26	.....	68	1,008	400	399	399	5

¹ Positions filled.

GERMANY.

The Reichs-Arbeitsblatt reports that since German industry has adjusted itself to the conditions arising from the war, economic development has taken an even course, with insignificant changes from month to month. During September and October conditions in German industry were essentially the same as during the preceding months, with a slight improvement in November. General industrial conditions were reported as satisfactory, exception being made of conditions in the textile and building industries. Mining and war-supplying industries continue active. Improvement is reported in shipping activity on the Rhine.

Returns from employers for September show an increase of 18 per cent in the number of workmen employed, as compared with September of the preceding year, and returns for October and November, 1915, show an increase of 15 and 14 per cent, respectively, in the number employed as compared with the same months in 1914. In September male workers formed the larger part of the increase noted, while in October and November the larger part was due to the influx of female workers. If employment during the above three months of 1915 is compared with employment in the same months of 1913, there is indicated a decrease in the number of workmen employed of 9, 14, and 18.5 per cent, respectively.

Practically no change of significance as to the percentage of unemployment in trade-unions, as compared with the preceding months, July and August, is noted. The per cent of unemployment in August and September, 1915, was 2.6, and in October and November 2.5.

Reports from the labor exchanges show a decline in the number of applicants for positions in all three months of 1915 under review, as compared with these months in 1914. For every 100 situations registered as vacant in September, October, and November, 1915, the number of male applicants was 89, as compared with 200, 154, and 140, respectively, for the same months of 1914, and the number of female applicants was 170 in September, 182 in October, and 179 in November, 1915, as compared with 183, 191, and 189, respectively, for the same months in 1914.

GREAT BRITAIN.

The Board of Trade Labor Gazette reports that the high level of employment of recent months was fully maintained in December, and a general shortage of labor, except in some branches of the clothing trades, was reported. Compared with the corresponding month of 1914, there is considerable improvement noted.

Great scarcity of labor is reported in the mechanical industries, and the ship-building trades, in the cotton trade, and in the textile trades. Tin-plate works building trades, and brick works showed a decline in activity, the cause being seasonal in the latter two. The following table shows the per cent of unemployment in trade-unions during each month of 1914 and 1915:

PER CENT OF UNEMPLOYMENT IN TRADE-UNIONS DURING EACH MONTH, 1914 AND 1915.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1914.....	2.6	2.3	2.2	2.1	2.3	2.4	2.8	7.1	5.9	4.4	2.9	2.5
1915.....	1.9	1.6	1.3	1.2	1.2	1.0	.9	1.0	.9	.8	.6	.6

The mean annual percentage of unemployment for the year 1915 in British trade-unions was 1.1 as compared with 3.3 in 1914; 2.1 in 1913; 2.4 in 1912; 3 in 1911; and 4.7 in 1910.

Employment conditions in certain industries are reflected in the following table which shows the total number of establishments, number of employees, and total amount of wages paid during a representative week in December, 1915, and the per cent of increase or decrease in numbers employed and wages paid over in the corresponding week of November, 1915, and of December, 1914. These data of course relate to the same establishments in each period of time indicated; otherwise the comparison would be valueless. According to this table the number employed in this week of December, 1915, as compared with the corresponding week of December, 1914, was 0.3 per cent less, while the amount of wages paid to the same number of employees was 13.8 per cent greater.

NUMBER OF PERSONS EMPLOYED BY ESTABLISHMENTS REPORTING, AND WAGES PAID SUCH EMPLOYEES, FOR THE WEEK ENDING DECEMBER 18, 1915, COMPARED WITH DATA FOR THE CORRESPONDING WEEK OF NOVEMBER, 1915, AND OF DECEMBER, 1914.

Industry.	Number of persons employed, third week of December, 1915.	Per cent of increase or decrease as compared with corresponding week of—				Total amount of wages paid.	Per cent of increase or decrease as compared with corresponding week of—			
		November, 1915.		December, 1914.			November, 1915.		December, 1914.	
		Increase.	Decrease.	Increase.	Decrease.		Increase.	Decrease.	Increase.	Decrease.
Cotton.....	205,230	0.6	.....	1.6	.....	1 \$1,058,493	1.3	.....	20.5	.....
Woolen.....	24,408	.3	.....	1.0	.....	1 135,464	2.1	.....	7.7	.....
Worsted.....	35,493	.....	0.6	.....	3.0	1 160,492	.....	0.2	9.3	.....
Linen.....	38,676	.3	.....	.....	7.6	131,683	4.8	.....	7.6	.....
Jute.....	14,674	.5	.....	4.2	.....	72,608	.7	.....	31.6	.....
Lace.....	7,968	.2	.....	2.1	.....	40,922	.6	.....	38.1	.....
Hosiery.....	23,417	.1	.....	4.2	.....	1 105,297	.....	1.3	12.8	.....
Other textiles.....	16,313	.....	.....	.....	4.1	69,825	2.0	.....	10.6	.....
Bleaching, dyeing, printing, and finishing.....	25,361	.....	.9	3.8	.....	1 191,657	1.2	.....	30.9	.....
Boots and shoes.....	62,174	.1	.....	.....	2.9	1 378,497	.2	.....	7.2	.....
Clothing, ready-made.....	36,137	.....	1.7	.....	2.0	153,270	.....	.4	.....	7.0
Shirts and collars.....	20,217	.1	.....	.....	.4	71,129	1.2	.....	9.5	.....
Brick.....	7,380	.....	2.0	.....	25.4	48,723	.....	6.2	12.6	.....
Cement.....	7,543	.....	1.1	.....	15.0	62,481	.....	3.4	1.6	.....
Food preparations.....	67,843	.1	.....	13.5	.....	346,996	.5	.....	27.1	.....
Printing.....	15,420	.....	.3	.....	11.1	115,948	.6	.....	.....	1.0
Bookbinding.....	10,283	.....	.3	.....	10.5	50,548	1.5	.....	4.5	.....
Glass.....	10,701	1.9	.....	.....	9.0	83,441	1.8	.....	4.1	.....
Pottery.....	17,666	.2	.....	.....	2.9	91,675	.....	.8	16.2	.....
Total.....	646,904	.1	.....	.....	.3	3,369,141	.7	.....	13.8	.....

¹ The comparison of wages with December, 1914, is affected by war bonuses.

LEGAL REGULATION OF PUBLIC EMPLOYMENT OFFICES IN AUSTRIA.

Public employment bureaus have been the subject of both actual and proposed legal regulation in Germany and Austria somewhat recently, presumably in order to coordinate their work and to make it more effective to meet the increased burden which will be placed upon these offices at the close of the war when the disbanded soldiery return to their industrial pursuits.

The October number of the REVIEW noted that all public employment offices in Germany have been required to make reports of their activities to the Imperial Statistical Office. In June, 1915,¹ the directors of the National Federation of Public Employment Offices in Austria submitted regulations for the conduct of employment agencies for enactment into law. These regulations, if given the force of law by the Government, provide for the discontinuance of private employment agencies conducted for profit.

¹ Der Arbeitsnachweis, Vienna, 1915, vol. 9, No. 5, pp. 373-et seq.

The principles laid down by these regulations included the following points:

(1) The establishment of public employment bureaus for all kinds of labor and classes of workers, where provision has not already been made for such by provincial or State legislation; (2) compulsory establishment of employment bureaus by municipalities having 15,000 inhabitants and over; (3) the establishment of registry offices by the central employment bureau created for each Province, in those localities in which the military authority engaged in demobilizing the forces is located, provided a public employment bureau does not already exist there; (4) the establishment in Vienna of a special employment bureau for the placing of migratory agricultural workers; (5) the creation of advisory councils of technical experts in connection with a general system of exchanges; (6) acceptance of the principle of free service, excepting a small Government fee; (7) cost and maintenance of the bureaus to be borne jointly by the municipalities, the Province and the State; (8) exemption of the offices from the payment of telephone and telegraph fees and postage, or their refund by the State; and (9) exemption from payment of all direct taxes. The exemption from the payment of telephone fees, etc., and from all direct taxes is also to be made applicable to existing public welfare employment bureaus, i. e., those not conducted for profit.

A marked feature of the proposed legislation is that provision which grants free transportation by the State and provincial railroads to applicants for employment to the place of work, and if, without their fault, no work is secured, free transportation, either returning or to some other locality, is to be granted.

OFFICIAL REPORTS RELATING TO LABOR.

UNITED STATES.

Illinois.—Department of Factory Inspection. *Twenty-second annual report of the chief State factory inspector of Illinois, for the year July 1, 1914, to June 30, 1915. Springfield, 1915. 235 pp.*

A detailed report of the work of the factory inspection department containing the results of inspection under the factory law; child labor law; health, safety, and comfort law; washhouse law; blower law; structural law; women's 10-hour law; garment law; and ice cream law. Attention is also called to the work of the department under the occupational-disease law, which was drawn as the result of the report of the committee for the investigation of industrial diseases in 1910. This law provides in general for the protection of certain workers engaged in occupations considered particularly hazardous, and safeguards the worker by compelling the employer to make medical examinations of his employees, to install adequate washing facilities, to provide places apart from the workroom where the employee may take his meals, to furnish proper working clothing for his workmen and to safeguard them from poisonous fumes, dust, and gases by means of adequate methods of ventilation. During the year the medical inspectors of the State department in enforcing the provisions of this law made 264 inspections in 165 establishments in 26 cities and towns, not including Chicago. In Chicago they made 331 inspections in 192 establishments. The following table presents a general summary of reports under the occupational-disease law:

NUMBER OF CASES OF OCCUPATIONAL DISEASES REPORTED, BY INDUSTRIES, FOR EACH MONTH, JULY 1, 1914, TO JUNE 30, 1915.

Industry.	Number of firms reporting.	Number of employees reported for—											
		July.		August.		September.		October.		November.		December.	
		Sick.	Well.	Sick.	Well.	Sick.	Well.	Sick.	Well.	Sick.	Well.	Sick.	Well.
LEAD POISONING.													
White lead.....	4	1	313	1	296	.....	292	1	292	.....	394	2	315
Smelting and refining.....	29	18	2,629	14	2,674	13	2,668	11	2,180	13	2,537	18	2,781
Manufacture of paints.....	24	.....	346	.....	333	.....	337	.....	341	.....	321	2	334
Manufacture of storage batteries.....	10	.....	183	.....	131	2	132	.....	168	.....	133	.....	141
Manufactures of tinware.....	3	18	342	.....	394	.....	413	1	289	2	239	.....	227
Manufacture of car seats and bearings.....	4	.....	269	.....	269	.....	206	.....	259	2	199	.....	199
Telephone and switchboards.....	2	.....	39	.....	42	.....	41	.....	39	.....	34	.....	37
Painting.....	56	.....	1,669	1	1,515	.....	1,320	.....	1,402	.....	1,369	.....	1,307
Electrotyping.....	2	.....	58	.....	65	.....	39	.....	50	.....	5	1	59
Wall paper and oilcloth.....	3	.....	22	.....	21	.....	22	.....	22	.....	16	.....	20
Enameling.....	4	.....	333	.....	334	.....	331	.....	174	.....	346	.....	341
Total.....	141	37	6,203	16	6,074	15	5,801	13	5,216	17	5,593	24	5,761
OTHER POISONING.													
Arsenic, paris green, etc....	2	.....	53	.....	51	.....	48	.....	43	.....	53	.....	52
Brass foundries.....	58	1	1,844	2	2,125	1	2,104	2	2,059	1	1,914	2	1,930
Spinners, polishers, etc....	36	.....	819	.....	735	.....	774	.....	830	.....	792	.....	795
Plating and electroplating.	16	.....	203	.....	177	.....	187	.....	186	.....	166	.....	202
Deafomania.....	1	.....	9	.....	11	1	11	.....	11	.....	13	.....	11
Galvanizing.....	3	.....	41	.....	38	.....	39	.....	37	.....	34	.....	32
Total.....	116	1	2,969	2	3,137	2	3,163	2	3,166	1	2,972	2	3,022
All causes.....	257	38	9,172	18	9,211	17	8,964	15	8,382	18	8,565	26	8,783

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NUMBER OF CASES OF OCCUPATIONAL DISEASES REPORTED, BY INDUSTRIES, FOR EACH MONTH, JULY 1, 1914, TO JUNE 30, 1915—Concluded.

Industry.	Number of firms reporting.	Number of employees reported for—											
		January.		February.		March.		April.		May.		June.	
		Sick.	Well.	Sick.	Well.	Sick.	Well.	Sick.	Well.	Sick.	Well.	Sick.	Well.
LEAD POISONING.													
White lead.....	4		380		300		379		352	1	364		395
Smelting and refining.....	29	12	2,390	17	2,711	5	2,577	5	2,721	5	2,548	5	2,854
Manufacture of paints.....	24	1	337	1	316		314		326		360		373
Manufacture of storage batteries.....	10		133		105		129		186		197	1	201
Manufacture of tinware.....	3	1	218	1	220		244	2	219		267	2	259
Manufacture of car seats and bearings.....	4		149	2	149		157	1	198		26	1	193
Telephone and switchboards.....	2		37		37		37		37		37		37
Painting.....	56		1,509		1,226	2	1,425	3	1,186	3	1,224	2	1,526
Electrotyping.....	2		58		41		67		23		76		80
Wall paper and oilcloth.....	3		22		21		23		19		21		22
Enameling.....	4		328		317		315	1	301		311		151
Total.....	141	14	5,561	21	5,443	7	5,667	12	5,568	9	5,431	11	6,091
OTHER POISONING.													
Arsenic, Paris green, etc....	2		56		60	1	66		74		85		81
Brass foundries.....	58	2	1,762		1,611		1,829		1,868	1	1,948		1,964
Spinners, polishers, etc....	36		689		679		719		699		684	1	643
Plating and electroplating.....	16		187		146		175		169		190		156
Decalcomania.....	1		10		9		7		10		7		6
Galvanizing.....	3		34		45		37		36		25		38
Total.....	116	2	2,738		2,550	1	2,833		2,856	1	2,939	1	2,888
All causes.....	257	16	8,299	21	7,993	8	8,500	12	8,424	10	8,370	12	8,979

Under the various laws enforced by the inspection department, 485 convictions were secured in the course of the fiscal year with fines and costs amounting to \$7,114.40. Of this number of convictions 280 were obtained in the municipal courts of Chicago, with fines and costs amounting to \$4,192.75.

The number of children under 16 years of age employed in 1913-14 was reported as 12,610, in 1914-15 as 5,805. Of this latter number 4,854 were employed in Chicago.

Illinois.—*Industrial Board. Second annual report, June 30, 1915. Springfield, 1915. 39 pp.*

This constitutes the report of the administrative body under the workmen's compensation act of Illinois, and a summary of it will be found in a future number of the REVIEW.

—*State Board of Arbitration. Report, March 1, 1915. Chicago, 1915. 52 pp.*

This volume gives the history of various labor disputes occurring in the State during 1914, and of the proceedings in those in which the board was called upon to institute arbitration processes, and the results of such interventions, together with resulting agreements entered into. No statistical or text summary is presented. The Federal and the Illinois arbitration laws are reproduced.

Kansas.—*Department of Labor and Industry. Thirtieth annual report, 1914. Topeka, 1915. 328 pp., folder.*

The activities of the bureau were broadened in scope during this year as the result of newly enacted laws. The work of inspection and law enforcement has been continued under more favorable conditions and with a greater degree of satisfaction than in former years, it is stated.

Special investigation has been made into the working conditions of women and children, and data collected in reference to wages and hours of labor in 25 towns, 365 establishments, and 27 different occupations, and applying to 10,854 women, showing the following results: 34 per cent received less than \$6 a week, 50 per cent, \$7 or less a week; 21 per cent worked 10 or more hours a day, and 50 per cent worked 54 hours or longer per week.

It is estimated that more than 50,000 women are employed in the industries within the State, and that 10 years ago 10 per cent of the wage earners in factories, workshop, and like establishments were under 16 years of age, while the records for 1914 show that of 40,658 wage earners in inspected factories, only 114, or about one-fourth of 1 per cent, were under that age.

Classified weekly wages for the more important industries; directory and statistics of labor organizations in the State; and proceedings of the seventh annual convention of the Federation (State) of Labor are set forth. The current miners' contract is reproduced. Decisions of the Kansas Supreme Court under the workmen's compensation act, suits to enforce contracts, and under laborers' and material men's liens are reported.

During the year 1,743 industrial establishments, employing 40,658 persons, were inspected, approximately 500 buildings examined under the fire-escape law, and 1,000 recommendations made, resulting in improved conditions, declares the report.

The following is abstracted from the chapter "Manufacturing and Industrial Statistics":

COMPARATIVE SUMMARY OF MANUFACTURING STATISTICS FOR THE YEARS 1909, 1913, AND 1914, WITH PER CENT OF INCREASE.

Item.	1909	1913	1914	Per cent increase.	
				1914 over 1913.	1914 over 1909.
Number of establishments.....	1,918	1,662	1,938	16.61	1.04
Capital invested.....	\$141,354,877.00	\$174,608,465.59	\$174,935,237.82	.19	23.76
Number of salaried officials, clerks, etc..	6,148	6,362	8,036	26.31	30.71
Salaries.....	\$6,098,368.00	\$7,082,938.93	\$8,611,545.87	21.58	41.21
Average number of wage earners.....	51,628	54,439	51,697	¹ 5.04	.13
Total wages.....	\$31,338,827.00	\$34,328,555.40	\$34,214,713.57	¹ .33	9.18
Miscellaneous expenses.....	\$12,118,765.00	\$15,056,082.43	\$17,805,205.98	18.26	46.92
Cost of material used.....	201,521,096.00	230,564,609.93	241,125,048.34	4.58	19.65
Value of products, including custom work and repairing.....	264,133,757.00	318,536,748.68	328,936,964.85	3.26	24.53

¹ Decrease.

A table in detail shows the number of serious accidents occurring during the year, wages paid, injury received, length of disability, amount of compensation paid in reference to each injury. There were reported during the year 3,641 accidents, of which 57 were fatal, 806 serious (2 weeks or more duration), and 2,778 less serious.

Exclusive of harvest hands the free employment bureau reports 1,784 applications for situations, 940 vacant positions registered, and places secured for 833 persons.

As to coal-mine inspection, see the REVIEW for December, 1915, page 73.

Maryland.—*Bureau of Statistics and Information, 1914. Twenty-third annual report. Baltimore, 1915. 273 pp.*

The larger part of this report relates to the extent of child labor in the State. Tables are given showing age, nationality, sex, height, and other physical data concerning children to whom certificates of employment were issued during the year; class of

employment secured; length of service; cause of leaving; weekly wages by industries; results of medical examinations; reported occupational diseases; effect of certain employments on physique of the children; children on the stage; factory inspection; and home workers. There is also given the results of a special study of conditions in 15 industries employing the largest number of children.

It is reported that 2,130 children were working in violation of the law. There were secured, however, only 33 prosecutions and 26 convictions. There were nearly 13,000 positions filled by children under 16 years of age, and 15,181 applications for certificates under the child labor law were made in Baltimore City alone. Throughout the State 12,494 such certificates were issued, and in addition thereto 2,249 boys between 10 and 16 years of age were granted street trades licenses.

Massachusetts.—*Bureau of Statistics. Forty-sixth annual report on the statistics of labor for the year 1915. Boston, 1915.*

The matter presented in this volume consists of nine separates issued by the bureau during the course of the fiscal year ending December 1, 1915, in the form of numbered bulletins (Nos. 104–112) according to a practice established in 1913. These bulletins, for the most part, have been listed as received by the MONTHLY REVIEW, their title and number of the REVIEW in which they appear being as follows: Handbook of labor laws of Massachusetts, 1914; Sixth annual report on labor organizations, 1913 (September, 1915, p. 60); Fourteenth annual directory of labor organizations in Massachusetts, 1915 (October, 1915, p. 87); Fifth annual report on union scale of wages and hours of labor in Massachusetts, 1914 (October, 1915, p. 87); Immigrant aliens destined for and emigrant aliens departing from Massachusetts, 1914 (September, 1915, p. 60); Wages and hours of labor in the manufacture of paper products in Massachusetts (March, 1916. See below); Labor legislation in Massachusetts, 1915 (December, 1915, p. 74); Labor bibliography, 1914 (January, 1916, p. 63); Seventh annual report on labor organizations, 1914 (January, 1916, p. 64).

————— *Wages and hours of labor in the manufacture of paper products in Massachusetts. 1915. 146 pp. (Labor Bulletin No. 109, Part VI of the annual report on the statistics of labor, 1915.)*

For the three groups of industries considered collectively the average weekly earnings of the 4,848 male wage earners employed in the different establishments, regardless of occupation or time worked, were found to be \$13.04 as compared with the average of \$13.30 for the 57 per cent of these mill employees who earned full-time pay during the representative week for which pay rolls were copied. The corresponding average for 7,249 female employees, 43.9 per cent of whom worked full time, were \$7.37 a week for all females as compared with \$7.59 for those working full time. These average earnings included the wages of 1,542 children under 16 years of age. Eliminating the data for these latter, the average weekly earnings of all males 16 years of age and over was \$13.63, which was greater by 59 cents than the corresponding rate for all males, while the average earnings of females 16 years of age and over was \$7.80, which was greater by 43 cents than the corresponding rate for all females.

“Although the so-called 54-hour law is legally applicable only to the employment of women and minors in manufacturing and mercantile establishments, it has, nevertheless, effected a corresponding reduction in the hours of labor of men in many of the establishments in which both men and women are employed, thus establishing the 54-hour schedule as a standard working week for men as well as for women” (p. 42).

————— *District Police. Report for the year ending October 31, 1915, including the detective, building inspection, and boiler inspection departments. Boston, 1915. 274 pp.*

New York—**NEW YORK CITY**.—*Department of Education. Seventeenth annual report of the City superintendent of the schools, 1914-15. New York, 1916. 4 vols.:*

— *Report on evening schools for the year ended July 31, 1915. Presented to the Board of Education October 27, 1915. 115 pp., plates.*

— *Recreation centers, vacation schools, vacation playgrounds. Presented November 10, 1915. 85 pp., plates.*

— *Preparation for trades: Manhattan trade school for girls; Vocational school for boys; Murray Hill vocational school for boys. Presented November 24, 1915. 99 pp., plates.*

— *Survey of the Gary and prevocational schools. Presented January 26, 1916. 61 pp.*

Concerning the last-named investigation the superintendent in his letter of transmittal to the board of education declared that "the results show that, of the three types, the traditional schools made the best showing, the 'prevocational' schools stood second, and the Gary schools stood third" in a test made as to the academic knowledge of the pupils.

Ohio.—*Industrial Commission. Division of Mines. Fortieth annual mine report for the year ending December 31, 1914. Columbus, 1915. 413 pp.*

The State of Ohio, according to this report, produced 18,736,407 tons of coal in 1914 as compared with 36,285,406 tons in 1913; the average number of miners for the year decreased from 48,420 to 46,965, or the lowest in any year since 1906; the average number of days worked by pick miners fell from 189 to 150, and of machine miners from 206 to 150.

Accidents in coal mines, it is reported, caused the death of 58 persons during the year, or one for every 813 persons employed, as compared with one for every 299 persons employed in 1913. Taking all deaths caused by accidents reported during the year 1914, or 61, 3 of which occurred as the result of accidents met with in 1913, falls of roof and coal were accountable for 44 deaths; mine cars, 7; motors, 3; explosions of gas, 1; explosion of powder, 1; electricity, 1; mining machine, 1; and miscellaneous, 3.

During the year 1914 there were reported 24 violations of the mining law, resulting in prosecutions. The most serious violations reported were those for removing and going beyond a danger signal.

The report contains information in some detail, concerning measures of safety, mining laws and legislation, coal production, coal mine inspection, etc. Part II is a detailed report of the deputy mine inspectors for their respective districts; and Part III contains a directory of coal companies by counties.

— *Financial statement of the State insurance fund on November 15, 1915. Columbus, 1915. 4 pp.*

This report will be found summarized elsewhere in this issue of the MONTHLY REVIEW in connection with a digest of recent reports relating to workmen's compensation. (See p. 53.)

Oregon—**PORTLAND**.—*Department of Public Works. Report on the problem of unemployed during the winter 1914-15. [Portland.] 18 pp.*

This pamphlet reports the experience of the Citizen's Employment Committee in caring for the unemployed men in the city of Portland, during the winter 1914-15. The city spent \$75,000, it is stated, in an endeavor to cope with unemployment. Timber was purchased on stumpage contract and three wood-cutting camps were established, furnishing employment to 902 men, for an aggregate of 11,752 days, for which wages were paid in cash amounting to \$6,462.58, and meals furnished to the value of \$7,416.93. The total expenditures in the project amounted to \$33,253.83. The public utilities commission gave 822½ days employment at \$3 per day to men having large families.

At a temporary city lodging house, 1,392 men were provided with quarters, and employment furnished in cutting cordwood, at \$1 per cord. The equipment and operations, etc., purchase of logs and rent amounted to \$9,609.16.

Virginia.—*Bureau of Labor and Industrial Statistics. Eighteenth annual report, 1915. Richmond, 1915. 190 pp.*

Statistical data relative to value of product, wages paid, and capital invested; also, average monthly pay of office help, and average daily wages of skilled and unskilled employees in the various industries in the State.

The summary shows that in 1913 the value of production was \$213,530,858 while in 1914 the value was \$212,416,996, including \$19,031,305 for industries not reported in 1913.

Accidents to employees are reported as follows:

Electric railways: Killed, 4; injured, 70; steam railroads: Killed, 61; injured, 3,139; in coal mines 43 fatal and 538 nonfatal accidents. In the section on inspection of factories the conditions observed in the various manufacturing and mercantile establishments are reported. Under the title, "Enforcement of Labor Laws" a record of each prosecution is given.

West Virginia.—*Department of Mines. Annual report, 1914. [Charleston, 1915]. 336, viii pp.*

This is the thirty-first annual report of the department upon the conditions of coal mines. It gives detailed statistics of coal mining and coke manufacturing, including accidents, strikes, wages, inspections, and visits made to mines. The report contains a directory of the mines of the State. In the chapter on accidents comparative data are given for the period 1883 to June 30, 1914, by year and by causes.

The following table of data summarizes the results of coal mine operations for the fiscal years 1913 and 1914:

NUMBER OF COAL MINES IN OPERATION, OUTPUT, AND VALUE OF COAL MINED; TONS OF COKE PRODUCED; DAYS OF OPERATIONS; INJURIES AND DEATHS CAUSED BY ACCIDENTS, 1913 AND 1914.

[Ton=2,240 pounds.]

	Year ending June 30—			Year ending June 30—	
	1913	1914		1913	1914
Counties mining coal ¹	33	33	Underground laborers ¹	17,075	18,323
Firms operating ¹	485	442	Outside employees ¹	10,553	11,212
Openings subject to mining law.....	850	847	Coke-oven employees.....	2,571	1,898
Tons of pick-mined coal ¹	28,134,552	29,541,498	Total employed in coal mines ¹ and coke ovens.....	70,321	78,041
Tons of machine-mined coal ¹	33,335,800	35,941,500	Number killed.....	308	541
Total coal mined.....	61,470,352	65,483,088	Number injured, non-fatally.....	668	870
Tons from small mines ²	300,000	300,000	Number employed per fatality.....	228	144
Tons from all mines.....	61,770,352	65,783,088	Number employed per injured.....	105	90
Coal converted into coke.....	3,763,077	2,907,434	Tons mined ¹ per fatality.....	199,579	121,041
Tons ³ of coke manufactured.....	2,521,800	1,957,401	Tons mined ¹ per injured.....	92,021	75,208
Value of coal at mines.....	\$61,132,648	\$65,783,088	Number of wives widowed.....	132	266
Value of coke at ovens.....	\$4,791,520	\$3,914,802	Number of children orphaned.....	299	621
Value of coal at mines (per ton).....	\$0.99	\$1.00	Acres of coal worked out.....	11,183	10,100
Value of coke at ovens (per ton).....	\$1.90	\$2.00	Tons produced per miner ¹	1,709	1,549
Mining machines in use.....	2,393	2,467	Average annual earnings per pick miner.....	\$737.62	\$726.67
Average coke ovens in use.....	8,393	5,902	Average monthly earnings per pick miner.....	\$61.47	\$60.56
Days mines in operation.....	220	226	Average mining cost per ton (run of mine).....	\$0.48	\$0.49
Days ovens in operation.....	255	252			
Pick miners employed ¹	18,320	19,924			
Machine operators and miners ¹	21,803	26,684			

¹ Commercial mines.

² Estimated.

³ 2,000 pounds.

Wisconsin.—*Industrial Commission. Report on allied functions for the year ending June 30, 1915. Madison, 1915. 51 pp.*

Contains record of the activities of the Industrial Commission of Wisconsin during the fiscal year 1915.

Safety in factories is secured by the commission by close cooperation with employers and employees, and orders are drawn up on the basis of the practical experience of these parties in interest. Thus, after six months spent in investigation by such a representative committee, 25 orders on safety and sanitation in zinc mines were issued in January. In a similar manner committees are at work drafting orders covering electric hazards, additional orders on safety and sanitation for factories for the guarding of machinery, etc., and orders covering safety in the logging industry. The commission has begun to make use of moving pictures in its educational campaign for safety.

In the work of inspection 2,879 establishments were visited during the fiscal year and 3,991 inspections were made. In 45 per cent of these establishments violations of safety orders were found and ordered corrected. During the preceding year violation of safety orders were found in 64 per cent of the 2,658 places inspected. As the building inspection code has been operative only since October 15, 1914, the work of the commission in connection therewith has been largely educative. This has been accomplished through conferences, by the drafting of short building ordinances suitable for adoption by cities, and by the use of pamphlets on fire protection in the schools.

The activities of the commission in relation to workmen's compensation were reviewed in a preceding number of the REVIEW (January, 1916, pp. 53-62.)

Many men looking for work and few positions to be found was the general condition of the labor market during the first 10 months of the fiscal year ended June 30, 1915. During the spring months the increased activity of manufacturing industries, and outside construction work relieved the situation to some extent. The existence of a real farm-help problem and an unusual dearth of employment in the cities brought about an aggressive movement by the free employment office to encourage the unemployed of the cities to accept work on the farms, and with the assistance of country banks and the long-distance telephone much has been accomplished in this field. In the year ending June 30, 1914, 1,408 farm hands were sent to different localities. Figures for the last year show that farmers asked for 3,572 men, and 2,035 applicants for farm work secured employment. The report states that the employment officials are very careful in choosing only men who are able to "make good" for farm vacancies and the farmers are beginning to place confidence in the judgment of free employment offices. The following table shows the result of the operation of free employment offices for the fiscal year ending June 30, 1915, as compared with the preceding fiscal year.

OPERATIONS OF THE WISCONSIN FREE PUBLIC EMPLOYMENT OFFICES, 1914-15 COMPARED WITH 1913-14.

Item.	Males.		Females.		Total.	
	1913-14	1914-15	1913-14	1914-15	1913-14	1914-15
Employers' orders.....	13, 113	10, 722	9, 043	9, 691	22, 156	20, 413
Applicants for work.....	42, 494	39, 242	9, 495	13, 326	51, 989	52, 568
Help wanted.....	33, 209	20, 811	9, 892	10, 284	43, 101	31, 095
Referred to positions.....	32, 300	20, 575	10, 029	12, 114	42, 329	32, 689
Positions secured.....	19, 651	15, 389	5, 276	6, 840	24, 927	22, 229

Regarding private employment offices, the commission proposes to inspect these during the coming year in order to insure full compliance with the law on their part. A system is being devised for regular reports by these offices to the commission.

The work of the commission in relation to woman and child labor has been largely routine work, it is stated, in inspecting work places where these are employed and in interesting employers with a view to a larger and more practical understanding of industrial welfare in behalf of these workers.

Among other matters reported upon by the commission were those concerning boiler inspection, enforcement of the minimum wage law, compulsory school attendance law, and the apprenticeship law of 1911. This latter law is declared to have been a failure, and as the result of inquiries by the commission an amended law was secured in 1915 which gives the industrial commission power to make regulations for the different trades and industries.

Bakeries and confectioneries to the number of 4,513 were inspected during the year and 1,248 were found unclean.

The arbitration functions of the commission were practically dormant during the year, the absence of serious strife, it is suggested, being due to the prevailing state of unemployment throughout Wisconsin.

Only 11 prosecutions for violation of the law were found necessary, 2 cases of violation of the sanitation law, 5 of violation of the woman labor laws, and 4 of violation of child labor laws.

The total expenditures of the commission for the fiscal year ending June 30, 1915, were \$106,240.74, as compared with \$104,973.04 for the preceding fiscal year.

United States.—*Association of Governmental Labor Officials of the United States and Canada. Proceedings, second annual convention, Detroit, Mich., June 28–July 1, 1915. Kansas City, Mo. 118, [2] pp.*

Prior to 1914 the two associations, the International Association of Factory Inspectors and the International Association of Labor Commissioners, had maintained separate existence, the former since 1887 and the latter since 1885; but in June, 1914, at a joint meeting of the associations at Nashville, Tenn., the two by mutual agreement went out of existence and reorganized themselves into a new association called "The Association of Governmental Labor Officials of the United States and Canada." The joint meeting of 1914 from June 8 to 12 continued after the amalgamation as the first annual convention of the newly organized association.

The proceedings here listed constitute those of the second annual convention held at Detroit, Mich. Among the topics discussed were the following: Cooperation in the enforcement of labor legislation; need of the extension of continuation schools; national child labor; elimination of dust, noxious fumes, excessive heat, etc., from factories; administration of industrial laws; public employment offices; factory inspection laws, etc.; factory inspection and labor conditions in the South; industrial hygiene; industrial progress in New England; need and benefit of industrial hygiene; need of women factory inspectors; and the work of the United States Department of Labor.

— *Bureau of Education. Report of the Commissioner of education for the year ending June 30, 1915. Washington, 1915. 2 vols.*

Chapter 9 of volume I of this report consists of a survey of the present status and tendencies in vocational education in the United States, written by the specialist in industrial education of the bureau.

"The intensity of popular interest, the increasing numbers of those who seek definite suggestions for specific purposes, the eagerness with which information is sought, and the magnitude of the physical proportions of the movement [for vocational education]

as manifested in legislation and in the creation and extension of schools to meet newly conceived needs—all of these grow steadily and rapidly more impressive." (p. 221.)

United States.—*Bureau of Foreign and Domestic Commerce.* (*Department of Commerce.*) *The hosiery industry: Report on the cost of production of hosiery in the United States.* Washington, 1915. 258 pp. (*Miscellaneous Series, No. 31.*)

This is the second of a series of reports to be issued by the Bureau of Foreign and Domestic Commerce concerning the cost of production in different branches of the clothing industry. The report contains information concerning cost of production, imports and exports, working conditions, factory equipment, selling methods, and other trade conditions in connection with the hosiery industry, together with some practical suggestions with regard to efficient factory management based on interviews with manufacturers and on the personal observations of the special agents of the bureau. Attention is called to that chapter which gives a description of the principal processes of hosiery manufacture.

In 1909 the hosiery and knit goods industry, considered on the basis of value of production, ranked thirtieth in importance among the industries of the United States. It is widely distributed, not less than 38 States having at least one such manufacturing establishment. The value of hosiery manufactured in the United States in 1909 is reported at \$68,721,825, of which cotton hosiery was valued at \$55,909,987. The importation of cotton hosiery for the fiscal year 1909 was \$6,390,923, or 11.43 per cent of the value of domestic production, while in 1914 such importation amounted to \$2,949,678, or 5.28 per cent of domestic production.

Reports were secured from 73 establishments located in 16 States. Their sales during the last business period, usually a year, aggregated \$27,010,893. The capital invested amounted to \$15,548,885, and employed during the busy season 4,620 males and 12,424 females, a total of 17,044 persons 16 years of age or over, and 466 males and 984 females under 16 years of age, making a total of 18,494 employees, of whom 7.85 per cent were under 16 years of age. Females constitute a large portion of the employees in hosiery mills. The piece-price system prevails, and is generally preferred by both employees and employers.

As to average cost of production the percentage expended for various items was as follows for all 73 establishments: Raw material, 53 per cent; direct labor, 25; indirect labor, 4; factory expense, 6; administrative expense, 3; and selling expense, 9.

Manufacturers north of Mason and Dixon's line complain that the rapid development of the hosiery industry in the South is making serious inroads on their business, and that it is hard for them to meet the competition of the southern mills, because in these mills wages are lower, working hours longer, and younger children employed than in northern factories, and workmen's compensation acts have not been passed in Southern States.

Chapter VI (pp. 195-217) of the report presents further details of working conditions, distribution of employees engaged in the different classes of establishments, wages, and hours of labor. These data were drawn for the most part from Bulletin No. 177 of the Bureau of Labor Statistics relating to wages and hours of labor in the hosiery and underwear industry, 1907 to 1914.

Pages 237 to 253 are devoted to suggestions for increasing foreign trade with various countries.

— — — — — *The knit underwear industry: Report on the cost of production of knit underwear in the United States.* Washington, 1915. 217 pp. (*Miscellaneous Series, No. 32.*)

This is the third of a series of reports to be issued by the Bureau of Foreign and Domestic Commerce concerning the cost of production in different branches of the clothing industry. The report contains information concerning the cost of produc-

tion, imports and exports, working conditions, factory equipments, selling methods, and other trade conditions of interest in connection with the knit underwear industry, together with some practical suggestions with regard to efficient factory management, based on interviews with manufacturers and on the personal observations of the special agents of the bureau.

According to the census of manufacturers the value of knit underwear produced in the United States in 1909 was \$84,446,353. In the fiscal year 1914 the imports of all cotton knit goods except hosiery, gloves, and mittens amounted to \$341,973, or 0.57 per cent of the production in 1909, and it is estimated that this percentage would be even lower if the imports in 1914 were compared with the domestic production in that year. The exports of knit goods and hosiery increased from \$1,016,325 in the fiscal year 1909 to \$2,544,822 in the fiscal year 1914, or over 150 per cent.

In the investigation reports were secured from 63 establishments located in 13 States said to be fairly representative of the industry. Their sales during the last business period, usually a year, amounted to \$26,693,778.

Concerning employees and wages in the industry the following summary is quoted from page 44 of the report:

"In most establishments the busy season includes the months of April, May, and June, and the full months are July, August, and December. The total number of employees in the 63 establishments reporting was 15,081 during the busy season, of whom 344, or 2.20 per cent, were under 16 years of age.

"The average number of employees 16 years of age and over during the busy season was: Males, 69.5; females, 167.6; total, 237.1. The average in the dull season was: Males, 67.1; females, 160.7; total, 227.8; a falling off of only 9.3, or 3.96 per cent.

"Of the establishments in the first four groups, including mills that buy all of their yarns, those in Group III, which includes mills in the Southern States, show the largest average number of employees.

"The whole number (not the average) of children under 16 years of age employed in the 63 establishments was 68 males and 276 females during the busy season and 57 males and 235 females during the dull season.

"Females constitute a large proportion of the employees in knit underwear mills. Most of the labor in such mills is paid for on the piece-price basis, which is preferred by both employer and employee."

The percentage distribution of the average cost of production for the 63 establishments, based on the total manufacturing and selling expense, was as follows, according to items of expense: Raw material, 61 per cent; direct labor, 21; indirect labor, 3; factory expense, 5; administrative expense, 3; and selling expense, 7.

Chapter VI of the report (pp. 176-195) presents further details as to working conditions in the industry, the number and distribution of employees, their earnings and hours of work as gathered from Bulletin No. 177 of the Bureau of Labor Statistics. Chapter V contains a description in some detail of the processes and occupations recognized in the industry.

United States.—*Navigation laws: Comparative study of principal features of the laws of the United States, Great Britain, Germany, Norway, France, and Japan. Washington, 1916. 190 pp. (Special Agents Series No. 114).*

This volume is a comparative analysis of the navigation laws of the leading maritime countries, namely, United States, Great Britain, Germany, Norway, France, and Japan. "This analysis is believed to be the first of its kind published in this country and is designed to meet the present urgent need for adequate official information on the subjects covered."

Among the features of the laws analyzed in this study are those provisions relating to the hours of labor of seamen, to provisions of the wage contract and conditions sur-

rounding the health and hygiene of seamen, regulations concerning the number of the crew and its nationality, their general disposition and treatment by the shipper. The provisions of the law are classified primarily according to subject matter, with sub-classification according to country. Three principal group classifications have been adopted: (1) Laws affecting the vessel; (2) laws affecting officers and crews; (3) administration of navigation laws.

The Bureau of Foreign and Domestic Commerce in the preparation of the report had the cooperation of the Commissioner of Navigation and of the Supervising Inspector General of the Steamboat-Inspection Service.

United States.—*Civil Service Commission. Thirty-second annual report for the fiscal year ended June 30, 1915. Washington, 1915. 211 pp.*

“The Government is doing more work with fewer employees and with increased economy and efficiency” is the verdict of the Civil Service Commission in the report listed here. On June 30, 1915, there were 476,363 officers and employees in the executive civil service. Of this number 292,296 were employees who held their positions by reason of competitive examinations; 10,690 were presidential appointees; 5,292, clerks in charge of contract postal stations; 72,000, clerks in third and fourth class post offices and consequently selected by the local postmasters; 8,098, mail messengers; 12,129, star-route, steamboat, and screen-wagon contractors; 4,556, pension examining surgeons; 20,674, engaged on the Panama work chiefly as laborers and minor employees; 27,464, unclassified laborers; 204, temporary employees of the Census; and the remaining 22,960 were either excepted from examination or subject to noncompetitive examinations.

Special attention is directed in the report to the securing of men for the valuation work of the Interstate Commerce Commission, with the statement that “the men engaged in the physical valuation of railroads constitute one of the most remarkable engineering forces ever assembled and their selection through competitive examination is a striking illustration of the efficiency of the merit system in meeting the demands of the public service.” (Page 8.)

The table which follows may serve as a summary of the examination and appointment work of the commission for the two fiscal years, 1914 and 1915:

PERSONS EXAMINED AND APPOINTED UNDER THE CIVIL SERVICE DURING THE FISCAL YEARS 1914, 1915.

	Examined.		Appointed.	
	1915	1914	1915	1914
Under civil-service rules, original entrance:				
Field service.....	141,927	183,003	33,927	39,134
Departmental at Washington, D. C.....	24,100	13,609	1,914	2,072
Total.....	166,027	196,612	35,841	41,206
Promotions, transfers, and reinstatements through examination	1,137	1,487	557	729
Total under rules.....	167,164	198,099	36,398	41,935
Not under Federal civil-service act and rules:				
Philippine service.....	337	585	63	45
Under labor regulations.....	17,366	9,326	3,949	3,025
Total.....	184,867	208,010	40,410	45,005
Without further examination:				
Transfers and promotions.....			1,137	1,307
Reinstatements.....			1,327	1,647
Grand total.....	² 184,867	208,010	42,874	47,959

¹ These were transfers and promotions requiring certificate of the commission under the rules.

² In addition and upon appropriate official request the commission examined 1,587 applicants for admission to the District of Columbia service, the Military and Naval Academies, and the Federal Reserve Board.

Under the rules of the civil service prohibiting political activity, coercion, and discrimination administrative punishment was imposed during 1915 resulting in 64 removals or involuntary separation from the service, 4 reductions in grade, 27 suspensions without pay, and 56 warnings or reprimands. In this connection the commission asks that uniform and definite restrictions in the form of a civil-service rule be placed upon the political activity of unclassified and excepted officers and employees in the Government service.

As to Philippine appointments it appears that in 1902, 48 per cent were Filipinos, while in 1914 this proportion had increased to 94 per cent. "The appointment of Americans to clerical positions has practically ceased."

The problem of civil-service retirement the commission holds is intimately related to the efficiency of the service, and by no means the result of the merit system. Although civil-service rules have never protected incompetents, nevertheless "the improvement of methods and the proper adjustment of pay can not be effectively provided for until a retirement system is established which will make provision for this class of employees. The commission believes that a contributory plan is the only just and practicable one for the retirement of employees, and earnestly recommends its adoption at an early date."

United States.—*Federal Trade Commission. Annual report for the fiscal year ended June 30, 1915. Washington, 1915. 14 pp.*

The commission had been organized 16 weeks at the time of the issue of this report. The report is therefore only a brief statement concerning the organization of the commission and its staff, the employees of the former Bureau of Corporations of the Department of Commerce. The act creating the commission and that part of the antitrust, or so-called Clayton Act, as far as its enforcement lies with the commission, are appended.

— *Interstate Commerce Commission. Accident Bulletin No. 55. Collisions, derailments, and other accidents resulting in injury to persons, equipment, or roadbed, arising from the operation of railways used in interstate commerce. January, February, March, 1915. Washington, 1915. 57 pp.*

Accidents occurring on interstate railways affecting passengers and employees of carriers have been reported quarterly by the commission since the act of May 6, 1910, came into effect, which required common carriers engaged in interstate and foreign commerce to make reports of all accidents to the commission, and which authorized investigation of accidents. There are reported all kinds of accidents to passengers, but accidents to employees resulting in injuries which do not prevent them from performing their accustomed services for more than three days in the aggregate during the 10 days immediately following the accident are not reported. Accidents to employees are reported separately for those on duty and those not on duty, and separately for those accidents occurring to railway employees other than trainmen on railway premises, which latter group of accidents are termed "industrial accidents," i. e., accidents not connected with train operation. No accident rates are presented as the number of employees is not reported. The bulletin contains data concerning accidents on electric railways and reports on railroad accidents specially investigated by the commission during the quarter in question.

During the first quarter, January, February, and March, 1915, the number of employees killed in "industrial accidents" was 79; the total number of employees killed by accident was 608; the number killed in coupling, 44; and the number killed in train accidents, 99.

— *Surgeon General United States Army. Report to the Secretary of war, 1915. Washington, 1915. 306 pp.*

This report is here listed because of the data it contains concerning the medical examinations and occupations of recruits to American Army, who, it need hardly be said, are made up largely of the floating labor supply of the country. Thus, according

to this report, of 28,772 men who were accepted for first enlistment during the calendar year 1914, 10,190 or 35.4 per cent were ordinary laborers. For the five occupations which ranked first in importance the actual and relative numbers were as follows: Laborers, 10,190, or 35.4 per cent; farmers, 3,487, or 12.1 per cent; clerk and bookkeepers, 1,706, or 5.9 per cent; drivers and stablemen, 1,272, or 4.4 per cent; machinists, 1,018, or 3.5 per cent.

Of the total, 1,574 were colored, of whom 977, or 62.1 per cent, were classed as ordinary laborers.

During the year there were examined by the medical officers of the Army 57,244 recruits. This is the number of recruits it should be remembered, who have already passed a preliminary examination at the recruiting station, and this examination by the medical officers is a final and more thorough one. Of the number above, 6,102 were rejected for enlistment, 4,699 rejections or 77 per cent for physical causes and 1,403 or 23 per cent for causes not physical. Of the total rejected the largest proportion or 12.3 per cent, were rejected on account of venereal diseases; 9 per cent on account of diseases of the ear and defects of hearing, 6.8 per cent for defects of vision, 6.3 per cent for heart disease, 4.7 per cent on account of flat feet, and 3.6 per cent each on account of alcoholism and hernia.

The report contains much detailed data on the health and sanitary conditions of the Army for the year 1914 and a financial statement for the fiscal year ending June 30, 1915.

FOREIGN COUNTRIES.

Austria.—*Arbeitsstatistisches Amt im Handelsministerium. Die Arbeitseinstellungen und Aussperrungen in Oesterreich während des Jahres 1913. Vienna, 1914. 107 and 138 pp.*

This report on strikes in Austria during 1913 was published at the end of 1914, but only recently received by the bureau.

There are reported 438 strikes in 1913, which involved 1,024 establishments employing 88,150 workmen. Of this latter number 39,814 participated in the strikes, with a total loss of 409,353 working days. The strikes were generally of short duration. As to results from the point of view of the strikers 88 were completely successful, 193 partial successful, while 157 were without results. Demands in some way concerned with wages were the cause of 68.3 per cent of all strikes, while demands relating to organization were the next most frequent cause.

The number of lockouts during the year was 23, which involved 1,675 establishments employing 30,296 workers. Of these latter 75.3 per cent were locked out.

Denmark.—*Direktoratet for Arbejdsog Fabriktilsynet. Beretning om arbejdsog fabriktilsynets virksomhed i aaret 1914. Copenhagen, 1915. 46 pp.*

The present report embraces operations of the factory inspection department for the first year under the law of April 29, 1913, which became applicable December 1 of that year, as well as its activities in enforcing the bakery and steam boiler inspection law. The inspection department consists of a director, two office chiefs, a technical expert, a bookkeeper, and 18 district inspectors, together with one woman inspector, also a special inspector for bakeries, another for elevators, and a third for steam boilers. On January 1, 1914, 15,241 factories and workshops and 3,226 bakeries were subject to inspection; at the close of the year the number had increased to 17,590 and 3,227, respectively. Excluding the inspection of agricultural machinery and the like, 18,774 fixed industrial establishments were inspected during the year, involving 20,755 inspections, or an average of 111 for each 100 establishments, as compared with 98 inspections for each 100 establishments during the previous year. It should be noted that the municipalities maintain inspection divisions which are engaged in the inspection of dangerous machinery in their respective localities.

One hundred and thirty prosecutions for infractions of the factory law were maintained during the year, giving rise to fines amounting to 2,830 crowns (\$758). Under the factory law 107 prosecutions were conducted with resulting fines amounting to 1,914 crowns (\$513).

PERIODICAL PUBLICATIONS RELATING TO LABOR.

LABOR DEPARTMENTS AND BUREAUS.

Canada.—*The Labor Gazette, issued by the Department of Labor by order of Parliament. Ottawa.*

January, 1916.—Notes on current matters of industrial interest; Industrial and labor conditions, December, 1915; Proceedings under the industrial disputes investigation act, December, 1915; Industrial and labor conditions in Canada, 1915; Wholesale and retail prices, 1915; Reports of employment bureaus; Fair wages schedules in Government contracts; Trade disputes, 1915; Industrial accidents, December, 1915; Immigration, emigration, and colonization; Building permits, December, 1915; Reviews; Legal decisions affecting labor.

Denmark.—*Statistiske Efterretninger udgivet af det Statistiske Department. Copenhagen.*

December 28, 1915 (Vol. 7, No. 26).—Wages of servants and day workers in agriculture, 1915; Taxes on theaters, concerts, public shows, etc.; Unemployment, October, 1915; Retail prices, December, 1915; Insurance premiums paid in Denmark, 1910, 1914; Municipal relief funds, 1913-14 and 1914-15; Index number of the Economist.

January 20, 1916 (Vol. 8, No. 1).—Root crops, 1915; Electrical works in Denmark; Textile production, 1913; Retail prices, January, 1916.

Finland.—*Arbetsstatistisk Tidskrift utgifven af Industristyrelsen. Helsingfors.*

No. 6, 1915.—Changes in rates of wages, 1914 and 1915; Conditions of labor in the lumber industry; Public employment exchanges, third quarter, 1915; Proposed new workmen's compensation law in Sweden, 1915; Reports from foreign countries; Retail prices, third quarter, 1915.

France.—*Bulletin du Ministère du Travail et de la Prévoyance Sociale. Paris.*

September-October, 1915.—Social movement—France: Work of the mixed commissions in the departments for the adjustment of employment (continued); Employment in mines, September, 1915; Strikes and lockouts, September and October, 1915; National unemployment funds; Central office for placing the unemployed and refugees; Investigation of unemployment in certain occupations in Paris; State subsidies to employment bureaus, 1914; Operations of the National Old-age Retirement Fund, 1913; Economic situation expressed in index numbers, second quarter, 1915; Election of two of the members of the central minimum wage board. Foreign countries—Germany: Labor market, July, August, 1915; Employment offices; Cost of living in Berlin, August, September, 1915; Sickness insurance, 1913. Austria: Cost of living in Vienna, August, September, 1915. Trade-unions in Canada, 1914. United States: Immigration, 1914; Trade-unions in New York State, 1913; Strikes and lockouts, 1914. Great Britain: Labor market, strikes and employment exchanges, August-September, 1915; Cost of living, November 1, 1915; Strikes and lockouts, 1914. Sweden: Strikes and lockouts, 1913, 1914; Work of Government mediators, 1914. Miscellaneous: Reports of the industrial courts, third quarter, 1915; Wholesale prices in Paris, September, October, 1915; Foreign commerce of France, first six months, 1915; Production of sugar and alcohol; Prices of bread. Laws, decrees, court decisions, etc., on matters of interest to labor.

Germany.—*Reichs-Arbeitsblatt, herausgegeben vom Kaiserlichen Statistischen Amte, Abteilung für Arbeiterstatistik. Berlin.*

December, 1915.—Labor market in Germany, November, 1915; Labor market in foreign countries (Great Britain, Switzerland, Netherlands, France, New York, Australia); Employment offices and unemployment; Unemployment in German trade-unions, November, 1915; Unemployment in foreign countries (Austria, April to July, 1915, Netherlands, September, 1915); The trade-unions and the war; Miners' wages, first and second quarter, 1915; Labor disputes in Germany and Great Britain during the war (Sept. 1, 1914, to Aug. 31, 1915); Courses in elementary academic instruction for workmen in Germany; Decisions of industrial courts; Statistical tables of the labor market.

Great Britain.—*The Board of Trade Labor Gazette. London.*

January, 1916.—Employment chart; The labor market; Special articles on employment, wages, prices, and labor disputes, 1915; Employment in Germany in November; Retail food prices in the United Kingdom, Berlin, Vienna, and Italy; Increase in cost of food in New Zealand, July, 1914–August, 1915; Welfare supervision; Coal mining organization committee; Official mediation in labor disputes in Norway; Reports of employment in the principal industries; Labor in the Dominions and in foreign countries, Denmark, Norway, United States; Board of trade labor exchanges. Statistical tables: Trade disputes; Distress committees; Changes in rates of wages; Prices of wheat, flour, and bread; Pauperism; Unemployment insurance; Diseases of occupations; Fatal industrial accidents; Building plans; Foreign trade; Passenger movement to and from the United Kingdom. Legal cases, official notices, etc.

Italy.—*Bollettino dell' Ufficio del Lavoro, Ministero di Agricoltura, Industria e Commercio. Rome. (Semimonthly.)*

December 15, 1915.—Labor market by localities and industries; Labor disputes, second half of November; Employers' and employees' associations; Congresses and conventions; Labor legislation Decree, November 11, 1915, providing facilities for the execution of public works; Activities of the bureau of labor; Illumination in factories and work shops.

January 1, 1916.—Labor market by localities and industries; Labor disputes, November, 1915; Employers' and employees' associations; Congresses and conventions; Retail prices and index numbers of food stuffs in Italian cities, first six months 1914 and November, 1915; Retail prices of foodstuffs in foreign countries: Great Britain (December, 1914, and July, 1915) Germany, Berlin (July, 1914, and October, 1915). Activities of the bureau of labor; Enforcement of labor legislation; Immediate effects of inhaling chlorine vapors; Poisoning in mines in the Transvaal.

January 16, 1916.—Labor market by localities and industries; Labor disputes, second half of December, 1915; Employers' and employees' associations; Congresses and conventions; Activities of the bureau of labor; Labor legislation; Decree, December 23, 1915, extending the term of validity of the decree of May 2, 1915, relating to expatriation for the purpose of securing work; Decree, December 23, 1915, prohibiting fishing in the Ionian Sea; Decree, December 29, 1915, extending the validity of various decrees for facilitating the payment of rents; Decree, January 2, 1915, authorizing the Government to extend its military discipline to dock labor at Italian seaports; Enforcement of social legislation; Court decisions relating to labor.

— (Monthly).

September–October, 1915.—Labor market in foreign countries (France, July, 1915); Labor disputes in Italy; Labor disputes in foreign countries (France, July and August, 1915; Buenos Aires, Argentina, 1913); Trade-unions in Canada, 1914; the problem of illumination in factories and workshops; Hygiene of the painters' trade; Occu-

pational aneurism of the hand; Approval by the second national conference of the American Association for Labor Legislation of a practical program of action against unemployment. Labor legislation—Australia: Report of the chief inspector of factories, Melbourne, on antistrike legislation; Canada: Proposed amendment of the industrial disputes investigation act. Prices of articles of consumption paid by State educational institutions.

Netherlands.—*Maandschrift van het Central Bureau voor de Statistiek. The Hague.*

December, 1915.—Review of the labor market, building trades, clothing and cleaning, and coal mining, November, 1915; Fisheries and dock labor, December, and employment of interned soldiers to supply deficiency of labor in Netherlands; Unemployment and unemployment insurance, 1911-1915; Labor exchanges; Strikes and lockouts; Wages, collective agreements, etc.; Workmen's organizations; Wholesale prices, 1914, 1915; Retail prices (index figures), 1913 to November, 1915; Number and classes of passports issued; Court decisions. Miscellaneous reports—Statistics of population, workmen's dwellings; Public contracts awarded; Invalidity and old-age pensions; Accidents; Postal savings bank, etc. International: Resume of war measures; Labor market in various countries; Labor exchanges; Strikes and lockouts in Australia, Germany, Great Britain, and Italy; Retail prices in Denmark, Great Britain, Italy, Norway, Austria, Sweden, and Switzerland; Cooperative societies in Germany; Conciliation and unemployment insurance in Norway. Statistical tables relating to the labor market and to public finance.

New South Wales.—*The New South Wales Industrial Gazette, issued by the Department of Labor and Industry. Sydney.*

November, 1915.—The industrial situation, October, 1915; Law of industrial import; Working of the factories and shops act, October, 1912; Departmental intelligence (industrial law); Judgments of industrial boards; Industrial arbitration; Factories and shops act, notice in regard to returns; Judicial, etc., proceedings; Departmental records—(Chief inspector of factories office; Gas examiner's office; Industrial registrar's office; Investigation office; Labor exchanges); Records of industrial boards, etc.; Industrial agreements and awards expired, rescinded, new, and in force.

New Zealand.—*Journal of the Department of Labor. Wellington.*

December, 1915.—Conditions of employment and trade, November, 1915; Woman's employment branches reports; Recent legal decisions of interest to labor; Death cases under the workmen's compensation act; Statistical tables of employment exchange data, registered trade-unions, cooperative works, accidents in factories, and current retail prices (November, 1915).

Spain.—*Boletín del Instituto de Reformas Sociales. Publicación Mensual. Madrid.*

December, 1915.—Report of the secretary's office and of the special divisions; Directory of associations; Strikes in 1914 and in November, 1915; Prices of various articles of food, October, 1914, and March, 1915; Proceedings of the convention of national federation of railway employees; Legislation. Foreign notes: Strikes and lockouts in Germany, third quarter, 1915; Great Britain, October, 1915. Index for July to December, 1915, issues.

Sweden.—*Sociala Meddelanden utgivna av K. Socialstyrelsen. Stockholm.*

November 12, 1915.—Report of the State unemployment commission on unemployment among stone workers, May, 1915; Relief and bonus payments by employers to offset the high cost of living; Foreign countries and the war (France); Prices and wages at certain armament works; Results of the housing census, 1912-13, at Eskilstuna; Maximum price fixed by the State on rye, wheat, and oats; Feeding of school children in Stockholm; Cost of living in Denmark during the war; Fatal industrial accidents;

Brief notices, mainly from foreign countries; Public-employment exchanges, November, 1915; Retail prices and cost of living, 1904 to November, 1915; Prices of cattle on the hoof, 1904 to November, 1915; Fish prices in Stockholm, November, 1914 and 1915; Reports from the royal pension bureau.

MISCELLANEOUS.

Austria.—*Amtliche Nachrichten des k. k. Ministeriums des Innern betreffend die Unfallversicherung und die Krankenversicherung der Arbeiter. Vienna.*

December, 1915.—Accident insurance; Election and appointment of officers of the workmen's accident insurance institutes and courts of arbitration; Decisions of the courts of arbitration; Sicknes insurance; Order relating to annual reports of sick funds; Redetermination of the customary local daily wages.

Germany.—*Amtliche Nachrichten des Reichsversicherungsamts. Berlin.*

September, 1915.—General part: Decree, August 19, 1915, of the imperial chancellor postponing the new determination of the customary local wages. Accident insurance. Circular decree, September 3, 1915, of the imperial insurance office to the directorates of trade accident associations as to the employment of persons injured in the war; Decisions of the imperial insurance office. Sicknes, invalidity, and survivors' insurance: Circular decree, September 3, 1915, of the imperial insurance office to the directorates of the State insurance institutes as to the granting of curative treatment to tubercular persons participating in the war; Decree, September 15, 1915, of the imperial insurance office exempting specified persons from the obligation to insure; Decisions on appeal; Decisions of the decision senates; Disbursements of the invalidity insurance institutes, July, 1915, for pensions and benefits to insured persons and their survivors; Receipts from the sale of contribution stamps, August, 1915.

October 15, 1915.—Accident insurance: Approval by the imperial insurance office of regulations for accident prevention and risk tariffs, third quarter, 1915; Decisions on appeals. Sicknes, invalidity, and survivors' insurance: Circular letter, June 24, 1915, of the imperial insurance office to the directorates of the State insurance institutes containing a statement of the investments of these institutes, December 31, 1915; Decisions on appeals; Decisions of the decision senates; Disbursements of the invalidity insurance institutes for pensions and benefits to insured persons and their survivors, August, 1915; Receipts from the sale of contribution stamps, September, 1915.



