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JOB SELLING IN INDUSTRIAL ESTABLISHMENTS IN OHIO.

Job selling involves the practice of paying to the foremen in industrial plants a fee for securing work and also of paying money to the foremen from time to time in order that the workman may not lose his job or may receive more desirable work. The first complaint of this sort of graft on the part of foremen came to the department of investigation and statistics of the Ohio Industrial Commission through the demands of a body of striking employees in the latter part of 1915. One of the demands of these strikers was for the discharge of a foreman to whom the foreign workmen were required to contribute money from time to time in order to hold their jobs or to secure an advance in wages. In response to this and subsequent complaints an investigation was instituted which developed the fact that the collection of fees for jobs, or assessments of various kinds, by foremen has been in the past few months carried on in at least six large industrial plants in the State employing approximately 40,000 men. The information collected in this connection is set forth in Report No. 24 of the Department of Investigation and Statistics.¹

It was found that in some plants the custom has been established for years. With some foremen a box of cigars or a bottle of whisky was a sufficient "present" to secure a job 10 years ago; then the applicant learned that money was more acceptable, and \$5 was the usual fee for the unskilled laborer; the applicant next learned that \$2 or \$3 extra would help him to get a job without waiting, or, in other words, it would place him on the preferred list; then the price rose to \$10, and from that to \$15; and at the time the investigations were begun the fee "expected" was generally \$15, \$20, or \$25 for a job paying approximately 25 cents per hour.

The employees paying these fees are almost altogether non-English speaking foreigners, and those who profit from the fees are usually English speaking, or able to speak English, and quite generally of a different race from those who are exploited.

Such a custom produces the worst possible type of industrial slavery, and it is small wonder that the much-exploited immigrant often feels bitter and

¹ Ohio. Industrial Commission. Department of Investigation and Statistics Report No. 24. Job selling in industrial establishments in Ohio. Columbus, 1916. 38 pp.

that sometimes this bitterness manifests itself in acts of violence during the excitement incident to a strike. What respect can the immigrant be expected to have for organized society which permits such conditions to exist?

The story appears to be the same in establishment after establishment where special pains have not been taken to eliminate and to prevent exploitation. The evidence showed that the shrewder foreman, occupying a comparatively high position, seldom receives the money directly from the applicant, but usually has a number of men who act as go-betweens. These go-betweens may be "straw bosses" or they may be workmen. They are often of the same race as those who are to be exploited. The applicant pays the money to the go-between, and he in turn pays it to the foreman. Sometimes the money passes through the hands of two, three, or even four persons before it reaches the foreman. In some cases the go-between retains a small part of the money collected. The go-between, it seems, performs this service practically without pay, for two reasons: First, this enables him to stand in with his foreman, and thus to secure more desirable work or to be retained during periods of depression; and, second, it enables him to secure work for his friends and countrymen, and this gives him a certain standing in his circle of acquaintances. On the whole, the investigation seemed to show that there are reasons to believe that more or less grafting in the form of job selling by foremen, in collecting money from workmen for retaining them during slack times, for assigning them to more desirable jobs, or for increasing their wages, and in conducting raffles for the benefit of the foremen, is carried on to a greater or less extent in most of the large industrial plants where immigrants are employed.

The report states that in some of the six plants mentioned above very drastic measures have been taken to punish those foremen who have violated their trust and to devise plans for preventing grafting. In the majority of plants it is believed that the practice has been broken up, "but almost a complete reorganization of some departments in some plants will be necessary before the public can feel assured that this graft will be permanently discontinued. The public has a vital interest in this matter, for future citizens are receiving in those plants their first lessons in graft, and moral standards are being established for the community."

In these particular plants, as a result of the investigation and of prosecutions conducted by the attorney general's office, three foremen have been discharged by the company officials, who were convinced of their guilt, without trial; three threw up their jobs and left the State during the investigation; two stood trial and were convicted; three go-betweens pleaded guilty; one foreman was found not guilty

by reason of insufficiency of evidence; and one was found not guilty on the grounds that as a general foreman he was a principal and not an agent within the meaning of the statute under which the prosecution was brought and that the evidence did not conclusively show that he had demanded money for jobs. In this case the evidence clearly established the fact that he had received money in a great number of cases, and that the custom of paying for jobs was a well-established one in that department.

The punishment provided by law is a fine of from \$50 to \$100, "and such a punishment is entirely inadequate, considering the seriousness of the crime." An effort will be made to induce the next legislature to enact a law covering not only the taking of a fee for a job, but also other forms of grafting on the part of foremen in industrial establishments.

The complicated machinery, the system, and the far-reaching effects of the practice of paying for jobs is indicated by the typical cases cited below, each of which is supported by affidavits and in some cases by the affidavits of witnesses to the transaction. Each of the letters or combination of letters represents the same individual throughout. Attention is called to the varying amounts, which seem to indicate a general upward trend of the market. The workman first named in each line was the applicant for a job.

MMM paid \$15 to TTT, who paid \$15 to N, who paid \$15 to F, who paid \$15 to A.

NN paid \$15 to TTT, who paid \$15 to N, who paid \$15 to F, who paid \$15 to A.

RRRR paid \$9 to PPP, who paid \$9 to I, who paid \$9 to A.

UUU paid \$10 to JJJ, who paid \$10 to I, who paid \$10 to A.

JJJ paid \$7 to L, who paid \$7 to I, who paid \$7 to A.

TTT paid \$15 to N, who paid \$15 to I, who paid \$15 to A.

XXX paid \$16 to RRR, who paid \$16 to I, who paid \$12 to A.

YYY paid \$13 to F, who paid \$13 to I, who paid \$9 to A.

BBBB paid \$10 to LL, who paid \$6 to I, who paid \$6 to A.

CCCC paid \$11 to ZZ, who paid \$10 to I, who paid \$10 to A.

DDDD paid \$8 to LL, who paid \$7 to I, who paid \$7 to A.

GGGG paid \$10 to N, who paid \$10 to I, who paid \$10 to A.

KKKK paid \$15 to JJJJ, who paid \$15 to I, who paid \$15 to A.

LLLL paid \$16 to JJJJ, who paid \$16 to I, who paid \$16 to A.

MMMM paid \$15 to JJJJ, who paid \$15 to I, who paid \$15 to A.

NNNN paid \$25 to JJJJ, who paid \$25 to I, who paid \$17 to A.

IIII paid \$9 to N, who paid \$9 to I, who paid \$9 to A.

CCC paid \$10 to L, who paid \$10 to J, who paid \$10 to A.

DDD paid \$10 to L, who paid \$8 to J, who paid \$5 to A.

EEE paid \$15 to L, who paid \$15 to J, who paid \$15 to A.

FFF paid \$10 to L, who paid \$10 to J, who paid \$10 to A.

GGG paid \$25 to L, who paid \$15 to J, who paid \$15 to A.

HHH paid \$15 to L, who paid \$15 to J, who paid \$15 to A.

QQ paid \$15 to OO, who paid \$15 to K, who paid \$15 to A.

YY paid \$15 to H, who paid \$10 to A.

O paid \$7 to H, who paid \$5 to A.
 P paid \$20 to O, who paid \$15 to H, who paid \$10 to B.
 R paid \$17 to G, who paid \$17 to B.
 S paid \$21 to G, who paid \$20 to B.
 T paid \$20 to G, who paid \$20 to B.
 U paid \$20 to B.
 SS paid \$15 to XX, who paid \$15 to C.
 TT paid \$15 to XX, who paid \$15 to C.
 UU paid \$10 to XX, who paid \$10 to C.
 VV paid \$15 to XX, who paid \$15 to C.
 WW paid \$15 to XX, who paid \$15 to C.
 W paid \$5 to V, who paid \$5 to D.
 V paid \$15 to D.
 QQQ paid \$25 to D.
 M paid \$20 to E.
 RRRR paid \$30 to E.
 KKK paid \$20 to N, who paid \$20 to F, who paid \$10 to Q.
 OOOO paid \$15 to N, who paid \$15 to F, who paid \$8 to Q.
 PPPP paid \$23 to N, who paid \$20 to F, who paid \$10 to Q.

The report includes 49 typical affidavits, of which the following are characteristic:

I, ———, No. ———, being first duly sworn, depose and say that I have worked for the past six years for the A. B. Co., under X——, labor boss, and Y—— and Z——, straw bosses. I paid nothing when I went to work, but Christmas Y—— and Z—— collected money from the men. This money was taken up at the shanty, where they would call the men in two or three at a time. One would take the money and the other would enter it in a book. Last Christmas X—— asked me for the money several days before the first pay day in December. I paid him \$5 the first pay day in December at the labor shanty, and Y—— wrote down my name in a book.

I further depose and say that I have bought tickets for raffles from Y—— and Z—— for \$2 watches, which they said belonged to X——.

——, being duly sworn, deposes and says that on or about May 8, 1915, he went to the C. D. Co. and asked the assistant foreman, named F, for a job in his department ———. F—— told me that I would have to pay \$16 to him and he would give it to A——, and he (A——) would put me to work. F—— and I then went to the home of A—— on ——— Avenue, ———, Ohio, and F—— talked to A——, who went with us to a saloon near A——'s home, where I paid \$16 to F——, who handed this to A—— while we were in the saloon. I was compelled to treat the crowd, which cost me \$8 in addition to the \$16 already paid. In about six days I went to the C. D. Co. and got a ticket from F—— and then went to A——, who put me to work. The affiant further says that when he had worked about two months F—— came to him and said that A—— sent him to get \$16 more or I would lose my job. I am married and have a wife and three children to support, so I could not afford to pay the second time; therefore I was compelled to quit my job.

——, who, being duly sworn, deposes and says that on or about November 15, 1914, he applied for a job to B—— at the E. F. Co.'s plant. Being unable to speak English, he talked to F——, who could speak Bulgarian and English and who was present when he tried to get a job from

B——. F—— explained to B—— that I wanted a job, and B—— told him to ask me for \$5; that he had a job if I would give B—— \$5, which I did. I paid this money to B—— on or about November 15, 1914, and went to work. After I had worked three days F—— came to me and told me that I would have to pay B—— another fee of \$5 or I would be discharged, as one of the other men had paid B—— \$20, and if I wanted to keep my job I must pay him an additional \$5. I paid the second \$5 to B—— on or about November 18, 1914, and was allowed to continue work.

CONCILIATION WORK OF THE DEPARTMENT OF LABOR, AUGUST 16 TO SEPTEMBER 15, 1916.

The organic act of the department gives the Secretary of Labor the authority to mediate in labor disputes through the appointment, in his discretion, of commissioners of conciliation. During the month August 16 to September 15, 1916, the Secretary exercised his good offices in 12 labor disputes. The companies involved, the number of employees affected, and the results secured, so far as information is available, were as follows:

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

Name.	Workmen affected.		Result.
	Directly.	Indirectly.	
Strike at Frank Sheble Spinning Co., Philadelphia, Pa. ....	.....	.....	Adjusted.
Strike at German-American Hosiery Mills, Philadelphia, Pa. .	900	.....	Do.
Strike of machinists, New Haven, Conn. ....	.....	.....	Pending.
Strike at Royle & Pilkington's Upholstery Mills, Philadelphia, Pa.	72	135	Adjusted.
Controversy between the Cincinnati, Indianapolis & Western R. R. and the Brotherhood of Railway Car men, Cincinnati, Ohio. ....	.....	.....	Pending.
Strike of wheelmen, lookoutmen, watchmen, oilers, etc., Goodrich Transit Co., Chicago, Ill. ....	.....	.....	Do.
Strikes at Equinox, Brogon, and Gluck Rural Mills, Anderson, S. C.	290	.....	Do.
Strike of shingle weavers, Everett, Wash. ....	.....	.....	Do.
Textile controversy, Bangor, Pa. ....	.....	.....	Do.
Textile controversy, Shamokin, Pa.	3,000	.....	Do.
Lockout of freight handlers, Chicago, Ill. ....	.....	.....	Do.
Controversy between Pacific Coast Light & Power Co. and electrical workers, Los Angeles, Cal. ....	.....	.....	Do.

Cases noted as pending in statement of August 15 have been disposed of as follows:

Controversy between Baltimore & Ohio Railroad Co. and its maintenance-of-way employees, Baltimore, Md., in which there were 1,200 men directly affected, and between 15,000 and 20,000 indirectly affected, has been adjusted.

Controversy between Crown Cork & Seal Co. and machinists, Baltimore, Md.; 175 directly and 2,000 to 2,500 indirectly affected; adjusted.

Controversy between Akron (Ohio) rubber manufacturers and employees; 1,400 directly and 2,600 indirectly affected; adjusted.

Threatened strike of milk-delivery drivers, Cleveland, Ohio; 500 directly and 200 indirectly affected; adjusted by Mediation Board of Ohio.

Strike of milk-delivery drivers, St. Louis, Mo.; 600 men directly involved; unable to adjust.

MEDIATION OF INDUSTRIAL DISPUTES IN OHIO.

Report No. 23 of the Department of Investigation and Statistics of the Ohio Industrial Commission¹ sets forth the activities of the commission in the mediation of industrial disputes from January, 1914, to June, 1916, inclusive. During this two and one-half year period 26 such disputes, involving more than 200 firms and approximately 35,000 employees, were taken up under the provisions of the industrial commission act. In no case was arbitration undertaken. Mediation resulted in a settlement in 11 of the 26 disputes. Although authorized by law to mediate at any time that the industrial commission deems it advisable, the commission in practice has usually waited until requested to act. However, in cases of unusual importance, either where a great number are involved or where there is violence or where the public is specially inconvenienced, mediation has been undertaken without request. As the work has been carried on in Ohio, only the most difficult disputes receive the attention of the commission.

Mediation can not bring about exact industrial justice, but probably no method of settling industrial disputes can more nearly approach justice if fairly and fearlessly carried out. Exact industrial justice would not take into consideration the demands of the employees or the proposals of employers, but would be determined after a full investigation and inquiry into cost of production, cost of maintaining a satisfactory standard of living, distribution of profits, and all other such matters. However, mediation as well as practically all other methods of securing settlements is confined on the one side by the employees' demands and on the other by the employers' proposals, or vice versa.

In mediating strikes in Ohio during the period covered by this report the usual practice seems to have been not to bring the representatives of each side together in conference, but instead to hold confidential conferences first with one side and then with the other until the facts in the case were secured and a satisfactory basis of settlement determined upon by the mediators. As a rule, it is stated, the final terms of the settlement have come not as a proposal from either side, but as a proposal from the mediators, with the definite understanding that unless it was accepted without change by both sides the proposition would be withdrawn by the mediators, thus leaving each side in exactly its former position. It would seem that mediation under this plan does not disclose to either side either the weak points or the strong points in the position of the opposing side.

¹ Ohio. Industrial Commission. Department of Investigation and Statistics Report No. 23. Mediation of industrial disputes in Ohio, January, 1914, to June, 1916. Columbus, 1916. 48 pp.

The report justifies the principle of mediation by pointing out several advantages which attend its application. These are—

Mediation has a very marked influence in removing the bitterness which often occurs during, or even continues after, industrial disputes.

Mediation in Ohio has usually also materially reduced the duration of the industrial disputes, and this has been a great financial saving to employers, to employees, and to the community.

Another marked benefit of mediation arises from the fact that violence is practically eliminated during the time negotiations for a settlement are under way by the mediators.

It is suggested that the present law requires a slight modification, by providing that the mayor or some other local official should notify the industrial commission of industrial disputes within the community over which he has authority.

During the two and one-half years covered by the report the total amount spent in connection with the mediation work did not exceed \$4,000, or \$363.63 for each dispute settled, a sum not considered excessive in view of the financial gain to employers and employees by reason of the activities of the mediators. The report includes a detailed account of the 26 disputes in which the commission acted as mediator.

FEDERAL EMPLOYMENT WORK OF THE DEPARTMENT OF LABOR.

During August, 1916, the Division of Information of the Bureau of Immigration of the Department of Labor placed 16,313 persons in employment as compared with 16,309 during July, 1916. The operations of the different offices throughout the country, by months, since May, 1915, when fuller reports began to be made, are contained in the statement following:

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

Year and month.	Number of applica- tions for help.	Number of persons ap- plied for.	Number of applicants for places.	Number referred to employ- ment.	Number actually employed.
1915.					
May.....	638	3,826	12,132	3,752	3,495
June.....	1,249	3,601	14,530	5,131	4,646
July.....	1,160	8,665	18,061	6,360	6,035
August.....	1,279	7,931	17,827	7,321	6,757
September.....	1,201	4,551	13,334	5,671	5,405
October.....	1,104	5,423	12,215	5,460	5,006
November.....	847	4,650	11,908	4,459	4,146
December.....	698	3,588	11,902	2,622	2,170
1916.					
January.....	933	5,063	15,015	4,300	3,419
February.....	1,423	6,413	14,257	5,036	4,185
March.....	3,443	10,209	19,484	8,113	7,030
April.....	3,805	12,104	13,498	8,843	7,653
May.....	4,918	21,326	17,614	12,938	11,453
June.....	4,826	17,402	18,824	13,839	11,960
July.....	5,488	23,657	24,058	17,608	16,309
August.....	6,420	26,791	23,720	18,062	16,313

The following statement of the work of the 18 different zones covering the whole country gives details for July and August, 1916:

SUMMARY OF ACTIVITIES OF UNITED STATES EMPLOYMENT SERVICE FOR THE MONTHS OF JULY AND AUGUST, 1916.

Zone number and office.	Opportunities received.				Applications for employment.					
	Applications for help.		Persons applied for.		Applications received.		Referred to employment.		Number actually employed.	
	July.	August.	July.	August.	July.	August.	July.	August.	July.	August.
1. Boston, Mass.....	7	3	141	1,640	54	54	14	12	14	12
2. New York, N. Y.....	245	231	956	1,303	1,128	1,692	510	579	494	550
Buffalo, N. Y.....	93	115	850	815	698	839	694	787	517	634
Total.....	338	346	1,806	2,118	1,826	2,531	1,204	1,366	1,011	1,184
3. Philadelphia, Pa.....	86	77	588	1,328	302	257	288	246	224	209
Pittsburgh, Pa.....	15	24	196	425	505	809	273	491	246	463
Wilmington, Del.....	21	19	524	338	101	52	27	48	13	40
Total.....	122	120	1,308	2,091	908	1,118	588	785	483	712
4. Baltimore, Md.....	42	53	110	217	156	161	192	145	180	145
5. Norfolk, Va.....	17	13	182	50	114	222	42	75	22	60
6. Jacksonville, Fla.....					732	511	515	198	515	198
Miami, Fla.....	1	3	2	3	14	38	2	3	2	1
Savannah, Ga.....	2	1	106	1	362	187	106	1	106	1
Charleston, S. C.....	1	2	38	11	97	12	169	83	169	83
Mobile, Ala.....					10	2				
Total.....	4	6	146	15	1,215	750	792	285	792	283
7. New Orleans, La.....	18	30	21	42	289	390	35	50	13	33
Gulfport, Miss.....	1	1	1	1	47	60		6		
Memphis, Tenn.....		4		6		49				
Total.....	19	35	22	49	336	499	35	56	13	33
8. Galveston, Tex.....	5	6	6	8	34	40	11	8	9	4
Houston, Tex.....		3		6	9	14		3		3
Amarillo, Tex.....						1				
Eagle Pass, Tex.....						1		1		
El Paso, Tex.....					1					
Albuquerque, N. Mex.....					3	2				
Total.....	5	9	6	14	47	58	11	12	9	7
9. Cleveland, Ohio.....	21	10	201	15	125	101	88	96	12	13
10. Chicago, Ill.....	220	252	1,702	1,709	1,096	1,634	1,050	1,619	1,022	1,592
Detroit, Mich.....	153	241	1,269	1,256	1,072	1,066	1,063	1,066	1,044	1,062
Sault Ste. Marie, Mich.....	8	9	81	120	77	88	64	89	63	89
Indianapolis, Ind.....	62	68	857	721	866	654	737	490	660	417
Total.....	443	570	3,909	3,806	3,111	3,442	2,914	3,264	2,789	3,160
11. Minneapolis, Minn.....	118	55	128	70	70	260	60	49	60	49
12. St. Louis, Mo.....	14	215	117	550	200	392	50	320	45	302
Kansas City, Mo.....	505	558	1,458	1,142	1,228	1,012	1,006	1,032	787	833
Total.....	519	773	1,575	1,692	1,428	1,404	1,056	1,352	832	1,135
13. Denver, Colo.....	3	2	3	2	27	20	8	10		2
14. Helena, Mont.....	3	8	3	18	27	18	8	8		6
Moscow, Idaho.....						4		4		4
Total.....	3	8	3	18	27	22	8	12		10

SUMMARY OF ACTIVITIES OF UNITED STATES EMPLOYMENT SERVICE FOR THE MONTHS OF JULY AND AUGUST, 1916—Concluded.

Zone number and office.	Opportunities received.				Applications for employment.					
	Applications for help.		Persons applied for.		Applications received.		Referred to employment.		Number actually employed.	
	July.	August.	July.	August.	July.	August.	July.	August.	July.	August.
15. Seattle, Wash.....	150	135	829	880	1,317	957	456	402	416	354
Aberdeen, Wash.....	20	25	92	180	226	378	92	180	92	172
Bellingham, Wash.....	31	22	162	35	167	66	92	42	75	34
Colfax, Wash.....		246		522		375		365		365
Everett, Wash.....		59		785		10		8		6
North Yakima, Wash.....	538	850	925	1,838	883	1,766	728	1,575	696	1,451
Spokane, Wash.....	74	109	580	605	639	712	511	605	511	595
Tacoma, Wash.....	530	442	2,529	1,150	1,165	1,325	1,088	1,028	1,065	1,018
Walla Walla, Wash.....	209	213	390	400	490	316	382	285	375	276
Sumner, Wash.....	350		2,500		1,894		1,775		1,768	
Puyallup, Wash.....	150		1,250		650		639		628	
Total.....	2,052	2,101	9,257	6,395	7,431	5,905	5,763	4,490	5,626	4,271
16. Portland, Oreg.....	1,224	1,439	2,589	3,269	2,512	2,627	2,454	2,378	2,399	2,262
Astoria, Oreg.....		25		170		171		140		104
Total.....	1,224	1,464	2,589	3,439	2,512	2,798	2,454	2,518	2,399	2,366
17. San Francisco, Cal.....	193	425	412	817	1,248	1,330	654	807	378	321
18. Los Angeles, Cal.....		1		1	103	149		1		1
San Diego, Cal.....	335	348	778	651	1,017	1,035	803	866	767	688
Total.....	335	349	778	652	1,120	1,184	803	867	767	689
Harvest hands.....	123	278	1,081	23,691	12,303	21,861	1,992	21,861	1,922	11,861
Grand total.....	5,488	6,420	23,657	26,791	24,058	23,720	17,608	18,062	16,309	16,313

¹ Through general inspector, Kansas City, Mo.² Through Hudson, S. Dak., branch of Minneapolis office. Figures for entire season.

WORK OF STATE AND MUNICIPAL EMPLOYMENT BUREAUS IN THE UNITED STATES AND OF PROVINCIAL EMPLOYMENT BUREAUS IN CANADA.

In the following table data are presented for August, 1915, and August, 1916, relative to the operations of public employment offices in the United States and in Canada. For offices in the United States, figures are furnished for State employment bureaus in 15 States, municipal employment bureaus in 7 States, State-city employment bureaus in 2 States, a Federal-State employment bureau in 1 State, and a city-private employment bureau in 1 State. Data are furnished for 2 provincial employment bureaus in Canada.

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OPERATIONS OF PUBLIC EMPLOYMENT OFFICES, AUGUST, 1915 AND 1916.

UNITED STATES.

State and city.	Applications from employers.	Persons asked for by employers.	Persons applying for work.		Persons referred to positions.	Positions filled.
			New registrations.	Re-newals.		
California (municipal):						
Berkeley—						
August, 1915.....	158	171	78	416	171	171
August, 1916.....	256	276	87	356	258	258
Sacramento—						
August, 1915.....	144	392	101	(1)	392	392
August, 1916.....	204	391	51	(1)	391	391
California (State-city):						
Los Angeles ² —						
August, 1915.....	(1)	(1)	1,647	(1)	(1)	3,500
August, 1916.....	1,540	3,766	1,365	(1)	3,738	3,601
California (State):						
Oakland—						
August, 1916.....	943	1,297	635	369	1,220	803
Sacramento—						
August, 1916.....	459	2,418	1,440	329	1,689	1,586
San Francisco—						
August, 1916.....	1,571	3,718	2,418	728	2,849	2,173
Total:						
August, 1915.....					563	4,063
August, 1916.....					10,145	8,812
Colorado (State):						
Colorado Springs—						
August, 1915.....	(1)	870	(1)	(1)	(1)	840
August, 1916.....	(1)	1,479	1,227	(1)	1,104	(1)
Denver No. 1—						
August, 1915.....	(1)	248	(1)	(1)	(1)	233
August, 1916.....	(1)	446	409	(1)	371	(1)
Denver No. 2—						
August, 1915.....	(1)	148	(1)	(1)	(1)	148
August, 1916.....	(1)	722	584	(1)	453	(1)
Pueblo—						
August, 1915.....	(1)	257	(1)	(1)	(1)	257
August, 1916.....	(1)	491	590	(1)	482	(1)
Total:						
August, 1915.....					(1)	1,478
August, 1916.....					2,410	(1)
Connecticut (State):						
Bridgeport—						
August, 1915.....	343	(1)	(1)	(1)	(1)	303
August, 1916.....	938	(1)	(1)	(1)	(1)	845
Hartford—						
August, 1915.....	509	(1)	(1)	(1)	(1)	389
August, 1916.....	778	(1)	(1)	(1)	(1)	485
New Haven—						
August, 1915.....	310	(1)	(1)	(1)	(1)	231
August, 1916.....	852	(1)	(1)	(1)	(1)	664
Norwich—						
August, 1915.....	54	(1)	(1)	(1)	(1)	50
August, 1916.....	148	(1)	(1)	(1)	(1)	144
Waterbury—						
August, 1915.....	287	(1)	(1)	(1)	(1)	144
August, 1916.....	157	(1)	(1)	(1)	(1)	112
Total:						
August, 1915.....					(1)	1,117
August, 1916.....					(1)	2,250
Illinois (municipal):						
Chicago—						
August, 1916.....	25	912	904	(1)	912	331
Illinois (State):						
Chicago—						
August, 1915.....	(1)	841	6,805	(1)	(1)	692
August, 1916.....	(1)	9,814	12,482	(1)	(1)	9,049
East St. Louis—						
August, 1915.....	(1)	642	1,043	(1)	(1)	621
August, 1916.....	(1)	1,925	1,925	(1)	(1)	1,425
Peoria—						
August, 1915.....	(1)	563	628	(1)	(1)	521
August, 1916.....	(1)	1,043	912	(1)	(1)	847

¹ Not reported.

² Includes Los Angeles district, 8 counties.

OPERATIONS OF PUBLIC EMPLOYMENT OFFICES, AUGUST, 1915 AND 1916—Continued.

UNITED STATES—Continued.

State and city.	Applications from employers.	Persons asked for by employers.	Persons applying for work.		Persons referred to positions.	Positions filled.
			New registrations.	Re-newals.		
Illinois (State)—Concluded.						
Springfield—						
August, 1915.....	(1)	267	430	(1)	(1)	265
August, 1916.....	(1)	670	684	(1)	(1)	602
Rock Island-Moline—						
August, 1915.....	(1)	410	510	(1)	(1)	408
August, 1916.....	(1)	1,335	737	(1)	(1)	627
Rockford—						
August, 1915.....	(1)	395	491	(1)	(1)	389
August, 1916.....	(1)	1,502	1,294	(1)	(1)	1,031
Total:						
August, 1915.....					(1)	2,896
August, 1916.....					912	13,912
Indiana (State):						
Fort Wayne—						
August, 1915.....	209	288	223	74	297	285
August, 1916.....	326	522	385	67	452	375
South Bend—						
August, 1915.....	167	298	405	64	292	260
August, 1916.....	223	922	452	32	401	357
Total:						
August, 1915.....					589	545
August, 1916.....					853	732
Iowa (State):						
Des Moines—						
August, 1916.....	31	436	120	18	103	70
Kansas (State):						
Topeka—						
August, 1915.....	16	30	45		27	17
August, 1916.....	21	57	68		51	36
Kentucky (city-private):						
Louisville—						
August, 1915.....	(1)	140	492	1,124	140	86
August, 1916.....	389	389	350	590	280	145
Kentucky (State):						
Louisville—						
August, 1916.....	590	590	2 768	(1)	590	590
Total:						
August, 1915.....					140	86
August, 1916.....					870	735
Massachusetts (State):						
Boston—						
August, 1915.....	1,356	1,580	2 943	(1)	4 2,757	1,225
August, 1916.....	2,280	2,561	2 1,356	(1)	4 3,617	1,645
Fall River—						
August, 1915.....						
August, 1916.....						
Springfield—						
August, 1915.....	650	931	2 538	(1)	4 1,156	713
August, 1916.....	1,185	1,788	2 949	(1)	4 2,137	1,224
Worcester—						
August, 1915.....	457	608	2 531	(1)	4 843	390
August, 1916.....	1,077	1,337	2 596	(1)	4 1,385	731
Total:						
August, 1915.....					4 4,756	2,328
August, 1916.....					4 7,139	3,600
Michigan (State):						
Battle Creek—						
August, 1916.....	73	277	199	(1)	171	171
Bay City—						
August, 1916.....	52	184	133	(1)	98	98
Detroit—						
August, 1915.....	(1)	(1)	(1)	(1)	(1)	2,033
August, 1916.....	1,609	5,246	(1)	(1)	(1)	4,315
Flint—						
August, 1915.....	(1)	(1)	(1)	(1)	(1)	361
August, 1916.....	108	1,182	961	(1)	961	961

1 Not reported.

2 Number applying for work.

3 Number who were registered.

4 Number of offers of positions.

5 Closed in August, 1915, and August, 1916.

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OPERATIONS OF PUBLIC EMPLOYMENT OFFICES, AUGUST, 1915 AND 1916—Continued.

UNITED STATES—Continued.

State and city.	Applica- tions from employ- ers.	Persons asked for by employ- ers.	Persons applying for work.		Persons referred to positions.	Positions filled.
			New registra- tions.	Re- newals.		
Michigan (State)—Concluded.						
Grand Rapids—						
August, 1915.....	(1)	(1)	(1)	(1)	(1)	588
August, 1916.....	462	890	871	(1)	855	855
Jackson—						
August, 1915.....	(1)	(1)	(1)	(1)	(1)	565
August, 1916.....	426	868	816	(1)	796	796
Kalamazoo—						
August, 1915.....	(1)	(1)	(1)	(1)	(1)	377
August, 1916.....	179	509	479	(1)	479	479
Lansing—						
August, 1916.....	74	239	259	(1)	228	228
Muskegon—						
August, 1916.....	69	342	253	(1)	242	234
Saginaw—						
August, 1915.....	(1)	(1)	(1)	(1)	(1)	665
August, 1916.....	168	1,047	942	(1)	942	942
Total:						
August, 1915.....					(1)	4,589
August, 1916.....					4,772	9,079
Minnesota (State):						
Duluth—						
August, 1915.....	(1)	(1)	(1)	(1)	(1)	879
August, 1916.....	(1)	(1)	(1)	(1)	(1)	1,498
Minneapolis—						
August, 1915.....	(1)	(1)	(1)	(1)	(1)	1,980
August, 1916.....	(1)	(1)	(1)	(1)	(1)	2,307
St. Paul—						
August, 1915.....	(1)	(1)	(1)	(1)	(1)	1,158
August, 1916.....	(1)	(1)	(1)	(1)	(1)	1,609
Total:						
August, 1915.....					(1)	4,017
August, 1916.....					(1)	5,414
Montana (municipal):						
Butte—						
August, 1915.....	437	437	700	(1)	470	429
August, 1916.....	500	500	650	(1)	490	460
New York (municipal):						
New York City—						
August, 1915.....	406	553	1,756	(1)	1,035	440
August, 1916.....	2,188	2,476	2,491	(1)	3,729	1,985
New York (State):						
Albany—						
August, 1915.....	220	329	664	164	451	228
August, 1916.....	533	764	487	171	696	407
Brooklyn—						
August, 1915.....	479	778	1,450	658	1,097	494
August, 1916.....	1,311	1,890	1,116	548	2,110	1,230
Buffalo—						
August, 1915.....	447	621	1,009	342	646	422
August, 1916.....	960	1,757	1,120	67	1,659	1,222
Rochester—						
August, 1915.....	550	817	837	148	844	503
August, 1916.....	1,113	1,602	794	317	1,556	873
Syracuse—						
August, 1915.....	548	768	1,053	90	915	523
August, 1916.....	783	905	514	119	834	647
Total:						
August, 1915.....					4,988	2,610
August, 1916.....					10,584	6,364
Ohio (State-city):						
Akron—						
August, 1915.....	(1)	1,460	1,282	2,130	1,363	1,119
August, 1916.....	(1)	1,764	756	1,298	1,623	1,405
Cincinnati—						
August, 1915.....	(1)	1,297	2,146	3,812	1,570	1,154
August, 1916.....	(1)	1,672	1,424	2,882	1,665	989

¹ Not reported.

OPERATIONS OF PUBLIC EMPLOYMENT OFFICES, AUGUST, 1915 AND 1916—Continued.

UNITED STATES—Continued.

State and city.	Applica- tions from employ- ers.	Persons asked for by em- ployers.	Persons applying for work.		Persons referred to positions.	Positions filled.
			New registra- tions.	Re- newals.		
Ohio (State-city)—Concluded.						
Cleveland—						
August, 1915.....	(1)	4,449	2,958	7,816	4,097	3,421
August, 1916.....	(1)	8,321	2,769	7,296	7,181	5,858
Columbus—						
August, 1915.....	(1)	1,401	833	2,485	1,366	1,198
August, 1916.....	(1)	2,565	813	2,238	2,320	1,919
Dayton—						
August, 1915.....	(1)	761	805	1,663	615	598
August, 1916.....	(1)	1,288	771	1,120	1,041	946
Toledo—						
August, 1915.....	(1)	1,987	1,582	2,093	1,825	1,698
August, 1916.....	(1)	4,484	1,401	2,162	2,676	2,267
Youngstown—						
August, 1915.....	(1)	635	728	773	654	594
August, 1916.....	(1)	1,507	761	1,145	1,360	1,127
Total:						
August, 1915.....					11,490	9,782
August, 1916.....					17,866	14,511
Oklahoma (State):						
Enid—						
August, 1915.....	225	(1)	229	(1)	(1)	192
August, 1916.....	113	(1)	153	(1)	(1)	100
Muskogee—						
August, 1915.....	99	(1)	160	(1)	(1)	121
August, 1916.....	213	(1)	215	(1)	(1)	191
Oklahoma City—						
August, 1915.....	385	(1)	477	(1)	(1)	336
August, 1916.....	526	(1)	454	(1)	(1)	443
Tulsa—						
August, 1915.....	167	(1)	151	(1)	(1)	140
August, 1916.....	701	(1)	693	(1)	(1)	693
Total:						
August, 1915.....					(1)	789
August, 1916.....					(1)	1,427
Pennsylvania (State):						
Altoona—						
August, 1916.....	(1)	537	54		24	24
Harrisburg—						
August, 1916.....	(1)	795	230	112	207	188
Johnstown—						
August, 1916.....	(1)	185	74	16	67	54
Philadelphia—						
August, 1916.....	(1)	797	650	481	820	713
Pittsburgh—						
August, 1916.....	(1)	1,373	738	180	585	529
Total:						
August, 1916.....					1,703	1,508
Rhode Island (State):						
Providence—						
August, 1915.....	302	375	204	159	(1)	375
August, 1916.....	269	324	136	248	(1)	324
Texas (municipal):						
Fort Worth—						
August, 1915.....	115	201	2,422	(1)	220	189
August, 1916.....	187	616	475	27	381	363
South Dakota (Federal-State):						
Huron—						
August, 1916.....	78	3,691	2,186	(1)	1,861	1,861
Virginia (municipal):						
Richmond—						
August, 1915.....	218	355	2,526	(1)	367	202
August, 1916.....	263	547	564	(1)	658	280
Washington (Federal-municipal):						
Tacoma ³						

¹ Not reported.² Number applying for work.³ Figures for this office are carried regularly in the REVIEW under the subject "Federal employment work of the Department of Labor," to which the reader is referred.

OPERATIONS OF PUBLIC EMPLOYMENT OFFICES, AUGUST, 1915 AND 1916—Concluded.

UNITED STATES—Concluded.

State and city.	Applica- tions from employ- ers.	Persons asked for by em- ployers.	Persons applying for work.		Persons referred to positions.	Position filled.
			New registra- tions.	Re- newals.		
Washington (municipal):						
Everett—						
August, 1915.....	(1)	(1)	(1)	(1)	(1)	173
August, 1916.....	(1)	705	(1)	(1)	(1)	508
Spokane—						
August, 1915.....	(1)	(1)	(1)	(1)	1,028	944
August, 1916.....	2,760	4,231			3,710	3,669
Total:						
August, 1915.....					1,028	1,117
August, 1916.....					3,710	4,177

CANADIAN PROVINCIAL EMPLOYMENT BUREAUS.

Province and city.	Applica- tions from employ- ers.	Persons asked for by em- ployers.	Persons applying for work.		Persons referred to positions.	Position filled.
			New registra- tions.	Re- newals.		
Quebec (Province):						
Montreal—						
August, 1916.....	931	(1)	418	(1)	590	506
Quebec—						
August, 1915.....	(1)	96	2 152	(1)	(1)	71
August, 1916.....	(1)	328	2 153	(1)	(1)	104
Total:						
August, 1915.....					(1)	71
August, 1916.....					590	610

¹ Not reported.² Number applying for work.

EMPLOYMENT IN SELECTED INDUSTRIES IN AUGUST, 1916.

Continuing information of a like character given in the MONTHLY REVIEW for several months past, there are presented below four tables designed to show the changes in the amount of employment in representative establishments in 10 manufacturing industries between August, 1915, and August, 1916, and between July, 1916, and August, 1916.

It will be noted from the following table that the number of employees in August, 1916, was greater than the number of employees in August, 1915, in all of the 10 industries listed, except in cotton manufacturing and cigar manufacturing. The greatest increase shown is 25.3 per cent for the iron and steel industry. The amount of money paid out to employees in August, 1916, was greater than in August, 1915, in all of the 10 industries. The greatest increase in the amount of money paid out was 50.3 per cent in the iron and steel industry.

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

Industry.	Estab- lish- ments to which in- qui- ries were sent.	Estab- lish- ments report- ing for August both years.	Period of pay roll.	Number on pay roll in August—		Per cent of increase (+) or de- crease (-).	Amount of pay roll in August—		Per cent of in- crease (+) or de- crease (-).
				1915	1916		1915	1916	
Boots and shoes.....	86	66	1 week.....	47,416	56,900	+20.0	\$569,856	\$738,687	+29.6
Cotton manufactur- ing.....	89	45	do.....	36,079	35,580	- 1.4	298,530	332,913	+11.5
Cotton finishing....	19	14	do.....	10,000	10,814	+ 8.1	108,467	131,629	+21.3
Hosiery and under- wear.....	82	50	do.....	24,337	26,517	+ 9.0	216,659	246,737	+13.9
Woolen.....	56	40	do.....	29,199	31,481	+ 7.8	277,445	369,948	+33.3
Silk.....	64	47	2 weeks.....	18,378	20,040	+ 9.0	378,923	453,143	+19.6
Men's ready-made clothing.....	83	39	1 week.....	19,041	22,090	+16.0	259,851	355,506	+36.8
Iron and steel.....	142	98	½ month.....	130,696	163,783	+25.3	4,076,274	6,125,481	+50.3
Car building and repairing.....	80	28	do.....	27,599	33,871	+22.7	792,490	1,082,099	+36.5
Cigar manufacturing	107	56	1 week.....	18,240	17,745	- 2.7	185,652	191,348	+ 3.1

In the table that follows, showing the smaller number of establishments reporting the number of employees actually working on the last full day of the reported pay periods, it will be seen that more persons were employed on the specified day in August, 1916, than in August, 1915, in all the industries listed, except in cotton manufacturing and cigar manufacturing. The greatest increase reported (22.7 per cent) was in the iron and steel industry:

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS ON LAST FULL
DAY'S OPERATION IN AUGUST, 1915, AND AUGUST, 1916.

Industry.	Estab- lish- ments report- ing for August, both years.	Period of pay roll.	Number actually working on last full day of re- ported pay pe- riod in August—		Per cent of in- crease (+) or decrease (-).
			1915	1916	
Boots and shoes.....	37	1 week.....	20,408	23,018	+12.8
Cotton manufacturing.....	32	do.....	21,294	20,912	- 1.8
Cotton finishing.....	11	do.....	8,145	8,939	+ 9.7
Hosiery and underwear.....	15	do.....	9,972	10,250	+ 2.8
Woolen.....	39	do.....	26,835	29,326	+ 9.3
Silk.....	29	2 weeks.....	9,300	10,414	+12.0
Men's ready-made clothing.....	10	1 week.....	859	896	+ 4.3
Iron and steel.....	83	½ month.....	104,788	128,618	+22.7
Car building and repairing.....	26	do.....	23,192	27,734	+19.6
Cigar manufacturing.....	31	1 week.....	6,874	6,299	- 8.4

An examination of the next table shows that in 3 of the 10 industries listed there was an increase in the number of employees on the pay roll in August, 1916, over July, 1916, but a reduction is shown for the other industries. In the amount of money paid out to employees in wages half of the industries listed show an in-

crease and the other half show a reduction. The greatest increase is 12.2 per cent in the iron and steel industry and the greatest reduction is 5.3 per cent in the woolen industry:

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS IN JULY, 1916, AND AUGUST, 1916.

Industry.	Establishments to which inquiries were sent.	Establishments reporting for July and August.	Period of pay roll.	Number on pay roll in—		Per cent of increase (+) or decrease (—).	Amount of pay roll in—		Per cent of increase (+) or decrease (—).
				July, 1916.	August, 1916.		July, 1916.	August, 1916.	
Boots and shoes....	86	51	1 week.....	47,147	46,666	-1.0	\$626,291	\$612,736	- 2.2
Cotton manufacturing....	89	51	.....do.....	39,651	38,826	-2.1	357,064	356,068	- .3
Cotton finishing....	19	13	.....do.....	8,339	8,417	+ .9	96,627	96,137	- .5
Hosiery and underwear.	82	50	.....do.....	27,836	27,421	-1.5	258,277	255,924	- .9
Woolen.....	56	41	.....do.....	33,056	31,644	-4.3	393,106	372,088	- 5.3
Silk.....	64	46	2 weeks.....	18,310	18,096	-1.2	387,439	401,566	+ 3.6
Men's ready-made clothing.	83	32	1 week.....	14,636	14,019	-4.2	188,959	210,567	+11.4
Iron and steel.....	142	101	½ month.....	158,848	161,814	+1.9	5,358,951	6,015,415	+12.2
Car building and repairing.	80	24	.....do.....	29,090	29,495	+1.4	876,140	965,099	+10.2
Cigar manufacturing	107	55	1 week.....	18,524	17,362	-6.3	174,778	183,274	+ 4.9

In the next table, which embraces a smaller number of establishments, the hosiery and underwear, iron and steel, and car building and repairing industries show a larger number of employees as actually working on the last full day of the reported pay period in August, 1916, than in July, 1916. A decline in the number of such employees is shown in all the other industries. The greatest reduction is 5.1 per cent, in the boot and shoe industry.

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS ON LAST FULL DAY'S OPERATION IN JULY, 1916, AND AUGUST, 1916.

Industry.	Establishments reporting for July and August.	Period of pay roll.	Number actually working on last full day of reported pay period in—		Per cent of increase (+) or decrease (—).
			July, 1916.	August, 1916.	
Boots and shoes.....	26	1 week.....	14,203	13,478	-5.1
Cotton manufacturing.....	34	.....do.....	22,965	22,752	- .9
Cotton finishing.....	8	.....do.....	6,038	5,906	-2.2
Hosiery and underwear.....	14	.....do.....	10,314	10,316	(¹)
Woolen.....	40	.....do.....	30,749	29,489	-4.1
Silk.....	30	2 weeks.....	9,229	9,093	-1.5
Men's ready-made clothing.....	7	1 week.....	466	459	-1.5
Iron and steel.....	95	½ month.....	130,167	132,035	+1.4
Car building and repairing.....	22	.....do.....	23,621	23,797	+ .7
Cigar manufacturing.....	30	1 week.....	6,381	6,380	(²)

¹ Increase of less than one-tenth of 1 per cent.

² Decrease of less than one-tenth of 1 per cent.

RECENT CHANGES IN WAGE RATES.

Inquiry was made, on the volume of employment schedule sent to reporting establishments, as to changes in wage rates for the period July 15, 1916, to August 15, 1916. In many instances no definite reply was received, and in such cases it is probably safe to assume that there was no change in the wage rates. In the textile industries—cotton manufacturing, cotton finishing, hosiery and underwear, woolen, and silk—as well as in the boot and shoe industry and in cigar manufacturing, wage rates are reported as practically stationary, a total of only four increases being reported from the establishments rendering reports. In the car building and repairing industry, one establishment reports an increase of 20 per cent to 9 per cent of the force and an increase of 3 per cent to 5 per cent of the force. In the men's ready-made clothing industry an increase of 5 per cent to a part of the force is reported by one establishment and an increase of 10 per cent to a part of the force by another establishment. The greatest number of increases in wage rates is reported for the iron and steel industry. Three establishments report increases ranging from 5 to 16 $\frac{2}{3}$ per cent to all employees. Twelve establishments report increases ranging from 5 to 16 $\frac{2}{3}$ per cent to a part of the force, the high rate being reported in several cases for puddlers. One establishment reports an increase in rate to furnace men of 15 cents a day to 12-hour men and 10 cents a day to 10-hour men.

STRIKES AND LOCKOUTS, MARCH TO AUGUST, 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 March to August, 1916, inclusive, was 2,006. The number similarly compiled during the corresponding months of the year 1915 was 633. The total number of strikes recorded for the eight months of 1916 is 2,329.

The following table shows the number of strikes and lockouts begun in each of the months March to August, 1916, inclusive, together with 174 strikes and lockouts reported as having occurred during that period, although the month in which they began was not reported. The number of strikes compiled during the corresponding months of the year 1915 is also given. In comparing these figures it must be borne in mind that, although the number of strikes in 1916 has undoubtedly been larger than those in the corresponding months of 1915, the sources of the bureau in obtaining data in regard to strikes have also increased, and the difference between the two

years is therefore not so great as the figures would tend to show. The strikes and lockouts were distributed as follows:

NUMBER OF STRIKES AND LOCKOUTS BEGINNING IN EACH MONTH, MARCH TO AUGUST, INCLUSIVE, 1916 AND 1915.

Kind of dispute.	March.	April.	May.	June.	July.	August.	Month not stated.	Total.
Strikes:								
1916.....	218	320	500	260	251	222	165	1,936
1915.....	75	91	111	54	94	138	.....	563
Lockouts:								
1916.....	8	13	16	16	2	6	9	70
1915.....	14	16	11	6	14	9	.....	70
Total:								
1916.....	226	333	516	276	253	228	174	2,006
1915.....	89	107	122	60	108	147	.....	633

The above columns include disputes that began in the months indicated only, and are subjected to monthly revision. More detailed accounts of the disputes reported for each month preceding August may be found in former numbers of the REVIEW.

DISPUTES REPORTED DURING AUGUST, 1916.

The number of strikes during August shows a decrease from that during the preceding four months. Probably the strike that attracted the greatest amount of attention was that of the street-railway men in New York City. Others of prominence were those of the miners in Pennsylvania, Ohio, and Arkansas; the culinary workers in San Francisco; the machinists in Ohio, Illinois, Massachusetts, and Connecticut; the freight handlers in Chicago; the cigar makers, leather workers, barbers, raincoat workers, and paper-box manufacturers in New York City; textile workers in Massachusetts, Rhode Island, and Pennsylvania; silk workers in New Jersey; milk drivers in St. Louis and Cleveland; ice drivers in Memphis; shoemakers in New Hampshire, Massachusetts, and New York City; and coal-dock laborers at Superior and Duluth.

The data in the following tables relate to 335 strikes and lockouts concerning which information was received by the bureau during the month of August. These include, in addition to the 228 strikes and lockouts which began in August, 104 strikes and 3 lockouts which were reported during the month, but began as follows: 54 strikes and 2 lockouts in July, 14 strikes in June, 6 strikes in May, 1 strike in April, and 29 strikes and 1 lockout the dates of commencement of which were not reported, but most of which probably occurred in July or August. Inasmuch as strikes which start toward the end of a month frequently do not come to the attention of the bureau until after the report for the month has been prepared, it is probable that corrected figures for August will show an increase over the number of strikes herein reported for that month.

Of the disputes reported during August, 18 strikes and 1 lockout occurred east of the Mississippi and south of the Ohio and Potomac rivers, 38 strikes and 1 lockout west of the Mississippi, and the remaining 270 strikes and 7 lockouts in the district north of the Ohio and Potomac rivers and east of the Mississippi. More than one-half of these strikes occurred in four States.

STATES IN WHICH FIVE OR MORE STRIKES AND LOCKOUTS WERE REPORTED DURING AUGUST, 1916.

State.	Strikes.	Lockouts.	Total.
Pennsylvania.....	60	.....	60
New York.....	50	4	54
Ohio.....	33	2	35
Massachusetts.....	28	.....	28
New Jersey.....	25	.....	25
Illinois.....	23	.....	23
Connecticut.....	13	.....	13
Wisconsin.....	10	.....	10
Missouri.....	9	1	10
Rhode Island.....	8	.....	8
Texas.....	7	.....	7
Indiana.....	6	.....	6
Maryland.....	5	1	6
25 other States.....	49	1	50
Total.....	326	9	335

The strikers were men in all but 15 strikes, which were confined to women, 10 strikes which included both men and women, and 19 strikes and 2 lockouts in which the sex was not stated.

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 AUGUST, 1916.

Industry.	Strikes.	Lockouts.	Total.
Metal trades.....	54	2	56
Mining.....	55	.....	55
Textile workers.....	31	.....	31
Clothing industries.....	25	1	26
Building trades.....	24	.....	24
Railroads.....	12	.....	12
Teamsters.....	9	3	12
City laborers.....	10	.....	10
Cooks and waiters.....	9	.....	9
Paper workers.....	7	2	9
Street railways.....	7	.....	7
Chemical workers.....	6	.....	6
Clay workers.....	6	.....	6
Iron and steel mills.....	6	.....	6
Bakers.....	4	.....	4
Cigar makers.....	4	.....	4
Furniture workers.....	4	.....	4
Moving picture operators.....	4	.....	4
All others.....	49	1	50
Total.....	326	9	335

Included in the above are 24 strikes of machinists, 15 of metal polishers, and 6 of molders; 53 of the mining strikes were in coal mines.

In 185 strikes and 8 lockouts the employees were connected with unions; in 10 strikes and 1 lockout they were not so connected; in 7 strikes they were not connected with unions at the time of striking,

but became organized during the course of the strike; in the remaining 124 strikes it was not stated whether the strikers had union affiliation or not.

The following table shows the causes of 257 of the strikes and lockouts. In nearly 70 per cent of these the questions of wages or hours, or both, were prominent.

PRINCIPAL CAUSES OF STRIKES AND LOCKOUTS REPORTED DURING AUGUST, 1916

Cause.	Strikes.	Lockouts.	Total.
For increase of wages.....	88	1	89
Because of reduction of wages.....	3		3
For increase of hours.....	18	1	19
For increase of wages and decrease of hours.....	39		39
Because of unpaid wages.....	4		4
General conditions.....	5	1	6
Conditions and wages.....	6		6
Conditions, wages, and hours.....	1		1
Recognition of the union.....	13	3	16
Recognition and wages.....	9	1	10
Recognition and hours.....	2		2
Recognition, wages, and hours.....	7		7
Because of discharge of employees.....	14		14
Because of presence of nonunion men.....	33		33
In regard to the agreement.....	3		3
Jurisdictional.....	1		1
Sympathy.....	1		1
Want foremen discharged.....	3		3
Miscellaneous.....	22	1	23
Not reported.....	54	1	55
Total.....	326	9	335

In 192 of the strikes the number of persons involved was reported to be 158,293, an average of 824 per strike. In 33 strikes, in each of which the number involved was over 1,000, the strikers numbered 127,100, thus leaving 31,193 involved in the remaining 159 strikes, or an average of 196 in each. In 4 lockouts the number reported to be involved was 4,063, ranging from 3 to 3,500 in each.

In 246 strikes and 6 lockouts only one employer was concerned in each disturbance; in 10 strikes, 2 employers; in 4 strikes, 3 employers; in 25 strikes and 2 lockouts, more than 3; in 41 strikes and 1 lockout the number of employers was not stated.

In 90 strikes reported as ending in August, 25 were won, 13 lost, 27 compromised; in 5 the strikers returned to work under promise of the employer to arbitrate the matter in dispute; in 20 the result was not reported. No lockouts were reported as ending in August. The duration of 60 of these strikes was given as follows: One day or less, 5; 2 to 3 days, 13; 4 to 7 days, 15; 1 to 2 weeks, 9; 3 to 4 weeks, 10; 1 to 3 months, 8. The duration of the 60 strikes was 892 days, or an average of 15 days each.

ARBITRATION OF RAILROAD LABOR DISPUTES.

In response to a resolution adopted by the Senate on May 3, 1916, the United States Board of Mediation and Conciliation prepared and filed on May 12, 1916, a report setting forth in detail the history of

all railroad labor arbitrations, including the effect in each instance upon the rates of pay and working conditions of employees.¹ The report includes an analysis of 21 arbitration proceedings held under the provisions of Federal law, and in addition 4 arbitration proceedings not conducted under the provisions of law, covering the period 1898 to 1915. In the tables presented in connection with each case a comparison has been made between rates of pay and working conditions prior and subsequent to the award of the arbitration boards. The general plan followed in the presentation of each case is as follows: (1) History of the case; (2) articles of the arbitration agreement; (3) testimony and argument of the employees; (4) testimony and argument of the railroads; (5) comparison of requests of employees with award of the arbitration board; (6) the application of the award of the board to railroad operating conditions, and (7) changes in the rates of pay and working conditions by individual railroads as the result of the arbitration award.

The first law dealing with the adjustment of labor controversies between the transportation companies and the employees was approved October 1, 1888. It provided for voluntary arbitration and, substantially, for compulsory investigation. No provision was made for enforcing any award of the board of arbitration and the provisions of the act were never utilized. This law was superseded in June, 1898, by the so-called Erdman Act. It included only employees directly engaged in the movement of trains—engineers, firemen, conductors, trainmen, switchmen, and telegraphers. Mediation was purely voluntary, and the mediators had no power to intervene on their own initiative. During the first eight and one-half years following the passage of this law only one attempt was made to utilize it, but within the next five years its provisions were invoked more than sixty times, thus establishing the effectiveness of the law and fully developing methods of procedure under its provisions. The next step in legislation relative to mediation and arbitration was the passage of the so-called Newlands law, approved July 15, 1913. It created the offices of commissioner of mediation and conciliation and assistant commissioner of mediation and conciliation, and further provided that the President shall also “designate not more than two other officials of the Government who have been appointed by and with the advice and consent of the Senate, who, together with the commissioner of mediation and conciliation, shall constitute a board to be known as the United States Board of Mediation and Conciliation.”

¹ Railroad labor arbitrations. Report of the United States Board of Mediation and Conciliation on the effects of arbitration proceedings upon rates of pay and working conditions of railroad employees. Prepared under the direction of the Board by W. Jett Lauck. S. Doc. 493, 64th Cong., 1st sess. Washington, 1916, 608 pp.

The law in general reenacted the provisions of the Erdman law relative to mediation. It also provided for three-member boards of arbitration as authorized by the Erdman Act, but, in addition, in order to meet the criticism that three-member boards placed too much power in the hands of the neutral arbitrator, it provided further for six-member boards of arbitration, composed of two representatives from each party to a controversy, and two neutral members representing the public.

The immediate cause for the passage of the present law grew out of the demands of the conductors and trainmen which had been presented, in a concerted movement, some months previously, to 42 eastern railroads in what is known as eastern associated territory. The direct negotiations between the parties resulted in a refusal by the railroads to grant the demands of the men, on the ground that the rates of wages prevailing were adequate and that the employees were working under favorable conditions. In accordance with the usual procedure a strike vote was then taken, resulting in some 97 per cent of the employees voting to authorize their representatives to order withdrawal from the service of the railroads unless their demands were complied with. In this emergency Congress enacted the Newlands law.

The case just cited was thus the first one arbitrated under the Newlands law. On July 26, 1913, the parties agreed to arbitrate, and six arbitrators were selected. The first hearing was held on September 11, in New York city, and the award was made on November 10, following. In this controversy 42 railroads and about 20,000 conductors and 70,000 trainmen were involved.

Under the operation of the various laws mediation appears to have taken the leading part. The report of Commissioner Neill¹ shows that there were in all 48 cases in which the services of the mediators were invoked under the Erdman law from June 23, 1899, to December 31, 1911. Seven of these cases were concerted movements, involving many of the various classes of employees and, in each instance, a large number of railroads, in one case as many as 64 roads. Of these 48 cases coming under the Erdman law up to the end of 1911, 20 were settled through mediation, 8 were settled by mediation and arbitration, and 4 by arbitration alone. In the remaining 16 cases the services of the mediators, requested by one of the parties, were either refused by the other or direct settlements were reached between the parties after the services of the mediators had been invoked without employing them or resorting to arbitration.

Since the Newlands law was approved, 56 controversies have been adjusted by the Board of Mediation and Conciliation. Of this num-

¹ Bulletin of the United States Bureau of Labor, No. 98.

ber, 45 were settled by mediation and 11 by mediation and arbitration. In 20 cases employees made application to the board for its services, the railroads applied in 13 cases, and in 15 cases the railroads and their employees made joint application. In 8 cases the board proffered its services, which were accepted.

Before entering upon an analysis of certain cases the report presents a table showing the arbitration proceedings under the Erdman law, including cases where mediation was first invoked and cases of arbitration direct, from June 1, 1898, to December 31, 1911, and a table giving the arbitrations under the Newlands law during the fiscal year ended June 30, 1915. In connection with each case the date of the award is shown, together with the members of the arbitration boards, the place of meeting, and the duration of the proceedings.

The report here under review contains no general summary, but is limited to a study of the effects of arbitration proceedings taken individually upon rates of pay and working conditions. Increases in rates of pay and improvements in working conditions secured through mediation are not included.

EIGHT-HOUR LAW FOR CERTAIN RAILROAD EMPLOYEES.

A statute that has attracted particular attention both on account of its provisions and of the circumstances under which it was enacted, entitled "An act to establish an eight-hour day for employees of carriers engaged in interstate and foreign commerce, and for other purposes," received presidential approval on September 3, 1916. The first eight-hour legislation of Congress was enacted in 1868, relating to the employment of labor on public works. It was held to be directory and not mandatory, so that it was of little practical effect. However, subsequent legislation has established the principle of a restricted eight-hour day for employees on public works, overtime being forbidden except in cases of emergency. Similarly restrictive and prohibitory is the 16-hour law for employees on railroads, with 9-hour and 13-hour limitations for train dispatchers using the telegraph or telephone. The eight-hour day as prescribed by State legislation for certain dangerous occupations is likewise restrictive, overtime work being forbidden. The present statute differs from the foregoing in that it declares that "eight hours shall, in contracts for labor and service, be deemed a day's work and the measure or standard of a day's work for the purpose of reckoning the compensation" of certain employees in interstate commerce. Overtime work is not forbidden and may extend up to the limitations prescribed by the 16-hour law noted above, but work in excess of eight hours must be paid at a rate not less than the pro rata rate for the standard 8-hour workday. A commission is appointed to

observe the operation of the law and must report not sooner than 6 months nor later than 9 months from January 1, 1917; and pending the report of the commission and for 30 days thereafter no reduction may be made in the present standard day's wage.

PUBLIC—No. 252—SIXTY-FOURTH CONGRESS.

[H. R. 17700.]

SECTION 1. Beginning January first, nineteen hundred and seventeen, eight hours shall, in contracts for labor and service, be deemed a day's work and the measure or standard of a day's work for the purpose of reckoning the compensation for services of all employees who are now or may hereafter be employed by any common carrier by railroad, except railroads independently owned and operated not exceeding one hundred miles in length, electric street railroads, and electric interurban railroads, which is subject to the provisions of the act of February fourth, eighteen hundred and eighty-seven, entitled "An act to regulate commerce," as amended, and who are now or may hereafter be actually engaged in any capacity in the operation of trains used for the transportation of persons or property on railroads, except railroads independently owned and operated not exceeding one hundred miles in length, electric street railroads, and electric interurban railroads, from any State or Territory of the United States or the District of Columbia, to any other State or Territory of the United States or the District of Columbia, or from one place in a Territory to another place in the same Territory, or from any place in the United States to an adjacent foreign country, or from any place in the United States through a foreign country to any other place in the United States: *Provided*, That the above exceptions shall not apply to railroads though less than one hundred miles in length whose principal business is leasing or furnishing terminal or transfer facilities to other railroads, or are themselves engaged in transfers of freight between railroads or between railroads and industrial plants.

SEC. 2. The President shall appoint a commission of three, which shall observe the operation and effects of the institution of the eight-hour standard workday as above defined and the facts and conditions affecting the relations between such common carriers and employees during a period of not less than six months nor more than nine months, in the discretion of the commission, and within thirty days thereafter such commission shall report its findings to the President and Congress; that each member of the commission created under the provisions of this act shall receive such compensation as may be fixed by the President. That the sum of \$25,000, or so much thereof as may be necessary, be, and hereby is, appropriated, out of any money in the United States Treasury not otherwise appropriated, for the necessary and proper expenses incurred in connection with the work of such commission, including salaries, per diem, traveling expenses of members and employees, and rent, furniture, office fixtures and supplies, books, salaries, and other necessary expenses, the same to be approved by the chairman of said commission and audited by the proper accounting officers of the Treasury.

SEC. 3. Pending the report of the commission herein provided for and for a period of thirty days thereafter the compensation of railway employees subject to this act for a standard eight-hour workday shall not be reduced below the present standard day's wage, and for all necessary time in excess of eight hours such employees shall be paid at a rate not less than the pro rata rate for such standard eight-hour workday.

SEC. 4. Any person violating any provision of this act shall be guilty of a misdemeanor and upon conviction shall be fined not less than \$100 and not more than \$1,000, or imprisoned not to exceed one year, or both.

Approved, September 3, 1916.

Approved, September 5, 1916.

LEGAL REGULATION OF LENGTH OF WORKING-DAY.

EIGHT HOURS.

Public employees and employees on public works (30 States and Territories).—District of Columbia, Alaska, Arizona, California, Colorado, Idaho, Indiana, Kansas, Kentucky, Maryland, Massachusetts, Minnesota, Missouri, Mon-

tana, Nevada, New Jersey, New Mexico, New York, Ohio, Oklahoma, Oregon, Pennsylvania, Texas, Utah, Washington, West Virginia, Wisconsin, Wyoming, Hawaii, Porto Rico, and the United States. The 8-hour day for public employees is fixed by the constitutions of Arizona, California, Idaho, Montana, New Mexico, Ohio, Oklahoma, Utah, and Wyoming.

Mines (14 States).—Alaska, Arizona, California, Colorado, Idaho, Missouri, Montana, Nevada, Oklahoma, Oregon, Pennsylvania, Utah, Washington, and Wyoming.

Smelters, reduction works, etc. (9 States).—Alaska, Arizona, California, Colorado, Idaho, Missouri, Montana, Utah, and Wyoming.

Electric light and power plants (1 State).—Arizona.

Coke ovens (3 States).—Alaska, Arizona, and Colorado.

Blast furnaces (2 States).—Arizona and Colorado.

Cement and plaster mills (2 States).—Arizona and Nevada.

Plate-glass works (1 State).—Missouri.

Rolling, rod, and stamp mills (5 States).—Alaska, Arizona, Colorado, Idaho, and Wyoming.

Tunnels (3 States).—Arizona, California, and Montana.

High-air pressure (2 States).—New Jersey and New York.

Irrigation works (1 State).—Montana.

Railroad telegraphers (6 States).—Arkansas, Connecticut, Maryland, Nevada, Texas, and West Virginia.

Day's work unless otherwise stipulated (9 States).—California, Connecticut, Illinois, Indiana, Missouri, New York, Ohio, Pennsylvania, and Wisconsin.

NINE HOURS.

Railroad telegraphers (5 States).—District of Columbia, Nebraska, North Carolina, Oregon, and the United States.

Telephone operators (1 State).—Montana.

Street railways (1 State).—Massachusetts.

Interlocking-tower operators, railroad (1 State).—Missouri.

TEN HOURS.

Saw and planing mills (1 State).—Arkansas.

Bakeries (1 State).—New Jersey.

Brickyards (corporation) (1 State).—New York.

Drug stores (2 States).—California and New York.¹

Cotton and woolen mills (2 States).—Georgia and Maryland.

Manufacturing establishments (1 State).—Mississippi.

Street railways (5 States).—Louisiana, New York, Rhode Island, and Washington.

Day's work unless otherwise stipulated (7 States).—Florida, Maine, Michigan, Minnesota, Nebraska, New Hampshire, and Rhode Island.

ELEVEN HOURS.

Grocery stores (1 State).—New York.

TWELVE HOURS.

Railroad telegraphers.—Island of Porto Rico.

Railroad trainmen.—Island of Porto Rico.

Street railways (5 States).—California, Maryland, New Jersey, Pennsylvania, and South Carolina.

These States have no provision in law for the limit of a day's work: Alabama, Delaware, Iowa, North Dakota, Tennessee, Vermont, and Virginia.

¹ Seventy hours per week, 6 hours overtime allowed to make shorter succeeding week; not over 132 hours in any two consecutive weeks.

THIRTEEN HOURS.

Railroad trainmen (2 States).—Florida and Georgia.

FOURTEEN HOURS.

Railroad trainmen (1 State).—Oregon.

FIFTEEN HOURS.

Railroad trainmen (1 State).—Ohio.*Railroad telegraphers (1 State).*—Ohio.*Street railways (1 State).*—Ohio.

SIXTEEN HOURS.

Railroad trainmen (21 States).—Arizona, Arkansas, California, Colorado, District of Columbia, Indiana, Iowa, Kansas, Minnesota, Missouri, Montana, Nebraska, Nevada, New Mexico, New York, North Carolina, North Dakota, South Dakota, Texas, Washington, Wisconsin, and the United States.*Railroad telegraphers (7 States).*—Arizona, California, Colorado, Indiana, Kansas, Missouri, and Montana.

TWENTY-FOUR HOURS.

Railroad trainmen (1 State).—Michigan.

NOTE.—A Federal statute fixes the hours of labor of railroad trainmen at 16 per day, and of train dispatchers and railroad telegraph operators at 9 per day (13 hours in offices, etc., operated only in the daytime). Decisions of the United States Supreme Court and of the State courts hold State laws fixing a different standard to be void and unconstitutional in so far as interstate commerce is concerned; some courts also hold that a distinction between interstate and intrastate operations is impracticable, so that no law fixing a different standard is valid. Laws thus held void are those of Missouri, New York, Washington, and Wisconsin. The Federal statute enacted at the session of Congress just closed, "to establish an eight-hour day," does not restrict employment to eight hours, but makes the eight-hour day the measure for the payment of wages.

LAW AND ORDER IN INDUSTRY.¹

Prior to the summer of 1910 the garment makers in New York City had been working under conditions which to them seemed hopelessly unfair and unjust, and failure on the part of the manufacturers to remedy the situation culminated in a strike involving approximately 15,000 employers and nearly 60,000 workers. To terminate the strike the Cloak, Suit, and Skirt Manufacturers' Protective Association and certain locals of the International Ladies' Garment Makers' Union entered into a collective agreement, known as the "protocol," which established a minimum scale for week workers, maximum hours, number of holidays to be observed, limitation of hours of overtime, prohibition of home work, requirement for electric instead of foot power, etc. Other provisions were the "preferential union shop," a board of arbitration, a board of sanitary control upon which the public had representation, and a board of grievances.

The history of the protocol and a discussion of the difficulties attending the workings of the institutions created by it, together with an outline of some of the business difficulties inherent in the cloak and suit industry, a discussion of the important principle of discrimination among workers and freedom of selection on the basis of skill—in other words, the preferential union shop—and, finally, the

advocacy of the creation of a representative national industrial board whose duty should be to certify any agreement "voluntarily come to" between employers and employees in order to guarantee the majority "against the undermining of standards by unscrupulous competitors," are set forth in a book entitled "Law and Order in Industry."¹

The book is largely devoted to the history of the events which culminated in the protocol, and the subsequent experience under its provisions. "The protocol undertook to better industrial conditions by rational and peaceable methods. Upon the sanitary side it succeeded. Upon the business side, while it did not wholly fail, it did not meet the expectations of those who framed it."

The author draws some inferences from the experience in the cloak situation which he believes demonstrate conclusively that "the faith in collective bargaining is justified and that the system is practicable, provided adequate machinery is established and there is leadership on both sides fully expressing the spirit of the arrangement." In discussing the making of collective agreements generally, the author takes up in some detail the question of recognition of the union and suggests that—

Perhaps the cause of more conflicts than any other of those mentioned is the "closed shop." The "preferential union shop" established through the protocol of 1910 would seem to furnish the *modus vivendi* for elimination of this obstacle.

Two other obstacles are suggested: (1) Contract breaking and (2) acts of violence against nonunion workers and the properties of employers, and in conclusion it is asserted that—

Industrial peace and welfare is not to be secured by acquiescence in violence as a method, nor by attacking personally individual employers, or even the whole class. Employers generally already are aware of the value of collective bargaining to society generally. They accept it in theory and in principle. What they want to know is how to run business by it. We will get more collective agreements when we solve the problem of enforcement of standards. Those who from the outside believe in the social value of joint agreements between unions and employers' associations must not rely upon violence or law breaking as the means for securing them. They must face the business factors squarely. When we shall do this we shall make progress.

The author suggests that by the formation of a national industrial board constituted of leaders of the trade-unions, employers, and public men and women, we would find a method for "applying intelligently and constantly to trade agreements the force of public opinion and at the same time utilize Federal power in making such agreements [wages, hours, conditions of employment, etc.], 'voluntarily come to' binding upon the unscrupulous and illegitimate minority

¹ *Law and Order in Industry*, by Julius Henry Cohen. The Macmillan Co., New York, 1916. 292 pp.

employer" thus "rendering the entire country a real service" and hastening the "day of industrial welfare as well as industrial peace."¹

RETAIL PRICES OF FOOD IN THE UNITED STATES.

Reports to the Bureau of Labor Statistics from approximately 725 retail dealers in 44 of the principal industrial cities of the United States show a decline of less than 1 per cent from June 15 to July 15, 1916, in the combined price of the principal articles of food. This movement was largely due to the decline in the price of beef. The prices of pork and lard, however, made slight advances. The most marked changes were in potatoes, which declined 19 per cent; eggs, which advanced 7 per cent, and beans, which advanced 21 per cent.

The table which follows shows the relative retail prices on June 15 and July 15, 1916, of 26 articles covered by the bureau's reports, together with the average money prices on the same dates. The plus and minus signs are used to indicate that the exact figure was slightly more or slightly less than the average money price carried to three places or the relative price with the terminal decimals dropped. Thus, the relative price of all articles combined was but a fraction more than 109 for June 15, 1916, and a fraction less than 109 for July 15, 1916.

AVERAGE MONEY RETAIL PRICES AND RELATIVE RETAIL PRICES OF FOOD ON JUNE 15 AND JULY 15, 1916.

[The relative price shows the per cent that the average price on the 15th of each month was of the average price for the year 1915.]

Article.	Unit.	Average money price.		Relative price (average price for the year 1915=100).	
		June 15, 1916.	July 15, 1916.	June 15, 1916.	July 15, 1916.
Sirloin steak.....	Pound.....	\$0.286-	\$0.283+	112+	111+
Round steak.....	do.....	.257+	.257+	113+	113-
Rib roast.....	do.....	.224	.220	112-	110+
Chuck roast.....	do.....	.180+	.177+	112-	110+
Plate boiling beef.....	do.....	.134-	.131+	110-	108+
Pork chops.....	do.....	.232-	.236-	114+	116-
Smoked bacon.....	do.....	.292+	.295+	107	108-
Smoked ham.....	do.....	.292-	.294+	113+	114-
Lard, pure.....	do.....	.172-	.175-	116	118-
Hens.....	do.....	.244-	.241+	117-	116-
Canned salmon.....	do.....	.202	.202	101-	101
Eggs, strictly fresh.....	Dozen.....	.295-	.315-	88	94-
Butter, creamery.....	Pound.....	.367+	.360+	102-	100-
Cheese.....	do.....	.245-	.243-	106-	105
Milk, fresh.....	Quart.....	.090	.090	100	100+
Flour, wheat.....	½-barrel bag.....	.933+	.923+	93+	92+
Corn meal.....	Pound.....	.031+	.031+	100-	100-
Rice.....	do.....	.091-	.091-	100+	100+
Potatoes.....	Peck.....	.429-	.346+	187	151-
Onions.....	Pound.....	.054+	.053+	157-	154-
Beans, navy.....	do.....	.096-	.116-	124	150
Prunes.....	do.....	.130+	.131+	98+	99-
Raisins, seeded.....	do.....	.127-	.128+	101+	102-
Sugar, granulated.....	do.....	.087+	.088-	132-	133+
Coffee.....	do.....	.302-	.302-	100-	100-
Tea.....	do.....	.551+	.551+	100+	100+
All articles combined.....				109+	109-

¹ In this connection it is of interest to compare the recommendations of the industrial council of the British Board of Trade in regard to industrial agreements. See Bulletin of the U. S. Bureau of Labor Statistics, No. 133.

The table below shows the average money prices and the relative prices of the same 26 articles on July 15 of each year from 1912 to 1916:

AVERAGE MONEY RETAIL PRICES AND RELATIVE RETAIL PRICES OF FOOD ON JULY 15 OF EACH YEAR, 1912 TO 1916.

[The relative price shows the per cent that the average price on the 15th of July in each year was of the average price for the year 1915.]

Article.	Unit.	Average money price July 15—					Relative price July 15—				
		1912	1913	1914	1915	1916	1912	1913	1914	1915	1916
Sirloin steak.....	Pound...	\$0.242+	\$0.263—	\$0.268—	\$0.265+	\$0.283+	95	103—	105+	104—	111+
Round steak.....	do.....	.207+	.230—	.241+	.237—	.257+	91—	101—	106+	104+	113—
Rib roast.....	do.....	.194	.202	.208	.204	.220	97—	101—	104—	102+	110+
Chuck roast.....	do.....	.172+	.172+	.164+	.177+	.177+	107+	102+	102+	110+	110+
Plate boiling beef.....	do.....	.127—	.127—	.123—	.131+	.131+	104—	101—	106+	106+	106+
Pork chops.....	do.....	.193+	.218—	.224—	.211+	.236—	95+	107	110+	104+	116—
Smoked bacon.....	do.....	.246—	.284+	.279—	.276—	.295+	90+	104—	102—	101—	108—
Smoked ham.....	do.....	.243—	.276+	.274—	.261—	.294+	94+	107+	106+	101—	114—
Lard, pure.....	do.....	.148—	.160—	.154—	.146+	.175—	100+	108—	104+	99+	118—
Hens.....	do.....	.200—	.219—	.221—	.206+	.241+	96—	105—	106—	99+	116—
Canned salmon.....	do.....	.200—	.219—	.221—	.200—	.202—	100	100	100	101	101
Eggs, strictly fresh.....	Dozen.....	.278+	.295—	.298+	.275—	.315—	83+	88—	89—	82	94—
Butter, creamery.....	Pound.....	.339—	.349+	.346—	.346—	.360+	94+	97+	96—	96+	100—
Cheese.....	do.....	.243—	.276+	.274—	.231—	.243—	100—	100—	100—	100—	105—
Milk, fresh.....	Quart.....	.087+	.090—	.090—	.089+	.090—	97—	100—	100+	99+	100+
Flour, wheat.....	½-barrel bag.....	.873—	.803—	.783—	.993+	.923+	87—	80+	78	99+	92+
Corn meal.....	Pound.....	.030+	.028+	.030—	.031+	.031+	96—	91—	95+	100	100—
Rice.....	do.....	.091—	.091—	.091—	.091—	.091—	100+	100+	100+	100+	100+
Potatoes.....	Peck.....	.328—	.284+	.401+	.218—	.346+	143+	124	175—	95+	151—
Onions.....	Pound.....	.035—	.035—	.035—	.035—	.053+	101+	101+	101+	151—	151—
Beans, navy.....	do.....	.076—	.076—	.076—	.076—	.116—	98—	98—	98—	150	150
Prunes.....	do.....	.133—	.133—	.133—	.133—	.131+	100+	100+	100+	99—	99—
Raisins, seeded.....	do.....	.126—	.126—	.126—	.126—	.128+	100—	100—	100—	102—	102—
Sugar, granulated.....	do.....	.062+	.055—	.052+	.070—	.088—	94	83+	79+	106—	133+
Coffee.....	do.....	.302—	.302—	.302—	.302—	.302—	100	100	100	100—	100—
Tea.....	do.....	.551+	.551+	.551+	.551+	.551+	100+	100+	100+	100+	100+
All articles combined.....	.....						94+	98—	101—	99+	109—

A comparison of prices from July 15, 1912, to July 15, 1916, shows an advance in the price of all articles combined of 16 per cent, each article for which prices were carried for the 5-year period showing an advance.

Round steak advanced 24 per cent from July 15, 1912, to July 15, 1916, which was a greater advance than shown for any other meat, and sugar advanced 41 per cent, a greater advance than made by any other article.

From July 15, 1915, to the same date in 1916 there was an advance in all articles combined of 10 per cent. The only article which made any noticeable decline in price was flour, 7 per cent. Sugar advanced 25 per cent, and all meats advanced, from bacon 7 per cent, to hens, 17 per cent.

RETAIL PRICES OF BREAD.

A résumé of the price of bread in a few selected cities in the United States for August 15, 1916, and for the same date in the three preceding years is given herewith, compiled from reports received

by the Bureau of Labor Statistics from leading bakers in these cities.

The prices given are the computed prices of a loaf scaled at 16 ounces—that is, 16 ounces of dough—based on reports of the actual scaling weights of the 5-cent loaf sold. While it would be highly desirable to present the price of the loaf as actually purchased by the consumer, the complications involved in the relation of the scaled weight to the weight of the bread when it passes over the retailer's counter were found to be such that it was impossible to do so. The loss of weight in baking varies with the formula, with the style of loaf, and with the temperature of the oven. Furthermore, the weight, of course, varies with the time intervening between the removal of the loaf from the oven and its delivery to the consumer, the loss by evaporation also being partly determined by the conditions under which the bread is kept and by the state of the atmosphere.

The customary loss in baking is variously estimated by bakers, but it may be said that a loaf weighing 16 ounces before baking will, when baked and cooled, weigh about 14½ ounces.

It must be borne clearly in mind that the price of bread varies with the kind of bread and the quality of materials used in its composition.

No fancy, special, graham, rye, or restaurant breads are included in these prices.

The following table shows the price of a loaf of bread weighing 16 ounces before baking in 16 important industrial cities of the United States on August 15 of each year 1913, 1914, 1915, and 1916. For instance, the weight of the 5-cent loaf as reported from Atlanta varied so that the price of a loaf weighing 16 ounces before baking was 5.6 cents on August 15, 1913; 5.4 cents on August 15, 1914; 6.1 cents on August 15, 1915, and 6.3 cents on August 15, 1916.

PRICE OF A LOAF OF BREAD WEIGHING 16 OUNCES BEFORE BAKING ON THE 15TH OF AUGUST, 1913 TO 1916.

City.	Price of loaf on—			
	August 15, 1913.	August 15, 1914.	August 15, 1915.	August 15, 1916.
Atlanta, Ga.....	\$0.056	\$0.054	\$0.061	\$0.063
Baltimore, Md.....	.050	.050	.057	.056
Birmingham, Ala.....	.047	.049	.054	.057
Chicago, Ill.....	.052	.053	.058	.058
Cincinnati, Ohio.....	.043	.044	.052	.051
Cleveland, Ohio.....	.050	.051	.054	.056
Dallas, Tex.....	.051	.050	.060	.060
Denver, Colo.....	.049	.048	.055	.057
Minneapolis, Minn.....	.050	.050	.058	.057
New Haven, Conn.....	.053	.053	.056	.057
New Orleans, La.....	.044	.041	.049	.048
New York, N. Y.....	.055	.059	.060	.059
Portland, Oreg.....	.049	.049	.055	.054
St. Louis, Mo.....	.049	.050	.062	.057
San Francisco, Cal.....	.054	.054	.057	.056
Washington, D. C.....	.052	.051	.056	.059

Prices on August 15, 1913, and August 15, 1914, were not materially different, but from August 15, 1914, to August 15, 1915, there were very noticeable changes. In every city there was an advance. The greatest advance was in St. Louis, but there was a greater decline in St. Louis from August 15, 1915, to August 15, 1916, than in any other of the 16 cities.

From August 15, 1915, to August 15, 1916, there was an increase in the price of bread in 6 of the cities and a decrease in 8 cities, while in 2 cities the price was the same on the two dates.

FEDERAL CHILD-LABOR LAW.

The Sixty-fourth Congress at its session just closed enacted a law entitled "An act to prevent interstate commerce in the products of child labor, and for other purposes." The purpose of the act is in brief to prevent the interstate shipment of the products of any mine or quarry in which children under the age of 16 years have been employed, or the products of any manufacturing establishment in which children under 14 years of age have been employed, or in which children between the ages of 14 and 16 years have worked more than eight hours in any day, or more than six days in any week, or have been employed at nightwork. This enactment marks the culmination of demands extending over a number of years, apparently the first bill of this intent being an amendment offered by Senator Beveridge, of Indiana, on January 23, 1907, to a bill then before Congress, the object of which was to regulate the employment of children in the District of Columbia. This amendment fell far short of the completeness of the present act, as did other bills introduced in succeeding Congresses. In the Sixty-third Congress a bill on this subject passed the House of Representatives, and was referred to the Senate Committee on Interstate Commerce; this committee reported the bill with amendments, but no further action was taken. The present act received the earnest support of the President, passing the House by a vote of 337 yeas to 46 nays, and the Senate by a vote of 52 to 12, receiving the presidential approval September 1, 1916.

The act follows:

PUBLIC—No. 249—SIXTY-FOURTH CONGRESS.

(H. R. 8234.)

SECTION 1. No producer, manufacturer, or dealer shall ship or deliver for shipment in interstate or foreign commerce any article or commodity the product of any mine or quarry, situated in the United States, in which within thirty days prior to the time of the removal of such product therefrom children under the age of sixteen years have been employed or permitted to work, or

any article or commodity the product of any mill, cannery, workshop, factory, or manufacturing establishment, situated in the United States, in which within thirty days prior to the removal of such product therefrom children under the age of fourteen years have been employed or permitted to work, or children between the ages of fourteen years and sixteen years have been employed or permitted to work more than eight hours in any day, or more than six days in any week, or after the hour of seven o'clock postmeridian, or before the hour of six o'clock antemeridian: *Provided*, That a prosecution and conviction of a defendant for the shipment or delivery for shipment of any article or commodity under the conditions herein prohibited shall be a bar to any further prosecution against the same defendant for shipments or deliveries for shipment of any such article or commodity before the beginning of said prosecution.

SEC. 2. The Attorney General, the Secretary of Commerce, and the Secretary of Labor shall constitute a board to make and publish from time to time uniform rules and regulations for carrying out the provisions of this act.

SEC. 3. For the purpose of securing proper enforcement of this act the Secretary of Labor, or any person duly authorized by him, shall have authority to enter and inspect at any time mines, quarries, mills, canneries, workshops, factories, manufacturing establishments, and other places in which goods are produced or held for interstate commerce; and the Secretary of Labor shall have authority to employ such assistance for the purposes of this act as may from time to time be authorized by appropriation or other law.

SEC. 4. It shall be the duty of each district attorney to whom the Secretary of Labor shall report any violation of this act, or to whom any State factory or mining or quarry inspector, commissioner of labor, State medical inspector, or school-attendance officer, or any other person shall present satisfactory evidence of any such violation to cause appropriate proceedings to be commenced and prosecuted in the proper courts of the United States without delay for the enforcement of the penalties in such cases herein provided: *Provided*, That nothing in this act shall be construed to apply to bona fide boys' and girls' canning clubs recognized by the Agricultural Department of the several States and of the United States.

SEC. 5. Any person who violates any of the provisions of section one of this act, or who refuses or obstructs entry or inspection authorized by section three of this act, shall for each offense prior to the first conviction of such person under the provisions of this act, be punished by a fine of not more than \$200, and shall for each offense subsequent to such conviction be punished by a fine of not more than \$1,000, nor less than \$100, or by imprisonment for not more than three months, or by both such fine and imprisonment, in the discretion of the court: *Provided*, That no dealer shall be prosecuted under the provisions of this act for a shipment, delivery for shipment, or transportation who establishes a guaranty issued by the person by whom the goods shipped or delivered for shipment or transportation were manufactured or produced, resident in the United States, to the effect that such goods were produced or manufactured in a mine or quarry in which within thirty days prior to their removal therefrom no children under the age of sixteen years were employed or permitted to work, or in a mill, cannery, workshop, factory, or manufacturing establishment, in which within thirty days prior to the removal of such goods therefrom no children under the age of fourteen years were employed or permitted to work, nor children between the ages of fourteen years and sixteen years employed or permitted to work more than eight hours in any day or more than six days in any week or after the hour of seven o'clock postmeridian or before the hour of six o'clock antemeridian; and in such event, if the guaranty contains any false statement of a material fact, the guarantor shall be amenable to prosecution and to the fine or imprisonment provided by this section for violation of the provisions of this act. Said guaranty, to afford the protection above provided, shall contain the name and address of the person giving the same: *And provided further*, That no producer, manufacturer, or dealer shall be prosecuted under this act for the shipment, delivery for shipment, or transportation of a product of any mine, quarry, mill, cannery, workshop, factory, or manufacturing establishment, if the only employment therein, within thirty days prior to the removal of such product therefrom, of a child under the age of sixteen years has been that of a child as to whom the producer or manufacturer has in good faith procured, at the time of employing such child, and has since in good faith relied

upon and kept on file a certificate, issued in such form, under such conditions, and by such persons as may be prescribed by the board, showing the child to be of such an age that the shipment, delivery for shipment, or transportation was not prohibited by this act. Any person who knowingly makes a false statement or presents false evidence in or in relation to any such certificate or application therefor shall be amenable to prosecution and to the fine or imprisonment provided by this section for violations of this act. In any State designated by the board, an employment certificate or other similar paper as to the age of the child, issued under the laws of that State and not inconsistent with the provisions of this act, shall have the same force and effect as a certificate herein provided for.

SEC. 6. The word "person" as used in this act shall be construed to include any individual or corporation or the members of any partnership or other unincorporated association. The term "ship or deliver for shipment in interstate or foreign commerce" as used in this act means to transport or to ship or deliver for shipment from any State or Territory or the District of Columbia to or through any other State or Territory or the District of Columbia or to any foreign country; and in the case of a dealer means only to transport or to ship or deliver for shipment from the State, Territory, or district of manufacture or production.

SEC. 7. This act shall take effect from and after one year from the date of its passage.

Approved, September 1, 1916.

COMPENSATION LAW FOR INJURED EMPLOYEES OF THE UNITED STATES.

On September 7 the President affixed his signature to an act to provide compensation for employees of the United States suffering injuries while in the performance of their duties. This act supersedes the act of 1908, which made provision for certain groups of such employees, amounting in all to perhaps one-fourth of the more than 480,000 employees of the United States, as well as other acts applying to the Post Office Department and orders relating to the Isthmian Canal and the Panama Railroad and to the Alaskan Railway. The foregoing measures were restricted both in scope and remedial value, only one, the order relating to the Canal Zone, being at all of the type of compensation legislation in present general acceptance. Several amendments were made to the act of 1908, and efforts have been put forth during the greater part of its existence to secure a substitute for it which would be more inclusive as well as furnishing more adequate relief. No particular hostility to such measures was ever developed, but favorable action did not seem possible to be secured until at the recent session of Congress, when a bill prepared by the collaboration of the American Association for Labor Legislation and the United States Bureau of Labor Statistics was favorably acted upon.

The act provides for benefits on a basis of two-thirds of the injured employee's wages, payments continuing as long as the disability lasts. Partial disability is compensated on the basis of the wage loss result-

ing from the injury. Death benefits to a widow cease only on her death or remarriage and to children on their attaining the age of 18, though they may continue beyond this date if the child is incapacitated from earning a livelihood. Other beneficiaries are to be provided for in the absence of the foregoing or subject to their prior rights.

The maximum benefit payable under the law during total disability is \$66.67 per month; the minimum, \$33.33. No compensation is to be paid for the first three days of disability, but reasonable medical, surgical, and hospital services are to be furnished in all cases.

The act as drawn made provision for occupational or industrial diseases, but this provision was omitted in the enactment. Compensation is to be based on personal injury, however, and not on accident, and it was said on the floor of the House that laws of similar phraseology had been construed to include the results of occupational diseases. This question will, therefore, doubtless come up for consideration by the commission provided for by the act for its administration. This commission is to be appointed by the President for terms of six years, the initial appointments to be made for terms of two, four, and six years, respectively, in order to secure continuity by biennial expirations of terms of service.

The text of the act is given herewith:

PUBLIC—No. 267—64TH CONGRESS.

(H. R. 15316.)

SECTION 1. The United States shall pay compensation as hereinafter specified for the disability or death of an employee resulting from a personal injury sustained while in the performance of his duty, but no compensation shall be paid if the injury or death is caused by the willful misconduct of the employee or by the employee's intention to bring about the injury or death of himself or of another, or if intoxication of the injured employee is the proximate cause of the injury or death.

SEC. 2. During the first three days of disability the employee shall not be entitled to compensation except as provided in section nine. No compensation shall at any time be paid for such period.

SEC. 3. If the disability is total the United States shall pay to the disabled employee during such disability a monthly compensation equal to sixty-six and two-thirds per centum of his monthly pay, except as hereinafter provided.

SEC. 4. If the disability is partial the United States shall pay to the disabled employee during such disability a monthly compensation equal to sixty-six and two-thirds per centum of the difference between his monthly pay and his monthly wage-earning capacity after the beginning of such partial disability. The commission may, from time to time, require a partially disabled employee to make an affidavit as to the wages which he is then receiving. In such affidavit the employee shall include a statement of the value of housing, board, lodging, and other advantages which are received from the employer as a part of his remuneration and which can be estimated in money. If the employee, when required, fails to make such affidavit, he shall not be entitled to any compensation while such failure continues, and the period of such failure shall be deducted from the period during which compensation is payable to him.

SEC. 5. If a partially disabled employee refuses to seek suitable work or refuses or neglects to work after suitable work is offered to, procured by, or secured for him, he shall not be entitled to any compensation.

SEC. 6. The monthly compensation for total disability shall not be more than \$66.67 nor less than \$33.33, unless the employee's monthly pay is less than \$33.33, in which case his monthly compensation shall be the full amount of his monthly pay. The monthly compensation for partial disability shall not be more than \$66.67. In the case of persons who at the time of the injury were minors or employed in a learner's capacity and who were not physically or mentally defective, the commission shall, on any review after the time when the monthly wage-earning capacity of such persons would probably, but for the injury, have increased, award compensation based on such probable monthly wage-earning capacity. The commission may, on any review after the time when the monthly wage-earning capacity of the disabled employee would probably, irrespective of the injury, have decreased on account of old age, award compensation based on such probable monthly wage-earning capacity.

SEC. 7. As long as the employee is in receipt of compensation under this act, or, if he has been paid a lump sum in commutation of installment payments, until the expiration of the period during which such installment payments would have continued, he shall not receive from the United States any salary, pay, or remuneration whatsoever except in return for services actually performed, and except pensions for service in the Army or Navy of the United States.

SEC. 8. If at the time the disability begins the employee has annual or sick leave to his credit he may, subject to the approval of the head of the department, use such leave until it is exhausted, in which case his compensation shall begin on the fourth day of disability after the annual or sick leave has ceased.

SEC. 9. Immediately after an injury sustained by an employee while in the performance of his duty, whether or not disability has arisen, and for a reasonable time thereafter, the United States shall furnish to such employee reasonable medical, surgical, and hospital services and supplies unless he refuses to accept them. Such services and supplies shall be furnished by United States medical officers and hospitals, but where this is not practicable shall be furnished by private physicians and hospitals designated or approved by the commission and paid for from the employees' compensation fund. If necessary for the securing of proper medical, surgical, and hospital treatment, the employee, in the discretion of the commission, may be furnished transportation at the expense of the employees' compensation fund.

SEC. 10. If death results from the injury within six years the United States shall pay to the following persons for the following period a monthly compensation equal to the following percentages of the deceased employee's monthly pay, subject to the modification that no compensation shall be paid where the death takes place more than one year after the cessation of disability resulting from such injury, or, if there has been no disability preceding death, more than one year after the injury:

(A) To the widow, if there is no child, thirty-five per centum. This compensation shall be paid until her death or marriage.

(B) To the widower, if there is no child, thirty-five per centum if wholly dependent for support upon the deceased employee at the time of her death. This compensation shall be paid until his death or marriage.

(C) To the widow or widower, if there is a child, the compensation payable under clause (A) or clause (B) and in addition thereto ten per centum for each child, not to exceed a total of sixty-six and two-thirds per centum for such widow or widower and children. If a child has a guardian other than the surviving widow or widower, the compensation payable on account of such child shall be paid to such guardian. The compensation payable on account of any child shall cease when he dies, marries, or reaches the age of eighteen, or, if over eighteen, and incapable of self-support, becomes capable of self-support.

(D) To the children, if there is no widow or widower, twenty-five per centum for one child and ten per centum additional for each additional child, not to exceed a total of sixty-six and two-thirds per centum, divided among such children share and share alike. The compensation of each child shall be paid until he dies, marries, or reaches the age of eighteen, or, if over

eighteen and incapable of self-support, becomes capable of self-support. The compensation of a child under legal age shall be paid to its guardian.

(E) To the parents, if one is wholly dependent for support upon the deceased employee at the time of his death and the other is not dependent to any extent, twenty-five per centum; if both are wholly dependent, twenty per centum to each; if one is or both are partly dependent, a proportionate amount in the discretion of the commission.

The above percentages shall be paid if there is no widow, widower, or child. If there is a widow, widower, or child, there shall be paid so much of the above percentages as, when added to the total percentages payable to the widow, widower, and children, will not exceed a total of sixty-six and two-thirds per centum.

(F) To the brothers, sisters, grandparents, and grandchildren, if one is wholly dependent upon the deceased employee for support at the time of his death, twenty per centum to such dependent; if more than one are wholly dependent, thirty per centum, divided among such dependents share and share alike; if there is no one of them wholly dependent, but one or more partly dependent, ten per centum divided among such dependents share and share alike.

The above percentages shall be paid if there is no widow, widower, child, or dependent parent. If there is a widow, widower, child, or dependent parent, there shall be paid so much of the above percentages as, when added to the total percentage payable to the widow, widower, children, and dependent parents, will not exceed a total of sixty-six and two-thirds per centum.

(G) The compensation of each beneficiary under clauses (E) and (F) shall be paid for a period of eight years from the time of the death, unless before that time he, if a parent or grandparent, dies, marries, or ceases to be dependent, or, if a brother, sister, or grandchild, dies, marries, or reaches the age of eighteen, or, if over eighteen and incapable of self-support, becomes capable of self-support. The compensation of a brother, sister, or grandchild under legal age shall be paid to his or her guardian.

(H) As used in this section, the term "child" includes step-children, adopted children, and posthumous children, but does not include married children. The terms "brother" and "sister" include stepbrothers and step-sisters, half brothers and half sisters, and brothers and sisters by adoption, but do not include married brothers or married sisters. All of the above terms and the term "grandchild" include only persons who at the time of the death of the deceased employee are under eighteen years of age or over that age and incapable of self-support. The term "parent" includes step-parents and parents by adoption. The term "widow" includes only the decedent's wife living with or dependent for support upon him at the time of his death. The term "widower" includes only the decedent's husband dependent for support upon her at the time of her death. The terms "adopted" and "adoption" as used in this clause include only legal adoption prior to the time of the injury.

(I) Upon the cessation of compensation under this section to or on account of any person, the compensation of the remaining persons entitled to compensation for the unexpired part of the period during which their compensation is payable shall be that which such persons would have received if they had been the only persons entitled to compensation at the time of the decedent's death.

(J) In case there are two or more classes of persons entitled to compensation under this section and the apportionment of such compensation, above provided, would result in injustice, the commission may, in its discretion, modify the apportionment to meet the requirements of the case.

(K) In computing compensation under this section, the monthly pay shall be considered not to be more than \$100 nor less than \$50, but the total monthly compensation shall not exceed the monthly pay computed as provided in section twelve.

(L) If any person entitled to compensation under this section, whose compensation by the terms of this section ceases upon his marriage, accepts any payments of compensation after his marriage he shall be punished by a fine of not more than \$2,000 or by imprisonment for not more than one year, or by both such fine and imprisonment.

SEC. 11. If death results from the injury within six years the United States shall pay to the personal representative of the deceased employee burial ex-

penses not to exceed \$100, in the discretion of the commission. In the case of an employee whose home is within the United States, if his death occurs away from his home office or outside of the United States, and if so desired by his relatives, the body shall, in the discretion of the commission, be embalmed and transported in a hermetically sealed casket to the home of the employee. Such burial expenses shall not be paid and such transportation shall not be furnished where the death takes place more than one year after the cessation of disability resulting from such injury, or, if there has been no disability preceding death, more than one year after the injury.

SEC. 12. In computing the monthly pay the usual practice of the service in which the employee was employed shall be followed. Subsistence and the value of quarters furnished an employee shall be included as part of the pay, but overtime pay shall not be taken into account.

SEC. 13. In the determination of the employee's monthly wage-earning capacity after the beginning of partial disability, the value of housing, board, lodging, and other advantages which are received from his employer as a part of his remuneration and which can be estimated in money shall be taken into account.

SEC. 14. In cases of death or of permanent total or permanent partial disability, if the monthly payment to the beneficiary is less than \$5 a month, or if the beneficiary is or is about to become a nonresident of the United States, or if the commission determines that it is for the best interests of the beneficiary, the liability of the United States for compensation to such beneficiary may be discharged by the payment of a lump sum equal to the present value of all future payments of compensation computed at four per centum true discount compounded annually. The probability of the beneficiary's death before the expiration of the period during which he is entitled to compensation shall be determined according to the American Experience Table of Mortality; but in case of compensation to the widow or widower of the deceased employee, such lump sum shall not exceed sixty months' compensation. The probability of the happening of any other contingency affecting the amount or duration of the compensation shall be disregarded.

SEC. 15. Every employee injured in the performance of his duty, or some one on his behalf, shall, within forty-eight hours after the injury, give written notice thereof to the immediate superior of the employee. Such notice shall be given by delivering it personally or by depositing it properly stamped and addressed in the mail.

SEC. 16. The notice shall state the name and address of the employee, the year, month, day, and hour when and the particular locality where the injury occurred, and the cause and nature of the injury, and shall be signed by and contain the address of the person giving the notice.

SEC. 17. Unless notice is given within the time specified or unless the immediate superior has actual knowledge of the injury, no compensation shall be allowed, but for any reasonable cause shown, the commission may allow compensation if the notice is filed within one year after the injury.

SEC. 18. No compensation under this act shall be allowed to any person, except as provided in section thirty-eight, unless he or some one on his behalf shall, within the time specified in section twenty, make a written claim therefor. Such claim shall be made by delivering it at the office of the commission or to any commissioner or to any person whom the commission may by regulation designate, or by depositing it in the mail properly stamped and addressed to the commission or to any person whom the commission may by regulation designate.

SEC. 19. Every claim shall be made on forms to be furnished by the commission and shall contain all the information required by the commission. Each claim shall be sworn to by the person entitled to compensation or by the person acting on his behalf, and, except in case of death, shall be accompanied by a certificate of the employee's physician stating the nature of the injury and the nature and probable extent of the disability. For any reasonable cause shown the commission may waive the provisions of this section.

SEC. 20. All original claims for compensation for disability shall be made within sixty days after the injury. All original claims for compensation for death shall be made within one year after the death. For any reasonable cause shown the commission may allow original claims for compensation for disability to be made at any time within one year.

SEC. 21. After the injury the employee shall, as frequently and at such times and places as may be reasonably required, submit himself to examination by a medical officer of the United States or by a duly qualified physician designated or approved by the commission. The employee may have a duly qualified physician designated and paid by him present to participate in such examination. For all examinations after the first the employee shall, in the discretion of the commission, be paid his reasonable traveling and other expenses and loss of wages incurred in order to submit to such examination. If the employee refuses to submit himself for or in any way obstructs any examination, his right to claim compensation under this act shall be suspended until such refusal or obstruction ceases. No compensation shall be payable while such refusal or obstruction continues, and the period of such refusal or obstruction shall be deducted from the period for which compensation is payable to him.

SEC. 22. In case of any disagreement between the physician making an examination on the part of the United States and the employee's physician the commission shall appoint a third physician, duly qualified, who shall make an examination.

SEC. 23. Fees for examinations made on the part of the United States under sections twenty-one and twenty-two by physicians who are not already in the service of the United States shall be fixed by the commission. Such fees, and any sum payable to the employee under section twenty-one, shall be paid out of the appropriation for the work of the commission.

SEC. 24. Immediately after an injury to an employee resulting in his death or in his probable disability, his immediate superior shall make a report to the commission containing such information as the commission may require, and shall thereafter make such supplementary reports as the commission may require.

SEC. 25. Any assignment of a claim for compensation under this act shall be void and all compensation and claims therefor shall be exempt from all claims of creditors.

SEC. 26. If an injury or death for which compensation is payable under this act is caused under circumstances creating a legal liability upon some person other than the United States to pay damages therefor, the commission may require the beneficiary to assign to the United States any right of action he may have to enforce such liability of such other person or any right which he may have to share in any money or other property received in satisfaction of such liability of such other person, or the commission may require said beneficiary to prosecute said action in his own name.

If the beneficiary shall refuse to make such assignment or to prosecute said action in his own name when required by the commission, he shall not be entitled to any compensation under this act.

The cause of action when assigned to the United States may be prosecuted or compromised by the commission, and if the commission realizes upon such cause of action, it shall apply the money or other property so received in the following manner: After deducting the amount of any compensation already paid to the beneficiary and the expenses of such realization or collection, which sum shall be placed to the credit of the employees' compensation fund, the surplus, if any, shall be paid to the beneficiary and credited upon any future payments of compensation payable to him on account of the same injury.

SEC. 27. If an injury or death for which compensation is payable under this act is caused under circumstances creating a legal liability in some person other than the United States to pay damages therefor, and a beneficiary entitled to compensation from the United States for such injury or death receives, as a result of a suit brought by him or on his behalf, or as a result of a settlement made by him or on his behalf, any money or other property in satisfaction of the liability of such other person, such beneficiary shall, after deducting the costs of suit and a reasonable attorney's fee, apply the money or other property so received in the following manner:

(A) If his compensation has been paid in whole or in part, he shall refund to the United States the amount of compensation which has been paid by the United States and credit any surplus upon future payments of compensation payable to him on account of the same injury. Any amount so refunded to the United States shall be placed to the credit of the employees' compensation fund.

(B) If no compensation has been paid to him by the United States, he shall credit the money or other property so received upon any compensation payable to him by the United States on account of the same injury.

Sec. 28. A commission is hereby created, to be known as the United States Employees' Compensation Commission, and to be composed of three commissioners appointed by the President, by and with the advice and consent of the Senate, one of whom shall be designated by the President as chairman. No commissioner shall hold any other office or position under the United States. No more than two of said commissioners shall be members of the same political party. One of said commissioners shall be appointed for a term of two years, one for a term of four years, and one for a term of six years, and at the expiration of each of said terms, the commissioner then appointed shall be appointed for a period of six years. Each commissioner shall receive a salary of \$4,000 a year. The principal office of said commission shall be in Washington, District of Columbia, but the said commission is authorized to perform its work at any place deemed necessary by said commission, subject to the restrictions and limitations of this act.

Sec. 28a. Upon the organization of said commission and notification to the heads of all executive departments that the commission is ready to take up the work devolved upon it by this act, all commissions and independent bureaus, by or in which payments for compensation are now provided, together with the adjustment and settlement of such claims, shall cease and determine, and such executive departments, commissions, and independent bureaus shall transfer all pending claims to said commission to be administered by it. The said commission may obtain, in all cases, in addition to the reports provided in section twenty-four, such information and such reports from employees of the departments as may be agreed upon by the commission and the heads of the respective departments. All clerks and employees now exclusively engaged in carrying on said work in the various executive departments, commissions, and independent bureaus, shall be transferred to, and become employees of, the commission at their present grades and salaries.

Sec. 29. The commission, or any commissioner by authority of the commission, shall have power to issue subpoenas for and compel the attendance of witnesses within a radius of one hundred miles, to require the production of books, papers, documents, and other evidence, to administer oaths, and to examine witnesses, upon any matter within the jurisdiction of the commission.

Sec. 30. The commission shall have such assistants, clerks, and other employees as may be from time to time provided by Congress. They shall be appointed from lists of eligibles to be supplied by the Civil Service Commission, and in accordance with the civil-service law.

Sec. 31. The commission shall submit annually to the Secretary of the Treasury estimates of the appropriations necessary for the work of the commission.

Sec. 32. The commission is authorized to make necessary rules and regulations for the enforcement of this act, and shall decide all questions arising under this act.

Sec. 33. The commission shall make to Congress at the beginning of each regular session a report of its work for the preceding fiscal year, including a detailed statement of appropriations and expenditures, a detailed statement showing receipts of and expenditures from the employees' compensation fund, and its recommendations for legislation.

Sec. 34. For the fiscal year ending June thirtieth, nineteen hundred and seventeen, there is hereby authorized to be appropriated, from any money in the Treasury not otherwise appropriated, the sum of \$50,000 for the work of the commission, including salaries of the commissioners and of such assistants, clerks, and other employees as the commission may deem necessary, and for traveling expenses, expenses of medical examinations under section twenty-one and twenty-two, reasonable traveling and other expenses and loss of wages payable to employees under section twenty-one, rent and equipment of offices, purchase of books, stationery, and other supplies, printing and binding to be done at the Government Printing Office, and other necessary expenses.

Sec. 35. There is hereby authorized to be appropriated, from any money in the Treasury not otherwise appropriated, the sum of \$500,000, to be set aside as a separate fund in the Treasury, to be known as the employees' compensation fund. To this fund there shall be added such sums as Congress may from time to time appropriate for the purpose. Such fund, including all additions that may be made to it, is hereby authorized to be permanently appropriated for the payment of the compensation provided by this act, including the medical, surgical, and hospital services and supplies provided by section nine, and the transportation and burial expenses provided by sections nine and eleven. The

commission shall submit annually to the Secretary of the Treasury estimates of the appropriations necessary for the maintenance of the fund.

SEC. 36. The commission, upon consideration of the claim presented by the beneficiary, and the report furnished by the immediate superior and the completion of such investigation as it may deem necessary, shall determine and make a finding of facts thereon and make an award for or against payment of the compensation provided for in this act. Compensation when awarded shall be paid from the employees' compensation fund.

SEC. 37. If the original claim for compensation has been made within the time specified in section twenty, the commission may, at any time, on its own motion or on application, review the award, and, in accordance with the facts found on such review, may end, diminish, or increase the compensation previously awarded, or, if compensation has been refused or discontinued, award compensation.

SEC. 38. If any compensation is paid under a mistake of law or of fact, the commission shall immediately cancel any award under which such compensation has been paid and shall recover, as far as practicable, any amount which has been so paid. Any amount so recovered shall be placed to the credit of the employees' compensation fund.

SEC. 39. Whoever makes, in any affidavit required under section four or in any claim for compensation, any statement, knowing it to be false, shall be guilty of perjury and shall be punished by a fine of not more than \$2,000, or by imprisonment for not more than one year, or by both such fine and imprisonment.

SEC. 40. Wherever used in this act—

The singular includes the plural and the masculine includes the feminine.

The term "employee" includes all civil employees of the United States and of the Panama Railroad Company.

The term "commission" shall be taken to refer to the United States Employees' Compensation Commission provided for in section twenty-eight.

The term "physician" includes surgeons.

The term "monthly pay" shall be taken to refer to the monthly pay at the time of the injury.

SEC. 41. All acts or parts of acts inconsistent with this act are hereby repealed: *Provided, however*, That for injuries occurring prior to the passage of this act compensation shall be paid under the law in force at the time of the passage of this act: *And provided further*, That if an injury or death for which compensation is payable under this act is caused under circumstances creating a legal liability in the Panama Railroad Company to pay damages therefor under the laws of any State, Territory, or possession of the United States or of the district of Columbia or of any foreign country, no compensation shall be payable until the person entitled to compensation releases to the Panama Railroad Company any right of action which he may have to enforce such liability of the Panama Railroad Company, or until he assigns to the United States any right which he may have to share in any money or other property received in satisfaction of such liability of the Panama Railroad Company.

SEC. 42. The President may, from time to time, transfer the administration of this act so far as employees of the Panama Canal and of the Panama Railroad Company are concerned to the governor of the Panama Canal, and so far as employees of the Alaskan Engineering Commission are concerned to the chairman of that commission, in which cases the words "commission" and "its" wherever they appear in this act shall, so far as necessary to give effect to such transfer, be read "governor of the Panama Canal" or "chairman of the Alaskan Engineering Commission," as the case may be, and "his"; and the expenses of medical examinations under sections twenty-one and twenty-two, and the reasonable traveling and other expenses and loss of wages payable to employees under section twenty-one, shall be paid out of appropriations for the Panama Canal or for the Alaskan Engineering Commission or out of funds of the Panama Railroad, as the case may be, instead of out of the appropriation for the work of the commission.

In the case of compensation to employees of the Panama Canal or of the Panama Railroad Company for temporary disability, either total or partial, the President may authorize the governor of the Panama Canal to waive, at his discretion, the making of the claim required by section eighteen. In the case of alien employees of the Panama Canal or of the Panama Railroad Company, or of any class or classes of them, the President may remove or modify the

minimum limit established by section six on the monthly compensation for disability and the minimum limit established by clause (K) of section ten on the monthly pay on which death compensation is to be computed. The President may authorize the governor of the Panama Canal and the chairman of the Alaskan Engineering Commission to pay the compensation provided by this act, including the medical, surgical, and hospital services and supplies provided by section nine and the transportation and burial expenses provided by sections nine and eleven, out of the appropriations for the Panama Canal and for the Alaskan Engineering Commission, such appropriations to be reimbursed for such payments by the transfer of funds from the employees' compensation fund.

Approved, September 7, 1916.

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

MICHIGAN.

Under the title "Michigan Workmen's Compensation Cases" the Industrial Accident Board of that State has published its first compilation of its own rulings and the decisions of the supreme court of the State on the Compensation Act of 1912. The volume also includes matter relating to administration, practice before the commission, rules of procedure, and forms and blanks for use in reporting accidents, etc.

Chief interest naturally attaches to the decisions of the supreme court which establish the constitutionality of the law generally (*Mackin v. Detroit-Timken Axle Co.*, 153 N. W., 49, Bul. No. 189, p. 233); and its constitutionality in its application to municipal corporations (*Wood v. City of Detroit*, 155 N. W., 592; *Purdy v. Sault Ste. Marie*, 155 N. W., 597). Of high interest also is the case *Adams v. Acme White Lead & Color Works* (182 Mich., 157, 148 N. W., 485, Bul. No. 169, p. 258), in which the supreme court of the State held that the law did not permit compensation for occupational diseases, even though the body of the act did not contain the word accident. A board of arbitration had given an award in favor of the claimant in this case, which was affirmed by the Industrial Accident Board. On appeal to the supreme court, however, it was pointed out that the title restricted it to "personal injury by accident," and the award was reversed. That the board is inclined to a rather more liberal construction than the supreme court appeared also in the case *Bischoff v. American Car & Foundry Co.* (157 N. W., 34), the board in this case having awarded compensation for injuries received by a molder who undertook to point out to a machinist the place where repairs were needed, and while doing so lost a hand. The supreme court held that the work of repair was no part of a molder's employment, and that in going upon the machine he had gone without the scope of his duties and could recover nothing.

A large number of rulings are given on the points "arising out of employment," dependence, evidence, etc. In fact, the volume well meets the description given it by its own introduction as "an aid in the understanding and administration of the law," since "it substantially covers the development and administration of the compensation law up to the date of publication, July, 1916."

OHIO.

On November 1, 1915, 1,046 firms in Ohio employing a total of 222,697 persons were carrying self-insurance under the provisions of the workmen's compensation act, according to a recent report of the Department of Investigation and Statistics of the Ohio Industrial Commission.¹ In response to a request of the department for certain information relative to facilities provided for medical and hospital treatment of injured employees and also whether or not they had reinsured, 994 firms employing 221,061 persons sent in replies. Of the remaining firms, 9 are reported to have gone out of business since November 1. The returns received disclosed the fact that 284 firms employing a total of 173,762 persons had not reinsured, while 710 firms employing a total of 47,299 had reinsured. This would seem to indicate that while less than one-third (28.6 per cent) of the 994 firms were carrying insurance without reinsuring, these firms furnished employment to over three-fourths (78.6 per cent) of the 221,061 persons employed by all the firms reporting and to more than three-fourths (78 per cent) of the 222,697 employed by the total number of firms (1,046) carrying self-insurance under the State plan.

Since medical and hospital facilities may vary in the different establishments belonging to a firm, the information covering these facts is compiled for establishments. The 994 firms carrying self-insurance reported 1,017 establishments. Of these establishments, 59 reported hospitals connected with the plant (47 reported a complete hospital outfit), 34 reported an emergency dispensary only, 1 reported a physician at the plant but no hospital, while 923 reported no hospital facilities. Of the 59 establishments, 28 reported more than 1,000 employees, while of the 923 establishments the great majority (79.6 per cent) reported less than 100 employees each. Of the 1,017 establishments, only 188 (18.5 per cent) reported having contracts with outside physicians, while 619 (60.9 per cent) reported having no such contract. Fifty-three reported that they had no contract, but that they did call in the nearest physician,

¹ Ohio. Industrial Commission. Department of Investigation and Statistics, Report No. 22, April, 1916. Report on employers carrying self-insurance as provided under sec. 22 of the workmen's compensation act. Columbus, 1916. 7 pp.

while 157 made no report on this point. One hundred and forty-six reported that they had arrangements with outside hospitals; in 754 establishments (74.1 per cent) the choice of physician is allowed, with or without certain restrictions, by the person injured or his family or friends, and of this number 604 establishments (80.1 per cent) pay the physician. The returns indicated that first-aid outfits were in use in 354 (42.4 per cent) of the establishments giving information on this point.

REPORT OF COMMITTEE ON STATISTICS AND COMPENSATION INSURANCE COST OF THE INTERNATIONAL ASSOCIATION OF INDUSTRIAL ACCIDENT BOARDS AND COMMISSIONS.

The International Association of Industrial Accident Boards and Commissions was organized "to bring into closer relation with one another the various boards and commissions administering compensation laws of the United States, and to effect so far as possible uniformity of legislation and administration of such laws and to encourage and give effect to all measures looking toward the prevention of accidents and the safeguarding of plants and machinery." At the meeting held in Chicago on January 12 and 13, 1915, the committee on statistics and compensation insurance cost was created and commissioned to prepare: (1) Uniform tables for the establishment of compensation costs; (2) uniform classification of industries; (3) uniform classification of causes of injuries; (4) uniform classification of nature of injuries. The first report of the committee,¹ embracing a preliminary grouping of industries, was approved by the association at its meeting held at Seattle, September 30 to October 2, 1915, and a second report, which was submitted at the third annual meeting of the association held at Columbus, April 25 to 28, 1916, has just been published as Bulletin 201 of the United States Bureau of Labor Statistics.² This report is signed by the members of the committee, who were as follows:

E. H. Downey, chairman, special deputy, Pennsylvania insurance department, Harrisburg, Pa.

Royal Meeker, Commissioner of Labor Statistics, Washington, D. C.

Robert K. Orr, manager State accident fund, Lansing, Mich.

W. N. Magoun, general manager Pennsylvania compensation rating and inspection bureau, Philadelphia, Pa.

¹ The first report of the committee was printed in full in the November, 1915, issue of the MONTHLY REVIEW, pp. 28-37.

² Report of committee on statistics and compensation insurance cost of the International Association of Industrial Accident Boards and Commissions. United States Bureau of Labor Statistics, Bulletin 201. Washington, 1916. 128 pp.

H. E. Ryan, associate actuary, State insurance department, New York City.

Floyd L. Daggett, chairman, industrial insurance commission, Olympia, Wash.

Fred C. Croxton, chief statistician, industrial commission, Columbus, Ohio.

L. W. Hatch, chief statistician, industrial commission, Albany, N. Y.

E. E. Watson, actuary, industrial commission, Columbus, Ohio.

In its work the committee had the benefit of the cooperation of the Casualty Actuarial and Statistical Society of America and the Workmen's Compensation Service Bureau. This latter organization has done much to bring about uniform classification of industries, and the original classification issued by it was taken as the basis by the committee in working out a classification of industrial processes.

The work of the committee was guided by the accepted principle that statistics of industrial accidents should serve for accident prevention, for the due administration and intelligent revision of workmen's compensation laws, and for the computation of compensation insurance rates. To this end the committee recommends that accident statistics be analyzed by industries, by cause of accident, and by nature and location of injury, and the extent of disability, and cross analyzed so as to show the correlation of each of these sets of facts with each other.

After the approval of the first report of the committee on statistics and compensation insurance cost by the association in its annual meeting at Seattle, in 1915, there remained for the committee the preparation of the final subdivisions of classifications under each of the various industry groups, the preparation of classifications of causes of accidents and of nature of injuries and the drafting of uniform tables for the presentation of accident and compensation statistics. All of these subjects, except the drafting of uniform tables, in which the committee is now engaged, are covered in the report under review.

It is believed that these classifications, necessarily the result of compromise, will serve the most important needs of industrial accident statistics. They are the fruit of much thought and discussion by experienced statisticians. They have made use of whatever was best and applicable to American conditions in the official classifications of the United States and Europe. All are designed to admit of contraction or expansion according to the varied needs and facilities of the different administrative boards.

The industry classifications are presented under seven principal divisions or primary headings, including (A) Agriculture, (B) Mining and quarrying, (C) Manufacturing, (D) Construction, (E) Transportation and public utilities, (F) Trade, (G) Service. The 7 divisions are divided into 43 schedules, these secondary headings explaining the details into which the primary headings are separated. For example, the primary heading "Manufacturing" is divided into 18 schedules, such as lumber and wood, leather, textiles, chemicals, paper, etc. The group headings, of which there are 272, are the most important in the series, and show a refinement of the secondary headings. Each group heading is intended to be significant of the industries covered under it. The final subdivision consists of the classifications of industries appearing in the manuals used by insurance companies in connection with their writing of workmen's compensation insurance. These final subdivisions are of special value to industrial accident boards and commissions, serving as an index to show what industries are intended to be covered by the respective groups. Opposite each industrial process is printed the Workmen's Compensation Manual code number given to that process in the manual, in order to facilitate the work of translation and comparison of accident statistics recorded under the classification of the Committee on Statistics and Compensation Insurance Cost with those of the Workmen's Compensation Service Bureau, since it was impossible for the latter to make this classification conform exactly with the classification adopted by the committee.

The whole purpose of a classification of accidents by causes is accident prevention. The committee recommends that for the sake of uniformity accidents be assigned to the proximate cause, namely, "to that condition or circumstance the absence of which would have prevented the accident; but if there be more than one such condition or circumstance, then to the one most easily prevented."

The causes of accidents have been grouped into 12 divisions, as follows: I. Machinery; II. Boilers and steam-pressure apparatus; III. Vehicles; IV. Explosives, electricity, fires, and hot and corrosive substances; V. Poisonous substances; VI. Falls of persons; VII. Stepping on or striking against objects; VIII. Falling objects; IX. Objects being handled; X. Hand tools; XI. Animals; XII. Miscellaneous causes. These, again, have been subdivided into general classes. Machinery, for instance, is divided into prime movers, power-transmission apparatus, power-working machinery, hoisting apparatus and conveyors, and miscellaneous machinery. A detailed analysis of machine accidents by manner of occurrence and by part of machine on which the accident occurred is recommended. Inas-

much as experience has shown that both in the United States and abroad machinery of all descriptions accounts for not more than one-fourth of the industrial accidents, the committee gives considerable attention to nonmachine accidents.

The committee has recommended four classifications of accidental injuries, as distinguished from the accidents themselves, namely, the location of injury or part of body injured, the nature of injury, the extent of disability, and, as a subdivision of the last, the degree of partial disability. In assignment of the location of injury, the committee has followed the common anatomical divisions, beginning with the head and ending with the feet. Special provision has been made for injuries involving two or more parts. The nature of injury classification is confined to the injuries sustained at the time of the accident, and is designated by popular rather than technical medical terms. Special provision is recommended for infections, so that the infection shall be correlated with the nature of injury and also with the extent of disability. With respect to extent of disability, injuries are divided into the generally recognized classes of fatalities, permanent total disabilities, permanent partial disabilities, temporary total disabilities, and temporary partial disabilities. Permanent disabilities are further divided into dismemberment and others.

The report includes appendixes briefly setting forth the resolutions in regard to accident and workmen's compensation adopted by the National Association of Industrial Accident Boards and Commissions at Chicago, January 12 and 13, 1915; resolutions adopted at the joint conference on standardization of accident reports and tabulations, held at Chicago, October 12 and 13, 1914; and definitions of injuries and methods of tabulating the various kinds of injuries and compensation payments in use by the Workmen's Compensation Service Bureau.

The report includes a comprehensive and exhaustive index with cross references to facilitate the work of finding a desired classification.

PREVENTION OF INDUSTRIAL ACCIDENTS.

The safety movement is in a state of constant evolution. As new machinery is devised and new methods are adopted to meet the demands of an era of unparalleled industrial progress accident hazards are multiplied and the necessity for protecting the men who toil presents a problem of considerable magnitude which must be met adequately and conclusively if industry is to be freed of the large proportion of the preventable accidents which have heretofore been charged against it. To this end the safety-first movement has

in recent years been developed along practical lines; studies have been made by industrial engineers, safety inspectors, and others familiar with the problems to be met; safety rules and regulations covering processes and occupations in various types of establishments have been formulated, machinery has been guarded, and attention has been given to proper sanitation, lighting, heating, ventilation, welfare work, hospital and first-aid equipment, and to other factors vitally necessary to an efficient working force.

In furtherance of this safety first or accident prevention campaign, two books have been recently issued, one entitled "Practical Safety Methods and Devices"¹ and the other "Industrial Accident Prevention,"² each of which seeks to present an authoritative statement of accident prevention methods proved by actual experience to be effective and practical. Although not particularly the aim of the author, the first book perhaps more than the second appeals to the layman who is interested in the study of safety methods and their adaptation to specific industries. There are many illustrations. The other book is particularly useful to the employer, engineer, superintendent, and foreman who is not only looking for practical workable methods but who seeks definite and detailed suggestions for putting them into actual use. It is illustrated with over 650 photographs and diagrams.

Accident prevention, it is stated, is now receiving considerable attention in this country and it has been demonstrated by employers, safety engineers, and accident indemnity companies that it is practicable, profitable, and humane to prevent a very large proportion of such accidents. The volume on "Practical Safety Methods and Devices" has been prepared to provide employers, superintendents, foremen, underwriters, safety inspectors, and engineers generally a convenient descriptive and illustrative summary of standard safety methods and devices as developed and perfected by those who have specialized in the subject of accident prevention. It is the result of observation made in hundreds of mills and manufacturing establishments, in building and construction work, railroad operation, handling explosives, and mining. It is not an exhaustive study, but aims to present general principles in such a manner as to be useful in special and exceptional applications not specifically described.

The author points out that safety engineering has become a well established profession; that safety is essential to efficiency; that education is the keynote to universal safety, emphasizing the fact that the public school is the logical starting point for this educational cam-

¹ Practical Safety Methods and Devices; Manufacturing and Engineering, by George Alvin Cowee. New York, Van Nostrand Co., 1916. 464 pp. Illustrated. \$3, net.

² Industrial Accident Prevention, by David Stewart Beyer. New York and Boston, Houghton Mifflin Co., 1916. 421 pp. Illustrated. \$10, net.

paign; that 90 per cent of all work accidents are actually preventable, 30 per cent by means of safeguards and 60 per cent by the proper education of employees in matters pertaining to safety; and suggests that if these methods are used to check the waste indicated in the paragraph quoted from the preface, "employers of labor may expect to ultimately save the entire cost of insurance on these preventable accidents. Employees may also expect to save at least 75 per cent of the losses in wage now incurred by these casualties."

The author cites the following illustration to emphasize his point that accident prevention is a paying investment.

The most striking proof of this statement is revealed in the experience of the United States Steel Corporation. Approximately \$5,000,000 was expended during the last eight years by the subsidiary companies of the corporation for the installation of safety devices and the adoption of accident-prevention measures. In three years the safety work resulted in the prevention of 6,308 accidents which would have otherwise occurred if the accident ratio of preceding years had been maintained. In other words, the accident rate has been reduced approximately 40 per cent during the past five years. Likewise, the saving in casualty expense over expenditures for safety, during the past three years, has been over 35 per cent. When we consider, in connection with this exhibit, that the compensation to injured workmen during this period was materially increased, the emphatic conclusion is that safety pays.

In the campaign for safety it is believed that the education of employees should receive the first consideration, and this may be effected through the organization, in each plant, of a safety committee made up of workmen, such committee to investigate all accidents and consider methods of prevention, warn fellow workmen against unsafe practices, and to report all suggestions and recommendations to the safety department. The organization of a central safety committee to have general charge and supervision of all safety work, including the carrying on of an educational campaign among the employees, is also recommended. These safety committees are regarded as of great service not only in the prevention of accidents but also in the increase of efficiency of the workers and in the promotion of universal good will. In mentioning some general observations looking to the promotion of safety the author suggests that the safeguarding of machinery and work places is one of the best investments that an employer can make, for it is to his interest, as well as to the interest of his employees, to maintain safe conditions in his factory; that danger signs should be displayed wherever necessary; that workmen should be cautioned to wear proper clothing; that congested work places should be eliminated; that intoxicants should be avoided; that workmen should not be allowed to become fatigued at their work; that concentration of mind and eye should be taught; that discipline should be maintained; that periodical inspections should be

made; that children should be taught in the art of self-preservation from public and industrial dangers; that the public generally should be impressed with the importance of the safety problem.

Following chapters on buildings and fire hazard, exit fire drills, and the organization of fire brigades, the author enters into a detailed description of the use and operation of various kinds of tools and machines, and of occupations involving danger to workmen, including in each chapter suggestions and rules to be observed to promote safety. These chapters cover: Boilers, engines, elevators, electricity, transmission, machine tools, grinding machinery, woodworking machinery, common machines, iron and steel, handling and storing material, construction work, steam and electric railroads, mining and quarrying, and explosives. There is a chapter embracing 21 rules for foremen and 60 general rules to be observed in the prevention of accidents. Suggestions as to sanitation, illumination, heating, ventilation, and welfare work are given, as well as precautions to be taken against occupational diseases, and the necessity of organizing adequate first-aid work, together with an outline of the symptoms and treatment of different injuries, including eye injuries, electric shock, infection, hemorrhage, shock, contusions or bruises, wounds, fractures, dislocations, sprains, strains, hernia or rupture, burns or scalds, poisoning, fainting, epileptic fits, apoplectic fits, and sun-stroke.

The author of "Industrial Accident Prevention" confines himself almost exclusively to a presentation of this subject, but describes in a general way such related subjects as sanitation, relief, and welfare work, and hospital and first-aid equipment. The first part is devoted to a discussion of general phases of the accident problem, including a chapter on compensation legislation, accident waste versus accident prevention, causes of accidents, engineering provisions, and plant arrangement. Parts II to VII, inclusive, deal, respectively, with building construction and arrangement; power generation and distribution; machine construction and arrangement; special industries; fire hazard; and explosion hazard. Part VIII takes up personal elements to be considered in accident prevention and presents chapters on safety education; inspection; eye protection; housekeeping, hand labor, etc.; hospital and first-aid equipment; resuscitation; occupational diseases; sanitation and welfare work.

Following a chapter outlining briefly the history and scope of various compensation laws affecting industrial accidents, in which it is pointed out that compensation legislation has stimulated accident prevention, the author presents figures showing that it is more profitable for employers to introduce preventive measures than it is to compensate injured workmen and otherwise meet the enormous ex-

pense involved in accident waste. Among others, the experience of the Eastman Kodak Co. is given, which in 1914 reduced the number of accidents 75 per cent from the total in 1910.

In presenting a list of 90,168 injuries which occurred in Massachusetts during one year, the author makes the point that approximately one-third were mechanical—that is, they occurred on machines, shafting, gearing, etc.—and the other two-thirds were nonmechanical. However, he concludes from this and other data that from the standpoint of seriousness industrial accidents are divided about equally between mechanical and nonmechanical. This conclusion—

indicates that after all possible mechanical safeguards have been installed there will still remain a large percentage of accidents which can not be prevented by mechanical means. There is an effective way to reach such accidents, however, which is equally important with the installation of mechanical safeguards; that is the education of the workmen in the exercise of greater care for the avoidance of injuries to themselves and their fellow-workmen. * * * To summarize, * * * 50 per cent of our present industrial accidents are preventable—25 per cent by mechanical safeguards and 25 per cent by education.

Emphasis is placed upon the responsibility of the modern industrial engineer for efficiency in construction and operation and the elimination of needless expense and waste, necessitating familiarity with improved safety practice and ability to apply it to his current work.

The author deplors the fact that “a large percentage of the buildings which have been erected in the past, and many of those which are now being erected even by architects of good reputation, are decidedly lacking in one or both” of the following two considerations which are regarded as of paramount importance in combating the fire hazard:

1. The design of the building and the materials used in its construction should, so far as practicable, prevent the rapid spread of fire.
2. Sufficient exit facilities of a safe and dependable type should be provided to enable all the occupants of a building to leave it quickly in case of fire.

Suggestions are given as to designs, materials, and exit facilities.

In some detail the author discusses the causes of the collapse or failure of building structures, and the necessity for good lighting and adequate ventilation, which, it is pointed out, tends to reduce the alertness of the workmen and bring on fatigue which in turn causes serious accidents.

Accident prevention in relation to specific industries, occupations, and equipment is taken up in a series of chapters presenting an exhaustive fund of suggestions looking to the minimizing or elimination of the hazards to which workmen are constantly exposed. These

chapters include boiler equipment, engine equipment; electricity; power control—quick-stopping devices, etc.; protection of power transmission equipment; cast iron and steel; machine design and guards for machine hazards; cranes; elevators; punch presses; machine shop and blacksmith shop equipment; carpenter shop and woodworking equipment; abrasive wheels; ladders and scaffolding; ropes, slings, chains, hooks, etc.; iron and steel works; foundries; wire-mill equipment; railroad equipment; chemical works, laboratories, etc.; textile equipment; leather and shoe industries; gas works; contracting; laundries; refrigerating plants; paper industry, printing, etc.; candy factories; mining. Two chapters are devoted to fire hazard—fire prevention and fire extinguishing, and fire drills and fire alarm systems, and four chapters present suggestions as to explosion hazard, namely, explosives, explosive dusts, celluloid and celluloid goods manufacture, and volatile and inflammable liquids.

The author believes that the formation of safety committees among the workmen is one of the most effective methods of safety education because they result "in the development throughout the working organization of a body of wide-awake men who are genuinely interested in looking out for their own safety as well as that of their fellow workmen." Other effective methods are accident pictures, safety bulletins, safety talks, and safety signs and slogans. The organization of an inspection service within the plant is considered of great value since it is effective not only from the standpoint of eliminating accident hazards, but also from that of educating the personnel of the working forces along accident prevention lines. The large number of accidents affecting the eyes prompted the author to devote a chapter to the subject of eye protection. Directions for first-aid treatment, covering the different kinds of injuries to which workmen are susceptible, are given in a chapter on hospital and first-aid equipment. Methods of resuscitation are set forth.

A list of common occupational diseases is presented showing that in the British factories for the years 1911 to 1913, out of a total of 2,036 cases, 1,791 were due to lead poisoning, and in this connection the author devotes the major portion of his chapter on occupational diseases to a consideration of this particular disease, giving the symptoms, preventive measures and a set of rules and other information prepared by the Massachusetts General Hospital to be posted under the following caption: Advice to persons working with lead or with lead paints.

The volume concludes with a short chapter on sanitation and welfare work, and one giving a list of safety organizations, publications, etc.

TRINITROTOLUOL MANUFACTURING: PRECAUTIONARY MEASURES.¹

TNT is the abbreviation for trinitrotoluol,² a highly poisonous substance used in the manufacture of explosives. In its manufacture illness is due principally to escape of (1) nitrous fumes evolved mainly in the manufacture of nitric acid and during the dilution of the TNT waste acids, and (2) chlorine and compounds of chlorine given off at the commencement of working each charge when not thoroughly absorbed in the towers. The pamphlet under review suggests precautionary measures against poisoning and gives instructions as to accidents, minor injuries, use of air helmets, use of oxygen cylinder, artificial breathing, the treatment of cases of gasing by nitrous fumes,³ instruction for first-aid attendants, and 11 rules suggesting how to avoid the effects of TNT poisoning.

Illness as a result of this poison, it is stated, may result from (1) general effects on the constituents of the blood, and (2) local effects—dermatitis or eczema. Absorption of poison takes place by inhalation of vapor or dust, by contact with the skin and by the alimentary canal. Effective ventilation largely overcomes the first; through proper provision and maintenance of clothing, washing facilities and meal room accommodation the second may be controlled. The eating of potatoes, green vegetables and uncooked fruits and the drinking of orange or lemon juice are recommended as effective in minimizing the last named method of absorption.

Symptoms, it is declared, may develop quickly, especially where there has been exposure in a confined space, in which case the best treatment seems to be inhalation of oxygen, a cylinder of which should be kept in readiness. In some workers an irritating rash on the arms is caused by trinitrotoluol, but evidence has accumulated to show that if washing facilities are suitable and are regularly used by the workers, the hands being thoroughly dried afterwards, occurrence of eczema is rare.

Emphasis is laid upon the importance of reporting all injuries, however trivial, to the foreman, and that the workmen should also report (1) a persistent cough due to no known cause, (2) unaccustomed shortness of breath, (3) fatigue not explained by exertion, and (4) pains coming on suddenly in the feet and legs.

Such symptoms should not be disregarded because they are trivial. In fact, they are only trivial if attended to in time. They may indicate the slight beginnings of poisoning, the effects of which rapidly become serious if the poisonous influences are not counteracted.

¹ Great Britain. Home Office. Factory Department. Trinitrotoluol Manufacturing. Precautionary measures. [London] March, 1916. 22 pp. Illustrated.

² A brief statement of symptoms of trinitrotoluol poisoning and preventive measures to be adopted appeared in the MONTHLY REVIEW for June, 1916, p. 84.

³ This subject was covered briefly in the MONTHLY REVIEW for June, 1916, p. 87.

In the case of minor injuries causing abrasion of the skin, however slight, the worker is not to touch, wash, or attempt to dress the wound; he or she is to go to the nearest place where first-aid dressings are kept and have the wound attended to by the person in charge of the first-aid dressing box.

Remedies for acid burns must be applied very promptly. The utmost care is to be used in dealing with acid burns to the eyes. When any acid gets into the eyes they are to be attended to at once by the person in charge of the first-aid dressing box.

The danger from nitrous fumes is recognized, and the pamphlet contains certain specific instructions in this connection.

1. Workmen are warned against breathing brown acid fumes.
2. Always put on the air helmet before repairing leaks or entering or remaining in a part of the room heavily charged with the fumes.
3. The fumes, if breathed, may cause shortness of breath some hours later and lead to serious illness.
4. If these symptoms develop at home, send at once for a doctor and meanwhile keep in the open air as much as possible.
5. If they develop at the works, send at once for the doctor.
6. Keep the air helmet handy and in good repair, as you never know when you may want it.

There is an appendix setting forth the Home Office regulations applying in factories where trinitrotoluol is manufactured.

FIFTH ANNUAL SAFETY CONGRESS OF THE NATIONAL SAFETY COUNCIL.

The fifth annual safety congress of the National Safety Council will be held in the Statler Hotel, Detroit, October 17 to 20, inclusive. The program will be presented in sectional meetings, with addresses and general discussion, relating to the chemical industry, foundries, iron and steel, mining, public utilities, steam railroads, health service, electric railways, paper and pulp, textiles, cement, employees' benefit associations, governmental; logging, lumbering and wood-working; and public safety. The program includes the following principal addresses:

CHEMICAL SECTIONAL MEETING (OCT. 18, MORNING).

Health problems in the chemical industry, by Dr. George M. Price, Joint Board of Sanitary Control, New York City.

The goggle problem in the chemical industry, by J. R. de la Torre Bueno, General Chemical Co., New York City.

Care of workmen employed in the manufacture of aniline and benzol products, by A. B. Mitchell, Benzol Products Co., Marcus Hook, Pa.

Fume poisoning from nitric and mixed acids, by L. A. De Blois, E. I. du Pont de Nemours & Co., Wilmington, Del.

FOUNDRY SECTIONAL MEETING (OCT. 18, MORNING).

Employment problem as related to safety.

Strains, sprains, and burns, by S. W. Ashe, General Electric Co., Pittsfield, Mass.

Crane and chain practices, by F. H. Elam, American Steel Foundries, Chicago, Ill.

Eye protection, by F. W. Shepard, American Cast Iron Pipe Co., Birmingham, Ala.

Alcohol versus safety, by Dr. H. P. Hourigan, surgeon, Larkin Co., Buffalo, N. Y.

Foundry sanitation, by J. F. Alexander, The Metal Trades Safety Association, Toronto, Canada.

IRON AND STEEL SECTIONAL MEETING.

(Oct. 18, morning.)

Progress of safety in iron and steel industry (illustrated with lantern slides), by Lucian W. Chaney, United States Department of Labor.

Safety in blast furnace operation, by F. H. Wilcox, United States Bureau of Mines.

Safety in Bessemer operations, by J. H. Ayres, National Tube Co., National Works, McKeesport, Pa.

Safety in open hearth operations.

(Oct. 19, morning.)

Achievements and possibilities of accident prevention in American industries, by F. L. Hoffman, LL. D., Prudential Life Insurance Co., Newark, N. J.

Employment, by A. H. Young, Illinois Steel Co., South Chicago, Ill.

Origin of safety methods and prevention of infection, by Dr. C. C. Booth, chief surgeon, Republic Iron & Steel Co., Youngstown, Ohio.

The duties of the visiting nurse, by Miss Florence Wright, Clark Thread Co., Newark, N. J.

(Oct. 20, morning.)

Safety in rolling mill operations, by Charles R. Hook, American Rolling Mill Co., Middletown, Ohio.

Electric hazards, by D. M. Petty, Bethlehem Steel Co., South Bethlehem, Pa.

Safety in coke oven operations, by K. M. Burr, Illinois Steel Co., Gary, Ind.

Police and fire, by G. W. Atwood, Youngstown Sheet & Tube Co., Youngstown, Ohio.

MINING SECTIONAL MEETING.

(Oct. 18, morning.)

Accident statistics, by Albert H. Fay, United States Bureau of Mines.

Mine safety signs and signals, by D. J. Parker and Edwin Steidle, United States Bureau of Mines.

Qualifications of a mine foreman, by J. W. Paul, consulting engineer, Pittsburgh, Pa.

Workmen's compensation and its effect on safety in mining, by H. M. Wilson, the Associated Companies, Pittsburgh, Pa.

Mine accidents and their prevention, by H. G. Davis, Delaware, Lackawanna & Western Railroad, Kingston, Pa.

Relation of workmen's compensation laws to accident prevention movement, by Dr. F. D. Patterson, Pennsylvania Department of Labor and Industry, Harrisburg, Pa.

Underground sanitation at the mines, by W. A. Borchard, Austinville, Va.

(Oct. 19, morning.)

Safety in hoisting and slope haulage, by O. P. Hood, United States Bureau of Mines.

Mine inspection, by William H. Jobe, mine inspector, Crystal Falls, Mich.

Welfare work, by E. E. Bach, Ellsworth Collieries Co., Ellsworth, Pa.

Mine fires and their recovery, by Prof. J. C. Roberts, Colorado School of Mines, Golden, Colo.

Mine rescue apparatus—its value as a safety measure, by Oscar Cartledge, Ottawa, Ill.

Metal mine accidents and their prevention, by Prof. F. W. Sperr, School of Mines, Houghton, Mich.

Education of miners in safety, by C. S. Stevenson, Cleveland Cliffs Iron Co., Ishpeming, Mich.

PUBLIC UTILITIES SECTIONAL MEETING.

(Oct. 18, morning.)

Station safeguarding, by Charles Penrose, Philadelphia Electric Co., Philadelphia, Pa.

Accident prevention in the commercial department of a large gas company, by C. W. Clabaugh, Omaha Gas Co., Omaha, Nebr.

Safety from the economic standpoint, by B. Frank Day, Philadelphia Electric Co., Philadelphia, Pa.

Safety wrinkles around gas works, by G. I. Vincent, Des Moines Gas Co., Des Moines, Iowa.

STEAM RAILROAD SECTIONAL MEETING.

(Oct. 18, morning.)

The prevention of accidents, by R. C. Richards, Chicago & North Western Railway, Chicago, Ill.

The American railroad passenger: (1) What the railroads have done and are doing for his safety; (2) What he should do for his own safety, by G. L. Wright, Chicago, St. Paul, Minneapolis & Omaha Railroad, St. Paul, Minn.

Railroad trespassing—Its prevention a public duty, by A. A. Krause, Missouri, Kansas & Texas Railway, St. Louis, Mo.

(Oct. 18, afternoon.)

Railway crossing accidents: (1) Their cause; (2) How they can be reduced, by John S. Rockwell, Buffalo, Rochester & Pittsburgh Railway, Rochester, N. Y.

How should the members of safety committees be selected and for what length of time should they serve? by E. R. Scoville, Baltimore & Ohio Railroad, Baltimore, Md.

In order to secure the best results in safety work what should be the relation of the railroad company and its officers to the safety first organization? by J. M. Guild, Union Pacific Railroad, Omaha, Nebr.

(Oct. 19, morning.)

The most frequent causes of injury to track and bridgemen and the best way to eliminate these causes, by Charles T. Banks, Erie Railroad Co., New York City.

Shop accidents: (1) What has been accomplished in their reduction; (2) How was it done and what more can be accomplished? by B. C. Winston, Wabash Railway Co., St. Louis, Mo.

How shall injuries resulting from train operation other than collisions and derailments be prevented? by F. M. Metcalfe, Northern Pacific Railway Co., St. Paul, Minn.

(Oct. 19, afternoon.)

How to make safety committee meetings interesting, by W. C. Wilson, Delaware, Lackawanna & Western Railway Co., New York City.

The national safety council: (1) What service does it render its members and how can that service be improved? (2) What it is doing for the public, by G. S. Locker, Duluth & Iron Range Railroad, Two Harbors, Minn.

HEALTH SERVICE SECTIONAL MEETING.

(Oct. 18, afternoon.)

Health service work as an efficiency factor, by Dr. Otto P. Geier.

Health education, by Dr. L. G. Shoudy, chief surgeon, Bethlehem Steel Co., South Bethlehem, Pa.

Physical examination of employees, by Dr. Wilbur E. Post, chief medical adviser, Peoples Gas, Light & Coke Co., Chicago, Ill.

First aid, by Dr. J. C. Bloodgood, Johns Hopkins University, Baltimore, Md.

Occupational diseases, by Dr. E. R. Hayhurst, Ohio State Board of Health, Columbus, Ohio.

Health insurance, by A. W. Whitney, National Workmen's Compensation Service Bureau, New York City.

(Oct. 19, afternoon.)

The company doctor, by Dean Samuel S. Marquis, Ford Motor Co., Detroit, Mich.

Employment, medical supervision, and safety, by L. A. Phelps, The Avery Co., Peoria, Ill.

Industrial hospital and dispensaries, by Dr. R. C. Cabot, Boston, Mass.

Hernia, by Dr. James Burry, chief surgeon, Illinois Steel Co., Chicago, Ill.

Dental work in the industries, by Dr. Lee K. Frankel, Metropolitan Life Insurance Co., New York City.

(Oct. 20, afternoon.)

Relationship of health to industry, by Dr. W. A. Evans, Chicago Tribune, Chicago, Ill.

Medical supervision of workmen, by Dr. Harry E. Mock, chief surgeon, Sears, Roebuck & Co., Chicago, Ill.

Reduction of health hazards, by Dr. Francis D. Patterson, Pennsylvania Department of Labor and Industry, Harrisburg, Pa.

Standards of industrial hygiene, by Dr. J. W. Schereschewsky, United States Public Health Service.

ELECTRIC RAILWAY SECTIONAL MEETING.

(Oct. 19, morning.)

How the attitude of the public toward the railroad company is influenced by systematic safety work, by Russel A. Sears, Boston Elevated Railway Co., Boston, Mass.

How graphic charts and bulletins help in safety education, by Harold W. Clapp, Columbus Railway, Power & Light Co., Columbus, Ohio.

Safety and efficiency—How a new member tackles the problem, by Julien H. Harvey, Kansas City Railway Co., Kansas City, Mo.

How the safety movement is helping the electric railway industry meet its problems, by Prof. H. H. Norris, Electric Railway Journal, New York City.

(Oct. 19, afternoon.)

The application of the national electric safety code to electric railway construction and operation, by W. J. Canada, United States Bureau of Standards.

Safety devices on electric street and interurban cars, by Charles H. Cross, Milwaukee Electric Railway & Light Co., Milwaukee, Wis.

Warnings at interurban and obstructed crossings.

Hazards of power houses and car barns and their remedies.

Methods of instructing new motormen in their duties, by H. B. Adams, Aurora, Elgin & Chicago Railway, Aurora, Ill.

PAPER AND PULP MANUFACTURERS' SECTIONAL MEETING.

(Oct. 19, morning.)

Paper mill lighting.

Guarding of electrical and steam machinery in paper mills.

Various types of calendar guards.

Elevators—How used and how to avoid accidents while being used.

Paper mill ventilation.

(Oct. 20, morning.)

Safety committee work in paper mills.

Maintaining interest in safety bulletin boards.

Safety in the Ontario pulp and paper manufacturers' plants.

Relation of the eight-hour day to safety.

Health and surgical problems of the paper industry.

TEXTILE SECTIONAL MEETING (OCT. 19, MORNING).

The safety work of the Ludlow Manufacturing Associates, by B. B. Fogler, Ludlow Manufacturing Associates, Ludlow, Mass.

Safety in southern cotton mills, by G. D. Bragdon, General Accident, Fire & Life Assurance Co., Philadelphia, Pa.

CEMENT SECTIONAL MEETING (OCT. 20, MORNING).

What has been accomplished by cement companies in safety work, by Robert Brinton Hill, Portland Cement Association, Chicago, Ill.

Electrical hazards, by R. J. Young, Universal Portland Cement Co., Chicago, Ill.

Safe practices in quarry and mill.

EMPLOYEES' BENEFIT ASSOCIATION SECTIONAL MEETING (OCT. 20, MORNING).

The mutual value to employer and employee of a benefit association, by J. N. Redfern, Chicago, Burlington & Quincy Railroad Co., Chicago, Ill.

The essential features of organizing benefit associations, by W. L. Chandler, Dodge Manufacturing Co., Mishawaka, Ind.

The statistical basis for assessments and benefits, by J. M. Eaton, Cadillac Motor Car Co., Detroit, Mich.

The doctor's work in a benefit association.

GOVERNMENTAL SECTIONAL MEETING (OCT. 20, MORNING).

Standardizing accident records, by Royal Meeker, United States Commissioner of Labor Statistics.

The accident problem as it concerns the general public, by Frederick L. Hoffman, Prudential Life Insurance Co., Newark, N. J.

Standardized Federal and State safety regulation, by E. B. Rosa, United States Bureau of Standards.

Marine safety regulations.

LOGGING, LUMBERING, AND WOODWORKING SECTIONAL MEETING (OCT. 20, MORNING).

Interesting the manufacturer in accident prevention work, by F. D. Campau, Furniture Manufacturers' Association, Grand Rapids, Mich.

Possibilities of preventing accidents in logging camps, through educational means, by J. J. Lingle, Westboro Lumber Co., Westboro, Wis.

How to organize a sawmill for safety, by F. A. Barker, Lumberman's Mutual Casualty Co., Chicago, Ill.

Safeguarding the most hazardous machines in woodworking plants, by Henry Burr, T. H. Mastin & Co., Kansas City, Mo.

Safe practices in lumber yards, by B. C. Christy, International Harvester Co., Chicago, Ill.

PUBLIC SAFETY SECTIONAL MEETING (OCT. 20, MORNING).

Public safety work of public service companies, by H. A. Bullock, Brooklyn Rapid Transit Co., Brooklyn, N. Y.

Ideal organization for public safety in a community, by Robert W. Campbell, Illinois Steel Co., Chicago, Ill.

Street traffic regulations as related to public safety, by William P. Eno, international traffic expert, Saugatuck, Conn.

Public safety education in the public schools, by R. B. Morley, Ontario Safety League, Toronto, Canada.

Practical aspects of public safety work, by Dr. William Burgess, Public Safety Commission of Chicago and Cook County, Chicago, Ill.

GERMAN WORKMEN'S INSURANCE CODE: AMENDMENTS RELATING TO INVALIDITY INSURANCE.

The bulletin (*Amtliche Nachrichten*) of the German Imperial Insurance Office, of July 15, 1916, reprints a federal law of June 12, 1916 (R. G. Bl. No. 127, p. 525), which makes several vital changes in those provisions of the workmen's insurance code which relate to old-age, survivors', and invalidity pensions.

The age limit for the payment of pensions is reduced from 70 to 65 years. The provision limiting the increase of the invalidity pension for children of dependents under 15 years of age to one and one-half times the amount of the invalidity pension has been removed, permitting an increase of one-tenth in the invalidity pension for each child without regard to number. The share of the invalidity institutes in providing pensions for orphans has been made a fixed rate for each orphan instead of a diminishing rate corresponding to the increase in the number of orphans. To provide for this increase in pensions, the weekly contributions of the insured in the different wage classes have been increased as follows:

Wage Class I, from 16 pfennigs (\$0.038) to 18 pfennigs (\$0.043).

Wage Class II, from 24 pfennigs (\$0.057) to 26 pfennigs (\$0.062).

Wage Class III, from 32 pfennigs (\$0.076) to 34 pfennigs (\$0.081).

Wage Class IV, from 40 pfennigs (\$0.095) to 42 pfennigs (\$0.100).

Wage Class V, from 48 pfennigs (\$0.114) to 50 pfennigs (\$0.119).

Articles 1294 and 1295, limiting survivors' pensions to a specified maximum, have been abrogated. Each person under the law must make contributions for a certain period, termed "waiting period," before entitled to a pension. Persons above a certain year of age at the time the system became effective as to them were credited with a certain number of weeks of waiting period for each year of their age in excess of 40 years. The new law lowers this age limit to 35 years, thereby reducing the period of actual contribution necessary in order to entitle to a pension.

The law also amends certain financial provisions of the code as to the keeping of reserves and the admission of special insurance institutes as carriers of the insurance.

The amendments of the new law as to weekly contributions and general reserve become effective January 1, 1917, and all of its other provisions on January 1, 1916. Claims as to old-age and orphans' pensions, and orphans' settlements pending on the day of the promulgation of the new law are subject to the provisions of the latter. Old-age pensions awarded under the new law do not, however, begin earlier than January 1, 1916.

A complete translation of the German Workmen's Insurance Code was published in Bulletin 96 of this bureau. At the time of the publication of this bulletin the Workmen's Insurance Code was in force only in so far as the measures for its administration were concerned. The provisions of book 4 (invalidity and survivor's insurance) and those of book 5, which regulate the relations of the carriers of the invalidity and survivors' insurance to the other insurance carriers, came into force on January 1, 1912. The third book of the code, relating to accident insurance, and that part of the fifth book which regulates the relations of the accident insurance carriers with the carriers of sickness insurance, became effective January 1, 1913, and the second book (sickness insurance) and all remaining provisions of the Insurance Code, came into force January 1, 1914 (R. G. Bl. 1912, No. 44).

A translation of the new law of June 12, 1916, follows:

LAW OF JUNE 12, 1916, RELATING TO PENSIONS UNDER THE INVALIDITY INSURANCE.

ARTICLE 1. Articles 1257, 1291, 1292, 1392, and 1397 of the Imperial Insurance Code are herewith amended as follows:

Article 1257.

Old-age pensions shall be received by the insured person beginning with the completed sixty-fifth year of life, even if he is not an invalid.

Article 1291.

If the beneficiary of the invalidity pension has children under 15 years of age, then the invalidity pension shall be increased for each child by one-tenth.

Article 1292.

The share of the insurance institute shall in the case of widows' and widowers' pensions amount to three-tenths, and in the case of orphans' pensions to three twentieths of the basic amount and of the increases of the invalidity pension, which the person providing their support had received at the time of his death, or, in the case of invalidity, would have received.

Article 1392.

Until further action, the following shall be collected as weekly contributions:

- In wage Class I, 18 pfennigs (\$0.043).
- In wage Class II, 26 pfennigs (\$0.062).
- In wage Class III, 34 pfennigs (\$0.081).
- In wage Class IV, 42 pfennigs (\$0.100).
- In wage Class V, 50 pfennigs (\$0.119).

Article 1397.

For covering the general cost, each insurance institute shall, beginning with January 1, 1917, set aside in its accounts 60 per cent of the contributions as general assets. The institute shall credit interest to the general assets set aside. The Federal Council shall determine the rate of interest on a uniform basis for the same periods of time as well as for the same contributions.

ART. 2. Articles 1294 and 1295 of the Imperial Insurance Code are herewith abrogated.

ART. 3. The text of paragraph 1 of article 65 of the introductory law to the Imperial Insurance Code is herewith amended as follows:

Insured persons who, when the insurance obligation for their branch of industry comes into force, have completed their thirty-fifth year of life shall be credited in the computation of the waiting term for the old-age pension with 40 weeks for each full year of their age in excess of 35 years and a proportionate number of weeks up to 40 for the part of such year in excess.

ART. 4. Special insurance institutes admitted by the Federal Council in pursuance of articles 1360 to 1380 of the Imperial Insurance Code shall without new admission by the Federal Council be considered as admitted up to September 30, 1916. Up to this date they must grant the old-age and survivors' pensions provided by the present law.

The supervisory authority shall determine the date up to which the special institutes must have made the required amendments in their by-laws. If a special institute does not comply in time with this provision, the supervisory authority shall amend the by-laws.

ART. 5. The provisions of this law relating to articles 1392 and 1397 become effective on January 1, 1917; all other provisions become effective on January 1, 1916.

ART. 6. Claims to old-age and orphans' pensions and orphans' settlements, as to which the procedure of determination is still pending on the date of the promulgation of this law, are subject to its provisions. Their nonapplication shall be ground for revision in cases in which the superior insurance office was not at the time able to apply them.

Claims to old-age or orphans' pensions and orphans' settlements which have been decided after December 31, 1915, shall be examined by the insurance institute in accordance with the provisions of this law, unless paragraph 1 is applicable. If this examination results in a decision more favorable to the claimant, or if the claimant demands it, a new decision must be rendered.

Old-age pensions awarded in pursuance of this law begin at the earliest with January 1, 1916.

ART. 7. Contribution stamps of the denominations prescribed in the former article 1392 of the Imperial Insurance Code may not be used after January 1, 1917. Nonvalid stamps may within two years after the expiration of their validity be exchanged for valid stamps of equal denomination at the places designated for their sale.

SWEDISH WORKMEN'S COMPENSATION LAW.

The Swedish Parliament on June 7, 1916, enacted a new compensation law for wage earners. This law, which goes into effect January 1, 1918, makes some important changes in the existing act of 1901. It changes the old law from one covering enumerated hazardous employments to one covering all employments. All wage earners, excepting home workers and children working for their parents, are entitled to compensation for injury providing their annual earnings do not exceed 5,000 crowns (\$1,340). Children under 12 years of age and casual workers are excluded.

The new law reduces the waiting period from 60 to 35 days, compensation commencing on the thirty-sixth day after the occurrence of the accident. The law provides, however, that until a special law on sickness insurance shall have been enacted, the employer shall compensate the injured workman during the time of this waiting period, beginning with the fourth day after the accident. The benefits provided consist of medical and hospital care, drugs and surgical supplies, cash benefits equivalent to two-thirds of the daily wages of the injured, but graded according to the loss of earning power, yet not less than one-fourth of the total earnings. Pension payments are made for permanent disability. In the event of death there is paid a funeral benefit of one-tenth of the annual earnings of the deceased

but not less than 60 crowns (\$16.08), and to dependents, according to their number, certain graded amounts.

As under the previous law, the risk of the employer may be insured either in the state insurance institute or with a private insurance company.

DANISH WORKMEN'S COMPENSATION LAW.

The seven existing workmen's compensation laws in Denmark covering various occupations and industries have been combined or codified in a single law of July 6, 1916.

The new act covers, under separate chapters, fishermen, seamen, agriculture and forestry and related industries, and all employments in manufacturing industries. The former law enumerated employments and industries which were covered under the act. Besides accidental injuries, occupational diseases may be included under this act, these to be specified presumably by the insurance council which is established.

The new law continues the system of compensating the first 13 weeks of disability under the voluntary sickness insurance law. Compensation under this law, therefore, begins with the fourteenth week. The act provides the usual items of compensation: Cash benefits; permanent disability payments, graded according to the loss of earning power; compensation to survivors; and funeral aid. The cash benefits are limited to two-thirds of the total wages of the injured, but not exceeding 3 crowns (80.4 cents) nor less than 1 crown (26.8 cents). To survivors the maximum lump-sum payment is limited to 6,000 crowns (\$1,608), with a minimum of 3,000 crowns (\$804). Funeral benefits range from 120 crowns (\$32.16) to 80 crowns (\$21.44) according to the residence of the deceased.

The State contributes two-fifths of the necessary premium for the support of the insurance system except in the case of seamen, for whom it provides one-half of the contributions with certain exceptions.

The law goes into effect January 1, 1917.

BRIEF FOR HEALTH INSURANCE.

The quarterly issue of the American Labor Legislation Review (American Association for Labor Legislation, New York City) for June, 1916, under the above title, contains special articles on health insurance as a phase of paternalism, compulsory health insurance in Great Britain, tendencies of health-insurance legislation, and voluntary health insurance in New York City. Most of the volume, how-

ever, is devoted to the brief for health insurance (pp. 155 to 236), followed by a concise statement of principles to be regarded as fundamental in considering health-insurance legislation. Based on these principles a tentative draft of an act is submitted, and the volume closes with a bibliography on health insurance.

Mr. William Hard, the author of the first article, entitled "Is health insurance paternalism?" observes that a system of health insurance once inaugurated so operates as to induce the employer voluntarily to extend and maintain it. "Having got started, it goes forward. Having been coerced into self-activity, it self-acts beyond coercion." The system compels attention and interest in sanitation, because the amount of the contribution to the sick fund is dependent upon the amount of sickness prevailing. The employer is thus encouraged to make every effort to reduce the sick rate. In Germany the monthly sick insurance paid by nearly all employers "has been worth thousands of sanitary inspectors to the Imperial Government." Similar results are said to have obtained in Great Britain as a consequence of the compulsory health-insurance law of 1911. "Already there are indications," declares an official investigating commission, "that as a result of the rest obtained under the act a better condition of health has in certain cases been attained than has been experienced for many years."

Moreover, it appears that the whole antituberculosis movement has been strengthened. In 1911 Parliament made a grant of \$7,200,000 to defray the expenses of sanitariums for both insured and noninsured persons, and for 1914 and 1915 the Government appropriated \$1,464,000 and \$2,300,000, respectively, to pay one-half of the expenses incurred by local authorities in treating for tuberculosis noninsured persons as well as the dependents of insured workers. Other results claimed for the system in England include an increased use of the midwife through the provisions of the maternity benefit, and a relief of the burden borne by the Poor law. The towns of Bristol and Manchester report a diminution of pauperism in 1913 as compared with 1912, which is attributed to the insurance act. Medical relief, unlike the practice under the Poor law, is rendered in the home, and this, it is stated, aided in preventing the breaking up of homes.

These and other benefits of a compulsory and State-wide system of health insurance are developed at some length in the "Brief for health insurance," which marshals the arguments in support of the system, quotes the opinions of authorities in the field, and cites official and private reports and investigations favorable to the adoption of a compulsory health-insurance plan. It is asserted that high sickness and death rates prevail among American wage earners, and authorities are cited to show that the amount of disability due to

sickness among wage earners is high, particularly as a result of tuberculosis and degenerative diseases of middle life. An excessive infant mortality rate in the industrial population is declared to be "indicative of conditions which stand sorely in need of correction."

These conditions suggest the necessity for more extended provision for medical care among wage earners and more effective methods for meeting the economic loss due to illness. This seems particularly important since the wage earner, with an income generally less than \$1,000 a year, does not possess the means to meet the expense of proper medical care. Furthermore, free hospital wards and dispensaries not only have been insufficient to care for the wage earners in time of sickness, but are objected to as charity by many workers. Although certain systems have been designed to insure against wage loss due to illness, they apparently are not fulfilling their purpose. Establishment funds are too few and limited in extent; commercial health insurance appears to be an excessively expensive method for recouping loss due to illness; fraternal insurance societies are not reaching the lower paid workers but rather the middle and higher classes; trade-union benefit funds are limited in extent, being confined to the better paid workers.

The methods followed in this country for the prevention of sickness and for its immediate relief have proved inadequate. Factory laws for the protection of the health and safety of workmen have been incomplete, while their administration too often has been defective. The economic loss due to tuberculosis, typhoid, and other infectious diseases, would suggest that the authorities to whom is entrusted their abatement have been unable to meet the situation.

The existing agencies noted above are declared to be ineffective in meeting the needs for financial relief and the prevention of illness among wage earners. It is furthermore asserted that voluntary subsidized insurance can not meet these needs if reliance may be placed upon the results achieved by such a system in various European countries. The limited benefits which have accrued to wage earners through voluntary health insurance as compared with the benefits extended to those who have profited by a compulsory health insurance system, in those countries in which the latter has been applied, are cited in support of the compulsory plan. It may be noted in this connection that while the voluntary health insurance system of France reached only 9 per cent of the population in 1911, the compulsory State health insurance system in Germany during the same year reached 22 per cent of the population of that country. Compulsory health insurance, therefore, is advanced as a proper method of securing adequate treatment, financial protection, and prevention of illness among wage earners.

The advantages cited in behalf of a compulsory health-insurance system, to which employers, employees, and the State shall contribute as sharers¹ in its benefits, are the following: (1) Certainty of insurance to all wage earners reasonably expected to require protection; (2) opportunity for simplified and economical administration; (3) the maintenance of a reserve, as under the voluntary system, is unnecessary inasmuch as under the compulsory system there will be a continuous accession of young lives. Under this system there will be provided the necessary medical care, drugs, and supplies, cash benefits, and relief from financial stress during illness; maternity benefits for the wives of insured workmen; and funeral benefits. The indirect results which may be expected to follow the adoption of a system of State health insurance will probably be as important as the direct results. "The great merit of the proposed legislation is the contribution it is certain to make to the cause of health conservation. Under this scheme health comes to have a cash value, not only to the employee but to the employer and the State, since all must contribute to the insurance fund."² Factory sanitation will be developed; preventive medicine may be expected to be stimulated; popular education on disease prevention will result; and governmental interest in a comprehensive campaign for sickness prevention will be intensified by reason of the Government having an interest in the system through its contribution to the sick fund. All these results have apparently been attained in those countries where the system has been tried.

"Thus compulsory health insurance not only meets the urgent need of the wage earner for medical care and for financial assistance during illness, but, of the various possible methods of insuring, it alone promises to distribute the cost fairly and wisely between employers, employees, and the State, while it also offers peculiar administrative advantages and can be counted on to give a powerful stimulus to the prevention of sickness. Compulsory health insurance is at once an economical method of providing for the needs of the wage worker and a mighty force for the inauguration of a comprehensive campaign for health conservation."

¹ The State shall contribute one-fifth of the total expenditures for benefits, and one-half of the balance shall be paid by the employer and one-half by the employee, except that if the earnings of the insured fall below \$9 a week the shares of the employer, employee, and State shall be the proportion indicated in the following schedule:

If earnings are—	Employer—	Employee—	State—
\$9, but not under \$8.	48 per cent.	32 per cent.	20 per cent.
\$8, but not under \$7.	56 per cent.	24 per cent.	20 per cent.
\$7, but not under \$6.	64 per cent.	16 per cent.	20 per cent.
\$6, but not under \$5.	72 per cent.	8 per cent.	20 per cent.
\$5 or less.	80 per cent.	0 per cent.	20 per cent.

In all cases the contributions shall be computed as a percentage of the wages.

² Henry R. Saeger, professor of economics, Columbia University.

HEALTH INSURANCE AND THE AMERICAN MEDICAL ASSOCIATION.

The American Medical Association has recently taken up the study of health insurance. Through its council on health and public instruction, to whom was delegated the duty of developing the program of the association as regards health insurance—outlined in 1914 and reaffirmed in 1915—a special subcommittee was appointed in January, 1916, the report of which to the Detroit session of the association (June 12–16, 1916) appeared in the June 17 issue of the *Journal of the American Medical Association* (pp. 1951–1985).

This committee was charged primarily “to study social insurance in its relation to the medical profession.” A special office was opened by the committee in New York and the services of a health-insurance expert secured to prosecute the study.¹ According to the report in question it is the intention of this committee to undertake the following duties:

First. To educate the American medical profession in the general principles of social insurance, particularly health insurance, the economic and social significance of the movement to obtain such insurance throughout the United States, and the absolutely essential part which the medical profession must play in a successful adaptation of this new legislation to American conditions.

Second. The bureau will consider it as part of its work to answer all questions which any physician may desire to write to it, asking for information, facts, or figures bearing on social insurance in any of its phases, and to be in reality a bureau of information for the medical profession in regard to the details of organization, of medical aid in various forms of social insurance, both in European countries and the United States.

Third. The committee considers it its duty to appear when advisable before the legislative bodies in this country, with a view to bring about friendly understanding between all parties concerned and to protect the legitimate economic interests of the profession in the laws coming up for discussion concerning social insurance.

Apparently, then, it is the purpose of this committee to study health insurance with a view to securing the best interests of the medical profession in the adoption of any system by the Nation or by the different States. In its review of the field of social insurance, as practiced in foreign countries, it emphasizes particularly the part that the medical profession plays in its application. Health insurance in the United States, as afforded through private, voluntary agencies, is touched upon, and criticism is made of the

¹ The committee consisted of H. B. Favill (since deceased), Alexander Lambert, and Frederic J. Cotton, the first two being chairmen, respectively, of the council on health and public instruction, and the judicial council. The expert engaged by the committee was Dr. I. M. Rubinow.

methods employed by these agencies in engaging the services of physicians.

The whole service and the capitation system under which it is possible is held as the criterion of what is dishonorable and contemptible in the practice of medicine. The results to the unfortunate physician who must give this service are disproportionately severe for his responsibility in the matter. The vicious circle is formed by certain economic situations, and this circle can not be broken except by a change of the economic forces. Compulsory insurance by the State can alone solve these economic problems of the very poor and release the unfortunate physician who, facing starvation, must accept this lodge practice.

This criticism is mainly directed against the fraternal lodges.

The report under review reprints the proposed health-insurance act drafted by the American Association for Labor Legislation, and concludes as follows:

This voluminous report has made no pretense of arguing for or against health insurance. It has made no attempt to bring together the advantages or disadvantages to be gained by the community or its desirability as a measure of health or social necessity. The committee on social insurance offers it as a compilation of what has been done abroad and of the present situation in the United States. It has brought forward only those points which would seem to be of interest to the medical profession and which will be useful to them in preparing a study of the situation in any given State in this Union where health insurance is likely to be brought up and placed on the statute books.

The effective administration of any health insurance law must be done through limitation by trade or geographic area of its application. This is clearly seen in the working abroad of the various laws in the different countries. The English law is difficult of administration because it violates this fact. Germany and Austria show marked effectiveness because their laws follow this peculiarity. Furthermore, the results obtained in working out the details of the law will be greatly influenced by the financial management of it. In Germany the percentage of expense borne by each member—the employer, the employee, and the State—is designated in percentage, the actual amounts necessary being left to experience and management to obtain. In England a definite monetary amount was laid down by law, and with the errors of actuarial calculation, it has been found that these amounts are insufficient to give the desired results to the workers. Eighteen cents a week as a premium was insufficient to give a full measure of sick benefits to the workers or just remuneration to the physicians and medical benefits to the sick, let alone the expenses for administration. The English law fails to give more than the ordinary medical service and gives but a minimum of surgical apparatus and appliances, with the result that the sick do not receive the care they should, though the physician is justly remunerated, and the lack of proper appliances keeps many sick on the sick benefit funds at the unnecessary expense of the insurance carriers. In Germany the generous application of medical benefit and surgical appliances brings back the tremendous saving in time and wages. As was pointed out by the judicial council last year, the expense of \$8,000 to specialists saved over \$160,000 in wages and sick benefits.

However one may criticize the details, the insurance act has unquestionably improved the condition of the working classes which have come under the

law. This is a very noticeable feature in England. It will be of great interest to note in the future the effect of the great war on these countries and on the laws of social insurance.

The committee on social insurance has endeavored to bring forward as much detail as possible regarding the remuneration of physicians under these laws, in order that the economic results on the lives of the physicians could be fairly studied.

The more these laws of social insurance are studied the more it is evident how essential is the medical profession in their administration. It is equally essential that the profession should clearly understand these laws, and the committee on social insurance therefore offers this study of health insurance for the assistance of the profession in obtaining this necessary information.

STRIKES AND LOCKOUTS IN FOREIGN COUNTRIES.

AUSTRALIA.

Continuing the investigation of strikes and lockouts which was begun in 1913 the Australian Bureau of Census and Statistics¹ notes the occurrence of 358 labor disputes during the year 1915 as compared with 337 in 1914 and 208 in 1913. A fewer number of establishments were, however, involved in 1915 as compared with 1914—942 and 1,203, respectively; in 1913 the number was 921. On the one hand the number of workers directly affected increased steadily, being 33,493 in 1913, 43,073 in 1914, 57,005 in 1915; on the other hand average duration of the disputes, omitting 522,967 days lost in connection with the dispute in the northern coal fields in 1914, shows a very notable decrease from year to year—12½ days in 1913, 8½ in 1914, 7¼ in 1915.

A greater prevalence of industrial disputes is noted in New South Wales as compared with the other States, a fact accounted for largely by the coal mining industry, in which most of the disputes in that State occur. Mining and quarrying, as a matter of fact, furnish a very large proportion of disputes throughout the whole Commonwealth. For the year 1913 the proportion of disputes in those industries represented approximately 50 per cent of the total number recorded; in 1914 the proportion was 55 per cent and in 1915, 57 per cent.

The wage question was responsible for the greatest number of industrial disputes for each of the years 1914 and 1915. The next most important causes were "employment of particular classes or persons" and "working conditions and discipline," followed by "trade-unionism." The following table shows the causes of industrial disputes commenced in Australia in 1915:

¹ Commonwealth Bureau of Census and Statistics, Labor and Industrial Branch, Report No. 6. Prices, purchasing power of money, wages, trade-unions, unemployment, and general industrial conditions, 1914-15. May, 1916, pp. 99-124, Melbourne [1916]. 183 pp.

Labor Bulletin, No. 13 (January to March, 1916), pp. 34-99 [Melbourne], July, 1916. 104 pp.

CAUSES OF INDUSTRIAL DISPUTES COMMENCED IN 1915.

Item.	Number of disputes.	Number of work-people involved.	Number of working days lost.
1. Wages—			
(a) For increase.....	73	18,783	190,645
(b) Against decrease.....	10	1,113	12,555
(c) Other wage questions.....	46	11,900	133,606
2. Hours of labor—			
(a) For reduction.....	3	896	836
(b) Other disputes re hours.....	6	2,643	23,374
3. Trade-unionism—			
(a) Against employment of nonunionists.....	19	3,873	31,145
(b) Other union questions.....	16	3,739	7,434
4. Employment of particular classes or persons.....	76	13,844	77,862
5. Working conditions.....	76	16,114	82,322
6. Sympathy.....	6	950	6,004
7. Other causes.....	27	7,347	17,442
Total.....	358	81,292	583,225

In comparison with 1914 the results of disputes commenced during 1915 appear to have been substantially more in favor of the employees.

INDUSTRIAL DISPUTES, ACCORDING TO RESULTS.

	1914			1915		
	Number of disputes.	Number of workmen affected.	Number of days lost.	Number of disputes.	Number of workmen affected.	Number of days lost.
In favor of workpeople.....	118	21,224	129,995	190	44,140	245,625
In favor of employer.....	98	18,242	119,819	78	15,327	155,659
Compromise.....	110	30,396	829,265	68	14,860	151,544
Indefinite.....	11	1,187	11,316	22	6,965	30,397
Total.....	337	71,049	1,090,395	358	81,292	583,225

Direct negotiations between representatives of employers and employees formed the most popular method for the settlement of disputes, accounting for the termination of approximately 70 per cent of the industrial disputes in 1914 and in 1915. During the year 1915 the report notes a decided increase in the number of disputes in which a third party (not officials under the Commonwealth or State industrial acts) was required in the capacity of arbitrator.

The first quarter of 1916 seems to show a relative increase in the number of labor disputes in Australia. During that quarter there occurred 132 disputes, "the second largest number recorded in any one quarter since particulars have been collected by this bureau (1913), and only 17 less than in the fourth quarter of 1915. The number of persons involved, either directly or indirectly, in these disputes totaled 40,185. New disputes entailed a loss of 407,724 working-days, and old disputes 30,138, making an aggregate loss in working-days of 437,862, and a total estimated loss of wages of £274,369 [\$1,335,217]. Of the total number of disputes all, with the exception of 14, terminated within the quarter under review."

AUSTRIA.

For the year 1914 the Austrian Bureau of Labor Statistics reports 260 strikes, affecting 794 establishments and participated in by 33,412 striking workmen out of a total of 72,805 employed in the establishments affected. The following table permits a comparison of the strike movement in Austria during the last 5 years:

GENERAL STATISTICS OF THE STRIKE MOVEMENT IN AUSTRIA, 1910-1914.

Year.	Strikes.	Estab- lish- ments af- fected.	Work- ers em- ployed in es- tablish- ments af- fected.	Strik- ing work- ers.	Work- days lost.	Work- ers em- ployed—	Strik- ing work- ers—	Estab- lish- ments af- fected—	Strik- ing work- ers—	Work- days lost—
						Per establish- ment affected.		Per strike.		
1910.....	657	2,888	108,464	55,474	1,129,460	37.6	19.2	4.4	84.4	1,719.1
1911.....	706	3,507	103,390	122,001	1,710,277	55.1	34.8	5.0	173.0	2,423.0
1912.....	761	2,818	211,743	120,953	1,862,027	75.1	42.9	3.7	159.0	2,446.8
1913.....	438	1,024	88,150	39,814	409,353	86.1	38.9	2.3	90.9	889.0
1914.....	260	794	72,805	33,412	264,354	90.4	42.1	3.1	128.5	1,016.7

The number of strikes during the year under review was the smallest since 1895. This is partly due, it is stated, to the economic depression immediately before the war and partly to the war itself. The individual strikes, however, were more extensive than in the preceding year, the number of establishments affected, striking workers, and workdays lost having increased in comparison with 1913, if computed per strike. The establishments affected by strikes in 1914 were on an average larger than in the nine preceding years, considering the number of workmen employed in them and the number of strikers. If only industry groups with at least 10 strikes are considered, the strikes in 1914 were distributed as follows:

STRIKES IN AUSTRIA DURING 1914, BY INDUSTRY GROUPS.

Industry group.	Strikes.		Establish- ments affected.		Strikers.		Workers employed.		Workdays lost.	
	Num- ber.	Per cent.	Num- ber.	Per cent.	Num- ber.	Per cent.	Num- ber.	Per cent.	Num- ber.	Per cent.
Mining	28	10.8	39	4.9	14,475	43.3	25,689	35.3	35,465	13.4
Stones, earths, clay, and glass..	31	11.9	76	9.6	2,429	7.3	3,850	5.3	46,202	17.5
Metal working.....	24	9.2	47	5.9	2,379	7.1	4,615	6.3	22,561	8.5
Machinery, apparatus, instru- ments, etc.....	19	7.3	23	2.9	1,035	3.1	14,205	19.5	5,826	2.2
Woodworking, rubber.....	15	5.8	122	15.4	330	2.5	1,016	1.4	31,249	11.8
Textiles.....	33	12.7	37	4.7	2,856	8.5	7,369	10.1	28,088	10.6
Clothing, cleaning.....	24	9.2	275	34.6	1,481	4.4	2,998	4.1	22,801	8.6
Foodstuffs.....	19	7.3	48	6.0	1,000	3.0	2,242	3.1	3,830	1.4
Building trades.....	42	16.2	97	12.0	5,510	16.5	8,733	12.0	55,130	20.9
Other industries.....	25	9.6	30	4.0	1,417	4.3	2,088	2.9	13,202	5.1
Total.....	260	100.0	794	100.0	33,412	100.0	72,805	100.0	264,354	100.0

As to the duration of the strikes, 124 (47.8 per cent), involving 16,058 strikers (48.1 per cent), lasted less than 6 days, while 71 strikes (27.4 per cent), involving 12,149 strikers (36.4 per cent), lasted from 6 to 15 days, so that the number of strikes lasting over 15 days formed less than one-fourth of the total number. Demands relating to wages in 203 instances (78.1 per cent), to hours of labor in 54 instances (20.8 per cent), and to organization in 57 instances (21.9 per cent), were the most frequent causes of strikes. Considered from the viewpoint of the strikers, 22.7 per cent of the strikes, involving 35.1 per cent of all strikers, were terminated successfully; 39.2 per cent of the strikes, involving 38.6 per cent of all strikers, were compromised; and 38.1 per cent of the strikes, involving 26.3 per cent of all strikers, failed. Workmen's organizations intervened in 126 strikes and employers' organizations in 14. Mediation by State or other authorities was attempted in 62 strikes.

A total of 18 lockouts is reported for 1914. They involved 50 establishments, employing 9,900 workmen, of which number 6,917 (69.9 per cent) were locked out, losing a total of 115,591 workdays. The two most important lockouts took place in two shipbuilding yards, in which 3,921 workmen were locked out, with a total loss of 97,362 workdays. Compared with the preceding year, in which 23 lockouts, affecting 1,675 establishments and 22,258 locked-out workmen out of 30,296 employed, were reported, the lockouts of 1914 were of relatively small importance. The majority (12) of the lockouts lasted less than 31 days.

SWEDEN.

There has been a decline in the number of strikes in Sweden occurring during the war, as compared with years prior thereto. Thus, according to a recent report of the Swedish bureau of labor, the number of strikes in 1915 was less than in any preceding year since 1903, except 1910. In the latter year there were 66 strikes, while during 1915 there were 70. In 1915 there were 7 lockouts and 3 disputes of an indefinite character, making a total of 80, as compared with 76 disputes of every character in 1910. The 80 disputes occurring in 1915 affected 110 employers and 5,119 employees, as compared with 115 disputes in 1914, affecting 247 employers and 14,385 employees. Since the above report was issued by the Swedish labor office, 31 labor disputes are reported as having occurred in the first quarter of 1916.¹ These latter involved 44 employers and 2,510 workmen.

¹ Sociala meddelanden utgivna K Socialstyrelsen. Stockholm, 1916. No. 6.

The average number of workers affected by each strike in 1915 was 64, somewhat greater than in 1914 (61).

By industry groups it appears that the largest proportion of workers affected in 1915 were those in the building trades, or 30 per cent, which compares with 21 per cent as the average for the same trade for the whole period 1903 to 1914.

As to duration, 35 per cent of the conflicts in 1915 did not extend over a week, while 76 per cent were terminated within a month, and 15 per cent extended from 31 to 90 days, inclusive, while 3 per cent continued for a period of over 180 days.

A larger proportion of the strikes in 1915 were favorable to the workers than during the period 1903 to 1914. The results are rather striking, as shown in the following tabulation:

RESULTS OF LABOR DISPUTES AND NUMBER OF WORKERS AFFECTED, 1903-1914 AND 1915.

Result.	Labor disputes.				Workers affected.			
	1903-1914		1915		1903-1914		1915	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
In favor of employers.....	634	30	17	21	338,441	66	638	12
In favor of workers.....	635	30	27	34	30,990	6	2,201	43
Compromised.....	728	35	29	36	238,290	27	2,083	41
Result not reported or indecisive....	115	5	7	9	4,508	1	197	4
Total.....	2,112	100	80	100	512,229	100	5,119	100

Relating the causes of strikes to their results, it appears, as is well known, that those strikes in which the demand was for an increase in wages were most generally compromised. Thus, of the 39 strikes (49 per cent of all strikes) caused by a demand for increased wages in 1915, affecting 2,327 workmen, 22, affecting 1,722 workmen, were compromised, while only 8 terminated in favor of the employers and only 7 in favor of the workmen.

Examination of the relation between the duration of strikes and their results shows that, from the point of view of the number of disputes, the workers were most successful in conflicts of long duration, while those of short duration were generally compromised.

Arbitration settled 3 strikes and the official conciliators contributed to the settlement of 21.

The principal data concerning strikes in Sweden since 1903 are contained in the following statement:

STRIKES AND LOCKOUTS IN SWEDEN, 1903 TO 1915.

Year.	Strikes.			Lockouts.			Disputes of indefinite character.			All disputes.			Number of work-days lost.
	Number of strikes	Number of employers affected.	Number of workers affected.	Number of strikes	Number of employers affected.	Number of workers affected.	Number of strikes.	Number of employers affected.	Number of workers affected.	Number of strikes	Number of employers affected.	Number of workers affected.	
1903..	109	256	5,970	16	96	982	17	126	17,619	142	478	24,571	642,000
1904..	169	383	8,299	12	62	1,218	34	153	2,731	215	598	12,248	385,000
1905..	152	325	13,186	12	12	456	25	510	19,264	189	847	32,906	2,390,000
1906..	239	668	15,050	8	12	560	43	49	3,045	290	729	18,655	479,000
1907..	243	498	11,278	23	37	5,669	46	283	6,593	312	818	23,540	514,000
1908..	229	473	17,187	38	125	2,672	35	826	20,498	302	1,424	40,357	1,842,200
1909..	102	7,707	229,248	22	451	71,364	14	30	1,137	138	8,188	301,749	11,739,700
1910..	66	127	3,420	5	5	101	5	14	150	76	146	3,671	39,000
1911..	85	150	4,940	9	1,750	15,145	4	11	491	98	1,920	20,576	569,800
1912..	108	168	5,797	4	337	2,166	4	284	2,017	116	789	9,980	292,145
1913..	118	203	9,574	1	1	17	-----	-----	-----	119	204	9,591	303,344
1914..	105	101	8,832	8	64	5,368	2	2	185	115	247	14,385	620,469
1915..	70	100	4,277	7	7	813	3	3	29	80	110	5,119	83,270

A LIVING WAGE BY LEGISLATION: THE OREGON EXPERIENCE.¹

"A Living Wage by Legislation"¹ is the title of a pamphlet setting forth the experience in Oregon under the operation of the minimum-wage law passed by the legislature in 1913 and administered by the State Industrial Welfare Commission. The volume contains the code of rulings and orders issued by the commission, a reprint of the act creating the commission, extracts from certain decisions of the Supreme Court of Oregon, and the text of the Oregon 10-hour law for women.

The presentation of this subject by the chairman of the Industrial Welfare Commission is premised upon the principle that it is the duty of the State, by wise and adequately enforced legislation, to prevent any large section of its people from falling below decent standards of living, which condition, it is claimed, would result in economic, social and domestic evils, individual demoralization, and in national weakness. One of the most important features of such legislation, it is declared, is the provision for a living wage.

In reviewing foreign experience in this connection, minimum-wage legislation enacted in the Australian States and in New Zealand is particularly noted, with special reference to the principles governing the action of the Australian court of conciliation and arbitration as outlined by Justice Higgins in an article published in the *Harvard Law Review* and reprinted in the *MONTHLY REVIEW* for February, 1916 (pp. 1 to 22). In the United States minimum-wage

¹ A Living Wage by Legislation: The Oregon experience. By Edwin V. O'Hara, chairman of the Industrial Welfare Commission of the State of Oregon. Salem, 1916. xxiii, 57 pp.

legislation, with one exception,¹ is administered by commissions or boards, the first being established in Massachusetts in 1912.² All legislation of this character applies only to women and children, and has followed in certain important features the Massachusetts law.

As already stated, the Oregon law was enacted in 1913, after a comprehensive survey of wages and hours and conditions of labor of women workers, and the Industrial Welfare Commission, which began work in June of that year, was concerned not only with the regulation of wages but the fixing of maximum hours and the establishment of sanitary conditions of labor. Failing in an attempt to induce employers voluntarily to adopt standards of hours and wages and conditions for their women workers, the commission resorted to the policy of issuing mandatory rulings, which constituted the first minimum-wage determinations made by any commission in the country. These orders have been since revised, effective September 1, 1916. They provide for a minimum weekly wage rate for experienced adult women workers, ranging from \$8.25 in the smaller towns of the State to \$9.25 in certain occupations in Portland. One feature of the revised orders is a provision for a rise every four months during the year in the wage scale allowed for apprentices. Other provisions of the code relate to the limitation of daily hours of labor, the prohibition of night work, the requirement of one day of rest in seven, a 45-minute lunch period, and general sanitary regulations.

The report refers to the fact that minimum-wage legislation in this country has been applied only to women because of the fear that legal interference with the contractual freedom of men might be declared unconstitutional, and then quotes from the decision of the United States Supreme Court, which, in upholding the Oregon 10-hour law for women, laid down broadly the grounds upon which welfare legislation interfering with the freedom of contract of women would be upheld by the courts while similar legislation would not be sustained for men.

Two cases are cited in which the constitutionality of the minimum-wage law was attacked—one resulting in a decision by the Supreme Court of Oregon upholding the constitutionality of the law and the other resulting in a similar decision, which was subsequently appealed to the United States Supreme Court, where the argument was heard on December 17, 1914.³ The author argues that minimum-wage legislation does not interfere with the freedom of contract, and in support

¹ In Utah the minimum wage has been fixed by direct act of the legislature.

² The States which have minimum-wage laws are Arkansas, California, Colorado, Kansas, Massachusetts, Minnesota, Nebraska, Oregon, Utah, Washington, and Wisconsin.

³ No decision was rendered, and the case is to be reheard this fall.

of his position quotes from Justice Higgins, president of the Australian court of conciliation and arbitration:

The imposition of a minimum wage * * * implies, of course, an admission of the truth of the doctrine of economists, of all schools, I think, that freedom of contract is a misnomer as applied to the contract between the employer and an ordinary individual employee. The strategic position of the employer in a contest as to wages is much stronger than that of the individual employee. "The power of the employer to withhold bread is a much more effective weapon than the power of the employee to refuse to labor." Low wages are bad in the worker's eyes, but unemployment, with starvation in the background, is worse.

In regard to the effects of the Oregon minimum-wage law the author cites the report of an investigation, especially of mercantile establishments, undertaken jointly by the Federal Industrial Relations Commission and the United States Department of Labor, the results of which are set forth in Bulletin 176 of the Bureau of Labor Statistics. In general the report shows that—

1. Men have not taken women's places.
2. The minimum rate of pay for the experienced adult workers was raised in all occupations. The per cent of the force receiving \$12 and over increased after the wage determinations.
3. Average weekly earnings increased 10 per cent for the total number of women employed in 1914. And this, it will be observed, at a time of financial depression, when a 10 per cent cut in wages would have occurred except for the wage rulings.

Occasion is taken in the report to differentiate between the wage rate and the contents of the pay envelope. The one might be largely increased, while the other, owing to unemployment, might still be far below the necessary cost of decent subsistence. It was found, however, in the investigation mentioned above, that while the wage law caused an advance in the wage rate it resulted in a still more marked increase in weekly income, indicating a tendency to regulate employment and to reduce the evils of unemployment.

Another result of wage legislation in Oregon, it is pointed out, has been to stimulate the movement for vocational education. "The elimination of the unregulated apprenticeship system, with its miserable pittance of a wage and generally inadequate training, has been altogether wholesome. It has brought employers and technical school authorities together in conference, with the promise of good both to the schools and the shops."

In discussing the employers' viewpoint the report seeks to correct the impression that minimum-wage legislation is opposed by representative employers. "A legal minimum wage destroys the advantage which unscrupulous employers who are willing to cut wages below the subsistence level have always enjoyed over their more

decent competitors. Respectable employers have not been slow to recognize this fact."

At public hearings held in the spring of 1916, at the time the rulings were revised, "while many employers manifested opposition to further reduction of working day, opinion was practically unanimous in favor of minimum-wage legislation."

In conclusion, the author of the report submits arguments in favor of a minimum wage, contradicting the position that girls enter industry to make "pin money" and that they are "living at home" and consequently do not need a living wage, and suggesting that "underpaid women workers are denying themselves the necessities of life in order to lead lives of virtue," that they "are living on one or two meals a day, are denying themselves clothing necessary to maintain their health, and are huddled together in rooms devoid of light, ventilation, and of heat. These are facts * * * of a character to create public sentiment of a permanent sort in favor of minimum-wage legislation."

OBJECTIONS OF MASSACHUSETTS EMPLOYERS TO THE STATUTORY MINIMUM WAGE.¹

"The executive committee of merchants and manufacturers of Massachusetts, relative to the minimum wage," representing more than 20 industries, has issued a 58-page pamphlet setting forth its conviction, based on the statements and experience of a number of manufacturers, notably those making brushes, that the present legislative minimum wage in Massachusetts is weak and unjust, an economic error and a menace to capital and labor alike, and that it is the result of the efforts primarily of those "whose livelihood is largely derived from service in this or that 'social welfare' organization, theorists on sociology, an occasional college professor, and, finally, a large proportion of well-to-do women whose sympathetic tendencies far outweigh their analytical grasp of the laws underlying the business and economic relations of mankind."

The pamphlet reviews the history of minimum-wage determinations from the beginning of industrial development down to the experience of Australia, New Zealand, and, finally, of the United States, where, beginning with Massachusetts in June, 1912, 11 States have enacted legislation of this character. Although only two decrees are now in effect in Massachusetts—in the brush industry²

¹ The minimum wage, a failing experiment, together with some side lights on the Massachusetts experience. Published by the executive committee of merchants and manufacturers of Massachusetts. Boston, 1916. 58 pp.

² A statement of the effect of the minimum-wage decree upon the brush industry, based upon the report of the minimum-wage commission as presented in their Bulletin No 7, Sept. 15, 1915, will be found in the MONTHLY REVIEW for December, 1915, pp. 33-36.

and in retail stores—the report states that “in those two industries enough havoc has been wrought to indicate sufficiently what the larger industries may expect when reached.”

The most ardent proponents of this kind of legislation admit it is an experiment. We emphatically maintain that as an experiment, wherever it has been tried in this country, it is languishing, and that the experiment in this State has been given ample time to develop at least some favorable aspects.

The pamphlet is devoted largely to the presentation of the employers' viewpoint, supplemented, however, by an appendix indicating that trades-unionists “in direct proportion to the thought or analysis which they give to the statutory minimum-wage problem, vary all the way from enthusiastic support to severe condemnation of interference by the State with the question of wages.” The contention of the employers is summed up in the following statement:

Nothing but growing irritation, unemployment with its consequent hardships to needy girls, substantial loss of interstate business, and the reduction of pay rolls have appeared in the nearly three years since the law went into effect.

Assuming, therefore, that the minimum wage is uneconomic and unjust and has failed in practice, the authors of the pamphlet proceed to point out objections to this legislation and to the principle upon which it is founded, citing the opinions or experience of various business men in support of their contention that such legislation is of no benefit to the employee and has resulted in injury to employers. These objections may be stated as follows:

1. One of the most fundamental objections to the legislative minimum wage is the false assumption by its advocates that the limited class of persons who happen to be employers of labor at the time should be forced by State edict to bear the entire burden of enabling the wage-earning community to live according to the standards set by the cost of normal and healthful living. Every one of us wants to see this standard set and established for all, but it must be done in a sound way. The problem of livelihood and health is not an industrial but a community problem, and must be met by the community and not by class legislation which singles out a particular group (the employing class) of the community to bear the brunt of the burden. The practical effect of the minimum-wage law is to place upon the shoulders of the employer the entire burden of redeeming society, in the economic sense. It seeks to compel them (the employers) exclusively to remedy and solve the self-evident economic injustices and inequalities which we all know exist in our present-day system—forgetting that the employing class is but one organ of the organism of society.

2. Another one of the inherent disabilities is that this legislation gets us nowhere, because its results are circular and therefore vicious. The admitted basis of minimum-wage decrees in various industries is “the necessary cost of living” and the “maintenance of the workers in health.”

It is argued that an increase of wages is reflected in an increase of prices, which leads to an increase in the cost of living, which in turn leads to a demand for further increase in the minimum wage.

3. If * * * we say that in some industries the increased cost of minimum wage is met by the wholesale discharge of workers with consequent unemployment, rather than by shifting the burden to the consumer (and this is an actual fact), then we have only seized another horn of the dilemma. For this result is as deplorable, perhaps more so, than the other, since the evil is thus fixed upon those least able to bear it, and the State is not only well-nigh made a partner with the iniquity, but becomes a direct factor in causing hardships far exceeding those existing even under the lowest sweat-shop wage, however abhorrent this may sound.

It appears that business men of Massachusetts have contended all along that the real effect of minimum-wage decrees—for instance, in the retail stores—would be to establish, among other evils, a method by which very young girls would be employed during the apprenticeship period at the rates fixed for that class of workers (which are considerably below the so-called minimum-wage standard for experienced workers) and that these young workers would be retained only during the apprenticeship period and would then be discharged just as they were becoming eligible for the standard wage, new girls of the same immature age then being hired in their place. In Appendix A instances are given, covering not only the retail stores, but also the brush industry, of the effect of minimum-wage determinations, which seem to bear out this contention. The following summary of the report of a certain brush manufacturer, whose business was established more than a hundred years ago, is offered as indicating the facts concerning the unemployment resulting from the introduction of the minimum-wage decree.

These figures rendered by a registered public accountant show a decrease of 195 women and minors employed in this factory between the dates of September 18, 1913 (which was prior to the adoption of the decree), and September 16, 1915 (which was about 13 months after the going into effect of the minimum-wage decree in the brush industry). This tremendous decrease (over 48 per cent) in the number of female and minor workers is a hard nut for the minimum-wage commission to crack. The stubborn fact is that because of the minimum-wage decree this factory was obliged to discharge 195 women and girls, while the decrease in workers caused a loss in the weekly pay roll of \$853.76. This weekly loss, figured in annual terms, would mean \$44,395.52 in this one factory. This is for women and minors alone. There was a further loss in this factory owing to the discharge of men workers occasioned by the minimum-wage law of \$384 weekly, which added to the former figure, makes a total loss of \$64,363.52 annually. The wage-earning community and all classes of our business life is therefore seen to have suffered on this basis in the 18 months up to March 1, 1915, a loss of \$96,545.28, which would otherwise

have been in circulation and added correspondingly to our economic strength.¹ Can the minimum-wage commission produce any figures to show as a result of all their activities that they have been able to increase wages to any class of workers to an amount sufficient to offset this substantial decrease caused by the partial incapacitation of one factory alone? Careful analysis of their various bulletins fails to disclose such a possibility.

These facts prove, declares the report, that there is no escape from the conclusion that the continued administration of the present minimum-wage law in Massachusetts, even for a year longer, presents the utmost menace to the workers themselves.

As to the attitude of labor regarding the minimum wage, it has already been suggested that "there is far from unanimity of belief among trades-unionists as to the merit or desirability of minimum-wage laws. In Appendix C this point is set forth in detail, indicating "that among the more serious-minded thinkers in the labor world the statutory minimum wage and its past history of disaster is feared rather than loved. Its small temporary benefits to a limited number are far outweighed by the danger to labor and to the highly paid skilled expression of labor contained in the legal precedents established by a State legislating along these lines."

Whether we have a compulsory or a noncompulsory law, so long as the State attempts to work out this problem by itself, whether through fines or the sort of obnoxious boycott contemplated by the present law, our economic sickness will only increase, and irritation between the classes and especially against the administering body will approach nearer and nearer the boiling point.

The committee concludes with a plea for repeal of the obnoxious law.

The committee points out the seriousness of the constitutional question involved and cites two cases now pending in the supreme court of the State—cases growing out of the activities of the minimum-wage commission in the laundry and confectionery industries. The following appendixes conclude the report:

- A. Unemployment and loss of business in Massachusetts.
- B. Minimum-wage law in brush manufacturing.
- C. Trades-unionism and the minimum wage.
- D. Commentary on Prof. Taussig's article.
- E. The minimum-wage commission—a semijudicial body or a crusading and dual organization.
- F. Massachusetts minimum-wage law summarized.

¹ A recent statement submitted by the president of this company to the executive committee indicates that the company has paid for wages, since the introduction of the brush decree, to date, nearly \$200,000 less than would otherwise have been the case had no decree been forced upon them.

SURVEY OF INDUSTRIAL CONDITIONS IN SPRINGFIELD, ILL.

The Springfield survey was instituted by the Springfield survey committee and conducted under the direction of the department of surveys and exhibits of the Russell Sage Foundation for the stated purpose of improving social and living conditions in this Illinois city of nearly 58,000 inhabitants, 81 per cent of whom are American born. Of the inhabitants over 10 years of age 53 per cent were, according to the census of 1910, employed in gainful occupations. Most of the facts presented in the recently issued report¹ were collected during the spring and early summer of 1914. In general the plan was to visit factories and mercantile establishments in order to examine physical conditions and gather data regarding hours, wages, and similar matters; and to call upon workers in their homes for the purpose of securing from them a full statement of their employment conditions. Information was also secured from labor organizations and a detailed study was made of the local branch of the Illinois State free employment agencies. Although Springfield is not essentially a manufacturing city, it ranks eleventh in the number of factory wage earners and fourteenth in the value of its products, the most important manufacturing industries being the making of grist-mill products, shoes, zinc products, watches, agricultural implements, and electrical supplies.

The report contains the following statement of general principles and minimum standards which, it is stated, furnished a basis upon which to consider the problems of social welfare and the recommendations for betterment resulting therefrom:

First and elementary among these matters are working conditions. These should be made as wholesome and safe as possible. Fire hazard should be minimized, machinery guarded, sanitary conditions maintained, industrial diseases prevented, and good light and ventilation provided. The maintenance of such conditions is a first responsibility of the employer.

Second. Until children are 16 years of age, it is essential that they develop normally and receive training for the work of life. Any occupation, therefore, is objectionable which interferes with such development or training. Under 14, children should not be employed in gainful occupations.

Third. Hours of labor should not be so long as to injure health or to deny workers opportunity for self-improvement, the development of home life, and an intelligent interest in public affairs. Eight hours for a day's work is a standard which is now widely accepted.

Fourth. Every worker should have one day of rest in seven.

Fifth. Women and children should not be employed at night.

Sixth. Workers who give their full working time to an industry should receive as a very minimum a wage which will provide the necessities of life.

¹ Industrial conditions in Springfield, Ill. A survey by the committee on women's work and the department of surveys and exhibits, Russell Sage Foundation, by Louise C. Odenrantz and Zenas L. Potter. Philadelphia, 1916. 173 pp. Illustrated.

Seventh. Either the "necessities of life" should include enough to allow workers to carry insurance and save something for old age or else industry should provide directly for the care of incapacitated workmen and for the dependents of workmen who are killed or used up at work, through payment made by the employer—the cost to be distributed over society by some form of insurance or other method.

Eighth. Irregularity of employment should be minimized, and when workers lose their positions adequate facilities should exist to help them find new places.

Ninth. The bargaining power in settling the terms of the work agreement should be as evenly balanced as possible as between the employer and the employee. This would recognize the right of employers and employees alike to organize or form unions.

Following a brief introduction, the report considers industrial conditions in Springfield from the standpoint of physical safety in industry, child labor, wages and regularity of employment, and hours of labor, and presents a study of conditions in 100 wage earners' families, including 573 persons, of whom 272 were gainfully employed. A concluding chapter summarizes the findings of the survey and gives specific recommendations for industrial betterment.

Physical safety in industry was considered from three standpoints—danger from accidents other than fire, from fire, and from diseases. The report notes the incompleteness of the data as to fatal and nonfatal accidents in Springfield, presents a brief review of the provisions of State legislation for the safeguarding of workers, comments on the nonenforcement of law, offers suggestions to be adopted for adequate protection from fire, reviews working conditions which especially induce occupational diseases, outlines the provisions and points out apparent defects in the Illinois workmen's compensation law, and then presents the main facts developed by the survey regarding physical safety in industry in a summary from which the following paragraphs are excerpts:

No establishment visited showed marked disregard for the safety and physical welfare of its workers. Some showed unusual care. Nevertheless * * * large numbers of employees were subjected to well-recognized industrial hazards.

Between 1909 and 1913, 36 Springfield individuals were killed by some kind of industrial accident.

Thirty-five such accidents [nonfatal] were reported for the single year 1913. These, particularly with the six fatal accidents of that year, are sufficient to show a need for vigorous work in accident prevention.

Up to the time of the survey no energetic accident-prevention campaign had ever been carried on in Springfield, either by employers' associations, labor organizations, civic bodies, the public officials, or the great majority of employers, although such campaigns have yielded excellent results elsewhere.

The provisions of the statutes requiring the reporting of work accidents are confused and in some cases overlap.

Protective legislation going into considerable detail, applying to accident prevention in mines, on steam railroads, to building and construction work, and

to factories, mercantile establishments, mills, and workshops, is found on the Illinois statute books. The work of the mine inspectors and railway safety inspectors, however, is not well organized, and is not carefully checked up and reported on from time to time—no reports at all being issued to show the efficiency of the work of the mining inspectors.

Causes of occupational diseases are: Vitiating of air with irritating or poisonous dusts and fumes; direct contact of workers with irritating and poisonous substances; extremes of heat and cold; extremes of dryness and humidity; defects in lighting; abnormal atmospheric pressure; jarring, shaking, and deafening noise; and overstrain, fatigue, hurtful postures, and over-exercise of parts of the body. A number of these conditions were found by the survey in greater or less degree in Springfield.

Some efforts to eliminate possible sources of the start and spread of fires and to provide adequate fire-fighting facilities were observed in many Springfield factories, but this could not be said of all. In a number of establishments provision for adequate egress had not been sufficiently looked after.

This law [workmen's compensation law] marked a distinct step forward, for it eliminated the "assumption of risk," "fellow servant," and "contributory negligence" defenses against the recovery of damages by injured workmen. But it has three great weaknesses which must be eliminated before the injured workman will get just treatment. First, it is optional with employers, and many, especially in the most hazardous industries, have elected to be exempt; second, injuries resulting from occupational disease are not covered; and third, even where operative, the law as administered does not in all cases eliminate the drain of lawyers' fees.

Under the Illinois child-labor law an age and school certificate must be secured by children under 16 years of age before they may go to work, and when employed they may not work before 7 a. m. or after 7 p. m.,¹ or for more than eight hours a day, or in any one of certain prohibited employments.

From conditions found in Springfield, however, it would appear that neither the child-labor law of Illinois nor its enforcement is satisfactory. There are opportunities for fraud and evasion in the provisions governing the issuance of certificates to permit children under 16 years of age to go to work, while violation of the provisions limiting the hours of work of children under 16 seems to be the rule rather than the exception.

Thus, among 55 children selected at random, it was found that 40 (72.7 per cent) had been irregularly employed, that 4 (7.3 per cent) began work before 7 o'clock in the morning, that 21 (38.2 per cent) worked in the evening after 7 o'clock, and that 34 (61.8 per cent) exceeded the weekly limit of 48 hours. "In the employment of these 40 children there was a total of 89 separate violations of different sections of the law on hours of work." The report suggests that the present law should be amended, making it more difficult to evade the requirements regarding proof of age, requiring at least a sixth-grade education or its equivalent before a child under 16 may leave

¹ Those under 14 years of age may not work later than 6 p. m.

school to go to work, and requiring that evidence of normal development and sound physical condition be procured before a work certificate can be secured.

In the chapter on wages and regulation of employment considerable space is devoted to a consideration of conditions in the mining industry which at the time of the survey employed approximately 2,500 residents of the city for an average of 181 days in the year. Wages in 1913 ranged from \$1.50 per day for trappers to approximately \$1.27 per ton¹ for miners and loaders, who make up the great majority of mine workers. Because of the uncertainty of continuous employment some miners, it is stated, are compelled to seek other work during slack periods.

The net result of these conditions is that miners' incomes, which when judged by wage rates appear to be liberal, are reduced until it is impossible in the case of many of the men to supply an average family of five or six persons with the reasonable necessities of life.

Among the measures recommended for improving wage conditions in the mines the report includes:

Greater effectiveness in the work of public employment agencies; regularizing the industry through larger summer production; Government regulation which prevents the opening of new mines until there is commercial need for them; earlier negotiations toward agreements between the operators and the unions; and the appointment of a commission to take up the study of unemployment insurance.

Irregularity of employment was found in the manufacturing and mercantile industries. Out of 3,771 employees in 49 establishments about one-half had full-time employment in 1913. Wages varied from industry to industry, but the report notes that unskilled laborers received from \$1.75 to \$2 a day—a large proportion not over \$1.80—and that the majority of skilled workers received wages ranging from \$2 to \$3.75 a day. Wage rates in the building trades, construction work, and in street paving were found to be fairly high, but the men suffered from enforced idleness. Transportation showed much greater regularity of work, with wages ranging from \$12 to \$30 a week. In laundries and mercantile establishments employing women mostly work was quite regular, but wages were low.

As to the wages of skilled and semiskilled workers in the manufacturing and mechanical industries, the building trades, and on railroads, the report expresses the opinion that one hope for male workers who at present are not members of the union is to be found

¹ It is stated that many workers were able to make as much as \$5 a day when there is plenty of work, although a large proportion fall below that amount. Some of the miners interviewed reported daily earnings of \$7 and \$8. The 1916 scale provides an increase of 3 cents per ton over the 1914 rates for tonnage men, and 5 per cent increase in the wages of day laborers.

in labor organization. As to wages of women workers, especially in laundries, 5-and-10-cent stores, and restaurants, it is stated that "minimum-wage legislation seems to offer the most promising method for securing a wage adequate for self-support of girls who give the whole of their working time to their employment." General wage increases may be brought about by certain indirect methods, to which end the report urges the support of citizens along the following lines:

The prohibition of child labor, with the consequent probable increase in the demand for, and in the wage of, adult labor; a corollary of this, the development of better industrial education for children now of school age, thus preparing the coming workers for better paid and higher types of work; the establishment of better wage rates for manual labor on public works; and the establishment of minimum wage standards.

The work and management of the Springfield State free employment office is reviewed, some apparent defects cited, and the need for some sort of central control of all State employment offices suggested.

The report shows that in 1914, in 72 manufacturing establishments, employing 3,981 organized and unorganized workers, 85 per cent were working nine or more hours a day, and that shorter hours, as a rule, prevailed in the union shops, where 54 per cent were working an eight-hour day.

At the same time hours of labor, considered as a whole, were not what should be reasonably expected. The eight-hour day, toward which the leaders of the labor movement throughout the country are working, was still a good way from being achieved in Springfield. The great majority of all workers, both men and women, were laboring 6, 9, or 10 hours a day or more.

There were a number of women and girls under 21 years of age still engaged in nightwork.

Finally, many children were working for more than eight hours a day in spite of the law which makes such labor illegal.

It is recommended that the reduction of the workday for women to eight hours, the limitation of the weekly hours, the elimination of nightwork for women, and the guaranty of one day of rest in seven should be made a part of the State law and that better law enforcement is needed to effect a reduction in the hours of child workers.

From the study of 100 wage earners' families the following facts were developed:

Seventy per cent of the 378 persons 14 years of age or over in these families were contributing to the family income.

The proportion of wage-earning children was very large. Of the 57 between 14 and 16 years old, 41, or 72 per cent, were gainfully employed.

When employed, 10 out of the 70 fathers whose wage rates were reported received less than \$12 per week; 32 received from \$12 to \$20; 28 received \$20 or more.

Of all the other males employed for whom information was available, one-third earned less than \$7 a week, one-half less than \$10. Among the women of 16 years of age and over, more than one-fourth earned less than \$6, and almost 70 per cent less than \$8 per week.

Of all members of these families who contributed to the family income, two out of every five reported irregular employment for the previous year—and irregular employment meant the loss of from several weeks to six months.

Of 56 persons discovered in the investigation who had left school before 16 years of age, 25, or nearly one-half, had left because their parents had not felt able to continue them in school.

Over one-fourth of the mothers in the 100 families were earning money to augment the family income.

Finally, conditions found in Springfield showed clearly, as they have in other investigations elsewhere, the important part which low wages and unemployment play in the problems of bad housing, child labor, evasion of the laws as to compulsory education, neglected childhood, and the predisposition of families to physical and often moral breakdowns. No solution of these problems, therefore, will be effective that does not eliminate the great economic waste of unemployment and correct the evil of low wages.

The report points out that the betterment of industrial conditions depends upon employers acting together in some degree but for the most part singly, employees acting individually and through labor organizations, and the public acting through crystallized public opinion and the power of the State. The largest responsibility is laid upon the employers who, it is stated, have large latitude in fixing wage rates, methods of payment, hours of labor, conditions as to safety and sanitation, and regularity of employment. In conclusion, the report briefly sums up the findings of the survey and offers definite recommendations to effectuate industrial betterment, laying particular emphasis upon the importance of consolidating and coordinating all State bodies having to do with industrial conditions into a single State department of labor with bureaus organized to have charge of special work.

These should include a bureau of inspection responsible for railroad, factory, and other inspection service, except mining; a bureau of child labor; of employment, including supervision of the public employment agencies; of mining; of research and labor statistics; and any other bureaus that may later be needed. The plan of reorganization should provide for the establishment of an industrial commission as an integral part of the new labor department, with the commission, instead of a single commissioner, acting as the executive head of the department.

The administration of the workmen's compensation act should be made a function of the industrial commission of the reorganized labor department.

It is believed * * * as in the case of workmen's compensation laws, that health insurance legislation will act as a powerful force for prevention of disease. * * * It is recommended, therefore, * * * that a commission of the legislature be appointed to study and report upon the matter.

Under the reorganization plan recommended the enforcement of the child-labor law should be in the hands of a bureau of child labor in the new department of labor and mining.

The establishment of a minimum-wage board through which assurance may be had that wages at least adequate for the self-support of girls giving the whole of their working time to stores or other work places is recommended.

It is recommended that thorough study of the unemployment situation and unemployment insurance be taken up through a commission to be created by the legislature.

The courts of New York State have held a law prohibiting the 7-day work week in factories and mercantile establishments to be constitutional. A similar law is recommended for Illinois.

The law allowing women to work 10 hours a day 7 days per week should be changed to make it illegal to employ women at most for more than 8 hours per day or 48 hours per week. This would merely be eliminating the 7-day week and reducing hours on the other 6 days to 8. Moreover, the law should be amended to prohibit nightwork by women and girls.

THE ORGANIC DEVELOPMENT OF BUSINESS.¹

This is the subtitle of the report of the committee on vocational guidance submitted at the fourth annual convention of the National Association of Corporation Schools held at Pittsburgh, May 30 to June 2, 1916. As stated in the report of the committee for 1915, "vocational guidance in industry is the organic conception of the individual in industry, and is possible only through organic progress in industry; hence the subtitle of the report." The present report is "an attempt to set forth what employee, employer, and society should strive for in the human relations in industry—the realization of an organic unity in each individual life, in each business, between businesses, and between business and society." It appears to be concerned primarily with the problem of "suggesting machinery for getting the organic conception of the individual in industry to operate efficiently in each firm of the association."

In order to grasp the significance of the organic unity of man, certain normal human needs are emphasized, among which are physical integrity, adequate compensation, training and knowledge, appreciation of the beautiful, social opportunities, and justice. Health is absolutely the foundation of economic and social efficiency, declares the report in drawing attention to the necessity of physical examination of employees, the protection of all workers after they are in their

¹ National Association of Corporation Schools. Report of Committee on Vocational Guidance (*The Organic Development of Business*). Fourth annual convention, Pittsburgh, May 30, 31, and June 1, 2, 1916. New York, 1916. 148 pp.

positions, the prevention of accidents, and the control and elimination of occupational diseases. In order to give concreteness to the organic progress of the employee in industry, the report gives in synthetic outline a picture of the worker at his job from start to finish, having an adequate starting knowledge of his prospective employer, fairly selected for his job, instructed in his work, guaranteed bodily integrity, given a chance to learn the business, justly remunerated, working reasonable hours, surrounded by machinery designed to keep open channels, assured that merit will win, and freely and fearlessly taking part in all those activities that awaken, train, and develop personal power.

Representatives of the committee on vocational guidance made a tour of investigation, visiting a number of individual firms in New York, Cleveland, Detroit, Chicago, Pittsburgh, and Philadelphia, and this personal contact with more than 200 executives of all grades revealed a "keen interest in the significance of the human relations in industry and a deep appreciation of it," and also that "the organic conception of the employee must include work, income, food, home, sleep, training, protection, recreation—the total life of an efficient contented human being—in work and out of work." This personal investigation also revealed a clear tendency among the firms visited "to get away from the old type autocratic one-man rule and substitute therefore the functionalized and cooperative committee system." Furthermore, many firms expressed a desire to have an efficient clearing house established in the association that would effectively gather, evaluate and pass along helpful assistance in the understanding and solution of their problems. In laying emphasis upon the general considerations resulting from this personal investigation—the rapidly growing interest in the human relations in work; the grasping in business of the organic ideal; the open, friendly, give-and-take spirit; the definite, helpful cooperative arrangements with our educational institutions; the rapidly developing, scientific, and human spirit in business, evidenced through the demand for the expert and the deep interest in experiments in industrial cooperative control; the searching efforts to anticipate and prepare for the readjustments certain to follow the war—"we see clearly that business is being recognized as the all correlating life fact of our time, in which the sovereignty of the normal individual must be realized."

Part II of the report is devoted to the formulation of ways and means for putting the organic conception of the individual employee in industry into practical operation—to make it of real working value. The general subjects discussed in this connection relate to a central employment and service bureau, the selection and adjustment

of men to jobs, health, education, promotion and transfer, grievances, and management sharing.

Decentralization in dealing with questions of employment is regarded as the fundamental weakness in the whole employment problem. Through a well thought-out centralized employment and service bureau should function all fundamental problems having to do with job analysis and the educational value of the job, and with the selection, hiring, compensation, promotion, and discharge of workmen. The importance of job analysis which includes a careful study of every kind of occupation, both within the industry itself and in relation to the life of the employee outside of his occupation, is emphasized. The medical examination of employees is regarded as the basis for all accurate work along the line of health conservation. The education and training of employees within the industry "is one of the most significant movements in the world of industry and gives promise of rapid extensive and intensive development. The training of employees is 'good business.' This conviction is turning our large corporate industries into veritable schools, colleges, and universities. It is already having a wholesome retroactive influence on our formal educational procedure in schools and colleges, giving it a more concrete content and shaping up educational methods more in terms of vocational business and social values." The report discusses some prerequisites of corporation education, pointing out the necessity of making physical, mental, and vocational tests in order to get "the right man on the right job." The value of systematic promotion and the advantages of a policy of transferring men from one job or department to another—remedying misfits—are briefly mentioned. Taking up the matter of grievances, the report declares that "a wise handling of misunderstandings, dissatisfactions and grievances is one of the most important problems now receiving wide attention." The report concludes with a brief description of how some firms are encouraging the cooperation of their employees in the management of the business—that is, making the workers practically partners in management.

Part III of the report includes special articles on the general subjects of Selection, Employment department, Home conditions, Training courses, and Adjustment machinery.

CHOICE OF OCCUPATION OF CHILDREN LEAVING SCHOOL IN THE CANTON OF ZURICH, SWITZERLAND.

In a recently issued bulletin¹ of the statistical bureau of the Swiss Canton of Zurich are published interesting statistics as to the choice of the occupation of pupils leaving the cantonal primary and secondary schools in 1915. It may be noted that in the primary schools the school age varies from 6 to 16 years. The secondary school supplements the work of the primary schools for those children who desire to increase their knowledge though having no idea of going on to higher studies, and also prepares certain pupils for entrance into the middle schools. Attendance is compulsory in the primary school but generally voluntary in the secondary schools.

The course of studies in the secondary school covers from two to four years and pupils are admitted from ten years and upward. In the Canton of Zurich, the primary schools have eight grades and the secondary schools three grades. Attendance is compulsory for eight years.

The total number of pupils leaving the primary and secondary schools in Zurich in the spring of 1915 was 7,972, against 8,077 in 1914. The decrease is partly explained by the fact that at the outbreak of the war a large number of alien children who had been living in the Canton returned with their parents to their native country. It is interesting to note that the pupils leaving school in 1915 had on an average a higher education than those leaving in 1914. In 1914, 51 per cent of the pupils leaving had attended the primary schools and 49 per cent the secondary schools, while in 1915 this proportion was exactly reversed.

The statements of those who were able to report that they had made a choice of occupation before leaving school are summarized in the following table:

¹ Die Berufswahl der im Frühjahr 1915 aus der Volksschule ausgetretenen Schüler. Winterthur, 1916. 58 pp. (Statistische Mitteilungen betreffend den Kanton Zürich. Heft 122. Herausgegeben vom Kantonalen Statistischen Bureau.)

GENERAL STATEMENT OF CHOICE OF OCCUPATION MADE BY PUPILS LEAVING SCHOOL IN 1915.

Choice of occupation.	Pupils of primary schools.		Pupils of secondary schools.		Total.		
	Num-ber.	Per-cent.	Num-ber.	Per-cent.	1915		1914
					Num-ber.	Per-cent.	Per-cent.
MALE.							
Entrance into a higher educational institution.	14	0.9	418	21.9	432	12.5	10.4
Departure for the purpose of an education in foreign languages	5	.3	59	3.1	64	1.9	2.5
Entrance into the business or industrial establishment of parents	379	24.7	257	13.4	636	18.4	19.7
Apprenticeship	700	45.5	1,067	55.8	1,767	51.2	49.6
Unskilled labor	440	28.6	111	5.8	551	16.0	17.8
Total	1,538	100.0	1,912	100.0	3,450	100.0	100.0
FEMALE.							
Entrance into a higher educational institution.	6	0.3	371	22.1	377	10.5	7.4
Departure for the purpose of education in foreign languages	7	.4	67	4.0	74	2.1	6.6
Entrance into the business or industrial establishment of parents	55	2.9	79	4.7	134	3.8	3.6
Apprenticeship	378	19.9	432	25.7	810	22.7	23.9
Industrial unskilled labor	495	26.1	100	6.0	595	16.6	19.7
Domestic occupation in:							
Own family—							
Agricultural	306	16.1	171	10.2	477	13.3	13.3
Nonagricultural	340	17.9	330	19.7	670	18.7	17.1
With strangers.	311	16.4	127	7.6	438	12.3	8.4
Total	1,898	100.0	1,677	100.0	3,575	100.0	100.0

The decrease shown in the number of pupils who entered gainful employment without any previous apprenticeship the report ascribes to the economic crisis caused by the war. This decrease, the report notes, indicates that in times of economic depression unskilled labor is less in demand than skilled labor.

A close study of the data presented shows in how large a measure the future of children entering gainful occupations is dependent upon their schooling. In the case of the boys leaving school, it becomes evident that those entering into the business of their parents, as well as those choosing unskilled labor in the service of strangers, were largely primary-school pupils, while about three-fifths of those choosing apprenticeship in a skilled occupation were pupils of the secondary schools (1,067 out of 1,767). A majority of the girls who are being apprenticed are likewise from the secondary schools, while more than four-fifths of those choosing unskilled labor have merely a primary-school education (1,452 out of 21,807).

Below are shown the principal industrial and occupational groups from among which the pupils of both sexes chose their future occupation.

CHOICE OF OCCUPATION OF PUPILS LEAVING SCHOOL, BY SEX, INDUSTRIAL AND OCCUPATIONAL GROUPS, AND IN WHAT CAPACITY, 1914 AND 1915.

Industrial and occupational groups.	Pupils entering—							
	The business of their parents.		Apprenticeship.		Unskilled labor.		Total.	
	1914	1915	1914	1915	1914	1915	1914	1915
MALE.								
Agriculture, gardening, etc.....	508	475	41	70	129	173	678	718
Industries and trades:								
Foodstuffs, etc., industry.....	34	28	101	98	15	11	150	137
Clothing industry.....	19	16	54	68	18	15	91	99
Building trades.....	41	44	208	116	29	18	278	178
Textile industry.....	4	.....	20	35	161	125	185	160
Metal industry.....	27	33	726	857	76	80	829	970
Printing trades.....	6	4	72	59	1	2	79	65
Other industries and trades.....	15	10	52	53	39	13	106	76
Total.....	146	135	1,233	1,286	339	264	1,718	1,685
Technical occupations in industry.....			99	104			99	104
Mercantile occupations in industry and commerce.....	11	13	279	257			290	270
Labor in mercantile establishments.....	11	9	5	1	144	104	160	114
Hotels, restaurants, saloons, cafés, etc.....	6	2	34	23	6	5	46	30
Transportation.....	7	2	25	8	7	5	39	15
Public administration, professions.....	3	.....	28	18			31	18
Grand total.....	692	636	1,744	1,767	625	551	3,061	2,954
FEMALE.								
Agriculture, gardening, etc.....	499	491	2	1			501	492
Industries and trades:								
Foodstuffs, etc., industry.....	35	32			22	21	57	53
Clothing and millinery industry.....	21	14	631	576	42	38	694	628
Textile industry.....	5	3	13	14	508	453	526	470
Metal industry.....	.....	.....	.....	.....	9	9	9	9
Printing trades.....	2	2	1	1	11	4	14	7
Other industries and trades.....	5	1	8	7	19	25	32	33
Total.....	68	52	653	598	611	550	1,332	1,200
Technical occupations in industry.....	1	.....					1	.....
Mercantile occupations in industry and commerce.....	3	19	197	186			200	205
Labor in mercantile establishments.....	32	24			112	36	144	60
Hotels, restaurants, saloons, cafés, etc.....	25	25	15	8	5	9	45	42
Transportation.....	.....	.....	7	4	1	.....	8	4
Public administration, professions.....	.....	.....	10	10	1	.....	11	10
Nursing.....	.....	.....	3	3	1	.....	4	3
Domestic service, housekeeping.....	637	670			315	438	952	1,108
Grand total.....	1,265	1,281	887	810	1,046	1,033	3,198	3,124

IMMIGRATION IN JULY, 1916.

The number of immigrant aliens admitted into the United States during the first eight months of 1916 has been in excess of the number admitted during the corresponding months of 1915. There has also been an increase from month to month during the first five months of 1916. June shows a decrease of 0.8 per cent from May, July a decrease of 18.6 per cent from June, and August an increase of 19.7 per cent over July. These facts are brought out in the statement following.

IMMIGRANT ALIENS ADMITTED INTO THE UNITED STATES IN SPECIFIED MONTHS,
1914, 1915, AND 1916.

Month.	1914	1915	1916	Per cent of increase over pre- ceding month.
January.....	44,708	15,481	17,293	8.5
February.....	46,873	13,873	24,740	43.1
March.....	92,621	19,263	27,586	11.5
April.....	119,885	24,532	30,560	10.8
May.....	107,796	26,069	31,021	15.1
June.....	71,728	22,598	30,764	1.8
July.....	60,377	21,504	25,035	18.6
August.....	37,706	21,949	29,975	19.7

¹ Decrease.

Classified by races, the number of immigrant aliens admitted into and emigrant aliens departing from the United States during July, 1915 and 1916, was as follows:

IMMIGRANT ALIENS ADMITTED INTO AND EMIGRANT ALIENS DEPARTING FROM
THE UNITED STATES, JULY, 1915 AND 1916.

Race.	Admitted.		Departing.	
	July, 1915.	July, 1916.	July, 1915.	July, 1916.
African (black).....	486	797	210	140
Armenian.....	30	118	58	15
Bohemian and Moravian.....	54	15	4	.....
Bulgarian, Serbian, Montenegrin.....	419	160	50	6
Chinese.....	357	180	157	50
Croatian and Slavonian.....	54	33	4	.....
Cuban.....	454	719	109	232
Dalmatian, Bosnian, Herzegovinian.....	12	3	1	.....
Dutch and Flemish.....	548	322	39	76
East Indian.....	11	2	4	3
English.....	2,787	3,119	578	617
Finnish.....	341	631	48	45
French.....	834	1,526	48	325
German.....	798	783	30	55
Greek.....	2,314	1,692	185	188
Hebrew.....	1,357	1,031	12	12
Irish.....	1,530	1,618	141	186
Italian (north).....	423	340	457	212
Italian (south).....	1,913	3,004	4,649	489
Japanese.....	903	686	69	50
Korean.....	11	5	6	7
Lithuanian.....	35	37	4	.....
Magyar.....	64	17	6	12
Mexican.....	1,121	1,132	26	101
Pacific Islander.....	2	3	.....	4
Polish.....	350	283	76	9
Portuguese.....	758	1,118	70	53
Roumanian.....	41	49	5	2
Russian.....	330	413	606	522
Ruthenian (Russniak).....	160	109	.....	1
Scandinavian.....	1,027	1,706	229	387
Scotch.....	937	1,081	168	184
Slovak.....	42	12	6	3
Spanish.....	420	1,467	179	202
Spanish-American.....	143	211	42	46
Syrian.....	40	93	22	6
Turkish.....	20	39	1	.....
Welsh.....	96	73	7	8
West Indian (except Cuban).....	84	205	30	20
Other peoples.....	198	203	40	54
Not specified.....	.....	.....	1,481	1,107
Total.....	21,504	25,035	9,861	5,429

OFFICIAL PUBLICATIONS RELATING TO LABOR.

UNITED STATES.

CALIFORNIA.—*Industrial Accident Commission. Report of decisions for the year 1915. Vol. 2. [Sacramento] 1916. 1121 pp.*

Contains report of decisions under the employers' liability act, commonly known as the Roseberry Act, an elective measure applying only to those filing notice of their intention to come under its provisions, and under the workmen's compensation insurance and safety act, as amended, effective January 1, 1914, which superseded the Roseberry Act. This act is a compulsory compensation measure and includes all classes of labor with the exception of farm, dairy, agricultural, viticultural or horticultural labor, stock or poultry raising, household domestic service, and employments which are both casual and not in the usual course of the business of the employer. This act was amended by the legislature in 1915 to cover occupational diseases. The volume contains about 1,000 decisions, of which 7 are under the Roseberry Act. The dismissed cases number 110. There are included also 8 decisions of the Supreme Court and District Court of Appeals of California on review of decisions made by the commission.

GEORGIA.—*Department of Commerce and Labor. Fourth annual report of the Commissioner of Commerce and Labor for the fiscal year ending December 31, 1915. Atlanta, 1916. 85 pp.*

Embraces a résumé of approximately 100 years of industrial progress in the State; an article on the natural resources of the State; statistics showing the amount and value of the raw material used during 1915 by the manufacturers of the State; the number of employees; the amount of wages paid to wage earners; the value of manufactured articles; and other information. The 166 textile mills, with a combined capital of \$48,849,232.73, turned out product valued at \$70,241,926.81. They employed 15,242 females and 22,063 males, 2,336, or 15.3 per cent, of the former being under 16 years of age. The highest weekly wage paid to women workers was \$18 and the lowest was \$2; the highest paid to male workers was \$32 and the lowest \$2.

MASSACHUSETTS.—*Bureau of Statistics. Rates of wages and hours of labor in steam and electric railway service in Massachusetts. June 1, 1916. Boston, 1916. 60 pp. (Labor bulletin, No. 115, being Part III of the annual report on the statistics of labor for 1916.)*

This is a special report on the rates of wages and hours of labor in the entire railway service in Massachusetts. It supplements previous annual reports on union scale of wages and hours of labor by including information previously omitted, having reference to those occupations represented in construction, maintenance, and repair work, while prior reports pertained to the operation of rolling stock. Data for the report were secured from printed and typewritten "Rules" or schedules furnished by the officials of the steam railroad and electric railway companies, and of the several labor organizations concerned.

The data for steam railroads are of date May 15, 1916, and for street railways of date October 1, 1915.

MICHIGAN.—*Department of Labor. Thirty-third annual report [1915]. Lansing, 1916. 741 pp.*

This report gives detailed statistics of inspections of factories and workshops, stores, buildings, restaurants, hotels, and schoolhouses, with supplementary reports of the State boat inspector and the coal-mine inspector. There are

also presented prison and reformatory statistics, a summary of accidents reported, a list of orders issued suggesting compliance with the provisions of law, statistics of the Michigan free employment bureaus, a list of banks in the State, a compilation of labor laws, and reports of municipalities.

During the year 1915 there were 14,359 inspections of factories and workshops, in which were employed 452,105 persons at the time of securing the statistics, 65,708 (14.5 per cent) being females and 386,397 (85.5 per cent) being males, with an aggregate daily pay roll of \$1,116,428.80. There were 1,226 males employed under 16 years of age. The average daily hours of labor for males was 9.4 and for females 8.6. About half of the firms inspected, 7,250, or 50.5 per cent, carried workmen's compensation insurance. There were 2,834 inspections of stores employing 28,074¹ people at an average daily wage of \$2.12; 529 restaurants employing 4,599¹ persons at an average daily wage of \$1.31; 986 hotels employing 11,387¹ persons at an average daily wage of \$1.16.

The six free employment offices in the State sent 54,000 persons to employers desiring help, an increase of 15,342 over 1914.

In 15 coal mines operated in 4 counties, 239 accidents occurred, of which 5 were fatal.

In all, 7,110 accidents, 75 being fatal, were reported to the department. Of these, 2,775 (39 per cent) occurred in connection with automobiles and automobile accessories. Approximately 75 per cent were due to causes other than machinery. In 2,425 cases (34.1 per cent) the disability did not extend beyond one-half day. A comparison of these figures with the number of accidents reported to the Michigan Industrial Accident Board (in 1915 a total of 39,781, of which 332 were fatal²) shows that they are far from complete and omit many fatal as well as nonfatal accidents.

NEW JERSEY.—*Department of Labor. Thirty-eighth annual report of the Bureau of Industrial Statistics for the year ending October 31, 1915. Camden, 1916. 296 pp.*

Presents comparative statistics of manufacturers for the calendar years 1913 and 1914; a tabular and analytic review of employment, working time, wages, accidents, etc., on steam railroads; a review of retail prices of food supplies; statistics of the fruit and vegetable canning industry; and a year's record of occurrences of interest to labor and industry, grouped under the title *Industrial Chronology of New Jersey*, as follows: Accidents to workmen while on duty; suspension of work—temporary or permanent—in manufacturing establishments; changes in working hours and wages; expansion of manufacturing industry; industrial property damaged or destroyed by fire; organization of trade and labor unions; and such strikes as have occurred during the 12 months covered by the chronological record.

The number of manufacturing establishments on December 31, 1914, was 2,624, divided into 89 general groups, with total capital of \$1,025,169,694. The aggregate average number of wage earners employed was 325,634. Of these, 233,208 were males 16 years of age and over, 87,669 were females 16 years of age and over, and 4,757 were children of both sexes who were less than 16 years. The total amount paid in wages was \$183,530,980, or \$563.61 per employee.

On railroads, for the year ending June 30, 1914, 44,898 persons were employed, to whom \$35,586,727.36 were paid in wages—an average daily wage of \$2.82. The employees injured numbered 2,490; 53 injuries resulted fatally.

¹ All the employees did not receive wages, and the average is based upon the number to whom wages were paid.

² See MONTHLY REVIEW of the United States Bureau of Labor Statistics, April, 1916, p. 61.

For the year ending September 30, 1914, the report notes 3,795 accidents, of which 259 (6.8 per cent) were fatal and 3,536 (93.2 per cent) nonfatal. Approximately one-third (65.6 per cent) of the accidents were reported by the railroads. One hundred and twenty-seven strikes and lockouts are reported, involving 26,786 wage earners and an aggregate wage loss of \$598,989, or \$22.40 for every participator. The aggregate number of days lost was 288,309, an average of 10.7 for each wage earner concerned. A detailed history of the strike of the Standard Oil Co. employees at Bayonne and the strike of the workers at the American Agricultural Chemical Co. at Roosevelt is given.

WYOMING.—*State Coal Mine Inspector. Annual report, year ending September 30, 1915. Cheyenne [1916]. 40 pp.*

This report shows a total coal production for the year ending September 30, 1915, of 6,268,990 tons; total employees, 7,379; fatal accidents, 21; non-fatal accidents, 144; tons of coal produced per accident, 37,994; number of fatal accidents per 1,000 employees, 2.85. It emphasizes the importance of safety in mines.

UNITED STATES.—*Congress. House. Committee on Labor. National employment bureau. Report to accompany H. R. 5783. [Washington, 1916.] 12 pp. (64th Cong., 1st sess., H. Rept. No. 424.)*

At the hearings held by the committee on H. R. 5783 statements were made by the Secretary of Labor; the Commissioner of Labor Statistics; Hon. J. I. Nolan, Congressman from California; Dr. B. A. Sekely, representing the National Liberal Immigration League; and Mr. D. B. Wheeler, of Washington, D. C., all agreeing on the necessity of immediate legislation to take care of the problem of unemployment. No one appeared in opposition to the legislation. This report is largely devoted to the statement of the Secretary of Labor, Hon. W. B. Wilson. In conclusion, the report says:

H. R. 5783, introduced by Mr. Nolan, contains a comprehensive plan for the establishment of such a bureau and embodies the proposition to use the post offices, postal facilities, and postal employees under the direction of a bureau of employment established in the Department of Labor. This idea has met with the approval of the committee and practically all students of the question, since it offers the opportunity of using for the solution of this problem well-established departments of the Government already organized. Moreover, it recommends itself for the reason that the expense entailed will thus be comparatively small. Also, as the post office is already the center of the social life in every community and the inhabitants habitually visit these offices, the system can at once be put into operation and those in most need of service of this kind be immediately acquainted with its opportunities through channels with which they are familiar and in the habit of using daily. The facilities for free and easy intercommunication possessed by the Post Office Department will also aid greatly in making the system efficient. * * *

The necessity for legislation of this character is denied by no one; and, indeed, the increasing menace of the situation in regard to unemployment at certain seasons of the year is so apparent that all students of the question agree that some remedy must be found. * * *

The committee is convinced that it is in the power of Congress, by immediate action (which should be taken before another season of unemployment is upon us), to alleviate to a large extent the appalling situation that periodically confronts the country by reason of unemployment and earnestly urges the immediate attention of Congress thereto.

— *Senate. The Seaman's Act of 1915. Address delivered at the ninth annual meeting of the American Association for Labor Legislation, held in Washington, D. C., on December 28, 1915, by Henry W. Farnam. Washington, 1916. 16 pp. (64th Cong., 1st sess., S. Doc. No. 333.)*

UNITED STATES.—*Congress. Senate. The Federal Farm Loan Act, approved July 17, 1916, with marginal notes and index. S. Doc. 500, 64th Congress, 1st sess. Washington, 1916. 50 pp.*

This is an act to provide capital for agricultural development, to create a standard form of investment based upon farm mortgage, to equalize rates of interest upon farm loans, to furnish a market for United States bonds, to create Government depositaries and financial agents for the United States, and for other purposes.

— *Department of Commerce. Bureau of the Census. Financial statistics of cities having a population of over 30,000. 1915. Washington, 1916. 338 pp.*

Contains 34 tables and 27 diagrams as a part of the text and 32 general tables setting forth financial statistics of 204 cities having a population of over 30,000 in 1915, the total population represented by these cities being 31,168,150, or 31 per cent of the population of the entire country. Massachusetts has the largest number of cities in this class, namely, 19. These cities show total receipts of \$271,505,178 which, added to the cash balance at the beginning of the year, made a total of \$2,381,103,700. The payments for governmental and nongovernmental purposes were \$2,118,134,530, leaving a cash balance at the close of the year of \$262,969,170.

— *Department of the Interior. Bureau of Education. Vocational guidance bibliography. June 7, 1916. [Washington, 1916] 31 pp.*

— *Public Health Service. Health insurance: Report of standing committee adopted by the conference of State and Territorial health authorities with the United States Public Health Service, Washington, D. C., May 13, 1916. Washington, 1916. 8 pp. (Reprint No. 352 from the Public Health Reports, July 21, 1916, pp. 1919–1925.)*

The committee, consisting of William C. Woodward, M. D., health officer of the District of Columbia, and B. S. Warren, surgeon, United States Health Service, recommends the following fundamental provisions in any health-insurance measure proposed for National or State Governments:

1. *Insured persons.*—Every person engaged in a gainful occupation and earning less than a specified annual income, say \$1,000, should be entitled to the benefits provided under the law. Every person earning more than the specified annual income should be allowed to qualify for the same benefits or greater benefits according to annual income.

2. *Funds.*—To be provided jointly by contributions from employees and employers; the Government to appropriate for the expenses of supervision and administration.¹

3. *Benefits.*—The following benefits should be provided:

(a) *Cash benefits.*—Weekly cash payments in case of disability due to sickness, nonindustrial accident, or to childbearing by the beneficiary, for a period not to exceed 26 weeks in any one 12-month period.

(b) *Death benefits.*—Cash payment (for funeral expenses) to legal heirs for death due to sickness or nonindustrial accident.

(c) *Medical benefits.*—To include adequate medical and surgical care, medicines and appliances in home, hospital, sanatorium, dispensary, or physician's office, beginning with the first day of disability, whether due to sickness, nonindustrial accident, or to childbearing by the beneficiary or the wife of the beneficiary, and limited to a period of 26 weeks in one 12-month period.

4. *Administration.*—All matters of promulgation of rules and regulations and appeals should be vested in a National or State commission created for this purpose. All matters of local administration should be vested in local boards of directors, federated according to districts, subject to supervision by the central authorities, and rules and regulations promulgated by the commission.

The commission and all local and federated boards should be composed of persons representing the contributors to the funds. The number representing

¹ Compare proposal of American Association for Labor Legislation, p. 65 of this issue of the REVIEW.

employees and employers should be in the same ratio as their respective contributions.

Provision should be made for free choice of any physician registered on the local panel, and provision might be made also for adequate institutional care for those who prefer this method of medical benefits.

A corps of full-time medical officers should be provided within the National or State health service to have supervision of all hospital and dispensary relief; to examine all insured persons claiming to be disabled, and issue certificates in accordance with the regulations promulgated by the commission; to advise the administrative authorities and all contributors to the funds as to the best measures for the relief and prevention of sickness; to advise with the physicians attending sick members as to measures which will shorten the periods of disability; and to perform such other duties as may be fixed by regulations.

FOREIGN COUNTRIES.

ARGENTINA.—*Boletín del Departamento Nacional del Trabajo. Buenos Aires. May, 1916 (No. 34).*

Continues from the preceding number the report of an investigation or study by the Department of Labor on labor conditions in the Federal District and in Chaco and Formosa.

AUSTRALIA.—*Commonwealth Bureau of Census and Statistics. Labor and Industrial Branch. Report No. 6. Prices, purchasing power of money, wages, trade-unions, unemployment, and general industrial conditions, 1914-15. May, 1916. Melbourne [1916]. 183 pp.*

The scope of this report is indicated in the title. The number of trade-unions in the Commonwealth increased from 302 with a membership of 147,049 in 1906, to 713 with a total membership of 528,031 in 1915. The largest membership, not including the miscellaneous group, was in the railway and tramway services. Compared with 1911, the base year, the weighted average purchasing power of money index number shows an increase of 14 per cent for 1914 and of 27.8 per cent for 1915. The weighted average normal weekly rate of wages as expressed by index numbers, for adult male workers on December 31, 1915, the wage payable on April 30, 1914, being taken as the base—1,000—was 1,023, and for female workers, 1,006. The weighted average working hours per week on December 31, 1915, were 48.77 for male workers and 49.12 for female workers, as compared with 48.93 and 49.08, respectively, on April 30, 1914. Operations under the arbitration and wages board acts show a total of 208 awards or determinations made and 130 agreements filed in 1914, and 274 awards and 243 agreements in 1915. The report notes, during 1915, 358 industrial disputes involving 81,292 workers with a total loss in days of 583,225 and a wage loss of £299,633 (\$1,458,163.99). (See p. 68.) In 1915, 111,339 applications for employment were filed with the State free employment bureaus, and 39,089 positions were filled. In the same year 5,027 industrial accidents occurred; 144 were fatal and 4,883 incapacitated for more than 14 days. More than 80 per cent of the accidents occurred in the mining industry.

— — — *Labor Bulletin (published quarterly). Melbourne. July, 1916 (No. 13, January-March, 1916).*

Contains the usual current material on labor conditions, unemployment, retail and wholesale prices, house rents, industrial disputes, rates of wages, operations under the arbitration and wages board acts, emigration, employment bureaus, industrial accidents and labor legislation.

— — — *Official year book of the Commonwealth of Australia, containing authoritative statistics for the period 1901 to 1914 and corrected statistics for the period 1788 to 1900. Number 8, 1915. Melbourne, [1916]. 1127 [1] pp.*

In addition to the statistical material in this volume concerning political, social, and economic conditions in Australia, the year book contains special

articles dealing with subjects of particular interest to labor and contained in those sections referring to industrial unionism and labor and industrial statistics. Considerable use is made of maps and diagrams.

AUSTRIA.—*Amtliche Nachrichten des k. k. Ministeriums des Innern, betreffend die Unfall- und Krankenversicherung der Arbeiter. Vienna, June, 1916.*

Special articles and current reports on matters relating to the social-insurance system of Austria; a special supplement reports financial and sickness statistics of the workmen's sick funds for the years 1912 and 1913.

— *Arbeitsstatistisches Amt im Handelsministerium. Die Arbeitseinstellungen und Aussperrungen in Österreich während des Jahres 1914. Vienna, 1916. 95, 76 pp.*

A report of the Austrian bureau of labor statistics on strikes and lockouts during 1914. An appendix gives statistics of employers' and workmen's organizations. The strike and lockout statistics are reviewed on pages 70 and 71 of the present number of the REVIEW.

— *Die kollektiven arbeits- und Lohnverträge in Österreich. Abschlüsse und Erneuerungen des Jahres 1913. Vienna, 1916. 178 pp.*

The present report on collective agreements entered into in Austria during 1913 continues a series begun in 1906 by the Austrian bureau of labor statistics. During the year 1913, 500 collective agreements, covering 10,986 establishments and affecting 142,682 workmen, were concluded. The number of newly concluded agreements decreased 23 per cent as compared with the average number for the seven preceding years, while the number of establishments covered corresponds to the average for these seven years, and the number of workmen affected decreased by about 4 per cent. Of the total agreements concluded during the year, 45 per cent were new agreements and 55 per cent were renewals. Classified as local and shop agreements, 170 agreements, affecting 119,234 workmen, were local or group agreements, while 330, affecting 23,448 workmen, were shop agreements. The data concerning the duration of the agreements concluded in 1913 have been summarized in the table following:

CLASSIFIED DURATION OF COLLECTIVE AGREEMENTS CONCLUDED IN AUSTRIA
IN 1913.

Duration. ¹	Agreements.		Establishments covered.		Workmen covered.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Less than one year.....	8	1.77	15	0.18	293	0.22
One year but less than two years.....	69	15.27	305	3.56	3,969	3.01
Two years but less than three years.....	171	37.83	3,617	42.21	54,621	41.44
Three years but less than four years.....	130	28.76	2,676	31.23	51,309	38.93
Four years but less than five years.....	60	13.27	1,828	21.33	20,213	15.34
Five years and over.....	14	3.10	128	1.49	1,400	1.06
Total.....	452	100.00	8,569	100.00	131,805	100.00

¹ In 48 agreements, covering 2,417 establishments and 10,877 workmen, the duration was indeterminate.

The following table shows the total number of collective agreements in force, with the number of establishments included and number of employees affected, on December 31, 1913, by industries. The data given in this table are somewhat defective, because many agreements are broken or terminated by notice before their actual expiration without this fact being reported to the bureau, and partly because agreements of indeterminate duration are not included in the compilation, as no information could be obtained as to whether or not these agreements were still in force.

COLLECTIVE AGREEMENTS CLASSIFIED BY INDUSTRIES IN FORCE IN AUSTRIA DEC.
31, 1913.

Industry and occupational groups.	Number of agreements.	Number of establish- ments covered.	Number of workmen covered.
Agriculture and gardening.....	1	1	87
Mining.....	2	41	39,200
Stone, earthenware, glass, and china.....	152	799	21,239
Metal working and machinery.....	397	2,873	78,004
Woodworking industry.....	179	2,925	24,178
Leather industry.....	45	233	3,696
Textile industry.....	27	64	5,349
Upholstering.....	18	364	1,415
Clothing.....	164	15,788	54,808
Paper.....	35	1,133	10,266
Foodstuffs.....	194	3,163	30,857
Hotels, restaurants, cafés, etc.....	10	1,946	5,717
Chemical industry.....	20	20	2,025
Building trades.....	225	5,640	99,451
Printing trades.....	24	1,881	23,907
Commerce, transportation.....	85	2,625	18,590
Engineers and firemen.....	10	10	201
Other occupations.....	13	13	382
Total.....	1,601	39,519	419,372

The principal provisions in agreements entered into in 1913 relate to wages (97 per cent of all agreements) and to the hours of labor (87 per cent). The principal facts in regard to hours of labor, as reflected in these collective agreements, are disclosed in the table following:

NUMBER AND PER CENT OF AGREEMENTS, ESTABLISHMENTS COVERED, AND
WORKMEN AFFECTED, CLASSIFIED ACCORDING TO NORMAL HOURS OF LABOR
ON THE FIRST FIVE DAYS OF THE WEEK.

Normal hours of labor on the first 5 days of the week.	Agreements.		Establishments covered.		Workmen covered.		Earlier closing on Satur- days. ¹		
	Num- ber.	Per cent.	Num- ber.	Per cent.	Num- ber.	Per cent.	Agree- ments.	Estab- lish- ments covered.	Work- men covered.
8.....	7	1.7	156	2.0	406	0.3	.....	.....	.....
8½.....	2	.5	201	2.5	1,414	1.1	2	201	1,414
9.....	7	1.7	116	1.5	795	.6	2	101	514
9½.....	103	25.1	3,978	49.6	58,405	45.2	75	3,108	47,473
10.....	19	4.6	176	2.2	1,993	1.6	18	141	1,593
10½.....	103	25.1	959	12.0	25,218	19.5	95	921	24,415
11.....	27	6.6	705	8.8	19,084	14.8	25	703	19,080
11½.....	108	26.3	675	8.4	17,617	13.6	73	377	14,234
12.....	18	4.4	773	9.6	2,308	1.8	5	651	1,329
12½.....	2	.5	76	.9	165	.1	1	75	150
13.....	12	2.9	100	1.2	470	.4	5	55	220
13½.....	1	.3	(2)	.....	(2)	.....	.....	.....	.....
14.....	1	.3	105	1.3	1,305	1.0	.....	.....	.....
Total.....	410	100.0	8,020	100.0	129,180	100.0	301	6,333	110,372

¹ Of the agreements shown here, 25, covering 717 establishments and 19,473 workmen, in addition to earlier closing on Saturday also provide for earlier closing on other week days. Fourteen establishments which, without regulating the daily hours of labor, provide for earlier closing on Saturday are not included here.

² The establishments and workmen covered were enumerated under agreements providing for 12 hours of labor.

BRAZIL (SÃO PAULO).—*Boletim do Departamento Estadual do Trabalho. São Paulo. First quarter, 1916 (vol. 5, No. 18).*

Industrial accidents in 1915, the labor market in 1915, and labor legislation.

DENMARK.—*Statens Statistiske Departement. Statistiske meddelelser. 4. række, 51. bind. Copenhagen, 1916. 3 parts in 1 volume.*

Constitutes volume 51 of the fourth series of the general statistics of Denmark, and contains the results of the population census of Denmark of February 1, 1916, wages of agricultural laborers in 1915, and statistics of production of products subject to State regulation, namely, alcohol, beer, sugar, oleomargarine, and cigarettes.

In the inquiry covering wages of agricultural laborers there were included 6,700 workers. The average annual wages of male workers hired by the year and living with the family of the employer was 441 crowns (\$118.19). To this should be added the value of board and lodging, which may be estimated at 354 crowns (\$94.87) for the year. The annual average wage of female domestics was 264 crowns (\$70.75), with 302 crowns (\$80.94) additional estimated for board and lodging. These wages are an increase of 30 per cent over those prevailing in 1910.

The daily wage of day workers (males) was found to be about 3.5 crowns (\$0.94) for the spring and summer months, 3.75 crowns (\$1.01) during the harvest season, and 2.5 crowns (\$0.67) during the winter months. The corresponding rates for female day workers were 2 crowns (\$0.54), 2.33 crowns (\$0.62), and 1.5 crowns (\$0.40), respectively.

The daily hours of work of all agricultural laborers in Denmark vary from 9 to 10 hours in the spring and summer, 10 to 10½ hours during harvest, and 8 to 8½ hours in winter. These hours have remained practically unchanged since 1905.

— *Statistiske Efterretninger udgivet af det Statistiske Departement. Copenhagen July 21, 1916; August 5, 1916; August 22, 1916.*

Contain retail prices (average and index numbers) July, 1916, emigration in 1915, and unemployment in May, 1916.

FRANCE.—*Bulletin du Ministère du Travail et de la Prévoyance Sociale, Paris. June, 1916. (Vol. 23, No. 6.)*

Besides containing a special study on the volume of employment, begun shortly after the outbreak of the war, this volume includes current reports on strikes and lockouts, operations of the governmental unemployment fund and the central employment exchange, together with special articles on the application of the minimum-wage law enacted in 1915. Labor conditions in foreign countries are briefly reviewed. Current legislation and judicial decisions are noted.

— *Bureau de la Statistique Générale de la France. Résultats statistiques du recensement générale de la population, effectué le 5 mars 1911. Vol. 1, part 2. Paris, 1915. 168 pp.*

Forms the second part of the first volume of the general population census of March 5, 1911. The first part of this volume showed the so-called "legal" population, i. e., the persons habitually residing in each locality, while the second part shows the "present" population, based on individual schedules for all persons present in each locality on the day of the enumeration. On March 5, 1911, the "legal" population was 39,602,258, and the "present" population 39,192,133. The "present" population is shown for all France and for the individual Departments by sex, age, conjugal condition, place of birth, and literacy. In an appendix the same data are shown for foreign countries.

FRANCE.—*Ministère du travail et de la Prévoyance Sociale. Conseil Supérieur du Travail. Allaitement maternel au magasin et à l'atelier. Procès-verbaux, enquête et documents. Paris, 1916. 24 pp.*

A bill providing that mothers working in mercantile or industrial establishments be granted one hour each day or half an hour twice a day in which to nurse their infants less than 1 year old, without reduction of wages, was passed on June 12, 1913, by the Chamber of Deputies. The present volume contains a report on this bill by the permanent committee of the Superior Labor Council. The report advocates legislation still more liberal to mothers. A new bill drafted by the committee provides in addition that mothers may nurse their infants in the establishment and that each employer must furnish a decent secluded place to employed mothers who nurse their infants.

In an appendix is given similar legislation in Denmark, Spain, Italy, Norway, Argentina, Roumania, and Sweden.

GERMANY—*Ämtliche Nachrichten des Reichsversicherungsamts. Berlin. June and July, 1916.*

Current reports on the operation of the German social insurance system; laws amending the Insurance Code are reproduced (see p. 58).

GREAT BRITAIN—*Board of Trade. General report to the Board of Trade upon the accidents that have occurred on the railways of the United Kingdom during the year 1915. London, 1916. 17 pp.*

This report is presented under three general heads: (1) Train accidents; (2) Accidents caused by the movement of trains and railway vehicles exclusive of train accidents; (3) Accidents on railway premises not due to train accidents or to the movement of trains and railway vehicles. These are further subdivided in each of the three groups according as they relate to passengers, servants of the railways, and other persons. The following table is a general summary of all accidents:

NUMBER OF PERSONS KILLED OR INJURED ON THE RAILWAYS OF THE UNITED KINGDOM IN 1915, COMPARED WITH 1914, SHOWING THE PER CENT OF INCREASE OR DECREASE.

Group.	1914.		1915.		Per cent of increase 1915 over 1914.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
1. Train accidents:						
Passengers.....	6	322	269	1,432	14,383.3	1344.7
Servants.....	8	115	9	183	12.5	59.1
Other persons.....		1		2		100.0
2. Accidents due to movement of trains and railway vehicles, exclusive of train accidents:						
Passengers.....	119	2,118	162	2,355	36.1	11.2
Servants.....	417	4,950	403	4,962	23.4	.2
Other persons.....	565	344	521	334	27.8	2.3
3. Accidents on railway premises not in- cluding 1 and 2:						
Passengers.....	(3)	(3)	6	708		
Servants.....	(3)	(3)	59	21,202		
Other persons.....	(3)	(3)	40	562		
Total.....	1,115	7,850	1,469	31,740	422.3	418.1

¹ This increase is due to one accident in which 227 persons were killed and 246 were injured.

² Decrease.

³ Data not available.

⁴ Based upon the totals of groups 1 and 2 only.

Of the 22,472 persons injured and 105 killed in accidents on railway premises, incidental to and not directly connected with railway working, the report states that "the bulk of them were due to misadventure and comparatively few could be attributed to preventable causes."

GREAT BRITAIN.—*Board of Trade Labor Gazette. London. August, 1916.*

Current review of the labor market and volume of employment in the principal industries, reports from the labor exchanges, and labor conditions in foreign countries; also special articles on employment in Germany, retail food prices, and English and German food production. Current court decisions affecting labor are reviewed.

— — — *Dope poisoning [London, 1916]. 4 pp.*

— — — *Factory Inspector's Office. Nitrous fumes. [London, 1916]. 1 p.*

— — — *T N T Manufacture: Precautionary measures, 1916. [London, 1916.] 20 pp.*

See p. 52.

— — — *Local Government Board. Forty-fifth annual report of the local government board, 1915-16. Part II—Housing and town planning. London, 1916. 19 pp.*

"During the year to which the present report relates there has been a marked diminution in the activity of local authorities generally in housing matters." Private building continues also to be much restricted, "and it is to be feared that in many districts in England and Wales there exists, or will exist on the conclusion of the war, a very serious need for additional accommodation for persons of the working class."

The following table shows the amount of loans and the number of homes erected since December 3, 1909:

NUMBER AND AMOUNT OF LOANS AUTHORIZED FOR THE ERECTION OF HOUSES, 1910 TO 1916.

Year ending Mar. 31—	Urban authorities.			Rural authorities.			Total.		
	Num- ber of author- ities.	Amount of appropria- tions.	Houses to be built.	Num- ber of author- ities.	Amount of appropria- tions.	Houses to be built.	Num- ber of author- ities.	Amount of appropria- tions.	Houses to be built.
1910.....	2	\$65,844	78	1	\$1,314	.....	3	\$67,158	78
1911.....	12	491,322	464	1	1,216	.....	13	492,538	464
1912.....	29	980,921	882	16	133,561	139	45	1,114,482	1,021
1913.....	46	1,634,536	1,549	22	289,834	331	68	1,924,370	1,880
1914.....	79	2,753,758	2,465	45	942,057	871	124	3,695,815	3,336
1915.....	110	4,197,069	3,264	72	1,278,600	1,144	182	5,475,669	4,408
1916.....	14	2,269,677	1,917	10	177,705	154	24	2,447,382	2,071

¹ Including 1 lodging house.

GREAT BRITAIN.—*Registrar of friendly societies. Friendly societies, industrial and provident societies, building societies, trade-unions, workmen's compensation schemes, loan societies, scientific and literary societies, post office, trustee, and railway savings banks. Report of the chief registrar of friendly societies for the year ending December 31, 1915. Part C: Trade-unions. London, 1916. xrv, 10 pp.*

On December 31, 1914, there were upon the register 690 unions; 643 made returns showing 3,261,050 members, and funds amounting to £7,013,048 (\$34,128,783.58), the average contribution per week from each member being 6½d. (13.2 cents). About £890,000 (\$4,331,185) was expended in unemployment benefits, including £170,000 (\$827,305) for the unemployment insurance benefit; £670,000 (\$3,260,555) in dispute benefits; £680,000 (\$3,309,220) in sickness and accident benefits; £160,000 (\$778,640) in funeral benefits; and a further £540,000 (\$2,627,910) in benefits of a miscellaneous character. The average amount of unemployment benefit paid per member was 5s. 5d. (\$1.32).

— (Scotland.)—*Government Committee on War Organization in the Distributing Trades in Scotland. Second report of the committee, 28th March, 1916. Edinburgh, 1916. 4 pp.*

This committee was appointed "to consider how far, and by what means, it will be practicable so to readjust the conditions of employment in the distributing trades, both wholesale and retail, in Scotland, as to release a larger number of men for enlistment or other national services, with the minimum of interference with the necessary operations of those trades." Returns received by the committee from 4,306 employers indicated 10,170 employees already released for military service, 11,440 men of military age still employed, 1,834 who could still be released, and 3,508 substitutes required, including 640 women and 2,818 men ineligible for military service. The committee emphasizes the importance of the recommendations contained in its first report regarding the establishment of trade committees to deal with such matters as reorganization, technical training, the extension of early closing and dinner-hour closing. "Special reference may be made to the desirability of extending early closing and dinner-hour closing, wherever practicable, so as to make employment in the distributing trades more attractive."

The first report of this committee was summarized in the MONTHLY REVIEW of April, 1916 (Vol. 2, No. 4, p. 106).

INDIA.—*Annual report of the working of the Indian factories act, 1911, in the Punjab, Delhi, and Northwest Frontier Provinces, for the year 1915. Punjab, 1916. 59 pp.*

The report indicates a general improvement in the conditions of factory labor, including sanitary reforms and improvements in ventilation and in the fencing of machinery. It is noted that in the Punjab the guarding of machinery was accompanied by an immediate reduction in the number of fatal and serious accidents, the average per 100 operatives employed in 1915 being 0.65 as against 0.72 in 1914. It is recommended that the age at which children may be permitted to work be raised from 9 to 10 years. The belief that women were being worked in excess of the legal 11 hours per day in certain spinning factories is noted, and as to children operatives it is stated that in many factories they "look fagged out, jaded, undersized, and unhealthily in

appearance." The range of wages paid to skilled and unskilled laborers in the three Provinces in 1915 was as follows:

RANGE OF WAGES PAID SKILLED AND UNSKILLED LABOR IN FACTORIES IN THE PUNJAB, DELHI, AND NORTHWEST FRONTIER PROVINCES, INDIA, IN 1915.

Province.	Skilled. ¹		Unskilled. ²	
	Highest.	Lowest.	Highest.	Lowest.
Punjab.....	\$42.12	\$2.59	\$0.20	\$0.04
Delhi.....	48.60	3.89	.20	.085
Northwest frontier.....	35.64	4.86	.20	.08

¹ Per month.

² Per day.

³ The report gives this rate as 4a. 6p., but it is not clear whether the "p" stands for the Indian coin "pie" or "pice." If the former, the equivalent is 8½ cents; if the latter, the equivalent is 11 cents.

ITALY.—*Bollettino dell' Ispettorato dell' Industria e del Lavoro. Ministero di Agricoltura, Industria e Commercio. Ufficio del Lavoro. Rome. January-February, 1916. (Bimonthly.)*

Special articles on the factory-inspection service and an account of an accident in connection with a Garnett machine in a woolen mill in Turin and of one connected with the operation of a grindstone for the sharpening of agricultural implements.

— *Bollettino dell' Ufficio del Lavoro. Ministero dell' Industria, Commercio e Lavoro. Rome. August 1, 1916. (Semimonthly.)*

Current reports on the labor market, labor disputes, employers' and workmen's organizations, retail prices, court decisions affecting labor; also articles on labor in foreign countries and one on tuberculosis among employees of retailers of wine in Paris.

— *Ministero di Agricoltura, Industria e Commercio. Direzione Generale del Credito e della Previdenza. Provvedimenti in materia di economia e di finanza emanati nella Svizzera in seguito alla guerra europea. Part 1: July 31, 1914, to December 31, 1915. Rome, 1916. 246 pp. (Annali del credito e della previdenza. Series II, vol. 16, part 1.)*

The present volume gives the text of all economic and financial measures—laws, decrees, ordinances, circular orders, etc.—enacted in Switzerland between July 31, 1914, and December 31, 1915, on account of the European war.

— *Ufficio del Lavoro. Provvedimenti di carattere sociale emanati all' estero durante la guerra europea fino al 30 aprile 1915. Rome, 1915. 109 pp. (Supplemento al Bollettino dell' Ufficio del Lavoro. No. 26.)*

A compilation of social measures enacted during the war up to April 30, 1915, in Great Britain, France, Germany, and Austria.

— *Statistica degli scioperi avvenuti in Italia nell' anno 1913. Rome, 1916. xv, 502 pp. (Pubblicazioni dell' Ufficio del Lavoro, series B, No. 47.)*

This recently published report of the Italian labor office on strikes and lock-outs in Italy during 1913 shows that the number of strikes in industry continued to decrease during the year under review, the total number reported being 810, the lowest since 1905. In contrast to this decrease in the number of strikes, the report shows an enormous increase in the number of strikers, which total 384,725, as compared with 144,124 in 1912, and even exceeds the previous highest total of 321,499 for 1907. The report ascribes this large number of strikers to the fact that sympathetic strikes of large extent took place during the year, the most extensive among these being the general strike in Milan. This strike, originating among workmen of the railroad car shops in Milan, was soon joined in by all machinists and metal workers (about 30,000) and ulti-

mately participated in by all the workmen (about 90,000) of Milan and by about 87,000 workers in other industrial and agricultural centers of the Kingdom. Altogether, 10 sympathetic strikes, involving 258,630 strikers, took place during 1913, leaving a total of 126,095 strikers for the remaining 800 strikes.

The duration of the strikes is shown in the following table:

DURATION OF STRIKES IN INDUSTRY (INCLUSIVE AND EXCLUSIVE OF SYMPATHETIC STRIKES), 1913.

Duration.	Inclusive of sympathetic strikes.		Exclusive of sympathetic strikes.	
	Per cent of strikes.	Per cent of strikers.	Per cent of strikes.	Per cent of strikers.
Up to 1 day.....	21.4	15.5	21.6	14.3
Over 1 to 5 days.....	35.3	23.7	35.0	30.5
Over 5 to 10 days.....	17.4	31.6	17.3	17.4
Over 10 to 20 days.....	11.5	21.3	11.4	13.4
Over 20 to 30 days.....	4.8	1.3	4.9	4.2
Over 30 to 50 days.....	5.0	3.3	5.0	10.0
Over 50 to 75 days.....	2.2	.8	2.3	2.3
Over 75 to 100 days.....	1.4	2.0	1.5	6.2
Over 100 to 150 days.....	.4	.5	.4	1.6
Not reported.....	.6	.....	.6	.1

Demands relating to wages were the most numerous (718, or 49.18 per cent), those relating to organization (286, or 19.50 per cent), hours of labor (158, or 10.82 per cent), and discipline (141, or 9.66 per cent), come next in the order named. The report estimates that the strike movement during 1913 has caused to the workmen a pecuniary loss amounting to approximately 15.3 million lire (\$2,952,900).

The results of the industrial strikes vary greatly according as they are computed inclusively or exclusively of the sympathetic strikes, as may be seen from the following table:

RESULTS OF STRIKES IN INDUSTRY (INCLUSIVE AND EXCLUSIVE OF SYMPATHETIC STRIKES), 1913.

Result of strikes.	Inclusive of sympathetic strikes.			Exclusive of sympathetic strikes.		
	Per 100 strikes.	Per 100 strikers.	Per 100 workdays lost.	Per 100 strikes.	Per 100 strikers.	Per 100 workdays lost.
Successful.....	17.5	4.3	2.3	17.7	13.0	3.9
Mainly successful.....	12.2	4.4	13.0	12.4	13.6	23.3
Compromised.....	12.4	5.0	15.3	12.5	15.2	27.4
Partly successful.....	20.1	10.3	19.2	20.4	31.4	34.6
Failed.....	32.1	6.6	5.6	32.2	20.2	10.0
Not reported.....	5.7	69.4	44.6	4.8	6.6	.8

Labor organizations directed or managed 497, or 61 per cent, of the 810 strikes in industry.

Mediation was resorted to for the settlement of 350, or 43 per cent, of the 810 strikes, and arbitration, or mediation and arbitration combined, was found necessary in 11 instances. The 43 per cent of all strikes noted as settled by mediation involved, however, 235,834, or 61 per cent, of all persons striking.

The number of agricultural strikes decreased from 176 in 1912 to 97 in 1913. The decrease in the number of strikers was, however, less marked, the respective figures being 95,841 and 79,842. About 60 per cent of these strikes had a

duration of not over 5 days. Most of the strikes were caused by demands relating either to organization or wages.

A total of 21 lockouts in industry is reported for 1913. They involved 21,098 workmen out of a total of 23,961 employed in the establishments affected and caused a loss of 638,777 workdays. The most important lockout as to number of locked-out workers (8,850) and duration (Nov. 15, 1913, to Jan. 31, 1914) was that in the marble industry in Carrara. The wage loss in all lockouts was approximately 2.6 million lire (\$501,800). From the viewpoint of the employers, 3 lockouts were terminated successfully, 3 mainly successfully, 4 were compromised, 2 were partly successful, 3 failed, and in 6 the result is unknown. Only one lockout took place in agriculture in 1913. It involved 500 laborers, began on January 19, and terminated April 21.

NETHERLANDS.—*Maandschrift van het Centraal Bureau voor de Statistiek. The Hague. July 1, 1916 (Vol. 11, No. 7).*

Contains the usual current data on the state of the labor market, unemployment and unemployment insurance, employment exchanges, strikes and lockouts, organization of employers and employees, wholesale and retail prices; also an account of the progress of labor legislation through Parliament and a review of labor conditions in foreign countries.

NEW SOUTH WALES.—*Department of Mines. Annual report for the year 1915. Sidney, 1916. 213 pp. 25 charts and diagrams.*

The value of the output of metals in 1915 was £10,064,569 (\$48,979,225.04); in 1914 the value was £10,499,720 (\$51,096,887.38). The following table shows the amount produced and the value of the more important metals:

TOTAL PRODUCTION AND VALUE OF EACH SPECIFIED MINERAL IN 1915 AS COMPARED WITH 1914.

Mineral.	1914		1915	
	Output.	Value.	Output.	Value.
Coal.....	10,390,622.00	\$18,189,813.90	9,449,008.00	\$16,665,961.90
Silver, lead, zinc.....	¹ 722,317.85	22,542,017.32	¹ 503,997.20	21,571,588.56
Copper.....	6,607.00	1,536,686.42	6,793.45	1,140,887.66
Tin.....	2,316.65	1,299,988.15	2,188.00	1,298,284.87
Gold.....	² 124,507.00	2,573,790.45	² 132,498.00	2,738,958.66
Iron.....	75,150.00	1,237,341.69	76,318.00	1,299,355.50

¹ This is silver-lead, ore, concentrates, etc., and does not include ingots and matte, of which 2,871,559 ounces were produced in 1914 and 3,237,432 in 1915.

² Ounces.

The report shows 31,411 persons employed in and about mines, this being a decrease of 6,059 from 1914. More than half of this number (57.1 per cent) was employed in the coal and shale mines. The number of fatal accidents in 1915 was 37, as against 43 in 1914, and the number of serious injuries was 84, being a decrease of 28 from 1914. Most of these accidents occurred in coal and shale mining. The number killed per 1,000 employed was highest in copper mining, being 3.282, and the number injured per 1,000 employed was highest in silver, lead, and zinc mines, being 5.211. The report of the miners' accident relief fund gives 23,477 as the average aggregate number of contributors, the income of the fund being £57,936 (\$281,945.54). On December 31, 1915, the invested funds amounted to £330,000 (\$160,594.50). The allowances payable at December 31, 1915, in respect of fatal accidents and cases of permanent disablement were at the rate of £34,346 (\$167,144.81) per annum. The report includes detailed statistics of each mineral produced.

NEW SOUTH WALES.—*The New South Wales Industrial Gazette, issued by the Department of Labor and Industry. Sidney. June, 1916 (Vol. 10, No. 2).*

Contains the usual current material on the labor market, cost of living, minimum wages, retail prices, labor exchanges, factory orders, wages rates under industrial arbitration, and the legislative and judicial record for the month; also reports from wages boards and on industrial agreements.

NEW ZEALAND.—*Department of Labor. Twenty-fifth annual report, 1916. Wellington, 1916. 21 pp.*

Covers the financial year ending March 31, 1916. "The various paragraphs deal chiefly with such items as may be noteworthy on account of the war." The report notes a smaller number of applicants for work than during any other period in the history of the department, and that of those applying for work a high percentage was assisted. The employment bureaus were able to offer employment, both government and private, to all classes of workmen. During the year under report 5,978 persons were assisted, of which 4,394 (73.5 per cent) were employed in government work. The overtime worked during the year was 432,250 hours. This is an increase of 45.7 per cent over that of the preceding year, "mainly contributed to by those trades engaged in the manufacture of articles of military requirement." A total of 1,065 accidents, of which 3 were fatal, in factories is reported, an increase of 10.1 per cent over 1914-15. Seven strikes are reported. Arrears of wages amounting to £1,688 11s. 7d. (\$8,217.47) were collected from employers and handed over to the workers concerned. Fifty-two cases were dealt with under the workmen's compensation act. An unusual feature, it is stated, has been the extensive employment of girls in the place of men in various vocations, notably in banks.

— *Government Insurance Department. Accident Insurance Branch. Annual report for the year ended 31st December, 1915. [Wellington, 1916] 1p.*

Shows premium income of about £23,466 (\$114,197.29) and claims paid amounting to £9,092 (\$44,246.22). The total income, including the balance from the previous year, was £50,564 15s. 2d. (\$246,073.40) and the total expenditures were £39,862 7s. 2d. (\$193,990.17).

— *Journal of the Department of Labor. Wellington. July, 1916.*

Contains usual current data on the labor market, employment offices, retail prices, cost of living, trade union statistics and legal decisions affecting labor.

NORWAY.—*Riksforsikringsanstalten. Ulykkesforsikringen for industriarbeidere m. v. 1913. Christiania, 1916. 33*, 79 pp. (Norges officielle Statistik. VI: 79).*

This is the annual report on the operations of the State accident compensation system in Norway for the year 1913. It reports the technical as distinct from the administrative phases of the compensation system, the latter appearing in a special report. The report covers all establishments subject to compensation, except the silver mines of Kongsberg and the State trunk-line railroad, which have their own separate compensation fund. Results of operation from 1895 to date are as follows:

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TOTAL NUMBER OF ACCIDENTS, FULL-TIME WORKERS, PREMIUMS AND COMPENSATION PAID, FOR ALL INDUSTRIES IN NORWAY, 1895-1908, 1909-1913.

Year.	Number of establishments.	Number of full-time workers (300 days).	Wages paid.	Amount of premiums.		Compensation paid, reserves, etc.		Number of accidents.			Number of accidents compensated per 1,000 years' work.
				Total.	Per cent of wages	Total.	Per cent of wages	Total.	Compensated.	Causing death.	
1895-1908.	(1)	1,472,189	\$331,876,227	\$5,166,181	1.6	\$5,697,770	1.7	(1)	(1)	(1)	(1)
1909.....	19,988	144,425	35,699,871	531,918	1.5	561,549	1.6	5,600	3,866	136	38.8
1910.....	19,655	150,771	37,771,501	569,092	1.5	647,369	1.7	5,875	3,986	119	39.0
1911.....	20,984	160,309	41,063,989	624,902	1.5	769,725	1.9	7,564	5,020	138	47.0
1912.....	21,581	173,783	45,537,923	756,200	1.7	755,948	1.7	8,808	6,183	116	50.7
1913.....	23,864	194,477	49,610,403	830,887	1.7	.....	1.6	8,849	6,903	137	45.5
1895-1913.	(1)	2,296,454	541,559,914	8,479,180	1.6	8,432,361	1.7	(1)	(1)	(1)	(1)

¹ Not reported.

For further information concerning accident insurance in Norway reference is made to Bulletin No. 157 of this bureau and volume 2 of its twenty-fourth annual report.

NORWAY.—*Sociale Meddelelser utgit av Socialavdelingen under Departementet for Sociale Saker, Handel, Industri og Fiskeri. Christiania, 1916. No. 3.*

Current retail prices and special article on compulsory arbitration in Norway and notes from foreign reports. Official regulations of the State Insurance Institute under various social insurance acts and the results of a child-labor investigation are contained in special supplements.

ONTARIO.—*Department of Agriculture. Twenty-eighth annual report of the factory inspection branch, 1915. Toronto, 1916. 61 pp. Illustrated.*

This report is for the year ending October 31, 1915, during which period 11,455 inspections were made in 467 cities, towns, and villages, in 7,625 factories and mercantile establishments employing 195,762 workers of whom only 39 were dismissed as being under the legal age. Eleven prosecutions were instituted and convictions secured and fines imposed in all but one instance. A decrease in the number of accidents is reported—994, of which 33 were fatal, as against 1,270, of which 52 were fatal, during the preceding year. More than 50 per cent of these accidents were due to causes other than machinery, the largest number, 179 or 18 per cent, being due to falling objects. A few breaches of the law in respect to hours of labor were found, notably violations of the one-hour noon-day regulation for females and youths. The report is largely devoted to a detailed tabulation of the accidents by districts, giving date, employer, place, sex, age, and nature of the injury.

QUEENSLAND.—*The Queensland Industrial Gazette issued by the Department of Labor. Brisbane. July 10, 1916 (vol. 1, No. 5).*

Contains current monthly reports on the labor market, employment offices, retail prices, industrial arbitration awards, trade agreements, factory accidents, etc.

SPAIN.—*Boletin del Instituto de Reformas Sociales. Madrid. July, 1916.*

Contains the usual current administrative reports of the Spanish department of labor, current reports on strikes, cost of living, and labor legislation.

SWEDEN.—*Sociala Meddelanden utgivna av K. Socialstyrelsen. Stockholm. Number 7, 1916.*

In addition to current reports on the state of employment, retail prices and the cost of living, prices of cattle, supply and consumption of meat, reports from factory inspectors on fatal industrial accidents, etc., this number of the Swedish labor periodical contains special articles on the new accident compensation law enacted in June, 1916; the census of manufacture in Sweden in 1914; strikes and lockouts, 1915; employment of women and children, 1914; operation of the wholesale cooperative society, 1915; special articles on labor conditions in foreign countries. There is noted an amendment of the factory inspection law of 1912 and the pension law of 1913.

—*Socialstyrelsen. Arbetsinställelser i Sverige år 1915. Stockholm, 1916. viii, 47 pp. (Sveriges officiella statistik; Socialstatistik).*

This volume forms the report of the Swedish bureau of labor on strikes occurring in Sweden in 1915. The material has been used in a special article appearing elsewhere in this number of the REVIEW. (See p. 71.)

SWITZERLAND (CANTON OF ZÜRICH).—*Kantonales Statistisches Bureau. Die Berufswahl der im Frühjahr 1915 aus der Volksschule ausgetretenen Schüler. Winterthur, 1916. 58 pp. (Statistische Mitteilungen betreffend den Kanton Zürich, Heft 122.)*

Statistics as to the choice of occupation of children leaving the elementary schools in the Canton of Zurich in 1915. A summary of this investigation will be found on page 89 of this number of the REVIEW.

—(CITY OF BERN).—*Verwaltungskommission des Arbeits- und Wohnungsamtes und der Versicherungskasse gegen Arbeitslosigkeit der Stadt Bern. Verwaltungsbericht für das Jahr 1915. Bern, 1916. 18 pp.*

The annual report for 1915 of the single administrative commission in charge of the varied activities of a public renting bureau, a public employment office, and a system of subsidized unemployment insurance for the city of Bern calls attention to how activities of interest to the wage earner not ordinarily considered as related are, however, in many instances in European countries intimately connected in administration.

War conditions have required the employment offices to supply an exceedingly large demand for labor in those industries actively engaged and to look after the workers thrown out of employment in stagnant industries. The following table indicates their activity in 1914 and 1915:

STATISTICS OF THE MUNICIPAL EMPLOYMENT BUREAU OF BERN, 1914 AND 1915.

	Vacant situations.		Applicants.		Situations filled.	
	1914	1915	1914	1915	1914	1915
Male.....	10,723	9,256	18,656	13,234	8,813	7,752
Female.....	5,062	4,571	4,731	5,119	2,560	2,539
Total.....	15,785	13,827	23,387	18,353	11,373	10,291
Female day laborers, laundresses, and charwomen.....	3,468	2,567	3,432	2,556	3,432	2,556
Grand total.....	19,253	16,394	26,819	20,909	14,805	12,847

The municipal renting bureau received orders for the renting of 1,533 properties and if to these are added 159 still vacant from the preceding year a total of 1,692 is made, of which 1,520 were apartments and one-family houses.

In the unemployment fund the commission reports a membership of 780 on March 21, 1916, an increase of 29 over the preceding fiscal year. Of the total number of members 521 were skilled and 259 unskilled workers. Heavy demands made on the unemployment fund on account of the economic depression caused by the war induced the commission to suspend the payment of unemployment benefits indefinitely beginning from April 1, 1915. Payments were, however, resumed on November 20 of the same year. The municipal subsidy granted annually to the fund had been increased to 20,000 francs (\$3,860). The contributions from the insured workmen amounted to 11,299 francs (\$2,180.71) which approximately equals the regular annual municipal subsidy. Up to the end of the fiscal year 446 members, as against 455 in 1914, had received unemployment benefits. Of this total number, 310 were skilled and 136 unskilled workmen. Skilled workmen received daily while unemployed 3 francs (58 cents) if married, and 2 francs (39 cents) if single, while unskilled workmen were given 2.50 francs (48 cents) and 1.50 francs (29 cents) respectively. Only 72 of the insured members received benefits for the maximum period of 60 days. The total amount disbursed for cash benefits was 38,645 francs (\$7,458.46).

SWITZERLAND.—(CITY OF ZÜRICH).—*Städtisches Arbeitsamt. Geschäfts-bericht für das Jahr 1915. Zürich, 1916. 32 pp., chart.*

This report of the municipal employment office of the city of Zurich for the year 1915 states that the depressing effects of the war upon the labor market were felt somewhat less in 1915 than in the preceding year. As compared with the preceding year, the number of vacant positions increased by 1,198 and that of vacancies filled by 585, while the number of local applicants decreased by 1,625 and that of transient and out of town applicants by 5,951. A summary of the activities of the employment office during the period 1901-1915 is given in the following table:

STATISTICS OF THE MUNICIPAL EMPLOYMENT OFFICE IN ZURICH, 1901-1915.

Year.	Vacant situations.			Local applicants.			Situations filled.			Transient and out-of-town applicants.
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	
1901.....	6,343	3,052	9,395	14,487	3,256	17,743	4,518	1,250	5,768	7,560
1905.....	10,728	3,763	14,491	12,288	3,676	15,964	7,317	1,743	9,060	10,191
1910.....	9,134	2,998	12,132	13,618	2,440	16,058	7,335	1,719	9,054	10,597
1911.....	9,430	3,043	12,473	15,681	2,452	18,133	7,499	1,684	9,183	12,498
1912.....	8,613	3,464	12,077	14,904	2,957	17,861	6,753	1,994	8,747	9,198
1913.....	7,200	3,315	10,515	13,925	2,642	16,567	5,713	2,124	7,837	9,682
1914.....	8,471	2,713	11,184	16,485	2,630	19,115	6,904	1,694	8,598	9,533
1915.....	10,286	2,096	12,382	14,599	2,891	17,490	7,645	1,538	9,183	3,582

VICTORIA.—*Department of Labor. Report on some of the effects of labor legislation and suggestions for attaining greater industrial efficiency. Melbourne, [1916]. 16 pp.*

This report claims that Victorian labor laws have abolished sweating, have made the surroundings of the worker in the factory and outside healthier, safer, more moral, and generally better than before their enactment, and have raised wages in all occupations. A table is inserted which shows that wage increases made by law in trades regulated by the wages boards have amounted to 42 per cent for the 150,000 workers affected. An admittedly incomplete table is

also inserted to show that the wages of 5,720 workers out of a total of 200,000 workers not under the wages boards have increased on the average 61 per cent.

An advance of 26.8 per cent, on the other hand, is noted in the cost of living; and, accepting the estimate of 40.7 per cent made by the Commonwealth statistician for the wage increase in all trades, it is claimed that the worker has benefited to the extent of 13.9 per cent.

The report notes that in many instances the manufacturer has benefited in spite of wage increases by being able to pass the effect of such wages on to the consumer. The practice of limiting output is condemned.

As a remedy for this state of affairs, and in order to provide an inducement to the highest endeavor, the report recommends universal profit sharing and piece payment in all trades.

RECENT UNOFFICIAL PUBLICATIONS RELATING TO LABOR.

THE AMERICAN LABOR YEAR BOOK, 1916. *Prepared by the department of labor research of the Rand School of Social Science. New York. [1916] 382 pp.*

BURNHAM, A. C., M. D. *The rôle of the physician in industrial medical insurance. Reprinted from the Medical Record, May 22, 1915. 11 pp. (5 by 7½ inches.)*

— *A plan for the care of the insured under the proposed health insurance law. Reprinted from the Medical Record, April 22, 1916. 7 pp. (5 by 7½ inches.)*

CASUALTY ACTUARIAL AND STATISTICAL SOCIETY OF AMERICA, THE. *Proceedings, May 26 and 27, 1916. Vol. II, Part III, No. 6. pp. 335-521.*

CLARK, VICTOR S. *History of manufactures in the United States, 1607-1860. Published by the Carnegie Institution of Washington, 1916. With index, 675 pp.*

COLLIE, SIR JOHN, M. D., J. P. *Articles on industrial accidents and occupational diseases, including suggestions to attending doctors, medical examiners, and claim adjusters. Published by the Employers' Liability Assurance Corporation (Ltd.), of London, England. 66 pp. (4 by 9 inches).*

A reprint of 26 short articles contributed by the author to the Post Magazine and Insurance Monitor of London. The author for many years conducted a large number of medical examinations for various English insurance companies, and these articles exhibit, in the light of his experience, information on certain points which should be useful to those interested in the subject of claims for disablement.

Titles to some of the articles are—

Functional nervous disease (5 articles); malingering in skin disease (2 articles); medicolegal aphorisms (2 articles); notes on the conduct of the medicolegal examinations, with special reference to malingering; notes on lacerated wounds, with special reference to some type of self-inflicted wounds; the pecuniary inducement to malingering.

Many examples met in actual experience are cited to illustrate the points of the author's observations.

COLLINS PUBLICITY SERVICE. *Philadelphia, Pa. Vocational studies. Nursing. School edition, teachers' auxiliary, No. 13. Copyright, 1916. 16 pp. (8½ by 11 inches).*

FABIAN SOCIETY (LIVERPOOL). *Tract No. 14. Industrial conditions after the war; The place of the labor exchange. 1916, 15 pp.*

— (LONDON). *Fabian Tract No. 5. Facts for Socialists, showing the distribution of the national income and its results. Twelfth edition, 1915. 23 pp.*

FABIAN SOCIETY. *Twenty-third annual report on the work of the Fabian society.* * * * 1916; also the rules of the society. 25 pp.

GEPHART, E. C. *Analysis and cost of ready-to-serve foods: a study in food economics.* Chicago, 1915. 71, [12] pp.

GONZALES, PEDRO LUIS, PROF. *El Contrato de Trabajo.* Santiago de Chile, 1912. 106 pp.

Biennial prize essay of the State University on the question (the labor contract) selected by the faculty of law and political sciences, 1908, 1909.

HOFFMAN, FREDERICK L., LL. D. *The sanitary progress and vital statistics of Hawaii. An address delivered before the Medical Society of Hawaii, Honolulu, March 5, 1915.* 82 pp.

ILLUMINATING ENGINEERING SOCIETY, THE, (Founded in London, 1909). *The Illuminating Engineer, September, 1915, No. 9, Vol. VIII.* 39 pp.

This number (special factory lighting number) contains (pp. 369-390) an abstract of the recently issued first report of the Departmental Committee on Lighting in Factories and Workshops.

INDEPENDENT LABOR PARTY AND THE FABIAN SOCIETY. *Joint Committee. Report for the two years ended April 30, 1913.* 12 pp.

INTERNATIONAL LABOR FORUM, NEW YORK. *Latin-American News Association, 1916.*

Contents: Introduction to labor law of Yucatan, Mexico, by M. C. Rolland; Labor law of Yucatan, Mexico; Appeal to U. S. workers by Mexican workingman; President Gompers issues call for unity of labor in all Pan-America.

JOHNSON, EMORY R., AND COLLABORATORS. *History of domestic and foreign commerce of the United States (two volumes), Vol. I, 363 pp; Vol. II, with index, 398 pp. Published by the Carnegie Institution of Washington, 1915.*

KOBER, GEO. M., ED. *Diseases of occupations and vocational hygiene.* Philadelphia [1916] 918 pp., illus.

LABOR COPARTNERSHIP ASSOCIATION, THE (formerly Labor Association), 6 Bloomsbury Square, London. *Thirtieth report, * * * 1915.* 32 pp.

MINNEAPOLIS CIVIC AND COMMERCE ASSOCIATION. *Fourth annual report, 1915.* 155 pp.

Contains reports of the association's standing committees on housing, industrial welfare, and unemployment, for the year 1915.

NATIONAL CHILD LABOR COMMITTEE (INC.), 105 E. Twenty-second Street, New York City. *The child labor bulletin, August, 1916, vol. 5, No. 2.* pp. 84-125.

Devoted to a discussion, both in editorial form and in special articles, of the recently enacted Federal child labor law, industrial education in New York City, and the street trades.

"The passage of the bill, in spite of all that it will accomplish for the protection of working children, is not the end of the fight," declares an editorial in the bulletin, which continues:

There must still be State campaigns for laws to protect children in local industries (in stores, street trades, and the night messenger service), campaigns for better school laws, and, most important of all, perhaps, investigations of occupations in which children engage about which little is known. Of these investigations, the survey of children in agriculture, which is now under way, is the most significant. The study of the children employed in the beet fields of Colorado is being followed by an intensive study of the effects of agricultural labor on school attendance in Kentucky. The condition of the tenant farmers and the extent of adult illiteracy are also receiving attention, with a view to discovering the relation of poverty and ignorance to the employment of children on the farms. The agricultural survey is being extended still further to discover what opportunities for schooling there are for the children who migrate during a large part of the year from one agricultural section to another as the crops mature. (Pages 85-86.)

NATIONAL SOCIETY FOR THE PROMOTION OF INDUSTRIAL EDUCATION, 140 W. Forty-second Street, New York City. *Vocational Education, one of the significant problems of the day.* 11 pp.

NATIONAL WORKMEN'S COMPENSATION SERVICE BUREAU, 13 Park Row, New York City. *The industrial compensation rating schedule. Schedule, 77 pp., and table, 31 pp., (5 x 7½ inches).*

A system of measuring the accident hazards in individual manufacturing plants for use in the determination of workmen's compensation insurance rates, adopted by the first conference on schedule rating, New York, July 27, 1916.

O'HARA, EDWIN V., *chairman of the industrial welfare commission, Oregon. A living wage by legislation, the Oregon experience.* Salem, Oreg., 1916. 57 pp. See p. 73.

STUCKEY, LORIN. *The Iowa State Federation of Labor.* Iowa City, Iowa. 1915. With index, 147 pp.

A monograph submitted to the faculty of the graduate college of the State University of Iowa, in partial fulfillment of the requirements for the degree of doctor of philosophy.

ADDENDA.

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

The condition of employment in the State of New York in August, 1916, is set forth in the following statement issued by the New York State Industrial Commission. The statement is based upon reports by 1,400 representative firms employing over half a million persons—approximately one-third of the factory workers in the State.

More wages were paid to workers in New York State factories in August, 1916, than in any other month during the last two years. From July to August there was an increase of 2 per cent in wages and a slight increase in number of employees. The increase in total wages in August, 1916, was 32 per cent, as compared with August of last year and 43 per cent, as compared with August, 1914. Increases in total number of employees for the corresponding dates were 18 per cent and 22 per cent, respectively.

In the *stone, clay, and glass products* group there was an increase in wages of 19 per cent and in number of employees of 7 per cent from July to August. The most marked increase both in wages and employees was in miscellaneous stone and mineral products manufacture. The glass industry also reported a marked increase in the amount of wages paid, but there was a slight falling off in the number of employees. The group as a whole paid out two-fifths more wages and employed one-fourth more workers than in August one year ago. The *metals, machinery, and conveyances* group reported an increase of 1 per cent in both wages and employees from July to August. Overtime work and increased rates of pay were contributing factors. Every industry in the group, with two exceptions, reported an increase in both wages and employees. In the manufacture of machinery and of structural and architectural iron work there were decreases in wages of 9 and 5 per cent, respectively, and a decrease of 8 per cent in number of employees in the latter. As compared with August, 1915, the total wages paid in the group as a whole increased by one-half and the number of employees by one-third. The *wood manufactures* group reported 4 per cent increase in wages and 3 per cent increase in employees from July to August. In the saw and planing mill industry and in the manufacture of furniture and cabinetwork, 7 per cent more wages were paid than in July. Each of these two industries likewise reported a substantial increase in number of employees. Musical instruments and miscellaneous wood products reported little change. As compared with August, 1915, the group as a whole paid out one-fifth more wages and employed one-tenth more workers. The *furs, leather, and rubber goods* group reported only a slight change from July to August. The boot and shoe industry, which is by far the largest in the group, paid out 1 per cent more wages to 2 per cent more employees. A decrease in the furs and fur goods industry was offset by increases in the other minor industries. The total wages paid in the entire group were two-fifths greater and the total number of employees was one-fourth greater than in August, 1915. The *chemicals, oils, and paints* group established in August a new high record for wages paid and number of employees, the increase in each being 1 per cent over July. The increase was confined to the drugs and chemicals industry, the other industries in the group reporting negligible decreases. As compared with August, 1915, the group paid out one-fourth more wages to one-fifth more employees. The *paper-making* industry paid out in August 1 per cent less wages to 5 per cent more employees than in July. A new high record in number of employees was established. The slight decrease in amount of wages paid was caused by the closing of some

mills for a short time. As compared with August, 1915, one-fourth more wages were paid and one-eighth more workers were employed. In the *printing and paper goods* group negligible increases both in wages and in employees were reported from July to August. The printing industry, which is dominant in this group, reported a slight increase which offset somewhat larger decreases in the other industries. As compared with August, 1915, the group paid out one-seventh more wages and employed one-tenth more workers. The *textiles* group paid out 1 per cent less wages and employed 5 per cent fewer workers in August than in July. Summer vacations were chiefly responsible for this decrease. Each industry, except silk and silk goods and wool manufactures, paid out less wages, and every industry employed fewer workers. The decrease was greatest in the manufacture of cotton goods, caused in great part by a strike in one large concern. As compared with August, 1915, the group as a whole paid out one-fifth more wages and had 6 per cent more workers. The *clothing, millinery, and laundering* group, although employing 2 per cent fewer workers in August than in July, paid out 9 per cent more wages. Men's clothing, the largest industry in the group, paid out 4 per cent more wages than in July. Men's shirts and furnishings reported about half the business done in July, on account of vacations, while women's clothing reported about one-half more business than in July, caused largely by resumption of activities after strikes. Women's underwear and the miscellaneous sewing industry reported decreases both in wages and employees, while women's headwear and laundering-cleaning-dyeing reported increases. As compared with August, 1915, the group as a whole paid out one-fifth more wages and employed one-tenth more workers. The *food, liquors, and tobacco* group reported 1 per cent increase both in wages and in employees from July to August. The manufacture of cigars and tobacco products, the second largest industry in the group, reported an increase of 10 per cent in wages, due in part to resumption of activity following strikes in July. Bakery products, the largest industry in the group, reported a 2 per cent increase. The most serious decrease was reported in the miscellaneous groceries industry. Shortage of crops was partly responsible for the 16 per cent decrease in the canning and preserving industry. Flour, feed, and cereal products reported an increase of 16 per cent. The group as a whole in August, 1916, paid out one-tenth more wages and employed slightly more workers than in August, 1915. The *water, light, and power* industry paid out 3 per cent more wages and employed 7 per cent more workers in August than in July. As compared with August one year ago, one-eleventh more wages were paid and one-twentieth more workers were employed.

Building activity as reported by building departments.—In the 10 cities of the first and second class in New York State the estimated cost of building work (of which new buildings constituted four-fifths) for which permits were granted in August, 1916, was 74 per cent less than in July, 1916, and 23 per cent less than in August, 1915. Albany, Binghamton, Buffalo, and Troy reported substantial increases over July; Syracuse reported a negligible increase; New York City, Rochester, Schenectady, Utica, and Yonkers reported substantial decreases. As compared with August, 1915, increases were reported for August, 1916, in Albany, Binghamton, Buffalo, Schenectady, and Troy. The other five cities reported decreases. The decrease of 81 per cent in New York City from July to August contrasts strongly with the increase of 106 per cent from June to July. The July total in New York City was swelled by reason of the zoning resolution passed by the board of estimate on July 25, 1916, which restricts the height of future buildings. A large number of permits were filed in anticipation of this resolution. Many of these buildings will doubtless not be erected in the near future, if at all.

FEDERAL LIMITATION OF HOURS OF LABOR ON PUBLIC WORKS.

Probably the earliest official act concerning the limitation of the hours of labor of workmen in the Federal service was an order of President Van Buren, issued March 31, 1840, which directed the observance of a 10-hour day on public works for all classes of workmen. The order reads as follows:

"The President of the United States, finding that different rules prevail at different places as well in respect to the hours of labor by persons employed on the public works under the immediate authority of himself and the Departments as also in relation to the different classes of workmen, and believing that much inconvenience and dissatisfaction would be removed by adopting a uniform course, hereby directs that all such persons, whether laborers or mechanics, be required to work only the number of hours prescribed by the ten-hour system."—(Richardson, Messages and Papers of the Presidents, Vol. III, p. 602.)

At this time 11 and 12 hours per day were common for laborers and mechanics in private employment.

One of the earliest enactments of Congress on this subject was the law of December 21, 1861 (12 Stat. at Large, p. 330), which provided:

That the hours of labor in the navy yards of the United States shall be the same as in the private shipyards at or nearest to the post where such navy yard is established, and the wages to be paid to all employees in such yards shall be, as near as may be, the average price paid to employees of the same grade in private shipyards or workshops in or nearest to the same vicinity, to be determined by the commandant of the navy yard.

This act was amended on July 16, 1862, so as to provide that the wages and hours of labor of employees in the navy yards of the United States should conform, as nearly as might be consistent with the public interests, with those of private establishments of a similar nature.—(12 Stat. at Large, p. 587.)

The agitation for an eight-hour day for wageworkers in the Federal service began about the year 1865. During the first session of the Thirty-ninth Congress (1865-66) several bills and resolutions were introduced in the House and Senate making provision for an eight-hour day for laborers and mechanics employed by or in behalf of the Government of the United States. These measures caused considerable discussion in both Houses of Congress but failed to be enacted into law. The next Congress, however, took up the matter early in its session by the introduction of a bill for an eight-hour day (H. R. 103 40th Cong.) on March 28, 1867, which was enacted into law June 25, 1868, and provides as follows:

Eight hours shall constitute a day's work for all laborers, workmen, and mechanics who may be employed by or on behalf of the Government of the United States.—(U. S. Compiled Statutes, 1901, sec. 3738.)

At this time persons in private employment commonly worked about 10 hours per day, so that this was a step forward by the Federal Government in the reduction of the hours of labor. This act, however, was largely misunderstood or disregarded by the Government officials in charge of the employment of mechanics and labores. It gave rise to many controversies and complaints, and frequent calls were made upon the Attorney General for interpretation.

The first opinion rendered by the Attorney General on this subject was in regard to the reduction of wages of laborers and mechanics made by officials to correspond with the reduction in hours of labor. In this opinion Mr. Wm. M. Evarts, Attorney General, held on November 25, 1868 (12 Op. A. G., 530), that the act does not absolutely require that employees of the Government must receive as high wages for their eight hours' labor as similar industry in private employment receives for a day's labor of 10 or 12 hours, but it simply requires that the same *worth* of labor shall be compensated in the public employment at the same rate of wages that it receives in private employment.

This construction of the law resulted in a continuance of the practice of paying reduced wages on account of the reduced hours of labor. On May 19, 1869, however, President Grant issued a proclamation directing "That, from and after this date, no reduction shall be made in the wages paid by the Government by the day to such laborers, workmen, and mechanics on account of such reduction of the hours of labor."—(16 Stat. at Large, p. 1127.)

Notwithstanding this proclamation of the President, the practice seems to have continued, for on May 11, 1872, the President issued another proclamation, which recited the proclamation of May 19, 1869, and contained the following:

And whereas it is now represented to me that the act of Congress and the proclamation aforesaid have not been strictly observed by all officials of the Government having charge of such laborers, workmen, and mechanics; now, therefore, I, Ulysses S. Grant, President of the United States, do hereby again call attention to the act of Congress aforesaid, and direct all officers of the executive department of the Government having charge of the employment of laborers, workmen, or mechanics employed by or on behalf of the Government of the United States to make no reduction in the wages paid by the Government by the day to such laborers, workmen, and mechanics on account of the reduction of the hours of labor.—(17 Stat. at Large, p. 955.)

On May 18, 1872, an act was approved making an appropriation to pay to laborers and mechanics the amount of reduction of wages that they had suffered on account of the above interpretation. The law provided as follows:

SECTION 2. That the proper accounting officers be, and hereby are, authorized and required, in the settlement of all accounts for the services of laborers, workmen, and mechanics employed by or on behalf of the Government of the United

States between the twenty-fifth day of June, eighteen-hundred and sixty-eight, the date of the act constituting eight hours a day's work for all such laborers, workmen, and mechanics, and the nineteenth day of May, eighteen hundred and sixty-nine, the date of the proclamation of the President concerning such pay, to settle and pay for the same, without reduction on account of reduction of hours of labor by said act, when it shall be made to appear that such was the sole cause of the reduction of wages, and a sufficient sum for said purpose is hereby appropriated out of any money in the Treasury not otherwise appropriated.—(17 Stat. at Large, p. 134.)

In 1876 an opinion was rendered by the Supreme Court of the United States (*U. S. v. Martin*, 94 U. S., 400), which declared that the eight-hour law of 1868 is chiefly in the nature of a direction by the Government to its agents, and is not a contract between the Government and its laborers that eight hours shall constitute a day's work, and that it does not prevent the making of agreements by which a greater or less number of hours of labor may be required, and any claim for the excess of time over eight hours per day is, when accepted by the laborer, a bar to any further proceedings. Another more recent decision (United States District Court for the District of Kentucky, 1897, *Coleman v. United States*, 81 Fed., 824), declared that no action lies to recover for labor in excess of eight hours where monthly pay was received without protest.

During several years that followed, frequent attempts were made in Congress to secure such legislation as would compel a limitation of the working hours of laborers and mechanics in the Government service to eight per day. Among these successful attempts were first, a joint resolution (H. J. Res. 9, 46th Cong.) which declared that, according to the true intent of the act of Congress, of June 25, 1868, eight hours constitute a day's work for all laborers, workmen, and mechanics, that while the act remains upon the statute book no reduction should be made in the wages paid by the Government, by the day, to such laborers, workmen, and mechanics on account of the reduction of the hours of labor and that all heads of departments, officers, and agents of the Government should enforce the law as long as unrepealed; and second, a joint resolution (H. J. Res. 239, 46th Cong.) which provided that, according to the true intent of section thirty-seven hundred and thirty-eight of the Revised Statutes, all laborers, workmen, and mechanics, employed by, or in behalf of, the Government, should thereafter receive a full day's pay for eight hours' work; and that all heads of departments, officers, and agents of the Government should enforce the law as therein interpreted.

The construction placed upon the eight-hour law of 1868 by the Supreme Court of the United States in 1876, and the failure of Congress to pass any remedial legislation, left this law without practical effect, even though it remained on the statute book. This will appear

from the following opinions rendered by the Attorney General from time to time and summarized in an opinion rendered April 29, 1882 (17 Op. A. G.), 341:

1. The act prescribes the *length of time* which shall constitute a day's work, but it does not establish any rule by which the *compensation* for a day's work shall be determined.

2. It does not contemplate a reduction of wages simply *because* of the reduction thereby made in the length of the day's work, but, on the other hand, it does not *require* that the same wages shall be paid therefor as are received by those who in similar private employments work a greater length of time per day.

3. It does not forbid the making of contracts for labor, fixing a different length of time for the day's work than that prescribed in the law.

Another opinion of the Attorney General, rendered on May 2, 1872 (14 Op. A. G., 37), and afterwards reaffirmed, declared that the provisions of the act of June 25, 1868, were not applicable to mechanics, workmen, and laborers in the employ of a contractor with the United States, and that the act was not intended to extend to any others than the immediate employees of the Government.

But while Congress failed to enact legislation providing for a compulsory eight-hour day in the general employment of laborers, workmen, and mechanics, several acts were passed requiring an eight-hour day for letter carriers and for employees of the Government Printing Office. The first of these acts was approved May 24, 1888, and provided as follows:

Hereafter eight hours shall constitute a day's work for letter carriers in cities or postal districts connected therewith, for which they shall receive the same pay as is now paid as for a day's work of a greater number of hours. If any letter carrier is employed a greater number of hours per day than eight he shall be paid extra for the same in proportion to the salary now fixed by law.—(U. S. Compiled Statutes, 1901, p. 2637.)

A decision of the Supreme Court of the United States concerning the application of this law rendered March 13, 1893, declares that:

This statute does not require that the eight hours' service shall relate exclusively to the free distribution and collection of mail matter, nor does it otherwise define the nature of said service. It is necessary only that one should be a letter carrier and be lawfully employed in work that is not inconsistent with his general business under his employment in order that he may recover for any employment for a greater number of hours per day than eight.—(United States v. Post, 1893, 148 U. S., 124.)

Another act, approved June 2, 1900, limits the weekly hours of labor of letter carriers. It provides as follows:

Letter carriers may be required to work as nearly as practicable only eight hours on each working-day, but not in any event exceeding forty-eight hours during the six working-days of each week; and such number of hours on Sunday, not exceeding eight, as may be required by the needs of the service; and if a legal holiday shall occur on any working-day, the service performed on said day, if less than eight hours, shall be counted as eight hours without regard to the time actually employed.—(U. S. Compiled Statutes, 1901, p. 2637.)

A provision concerning employees of the Government Printing office was inserted in the urgent deficiency bill approved March 30, 1888, and provided as follows:

The Public Printer is hereby directed to rigidly enforce the provisions of the eight-hour law in the department under his charge.—(U. S. Compiled Statutes, 1901, p. 2588.)

This last provision was reenforced by the enactment of the following section of an act approved January 12, 1895:

The Public Printer shall cause work to be done on the public printing in the Government Printing Office at night as well as through the day, when the exigencies of the public service require it, but the provisions of the existing eight-hour law shall apply.—(U. S. Compiled Statutes, 1901, p. 2551.)

In 1892, steps were finally taken to secure the enactment of an effective eight-hour law for all laborers and mechanics employed on Federal public works. For this purpose, an investigation was made by the House Committee on Labor, and on March 8, 1892, the testimony of the Chief of Engineers, the Superintendent of Public Buildings and Grounds, the Chief of the Bureau of Ordnance, the Public Printer, and the chief of the law and construction division of the Supervising Architect's Office of the Treasury Department was taken. The testimony given by these officers, who had charge of practically all of the public works of the Federal Government, showed, according to the report of the committee, that at the time of the investigation, the administration of the eight-hour law of 1868 by the several officials directing Government employees "was not uniform and not intended to be." Following the report of this committee the law of August 1, 1892, was enacted. It provided as follows:

SECTION 1. The service and employment of all laborers and mechanics who are now or may hereafter be employed by the Government of the United States, by the District of Columbia, or by any contractor or subcontractor upon any of the public works of the United States or of the said District of Columbia, is hereby limited and restricted to eight hours in any one calendar day, and it shall be unlawful for any officer of the United States Government or of the District of Columbia or any such contractor or subcontractor whose duty it shall be to employ, direct, or control the services of such laborers or mechanics, to require or permit any such laborer or mechanic to work more than eight hours in any calendar day, except in case of extraordinary emergency.

SEC. 2. Any officer or agent of the Government of the United States or of the District of Columbia, or any contractor or subcontractor whose duty it shall be to employ, direct, or control any laborer or mechanic employed upon any of the public works of the United States or of the District of Columbia who shall intentionally violate any provision of this Act, shall be deemed guilty of a misdemeanor and for each and every such offense shall upon conviction be punished by a fine not to exceed one thousand dollars or by imprisonment for not more than six months, or by both such fine and imprisonment, in the discretion of the court having jurisdiction thereof.—(U. S. Compiled Statutes, 1901, p. 2521.)

According to the report of the committee recommending the bill which was enacted into this law, it was intended to be an eight-hour law which would be effective. In its explanation of the law, the committee used the following language:

It makes it unlawful to allow or permit a laborer or mechanic to work more than eight hours in any one calendar day, thus prohibiting evasion in the manner the act of 1868 was evaded.

The measure herewith submitted, it is thought, will secure a practical enforcement of the purpose intended to be secured by the act of 1868. It limits the service and employment of all laborers and mechanics employed by the Government of the United States, by the District of Columbia, or by any contractor or subcontractor of the United States or of the District of Columbia to eight hours in any one calendar day; makes it unlawful for any officer of the United States or of the District of Columbia, or any contractor or subcontractor, whose duty it shall be to employ, direct, or control the services of such laborers or mechanics to require or permit such laborer or mechanic to work more than eight hours in any one calendar day except in cases of extraordinary emergency; makes the willful violation of its provision a misdemeanor, and enforces suitable penalties for such violation.¹

While the intention of Congress in regard to the enforcement of the eight-hour provision was made clear by these statements, there still remained some misunderstanding as to the scope of the law. Owing to this misapprehension there has been some litigation in the Federal courts, and numerous requests for opinions have been made of the United States Attorney General. The following are extracts from Federal court decisions bearing upon this point:

To render one amenable to this law he must be an officer or agent of the United States, or a contractor or subcontractor whose duty it is to employ, direct, or control laborers or mechanics upon some of the public works of the United States, and he must have intentionally required or permitted such laborers or mechanics to work more than eight hours in any calendar day. The law does not apply where one builds barges at his own risk and cost, though under Government inspection and under agreement for their sale to the Government if, on completion, they are found to conform to certain prescribed specifications.—(United States District Court for the Southern District of Alabama, 1893, *United States v. Ollinger*, 55 Fed., 959.)

Seamen upon a Government vessel, when engaged in removing obstructions to navigation in rivers and harbors, are employed upon public works of the United States, within the meaning of the above act. The time actually required in the care and repair of appliances necessary to carry on such work must be included within the eight hours, and is a part of the public work.—(United States District Court for the Northern District of Washington, 1894, *United States v. Jefferson*, 60 Fed., 736.)

The foregoing opinion is in apparent conflict with a later ruling in 1907 of the Supreme Court of the United States, three justices dissenting.

The statute says, "laborers and mechanics * * * employed * * * upon any of the public works." It does not say, and no one supposes it to

¹ Quoted in Report No. 1272, to accompany bill H. R. 6882, 56th Cong., 1st sess., p. 6.

mean, "any public work." The words "upon" and "any of the," and the plural "works" import that the objects of labor referred to have some kind of permanent existence and structural unity, and are severally capable of being regarded as complete wholes. The fact that the persons mentioned as employed upon them are laborers and mechanics, words admitted not to include seamen, points in the direction of structures and away from the sea.

* * *

* * * The scows and floating dredges were vessels. * * * Therefore all of the hands mentioned in the informations were seamen within the definition in an earlier statute of the United States. * * * Without further elaboration of details, we are of opinion that the persons employed by the two defendant companies were not laborers or mechanics and were not employed upon any of the public works of the United States within the meaning of the act.—(*Ellis v. United States*, 1907, 206 U. S., 246; 27 Sup. Ct., 600.)

The statement that "a corporation as such is not capable of entertaining a criminal intention" is not a defense in case of the violation of such a law as the above, where the prohibited act can be done by a corporation.—(*United States District Court for the Northern District of California*, 1898, *United States v. John Kelso Co.*, 86 Fed., 304.)

The United States has the power to control in regard to the subject matter of this law, although the State in which a building is being erected retains political jurisdiction over the land occupied.—(*United States District Court for the Northern District of California*, 1898, *United States v. San Francisco Bridge Co.*, 88 Fed., 891.)

This law can not be held to provide for compensation for services rendered in excess of eight hours per day.—(*United States Circuit Court of Appeals, Ninth Circuit*, 1903, *United States v. Moses*, 126 Fed., 58.)

When confronted with an "extraordinary emergency" within the meaning of the statute, the laborers and mechanics [employed in the construction of a dam] may be required or permitted to work overtime in protecting property during the emergency, but not afterward for the purpose of minimizing the losses of the contractor.

* * * Neither the law nor the contract justify the assumption that the work was one of continuing extraordinary emergency, or that a case of extraordinary emergency would cover the time employed in repairing the injuries, and in removing the obstacles caused by the flood. The phrase "continuing extraordinary emergency" is self-contradictory. A condition or conditions which necessarily must continue for years can not be called an uncommon, sudden, unexpected happening, which presents a sudden and unexpected occasion for action.—(*United States v. Sheridan-Kirk Contract Co.*, 1907, 149 Fed., 809.)

A contractor for levee work on the Mississippi River made the contention that the undertaking presented "at all times an extraordinary emergency within the meaning of the statute," and this contention was allowed by a circuit court (180 Fed., 502). On appeal, the Supreme Court reversed this ruling, quoting the expression that "the phrase 'continuing extraordinary emergency' is self-contradictory," and saying:

The building and repair of levees on the Mississippi River is one of the most important and conspicuous of the public works of the United States, and if it had been intended to exempt it from the provisions of the act of August 1, 1892,

which declared a public policy in regard to labor, it would have been expressed.—(*United States v. Garbish*, 1911, 222 U. S., 257; 32 Sup. Ct., 77.)

Bargemen engaged in transporting stone for use in the construction of a jetty in a harbor, all work being done offshore, were held not to be within the act, on the authority of *Ellis v. United States*, *supra*.

The barge was a maritime vessel. She was engaged in a maritime duty. The men were entitled to a maritime lien on her for their wages, for their work was of a maritime character. Their labor contributed to the work in which the barge was engaged, and they were clothed with the rights of seamen.—(*Breakwater Co. v. United States*, 1911, 183 Fed., 112.)

The following are summaries or extracts from opinions which have been rendered by the United States Attorney General on the application of the eight-hour lay of August 1, 1892:

As this new timber dry dock is intended to be a valuable and permanent improvement of real estate belonging to the United States, and is solely for its use and benefit, it is * * * to be regarded as one of the "public works" of the United States under this eight-hour law.—(20 Op. A. G., 445.)

Contracts for supplying post-office lock boxes, lock drawers, locks, pulls, plates, etc., for various public buildings throughout the United States, to be delivered by the contractors at the freight depot at the point of destination and placed in position in the buildings by the Government, were held not to be within the provisions of the statute.—(20 Op. A. G., 454.)

The statute, while in one sense restricting and in derogation of the common right of parties to contract, is nevertheless remedial, and is entitled to a fairly liberal construction. * * * The law as to laborers and mechanics in the direct employment of the Government and of the District of Columbia, is general; and the limitation to public works applies only to such persons as are in the employ of contractors and subcontractors. * * * As to others—as, for instance, sailors or others on shipboard, or teamsters—their employment being peculiar, they might well be held to be, as a matter of fact, neither laborers nor mechanics within the meaning of this law.—(20 Op. A. G., 459.)

The statute does not apply to foremen of mechanics employed to direct the mechanical labor of prisoners at the Fort Leavenworth Military Prison, whose hours of labor exceed eight per day.—(21 Op. A. G., 32.)

Although Congress has no power to enact laws which shall operate beyond the jurisdiction of the United States, still it has the power to determine what shall be the length of a day's work of any and all persons employed by the Government or by contractors upon any public works undertaken by the United States anywhere. * * * By the letter of the law, therefore, the hours of labor of all laborers and mechanics engaged in the construction of the Panama Canal are limited to eight hours in any one calendar day, whether employed directly by the United States or by a contractor or subcontractor with the United States. * * * The act of 1892 does not apply to the office force of the Isthmian Canal Commission stationed on the Isthmus of Panama,

or to any of the employees of the Government who are not within the ordinary meaning of the words "laborers and mechanics." (25 Op. A. G., 441. See act of June 30, 1906, below.)

Toolmen and repairers and cleaners of machinery, whose work must be done before or after the day's work of employees in machine shops where the regular force of workmen is within the provisions of the law, are likewise included therein if fairly coming within the description of laborers and mechanics, whether they are paid by the year, month, or day. (25 Op. A. G., 465.)

The employees of a corporation engaged in the business of a common carrier, even though the United States owns practically all of the stock of such corporation, and is largely served by it in the prosecution of a public work, as is the case with the Panama Railroad & Steamship Line, are not within the provisions of this statute, being employees of the corporation and not of the United States. (25 Op. S. G., 465.)

The act * * * does not apply to vessels under construction for the Navy by contract with builders at private establishments. The case of material for such vessels, as for instance, armor, guns, and other articles obtained under special contracts, is *a fortiori*; and, besides, rests fully on the ruling of Attorney General Miller in 20 Op., 454, as above cited, which is hereby expressly approved and affirmed. (26 Op. A. G., 30.)

Presumably, quartermaster's supplies for the use of the Army are such as, generally speaking, are consumed sooner or later in the using. [The act does not apply.] (26 Op. A. G., 36.)

There is no conflict between the act of August 1, 1892, and the proviso to section 4 of the act of July 17, 1902. [Reclamation act; see below.] The "extraordinary emergency" of the former act would apply to the latter. The acts are to be construed together [and it is held that it was not], the intention of Congress, by the proviso in the reclamation act and the use of the term "construction work," either to displace the provisions of the act of August 1, 1892, as to laborers and mechanics not strictly engaged in "construction work," or to exclude the exception of an "extraordinary emergency." * * * The eight-hour law applies fully to contractors on the irrigation works constructed by the United States. (26 Op. A. G., 64.)

Blacksmiths and their helpers, firemen, and pumpmen are either mechanics or laborers. (26 Op. A. G., 64.)

Engineers of the Reclamation Service are responsible to the extent of requiring the law to be observed and reporting violations of it. (26 Op. A. G., 64.)

As to employees engaged in the construction of a jetty at the mouth of the Columbia River, the following ruling was made:

Upon the questions suggested by your communication you are advised that the eight-hour law applies to this work, and that I fully concur with the view of your [War] Department * * * that those who fairly come within the ordinary meaning of the words "laborers and mechanics" should be restricted

to no more than eight hours of effective labor upon each calendar day, irrespective of enforced idleness on other days, except when a sudden emergency must be met by prompt action. (26 Op. A. G., 278.)

I think that the eight-hour day means eight hours of effective labor, and, therefore, so far as your questions present the case of laborers and mechanics who, from the exigencies of the situation, must wait until after the completion of the regular day to finish their work, I am of the opinion that the blasting, cleaning of tracks, repair of machinery, and all other similar work essential to prompt and continuous service in the regular day may be legally done before and after the regular hours. To be more specific, laborers and mechanics who are called upon to do two hours' work, for example, before or after the regular day begins or ends have no just cause for complaint that the law is violated if they are only called upon to work six more hours during the regular hours. (26 Op. A. G., 64.)

In accordance with the above ruling, it was held in a later opinion that persons employed as lock tenders, lock helpers, lockmen, and in similar employments at the locks of canals owned and operated by the Government may be called upon to render service at any hour of the day, if only the total hours of labor actually performed do not exceed eight. (26 Op. A. G., 605.)

Specifically, it was held that a watchman charged with the duty of keeping the door at a department building, enforcing regulations or reporting their breach, or keeping guard at night was not within the act; so also a laborer in such building who moved furniture, cleaned windows, cut grass on the surrounding grounds, and the like, rendered services more of the nature of a domestic servant than of a laborer within the meaning of the act; the same was said of a hostler whose duty it was to feed, drive, and care for horses and to clean carriages, harness, and stables; and a messenger who swept floors, did general office cleaning, attended fires, and carried messages was held not within the act. (26 Op. A. G., 623.)

The naval appropriation act of June 24, 1910, required vessels built under its provisions to "be built in accordance with the provisions of" the eight-hour law of August 1, 1892. As to the extent of this requirement, it was said:

The provision in the appropriation act must be construed to apply simply to work done upon the vessel itself at the place where it is built, and not as applying to the manufacture of machinery or other material elsewhere which is to enter into the construction of the vessel. (28 Op. A. G. 358.)

Similarly, the naval appropriation act of March 4, 1911, required the observance of "an eight-hour workday" in the construction of certain vessels provided for in the act. It was held that this direction would not be complied with by an arrangement by which the workmen would be employed $8\frac{1}{2}$ or $8\frac{3}{4}$ hours for five days, and given a shorter day on Saturday, the aggregate for the week being 48 hours. (29 Op. A. G. 371.)

Besides these rulings by the courts and the Attorney General, Congress took a hand in determining the application of the law to specific undertakings, declaring in the act of June 17, 1902, relating to the construction of irrigation works, that the act of August 1, 1892, should apply to such work; while by an act of June 30, 1906, the eight-hour day was made not to apply to unskilled alien laborers and their foremen and superintendents in the construction of the Isthmian Canal within the Canal Zone.

As to the enforcement of the law and the attitude of the officials of the Government thereto, it was stated in July, 1906, that the practice had grown up for the "inspectors of work done under public contracts, acting in accordance with the department's instructions or approval, to ignore altogether the question whether the Government contractors were obeying the law with reference to the eight hour a day provision, it being the department's attitude that it was the duty of the contractors with the Government to obey the law and not the peculiar responsibility of the department to see that they did so."¹

Subsequently, in September, 1906, for the purpose of securing prompt enforcement and uniform action among the departments in regard to the law, the following Executive order was issued:

1. All departments of the Government under the supervision of which public works are being constructed are hereby directed to notify the representatives stationed at such public works to report at once to their respective departments all cases in which contractors or subcontractors on works now under construction have required or permitted laborers or mechanics in their employ to work over eight hours in any one calendar day.

2. All Government representatives in charge of construction of public works are further directed that it is part of their duty to report to their respective departments each and every case in which laborers or mechanics are required or permitted to work over eight hours a day on the works under supervision of such Government representatives. Wherever reports showing work in excess of eight hours a day are received by any department they are to be referred to the Department of Justice for appropriate action.

3. All departments of the Government under the supervision of which public works are being constructed by contract are further directed to have their respective legal officers prepare and forward to the President a list of such statutes and Executive orders as have a direct bearing on contracts for the construction of public works, and with which bidders on such works should be made acquainted.

THEODORE ROOSEVELT.

SEPTEMBER 19, 1906.

It had been ruled in 1892 by an Attorney General that—

The duty to employ, direct, or control such laborers or mechanics, and the penalty for their wrongful employment, is with the contractor, and not with the Government or any of its officers or agents. (20 Op. A. G. 500.)

¹ Memorandum addressed to chiefs of bureaus, etc., by Acting Secretary of the Navy, July 17, 1906.

In October, 1906, however, the then Attorney General issued instructions to United States attorneys throughout the country saying that—

The Government is determined upon a strict enforcement of this statute, and you are directed diligently to investigate all complaints which may come to you from any source of violations of this law, and upon your own initiative to make investigation if there appears to you to be any reasonable ground for suspecting violation of this law.

The Navy Department memorandum quoted from above also laid down the principle that—

It is the duty of the officers of the Government, with respect to public contracts that are performed under their supervision and for the performance of which they are responsible, to use the powers they have to prevent violations of the law, and especially the Federal law, by the contractors in the work that comes under their supervision.

Defects were found, however, other than lack of enforcement, especially in the restricted application of the act of 1892 as indicated in the case of *Ellis v. United States*, and elsewhere. Steps were taken accordingly to secure additional and amendatory legislation, and on June 19, 1912, at the second session of the 62d Congress, the following act was passed:

[PUBLIC—No. 199.]

An act limiting the hours of daily service of laborers and mechanics employed upon work done for the United States, or for any Territory, or for the District of Columbia, and for other purposes.

SECTION 1. Every contract hereafter made to which the United States, any Territory, or the District of Columbia is a party, and every such contract made for or on behalf of the United States, or any Territory, or said District, which may require or involve the employment of laborers or mechanics shall contain a provision that no laborer or mechanic doing any part of the work contemplated by the contract, in the employ of the contractor or any subcontractor contracting for any part of said work contemplated, shall be required or permitted to work more than eight hours in any one calendar day upon such work; and every such contract shall stipulate a penalty for each violation of such provision in such contract of five dollars for each laborer or mechanic for every calendar day in which he shall be required or permitted to labor more than eight hours upon said work; and any officer or person designated as inspector of the work to be performed under any such contract, or to aid in enforcing the fulfillment thereof, shall, upon observation or investigation, forthwith report to the proper officer of the United States, or of any Territory, or of the District of Columbia, all violations of the provisions of this act directed to be made in every such contract, together with the name of each laborer or mechanic who has been required or permitted to labor in violation of such stipulation and the day of such violation, and the amount of the penalties imposed according to the stipulation in any such contract shall be directed to be withheld for the use and benefit of the United States, the District of Columbia, or the Territory contracting by the officer or person whose duty it shall be to approve the payment of the moneys due under such contract, whether the violation of the provisions of such contract is by the contractor or any subcontractor. Any contractor or subcontractor aggrieved by the withholding of any penalty as hereinbefore provided shall have the right within six months thereafter to appeal to the head of the department making the contract on behalf of the United States or the Territory, and in the case of a contract made by the District of Columbia to the Commissioners thereof, who shall have power to review the action imposing the penalty, and in all such

appeals from such final order whereby a contractor or subcontractor may be aggrieved by the imposition of the penalty hereinbefore provided, such contractor or subcontractor may within six months after decision by such head of a department or the Commissioners of the District of Columbia file a claim in the Court of Claims, which shall have jurisdiction to hear and decide the matter in like manner as in other cases before said court.

SEC. 2. Nothing in this act shall apply to contracts for transportation by land or water, or for the transmission of intelligence, or for the purchase of supplies by the Government, whether manufactured to conform to particular specifications or not, or for such materials or articles as may usually be bought in open market, except armor and armor plate, whether made to conform to particular specifications or not, or to the construction or repair of levees or revetments necessary for protection against floods or overflows on the navigable waters of the United States: *Provided*, That all classes of work which have been, are now, or may hereafter be performed by the Government shall, when done by contract, by individuals, firms, or corporations for or on behalf of the United States or any of the Territories or the District of Columbia, be performed in accordance with the terms and provisions of section one of this act. The President, by Executive order, may waive the provisions and stipulations in this act as to any specific contract or contracts during time of war or a time when war is imminent, and until January first, nineteen hundred and fifteen, as to any contract or contracts entered into in connection with the construction of the Isthmian Canal. No penalties shall be imposed for any violation of such provision in such contract due to any extraordinary events or conditions of manufacture, or to any emergency caused by fire, famine, or flood, by danger to life or to property, or by other extraordinary event or condition on account of which the President shall subsequently declare the violation to have been excusable. Nothing in this act shall be construed to repeal or modify the act entitled "An act relating to the limitation of the hours of daily service of laborers and mechanics employed upon the public works of the United States and of the District of Columbia" being chapter three hundred and fifty-two of the laws of the Fifty-second Congress, approved August first, eighteen hundred and ninety-two, as modified by the Acts of Congress approved February twenty-seventh, nineteen hundred and six, and June thirtieth, nineteen hundred and six, or apply to contracts which have been or may be entered into under the provisions of appropriation acts approved prior to the passage of this act.

SEC. 3. This act shall become effective and be in force on and after January first, nineteen hundred and thirteen.

Approved, June nineteen, nineteen hundred and twelve.

As an independent piece of legislation the act called for new rulings by the Attorney General to determine its application. Thus the Secretary of the Navy requested a construction of the provision that limits the hours of labor of any workman "in the employ of the contractor or any subcontractor contracting for any part of said work contemplated" to not more "than eight hours in any one calendar day upon such work." The limiting words "upon such work" were held to restrict the application of the eight-hour provision to employment upon the subject matter of the Government contract only, the Attorney General in 1912 (Oct. 3) saying,

Clearly, no penalty could be collected under the authority of this provision if the laborer or mechanic were required to labor more than eight hours per day upon some other work than that contemplated by the contract. (29 Op. A. G., 538.)

Another question submitted at the same time related to the extent of inclusion of the phrase "any part of the work contemplated by the contract," the question being at what stage in the segregation and

application of materials the eight-hour law became applicable. As to this it was said:

To determine what class of work is covered by this definition must be largely a matter of administration; but, in my opinion, the general work done by the contractor or a subcontractor in his plant which is applicable and destined to the fulfillment of his contracts with all persons generally does not fall within the law. Only that portion of the work which can be regarded as directed specifically to the fulfillment of the Government contract, and nothing else, falls within the provisions of the act.

A similar ruling to the foregoing was made in response to an inquiry of the Secretary of War as to the construction of a provision of the appropriation act of June 6, 1912 (antedating the eight-hour law of the same year), which prohibits the purchase of ammunition from any persons who do not at the time of commencement of work thereon establish an eight-hour workday for all employees engaged or to be engaged in the work of manufacturing such ammunition. It was held that:

The provision contained in the act relative to the eight-hour law applies only to employees, laborers, and mechanics while engaged in the work of manufacturing the ammunition named therein, and does not establish any general rule governing the employees of the contractor beyond their occupation in carrying out the work embraced in the contract with the Government. (30 Op. A. G., 16.)

The exception, in the act of June 19, 1912, of supplies purchased by the Government "whether manufactured to conform to particular specifications or not, or for such articles or materials as may usually be bought in open market, except armor and armor plate, whether made to conform to particular specifications or not," was held to exempt from the application of the act articles to be purchased by the Public Printer for use in the Government Printing Office, as leathers, cloth, colors, ink, gold leaf, etc. (30 Op. A. G. 24); as also of the labor involved in the dressing of marble and stone for public buildings, such work not being performed at the sites of the buildings themselves (30 Op. A. G. 211); of dynamos and engines for installation in public buildings, tiles for roofing, terra cotta, bricks, structural iron and steel, lamp standards and brackets, sash, doors, molding, etc (30 Op. A. G. 31); and of cloth for clothing and tents for the Army (29 Op. A. G. 505).

Another question submitted related to the application of the new act to dredging in river and harbor work—employment which had been held not to be covered by the act of August 1, 1892. On the authority of the decision in the case of *Ellis v. United States*, previously noted, the later act was construed as not affecting such employment (29 Op. A. G. 583). This opinion is of less importance, however, in view of the enactment, on March 3, 1913, of a statute amending the act of 1892, which had for one of its specific aims the

inclusion of persons employed in constructing, maintaining, or improving a river or harbor. This enactment was made as an amendment of the act of 1892, and reads as follows:

[PUBLIC—No. 408.]

An act relating to the limitation of the hours of daily service of laborers and mechanics employed upon a public work of the United States and of the District of Columbia, and of all persons employed in constructing, maintaining, or improving a river or harbor of the United States and of the District of Columbia.

SECTION 1. Sections one, two, and three of an act entitled "An act relating to the limitation of the hours of daily service of laborers and mechanics employed upon the public works of the United States and of the District of Columbia [shall] be amended to read as follows:

Section 1. The service and employment of all laborers and mechanics who are now, or may hereafter, be employed by the Government of the United States or the District of Columbia, or by any contractor or subcontractor, upon a public work of the United States or of the District of Columbia, and of all persons who are now, or may hereafter be, employed by the Government of the United States or the District of Columbia, or any contractor or subcontractor, to perform services similar to those of laborers and mechanics in connection with dredging or rock excavation in any river or harbor of the United States or of the District of Columbia, is hereby limited and restricted to eight hours in any one calendar day; and it shall be unlawful for any officer of the United States Government or of the District of Columbia, or any such contractor or subcontractor whose duty it shall be to employ, direct, or control the services of such laborers or mechanics or of such persons employed to perform services similar to those of laborers and mechanics in connection with dredging or rock excavation in any river or harbor of the United States or of the District of Columbia, to require or permit any such laborer or mechanic or any such person employed to perform services similar to those of laborers and mechanics in connection with dredging or rock excavation in any river or harbor of the United States or of the District of Columbia, to work more than eight hours in any calendar day, except in case of extraordinary emergency: *Provided*, That nothing in this act shall apply or be construed to apply to persons employed in connection with dredging or rock excavation in any river or harbor of the United States or of the District of Columbia while not directly operating dredging or rock excavating machinery or tools, nor to persons engaged in construction or repair of levees or revetments necessary for protection against floods or overflows on the navigable rivers of the United States.

Sec. 2. Any officer or agent of the Government of the United States or of the District of Columbia, or any contractor or subcontractor whose duty it shall be to employ, direct, or control any laborer or mechanic employed upon a public work of the United States or of the District of Columbia, or any person employed to perform services similar to those of laborers and mechanics in connection with dredging or rock excavation in any river or harbor of the United States or of the District of Columbia, who shall intentionally violate any provision of this act shall be deemed guilty of a misdemeanor, and for each and every such offense shall, upon conviction, be punished by a fine not to exceed \$1,000 or by imprisonment for not more than six months, or by both such fine and imprisonment, in the discretion of the court having jurisdiction thereof.

Sec. 3. The provisions of this act shall not be so construed as to in any manner apply to or affect contractors or subcontractors, or to limit the hours of daily service of laborers or mechanics engaged upon a public work of the United States or of the District of Columbia, or persons employed to perform services similar to those of laborers and mechanics in connection with dredging or rock excavation in any river or harbor of the United States or of the District of Columbia, for which contracts have been entered into prior to the passing of this act or may be entered into under the provisions of appropriation acts approved prior to the passage of this act.

Sec. 4. This act shall become effective and be in force on and after March first, nineteen hundred and thirteen.

Approved, March 3, 1913.

[540]

But little is available in the way of official interpretation of this act, a single point of narrow range being to the effect that this law does not apply to laborers employed on the Panama Canal (30 Op. A. G. 139). Obviously this act is of broader application than the act of 1892 in its use of the phrase "upon a public work" in lieu of the phrase "upon any of the public works," the latter phrase being held by both the majority and dissenting opinions in the *Ellis Case* to be of a narrower inclusiveness than the phrase "any public work." The effect of the act on dredge workers is less obvious, since its application is restricted to persons performing "services similar to those of laborers and mechanics in connection with dredging or rock excavation in any river or harbor," and, further, the act does not apply to any person in this line of employment "while not directly operating dredging or rock excavating machinery or tools."

One exemption that is clear affects persons held to be covered by the act of 1892; that is, workers on levees or revetments for protection against floods or overflows on the navigable rivers of the United States, this exception being found both in the act of 1912 and that of 1913. Except where the modifying provisions are specific, it is a fair assumption that the interpretation of the act of 1912 is applicable to the later acts. Authority for this view, especially as to the act of 1913, is found in a statement of the Attorney General to the effect that—

In the absence of clear evidence to the contrary it must be presumed that in the act of March 3, 1913, Congress intended to amend the act of August 1, 1892, only to the extent provided for in the later act. (Op. A. G., —.)

The foregoing account and discussion is limited to the single line of legislation the object of which was to regulate the working time of employees of restricted definition, i. e., laborers and mechanics employed by or on behalf of the Federal Government, a Territory, or the District of Columbia. The law of June 25, 1868, though unrepealed, is negligible, while those of 1912 and 1913 lie side by side. The relationship of these two laws to each other would appear to be one of coordinate control in some aspects, while in others their fields are more distinct. The provision in the act of 1912 that it was not to be regarded as in any way repealing or modifying the act of 1892 must be held to indicate its separateness from the act of 1913 amending the act of 1892.

Other laws of Congress affecting public employment are an act of August 27, 1912, fixing the hours of labor of letter carriers in the city delivery service and clerks in first and second class post-offices at not more than 8 per day, to be performed within a period of 10 consecutive hours, Sunday work to be compensated for by a time allowance on

one of the 6 days following the Sunday on which such work was done.

The law applicable to hours of labor of clerks and other employees in the executive departments is found in an act of March 3, 1893, and is as follows:

Hereafter it shall be the duty of the heads of the several executive departments, in the interest of the public service, to require of all clerks and other employees, of whatever grade or class, in their respective departments, not less than seven hours of labor each day, except Sundays and days declared public holidays by law or Executive order; *Provided*, That the heads of the departments may by special order, stating the reason, further extend the hours of any clerk or employee in their departments, respectively; but in case of an extension it shall be without additional compensation. * * * —(U. S. Compiled Statutes, 1901, p. 80.)

As disclosed by opinions of the Attorney General and by court decisions, the net effect of the different eight-hour laws of the Federal Government made applicable to public works, and beginning with the act of 1868, may be briefly summarized as follows:

The law of June 25, 1868, while still on the statute books, is only in the nature of a direction.

The eight-hour law of August 1, 1892, however, was mandatory and made it unlawful for officers, contractors, or subcontractors to employ laborers and mechanics on public works of the United States or of the District of Columbia for more than eight hours per day, except in cases of emergency. The term "public works" included all fixed works for public use.

The law of 1892 applied to all laborers and mechanics properly classified as such, who are—

- (1) Employed directly by the United States or the District of Columbia.
- (2) Employed within the bounds of property of the United States Government.
- (3) Working on Government buildings, even though the land occupied is under the political control of a State.
- (4) Working on levees on navigable rivers of the United States.
- (5) Employed by contractors on public works.
- (6) Employed in "construction work" in the Reclamation Service.
- (7) Employed in repairing tools or appliances necessary to the prosecution of public works.

The law of 1892 did not apply to:

A. Laborers and mechanics employed in private establishments engaged in—

- (1) Manufacturing material for public works, even though such material is to be used for fixtures.

(2) Manufacturing supplies for the quartermaster's department.

(3) Building vessels or barges for the Government.

B. Unskilled alien laborers and their foreman and superintendents engaged in the construction of the Panama Canal.

C. Employees of the Panama Railroad.

D. Watchmen, laborers, hostlers, messengers, and the like employed in and about the Government departments in Washington.

The act did not authorize payments for overtime work.

The term "extraordinary emergency" must be strictly construed, and can not be held to apply to continuing conditions.

A corporation could be held criminally liable for violations.

The observance of an eight-hour day does not imply continuous employment, but means eight hours of effective service within the 24 hours of a calendar day.

Lost time due to adverse conditions of the weather, etc., can not be made up by extra work on another day.

Where work—as on a vessel—must be carried on in accordance with the provisions of the act, this requirement affected only the labor done at the place of construction, and not the preparation of materials.

A specification that an eight-hour workday must be observed is not met by working days of different lengths, aggregating 48 hours per week. The eight-hour act of June 19, 1912—

Does not apply to supplies purchased for the Government, even though manufactured for it in accordance with its own specifications.

Dos not prevent the employment of workmen for additional hours of service on other jobs after having worked eight hours upon the subject-matter of a Government contract:

Does not apply to the dressing of stone for public buildings if not done at the site of the building, nor to the manufacture of fittings and equipment for such buildings;

Does not modify the act of 1892 as to river and harbor work.

The eight-hour act of March 3, 1913—

Does not apply to laborers on the Panama Canal;

Apparently retains the construction and application of the act of 1892 except as specifically provided for by the later act; in particular it includes dredge work in so far as services similar to those of laborers and mechanics are employed, and excludes labor on levees and revetments.

