

REPORT ON STRIKE AT BETHLEHEM STEEL WORKS SOUTH BETHLEHEM, PENNSYLVANIA



Prepared under the direction of
CHAS. P. NEILL
Commissioner of Labor



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LETTERS OF TRANSMITTAL.

DEPARTMENT OF COMMERCE AND LABOR,
OFFICE OF THE SECRETARY,
Washington, May 3, 1910.

SIR: Some weeks since, because of conditions reported as existing in connection with a strike at the plant of the Bethlehem Steel Company, South Bethlehem, Pa., I directed the Commissioner of Labor to make an investigation as to the causes of the strike and of the wages and working conditions at that plant. An investigation was thereupon immediately undertaken, and the report covering conditions of employment in the establishment has just been completed.

This report I now have the honor to transmit herewith, in compliance with the Senate resolution of April 19, 1910, directing—

That the Bureau of Labor advise the Senate of the conditions leading up to the strike of employees of the Bethlehem Steel Company, Bethlehem, Pa., and the causes which led to that strike, and whether or not the employees of the machine shops of this company were required to work on Sunday, and whether the work of the mechanics and machinists was put upon the seven-day basis.

Respectfully,

CHARLES NAGEL,
Secretary.

HON. JAMES S. SHERMAN,
President of the Senate, Washington, D. C.

DEPARTMENT OF COMMERCE AND LABOR,
BUREAU OF LABOR,
Washington, May 2, 1910.

SIR: In accordance with your instructions, the Bureau of Labor on March 17 began an investigation of the strike of the employees of the Bethlehem Steel Company, South Bethlehem, Pa., and of the wages and working conditions in that plant.

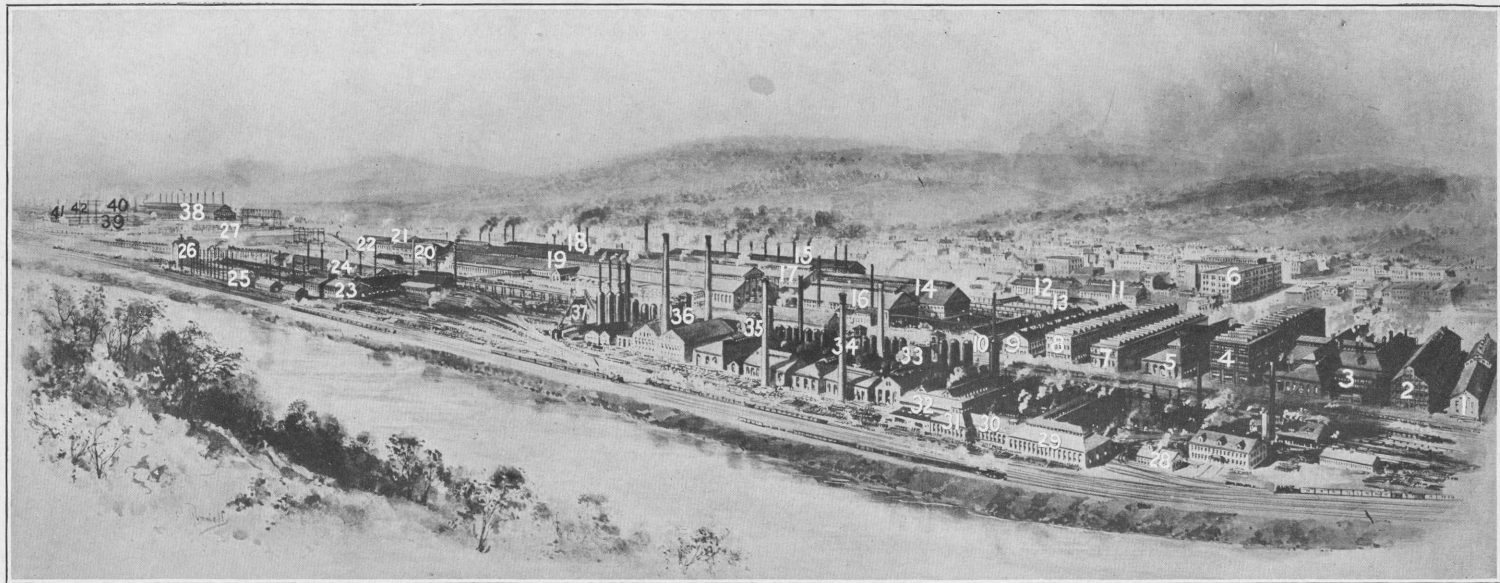
The investigation has just been completed, and I transmit herewith the report embodying its results.

The investigation was carried on by Special Agent Ethelbert Stewart, with the assistance of several other special agents of the bureau.

I am, very respectfully,

CHAS. P. NEILL,
Commissioner.

THE SECRETARY OF COMMERCE AND LABOR,
Washington, D. C.



- No. 1. Brass foundry.
- No. 2. No. 4 foundry cleaning building.
- No. 3. No. 4 foundry.
- No. 4. No. 6 machine shop.
- No. 5. Construction and boiler shops.
- No. 6. General office building.
- No. 7. Pattern and carpenter shops.
- No. 8. No. 4 machine shop.
- No. 9. Projectile press shop.
- No. 10. Projectile machine shop.
- No. 11. Drop forge die shop.
- No. 12. Drop forge hammer shop.
- No. 13. Drop forge treatment shop.
- No. 14. No. 3 smith shop.

- No. 15. Gas producers.
- No. 16. Annealing and storage building.
- No. 17. Press forge and open-hearth building.
- No. 18. Steel foundry.
- No. 19. No. 2 machine shop.
- No. 20. Steel casting cleaning shed.
- No. 21. Treatment department.
- No. 22. Pattern storage house.
- No. 23. Armor forge.
- No. 24. No. 3 machine shop.
- No. 25. Armor plate treatment plant.
- No. 26. Tempering plant No. 2.
- No. 27. Ore stock yard.
- No. 28. Laboratories.

- No. 29. No. 1 mill.
- No. 30. Stay bolt mill.
- No. 31. Eight-inch mill.
- No. 32. Crucible steel department.
- Nos. 33 to 37. Blast furnace plant.
- Nos. 38 to 41. The Saucon plant.
- No. 38. Open-hearth department.
- No. 39. Soaking pit department.
- No. 40. Power plant.
- No. 41. Rail mill.
- No. 42. Gray mill; twenty-eight-inch structural mill.

REPORT ON STRIKE AT BETHLEHEM STEEL WORKS, SOUTH BETHLEHEM, PA.

INTRODUCTION.

The strike at the Bethlehem Steel Works, which was the occasion of this investigation and report, began on February 4, 1910. The immediate cause of the strike was the dismissal on that date of three machinists. The three men who were dismissed had shortly before served on a committee that had waited upon the foreman to protest against the discharge of a man who had used a subterfuge to escape Sunday work, and to ask for the abolition of Sunday work itself. The discharge of these particular men was, on this account, construed by the machinists as a coercive measure to repress agitation against overtime and Sunday work. The discharge of the employees for whose reinstatement the strike occurred, was thus merely an incident growing out of opposition on the part of some of the employees against the extension of overtime and Sunday work. To understand, therefore, the real causes leading up to the strike, it is necessary to outline briefly certain general conditions of employment with special reference to hours and methods of payment at the Bethlehem Steel Works.

The works of the Bethlehem Steel Company are located in the boroughs of South Bethlehem and Northampton Heights, Pa., and cover about 500 acres, extending about 2 miles in a strip along the Lehigh River.

The works are organized into two general plants, the Lehigh plant, employing normally approximately 6,800 men, and the Saucon plant, approximately 1,500 men. (^a)

HOURS OF LABOR.

The following table shows the different departments embraced in these two plants, the number of employees normally required to operate each department, the regular hours per day the employees

^a The organization of the works, showing the character of the work done in each department, is shown in detail in Appendix B.

in these several departments are normally required to work on the different days of the week, and the total hours per week:

LABOR FORCE AND WORKING HOURS, BY DEPARTMENTS.

Department.	Number of men em- ployed.	Hours worked per day.			Total hours worked per week.
		Monday to Friday.	Saturday.	Sunday.	
LEHIGH PLANT.					
General office.....	373	8	4		44
Engineering.....	61	8 ^a ₁₂	4 ^a ₁₂		46 ^a ₁₂
McAfee quarry.....	140	10	5		55
Iron foundry.....	504	10 ^a ₁₂	5 ^a ₁₂		57 ^a ₁₂
Steel foundry.....	483	10 ^a ₁₂	5 ^a ₁₂		57 ^a ₁₂
Brass foundry.....	57	10 ^a ₁₂	5 ^a ₁₂		57 ^a ₁₂
Armor plate.....	190	10 ^a ₁₂	5 ^a ₁₂		57 ^a ₁₂
Hammer forge.....	180	10 ^a ₁₂	5 ^a ₁₂		57 ^a ₁₂
Annealing and tempering.....	50	10 ^a ₁₂	5 ^a ₁₂		57 ^a ₁₂
Tool treating.....	4	10 ^a ₁₂	5 ^a ₁₂		57 ^a ₁₂
Drop forge.....	136	10 ^a ₁₂	5 ^a ₁₂		57 ^a ₁₂
Projectile.....	89	10 ^a ₁₂	5 ^a ₁₂		57 ^a ₁₂
Carpenter shop.....	96	10 ^a ₁₂	5 ^a ₁₂		57 ^a ₁₂
Pattern shop.....	73	10 ^a ₁₂	5 ^a ₁₂		57 ^a ₁₂
Boiler and construction shops.....	130	10 ^a ₁₂	5 ^a ₁₂		57 ^a ₁₂
Saw repair.....	4	10 ^a ₁₂	5 ^a ₁₂		57 ^a ₁₂
Smith shop No. 1.....	10	10 ^a ₁₂	5 ^a ₁₂		57 ^a ₁₂
Smith shop No. 4.....	19	10 ^a ₁₂	5 ^a ₁₂		57 ^a ₁₂
Machine shop No. 2.....	920	10 ^a ₁₂	5 ^a ₁₂		57 ^a ₁₂
Machine shop No. 4.....	454	10 ^a ₁₂	5 ^a ₁₂		57 ^a ₁₂
Machine shop No. 6.....	264	10 ^a ₁₂	5 ^a ₁₂		57 ^a ₁₂
Storehouse.....	7	10 ^a ₁₂	5 ^a ₁₂		57 ^a ₁₂
Laboratories.....	16	10 ^a ₁₂	5 ^a ₁₂		57 ^a ₁₂
Proving ground.....	5	10 ^a ₁₂	5 ^a ₁₂		57 ^a ₁₂
Shipping.....	11	10 ^a ₁₂	5 ^a ₁₂		57 ^a ₁₂
Crucible.....	111	$\left\{ \begin{array}{l} a \ 10\frac{a}{12} \\ b \ 12 \end{array} \right.$	$\left\{ \begin{array}{l} a \ 5\frac{a}{12} \\ b \ 6 \end{array} \right.$		$\left\{ \begin{array}{l} a \ 57\frac{a}{12} \\ b \ 66 \end{array} \right.$
General mechanical.....	25	$\left\{ \begin{array}{l} 10\frac{a}{12} \\ 12 \end{array} \right.$	$\left\{ \begin{array}{l} 5\frac{a}{12} \\ 12 \end{array} \right.$		$\left\{ \begin{array}{l} 57\frac{a}{12} \\ 72 \end{array} \right.$
Yard.....	588	$\left\{ \begin{array}{l} 10\frac{a}{12} \\ c \ 12 \end{array} \right.$	$\left\{ \begin{array}{l} 5\frac{a}{12} \\ c \ 12 \end{array} \right.$		$\left\{ \begin{array}{l} 57\frac{a}{12} \\ c \ 72 \end{array} \right.$
Electrical.....	64	$\left\{ \begin{array}{l} 10\frac{a}{12} \\ d \ 12 \end{array} \right.$	$\left\{ \begin{array}{l} 5\frac{a}{12} \\ d \ 12 \end{array} \right.$	d 12	$\left\{ \begin{array}{l} 57\frac{a}{12} \\ d \ 84 \end{array} \right.$
Bricklaying.....	80	10 ^a ₁₂	10 ^a ₁₂		62 ^a ₁₂
Press forge.....	77	12	6		66
Construction.....	300	12	12		72
Mill No. 1.....	547	c 12	c 12		c 72
Open hearth No. 1.....	340	d 12	d 12	d 12	d 84
Blast furnace.....	255	d 12	d 12	d 12	d 84
Boiler.....	147	d 12	d 12	d 12	e 84
Total, Lehigh plant.....	6,810				
SAUCON PLANT.					
Roll shop.....	29	10 ^a ₁₂	5 ^a ₁₂		57 ^a ₁₂
Bricklayers and helpers.....	23	10 ^a ₁₂	10 ^a ₁₂		62 ^a ₁₂
Bridge shop.....	209	10 ^a ₁₂	10 ^a ₁₂	10 ^a ₁₂	72 ^a ₁₂
Electrical.....	36	$\left\{ \begin{array}{l} 10\frac{a}{12} \\ 12 \end{array} \right.$	$\left\{ \begin{array}{l} 10\frac{a}{12} \\ 12 \end{array} \right.$	$\left\{ \begin{array}{l} 10\frac{a}{12} \\ 12 \end{array} \right.$	$\left\{ \begin{array}{l} 72\frac{a}{12} \\ 84 \end{array} \right.$
Office.....	6	$\left\{ \begin{array}{l} 10\frac{a}{12} \\ 12 \end{array} \right.$	$\left\{ \begin{array}{l} 10\frac{a}{12} \\ 12 \end{array} \right.$	$\left\{ \begin{array}{l} 10\frac{a}{12} \\ 12 \end{array} \right.$	$\left\{ \begin{array}{l} 72\frac{a}{12} \\ 84 \end{array} \right.$
General.....	29	f 12	f 12	f 12	f 84
Mechanical.....	260	f 12	f 12	f 12	f 84
Open hearth No. 2.....	339	f 12	f 12	f 12	f 84
Soaking pit.....	82	f 12	f 12	f 12	f 84
Forty-inch blooming and rail mill.....	171	f 12	f 12	f 12	f 84
Gray mill.....	309	f 12	f 12	f 12	f 84
Total, Saucon plant.....	1,493				
Grand total.....	8,303				

^a Hammer shop.

^b Milling.

^c Continuous operation, 2 shifts, 6 days in the week.

^d Continuous operation, 2 shifts, 7 days in the week.

^e Continuous operation, but with reduced force on Sundays.

^f Continuous operation, 2 shifts, 7 days in the week. In some instances only a part of the full force is reported as employed on Sunday.

In order to show the exact hours worked by different groups of employees the following table has been prepared from data supplied by the pay roll for the month of January, 1910.

It will be seen that the number of employees shown in this table is in excess of the number shown in the table preceding. The difference arises out of the fact that the preceding table gives the number of employees normally required to man the different departments in the plant. The daily average number of employees in January, however, is reported to be somewhat larger than the normal daily average. Moreover, the pay roll for any given month would, of course, show a larger number of employees than was actually at work on any one day. Thus, an employee might leave one day and a new man be employed the next day in his place. This might occur more than once during the month in the same position. In this way the names of the several employees who successively filled the same position would appear on the pay roll. While this factor affects the absolute numbers shown for each occupation, it is not probable that the relative figures would differ materially from the figures representing the average number of employees in each occupation the entire month.

WORKING HOURS PER DAY AND WORKING DAYS PER WEEK IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM STEEL WORKS OF EMPLOYEES WHO APPEARED ON THE PAY ROLL OF JANUARY, 1910.

Employees working specified number of hours per day and days per week.															Total.	
Department.	13 $\frac{3}{4}$ hrs. 7 das.	13 hrs.		12 $\frac{3}{4}$ hours.			12 hours.		12 and 11 hrs. (a) 6 days.	12 and 10 hrs. (b) 6 days.	11 hrs. 6 das.	10 $\frac{1}{2}$ hrs. 7 das.	10 $\frac{5}{8}$ and 5 $\frac{3}{8}$ hrs. (c) 6 days.	Other combinations of hours and days.		
		7 das.	6 das.	7 das.	6 das.	5 das.	7 days.	6 days.								
Annealing.....								18							1	19
Armor plate.....							24	1					65			90
Armor-plate machine shop.....													153			153
Blast furnace.....							254									254
Boiler room, pumps, etc.			1				79	83							1	164
Boiler shop.....						1		1					173			175
Brass foundry.....								5					74		2	81
Crucible.....								93					28		1	122
Drop forge.....								2		11			147			160
Electrical.....							32	41			1	3	33			110
Erecting.....								490					7			497
Fabricating.....	79						2					182				263
Gas producers.....							32									32
Hammer forge.....						19	10	5			86		54			174
Iron foundry.....			1					325					309		1	636
Laboratories.....							1	3							7	11
Machine shop No. 2.....													1,067			1,067
Machine shop No. 4.....													562			562
Machine shop No. 6.....					26	28							290		3	347
Mechanical.....		1					46	4								51
Mill, puddling.....								150								150
Mill, 48-inch blooming.....							21									21

a 12 hours Monday to Friday, 11 hours on Saturday.

b 12 hours Monday to Friday, 10 hours on Saturday.

c 10 $\frac{1}{2}$ hours Monday to Friday, 5 $\frac{3}{8}$ hours on Saturday.

WORKING HOURS PER DAY AND WORKING DAYS PER WEEK IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM STEEL WORKS OF EMPLOYEES WHO APPEARED ON THE PAY ROLL OF JANUARY, 1910—Concluded.

Department.	Employees working specified number of hours per day and days per week.															Total.
	13 $\frac{3}{4}$ hrs. 7 das.	13 hrs.		12 $\frac{3}{4}$ hours.			12 hours.		12 and 11 hrs. (a) 6 days.	12 and 10 hrs. (b) 6 days.	11 hrs. 6 das.	10 $\frac{1}{2}$ hrs. 7 das.	10 $\frac{5}{8}$ and 5 $\frac{1}{2}$ hrs. (c) 6 days.	Other combinations of hours and days.		
		7 das.	6 das.	7 das.	6 das.	5 das.	7 days.	6 days.								
Mill, 48-inch, soaking pits.....							14									14
Mill, 48-inch, rolling.....				1			119									120
Mill, 48-inch, yard.....							191									191
Mill, 40-inch, soaking pits.....							36	1								37
Mill, 40-inch, blooming.....							19	2							1	22
Mill, 28-inch, rail.....							141									141
Mill, 22-inch.....								71								71
Mill, 12-inch.....								41								41
Mill, 8-inch.....								25								25
Mill, stay-bolt.....								60								60
Mill, general.....							164	67								231
Office force at mill.....							7									7
Open-hearth furnace, Lehigh plant.....							324	1							2	327
Open-hearth furnace, Saucon plant.....							330									330
Pattern shop.....													76			76
Press forge.....							6	59							1	67
Projectile, forging.....													42			42
Projectile, treatment.....													10			10
Projectile, shop.....													82			82
Repair shops, boilers, etc.....								73							1	74
Roll turning.....							9	1				11	3		8	32
Steel foundry.....							84	51	209				235		6	585
Tempering.....			1					30							5	36
Yard, stocking.....			2					282					160			444
Yard, transportation.....			6				25	212								243
Miscellaneous.....		2		2			352	36			16	322		7		737
Total.....	79	3	11	3	26	48	2,322	2,233	209	11	87	212	3,893	47		9,184

^a 12 hours Monday to Friday, 11 hours on Saturday.

^b 12 hours Monday to Friday, 10 hours on Saturday.

^c 10 $\frac{5}{8}$ hours Monday to Friday, 5 $\frac{1}{2}$ hours on Saturday.

This table shows that in January, 1910, 9,184 names appeared on the pay roll. Of this number 79 worked in occupations regularly requiring 13 $\frac{3}{4}$ hours a day for the entire 7 days of the week; 3 worked in occupations regularly requiring 13 hours for the 7 days of the week; and 11 at occupations regularly requiring 13 hours for 6 days a week. Three worked 12 $\frac{3}{4}$ hours 7 days a week, 26 worked this number of hours 6 days a week, and 48 worked a 12 $\frac{3}{4}$ -hour day 5 days a week.

Of the total employees appearing on the January pay roll 2,322 worked in occupations regularly requiring 12 hours a day for the 7 days of the week, and 2,233 worked in occupations requiring 12 hours a day for 6 days in the week. Thus, 4,725, or 51 per cent of the 9,184 employees on the pay roll, were employed in occupations regularly requiring 12 or more hours per day on their regular working day.

Of the 9,184 employees on the pay roll, 5,244 worked over 10 hours at least 6 days a week; something less than 4,000 of the entire force had 5½ hours per day on Saturday. Excluding this Saturday half holiday and considering the other 5 working days of the week only, over 99 per cent of the entire force of the works had a normal working day of 10 hours and 25 minutes or over.

A further analysis of the January pay roll of the company shows that out of 9,184 persons employed during that month 2,628, or 29 per cent, worked regularly 7 days a week. Sunday work was for them the rule and was not considered overtime. Some of this number were in departments where the work is necessarily a continuous process from which Sunday work can not be largely eliminated. Of the 2,628 regular 7-day workers, 79 worked 13 hours and 10 minutes per day or night, 2,322 worked 12 hours per day or night, and 212 worked 10 hours and 25 minutes; a few only worked other irregular hours.

OVERTIME AND SUNDAY WORK.

Practically 71 per cent of the entire force, or 6,504 persons, had nominally a 6-day week; that is, 6 days was their normal working week, and no Sunday work was done except as overtime. Of these 6-day workers, 40 had a working day exceeding 12 hours, 2,233 worked 12 hours per day or night, while 3,893 worked 10 hours and 25 minutes per day from Monday to Friday and 5 hours and 20 minutes on Saturday. It was from this last group that the protests against overtime and Sunday work came, finally resulting in the strike.

The rates paid for overtime work and Sunday work, alike, did not differ from the ordinary hourly rates.

The number of employees doing Sunday work, either regularly as 7-day workers or irregularly as Sunday overtime, and the percentage of this number of the total employees in each department are shown in the following table:

NUMBER AND PER CENT OF EMPLOYEES WORKING ON SUNDAY IN JANUARY, 1910,
BY DEPARTMENTS.

Department.	Total number of employees.	Number of regular seven-day workers.	Six-day workers working Sundays.		Total Sunday workers.	
			Number of employees.	Average Sunday overtime (hours).	Number of employees.	Per cent of total force.
Annealing.....	19					
Armor plate.....	90	24			24	26.7
Armor-plate machine shop.....	153		27	17.0	27	17.6
Blast furnace.....	254	254			254	100.0
Boiler room, pumps, etc.....	104	79			79	48.2
Boiler shop.....	175					
Brass foundry.....	81		14	14.8	14	17.3

NUMBER AND PER CENT OF EMPLOYEES WORKING ON SUNDAY IN JANUARY, 1910.
BY DEPARTMENTS—Concluded.

Department.	Total number of employees.	Number of regular seven-day workers.	Six-day workers working Sundays.		Total Sunday workers.	
			Number of employees.	Average Sunday overtime (hours).	Number of employees.	Per cent of total force.
Crucible.....	122	.....	8	44.3	8	6.6
Drop forge.....	160	.....	29	14.7	29	18.1
Electrical.....	110	35	.....	.....	35	31.8
Erecting.....	497	.....	.....	.....	.....	.....
Fabricating.....	263	263	.....	.....	263	100.0
Gas producers.....	32	32	.....	.....	32	100.0
Hammer forge.....	174	10	.....	.....	10	5.7
Iron foundry.....	636	.....	.....	.....	.....	.....
Laboratories.....	11	1	.....	.....	1	9.1
Machine shop No. 2.....	1,067	.....	470	19.4	470	44.0
Machine shop No. 4.....	562	.....	311	17.8	311	55.3
Machine shop No. 6.....	347	.....	91	17.9	91	26.2
Mechanical.....	51	47	.....	.....	47	92.2
Mill, puddling.....	150	.....	.....	.....	.....	.....
Mill, 48-inch, blooming.....	21	21	.....	.....	21	100.0
Mill, 48-inch, soaking pits.....	14	14	.....	.....	14	100.0
Mill, 48-inch, rolling.....	120	120	.....	.....	120	100.0
Mill, 48-inch, yard.....	191	191	.....	.....	191	100.0
Mill, 40-inch, soaking pits.....	37	36	.....	.....	36	97.3
Mill, 40-inch, blooming.....	22	19	.....	.....	19	86.4
Mill, 28-inch, rail.....	141	141	.....	.....	141	100.0
Mill, 22-inch.....	71	.....	.....	.....	.....	.....
Mill, 12-inch.....	41	.....	.....	.....	.....	.....
Mill, 8-inch.....	25	.....	.....	.....	.....	.....
Mill, stay bolt.....	60	.....	.....	.....	.....	.....
Mill, general.....	231	164	.....	.....	164	71.0
Office force at mill.....	7	7	.....	.....	7	100.0
Open-hearth furnace, Lehigh plant.....	327	326	.....	.....	326	99.7
Open-hearth furnace, Saucon plant.....	330	330	.....	.....	330	100.0
Pattern shop.....	76	.....	.....	.....	.....	.....
Press forge.....	67	6	.....	.....	6	9.0
Projectile, forging.....	42	.....	24	15.6	24	57.1
Projectile, treatment.....	10	.....	.....	.....	.....	.....
Projectile shop.....	82	.....	41	17.6	41	50.0
Repair shops, boilers, etc.....	74	.....	.....	.....	.....	.....
Roll turning.....	32	25	.....	.....	25	78.1
Steel foundry.....	585	84	319	21.2	403	68.9
Tempering.....	36	.....	.....	.....	.....	.....
Yard, stocking.....	444	.....	.....	.....	.....	.....
Yard, transportation.....	243	25	.....	.....	25	10.3
Miscellaneous.....	737	374	28	25.9	402	54.5
Engineering (a).....	107	.....	51	8.0	51	47.7
Total.....	9,291	2,628	1,413	.....	4,041	43.5

a Not included in wage or hour report given by the company.

As will be seen by the foregoing table, of the total employees on the pay roll in January, 4,041, or 43.5 per cent, either worked regularly on Sunday or were called upon to do some Sunday work during the month. If the comparison be confined to those departments where Sunday work was done during the month, 57.9 per cent of all the men did Sunday work.

The departments which operated continuously 168 hours a week with two crews, thus employing men 7 days of 12 hours each per week, as reported by the officials of the company, are as follows:

Open hearth No. 1.
Open hearth No. 2.
Blast furnace.
Boiler shop.
Soaking pits

Forty-inch blooming and rail mills.
Gray mill.
Mechanical department (Saucon).
General labor (Saucon).

In addition to this a part of the electrical departments in both divisions of the works—Lehigh and Saucon—and a part of the office force at the Saucon plant work 7 days of 12 hours each.

There are metallurgic reasons for continuous operation in certain processes entirely aside from economic or commercial incentive; physical and industrial necessity requires 7 days' work of 24 hours each per week in the production of pig iron or of liquid iron metal from the ores. In the case of admittedly continuous processes there is but one remedy for long hours, and that is the three-shift method of labor. This method can also minimize Sunday work by such rotation that each crew would have two Sundays out of three. With the newer blast furnaces, equipped with automatic bottom fillers and mechanical top fillers, the amount of human labor employed is small and growing less every year, as new devices come up and new furnaces replace the old ones. In the blast furnace department of the Bethlehem Steel Company there are 255 men employed. The January, 1910, pay rolls show 254 names. These work 7 days or nights each, and 12 hours a day or night—that is, the two shifts work 84 hours per week each. As indicated above, there is no remedy for this so long as only two shifts of men are employed.

In this connection it may be pointed out that the United States Steel Corporation during this investigation reissued orders concerning Sunday work which largely prohibits such work outside of blast furnaces and necessary repair work. The text of the orders issued by the Steel Corporation is given in an extract published in Appendix F.

The following table, prepared from data furnished by the company, shows in detail the average hours of overtime and Sunday work done in each department during December, 1909, and January, 1910, separately, excluding, however, the regular 7-day departments and the departments having no Sunday or overtime work. It shows the total number of men by departments, the number working overtime, and their average hours of overtime work during the month, also the number of employees working on Sunday and their average hours of Sunday work.

The figures in the table should be read as follows: Taking machine shop No. 4, for example, in December, 1909, there were 503 men. Of this number, 37 worked more or less overtime during the month, the average for the 37 being 62.9 hours. Of the 503 employees, 286 did Sunday work in December, amounting on the average to 15.4 hours for the month.

Taking January, 1910, in the same shop, 537 men were employed. Of these, 77 worked more or less overtime, averaging 39.8 hours of overtime during the month. Three hundred and eleven out of the

537 did Sunday work during the month, the average of such work amounting to 17.8 hours.

Taking the total for January as another illustration of the manner in which the table should be read, the total employees in departments subject to overtime and Sunday work numbered 3,388. Of this number, 427, or 12.60 per cent, worked overtime, their average overtime amounting to 43.8 hours for the month. The employees working on Sunday numbered 1,413, or 41.71 per cent of the employees in the same departments. The average amount of the Sunday time during the month was 18.9 hours.

With this explanation the figures for any department can readily be followed. It should be borne in mind that this table excludes entirely the departments where 7-day work was the rule, as well as the departments having no Sunday or overtime work, and refers only to the departments where the employees were subject to more or less irregular overtime and Sunday work.

OVERTIME AND SUNDAY WORK IN BETHLEHEM STEEL WORKS, EXCLUDING SEVEN-DAY DEPARTMENTS AND DEPARTMENTS HAVING NO SUNDAY OR OVERTIME WORK, DECEMBER, 1909, AND JANUARY, 1910.

Department.	December, 1909.					January, 1910.				
	Total employees.	Employees working overtime.		Employees working on Sundays.		Total employees.	Employees working overtime.		Employees working on Sundays.	
		Num-ber.	Average hours worked overtime.	Num-ber.	Average hours worked on Sundays.		Num-ber.	Average hours worked overtime.	Num-ber.	Average hours worked on Sundays.
Engineering.....	112	44	18.3	18	11.6	107	49	9.4	51	8.0
Saw repair.....	4			4	6.5	4				
Carpenter shop.....	112	8	46.5	41	18.9	114	9	53.1	28	25.9
No. 3 machine shop.....	108	67	20.2	23	18.3	154	89	27.6	27	17.0
No. 6 machine shop.....	290	48	24.7	97	15.5	352	42	35.0	91	17.9
Crucible steel department.....	109	8	26.4	10	35.6	118	6	34.5	8	44.3
Brass foundry.....	67			1	24.0	81	16	10.6	14	14.8
Steel foundry.....	515	51	46.1	275	23.0	582	84	86.8	319	21.2
No. 2 machine shop.....	1,028	15	49.3	518	16.5	1,065	23	103.9	470	19.4
No. 4 machine shop.....	503	37	62.9	286	15.4	537	77	39.8	311	17.8
Drop forge.....	85	4	20.2	25	14.5	89	7	10.0	19	15.8
Drop forge, machine section.....	64	7	18.3	5	7.2	56	1	45.0	10	12.6
Projectile shop.....	42	6	33.0	16	11.5	43	1	87.0	24	15.6
Projectile machine section.....	65	2	185.5	54	14.5	55			41	17.6
Projectile treatment section.....	11	1	32.0	10	31.3	10	2	74.5		
Blacksmith shop.....	23	2	17.0	6	10.0	21	21	17.7		
Total.....	3,138	300	34.0	1,389	17.5	3,388	427	43.8	1,413	18.9
Per cent.....		9.56		44.26			12.60		41.71	

In machine shop No. 4, where the strike originated, out of 503 men on the pay roll in December, 1909, Sunday work was performed by 286, and they averaged 15.4 hours of such work for the month. In January the shop had 582 men, 319 of whom were called upon for an average of 21.2 hours of Sunday work during the month. In

machine shop No. 2, said to be one of the finest machine shops in the world, employing in December 1,028 men, 518, or over one-half, were called upon for Sunday work, which averaged 16.5 hours for each man. In January, of 1,065 employed, 470 did Sunday work, averaging 19.4 hours per man.

Of the 3,138 men in these departments in December, 300, or 9.6 per cent, were called upon to do overtime work other than Sunday work—that is, work in addition to their regular daily working hours—and this averaged 34 hours per man; 1,389 men, or 44.2 per cent of all employees in these departments, performed Sunday work, and such work averaged 17.5 hours per man. Of the 3,388 men in these departments in January, 427, or 12.6 per cent, performed an average of 43.8 hours' overtime work other than Sunday, while 1,413, or 41.7 per cent, were called upon for an average of 18.9 hours of Sunday work.

The pertinence of the foregoing tables, analyzing in such detail the Sunday and overtime work of the Bethlehem Steel Company's plant, rests on the fact that the strike of February 4 was against overtime and Sunday work, particularly the latter, by men who claimed their normal working speed rate had been keyed up for a number of years by the application of a time bonus premium wage system. The strike was not begun by those whose normal working time included Sundays, but by those who claimed to believe that the encroachments of Sunday work would ultimately absorb the nominally 6-day departments and eventually make Sunday work coextensive with the plant.

None of the employees of the Bethlehem Steel Works were members of any labor organization, and were not therefore in a position readily to formulate expressions of particular grievances. It is not possible, therefore, to determine just to what extent there was opposition to overtime and extra Sunday work, nor for how long a period, whatever opposition there might be, had been developing. It is claimed by representatives of the men who were on strike that a year ago a petition was presented to the company by some of the machinists, asking for the elimination of Sunday work, or else that they be paid extra time for such work; but that the only result of the presentation of this petition was the dismissal of five of those who had signed it, and that this had repressed any further expression of dissatisfaction with Sunday or overtime work.

Another consideration upon which stress was laid in discussing the matter of overtime and Sunday work is the basis of payment adopted in some of the departments of the Bethlehem Steel Works. This basis, it is claimed by representatives of the men, automatically results in an employee ordinarily working up to the limit of his

capacity, and it is, therefore, claimed to be as important an item in considering overtime and Sunday work as is the question of the hours the employee normally works per day.

Three methods of payment are in use in the Bethlehem Steel Works:

One is what is known as "straight time;" that is, a fixed rate per hour or per day, as the case may be, irrespective of the amount of work which may be accomplished.

Another is what is known as "straight piece rates;" that is, a fixed rate per piece or per hundred pieces, or per ton where piece rates are based on the tonnage system. Under this system the workman's compensation is directly in proportion to the amount of work he performs, and he is stimulated to speed up in order to increase his daily or hourly earnings. This stimulus to speed up is, of course, absent in the case of workers having a fixed rate per day or per hour, irrespective of their output.

In addition to these two systems, a third system in effect in the Bethlehem Works is what is known as a "time-bonus" system. Under this system a machinist, say, is paid a guaranteed hourly rate. For each standard piece of work a fixed time limit is set. If a machinist, for example, does not complete the work within a given time, he is paid his straight hourly rate for the number of hours he is employed on the work. If he just equals the time limit fixed for the work, he receives a bonus of 20 per cent over his guaranteed hourly rate for each hour he was at work on the piece. If, however, he finishes it within less than the time limit fixed, he receives not only the 20 per cent increase on his hourly rate for the number of hours worked, but in addition receives 50 per cent of his hourly rate for the number of hours saved on the job. This method of payment and the forms used are given in detail in the appendix. The method is referred to here on account of its relation to the question of speeding up. The time-bonus system of payment obviously stimulates speeding up even more than the ordinary piece-rate system of payment.

The relation of the "time-bonus" system to the causes of the strike were alleged to be direct by the workmen for the reason that the normal speed rate of work developed under it made overtime work especially obnoxious, and the necessity for Sunday as a day of rest especially urgent for the workmen.

The question, therefore, of this method of payment as well as hours of labor per day must be taken into account in considering the opposition to overtime and Sunday work, which were the basic causes leading up to the strike.

CAUSE OF THE STRIKE.

In the latter part of January a workman remained away from his work on a Saturday to avoid the possibility of being ordered to work on the following Sunday. When he went to work on Monday he stated to some of his fellow-workmen that he had remained away on Saturday for the purpose above named. This got to the ears of his foreman, who upon ascertaining its truth—that is, after having the man verify the reported statement, discharged him. The workmen on this floor of machine shop No. 4 thereupon decided to ask for the reinstatement of the discharged employee, and to make this request the occasion of an additional request that Sunday work be eliminated and overtime reduced to a minimum in the machine shops. They selected three machinists to act as a committee to see the foreman and shop superintendent with reference to these matters. The discharge of these three men in a few days afterwards for refusing to work overtime was therefore construed to mean more than the ordinary discharge of a workman, since other workmen at this same time gave a like refusal and were not discharged. The men got together in little bunches and decided to strike as a protest against this discharge of the men who had acted as a committee to take up their grievances with the company. This was February 4, 1910.

The strike started in machine shop No. 4, and on the floor where the three dismissed employees were employed. At first there were comparatively few men involved; later all the workmen in machine shop No. 4 joined the strikers, who then secured the adherence of the workmen of machine shops No. 3 and No. 6 to the strike movement.

They then marched to machine shop No. 2, where the shop policeman prevented them from entering the shop. The men then left the yards and held a meeting on a vacant lot belonging to the company, near the office.

The strike was distinctively a nonunion or unorganized one. There were not only no union men in the steel works, but aside from a small carpenter's union and a few organized bartenders, there were no trade-unionists in South Bethlehem.

The leader of the strikers said that, knowing the feelings entertained by the officials of the company against trade-unionism, he deliberately kept the subject of organization in abeyance for three or four days, thinking the matter would be settled.

The bartenders, after a few days, sent for the organizer of that organization, who in turn notified the Federation of Labor, and a number of national organizers were sent to South Bethlehem.

Originally the men had simply remonstrated against Sunday and excessive overtime work, advancing no demands or requests for additional pay. Later they added a request for time and a half for overtime and double time for Sunday work when such was absolutely necessary. Their leaders say that this was demanded, not as increase in pay, but to put a check on such work by making it more expensive to the company than straight time work.

The organizers realized that the grievances of the machine-shop men, then out, some 800 of them, could not be made into a general one upon which to induce the men in the other departments to quit work.

That is to say, some 29 per cent of the men worked in departments which run regularly 7 days a week, and in which, of course, Sunday work was not considered overtime. Again, as practically 54 per cent of the total employees were on a regular 12-hour day, they were not interested in overtime work, which ordinarily could not exist for them.

The protest against overtime and Sunday work came only from the departments normally working 6 days a week, and from those which worked 10 hours and 25 minutes per day from Monday to Friday and 5 hours and 20 minutes on Saturdays. It was, in fact, a protest from those enjoying the shortest hours per day and per week against encroachments which they claim they thought might ultimately make the longest hours the uniform ones for the entire plant.

The organizers adopted the plan of drafting a scale of wages and hours for each department, demanding substantial increase of wages and reduction of hours, elimination of Sunday work or penalizing it by double-time rates in many departments where it is now established as per scale above submitted.

This explains why specific demands for increase of wages—in fact, a formulated demand of any sort—was not made until the strike had been on for several weeks and the men had been organized.

The January pay roll shows that large numbers of laborers were working for 12½ cents an hour, 12 hours a day, 7 days in the week. Of the 9,184 employed in January, 2,640, or 28.7 per cent, were working for 12 and under 14 cents an hour; 1,528, or 16.6 per cent, for 14 and under 16 cents an hour. Forty-eight and five-tenths per cent of all employees were getting less than 16 cents an hour, 31.9 per cent less than 14 cents, and 61.2 per cent less than 18 cents an hour.

The following table gives classified hourly earnings of the entire force, irrespective of occupations or departments. The figures are based on the January (1910) pay roll.

Wage data are tabulated and presented in detail in Appendix A.

NUMBER OF EMPLOYEES OF THE BETHLEHEM STEEL WORKS EARNING CLASSIFIED AMOUNTS PER HOUR.

Classified earnings per hour.	Employees in each group.
For and under 6 cents.....	a 97
6 and under 8 cents.....	a 38
8 and under 10 cents.....	a 100
10 and under 12 cents.....	53
12 and under 14 cents.....	2,640
14 and under 16 cents.....	1,528
16 and under 18 cents.....	1,162
18 and under 20 cents.....	551
20 and under 22 cents.....	677
22 and under 24 cents.....	480
24 and under 26 cents.....	581
26 and under 28 cents.....	432
28 and under 30 cents.....	93
30 and under 32 cents.....	256
32 and under 34 cents.....	146
34 and under 36 cents.....	121
36 and under 38 cents.....	52
38 and under 42 cents.....	55
42 and under 46 cents.....	36
46 and under 60 cents.....	65
60 cents and over.....	21
Total.....	9,184

a Apprentices.

The work of organizing the men by trades was vigorously undertaken. The iron molders who were induced to join were attached to the local union at Allentown, Pa., which is 6 miles away.

The chairman of the executive committee of the strikers states that approximately 3,500 employees of the Bethlehem Steel Company were enrolled in the 12 trade organizations given below during the strike, but that a number of those employees have since returned to work and that quite a large number of the unskilled laborers, mostly Hungarians and Slavs, have been sent out of town, work having been found for them in other localities. There are at this time (Apr. 5), according to this estimate, 1,500 men out, many of them skilled mechanics.

The strike has had no financial backing at all from any source and no revenue. None of the striking workmen have received any assistance during the time they have been on strike.

UNIONS ORGANIZED AMONG THE STRIKERS, WITH NUMBER OF MEN REPORTED AS BEING IN EACH UNION.

Boiler makers.....	36
Machinists.....	1,300
Molders.....	300
Amalgamated Association Iron and Steel Workers.....	700
Cranemen.....	180
Pattern makers.....	50
Blacksmiths.....	160
Laborers.....	800
Electricians.....	82
Structural iron workers.....	100
Carpenters.....	25
Stationary engineers.....	53
Total.....	3,786

The town council of South Bethlehem granted the strikers the use of the town hall free of rent, and their daily meetings were held here until the council rescinded this grant at its first meeting in April.

The circulars and documents of the executive committee were issued as from the municipal hall. One of the members of the council had worked in the mill for twenty years and was on strike.

In Appendix G will be found copies of the circulars issued by the committee.

THE LABOR PARADE, BEGINNING OF RIOTING, AND COMING OF THE STATE POLICE.

Nothing had occurred between the 4th of February, the date of beginning of the strike of machinists, and the 24th of February, worthy of special notice. Up to this time only about 800 men were out. These had been pretty thoroughly organized, and had used for the most part only peaceable means to induce others to join them.

A parade of strikers was planned by the leaders for Friday, February 24. While the parade itself seems to have been quiet, its aftermath was riotous.

After the break-up of the parade disorder began, during which a workman was dragged off a street car, rough-handled, and had his dinner pail taken away from him. Later on, a crowd following the band reached the company's property and a demonstration was made, during which a stone was thrown through the superintendent's window. No arrests were made, and the following morning, February 25, crowds of men gathered in large numbers near the works, dinner pails and baskets were taken from men going to their work, missiles were thrown, and during the mêlée one of the police officers was struck with a brick.

No arrests followed this incipient rioting, and according to the statement of the chief of the police, "there were no reports of any violence up to the night of February 25."

On February 25, at the request of the sheriff, the governor ordered some of the state police to South Bethlehem, where they arrived on the morning of the 26th. During the day there were several clashes between the state police and crowds collected on the streets. During one of these clashes a number of people were injured, and one man who was in the barroom of a hotel was killed by a shot fired by one of the state police.

The fact seemed to be pretty well established by interviews with eyewitnesses that the original trouble on the night of the labor parade was irritating, exasperating, and annoying rather than serious. The consensus of opinion was to the effect that the local police could have prevented the serious trouble had they, at the outset, merely

ordered the crowd to stop the stone throwing and dinner-bucket smashing.

An official of the steel company, one of the persons referred to in the company's statement as having been struck by stones, described the rioting. He said that at first there was hooting, and then the crowd or some persons in it began throwing small pebbles; that the crowd was disorderly and annoying, but not dangerous. Finally they started toward the company's gate. Three or four local policemen stood over on the sidewalk, looking on, not even telling the men to behave themselves. The crowd, which was not dangerously large, seemed to be cheered on by the attitude of the police; began throwing larger stones, and finally bricks. That the police department throughout sympathized with the strikers does not admit of doubt; that this sympathy led to a do-nothing policy which winked at small disorders, thus encouraging, almost suggesting, serious ones, is shown by events. Had the police force, small as it was, been firm in its attitude toward incipient lawlessness, even with an entirely sympathetic personal attitude toward the men on strike, and the cause for which the strike was inaugurated, the more serious outbreaks would probably not have occurred.

Below is given an account of the strike prepared by the representatives of the company, together with a statement of the other side, prepared by the executive committee representing the strikers. These are followed by statements furnished by the ex-chief of police of the borough of South Bethlehem, who was chief of police from the beginning of the strike up to the 14th of March; a further statement from the chief of police who succeeded him, a statement from the sheriff, and a statement by the captain in command of the detachment of state police on duty during the strike. These are followed by letters and documents dealing with the calling of the state troops and the actions taken by the borough officials during the time of the strike.

Those who furnished statements were left free to present such matters bearing on the controversy as they cared to, without suggestion or attempt at direction as to what should be said or left unsaid in their statements. They are *ex parte* statements and are given here as such. Their use in this report is not to be construed as committing the Bureau, either as to the accuracy of any statement or as to an indorsement of any point of view. In a situation such as the one dealt with in this report, the points of view and the mental attitude of the disputants toward one another, and of the representative elements of the community toward the controversy, are among the most important and vital elements in the situation; and without an understanding of these basic factors there can be no intelligent grasp of the forces that bring about industrial and social disorder.

STATEMENT SUBMITTED BY THE COMPANY.

The contention made by the men after going out on strike was that three men were discharged in No. 4 machine shop for not working overtime, as ordered by their foreman. No attempt was made either by the three discharged men, or their fellow-workmen, to present their grievances to the higher officials of the company before leaving work, but, on the other hand, the superintendent of the department approached the men, and on learning that they were leaving because three men had been discharged, he advised and requested them all to return to work, including the three discharged men, and their grievances would be heard.

Instead of accepting the offer of the superintendent of the department, they formed themselves into a mob, and assailed the men in other departments, driving them from their work, using violence and threats to the men personally, besides summarily throwing the belts and power off of the machines.

All of the men in No. 6 machine shop were driven out in this manner, and the mob then marched on No. 2 machine shop, where their efforts were forestalled by watchmen and guards being placed at the doors of the shop, preventing them from entering.

The watchmen of the company then drove the mob from the plant, whereupon they gathered on a vacant lot belonging to the company outside and adjacent to the main gate of the plant, indulging in speeches, jeers, etc., when it was proposed that they adjourn to the municipal building in South Bethlehem.

They were still further remonstrated with at this point by the president of the company to return to work, but without avail.

They thereupon adjourned to the municipal hall in South Bethlehem and appointed two committees of shopmen to wait on the company, which committees were received by the officials of the company. The burden of the talk of these committees at this time was to the effect that they objected to overtime, and wanted time and half-time pay for all overtime, but in any event preferred not to work overtime, coupling this with the request that the three discharged men be allowed to return to work.

The president of the company replied that the three men could not return to work, but that overtime work, being objectionable to the men, would not be obligatory, but optional with them, and that the case of the three discharged men would be investigated. The replies of the committee were to the effect that they would report back to the men what they had been advised at a prearranged meeting to be held in the municipal hall at 2 o'clock that afternoon.

The walk out occurred at about 7.30 a. m., February 4, and the committees were heard during the same forenoon. The total number of employees in the plant previous to this trouble was about 8,300.

The president and general manager of the company, subsequently learning of the action of the superintendent of machine shop No. 4 in the morning in offering to take back the three discharged men provided the men would return to their work and have their grievances heard, decided, in company with the general superintendent, to attend the 2 o'clock meeting of the strikers above referred to in municipal hall. The president of the company addressed that meeting, advising that it was impossible for him to deal with men on a

strike, but requesting that they all return to work, including the three discharged men, and that the company would then consider and adjust their grievances, and in the event of the adjustment not being satisfactory to the men, then would be the time for them to quit work, but not before they had properly placed their side of the case as workingmen before the officials of the company.

After this address by the president, the general manager asked the individual members of the committee on the stage if that was not giving them exactly what they asked for in the morning, and they answered that it was, and that they would advise the men to return to work. The officials of the company left the meeting with this understanding.

The men did not return to work, and representatives of organized labor appeared on the scene.

On Sunday afternoon, February 6, a committee called on the general superintendent, advising that they had come from a meeting of the strikers (then in session), and stated that it was the consensus of opinion of the meeting that the strikers would all return to work, provided they were all allowed to return to work, including the three discharged men.

The general superintendent called to their attention the fact that they had not returned to work on the strength of the offer made them by the president on the previous Friday afternoon, in which he granted all of their demands, but, on the contrary, had done everything within their power to influence additional men to join their ranks, and that it would be necessary to take them back as individuals.

The original number of men who walked and were driven out of the plant on the morning of February 4 was about 800. From that date up to Friday, February 25, there were a few instances of men joining the strikers, but only of a minor nature, while in the meantime about one-half of the original striking force had returned to work.

During this period the strikers had been using the municipal hall for their daily meetings, on permission granted by the South Bethlehem town council and burgess, their committee also meeting in the office of the chief of police. On permission from the burgess, on the afternoon of Thursday, February 24, they formed themselves in a body, and paraded through the main streets of the town, headed by a Hungarian band, arriving at the plant at the end of the working day when the men were leaving the plant, there being employed in the plant at that time not less than 7,800 men.

They marched and countermarched in front of the main gate and general office building of the company, making quite a demonstration toward the men leaving the plant, in the way of jeers, shouts, and threats, at the same time carrying banners with insulting inscriptions directed principally against the president of the company. A stone was also thrown through a window of the general office building. That same evening dinner pails and baskets were, for the first time, taken from our workingmen, and kicked about the streets. The following morning, Friday, February 25, as early as 5 o'clock, crowds of strikers began gathering at the entrances of our works, a large mob being at the main entrance of the plant at Second and Poplar streets.

The object of the mob was to prevent the men who desired to work from getting into the plant and to attack the night men leaving their work. There were many assaults upon workmen in the presence of the borough police, including the chief of police, who made no effort whatever to prevent same, not making a single arrest. A dinner pail or a basket was the sign for an onslaught by the mob, and only a portion of the workmen who desired to get into the plant to pursue their labors were able to do so. In many instances the men who desired to work made three or four attempts by circuitous routes before they could get into the plant. During the day the mob committed a number of depredations, a number of our department superintendents and other workmen being stoned at the main entrance of the plant while on their way from the works to the general office building. The mob remained throughout the day on the vacant lot belonging to the company, on the corner of Second and Poplar streets, immediately in front of the main entrance to the works, the object being to attack the men going to and from the plant. Anyone leaving or entering the works by the main entrance during the afternoon was stoned or subjected to other injury or insult. At 4 o'clock in the afternoon, when our pay wagon came out of the works, our assistant treasurer and others who were on the wagon were stoned, it being necessary for the men to defend themselves by drawing revolvers.

The company realizing that the workmen being let out through the main entrance at 5.25 p. m. would be the signal for further rioting, sent the workmen in box cars over its own and the Lehigh Valley tracks to a point west of the New Street bridge about one-fourth of a mile from the extreme western end of the plant, while others were similarly transported to the eastern end of the plant.

After the morning riot of Friday, February 25, the company, realizing the danger to its employees and property, sent for the burgess, a police commissioner, and chief of police, who came to our office, and to whom appeal was made for protection. At the same time the company wrote letters to the burgess and town council of the borough of South Bethlehem, the burgess and town council of Northampton Heights, the sheriff of Northampton County, and to the governor of the State of Pennsylvania, appealing for protection, and stating that the company would hold the authorities liable for any damage or consequential loss resulting to the company from acts of lawlessness committed by the mob. The burgess of South Bethlehem appealed to the sheriff of the county for protection, stating that the borough authorities were unable to cope with the situation, and the sheriff and his deputy came to our general offices about noon of Friday, February 25. The sheriff in turn appealed to the governor for state aid, as per copies of telegrams attached.

About 6.30 the following morning Captain Robinson, of the state police, arrived at Bethlehem from Philadelphia with a detachment of 24 members of the Pennsylvania state police. They came to the plant via Third street, which is the principal thoroughfare of the town, and on their way to the plant from the station, a distance of about a mile, made four arrests. After stabling their horses inside of the plant, the troopers, with the exception of Captain Robinson, came to the dining room of the general office building for their breakfast, being jeered all the way from the entrance of the plant to

the entrance of the office building. Captain Robinson left the main entrance of the plant, on his way to the general office building, some ten minutes later, and upon leaving the main entrance of the plant he was hit with a stone, frequently threatened, and had fists shaken in his face. The mob continued to occupy the company's vacant lot at the corner of Second and Poplar streets, as well as the streets surrounding the general office building, when Captain Robinson and his detachment of troopers went back to the plant after breakfast to get their horses.

For the later occurrences of that day, as well as to the present, so far as the state of order in the borough is concerned, we would respectfully refer you to Capt. J. F. Robinson, of the Pennsylvania state police.

Owing to the condition of affairs on Friday, February 25, as above recited, the company deemed it expedient, on account of the utter lack of police protection, and in order to save their loyal workingmen from further injury and insult, to close the works on Saturday, February 26.

Having been accorded protection by the state police, it was decided to reopen the plant on Monday, February 28, for the purpose of allowing loyal workmen to resume their duties, and the force reporting for work numbered about 2,000 men, and have increased gradually since that time until at March 21 the working force is about 6,100, leaving about 2,200 who have not returned to work to this date.

This very satisfactory showing in the number of men returning to work has been due, primarily, to two causes: First, the excellent protection given by the state police to the men who desired to return to work, and, second, the closing of the saloons.

The efforts of the leaders and strikers since the arrival of the state police have been directed toward having them removed, they saying, openly and boastfully, that if this could be accomplished they would again take the necessary steps to shut down the plant.

On Saturday afternoon of March 5, 29 days after the original walkout from the plant, the demands of the striking employees were presented to the company, a copy of which was made public in a special issue of the Bethlehem Times, under date of March 5, this same issue containing the company's reply, and the papers were distributed on Sunday morning, March 6. A copy of this issue is attached.

Daily meetings of the strikers are still being held in the municipal hall, this permission having been granted by the borough authorities.

[From the Bethlehem Times, Saturday, March 5, 1910.]

PRESIDENT SCHWAB'S LETTER.

I am in receipt of the following communication which I desire to make public and state our position in reference thereto:

We infer that the communication bearing the signature "Executive Committee" originated either with representatives of organized labor or men who have left our employ during the last month.

We desire to notify the men who have left our employ, as well as the general public, that we can give no consideration to the communication, since it does not emanate from men working in our plant.

It must be understood that under no circumstances will we deal with men on a strike or a body of men representing organized labor.

Having thus defined our position, we shall refrain from further statements or acknowledgments of any communications or solicitations from any source whatever.

C. M. SCHWAB,
President Bethlehem Steel Company.

STRIKERS' DEMANDS.

(The following is the communication from the executive committee of the strikers, submitting demands:)

SOUTH BETHLEHEM, PA., *March 4, 1910.*

MR. CHAS. M. SCHWAB,
President Bethlehem Steel Company.

DEAR SIR: Inclosed you will find copies of agreements, or working rules, adopted by your former employees. From an examination of same, you will note that it is our desire to bring about, if possible, uniform conditions governing hours of employment, overtime rates, and rates of wages, so all will know under what conditions they are to be employed, and that men seeking employment may know the general conditions prevailing in advance of application thereof.

It is not our desire to resort to strikes as a complete elimination of all conditions that would bring about dissensions; it is more conducive to the general welfare of all parties concerned, as strikes and kindred procedures should not be necessary to secure consent to working conditions so patently fair and equitable to all concerned.

It is intended, however, that the conditions set forth in the working rules should be accepted generally.

We have every reason to believe that if given an opportunity to meet with you or your representatives in conference upon any point of apparent difference that a fair and free discussion of same can result only in a satisfactory understanding.

If, during the discussion, both parties hereto desire a signed contract, same can be entered into.

It is our desire that the inclosed rules should be accepted in the spirit in which they are sent and to go into effect from the date of signing, or when agreed to.

If the rules are not thoroughly understood, you or your representatives can communicate with the executive committee, room 8, Municipal Building, South Bethlehem, Pa., where you will find in waiting a committee ready to confer with you.

Trusting that the inclosed rules will be found satisfactory and that we may receive a favorable reply, we are, in behalf of your former employees, most respectfully yours,

EXECUTIVE COMMITTEE.

(Following are the demands:)

The Lehigh plant requests that:

First. All armature winders and coil winders shall receive 35 cents per hour.

Second. Repairers and wire men shall receive 30 cents per hour.

Third. All electrical workers, including oilers and wipers, 25 cents per hour.

Fourth. The Saucon plant requests that all men employed in that plant shall receive an increase of 50 cents per day.

Fifth. All overtime to be paid at the rate of time and one-half.

Sixth. All work performed after 5.30 p. m. by day men to be considered as overtime, and to be paid for as agreed as in the fifth provision.

Seventh. Turn men shall work from 6 p. m. until 6 a. m. Any work performed before or after hours mentioned shall be considered overtime, and is to be paid for as agreed in the fifth provision.

Eighth. Saturday nights, Sunday, and Sunday nights to be paid at the rate of time and one-half for work performed.

Ninth. All legal holidays, such as New Year's Day, Decoration Day, July 4, Labor Day, Thanksgiving, and Christmas, to be paid at the rate of time and one-half for the work performed.

CRANE MEN.

Open hearth No. 2, crane and machine men.

Twelve hours shall constitute a day's work.

Twenty-five cents per hour and 10 cents per 100-ton tonnage.

Time and one-half for all overtime and Sunday work.

One man on every crane.

If a man is compelled to work two machines, he shall receive double pay.

Same holidays to apply as in first agreement (known as sheet one).

No. 2, 4, 6 machine shops.

Have decided upon a 25 cents per hour minimum rate.

To work one-half day on Saturday up to 12 o'clock.

Time and one-half for all overtime and Sunday work.

Holidays to apply, same as (sheet one).

Forge department.

Present a demand for 25 cents per hour minimum; corresponding increase in tonnage.

Will work same hours as the open hearth No. 1.

Holidays to apply as above.

The crane men in all other departments not mentioned in agreement have decided upon a 25 cents per hour minimum. Hours to apply to the department in which employed.

Open-hearth department.

Twelve hours to constitute a day's work, to be paid at the rate of 25 cents per hour minimum, and 20 cents per ton tonnage.

No work to be performed Saturday night.

Time and one-half time for overtime and Sunday work.

All legal holidays to be paid at the rate of double time.

Legal holidays to be New Year's Day, Decoration Day, July 4, Labor Day, Thanksgiving Day, and Christmas.

Stock-yard crane men present the same demand as the open-hearth men, and demand one man on every crane.

Gray Mill Heights.

Ten hours to constitute a day's work; pay at the rate of 25 cents per hour; Saturday night off; time and one-half for overtime and Sunday work; men to work only one crane.

Holidays, same as for open-hearth men.

Men in rail mill demand the same conditions.

Iron and steel foundry.

Ten hours to constitute a day's work, at the rate of 25 cents per hour.

One-half day off on Saturday, time and one-half for overtime and Sundays, and legal holidays as designated above.

Soaking pit and stripper crane men of Saucon plant.

Thirty-five cents per hour, no Saturday-night work.

Time and one-half for overtime and Sunday work.

Twelve hours shall constitute a day's work.

To have spell hands on pit crane and stripper, one spell hand from October 1 to April 1, and two spell hands from April 1 to October 1.

Holidays to be same as above.

DEMANDS OF BLACKSMITHS AND CRUCIBLE.

ARTICLE I.

Hours of labor to remain as heretofore, except that all time over $10\frac{5}{12}$ hours' work to be paid at the rate of time and one-half.

Sundays and all legal holidays, namely, New Year's Day, Decoration Day, July 4, Labor Day, Thanksgiving, and Christmas, to be paid at the rate of double time.

When any legal holiday falls on Sunday, the day observed by State and nation will be recognized accordingly.

All bonus, piecework, and tonnage to be entirely eliminated and abolished in this department.

ARTICLE II.

When it becomes necessary to reduce expenses, the time will be reduced to at least 40 hours per week before laying men off; if after this reduction of hours it becomes further necessary to reduce the force, men with families will be given the privilege and preference of employment.

When increasing the force former employees will be given the preference if available.

ARTICLE III.

No employee to be discharged or suspended without just and sufficient cause. If, after investigation, it develops that he has been unjustly discharged or suspended, he must be reinstated and receive full time for all lost time. Such investigation to take place within five days from date of suspension or dismissal.

ARTICLE IV.

Company not to discriminate against any employee who may from time to time be delegated to serve on a committee or to represent his organization in convention.

ARTICLE V.

When a vacancy occurs for promotion the oldest employee in point of service to be given preference, with due regard to competency.

ARTICLE VI.

Helpers may be promoted at the ratio of one to each five journeymen employed in this department, their wages to be increased to the rate paid to the class of work to which they are promoted.

No employee to be hired for less than the minimum rate of pay established for the class of work on which he is employed.

ARTICLE VII.

	Cents per hour.
The minimum rate for blacksmiths.....	40
Helpers.....	23
Hammer drivers.....	20
Forgers.....	45
First helpers, hammer drivers, and heaters.....	30
Heater helpers and second helpers.....	25
Crane rackers.....	15

All helpers to be paid one-half hour extra per day for building fires before the regular starting time.

In the event of a hammer gang working short-handed the wages of the man absent will be equally divided among those working.

Rates of the crucible department:

	Cents per hour.
Tilt hammermen to receive.....	55
Tilt hammermen helpers.....	22½
Ten and twelve hundred pound hammermen to receive.....	60
Ten and twelve hundred pound hammermen helpers.....	22½
Fifteen hundred pound hammermen to receive.....	65
Fifteen hundred pound hammermen helpers.....	30
Fifteen hundred pound hammermen drivers.....	22½
Twenty-five and forty hundred pound hammermen to receive.....	70
First helpers, heaters, and hammer drivers.....	30
Second helpers.....	25
Annealers.....	30

CARPENTERS.

A 20 per cent increase in wages, 10 hours to constitute a day's work, excepting Saturday, when men shall work 5 hours up to 12 o'clock noon.

All overtime, including Saturday afternoon, up to 12 o'clock Saturday night, time and one-half. After that until Sunday night at 12 o'clock, double time.

All legal holidays to be paid at the rate of double time. New Year's Day, Decoration Day, July 4, Labor Day, Thanksgiving Day, and Christmas.

AMALGAMATED—DEMAND OF PUDDLERS.

	Per ton.
Common iron, ton of 2,240 pounds, to be paid at the rate of.....	\$4. 50
X-20 to be paid at the rate of.....	4. 75
Low phosphorus steel, or Bessemer, to be paid at the rate of.....	5. 00

Open hearth No. 1.

	Cents per hour.
Ladle men of Lehigh plant:	
First men.....	30
Second men.....	25
Third men.....	22

Rail mill.

	Cents per hour.
Manipulator men to receive.....	27½
Hot bed men to receive.....	25
Inspectors to receive.....	27½
Stamper on the hot bed to receive.....	20
Stamper at the shears to receive.....	17½
Shear men to receive.....	30

The above-mentioned employees of the rail mill to be paid tonnage; also, time and one-half for overtime and Sunday work.

Open hearth, Lehigh plant.

	Per day.
Mold liners:	
First helpers to receive.....	\$2. 75
Second helpers to receive.....	2. 20

Old mill No. 1.

Billets, rounds, hexagon, flats, and gunners to receive a 10 per cent increase. Magnet steel, double.

Saturday and Sunday, time and one-half.

Also, Saturday afternoon, time and one-half.

That the men as follows get rate asked for:

Shear scrap men and greasers on mills get an increase from 12½ cents to 20 cents per hour, or equal to that on a tonnage basis.

Chief inspector gets an increase from 22½ cents to 27½ cents per hour.

Inspectors and checkers.

	Cents per hour.
No. 1 assembling bed, an increase from.....	20 -25
No. 2 assembling bed, an increase from.....	17½ -22½
On two cold saws, an increase from.....	17½ -22½
Hot-saw inspectors, an increase from.....	21 -25
Hot-saw recorder, an increase from.....	17½ -22½
Hot-saw marker, an increase from.....	14 -17½
Gauge man on hot saw, an increase from.....	15 -20
Hot-saw operator, an increase from.....	22½ -27½
Hot-saw cutter and hydraulic, an increase from.....	25 -30
Shear man, an increase from.....	25 -30

GRAY MILL.

Straighteners on the gray mill.

Demand the following: Three cents per ton for sections, such as B 8-9-10-12-15, also G 8-9-10 and H 8, and 2½ cents per ton on all other sections.

No. 5 cold saws.

Demand 10 hours instead of 12, and a tonnage reduced from 90 tons to 75 tons, at the following prices:

Position:	Prices.
Cutter.....	\$2. 50
Operator.....	2. 50
Gauge.....	2. 40
Marker.....	2. 10
Clamper.....	1. 50
Chain men.....	1. 50
Chippers.....	1. 50
Laborers (day rate).....	1. 50
	Per day.
Piler.....	\$2. 10
Stocker.....	2. 10
Scrap man.....	1. 50

No. 4, cold saw.

Demand 10 hours shall constitute a day's work.
Tonnage reduced from 140 tons to 117 tons.

Position:	Price per day.
Cutter.....	\$2. 50
Operator.....	2. 50
Marker.....	2. 10
Gauge.....	2. 40
Stocker.....	2. 10
Clamper.....	1. 50
Chain man.....	1. 50
Chipper.....	1. 50
Piler.....	2. 10
Laborer.....	1. 50

Saucon plant, open hearth.

Men in this department demand a 15 per cent increase for all, including laborers and gas makers.

Blast-furnace men a 15 per cent increase on all jobs.

SOUTH BETHLEHEM, PA., *March 1, 1910.*

At a meeting of the boilermakers and helpers employed at the Bethlehem Steel Works the following rules and regulations governing the hours and wages there were unanimously adopted:

First. Ten hours shall constitute a day's work, except on Saturday, when 5 hours shall constitute a day's work.

Second. In the event of men being employed regularly at night, 10 hours shall constitute a night's work.

Third. The working hours shall be from 7 a. m. to 12 m., and from 12.25 p. m. to 5.25 p. m. For night shift the hours shall be from 7 p. m. to 12 m., and from 12.25 a. m. to 5.25 a. m. For Saturdays, from 7 a. m. to 12 m. All other time worked shall be classed as overtime and shall be paid for at the rate of one and one-half hours for one hour.

Fourth. Work on Sundays, New Year Day, Decoration Day, Independence Day (Fourth of July), Labor Day, Thanksgiving Day, and Christmas Day shall be paid at overtime rates.

Fifth. That an increase of wages of 2½ cents per hour over the wages now paid be granted.

Agreement between the International Union of Steam Engineers and the Bethlehem Steel Company:

First. That 12 hours shall constitute a day's work.

Second. That engineers employed in the Saucon plant be paid at the rate of 40 cents per hour.

Third. That engineers in the Lehigh plant be paid at the rate of 30 cents per hour.

Fourth. That all oilers and assistants to engineers be paid at the rate of 25 cents per hour.

PATTERN MAKERS.

The pattern makers submit the following demands:

Ten hours to constitute a day's work.

A 15 per cent increase in wages, time and one-half for overtime, and double time for Sundays and holidays.

To work 5 hours on Saturday, up to 12 o'clock noon.

All legal holidays to be paid at the rate of double time, such as New Year Day, Decoration Day, July 4, Labor Day, Thanksgiving, and Christmas.

LABORERS.

The laborers of the Bethlehem Steel plant present the following demands:

Ten hours to constitute a day's work.

An increase from 12½ cents per hour to 15 cents per hour; Saturday work, one-half a day, time and one-half for overtime, and double time for Sunday and the following holidays: New Year, Decoration Day, July 4, Labor Day, Thanksgiving, and Christmas.

MOLDERS.

First. A minimum rate of \$3 per day for molders and core makers.

Second. Nine hours to constitute a day's work.

Third. Time and one-half for overtime, double time for Sundays and holidays.

Fourth. The minimum rate to be paid all molders and core makers having served four years' apprenticeship.

Fifth. Elimination of piecework.

Sixth. A proportionate advance to those receiving the minimum rate or over.

Seventh. The elimination of the relief association or the question to be left optional with the employees.

Eighth. All men to be reinstated without discrimination.

MACHINISTS' AGREEMENT OF WORKING RULES.

The intention of the following working rules is to bring about a harmonious feeling between the Bethlehem Steel Company and machinists and apprentices, thereby assuring the company that they will receive a fair day's work from machinists and apprentices in their employ and the machinists and apprentices will receive a fair compensation for their services while in the employ of the said company.

HOURS.

Ten hours or less shall be the standard workday, excepting Saturdays, when work shall cease at 12 o'clock noon. Night shifts shall only work 55 hours in the 5 nights; that is, Monday, Tuesday, Wednesday, Thursday, and Friday. If overtime is worked, there shall be at least 30 minutes' intermission before overtime takes place. In case of depression in trade the hours shall be reduced to 8 before the reduction in the force takes place.

OVERTIME.

Day shift.—Time and one-half to be paid for all overtime worked after the recognized quitting time up to 10 o'clock p. m. After 10 o'clock p. m., Sundays and holidays—that is, New Year Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving, and Christmas—shall be paid for at the rate of double time excepting on company's own repairs, when time and a half time shall be paid for all overtime. If any of the holidays mentioned herein fall on Sunday, the day to be observed by the State or by proclamation, shall be considered a holiday and paid for as such.

Night shift.—All overtime worked over the regular night-shift schedule shall be paid for at the rate of double time. In case of night entering holidays, single time is to be paid, time worked on night of holidays to be double time.

WAGE SCALE.

Machinists, tool and die makers, die sinkers, machine operators, vise or floor hands, pipe fitters, and all who are engaged in any manner in the making, erecting, or repairing of machinery or parts thereof, also machinists' apprentices, shall receive at least 25 cents per day increase over and above rate paid January 1, 1910, and such additional increase to journeymen to equal \$3 per day. Thereafter the minimum rate shall be \$3 per day. When machinists are required to leave shop for the purpose of making, erecting, repairing, or installing machinery, they shall receive at least \$5 per day for 8 hours' work, car fare, and reasonable expenses. Double time for all overtime and for Sundays and holidays. Machinists and apprentices shall be required to work by the hour only, or what is known as "day-work system."

APPRENTICES.

Apprentices shall not be less than 16 and not over 21 years of age at the beginning of their apprenticeship term and shall serve 4 years and to be employed on day shift only, and at the expiration of their apprenticeship term they shall receive the minimum rate paid to journeymen.

There may be 1 apprentice to the works regardless of the number of machinists employed, and not to exceed 1 additional to every 5 journeymen machinists thereafter. It is understood that if the ratio is more than the above no change shall take place until the ratio has reduced itself to the proper number by lapse or by the expiration of existing contract; apprentices shall be given an opportunity to work at all branches of the trade during their apprenticeship term.

NOTE.—The company shall designate at least two regular pay days per month, and it shall be optional to the employees as to affiliating themselves to the company's relief association. When an adjustment is reached all former employees shall file application for reinstatement within 10 days and to be reinstated to their former positions before new help is hired.

Should any difference arise in reference to the above rules, the same should be presented to the works' superintendent by a committee of the machinists for adjustment within a reasonable time.

It is hereby agreed that when this agreement is signed or agreed to the same shall be open 30 days prior to expiration, for the purpose of discussing the wage scale or to amend any article contained therein.

Any branch of the service not mentioned herein by the submission of an agreement shall be granted an increase of at least 15 per cent over and above all wages received January 1, 1910.

Awaiting your very favorable reply, we subscribe ourselves,

Very respectfully,

EXECUTIVE COMMITTEE,
Room 8, Municipal Building, South Bethlehem, Pa.

STATEMENT SUBMITTED BY THE EXECUTIVE COMMITTEE
OF THE STRIKERS.

The working-day of the Bethlehem Steel Company machine shops for 5 days a week (Monday to Friday) is $10\frac{5}{2}$ hours, beginning at 6.40 a. m. and ending at 5.30 p. m., with 25 minutes for dinner. On Saturday it begins at 6.40 a. m. and ends at 12 m., a period of $5\frac{4}{2}$ hours. About four years ago an attempt was made by the company to make the men work Saturday afternoons. Notices were posted in the different shops to that effect, but the men came without their lunches and so the notices were taken down and the men allowed Saturday afternoon off as before. It has been the custom of the company to work the men overtime at night and on Sundays, whenever it was necessary in order to hurry the work out, regardless of whether the employee wanted to work or not. About two and one-fourth years ago (December, 1907) the wages of the machinists were reduced; all men receiving $17\frac{1}{2}$ cents per hour and under were cut 1 cent an hour, except the sweepers, who were later reduced from $12\frac{1}{2}$ cents an hour to 12 cents an hour. All employees receiving over $17\frac{1}{2}$ cents an hour were reduced $2\frac{1}{2}$ cents an hour, and in some cases 5 cents an hour.

Although the cost of living was on the raise, the fact of the country being in the throes of an industrial and financial panic, forced the men to take the cut in wages. Hundreds of men were laid off at this time, while hundreds also were put on half time until work picked up. The restaurant in the works where the men could get their dinner on five days (Monday to Friday) a week was also abolished. As there was not much overtime work at that time the company still paid overtime at time and one-half. When work started to pick up, a few months later, is when the trouble really started. Some of the men laid off had gotten jobs elsewhere, and as work became due it was necessary to work some of the men overtime to get it out. About this time the company discontinued paying time and one-half for overtime at night, but would only pay straight time worked. As work was slack around the country the men had to submit and say nothing. About two years ago, overtime at the rate of time and one-half for Sunday work was also discontinued, and from that time on men were worked on Sunday if it were necessary just as any other day. About one year ago the machine hands on the second floor of No. 4 machine shop got together and drew up a petition, stating that they wanted Sundays off or else that they be paid extra time for Sunday work. The men signed their names to this petition in a circular form, so that the company officials could not tell who started it out, as it was sure discharge to ask the company for anything which the officials decided the men could not have. Four of the best machinists the company had in this department were immediately discharged. Their names were Brandt, Croope, Lutz, and Henry.

A few days later a machinist by the name of Stern was asked if he had signed the petition by Mr. Herbig, and when he acknowledged it, Mr. Herbig discharged him on the spot. Of these five men discharged only one, Mr. Henry, was ever reinstated. The discharge of these men, of course, subdued the rest for the time being. But

from that time on the spirit of discontent has been growing. The pay days were changed so that the company did not need as many clerks as paymasters, and the men never knew until a day or two before pay day when they were to be paid. The pay-day system was changed again for the machine shops and foundry, back to the old system of paying on Saturday, with four three-week pays a year, beginning with this year, but it was not as satisfactory as before, as more clerks were needed to pay the men. One department often had to wait until another one was paid first, and by doing that some of the men missed the trains or cars home, and as their tickets were not good on the trains following, they were compelled to take cars home and often were (in some cases) until 4 o'clock getting home. This could all have been avoided by the small expense of two more clerks on pay day.

The iron heel with which Mr. ——— tried to rule the men, or in other words the abusive language used, as was also the abusive language of ——— and ———, two foremen of No. 4 shop, would do nothing but end in trouble some time. Whether this was the policy which the head officials wanted used is not known to the men, but the records in the office of No. 4 shop of men discharged and of men who quit should convince the head officials that ——— is not a suitable man to look after their interests, while an investigation of the methods used in handling the men, by Mr. Schwab, would no doubt show him a system which he would not care to indorse.

The bonus system used in No. 4 shop where the strike started caused great dissatisfaction among the assistant foremen and men. In this shop at the present time there are shells under the process of manufacture ranging in size from 1 pounders to 12-inch armor piercing shells. Also there are twenty-four 6-inch howitzer limbers, twenty-four 6-inch howitzer gun carriages, forty-eight 4.7-inch howitzer limbers, forty-eight 4.7-inch howitzer caissons, and sixteen 4.7-inch howitzer carriage limbers, all for the United States Government, held up on account of the strike. More bonus was paid for work done on shells than any other work in the shop. The system used was for the superintendent and the bosses who looked after the shellwork to agree on a certain price for which these shells could be made, and if the bosses were able to drive the men so that the shells were made cheaper than the price agreed upon, the bosses would receive as their bonus a certain per cent of the money saved by making the work cheaper than agreed upon. It also led to using apprentice boys and cheap help whenever possible on this work. At the present time there are 70,000 1-pound shells being made, on which there are about 18 apprentices and 6 machinists used. As the first 72,000 made only cost the company about 16 cents apiece to manufacture, the profit on the present 70,000 will be much greater, as the cost of tools for manufacturing these shells was figured in the cost of the first lot.

This large bonus on shells led the foreman who had charge of shells, and also other work on which there was no bonus, to neglect the other work in favor of the shells on which there was bonus. There was also a general understanding that time which should be charged to shells was charged to other work, in order to cheapen the cost of shells and allow the bosses to make their bonus. By consulting the vault department Mr. Schwab can verify this statement to his satisfaction, as the vault department took all their work from No. 4 shop to

No. 6 shop for no other reason than this. Take the case of foreman _____ of the _____ floor. He was, or is yet, in charge of entire floor. His specialty is shells and, although he should look after all other work on third floor, he forces the other foremen to look after all the difficult work on which there is no bonus and makes a specialty of the shell job. Among the men the injustice is very apparent when the fact is realized that in the manufacturing or turning of a shell there is really no skill used, as the forming tools are made by tool makers and attached to the machines, and all the machine hand must do is to look after the changing of the shells. These tool makers or their foremen receive no bonus, and when the fact is considered that the most skilled men are used for tool makers and must work for hour rate only while an unskilled man is paid sometimes a large bonus for merely taking a finished shell out of the lathe and putting a rough one in, the injustice of the system is easily seen.

As this statement is only to show the causes leading to the strike, we will not quote the figures or some of the other information regarding this work that we have at our disposal until a later statement is issued regarding the methods used on government work while being manufactured. Why should one foreman have to look after and understand the assembling of five different kinds of gun carriages, limbers, and caissons, also look after the making of punches, dies, and drilling jigs for this work, and receive only an hour rate for doing so, while another foreman only has to look after a common shell job and be allowed to make hundreds of dollars extra as bonus? It is no secret that one foreman, not connected with the shells, also received hundreds of dollars as bonus. How much the superintendents received can only be found by consulting the office records, as it does not seem reasonable that the foremen would be allowed to make this money unless the superintendents got theirs. In fact, in shop No. 4 everything had to sidetrack and let the shells have the right of way. If the crane men were handling shells, it was impossible to get the use of the crane until there were no more shells to be handled. One foreman (——) practically put all his time to unloading and handling shells until he was injured by one falling off the chain and crushing his foot. By favoring this shell work the cost was of course lowered, but was really only transferred to that class of work which was hindered in its manufacture by this favoritism. The feeling toward each other among the foremen and assistant foremen was one of jealousy as the result of this system.

During January of this year the men on the second floor were given orders to work three nights a week until 8.30 and also Sundays, as the work upon which they were employed was almost due. This work consisted of twenty-four 6-inch howitzer gun carriages and twenty-four 6-inch limbers for the United States Government. The limbers were later transferred to the third floor for assembling. The average pay for machine hands on this work on second floor was about 22½ cents per hour, while the assembling gang of second floor averaged 25 cents per hour. On the third floor, on the same work and also on the work for the sixteen 4.7-inch carriage limbers, forty-eight 4.7-inch howitzer limbers, and forty-eight 4.7-inch howitzer caissons, the machine hands were largely apprentices and men just out of their apprenticeship and averaged about 18 or 19 cents per

hour. A small vise gang, under ———, averaged about 22½ cents per hour, while the assembling gang of ——— had 6 men over 20 cents per hour, while 40 more were paid from 14 to 20 cents per hour. By comparing rates paid at Rock Island Arsenal for such work, the enormous profit and the ability to pay time and one-half for overtime on this work is easily seen. The men on the second floor were ordered to work Sunday, January 30, but none reported for work. One machinist, Henry Schew, stayed home Saturday, so that he would not be ordered out Sunday, and was discharged Monday when he reported for work for not working Saturday. The men considered that this was an indirect discharge for not working Sunday and appointed a committee of three machinists to have Assistant Foreman Mitchell ask Mr. Henry why Schew was discharged.

When Mitchell went into the office Mr. Herbig and Mr. Henry were having a conversation, and upon Mitchell stating what he wanted Mr. Herbig asked him who wanted to know why Schew was discharged. Mitchell said the men. "But who inquired of you?" said Mr. Herbig. "A committee of three machinists—Bleamer, Eyre, and Foster." "You go out and tell those men it is none of their ——— business," said Mr. Herbig. Schew left the shop and nothing more was said that day. The next day, Tuesday, the men were ordered to work until 8.30 Tuesday night, but refused; so on Wednesday morning Mr. Henry started to go to each man individually and ask him to work overtime Thursday night. He also asked Bleamer, Eyre, and Foster. Now, if these three men were later discharged for intervening in the Schew case, why were they asked to work Thursday night, and why were they not discharged until Mr. Henry found he could not get the men to work Thursday night? After Mr. Henry had spoken to each man, which took him all of Wednesday and most of Thursday, he went to Bleamer, Eyre, and Foster on Thursday about 4 o'clock and told them they were discharged, and could go and get their time. When the men on the second floor found out what had happened they all stopped work and crowded around the shop office, demanding that these men be reinstated. Mr. Herbig and Mr. Buck were sent for, and Mr. Buck had Mr. Henry call the foreman and assistants into the office, and Mr. ——— told them to go out and tell the men that "if they didn't want to go to their work, to get the ——— out." Mr. ——— later denied he made this statement, but witnesses can be furnished who will swear that he did make it. Mr. Myers asked him what he meant by "go to their work;" whether he meant to work overtime or just until regular quitting time. He said, "I mean work now. We want the men to understand we are running these shops, and not them."

This is really the statement that caused the strike. The men of course considered that the only thing to do was to quit, and started to turn in their tools, but the whistle blowing for the close of the work-day forced them to all return in the morning to get their time. On Friday morning all the men started to pack up, and the foreman and superintendent tried to get them to return to work, but the men would not return unless the three men were reinstated. Some of the men went to the third floor, and every man on the third floor marched to the second and joined the crowd. Mr. Herbig was asked then to take

the three discharged men back, and he stated that the company didn't want those three men. The men then went down to the first floor and, taking that force, went to No. 6 shop, and all the men there joined the crowd. They then marched to No. 2 shop, but the works police had gotten there first and refused to let them in the shop. One of the police pulled a revolver on one of the men, and as the man turned and ran the policeman fired five shots at him, none of which hit him. While the men were in the yard Mr. Herbig came down, and approaching the crowd, he asked them to go back to work, telling them that he had spoken to Mr. Buck, and that the three men would be reinstated. The men would not return then until the question of overtime was settled. The men then marched outside the works to the lot near the main office, where they held a meeting. Mr. Schwab came out of the office and came over to the crowd and asked what was the matter. He stated that he had just arrived in town and was surprised to find his men acting like a lot of schoolboys by striking. He said he would not deal with the men unless they first returned to work, and then their grievances would be taken up individually. One of the men in the crowd yelled, "We don't care. We don't live here. We can go somewhere else and work." Mr. Schwab said, "Well, I'm ——— glad of that. I'll close the ——— shops down then." The men appointed a committee here to interview Mr. Schwab later, but no satisfaction was received. The men had another meeting immediately after in the market hall and appointed a committee of Williams, Eyre, Barkman, and Hopkins to see Mr. Schwab and see if the trouble could be settled.

This committee was received by Messrs. Buck, Grace, and Schwab, and although given to understand that they were not recognized as a committee of striking employees, they were received very courteously by the three officials named above, and had an interview of about one and one-half hours. The committee pleaded with Mr. Schwab to reinstate the three men and to discontinue the overtime, thereby allowing the men to have their evenings and Sundays off. Mr. Schwab refused, saying the company had taken that step and could not recede. Mr. Schwab gave several reasons why overtime must continue and the reason for not being able to pay time and one-half for overtime. He was asked by Williams to come to the market house that afternoon and explain this to the men. He refused to do this, but regardless of this refusal he did come to the market house, but the committee had already reported that Mr. Schwab refused to take the men back and the men were in an angry mood, so that when Mr. Schwab addressed them he was frequently interrupted from the audience by cries of "We want time and one-half for overtime," etc. During his talk to the men, Mr. Schwab said that after the committee had seen him in the morning he had had a talk with Mr. Herbig and that he would not go back on what Mr. Herbig said, but that the men could all return to work and if they had any grievance it would be taken up individually and in the course of three days, a week or ten days, he felt sure it would be fixed up. Now, the grievances up until this time, in view of the fact that only No. 4 and No. 6 machine shops were on strike, was limited to the demand for time and one-half for overtime and the reinstatement of the three discharged men. The men claimed and still

claim that Mr. Henry had taken up their grievances individually when he asked each one if they would work Thursday night, February 3, for single time. Mr. Henry asked all men on second floor, and this took him almost two days to interview all these men.

The discharge of the three men was the company's answer to Mr. Henry taking up their grievances individually, and the reinstatement of the men left the whole matter unsettled with no possible chance of adjustment as far as future overtime was concerned. Although the committee in charge realized this yet they advised the men to go back to work, as they realized what a strike with no organization or preparation meant. Another meeting was held Saturday, February 5, and labor leaders were brought to the meeting by the committee to advise the men to go back to work. The men, by Saturday, had been joined by about 80 men from No. 2 shop, and when a vote was called for as to whether the men should return to work or not, No. 4 voted to return and No. 2 and No. 6 to stay out. After the meeting was over, two assistant foremen of No. 6 shop came to the men with the proposition that the men all return to work and that the matter of working overtime would be optional with the man asked to work. This committee was asked to come again at the meeting to be held Sunday, and on Sunday a committee of strikers, composed of Williams, Barkman, and Hopkins, interviewed Mr. Buck at his home. Mr. Buck said that the matter of overtime would be optional with the men, but that, by holding the meeting on Saturday, the men had lost all chance to return to work in a body. They could all return to work, but that the company reserved the right to retain in its employ such men as it saw fit. "In other words," he said, "the company wants it strictly understood that the Bethlehem Steel Company is running that plant." When this was given to the men, they unanimously decided to stay out, and are out yet. Although organizers were on the ground Saturday, the committee in charge, knowing Mr. Schwab's attitude to organized labor, refused to let them start to organize the men until all chance of the men returning to work was gone, and on Sunday, after the men voted to continue the strike, their only chance was to organize. So the work of organization was started.

This strike went on until February 25, the men being joined by the Hungarian laborers who were only receiving $12\frac{1}{2}$ cents an hour and had to work 12 hours a day and work every day, including Sunday. On Thursday, February 24, the strikers held a parade, which resulted in a general close down of the plant on Friday, the 25th. During the three weeks the machinists had been out, almost every department had sent committees to the organizers asking information how to get organized, so that when the general tie-up came they were prepared to form their organizations. Up to the present time, ten new organizations have been formed, consisting of machinists, boilermakers, crane men, amalgamated iron workers, pattern makers, blacksmiths, laborers, electricians, structural-iron workers, and stationary engineers. The molders joined in Allentown, and the carpenters in Bethlehem. In these twelve organizations there are about 3,800 men. The fact of all these men striking and organizing so quickly can only show Mr. Schwab the extent of discontent in his plant. We admit some of the men who had their wages reduced a

few years ago had the cut restored last fall, but some did not. At the present time we admit that the company has about 2,500^a men at work, but why? Simply because they are compelled to on account of circumstances forcing them to accept conditions as they are handed to them. All manner of tricks have been used to get the men back to work; men have been ordered to vacate the company's houses; apprentice boys have been ordered back to work or else have their contracts annulled. Very few strikers can get work in other cities if the firm knows he comes from South Bethlehem. Whether the Bethlehem Steel Company is responsible or not, the fact exists that a black list is used against the employees of the Bethlehem Steel Company. Regardless of this, at least 1,500 men have left the town, and although the men have had to claim to come from some other town, still they used that means to get employment.

The strikers are ready to-day to meet in conference any officials of the Bethlehem Steel Company, and have been willing to do this any day since the strike began. The company hired two of the three men who were discharged back again; at least we give the credit to them of hiring these men, although Eyre came to the meeting in the market hall on February 8 and claimed he was locked in No. 4 shop from 4 p. m. to 5.30 p. m., and had not hired out again. The strikers took no chance with him and put him out of the meeting, although he cried like a baby and claimed he was innocent and that the company tricked him into the shop so that the men would come back. When he was put out he begged the men to kill him, he felt the disgrace so keenly. At the present time the strikers have an average attendance of 2,000 at their daily mass meetings. We claim, with the men out of town, that at least 5,000 men are out of the mill who formerly worked there.

We will be glad to meet a committee to try to settle this at any time. We do not ask Mr. Schwab to even meet the union organizers, much less recognize the union, but, on the other hand, Mr. Schwab should not insist on us not joining a union. While we want a settlement we are preparing for a long struggle. Organized labor will be asked not to handle the product of these works, Congressmen will be furnished with all the information we can give them regarding wages and other matters regarding government work, and we will keep all men away from this plant we can until we get a settlement. On the other hand, if the company will meet the committee of workmen and bring about a settlement we will do all we can to bring back to South Bethlehem the skilled mechanics who have left town, and also help the company all we can to get other men here that they may need.

This is the position of the striking employees at the present time, and although this is the seventh week of the strike and we want a settlement, still we will fight to a finish if forced to in order that we may have our nights for our wives and children and our Sundays to worship God as we see fit.

STATEMENT OF MR. HUGH KELLY, EX-CHIEF OF POLICE.

Mr. Kelly stated that he was chief of police at the time of the beginning of the strike (February 4) and continued so to be up to March 14, when his term expired, and he had declined to be a candidate for reelection.

The regular police force of the borough consists of 9 patrolmen and the chief of police. It has been the custom of the police department to divide the force into 2 day men and 7 night men.

The strike occurred February 4, 1910. Until February 24, the day of the parade, nothing occurred requiring police notice, more than to have a man or two stationed at Third street and Poplar, and Second street and Poplar (two of the entrances to the Bethlehem Steel Company's plant), as crowds would gather there at times.

On the 24th of February the striking workmen arranged for a parade. The parade marched down Third street to Oak, one block below the company's plant, countermarched, and returned. The office steps, windows, and roof of the steel company's office building were filled with clerks and other people as the parade went by, and there was not any sign of disturbance. The parade itself was perfectly orderly. On the return march the parade came back as far as the municipal building, where it dispersed.

About the time the parade dispersed—that is, in the evening of February 24—there was a large gathering of people at Third and New streets, one block west of the municipal building. A workman was pulled off a street car here and his dinner pail taken away from him and he was pulled around some. The police squad had remained at the steel company's office about ten minutes after the parade, and by the time they could get to Third and New streets it was all over. They got the man who had been pulled off the street car. He was not hurt, but had had his dinner pail taken from him. No arrests were made, because the man could not identify the man or men who had actually hauled him off the car, and by this time the crowd had dispersed entirely.

The members of the band that led the parade with music—most of them lived in the lower end of the town, toward the company's office. As the band, or some of the band, started to go home, marching up Third street, a crowd of men followed them and marched to Third and Poplar, and on Poplar down to Second street, which is the main entrance to the company's plant, countermarching back by the office on Poplar street. It was at this time that a stone was thrown through Superintendent Buck's window.

The next morning crowds gathered at Third and Poplar streets in large numbers. Dinner pails and baskets were taken away from men going to their work, and these were kicked and thrown around. There was some stone throwing. Officer O'Donnell was struck in the back by a brick or stone thrown by some unknown man. There were no arrests.

Up to that time the police had been able to handle things. There are no reports in the police office of any violence up to the night of February 25. Mr. Buck and Mr. Grace called me (chief of police) into their office and asked me if, in view of what had happened, I thought I could handle a crowd of that kind. I said, "No; I think

not." Then the question of the state constabulary was brought up. I told them the burgess and the sheriff ought to be notified, and I understand they were so notified.

Later in the day, at the office of the steel company, the burgess, the sheriff and his deputy, the chairman of the police committee, and myself talked the matter over and it was decided that 25 or 30 of the constabulary would be able to take care of the different entrances to the steel plant. The company claimed, I believe, that there were seven entrances. Mr. Buck and Grace claimed that the mob of strikers would break into the plant and destroy their valuable machinery. They got into communication with the state officials, or at least I suppose they did.

When the constabulary arrived here, February 26, within two blocks of the point where they got off the cars, without any notice to the burgess or chief of police of their presence in the town, but in charge of the sheriff—about two blocks, as I say from where they got off the cars—at Third and New streets, one of the troopers jumped off his horse, caught a man by the throat, pulled his collar and tie off, without any reason as I have been told, and he turned him over as a prisoner to one of the police officers who had been doing night duty, and had him locked up in our station house. No charge has been preferred against this man up to this date (March 24). I kept this man until afternoon and released him on a cash bail of \$25 to appear when wanted.

On their way down to the steel company's office, they assaulted a number of other people standing on the corners of the streets. In one instance, one of the local police officers who witnessed this assault protested against it, but he had no weight whatever; and between Third and Linden streets, going to the office, they beat people standing peaceably on the street. Men were arrested, taken to the plant of the steel company, and there confined. They gave them a hearing on Monday.

I was very indignant at the manner in which the sheriff handled the troopers, in view of the fact that the burgess, myself, and the chairman of the police committee and officials of the steel company were parties to the bringing of the constabulary here for the preservation of the peace and the protection of the steel company's plant. Had the sheriff notified our burgess and chief of police that the constabulary were here, and my claim is we should have been so notified, the riot that occurred afterwards, I believe, never would have occurred. I claim that the sheriff and captain of troopers should have notified our burgess that they were here on the ground ready to give whatever assistance was required by the local authorities. The burgess was never notified officially that the troopers were on the ground by the sheriff. The sheriff took the men to the steel company's plant, and makes his headquarters at the steel company's plant. He has never notified the chief of police that those men were here, nor consulted with him as to what should be done.

They start out on our streets, beat down our people without any reason whatever, and they shot down an innocent man—Joseph Szambo—who was not on the street but who was in the Majestic Hotel, when one of the troopers rode up on the pavement at the hotel door and fired two shots into the barroom; shooting one man through

the mouth, another (Szambo) through the head, who died that afternoon in the hospital.

The name of the trooper who shot Szambo is said to be Moughan. Moughan has been delivered up to the office of the district attorney by Captain Robinson. The district attorney has preferred a charge of manslaughter against Moughan and he is held in \$5,000 bond to the next term of court, which will be held April 11. From all the information I gather there was no warrant for this murder. There was no disturbance of any kind at this hotel. No reason whatever for him to shoot into this hotel. To an outsider it would appear that it was premeditated; the Majestic being the headquarters of the leaders that were conducting this strike. There is no other known reason for it. While this may not be so, it looks so to me, and to many with whom I have talked. It is one of the best hotels in the town and one of the most peaceable. The bartender might just as well have been killed as this man Szambo, as one of the shots was directly over his head, about 6 inches.

Deputy sheriffs, the number I do not know, appointed by the sheriff to preserve the peace of the borough against mob, riot, and violence, have been kept in the plant of the steel company. The troopers he sent out through the town, and whatever riot or troubles have occurred in our town since their arrival is due entirely to their high-handed and cowardly attacks upon innocent people.

We had 18 special borough police appointed as a result of the strike. The borough authorities on the 15th of March released from duty all but 9 of these. There are 9 specials on duty now.

We can point to the fact that notwithstanding the number of citizens who have been cruelly beaten and others thrown into jail, the citizens of our town have not committed any outrage on the state constabulary. If they were not a peaceable and law-abiding community there would be some other tales to tell. Troopers went into the houses of people without warrant and searched the inmates; drove people from their own doorsteps. They beat an old man at least 60 years old, and I believe he is older—a peaceable old fellow named Joseph ———. He was hauled before Justice Bloom. The complaint of the trooper was that the old man was drunk and had made some sarcastic remark to him while on his horse. He struck him with his riot stick, knocked him down on the street, and left him in a very bad condition. The justice made the old man pay the costs of the case and assessed no fine.

This is only one of a dozen similar cases. Another case was called to my attention by the brother of the man arrested. He came here and made complaint to me that his brother, while on the way to the station with his mother to take a train to New York, was struck down by one of the troopers and thrown into prison. His brother is in prison yet, so far as I know.

I don't know as you care for report of a conversation over the telephone, but after the constabulary had been here several days Mr. R. S. Taylor, attorney for the steel company, called me up on the 'phone, wanting to know before what justice the prisoners arrested by the troopers would be tried. I answered Mr. Taylor that the constabulary had made these arrests; confined these men in the plant of the steel company without notifying the Burgess or myself; that I did not care a ——— what justice he had them brought before; that

there were four justices in the town. About a minute afterwards Captain Robinson called me up on the phone, introducing himself, and asked why I felt so indignant about the arrests. I then called his attention to the high-handed manner in which his troopers beat down our citizens without any just cause, as I understood it. I called his attention to the arrest of a man at Third and New streets that was assaulted by one of the troopers without any reason, as shown by the information given to me by people who were eyewitnesses. I asked Captain Robinson what were the powers of the troopers in regard to arrests. He answered, "The same as any constable or police officer—the only difference being that their authority was state wide while the local police and local constable was confined to your county or borough," that he was answerable to the sheriff.

Only one arrest was made by borough authorities, that of Herman Garabrandt, made on complaint of some of his neighbors, to the effect that he carried a revolver. He was reported as having been shooting at targets around in his yard and as having made remarks that anyone trying to stop him from going to work would find out that he could take care of himself. The man was working. When arrested and searched, a loaded revolver was found. He was held to \$500 bail to appear before the court (April 11) on a charge of carrying concealed weapons.

I have been chief of police here nine years; but refused to be a candidate after March 14, partly on account of the manner of treatment accorded the burgess and myself by the sheriff and the constabulary.

STATEMENT OF MICHAEL LYNCH, CHIEF OF POLICE.

Chief Lynch stated that he had been chief only since March 15, 1910. That on the 15th of March, 9 of the 18 special police had been relieved of duty; that the force now consists of the chief, 9 regular and 9 special officers.

Chief Lynch was present throughout the interview with ex-Chief Hugh Kelly. When asked if he had any report to make as to what had happened since March 15, Chief Lynch said:

March 22, two troopers, names unknown, at Fourth street and Linden, rode up to and one of them struck Peter —— with a riot stick and knocked him down; they rode their horses onto him, and then these two troopers rode off and let the man lay there. Afterwards two other troopers rode up and picked Martin up and carried him to the office of Doctor Leibert and had his wounds dressed, and then let him go home. I sent a patrolman up there to look after Martin. He found him in a dazed condition; the doctor said the worst hurt was over his eye, and looked like the print of a horse's shoe.

On Tuesday evening, March 22, the men out on strike were walking on the sidewalk up near the company's offices, but on the opposite side of the street, at the time the troopers rode out of the company's yards onto the street. There were troopers dressed in plain clothes walking in this parade or whatever it could be called—walking with and among these men on the sidewalk. As near as I can find out it was one of these plain-clothes men who called out "scab" to the troopers as they rode out on the street, although it is claimed that a foreigner called "scab." Anyway, the plain-clothes man struck a

man with his blackjack, and troopers rode into the crowd and arrested three men. Business men were ordered off their own doorsteps. Troopers rode for half a block on the sidewalks swinging their clubs and ordering people off their own doorsteps. They followed one young fellow into a store. Citizens told me that he had done nothing; that he ran into the store to get out of the way of the troopers. A trooper got off his horse, followed him into the store and arrested him.

STATEMENT OF CAPTAIN IN CHARGE OF STATE POLICE.

SOUTH BETHLEHEM, PA.,

March 21, 1910.

SIR: Pursuant to your request, I have the honor to submit report of identification of Troops B and D of the Pennsylvania state police force with the strike of employees of the Bethlehem Steel Company, and the subsequent disorders in consequence of strike in South Bethlehem, Pa.

In response to requests from Sheriff Person, of Northampton County, and Mayor Peysert, of South Bethlehem, which requests were supplemented by action of councils of South Bethlehem, Governor Edwin Stuart, of Pennsylvania, ordered Supt. John C. Groome, of the Pennsylvania state police force, to send detachment of state police to South Bethlehem for the purpose of protecting life and property.

Capt. J. F. Robinson and detachment of 24 troopers were ordered from Philadelphia to South Bethlehem on the morning of February 26, 1910. Captain Robinson with detachment arrived at South Bethlehem about 6.30 on the morning above mentioned and proceeded from the Reading Railway depot to offices of the steel plant at Third and Poplar streets. Horses were taken within inclosure of the steel plant to stables and provided with feed.

Troopers proceeded from the stables to office of the steel plant, where breakfast was served them about 7.30 a. m.

En route from the Reading Railway station to steel plant troopers were jeered and hissed by citizens, principally strikers, and met with considerable resistance, necessitating the arrest of 4 offenders.

After stabling horses in steel plant, troopers were again hissed on their way from inclosure to steel offices, where they had been provided with breakfast.

Following the serving of breakfast, the troopers returned to the stables amid a throng of about 1,000 that had collected about the offices, mounted their horses, and returned to Poplar street.

At direction of commanding officer, Poplar and Third streets were cleared of mob, and during which considerable rioting took place, resulting in the death of one striker, the wounding of another, and the injuring of 6 troopers. Troopers were injured by bricks and stones thrown at them by strikers and sympathizers. Reinforcements were sent for, resulting in a total of 66 additional troopers being sent to South Bethlehem.

Rioting continued throughout the afternoon and evening, in consequence of which 27 arrests were made on charges varying from rioting and carrying concealed weapons to disorderly conduct. The number of strikers at that time was estimated at 9,600.

The daily arrests made by the state police during their tour of duty at South Bethlehem were as follows:

February 26, 1910.

John Fukes, rioting; committed to county jail in default of \$1,000 bail for trial.
John Grander, rioting; committed to county jail in default of \$1,000 bail for trial.
Andrew Kundik, rioting; committed to county jail in default of \$1,000 bail for trial.
Steve Norlis, rioting; escaped from deputy sheriffs, into whose custody the defendant was placed by state police.

John Collins, rioting; committed to county jail in default of \$1,000 bail for trial.
Steve Dun, rioting; committed to county jail in default of \$1,000 bail for trial.
Bartholomew O'Brien, rioting and carrying concealed weapons; escaped from deputy sheriffs, into whose custody defendant had been placed by state police.

Stanley Bromkosky, carrying concealed deadly weapons; committed to county jail in default of \$500 bail for trial.

Kraska Vincient, rioting; escaped from deputy sheriffs, into whose custody he had been placed by state police.

Harry Brew, rioting and carrying concealed deadly weapons; escaped from deputy sheriffs, into whose custody he had been placed by state police.

Fabian Georgy, rioting and carrying concealed deadly weapons; escaped from deputy sheriffs, into whose custody he had been placed by state police.

Joe Boaka, rioting and carrying concealed deadly weapons; escaped from deputy sheriffs, into whose custody he had been placed by state police.

Steve Hardy, disorderly conduct; sentence of 30 days in county jail in default of fine and costs.

John Misko, rioting; committed to county jail in default of \$1,000 bail for trial.

Frank Harka, rioting; committed to county jail in default of \$1,000 bail for trial.

Thomas Steransik, rioting; released upon furnishing \$1,000 bail for appearance at court for trial.

James Cullen, drunk and disorderly; fined \$6 and costs; released upon payment of same.

Lewis Kalman, rioting; committed to county jail in default \$1,000 bail for trial.

John Korach, rioting; escaped from deputy sheriffs into whose custody he had been placed by state police.

Frank Takas, rioting; committed to county jail in default of \$1,000 bail for trial.

Lewis Gesester, carrying concealed deadly weapons; committed to county jail in default of \$1,000 bail for trial.

George Nages, rioting and carrying concealed deadly weapons; committed to county jail in default of \$1,000 bail for trial.

John Sominski, rioting; committed to county jail in default of \$1,000 bail for trial.

As will be noted by above list of arrests, entire number was made on day of arrival of state police, which were mainly as a result of rioting on previous day, the majority of the strikers being unaware of the expected arrival of the state police until their presence here was noted.

March 5, 1910.

Thomas Kenney, conspiracy and surety of the peace; held in \$500 bail for appearance at court.

Lawrence Kelly, assault and battery; held in \$300 bail for appearance at court.

March 7, 1910.

Petro Gatto, larceny; furnished \$300 bail for appearance at court.

Tony Gatto, larceny; furnished \$300 bail for appearance at court.

John Ringhopper, conspiracy and surety of the peace; furnished \$600 bail for appearance at court.

March 8, 1910.

Lewis Marketto, conspiracy and surety of the peace; defendant entered \$600 bail for appearance at court.

March 9, 1910.

Steve Sully, drunk and disorderly; fined \$5 and costs.

March 10, 1910.

George Banny, rioting; committed to county jail in default of \$1,000 bail for court.

March 11, 1910.

John Holva, surety of the peace; entered bail in the sum of \$500 for appearance at court.

Steve Sobotta, disorderly conduct; fined \$5 and costs.

Frank Givon, disorderly conduct; fined \$5 and costs.

March 12, 1910.

John McGuire, assault and battery and surety of the peace; entered bail in the sum of \$1,000 for appearance at court.

Andrew Surman, assault and battery; fined \$5 and costs.

Paul Sabina, drunk and disorderly conduct; fined \$5 and costs.

March 14, 1910.

Paul Howalt, carrying concealed weapons, and disorderly conduct; committed to county jail in default of \$500 bail for court.

March 15, 1910.

John Hartnes, assault and battery; fined \$20 and costs.

March 16, 1910.

Valent Krupa, felonious assault and battery; committed to county jail in default of \$500 bail for court.

Frank Suotta, disorderly conduct; discharged.

Steve Gausei, disorderly conduct; discharged.

March 17, 1910.

Adam Mihala, surety of the peace; entered bail for sum of \$500 for appearance at court.

John Gallagher, drunk and disorderly conduct; fined \$5 and costs.

March 18, 1910.

Mike Tenko, intimidation and surety of the peace; held for court in default of \$1,000 bail for trial.

Mike Sumko, surety of the peace, intimidation, and disorderly conduct; committed to county jail in default of \$1,000 bail for trial.

March 19, 1910.

Edward Kokoski, rioting; entered bail in the sum of \$1,000 for appearance at court.

Stanley Lucas, rioting and surety of the peace; discharged.

John Skoda, rioting and surety of the peace; discharged.

March 21, 1910.

Steve Kovatch, rioting; committed to county jail in default of \$500 bail for court.

STRENGTH OF STATE POLICE.

1910.	Troopers.	Horses.	1910.	Troopers.	Horses.
February 26.....	91	91	March 10.....	83	91
February 27.....	91	91	March 11.....	82	91
February 28.....	90	91	March 12.....	82	91
March 1.....	90	91	March 13.....	80	91
March 2.....	85	91	March 14.....	84	91
March 3.....	85	91	March 15.....	83	91
March 4.....	85	91	March 16.....	82	91
March 5.....	85	91	March 17.....	85	91
March 6.....	83	91	March 18.....	85	91
March 7.....	84	91	March 19.....	83	91
March 8.....	83	91	March 20.....	71	91
March 9.....	84	91	March 21.....	80	91

As is generally understood, the Pennsylvania state police force is an organization created by the act of legislature in 1905. Members of the force are paid regular salaries, and the maintenance of the men is provided either by themselves, by the department of state police, which is a part of the state government, or expenses are divided between divisions. When sent by direction of the governor and the superintendent to the various parts of Pennsylvania, on either strike or regular police duty, no expense is incurred by either corporations or individuals, other than the State of Pennsylvania, for the duty thus performed. During the present strike the maintenance of the men and horses is provided by the department of state police, of which amount the troopers pay a proportionate share, as directed by Superintendent Groome of the department.

The troopers are nonpartisan inasmuch as strikes are concerned, and take no part either for or against the strikers or corporations. They strive to do their duty to preserve the peace, regardless of results either in favor of striker or corporation.

Upon arrival of state police in South Bethlehem on February 26, 1910, the following agreement was entered into between Robert Person, sheriff of Northampton County, and Capt. J. F. Robinson, commanding state police detachment, which is as follows:

SOUTH BETHLEHEM, PA., *February 26, 1910.*

The following duties will be performed by the members of the state police while on duty in Northampton County in consequence of the disorders attending the strike of employees of the Bethlehem Steel Company: State police are to patrol streets and preserve order on same and prevent, as far as possible, all violations of the law. The state officers are to work in harmony with the sheriff and his forces.

The sheriff and his deputies will, as far as their powers and ability permit, guard the property of the Bethlehem Steel Company, the state police to do the street and road work outside of the plant.

If necessary, both forces will combine and aid one another.

ROBERT PERSON,
Sheriff Northampton County.

J. F. ROBINSON,
Captain State Police.

If any additional information is desired, it will be cheerfully and readily furnished.

Very respectfully,

J. F. ROBINSON,
*Commanding State Police Detachment on duty at
South Bethlehem, Pa.*

SHERIFF'S STATEMENT.

Sheriff Persons, in an interview held with him and his clerical deputy or assistant in charge of records, in their room in the offices of the Bethlehem Steel Company's plant, on March 28, 1910, stated:

The first call for protection was received February 25.

The first deputies were taken to the Bethlehem Steel Company's plant at 4 o'clock Saturday morning, February 26.

Greatest number of deputies (on pay) at any one time was 110.

Employees of the Bethlehem Steel Company to the number of 140 have been sworn in but do not receive any pay from the county. They still work at their regular occupations in the employ of the steel company.

Forty deputies were dropped on March 12, leaving 48 on duty at that date. From time to time, up to March 24, 17 more deputies were dropped, leaving 31, which is the number now on duty, March 28, 1910.

Deputy sheriffs have made two arrests to date, March 28. These two men arrested were Mike Tinko and Mike Shimko. They were arrested by Deputy Sheriff H. (a steel company employee) on March 18, at 6.10 p. m. Charge: "Intimidation" and "surety of the peace," interference with an officer—accosting him on his way home from work. They were placed under \$1,000 bail each, and held for court by Justice Bloom.

THE KILLING OF JOSEPH SZAMBO.

A statement was made by the district attorney for Northampton County, Pa., covering the shooting of Joseph Szambo, which is referred to in the statements of the ex-chief of police and of the captain of the state police. The district attorney stated that the evidence collected by him was to the effect that on Saturday, February 26, the constabulary had started to clear the street; that the crowd was pressing back and getting out of the way as fast as it could; that while on prior occasions stones had been thrown at the troopers, there were no stones being thrown at the time of the shooting.

In trying to get out of the way of the "troopers" some of the crowd backed into the barroom of the Majestic Hotel. Joseph Szambos, who had not been on the street, was drinking a glass of beer at the bar. The "trooper" fired two shots into the barroom; one fatally wounded Szambo, the other went through both cheeks of a man who was in the act of drinking a glass of beer. Szambo died that afternoon in a hospital. He was a subject of Austria-Hungary, about 35 years of age. The finding of the coroner's jury was as follows:

We, the jury appointed to sit in this case, do say that Joseph Szambo came to his death at St. Luke's Hospital, Fountain Hill,

Saturday, February 26, 1910, and that the cause was a bullet wound in the left side of the head inflicted by Pennsylvania state constable by the name of John Moughan, at the southwest corner of East Third and Linden streets, on Saturday, February 26.

Moughan was held to the grand jury.

ACTION TAKEN BY THE BURGESS.

On the morning of February 25, 1910, the town burgess issued the following

PROCLAMATION.

On account of the strained condition of this borough at this time the undersigned calls attention to the following order of the supreme court, that "The public possesses in the highway the right of transit only, with such stoppages as business, necessity, or the exigencies of travel require."

All persons are therefore urged to strictly observe the above law, using the streets of the borough for travel only, making no unnecessary stops, to avoid loafing or loitering on street corners or in crowds, and abstain from the use of loud, boisterous, or insulting language. All orderly and well disposed citizens are also enjoined to cooperate with the borough authorities in keeping the public peace, as any person or persons who shall "unlawfully, riotously and tumultuously assemble together so as to disturb the public peace," the chief of police, his assistants and deputies, are hereby ordered to enforce the act commonly called the "Riot act," using all necessary force and means to disperse such unlawful assemblages.

The use of intoxicating drinks to excess is also to be discouraged under the circumstances and persons so interested, will be careful to strictly observe the law in that respect.

O. L. PEYSERT,
Chief Burgess.

SOUTH BETHLEHEM, PA., *February 25, 1910.*

CLOSING OF SALOONS.

By order of the county judge, the saloons were closed February 27 throughout the entire strike zone, so far as the same lies within Northampton County. The order follows:

NOTICE.

EASTON, PA., *February 26, 1910.*

To each and every person in Bethlehem, South Bethlehem, and Northampton Heights, holding license to sell vinous, spirituous, malt, or brewed liquors in every form:

You are hereby required forthwith, from the time of service of this notice, to abstain from the sale of such liquors, absolutely, during the acute disorders over the strike at the Bethlehem Steel Company. Disregard of this notice will be taken as sufficient proof of unfitness to have such license renewed.

HENRY W. SCOTT, *P. J.*

This order was strictly obeyed and is still in force. Allentown, being in another county, was not affected by the order to close the saloons. Allentown is 6 miles from Bethlehem, and is the residence of hundreds of the employees of the Bethlehem Steel Company. An electric car system connects the towns.

CORRESPONDENCE IN REGARD TO CALL FOR STATE POLICE.

SOUTH BETHLEHEM, PA., *March 29, 1910.*

DEAR SIR: In reply to your favor of 26th instant, requesting me to furnish a written statement covering the events of the strike of the employees of the Bethlehem Steel Company, I beg leave to advise that on the morning of February 25, following a parade of strikers on the afternoon of the 24th, I was called in consultation with Messrs. E. G. Grace and C. A. Buck, of the management of the steel company, and Mr. Hugh Kelly, then chief of police, on account of rioting at the Poplar street entrance to the steel works and striking employees at different points of the borough preventing workmen from going to work, at the same time demanding protection both to the works and the men going to and from work.

In the presence of the above-named gentlemen and Mr. Chas. A. Groman, then chairman of the police committee of the borough, who came in later, our chief acknowledged, and truthfully, that he could not cope with the situation, and that if he were furnished with 200 deputies he would be powerless to handle the crowd of more than 2,000 strikers assembled.

In anticipation of another outbreak in the evening of the same day or the morning of the next, I consulted with our borough solicitor, who advised calling upon the sheriff for assistance, which was done, and at 11 o'clock of the morning of Friday, February 24, the whole matter of the preservation of the peace of the borough and the proper protection of property and since that date has been in the sheriff's hands.

The attached copies of letters are self-explanatory and cover all official correspondence on the subject in so far as the burgess is concerned, and I have simply to add that under the circumstances I fully concur with the action of the sheriff in calling upon the state constabulary so promptly, and even now, while the borough is in a state of comparative peace and quiet, I would deem it unadvisable to have them removed.

Yours, truly,

OLIVER L. PEYSERT,
Chief Burgess.

SOUTH BETHLEHEM, PA., *February 23, 1910.*

Mr. J. C. McINTYRE,
*Trustee and Member Executive Board,
Bethlehem Steel Company Strikers,
South Bethlehem, Pa.*

DEAR SIR: In reply to your personal request for the privilege of your union holding a public parade to-morrow evening, February 24, I beg leave to advise that I am personally not in favor of this move-

ment, for the reason that I fear trouble, and in nine cases out of ten where trouble occurs on occasions of this kind it is brought on by outsiders and overzealous sympathizers outside of your ranks, for which your organization will be blamed; but to show absolute fairness toward your organization, I hereby grant your request, with the injunction that the demonstration is to be conducted peaceably and in good order, so that no odium will reflect upon yourselves or this administration, as any act or acts inconsistent with the laws of the State or the ordinances of this borough that might occur will be summarily dealt with, and will be sufficient cause for refusal of a similar request in the future.

Yours, very truly,

OLIVER L. PEYSERT,
Chief Burgess.

(Copy to Hugh Kelly, esq., chief of police.)

BETHLEHEM STEEL COMPANY,
South Bethlehem, Pa., February 25, 1910.

To the honorable burgess and members of town council of the borough of South Bethlehem, Pa.

SIRS: We desire to make a formal appeal for proper police protection to our works and property located within the confines of the borough, and also in all parts of the borough, to the thousands of men in our employ who desire to remain at work but by acts of violence and intimidation are prevented from so doing.

We hereby give you formal notification that we will hold the borough accountable for any damage to our property, or other losses occasioned by mob violence. Mobs have been collected on our property and acts of violence have already been committed, as well as destruction of property.

Respectfully,

E. G. GRACE,
General Manager.

[From the minutes of the special meeting of the borough council of the borough of South Bethlehem, Pa., held on February 25, 1910.]

Whereas the public peace of the borough of South Bethlehem is being violated and the property of its citizens endangered by the congregation of large numbers of disorderly persons on the public streets and highways who by acts of violence interfere with the lawful occupation of others; and

Whereas, owing to the large numbers of persons engaged in these acts of violence and disorder, it is impossible for the police authorities of this borough to cope with the situation, be it

Resolved, That the sheriff of Northampton County be and is hereby called upon for assistance in the maintenance of peace and order in the borough, and the chief burgess is hereby directed to communicate this resolution to the sheriff.

I, Thos. Ganey, borough secretary of the borough of South Bethlehem, Pa., hereby certify that the above is a true and correct copy of the resolution as passed by the borough council on the date named.

[SEAL.]

THOS. GANEY, *Borough Secretary.*

SOUTH BETHLEHEM, PA., *February 26, 1910.*

MR. OLIVER L. PEYSERT,
Burgess, South Bethlehem, Pa.

DEAR SIR: By telephone instructions from our general manager, I am to request you to afford us the same protection as being afforded to the Bethlehem Steel Company. Quite a number of our men have been stopped on the streets and more or less abused. Our men are all anxious to work, and it is up to you to see that they have protection on the streets. When they are in the works we will protect them, and if there is any trouble in the works we will call on you.

Very truly, yours,

THE NEW JERSEY ZINC COMPANY (OF PA.).

A. B. DE SAULLES,

Superintendent of Bethlehem Works.

P. S.—Please acknowledge receipt.

SOUTH BETHLEHEM, PA., *March 10, 1910.*

MR. O. L. PEYSERT,
South Bethlehem, Pa.

DEAR SIR: At this morning's meeting of the executive committee of striking employees of the Bethlehem Steel Company it was unanimously decided upon that a request be made upon you for permission to hold a children's parade Saturday afternoon.

Realizing that this will be a peaceful demonstration, we can see no reason for your refusal to grant this demand.

The bearer, Brother D. Williams, has been authorized to represent the committee. Awaiting your favorable reply, we are,

Yours, very respectfully,

EXECUTIVE COMMITTEE,
Room 8, Municipal Building.

EXECUTIVE COMMITTEE,
BETHLEHEM STEEL COMPANY STRIKERS,
Room 8, Municipal Building.

GENTLEMEN: In reply to your favor of even date requesting permission to hold a children's parade next Saturday afternoon, I beg leave to advise that inasmuch as the town is practically under martial law, and, further, as the peace of the borough was transferred to the sheriff of the county more than a week ago, I have referred your request to that official. I will also state that I was in communication with the sheriff's deputy at 1 o'clock, who advised me by telephone that if your committee had any business to transact with him he would be pleased to see you at his temporary office in the Bethlehem Steel Company's office.

Yours, truly,

O. L. PEYSERT,
Chief Burgess.

SOUTH BETHLEHEM, PA., *March 10, 1910.*

MR. ROBERT PERSON,
High Sheriff, Northampton County.

DEAR SIR: The inclosed letter from the executive committee of the striking employees of the Bethlehem Steel Company is self-explanatory.

As the town is practically under martial law, and inasmuch as the peace of the borough was transferred to your charge over a week ago, I consider this a matter for your disposition, and will therefore ask you to reply to the request direct, and oblige,

Yours, truly,

O. L. PEYSERT,
Chief Burgess.

EASTON, PA., *March 10, 1910.*

EXECUTIVE COMMITTEE OF THE STRIKING EMPLOYEES
OF THE BETHLEHEM STEEL COMPANY,
Room 8, Municipal Building, South Bethlehem, Pa.

GENTLEMEN: O. L. Peysert, chief burgess of the borough of South Bethlehem, has referred to me your request for permission to hold a children's parade on Saturday afternoon. Such a parade can not do any good and is fraught with danger to the public peace, and I must decline to give the desired permission. I have notified Mr. Peysert of my decision and inclose herewith a copy of my letter to him.

Yours, truly,

ROBERT PERSON,
Sheriff.

EASTON, PA., *March 10, 1910.*

OLIVER L. PEYSERT, Esq.,
Chief Burgess, South Bethlehem, Pa.

DEAR SIR: I have received your favor of this date, inclosing written request of the executive committee of the striking employees of the Bethlehem Steel Company, addressed to you for permission to hold a children's parade on Saturday afternoon which, in view of the situation in the borough, you have referred to me for decision. Such a parade can not do any good and is fraught with danger to the public peace, and I have, in consequence, refused permission to hold it.

I need not remind you that the riotous outbreaks which have resulted in the maintenance for the past two weeks of a large force of deputy sheriffs and two companies of the state constabulary for the purpose of preserving the peace and protecting property followed a parade of the same body of men who are now asking permission to hold another parade on Saturday afternoon, and I call upon you and expect you, as chief burgess of the borough of South Bethlehem, to prevent any such parade, if there should be an attempt to hold it notwithstanding my refusal to permit it, and to prevent any gatherings for that purpose, and expect you to use the entire police force of the borough, if necessary, to do so, and to arrest every one responsible for such attempt on charges of disorderly conduct and inciting to riot and breaches of the peace. I want it distinctly understood that I shall not permit any riotous outbreaks, and shall promptly and

firmly suppress any disturbances that may arise to the full limit of my power, and I shall arrest every one responsible for such outbreaks or guilty of conduct tending thereto.

I am inclosing herewith a copy of my letter of refusal to the executive committee, and am sending a copy of this letter to the executive committee.

Yours, truly,

ROBERT PERSON,
Sheriff.

SOUTH BETHLEHEM, PA., *March 10, 1910.*

HUGH KELLY, Esq.,
Chief of Police.

DEAR SIR: I inclose herewith correspondence between the sheriff and myself in regard to the proposed parade of the children of the Bethlehem Steel Company's strikers next Saturday, and will ask you to note the decision of the sheriff and his instructions to all concerned.

Kindly return all papers when through, and oblige,

Yours, truly,

OLIVER L. PEYSERT,
Chief Burgess.

SOUTH BETHLEHEM, PA., *March 15, 1910.*

MR. ROBERT PERSON,
Sheriff, Northampton County,
South Bethlehem, Pa.

DEAR SIR: I hand you herewith a petition from the executive committee of the striking employees of the Bethlehem Steel Company, another from citizens of the borough, and still another from professional and business men located here, praying town council for the removal of the state constabulary.

At a regular meeting of council held last evening, upon a motion of Members Thomas Scott and John Loughery, I have been instructed, together with the chief of police, to present same to you with a view to having said constabulary removed from the borough, the contention being that the town is now in such a peaceable condition as to be able to dispense with their services. I will thank you for your written reply, returning therewith all papers to complete the files of the borough secretary, and oblige,

Yours, truly,

OLIVER L. PEYSERT,
Chief Burgess.

EASTON, PA., *March 16, 1910.*

O. L. PEYSERT,
Chief Burgess, South Bethlehem, Pa.

DEAR SIR: In compliance with your request that I make reply in writing to the resolution adopted by the town council of the borough of South Bethlehem, on Monday, the 14th instant, requesting me to have the state police, who are now preserving the peace and protecting the persons and property of the citizens of the borough and surrounding districts, removed from the borough, I desire to inform you

that I must not only decline to take any such action, but must insist that they remain, as I do not think it safe to have them withdrawn at this time. I consider the state of comparative quiet which the borough is now enjoying to be due to the efficiency of the state police in suppressing disturbances, and their ability to move quickly from one part of the borough to another, and in my opinion their withdrawal now would result in riotous outbreaks, the results of which might be very grave indeed.

Yours, very truly,

ROBERT PERSON, *Sheriff.*

SOUTH BETHLEHEM, PA., *March 28, 1910.*

OLIVER L. PEYSERT, Esq.,
Chief Burgess, South Bethlehem, Pa.

DEAR SIR: As per your request, I herewith inclose to you copies of—

Request of Bethlehem Steel Company for protection to its property and employees.

Resolution of the borough council calling on the sheriff of Northampton County for aid in maintaining order in the borough of South Bethlehem.

Request of the New Jersey Zinc Company (of Pennsylvania) for protection to its properties and employees.

Answer of the sheriff of Northampton County to the petition for the removal from the borough of the state constabulary.

Kindly acknowledge receipt and oblige,

Yours, truly,

[SEAL.]

THOS. GANEY, *Borough Secretary.*

SOUTH BETHLEHEM, PA., *March 10, 1910.*

MR. ROBERT PERSON, *Sheriff.*

DEAR SIR: About the middle of February, before the strike, I issued a permit to the First Hungarian Beneficial Society, of South Bethlehem, to hold a parade on next Sunday, March 13, in celebration of the national holiday of Hungary. As the state of affairs has changed very considerably since that time, I deem it advisable to inform you of my action and to suggest that you revoke my permit for said parade for fear of a possible outbreak on that occasion, and oblige,

Yours, truly,

OLIVER L. PEYSERT, *Chief Burgess.*

SOUTH BETHLEHEM, PA., *March 11, 1910.*

SECRETARY FIRST HUNGARIAN BENEFICIAL SOCIETY,
South Bethlehem, Pa.

DEAR SIR: Referring to the permit which I granted your organization to hold a public parade on next Sunday, March 13, in celebration of the national holiday of Hungary, I am this day directed by the sheriff of the county to revoke same, as in his judgment the affairs of the borough at this time do not warrant any public demonstration.

I therefore ask you to have regard for the order of the sheriff and personally request that you postpone your parade until such time as the affairs of the town are a little more settled, and oblige,

Yours, truly,

OLIVER L. PEYSERT,
Chief Burgess.

Below will be found copies of the telegrams which passed between the sheriff of the county and the governor of Pennsylvania.

FEBRUARY 25, 1910—12.20 p. m.

Hon. EDWIN S. STUART,
Governor of Pennsylvania, Harrisburg, Pa.

Situation at South Bethlehem on account of strike at Bethlehem Steel Works is beyond my control. Employees of the works are mobbed in both going to and coming from the works and I am very much afraid that there will be violence to-night. I would respectfully request and urge that 25 or 30 members of the state constabulary be sent us at once to assist in maintaining order so that they will be here to-night. A large number of employees are desirous of working if they can secure adequate protection. To protect men who want to work we will have to control about 3 miles of territory, including five congested points.

ROBERT PERSON,
Sheriff Northampton County.

HARRISBURG, PA., *February 25, 1910.*

ROBERT PERSON,
Sheriff Northampton County.

Your telegram received. There are no conditions or circumstances before me indicating that existing conditions at South Bethlehem can not be controlled by you through the proper and vigorous exercises of your high powers as sheriff. Telegraph me immediately what you have done in the way of exercising your powers as sheriff and preserving the peace in your county.

EDWIN S. STUART.

FEBRUARY 25, 1910.

Hon. EDWIN S. STUART,
*Governor of Pennsylvania,
Harrisburg, Pa.*

It is impossible for me to handle and control the situation at South Bethlehem. It is impossible to get sufficient deputies from this community to act. Serious riots and bloodshed occurred this morning and evening. Steel officials helped the situation by surreptitiously removing many of the men in box cars this afternoon. Works entirely suspended. It is absolutely impossible for me to protect men desiring to do necessary work. Further riot and bloodshed imminent in the morning. The whole town in a lawless state, and I

must have your help to preserve the peace. Have personally been in works several hours this afternoon and found it impossible, on account of mob, to get out. I am supported in the foregoing view by the burgess and chief of police of South Bethlehem.

ROBERT PERSON.

WAGES.

The detail wages table, which will be found in Appendix A, gives the hourly rates for time workers, and earnings for piece and bonus workers, by occupations, in each department in detail. The number at each rate and the average rate for all in a given occupation is shown by departments. As before stated this table is based upon a transcript of the pay roll for January, 1910, furnished by the the company.^(a) Practically any desired detail as to wage rates can be determined by reference to this table.

To bring the wages presentation, to be found in the general detailed table, into a more compact form, and one more easily grasped, a summary table is submitted below. In this table occupations have been ignored, but the division by departments retained. In it is presented the number of men employed at classified rates of wages or earnings, by departments.

^a Since the preparation of these tables the company reports that on April 1 the wages paid unskilled labor were raised 1 cent an hour, making this rate now $13\frac{1}{2}$ cents as against $12\frac{1}{2}$ cents prior to April 1; and that in a number of departments skilled labor was given an increase of 10 per cent, effective as of the same date.

CLASSIFIED EARNINGS PER HOUR (IN CENTS) OF EMPLOYEES OF BETHLEHEM STEEL WORKS, BY DEPARTMENTS, JANUARY, 1910.

Department.	Employees receiving classified earnings per hour (cents).																					Total.
	4 and under 6.	6 and under 8.	8 and under 10.	10 and under 12.	12 and under 14.	14 and under 16.	16 and under 18.	18 and under 20.	20 and under 22.	22 and under 24.	24 and under 26.	26 and under 28.	28 and under 30.	30 and under 32.	32 and under 34.	34 and under 36.	36 and under 38.	38 and under 42.	42 and under 46.	46 and under 60.	60 and over.	
Annealing.....					7	5	4	1	1		1											19
Armor plate.....					32	14	13	9	3	8	4	1				1		4	1			90
Armor-plate machine shop.....	1	1	3	1	8	44	31	25	25	3	1	2		3	1	2	1	1				153
Blast furnace.....					108	90	28	14	5	4	1											254
Boiler room, pumps, etc.....					24	114	17	5	1	2							1					164
Boiler shop.....					2	103	22	1	6	7	3	22	1	3		3		1		1		175
Brass foundry.....	2		1		8	34	11	2	2	4	11	4	1	1								81
Crucible.....					38	10	28	9	5	2	2	1	1	1			12	3				122
Drop forge.....		2	2	3	29	27	7	4	12	9	11	5		9	1	5	1	5	3	1	7	160
Electrical.....		1			13	13	11	32	13	6	9	5	1	3	3							497
Erecting.....				1	338	123	12	1	11	2	4	1	1	1			1		1			110
Fabricating.....					87	51	78	5	10	8	15	6	1	1		1						263
Gas producers.....					6	23			1							1						32
Hammer forge.....				10	3		41	20	27	11	20	10	4	1	6	3	3	1	7	2		174
Iron foundry.....	3	2	4		355	37	40	29	26	13	60	37		16	12		1		1			636
Laboratories.....						4	3	2	2													11
Machine shop:																						
No. 2.....	33	10	34	7	67	154	162	82	82	78	113	99	19	45	34	17	8	14	4	2	3	1,067
No. 4.....	27	10	20	2	44	60	36	17	41	58	82	69	13	38	14	11	7	2	4	7		562
No. 6.....	6		1	1	27	65	49	6	34	38	42	42	1	19	7	4		3		1	1	347
Mechanical.....				1		3	7	1	8	7	13	4		3	2	1	1					51
Mill:																						
Puddling.....	13		2	4	13	19	16	3	13	11	9	11	12	11	8	5						150
48-inch, blooming.....						4			6			3		4		2					2	21
48-inch, soaking pits.....			2					2					2		6					2		14
48-inch, rolling.....			2		21	6	24	4	11	12	8	10	4	3	3	4	2	1		3	2	120
48-inch, yard.....		5		7	31	39	52	3	20	11	14	3		3		1				2		191
40-inch, soaking pits.....				4	12			1	2	5	2	6		2	1						2	37
40-inch, blooming.....			2		1	2	8		2				3							1		22
28-inch, rail.....					45	10	15	10	10	31	3	7		2	1					6		141
22-inch.....					14	19	2	2	14	3	6	4	2	2	1	1			1			71
12-inch.....					6	2	8	5	2	4	1	2	1	2			2	4		3	1	41
8-inch.....					2	3		2	1	3			6	1	2	1	2			1		25
Stay bolt.....					7	21	7	5	6	5	3						2	2	1	1		60
General.....			1		123	61	26	5	6		3		1		1	2		1	1			231
Office force at mill.....			1			1		5	3		2											7

<hr/>																									
Open-heart furnace:																									
Lehigh plant.....		5		1	114	37	61	46	14	8	12	10	2	5	3					3	2				330
Saucon plant.....			13		95	57	17	42	22	24	27	4	1	5	12	4	2	1			4				327
Pattern shop.....	3	1	4	1	4			19	4	2	7			23	6			1			1				76
Press forge					5	6	24	10	9	4		4								3			2		67
Projectile forging.....					4		10	7	8	2	5	2		1		2				1					67
Projectile treatment.....						5	3		1		1														10
Projectile shop.....				2	6	15	23	12	9	3	1		1	3	2	3	1			1					82
Repair shops, boilers, etc.....					36	24	9	1	1		1	1		1			1								74
Roll turning.....					7	7				2	3	4		2		6		1							32
Steel foundry.....	5	1	3	9	202	56	84	14	25	27	55	37	14	20	17	7	2	5	2						585
Tempering.....	2				2	20	1	4	4	1	1			1											36
Yard stocking.....				2	268	71	50	20	24	9															444
Yard transportation.....					2	32	72	42	52	38	5														243
Miscellaneous.....	2		1		430	28	50	26	93	15	15	13		26		31	2	4	1						737
Total.....	97	38	100	53	2,640	1,528	1,162	551	677	480	581	432	93	256	146	121	52	55	36	65	21				9,184
<hr/>																									

From the above table it will be noted that the largest number of employees falling within any one classified wage group are those earning 12 cents but less than 14 cents an hour. These number 2,640 persons, or 28.7 per cent of all working employees on the January pay rolls.

Those earning this amount or less constitute 31.9 per cent of the whole. In the next higher group, those earning 14 cents but less than 16 cents per hour, are 1,528 persons, or 16.6 per cent of the whole.

To bring all of these percentages before the eye the following final summary has been prepared, which gives classified earnings per hour, with number in each group so classified; percentage of the total employees in each such group; and finally the cumulative percentage of employees earning such specified hourly amounts or less.

This last or cumulative percentage column makes it possible to determine the entire percentage at or below a certain rate, whereas the percentage column gives the per cent at a single classified rate. To take an example which will show the manner of reading this table: There were 1,162 persons earning 16 cents and under 18 cents an hour; these 1,162 persons constitute 12.7 per cent of the total employees; while by reference to the cumulative percentage column it will be seen that 61.2 per cent of all employees work at this rate or less than this rate.

NUMBER AND PER CENT OF EMPLOYEES OF THE BETHLEHEM STEEL WORKS EARNING CLASSIFIED AMOUNTS PER HOUR AND PER CENT EARNING EACH CLASSIFIED AMOUNT OR LESS.

Classified earnings per hour.	Employees in each group.	Per cent of total employees in each group.	Per cent of employees earning specified amount per hour or less.
4 and under 6 cents.....	a 97	a 1.1	a 1.1
6 and under 8 cents.....	a 38	a .4	a 1.5
8 and under 10 cents.....	a 100	a 1.1	a 2.6
10 and under 12 cents.....	53	.6	3.1
12 and under 14 cents.....	2,640	28.7	31.9
14 and under 16 cents.....	1,528	16.6	48.5
16 and under 18 cents.....	1,162	12.7	61.2
18 and under 20 cents.....	551	6.0	67.2
20 and under 22 cents.....	677	7.4	74.5
22 and under 24 cents.....	480	5.2	79.8
24 and under 26 cents.....	581	6.3	86.1
26 and under 28 cents.....	432	4.7	90.8
28 and under 30 cents.....	93	1.0	91.8
30 and under 32 cents.....	256	2.8	94.6
32 and under 34 cents.....	146	1.6	96.2
34 and under 36 cents.....	121	1.3	97.5
36 and under 38 cents.....	52	.6	98.1
38 and under 42 cents.....	55	.6	98.7
42 and under 46 cents.....	36	.4	99.1
46 and under 60 cents.....	65	.7	99.8
60 cents and over.....	21	.2	100.0
Total.....	9,184	100.0	100.0

a Apprentices.

APPENDIX A.

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910.

Department and occupation.	Regular full working time.				Time workers.		Pieceworkers.			
	Days per week.	Hours per day.			Employees.	Rates per hour.	Actual earnings.		Guaranteed minimum rate per hour.	
		Monday to Friday.	Saturday.	Sunday.			Earnings per hour.		Employees.	Minimum.
							Classified.	Average.		
ANNEALING.										
Bar chasers.....	6	12	12		1	<i>Cents.</i> 18.0	<i>Cents.</i>	<i>Cents.</i>		
Clerks.....	6	10	10		1	21.6				
Crane men.....	6	12	12		2	16.0				
Firemen.....	6	12	12		3	14.0				
Foremen.....	6	12	12		1	24.0				
Furnace tenders.....	6	12	12		1	15.0				
Laborers.....	6	12	12		7	12.5				
Do.....	6	12	12		1	14.0				
Do.....	6	12	12		2	16.5				
Total.....	6	12	12		10	13.5				
ARMOR PLATE.										
Air compressor engine tenders.....	7	12	12	12	2	17.5				
Bending press foremen.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	45.0				
Bending press foremen, assistants.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	25.0				
Bending press crane men.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	22.0				
Bending press heaters.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	20.5				
Bending press helpers.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	16.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		3	17.5				
Total.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		4	17.1				
Bending press valve men.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	25.0				
Chain men.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		3	15.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	16.0				
Total.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		4	15.3				
Chippers.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	15.0				
Clerks.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	13.5				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	22.5				
Total.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		2	18.0				
Crane men, not specified.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	16.0				
Drillers.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	17.0				
Forging press foremen.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	40.0				
Forging press foremen, assistants.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	22.0				
Forging press crane men.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		2	22.0				
Forging press drivers.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	25.0				
Forging press engine tenders, first.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	20.0				

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full working time.				Time workers.		Pieceworkers.				
	Days per week.	Hours per day.			Employees.	Rates per hour.	Actual earnings.		Guaranteed minimum rate per hour.		
		Monday to Friday.	Saturday.	Sunday.			Earnings per hour.		Employees.	Minimum.	
							Classified.	Average.			
ARMOR PLATE—concluded.											
Forging press engine tenders, second	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	1	17.5	.....	.....	.....	.....
Forging press furnace tenders	7	12	12	12	1	20.5	.....	.....	.....	.....
Do	7	12	12	12	1	22.5	.....	.....	.....	.....
Total	7	12	12	12	2	21.5	.....	.....	.....	.....
Forging press furnace tenders' helpers	7	12	12	12	1	17.5	.....	.....	.....	.....
Forging press pitmen	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	3	18.0	.....	.....	.....	.....
Forging press valve men	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	2	22.0	.....	.....	.....	.....
Gas house men	7	12	12	12	5	13.5	.....	.....	.....	.....
Do	7	12	12	12	8	14.0	.....	.....	.....	.....
Total	7	12	12	12	13	13.8	.....	.....	.....	.....
Heaters	7	12	12	12	6	18.5	.....	.....	.....	.....
Laborers	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	26	12.5	.....	.....	.....	.....
Repair foremen	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	1	25.0	.....	.....	.....	.....
Repair men	6	12	12	.....	1	17.5	.....	.....	.....	.....
Do	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	1	14.0	.....	.....	.....	.....
Do	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	1	15.0	.....	.....	.....	.....
Total	.....	.....	.....	.....	3	15.5	.....	.....	.....	.....
Riggers	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	1	16.5	.....	.....	.....	.....
Scalers	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	3	38 and under 40	38.0	3	12.5
Templet makers	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	1	27.5	.....	.....	.....	.....
Treatment foremen	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	1	35.0	.....	.....	.....	.....
ARMOR PLATE MACHINE SHOP.											
Apprentices	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	1	5.0	.....	.....	.....	.....
Do	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	1	7.5	.....	.....	.....	.....
Do	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	3	9.2	.....	.....	.....	.....
Do	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	1	10.8	.....	.....	.....	.....
Total	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	6	8.5	.....	.....	.....	.....
Belt men	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	1	18 and under 20	18.2	1	17.5
Chain men	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	1	16.0	2	16 and under 18	16.6	2	16.0
Chippers	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	1	20.0	2	14 and under 16	2	14.5
Do	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	1	20 and under 22	1	20.0
Total	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	1	20.0	3	16.9	3	16.3
Crane men	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	5	16.0	.....	.....	.....	.....
Dispatchers	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	1	16.0	.....	.....	.....	.....
Engine tenders	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	1	17.0	.....	.....	.....	.....
Do	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	1	17.5	.....	.....	.....	.....
Total	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	2	17.3	.....	.....	.....	.....
Erectors	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	1	18.5	.....	.....	.....	.....
Do	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	1	20.0	.....	.....	.....	.....
Do	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	1	37.5	.....	.....	.....	.....
Total	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	3	25.3	.....	.....	.....	.....

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full working time.				Time workers.		Pieceworkers.				
	Hours per day.				Employees.	Rates per hour.	Actual earnings.		Guaranteed minimum rate per hour.		
	Days per week.	Monday to Friday.	Saturday.	Sunday.			Earnings per hour.		Employees.	Minimum.	
							Classified.	Average.			
ARMOR PLATE MACHINE SHOP—concluded.						<i>Cents.</i>		<i>Cents.</i>	<i>Cents.</i>		
Foremen	6	10 ⁵ / ₁₂	5 ⁴ / ₁₂		1	22.5					
Do.....	6	10 ⁵ / ₁₂	5 ⁴ / ₁₂		1	35.0					
Do.....	6	10 ⁵ / ₁₂	5 ⁴ / ₁₂		1	39.0					
Total.....	6	10 ⁵ / ₁₂	5 ⁴ / ₁₂		3	32.2					
Grinders.....	6	10 ⁵ / ₁₂	5 ⁴ / ₁₂		2	16.0					
Heaters.....	6	10 ⁵ / ₁₂	5 ⁴ / ₁₂		4	18.5					
Laborers.....	6	10 ⁵ / ₁₂	5 ⁴ / ₁₂				3	14 and under 16	15.2	3	13.5
Layers-out.....	6	10 ⁵ / ₁₂	5 ⁴ / ₁₂		1	32.5					
Machine hands and helpers..	6	10 ⁵ / ₁₂	5 ⁴ / ₁₂		2	13.0	2	12 and under 14		1	12.5
Do.....	6	10 ⁵ / ₁₂	5 ⁴ / ₁₂		4	13.5	15	14 and under 16		14	13.5
Do.....	6	10 ⁵ / ₁₂	5 ⁴ / ₁₂		23	15.0	11	16 and under 18		14	15.0
Do.....	6	10 ⁵ / ₁₂	5 ⁴ / ₁₂		5	17.5	18	18 and under 20		2	16.0
Do.....	6	10 ⁵ / ₁₂	5 ⁴ / ₁₂		1	21.0	21	20 and under 22		38	17.5
Do.....	6	10 ⁵ / ₁₂	5 ⁴ / ₁₂		1	22.0	1	22 and under 24		1	20.0
Do.....	6	10 ⁵ / ₁₂	5 ⁴ / ₁₂				1	24 and under 26			
Do.....	6	10 ⁵ / ₁₂	5 ⁴ / ₁₂				1	30 and under 32			
Total.....	6	10 ⁵ / ₁₂	5 ⁴ / ₁₂		36	15.4	70		18.4	70	16.1
Machinists.....	6	10 ⁵ / ₁₂	5 ⁴ / ₁₂		1	26.0					
Do.....	6	10 ⁵ / ₁₂	5 ⁴ / ₁₂		1	27.5					
Do.....	6	10 ⁵ / ₁₂	5 ⁴ / ₁₂		2	30.0					
Do.....	6	10 ⁵ / ₁₂	5 ⁴ / ₁₂		1	35.0					
Total.....	6	10 ⁵ / ₁₂	5 ⁴ / ₁₂		5	29.7					
Stampers.....	6	10 ⁵ / ₁₂	5 ⁴ / ₁₂		1	17.5					
Tool carriers.....	6	10 ⁵ / ₁₂	5 ⁴ / ₁₂		1	15.0					
Tool room window men.....	6	10 ⁵ / ₁₂	5 ⁴ / ₁₂		1	17.5					
Do.....	6	10 ⁵ / ₁₂	5 ⁴ / ₁₂		1	18.0					
Total.....	6	10 ⁵ / ₁₂	5 ⁴ / ₁₂		2	17.8					
BLAST FURNACE.											
Blacksmiths.....	7	12	12	12	3	19.0					
Blacksmiths' helpers.....	7	12	12	12	3	16.0					
Bottom fillers.....	7	12	12	12	42	15.0					
Bricklayers.....	7	12	12	12	2	15.0					
Carpenters.....	7	12	12	12	1	21.0					
Cinder dumpers.....	7	12	12	12	10	13.3					
Cinder men.....	7	12	12	12	2	13.3					
Do.....	7	12	12	12	2	15.0					
Total.....	7	12	12	12	4	14.2					
Conveyors.....	7	12	12	12	2	14.2					
Crane men.....	7	12	12	12	2	16.0					
Engine tenders.....	7	12	12	12	13	13.3					
Foremen.....	7	12	12	12	2	17.5					
Do.....	7	12	12	12	3	18.8					
Do.....	7	12	12	12	3	20.8					
Do.....	7	12	12	12	3	22.9					
Do.....	7	12	12	12	2	25.0					
Total.....	7	12	12	12	13	21.0					

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full work- ing time.				Time workers.		Pieceworkers.			
	Days per week.	Hours per day.			Employees.	Rates per hour.	Actual earnings.		Guaran- teed mini- mum rate per hour.	
		Monday to Friday.	Saturday.	Sunday.			Earnings per hour.		Employees.	Minimum.
							Classified.	Average.		
BLAST FURNACE—concluded.										
						<i>Cents.</i>	<i>Cents.</i>		<i>Cents.</i>	
Hot blast men.....	7	12	12	12	8	15.4				
Hot metal chasers.....	7	12	12	12	2	17.0				
Keepers.....	7	12	12	12	8	18.8				
Keepers, assistant.....	7	12	12	12	16	15.0				
Laborers.....	7	12	12	12	77	12.5				
Ladle men.....	7	12	12	12	2	17.9				
Ladle men's helpers.....	7	12	12	12	2	13.3				
Lime and scrap men.....	7	12	12	12	4	12.5				
Oilers.....	7	12	12	12	2	14.0				
Pipe fitters.....	7	12	12	12	1	20.0				
Pourers.....	7	12	12	12	2	16.7				
Repair men.....	7	12	12	12	13	16.0				
Do.....	7	12	12	12	1	22.0				
Do.....	7	12	12	12	2	25.0				
Do.....	7	12	12	12	1	27.5				
Total.....	7	12	12	12	17	18.1				
Scale men.....	7	12	12	12	2	17.1				
Skip men.....	7	12	12	12	2	15.0				
Top fillers.....	7	12	12	12	12	15.8				
Trough men.....	7	12	12	12	2	14.2				
BOILER ROOM, PUMPS, AND AIR COMPRESSORS.										
Ash wheelers.....	6	12	12	.....	3	12.5				
Boiler cleaners.....	7	12	12	12	8	14.5				
Clerks.....	6	10 ⁵ / ₁₂	5 ⁴ / ₁₂	.....	1	18.0				
Coal heavers.....	6	12	12	.....	3	13.5				
Compressor engine tenders.....	6	12	12	.....	1	14.0				
Do.....	6	12	12	.....	1	17.0				
Total.....	6	12	12	.....	2	15.5				
Conveyor men.....	6	12	12	.....	2	13.5				
Economizer tenders.....	6	12	12	.....	2	12.5				
Firemen.....	7	12	12	12	56	14.5				
Do.....	6	12	12	.....	18	14.5				
Do.....	6	12	12	.....	16	15.0				
Total.....				.....	90	14.6				
Foremen.....	6	13	13	.....	1	21.5				
Do.....	7	12	12	12	1	37.5				
Total.....				.....	2	29.5				
Foremen, assistant.....	7	12	12	12	1	19.0				
Do.....	7	12	12	12	1	22.0				
Total.....	7	12	12	12	2	20.5				
Pump engine tenders.....	6	12	12	.....	2	13.3				
Do.....	6	12	12	.....	4	13.5				
Total.....	6	12	12	.....	6	13.4				
Stoke tenders.....	6	12	12	.....	3	14.0				

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full working time.				Time workers.		Pieceworkers.			
	Days per week.	Hours per day.			Employees.	Rates per hour.	Actual earnings.		Guaranteed minimum rate per hour.	
		Monday to Friday.	Saturday.	Sunday.			Earnings per hour.			
							Classified.	Average.	Employees.	Minimum.
BOILER ROOM, PUMPS, AND AIR COMPRESSORS—concl'd.						<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>		<i>Cents.</i>
Water tenders.....	7	12	12	12	10	17.0				
Do.....	7	12	12	12	1	19.0				
Do.....	7	12	12	12	1	22.0				
Do.....	6	12	12		2	13.5				
Do.....	6	12	12		8	14.5				
Do.....	6	12	12		4	15.5				
Do.....	6	12	12		6	17.0				
Do.....	6	12	12		2	18.0				
Total.....					34	16.3				
Water tenders' helpers.....	6	12	12		6	13.5				
BOILER SHOP.										
Angle curvers.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	17.5				
Blacksmiths.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	28.5				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	32.5				
Total.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		2	30.5				
Blacksmiths' helpers.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	17.5				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	23.5				
Total.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		2	20.5				
Boiler makers.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		22	27.5				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		2	30.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	32.5				
Total.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		25	27.9				
Boiler makers' helpers.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	15.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	16.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		2	20.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		6	22.5				
Total.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		10	20.6				
Clerks.....	6	12	12		1	20.0				
Crane men.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		4	16.0				
Fitters-up.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		3	17.5				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	25.0				
Total.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		4	19.4				
Flangers.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	32.5				
Foremen.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	42.5				
Foremen, assistant.....	5	12 $\frac{1}{2}$			1	25.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	30.0				
Total.....					2	27.5				
Helpers.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	12.5				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		102	15.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		5	17.5				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	20.0				
Total.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		109	15.1				
Layers-out.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	37.5				

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full work- ing time.				Time workers.		Pieceworkers.				
	Days per week.	Hours per day.			Employees.	Rates per hour.	Actual earnings.		Guan- teed mini- mum rate per hour.		
		Monday to Friday.	Saturday.	Sunday.			Earnings per hour.				
							Classified.	Average.	Employees.	Minimum.	
BOILER SHOP—concluded.						<i>Cents.</i>		<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	
Machine hands.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		2	17.5					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	18.0					
Total.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		3	17.7					
Painters.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	16.0					
Punch men.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		2	17.5					
Riveters.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		2	17.5					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	20.0					
Total.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		3	18.3					
Templet makers.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	20.0					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	25.0					
Total.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		2	22.5					
Tool men.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	12.5					
BRASS FOUNDRY.											
Apprentices.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	9.2					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	12.5					
Total.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		2	10.9					
Carpenters.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	17.5					
Chippers.....	6	12	12		1	18.0					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		3	12.5	1	18 and under 20	18.0	1	12.5
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		29	14.0					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		3	15.0					
Total.....	6				36	14.1	1	18 and under 20	18.0	1	12.5
Clerks.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	17.5					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	27.5					
Total.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		2	22.5					
Core makers.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	21.0	1	24 and under 26	25.3	1	22.5
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		2	22.5					
Total.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		3	22.0	1	24 and under 26	25.3	1	22.5
Core boys.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	5.0					
Crane men.....	6	12	12		2	16.0					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	16.0					
Total.....	6				3	16.0					
Foremen.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	17.5					
Furnace men and helpers.....	6	12	12		2	17.5					
Do.....	6	12	7		1	15.0					
Do.....	6	11 $\frac{1}{2}$	6 $\frac{1}{2}$		1	16.0					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	15.0	1	24 and under 26	24.0	1	12.5
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	16.0					
Total.....	6				6	16.2	1	24 and under 26	24.0	1	12.5

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full working time.				Time workers.		Pieceworkers.				
	Days per week.	Hours per day.			Employees.	Rates per hour.	Actual earnings.			Guaranteed minimum rate per hour.	
		Monday to Friday.	Saturday.	Sunday.			Earnings per hour.		Employees.	Minimum.	
							Classified.	Average.			
BRASS FOUNDRY—concl'd.											
Laborers.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....	1	Cents. 12.5		Cents.	Cents.		Cents.
Machine hands.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....	1	16.0					
Molders.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....	3	25.0	1	28 and under 30	29.6	1	25.0
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....	3	27.5					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....	1	30.0					
Total.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....	7	26.8	1	28 and under 30	29.6	1	25.0
Molders' helpers.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....	1	12.0	2	12 and under 14		2	10.0
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....	1	20.0	5	24 and under 26		3	20.0
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....	2	22.5				2	22.5
Total.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....	4	19.3	7		21.6	7	17.9
Office boys.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....	1	5.0					
Pattern men.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....	1	25.0					
CRUCIBLE.											
Clerks.....	6	12	12	.....	1	16.7					
Crane men.....	6	12	12	.....	2	16.5					
Furnace tenders.....	6	12	12	.....	3	16.0					
Do.....	6	12	12	.....	1	20.0					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....			1	16 and under 18			
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....			4	18 and under 20			
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....			1	20 and under 22			
Total.....	6			.....	4	17.0	6		18.8	6	16.0
Gas men.....	6	12	12	.....	5	14.0					
Do.....	6	12	12	.....	1	15.8					
Total.....	6	12	12	.....	6	14.3					
Gas men's helpers.....	6	12	12	.....	7	13.5					
Hammer drivers.....	6	12	12	.....	2	16.0					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....			3	16 and under 18			
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....			4	18 and under 20			
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....			1	20 and under 22			
Total.....	6			.....	2	16.0	8		18.4	8	16.0
Hammer men.....	6	12	12	.....	1	25.0					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....			1	34 and under 36			
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....			3	40 and under 42			
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....			1	42 and under 44		5	35.0
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....			1	48 and under 50		1	45.0
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....			1	60 and under 62		1	55.0
Total.....	6			.....	1	25.0	7		44.6	7	39.3
Hammer men's helpers.....	6	12	12	.....	1	12.5					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....			1	16 and under 18			
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....			1	18 and under 20			
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....			1	20 and under 22			
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....			2	22 and under 24		2	16.0
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....			1	26 and under 28		4	20.0
Total.....	6			.....	1	12.5	6		21.4	6	18.7
Inspectors.....	6	12	12	.....	1	17.5					

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full working time.				Time workers.		Pieceworkers.			
	Days per week.	Hours per day.			Employees.	Rates per hour.	Actual earnings.		Guaranteed minimum rate per hour.	
		Monday to Friday.	Saturday.	Sunday.			Earnings per hour.		Employees.	Minimum.
							Classified.	Average.		
CRUCIBLE—concluded.						<i>Cents.</i>		<i>Cents.</i>		<i>Cents.</i>
Laborers.....	6	12	12	30	12.5					
Do.....	6	12	5 $\frac{4}{12}$			1	24 and under 26		1	16.0
Do.....	6	10 $\frac{5}{12}$	5 $\frac{1}{12}$			1	16 and under 18		1	12.5
Total.....	6			30	12.5	2		21.4	2	14.3
Ladle men.....	6	12	12	2	14.5					
Melters, foremen.....	6	12	12	1	66.7					
Melters.....	6	12	12	6	55.0					
Molders.....	6	12	12	12	17.5					
Pot pullers.....	6	12	12	12	37.5					
Repair men.....	6	12	12	1	20.0					
Shippers.....	6	12	12	1	17.5					
Superintendents, assistant.....	6	12	12	1	29.2					
Weighers.....	6	12	12	2	15.0					
DROP FORGE.										
Apprentices.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	2	9.2					
Blacksmiths.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	1	25.0	1	50 and under 52	51.9	1	30.0
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	1	27.5					
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	1	32.5					
Total.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	3	28.3	1	50 and under 52	51.9	1	30.0
Blacksmiths' helpers.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	1	20.0					
Clerks.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	2	10.0					
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	1	16.0					
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	2	20.0					
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	1	30.0					
Total.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	6	17.7					
Cold trimmers.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	2	7.5					
Die sinkers.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	1	27.5					
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	2	35.0					
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	1	40.0					
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	1	45.0					
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	11	50.0					
Total.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	16	45.8					
Drill press hands.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	1	10.0					
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	1	15.0					
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	1	20.0					
Total.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	3	15.0					
Forgers, foremen.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	1	30.0					
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	1	60.0					
Total.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	2	45.0					
Forgers.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	1	25.0	1	36 and under 38		1	25.0
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	2	30.0	1	44 and under 46		1	35.0
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	1	35.0	1	46 and under 48		5	40.0
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	3	40.0	1	48 and under 50		3	45.0
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	1	45.0	1	50 and under 52		3	50.0
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$			2	54 and under 56			
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$			3	56 and under 58			
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$			1	62 and under 64			
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$			1	64 and under 66			
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$			1	90 and under 92			
Total.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	8	35.6	13		56.0	13	41.9

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full working time.				Time workers.		Pieceworkers.			
	Days per week.	Hours per day.			Employees.	Rates per hour.	Actual earnings.		Guaranteed minimum rate per hour.	
		Monday to Friday.	Saturday.	Sunday.			Earnings per hour.		Employees.	Minimum.
							Classified.	Average.		
DROP FORGE—continued.										
Forgers' helpers.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$			<i>Cents.</i>	2	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$				4	14 and under 16		13.5
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$				3	16 and under 18	14	15.0
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$				3	18 and under 20	3	17.5
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$				5	20 and under 22	1	20.0
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$				3	22 and under 24		
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$				1	24 and under 26		
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$				1	30 and under 32		
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$				1	38 and under 40		
Total.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$				20		21.1	20 15.5
Inspectors.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$		2	15.0				
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$		1	22.5				
Total.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$		3	17.5				
Laborers.....	6	12 10		4	12.5	1	18 and under 20	18.7	1	12.5
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	7	12.5					
Total.....	6			11	12.5	1	18 and under 20	18.7	1	12.5
Machinists' foremen.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	1	27.5					
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	1	30.0					
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	1	65.0					
Total.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	3	40.8					
Machinists.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	1	20.0					
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	4	22.5					
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	1	27.5					
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	2	30.0					
Total.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	8	24.7					
Oilers.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	2	15.0					
Picklers.....	6	12 10		1	12.5					
Do.....	6	12 10		2	15.0					
Total.....	6	12 10		3	14.2					
Repair men.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	1	22.5					
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	1	25.0					
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	1	27.5					
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	1	35.0					
Total.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	4	27.5					
Tool makers.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	1	20.0					
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	1	25.0					
Total.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	2	22.5					
Tool room men.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	1	15.0					
Treaters' foremen.....	6	12 10		1	30.0					
Treaters.....	6	12 10		3	15.0					
Trimmer makers.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	1	20.0					
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	5	25.0					
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	1	35.0					
Total.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	7	25.7					

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full working time.				Time workers.		Pieceworkers.			
	Days per week.	Hours per day.			Employees.	Rates per hour.	Actual earnings.		Guaranteed minimum rate per hour.	
		Monday to Friday.	Saturday.	Sunday.			Earnings per hour.		Employees.	Minimum.
							Classified.	Average.		
DROP FORGE—concluded.						<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>		
Trimmers.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	3	12.5	.....	.....	.....	.....
Do.....		10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	1	25.0	.....	.....	.....	.....
Total.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	4	15.6	.....	.....	.....	.....
Trimmers' helpers.....	6	12	12	.....	1	15.0	.....	.....	.....	.....
Do.....	6	12	12	.....	1	17.5	.....	.....	.....	.....
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	14	13.5	.....	.....	.....	.....
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	13	15.0	.....	.....	.....	.....
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	1	17.5	.....	.....	.....	.....
Total.....	6	.....	.....	.....	30	14.5	.....	.....	.....	.....
ELECTRICAL.										
Apprentices.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	1	7.5	.....	.....	.....	.....
Armature winders.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	2	25.0	.....	.....	.....	.....
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	1	27.0	.....	.....	.....	.....
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	2	30.0	.....	.....	.....	.....
Total.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	5	27.4	.....	.....	.....	.....
Armature winders' helpers.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	1	15.0	.....	.....	.....	.....
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	1	22.0	.....	.....	.....	.....
Total.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	2	18.5	.....	.....	.....	.....
Carbon setters.....	7	10 $\frac{5}{12}$	10 $\frac{5}{12}$	10 $\frac{5}{12}$	2	18.0	.....	.....	.....	.....
Cleaners.....	6	12	12	.....	1	12.5	.....	.....	.....	.....
Clerks.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	1	19.0	.....	.....	.....	.....
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	1	20.0	.....	.....	.....	.....
Total.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	2	19.5	.....	.....	.....	.....
Crane and motor inspectors.....	7	12	12	12	2	25.0	.....	.....	.....	.....
Do.....	7	12	12	12	1	26.0	.....	.....	.....	.....
Total.....	7	12	12	12	3	25.3	.....	.....	.....	.....
Engine tenders.....	7	12	12	12	2	19.0	.....	.....	.....	.....
Do.....	7	12	12	12	1	20.0	.....	.....	.....	.....
Do.....	6	12	12	.....	2	19.0	.....	.....	.....	.....
Do.....	6	11	11	.....	1	20.0	.....	.....	.....	.....
Total.....	.....	.....	.....	.....	6	19.3	.....	.....	.....	.....
Engine tenders' assistants.....	6	12	12	.....	3	15.0	.....	.....	.....	.....
Floating men.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	1	22.0	.....	.....	.....	.....
Foremen.....	7	12	12	12	3	32.5	.....	.....	.....	.....
Do.....	6	12	12	.....	1	25.0	.....	.....	.....	.....
Do.....	6	12	12	.....	1	27.0	.....	.....	.....	.....
Do.....	6	12	12	.....	1	28.0	.....	.....	.....	.....
Total.....	.....	.....	.....	.....	6	29.6	.....	.....	.....	.....
Lamp and controller repair men.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	1	24.0	.....	.....	.....	.....
Light trimmers.....	6	12	12	.....	6	12.5	.....	.....	.....	.....
Machine hands.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$	.....	1	22.0	.....	.....	.....	.....
Oilers.....	7	12	12	12	2	16.5	.....	.....	.....	.....
Do.....	7	12	12	12	1	19.0	.....	.....	.....	.....

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full working time.				Time workers.		Pieceworkers.			
	Days per week.	Hours per day.			Employees.	Rates per hour.	Actual earnings.		Guaranteed minimum rate per hour.	
		Monday to Friday.	Saturday.	Sunday.			Earnings per hour.		Employees.	Minimum.
							Classified.	Average.		
ELECTRICAL—concluded.						<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>		<i>Cents.</i>
Oilers.....	6	12	12		1	12.5				
Do.....	7	10 $\frac{1}{2}$	10 $\frac{1}{2}$	10 $\frac{1}{2}$	1	19.0				
Total.....					5	17.7				
Repair men.....	6	12	12		3	12.5				
Do.....	6	12	12		3	15.0				
Do.....	6	12	12		1	16.0				
Do.....	6	12	12		2	17.0				
Do.....	6	12	12		2	17.5				
Do.....	6	12	12		6	19.0				
Do.....	6	12	12		4	20.0				
Do.....	6	12	12		1	22.0				
Do.....	6	12	12		2	22.5				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		2	12.5				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	15.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	17.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	20.0				
Total.....	6				29	17.4				
Storekeepers.....	7	12	12	12	2	18.0				
Switchboard tenders.....	7	12	12	12	1	16.5				
Do.....	7	12	12	12	1	19.0				
Do.....	6	12	12		1	25.0				
Total.....					3	20.2				
Wire men.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		3	20.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		2	21.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		2	25.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		2	26.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	30.0				
Total.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		10	23.4				
Wire men's helpers.....	7	12	12	12	16	19.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		5	15.0				
Total.....					21	18.0				
ERECTING.										
Engineers.....	6	12	12		1	16.0				
Foremen, general.....	6	12	12		1	45.0				
Foremen, gangs.....	6	12	12		4	15.0				
Do.....	6	12	12		6	17.5				
Do.....	6	12	12		8	20.0				
Do.....	6	12	12		4	25.0				
Total.....	6	12	12		22	19.3				
Laborers.....	6	12	12		338	12.5				
Mechanical engineers.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		2	23.5				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	26.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	30.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	35.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	40.0				
Total.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		6	29.7				

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full working time.				Time workers.		Pieceworkers.			
	Days per week.	Hours per day.			Employees.	Rates per hour.	Actual earnings.		Guaranteed minimum rate per hour.	
		Monday to Friday.	Saturday.	Sunday.			Earnings per hour.		Employees.	Minimum.
							Classified.	Average.		
ERECTING—concluded.										
Riggers.....	6	12	12	.....	119	Cents. 15.0	Cents.	Cents.	Cents.	
Do.....	6	12	12	.....	4	16.5				
Do.....	6	12	12	.....	1	17.5				
Do.....	6	12	12	.....	1	18.5				
Total.....	6	12	12	.....	125	15.1				
Stone masons.....	6	12	12	.....	3	20.0				
Tool room men.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....	1	10.0				
FABRICATING.										
Blacksmiths.....	7	10 $\frac{1}{2}$	10 $\frac{1}{2}$	10 $\frac{1}{2}$	1	27.5				
Blacksmiths' helpers.....	7	10 $\frac{1}{2}$	10 $\frac{1}{2}$	10 $\frac{1}{2}$	1	15.0				
Do.....	7	10 $\frac{1}{2}$	10 $\frac{1}{2}$	10 $\frac{1}{2}$	1	22.5				
Total.....	7	10 $\frac{1}{2}$	10 $\frac{1}{2}$	10 $\frac{1}{2}$	2	18.8				
Bucker-up and helpers.....	7	13 $\frac{2}{3}$	13 $\frac{2}{3}$	13 $\frac{2}{3}$	10	13.0				
Do.....	7	13 $\frac{2}{3}$	13 $\frac{2}{3}$	13 $\frac{2}{3}$	5	13.5				
Do.....	7	13 $\frac{2}{3}$	13 $\frac{2}{3}$	13 $\frac{2}{3}$	12	15.0				
Do.....	7	13 $\frac{2}{3}$	13 $\frac{2}{3}$	13 $\frac{2}{3}$	2	16.0				
Do.....	7	13 $\frac{2}{3}$	13 $\frac{2}{3}$	13 $\frac{2}{3}$	3	16.5				
Do.....	7	13 $\frac{2}{3}$	13 $\frac{2}{3}$	13 $\frac{2}{3}$	1	17.5				
Do.....	7	10 $\frac{1}{2}$	10 $\frac{1}{2}$	10 $\frac{1}{2}$	3	12.5				
Do.....	7	10 $\frac{1}{2}$	10 $\frac{1}{2}$	10 $\frac{1}{2}$	2	13.0				
Do.....	7	10 $\frac{1}{2}$	10 $\frac{1}{2}$	10 $\frac{1}{2}$	30	15.0				
Do.....	7	10 $\frac{1}{2}$	10 $\frac{1}{2}$	10 $\frac{1}{2}$	3	16.0				
Do.....	7	10 $\frac{1}{2}$	10 $\frac{1}{2}$	10 $\frac{1}{2}$	1	16.5				
Do.....	7	10 $\frac{1}{2}$	10 $\frac{1}{2}$	10 $\frac{1}{2}$	3	17.0				
Do.....	7	10 $\frac{1}{2}$	10 $\frac{1}{2}$	10 $\frac{1}{2}$	4	17.5				
Total.....	7				79	14.9				
Clerks.....	7	10 $\frac{1}{2}$	10 $\frac{1}{2}$	10 $\frac{1}{2}$	1	24.5				
Clerks, stock.....	7	10 $\frac{1}{2}$	10 $\frac{1}{2}$	10 $\frac{1}{2}$	1	20.0				
Crane and motor inspectors.....	7	10 $\frac{1}{2}$	10 $\frac{1}{2}$	10 $\frac{1}{2}$	1	24.0				
Crane men.....	7	13 $\frac{2}{3}$	13 $\frac{2}{3}$	13 $\frac{2}{3}$	2	16.5				
Do.....	7	10 $\frac{1}{2}$	10 $\frac{1}{2}$	10 $\frac{1}{2}$	6	16.5				
Total.....	7				8	16.5				
Fitters.....	7	12	12	12	1	27.5				
Do.....	7	10 $\frac{1}{2}$	10 $\frac{1}{2}$	10 $\frac{1}{2}$	2	25.0				
Do.....	7	10 $\frac{1}{2}$	10 $\frac{1}{2}$	10 $\frac{1}{2}$	1	26.0				
Do.....	7	10 $\frac{1}{2}$	10 $\frac{1}{2}$	10 $\frac{1}{2}$	1	28.0				
Total.....	7				5	26.3				
Fitters' helpers.....	7	13 $\frac{2}{3}$	13 $\frac{2}{3}$	13 $\frac{2}{3}$	1	15.0				
Do.....	7	13 $\frac{2}{3}$	13 $\frac{2}{3}$	13 $\frac{2}{3}$	1	16.5				
Do.....	7	13 $\frac{2}{3}$	13 $\frac{2}{3}$	13 $\frac{2}{3}$	8	17.5				
Do.....	7	13 $\frac{2}{3}$	13 $\frac{2}{3}$	13 $\frac{2}{3}$	1	18.0				
Do.....	7	13 $\frac{2}{3}$	13 $\frac{2}{3}$	13 $\frac{2}{3}$	1	19.0				
Do.....	7	13 $\frac{2}{3}$	13 $\frac{2}{3}$	13 $\frac{2}{3}$	1	20.0				
Do.....	7	10 $\frac{1}{2}$	10 $\frac{1}{2}$	10 $\frac{1}{2}$	1	15.0				
Do.....	7	10 $\frac{1}{2}$	10 $\frac{1}{2}$	10 $\frac{1}{2}$	2	16.5				
Do.....	7	10 $\frac{1}{2}$	10 $\frac{1}{2}$	10 $\frac{1}{2}$	7	17.5				
Do.....	7	10 $\frac{1}{2}$	10 $\frac{1}{2}$	10 $\frac{1}{2}$	1	18.0				
Do.....	7	10 $\frac{1}{2}$	10 $\frac{1}{2}$	10 $\frac{1}{2}$	1	20.0				
Do.....	7	10 $\frac{1}{2}$	10 $\frac{1}{2}$	10 $\frac{1}{2}$	2	22.5				
Total.....	7				27	17.9				

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full working time.				Time workers.		Pieceworkers.				
	Days per week.	Hours per day.			Employees.	Rates per hour.	Actual earnings.			Guaranteed minimum rate per hour.	
		Monday to Friday.	Saturday.	Sunday.			Earnings per hour.		Employees.	Minimum.	
							Classified.	Average.			
FABRICATING—continued.						Cents.		Cents.		Cents.	
Foremen.....	7	13 ³ / ₁₂	13 ³ / ₁₂	13 ³ / ₁₂	1	27.5					
Do.....	7	10 ³ / ₁₂	10 ³ / ₁₂	10 ³ / ₁₂	1	18.0					
Do.....	7	10 ³ / ₁₂	10 ³ / ₁₂	10 ³ / ₁₂	1	35.0					
Total.....	7				3	26.8					
Laborers.....	7	13 ³ / ₁₂	13 ³ / ₁₂	13 ³ / ₁₂	2	12.5					
Do.....	7	13 ³ / ₁₂	13 ³ / ₁₂	13 ³ / ₁₂	9	13.0					
Do.....	7	13 ³ / ₁₂	13 ³ / ₁₂	13 ³ / ₁₂	1	15.0					
Do.....	7	10 ³ / ₁₂	10 ³ / ₁₂	10 ³ / ₁₂	7	12.5					
Do.....	7	10 ³ / ₁₂	10 ³ / ₁₂	10 ³ / ₁₂	38	13.0					
Do.....	7	10 ³ / ₁₂	10 ³ / ₁₂	10 ³ / ₁₂	1	13.5					
Do.....	7	10 ³ / ₁₂	10 ³ / ₁₂	10 ³ / ₁₂	1	15.0					
Total.....	7				59	13.0					
Layers-out.....	7	10 ³ / ₁₂	10 ³ / ₁₂	10 ³ / ₁₂	6	25.0					
Layers-out, helpers.....	7	13 ³ / ₁₂	13 ³ / ₁₂	13 ³ / ₁₂	1	16.5					
Do.....	7	13 ³ / ₁₂	13 ³ / ₁₂	13 ³ / ₁₂	1	17.0					
Do.....	7	10 ³ / ₁₂	10 ³ / ₁₂	10 ³ / ₁₂	1	17.5					
Do.....	7	10 ³ / ₁₂	10 ³ / ₁₂	10 ³ / ₁₂	1	20.0					
Do.....	7	10 ³ / ₁₂	10 ³ / ₁₂	10 ³ / ₁₂	1	22.5					
Total.....	7				5	18.7					
Loaders.....	7	10 ³ / ₁₂	10 ³ / ₁₂	10 ³ / ₁₂	1	25.0					
Machine hands.....	7	13 ³ / ₁₂	13 ³ / ₁₂	13 ³ / ₁₂	2	15.0					
Do.....	7	13 ³ / ₁₂	13 ³ / ₁₂	13 ³ / ₁₂	6	17.5					
Do.....	7	10 ³ / ₁₂	10 ³ / ₁₂	10 ³ / ₁₂	2	16.0					
Do.....	7	10 ³ / ₁₂	10 ³ / ₁₂	10 ³ / ₁₂	4	16.5					
Do.....	7	10 ³ / ₁₂	10 ³ / ₁₂	10 ³ / ₁₂	9	17.5					
Do.....	7	10 ³ / ₁₂	10 ³ / ₁₂	10 ³ / ₁₂	1	19.0					
Do.....	7	10 ³ / ₁₂	10 ³ / ₁₂	10 ³ / ₁₂	2	22.5					
Total.....	7				26	17.5					
Punch men.....	7	13 ³ / ₁₂	13 ³ / ₁₂	13 ³ / ₁₂	1	16.0					
Do.....	7	10 ³ / ₁₂	10 ³ / ₁₂	10 ³ / ₁₂	1	16.5					
Do.....	7	10 ³ / ₁₂	10 ³ / ₁₂	10 ³ / ₁₂	1	17.5					
Do.....	7	10 ³ / ₁₂	10 ³ / ₁₂	10 ³ / ₁₂	1	20.0					
Total.....	7				4	17.5					
Riveters.....	7	13 ³ / ₁₂	13 ³ / ₁₂	13 ³ / ₁₂	2	17.5					
Do.....	7	10 ³ / ₁₂	10 ³ / ₁₂	10 ³ / ₁₂	5	17.5					
Do.....	7	10 ³ / ₁₂	10 ³ / ₁₂	10 ³ / ₁₂	1	20.0					
Total.....	7				8	17.8					
Riveters' helpers.....	7	13 ³ / ₁₂	13 ³ / ₁₂	13 ³ / ₁₂	2	12.5					
Do.....	7	13 ³ / ₁₂	13 ³ / ₁₂	13 ³ / ₁₂	1	13.0					
Do.....	7	13 ³ / ₁₂	13 ³ / ₁₂	13 ³ / ₁₂	1	15.0					
Do.....	7	10 ³ / ₁₂	10 ³ / ₁₂	10 ³ / ₁₂	6	12.5					
Do.....	7	10 ³ / ₁₂	10 ³ / ₁₂	10 ³ / ₁₂	1	13.0					
Total.....					11	12.8					
Shear men.....	7	13 ³ / ₁₂	13 ³ / ₁₂	13 ³ / ₁₂	1	20.0					
Do.....	7	10 ³ / ₁₂	10 ³ / ₁₂	10 ³ / ₁₂	1	17.5					
Do.....	7	10 ³ / ₁₂	10 ³ / ₁₂	10 ³ / ₁₂	1	20.0					
Total.....	7				3	19.2					

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full working time.				Time workers.		Pieceworkers.			
	Days per week.	Hours per day.			Employees.	Rates per hour.	Actual earnings.		Guaranteed minimum rate per hour.	
		Monday to Friday.	Saturday.	Sunday.			Earnings per hour.		Employees.	Minimum.
							Classified.	Average.		
FABRICATING—concluded.						<i>Cents.</i>	<i>Cents.</i>		<i>Cents.</i>	
Shippers	7	12	12	12	1	22.5				
Stockers.....	7	10 $\frac{1}{2}$	10 $\frac{1}{2}$	10 $\frac{1}{2}$	1	20.0				
Templet makers.....	7	10 $\frac{1}{2}$	10 $\frac{1}{2}$	10 $\frac{1}{2}$	4	25.0				
Do.....	7	10 $\frac{1}{2}$	10 $\frac{1}{2}$	10 $\frac{1}{2}$	2	27.5				
Do.....	7	10 $\frac{1}{2}$	10 $\frac{1}{2}$	10 $\frac{1}{2}$	1	31.0				
Total.....	7	10 $\frac{1}{2}$	10 $\frac{1}{2}$	10 $\frac{1}{2}$	7	26.6				
Templet makers' helpers	7	10 $\frac{1}{2}$	10 $\frac{1}{2}$	10 $\frac{1}{2}$	1	20.0				
Do.....	7	10 $\frac{1}{2}$	10 $\frac{1}{2}$	10 $\frac{1}{2}$	1	23.0				
Total.....	7	10 $\frac{1}{2}$	10 $\frac{1}{2}$	10 $\frac{1}{2}$	2	21.5				
Tool room men.....	7	10 $\frac{1}{2}$	10 $\frac{1}{2}$	10 $\frac{1}{2}$	1	15.0				
GAS PRODUCERS.										
Ash men	7	12	12	12	4	13.5				
Coal conveyors.....	7	12	12	12	1	14.5				
Coal crushers.....	7	12	12	12	2	14.5				
Foremen.....	7	12	12	12	2	25.0				
Gas men.....	7	12	12	12	20	14.5				
Millwrights.....	7	12	12	12	1	20.0				
Valve men.....	7	12	12	12	2	13.5				
HAMMER FORGE.										
Blacksmiths, day.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		2	26.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	26.5				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	27.5				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	28.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	30.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		3	32.5				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	35.0				
Total.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		10	29.7				
Blacksmiths, night.....	5	12 $\frac{1}{2}$			3	25.0				
Do.....	5	12 $\frac{1}{2}$			1	27.5				
Do.....	5	12 $\frac{1}{2}$			1	28.0				
Total.....	5	12 $\frac{1}{2}$			5	26.1				
Blacksmiths' helpers, day	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		23	16.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	18.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		3	20.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	21.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		2	22.5				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	23.5				
Total.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		31	17.3				
Blacksmiths' helpers, night..	5	12 $\frac{1}{2}$			8	16.0				
Do.....	5	12 $\frac{1}{2}$			1	18.0				
Do.....	5	12 $\frac{1}{2}$			1	20.0				
Do.....	5	12 $\frac{1}{2}$			1	21.0				
Total.....	5	12 $\frac{1}{2}$			11	17.0				
Clerks.....	6	12	12		2	20.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	15.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	20.0				
Total.....	6				4	18.8				

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full working time.				Time workers.		Pieceworkers.				
							Actual earnings.		Guaranteed minimum rate per hour.		
	Days per week.	Hours per day.			Employees.	Rates per hour.	Employees.	Earnings per hour.			
		Monday to Friday.	Saturday.	Sunday.				Classified.			Average.	Employees.	Minimum.
HAMMER FORGE—concluded.						<i>Cents.</i>		<i>Cents.</i>	<i>Cents.</i>		<i>Cents.</i>
Crane boys.....	6	11	11	.....			2	10 and under 12		2	10.0
Do.....	6	11	11	.....			2	12 and under 14		2	11.5
Total.....	6	11	11	.....			4		11.7	4	10.8
Crane men.....	6	11	11	.....	2	19.5					
Crane men, first.....	6	11	11	.....			2	26 and under 28	27.6	2	19.5
Crane men, second.....	6	11	11	.....			2	24 and under 26	25.2	2	17.5
Floor men.....	6	10 $\frac{5}{12}$	5 $\frac{1}{12}$	.....	4	14.8					
Foremen.....	6	12	12	.....	1	37.5	1	42 and under 44	42.7		
Do.....	6	12	12	.....	1	40.0					
Total.....	6	12	12	.....	2	38.8	1	42 and under 44	42.7		
Forgers.....	6	11	11	.....	2	24.8	2	28 and under 30		4	26.3
Do.....	6	11	11	.....	1	25.0	2	34 and under 36		2	27.5
Do.....	6	11	11	.....	1	27.5	2	36 and under 38		2	30.0
Do.....	6	11	11	.....			2	46 and under 48			
Total.....	6	11	11	.....	4	25.5	8		36.5	8	27.5
Forgers' helpers, first.....	6	11	11	.....	2	17.5	4	22 and under 24		16	21.0
Do.....	6	11	11	.....	6	21.0	4	24 and under 26			21.0
Do.....	6	11	11	.....			2	32 and under 34			21.0
Do.....	6	11	11	.....			6	44 and under 46			21.0
Total.....	6	11	11	.....	8	20.1	16		33.1	16	21.0
Forgers' helpers, second.....	6	11	11	.....	4	18.0	6	18 and under 20		2	17.5
Do.....	6	11	11	.....			6	20 and under 22		16	18.0
Do.....	6	11	11	.....			4	24 and under 26			
Do.....	6	11	11	.....			2	26 and under 28			
Total.....	6	11	11	.....	4	18.0	18		22.1	18	17.9
Furnace tenders.....	7	12	12	12	2	17.5	2	20 and under 22		8	17.5
Do.....	7	12	12	12			4	22 and under 24			
Do.....	6	11	11	.....	2	17.5	2	18 and under 20			
Total.....					4	17.5	8		21.3	8	17.5
Furnace tenders' helpers.....	7	12	12	12	2	16.0					
Do.....	6	11	11	.....			2	20 and under 22	20.5	2	16.0
Hammer boys, day.....	6	10 $\frac{5}{12}$	5 $\frac{1}{12}$	.....	5	11.0					
Hammer boys, night.....	5	12 $\frac{5}{12}$		.....	3	11.0					
Hammer drivers.....	6	11	11	.....	2	17.5	2	18 and under 20		2	16.5
Do.....	6	11	11	.....	2	18.0	2	20 and under 22		6	18.0
Do.....	6	11	11	.....			4	24 and under 26			
Total.....	6	11	11	.....	4	17.8	8		22.7	8	17.6
Inspectors.....	6	10 $\frac{5}{12}$	5 $\frac{1}{12}$	.....	1	32.5					
Stampers.....	6	10 $\frac{5}{12}$	5 $\frac{1}{12}$	.....	1	12.5					
IRON FOUNDRY.											
Air furnace men.....	6	12	12	.....	1	20.0					
Apprentices.....	6	10 $\frac{5}{12}$	5 $\frac{1}{12}$	.....	1	5.0					
Do.....	6	10 $\frac{5}{12}$	5 $\frac{1}{12}$	.....	4	9.2					
Do.....	6	10 $\frac{5}{12}$	5 $\frac{1}{12}$	.....	6	12.5					
Total.....	6	10 $\frac{5}{12}$	5 $\frac{1}{12}$	.....	11	10.6					

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full working time.				Time workers.		Pleceworkers.			
	Hours per day.				Rates per hour.		Actual earnings.		Guaranteed minimum rate per hour.	
	Days per week.	Monday to Friday.	Saturday.	Sunday.	Employees.	Employees.	Classified.	Average.	Employees.	Minimum.
IRON FOUNDRY—continued.										
Blacksmiths.....	6	12	12			<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>		
Do.....	6	12	12		1	16.5				
Total.....	6	12	12		2	17.5				
Carpenters.....	6	10 ¹ / ₂	5 ⁴ / ₁₂		2	15.0				
Do.....	6	10 ¹ / ₂	5 ⁴ / ₁₂		2	17.5				
Do.....	6	10 ¹ / ₂	5 ⁴ / ₁₂		1	22.5				
Total.....	6	10 ¹ / ₂	5 ⁴ / ₁₂		5	17.5				
Chain men.....	6	12	12		4	15.0				
Do.....	6	10 ¹ / ₂	5 ⁴ / ₁₂		1	15.0				
Total.....	6				5	15.0				
Chippers' foremen.....	6	12	12		1	20.0				
Chippers.....	6	12	12		14	12.5	3	12 and under 14	17	12.5
Do.....	6	12	12		8	15.0	4	14 and under 16	22	15.0
Do.....	6	12	12				11	16 and under 18		
Do.....	6	12	12				17	18 and under 20		
Do.....	6	12	12				3	20 and under 22		
Do.....	6	12	12				1	22 and under 24		
Total.....	6	12	12		22	13.4	39	17.7	39	13.9
Clerks.....	6	12	12		1	15.0				
Do.....	6	12	12		1	17.5				
Do.....	6	10 ¹ / ₂	5 ⁴ / ₁₂		1	22.5				
Do.....	6	10 ¹ / ₂	5 ⁴ / ₁₂		1	14.0				
Do.....	6	10 ¹ / ₂	5 ⁴ / ₁₂		1	25.0				
Total.....	6				5	18.8				
Core makers and helpers.....	6	12	12		1	15.0				
Do.....	6	10 ¹ / ₂	5 ⁴ / ₁₂		1	17.5				
Do.....	6	10 ¹ / ₂	5 ⁴ / ₁₂		1	18.0				
Do.....	6	10 ¹ / ₂	5 ⁴ / ₁₂		5	20.0				
Do.....	6	10 ¹ / ₂	5 ⁴ / ₁₂		3	22.5				
Do.....	6	10 ¹ / ₂	5 ⁴ / ₁₂		18	25.0				
Do.....	6	10 ¹ / ₂	5 ⁴ / ₁₂		1	32.5				
Total.....	6				30	23.4				
Core boys.....	6	10 ¹ / ₂	5 ⁴ / ₁₂		1	5.0				
Do.....	6	10 ¹ / ₂	5 ⁴ / ₁₂		2	7.5				
Do.....	6	10 ¹ / ₂	5 ⁴ / ₁₂		2	12.5				
Total.....	6	10 ¹ / ₂	5 ⁴ / ₁₂		5	9.0				
Crane men.....	6	12	12		15	16.0				
Engine tenders.....	6	12	12		1	18.0				
Errand boys.....	6	12	12		1	5.0				
Finishers.....	6	12	12				1	16 and under 18	4	16.5
Do.....	6	12	12				3	18 and under 20		
Total.....	6	12	12				4	19.0	4	16.5
Firemen.....	6	12	12		2	14.0				
Foremen.....	6	13	13		1	20.0				
Do.....	6	12	12		1	22.5				
Do.....	6	12	12		1	30.0				

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full working time.				Time workers.		Pieceworkers.			
	Days per week.	Hours per day.			Employees.	Rates per hour.	Actual earnings.		Guaranteed minimum rate per hour.	
		Monday to Friday.	Saturday.	Sunday.			Earnings per hour.			
							Classified.	Average.	Employees.	Minimum.
IRON FOUNDRY—concluded.										
Foremen.....	6	12	12	.....	1	<i>Cents.</i> 37.5	<i>Cents.</i>	<i>Cents.</i>		<i>Cents.</i>
Do.....	6	12	12	.....	1	45.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....	1	30.0				
Total.....	6	.....	.....	.....	6	30.8				
Laborers.....	6	12	12	.....	189	12.5				
Do.....	6	12	12	.....	5	15.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....	139	12.5				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....	2	14.0				
Total.....	6	.....	.....	.....	335	12.5				
Mold closers.....	6	12	12	.....	2	14.0				
Molders.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....	1	17.5				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....	1	20.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....	41	25.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....	37	27.5				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....	14	30.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....	11	32.5				
Total.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....	105	27.2				
Molders' helpers.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....	1	17.5				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....	2	18.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....	5	20.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....	1	22.5				
Total.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....	9	19.6				
Pattern house men.....	6	12	12	.....	1	12.5				
Do.....	6	12	12	.....	1	16.0				
Do.....	6	12	12	.....	1	22.5				
Total.....	6	12	12	.....	3	17.0				
Rammers.....	6	12	12	.....	.....	2	16 and under 18		13	16.5
Do.....	6	12	12	.....	.....	4	18 and under 20			
Do.....	6	12	12	.....	.....	3	20 and under 22			
Do.....	6	12	12	.....	.....	4	22 and under 24			
Total.....	6	12	12	.....	.....	13		20.3	13	16.5
Rammers' helpers.....	6	12	12	.....	.....	1	12 and under 14.		1	12.5
Do.....	6	12	12	.....	.....	2	14 and under 16.		4	14.0
Do.....	6	12	12	.....	.....	2	16 and under 18.			
Total.....	6	12	12	.....	.....	5		15.5	5	13.7
Repair men.....	6	12	12	.....	1	15.0				
Do.....	6	12	12	.....	1	16.0				
Do.....	6	12	12	.....	2	20.0				
Total.....	6	12	12	.....	4	17.8				
Tappers.....	6	12	12	.....	4	20.0				
Window cleaners.....	6	12	12	.....	1	14.0				
LABORATORIES.										
Determinators.....	6	12	12	.....	1	16.5				
Do.....	6	12	12	.....	1	17.5				
Do.....	6	10 $\frac{1}{2}$	10 $\frac{1}{2}$	.....	1	14.6				
Do.....	6	10 $\frac{1}{2}$	10 $\frac{1}{2}$	.....	1	15.0				
Total.....	6	.....	.....	.....	4	15.9				

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full working time.				Time workers.		Pieceworkers.				
	Hours per day.				Employees.	Rates per hour.	Actual earnings.		Guaranteed minimum rate per hour.		
	Days per week.	Monday to Friday.	Saturday.	Sunday.			Earnings per hour.		Employees.	Minimum.	
							Employees.	Classified.	Average.	Employees.	Minimum.
LABORATORIES—concluded.						<i>Cents.</i>		<i>Cents.</i>	<i>Cents.</i>		<i>Cents.</i>
Foremen	6	12	12		1	19.6					
Machine hands	7	12	12	12	1	15.8					
Do	6	10	10		1	15.0					
Total					2	15.4					
Photographers	6	10	10		1	20.0					
Samplers	6	11½	11½		1	20.0					
Weighers	6	10½	10½		1	17.5					
Do	6	10½	10½		1	19.0					
Total	6	10½	10½		2	18.3					
MACHINE SHOP NO. 2.											
Chain men	6	10½	5½		8	15.0	1	10 and under 12			
Do	6	10½	5½		1	16.0	5	14 and under 16		1	13.5
Do	6	10½	5½				13	16 and under 18		3	14.0
Do	6	10½	5½				13	18 and under 20		28	15.0
Do	6	10½	5½				2	20 and under 22		2	17.5
Total	6	10½	5½		9	15.1	34		17.3	34	15.0
Chief clerks	6	10½	5½		1	40.1					
Chip men	6	10½	5½		2	13.5	2	14 and under 16		3	13.5
Do	6	10½	5½				2	16 and under 18		1	15.0
Total	6	10½	5½		2	13.5	4		15.6	4	13.9
Clerks	6	10½	5½		1	14.0	1	16 and under 18		1	15.0
Do	6	10½	5½		2	15.0	1	36 and under 38		1	30.0
Do	6	10½	5½		1	16.0					
Do	6	10½	5½		1	16.8					
Do	6	10½	5½		1	17.7					
Do	6	10½	5½		1	20.0					
Do	6	10½	5½		2	21.6					
Total	6	10½	5½		9	17.5	2		26.5	2	22.5
Clerks, shipping	6	10½	5½		1	26.0					
Crane inspectors	6	10½	5½				1	20 and under 22	20.5	1	17.5
Crane men	6	10½	5½		2	16.0	10	14 and under 16		13	15.0
Do	6	10½	5½				21	18 and under 20		18	16.0
Do	6	10½	5½				1	20 and under 22		1	17.5
Total	6	10½	5½		2	16.0	32		18.0	32	15.6
Draftsmen	6	10½	5½		1	32.5					
Engine tenders	6	10½	5½		2	17.5					
Foremen	6	10½	5½		1	60.1	1	34 and under 36		1	30.0
Do	6	10½	5½		1	64.1	2	38 and under 40		1	34.0
Do	6	10½	5½				1	40 and under 42		2	35.0
Do	6	10½	5½				3	42 and under 44		3	37.5
Total	6	10½	5½		2	62.1	7		40.3	7	35.2
Grinders	6	10½	5½				1	14 and under 16			
Do	6	10½	5½				2	16 and under 18		3	15.0
Total	6	10½	5½				3		16.5	3	15.0

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full working time.				Time workers.		Pieceworkers.				
	Days per week.	Hours per day.			Employees.	Rates per hour.	Actual earnings.			Guaranteed minimum rate per hour.	
		Monday to Friday.	Saturday.	Sunday.			Earnings per hour.				
							Classified.	Average.	Employees.	Minimum.	
MACHINE SHOP No. 2—cont'd.											
Inspectors.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	1	27.5	1	32 and under 34	.....	1	27.5
Do.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	1	30.0	1	38 and under 40	.....	1	31.5
Total.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	2	28.8	2	.....	35.8	2	29.5
Laborers.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	2	12.5	.....	.....	.....	.....	.....
Do.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	1	15.0	.....	.....	.....	.....	.....
Total.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	3	13.3	.....	.....	.....	.....	.....
Machine hands and helpers..	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	2	10.0	1	10 and under 12	.....	4	10.0
Do.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	4	12.5	10	12 and under 14	.....	8	12.5
Do.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	10	13.5	45	14 and under 16	.....	30	13.5
Do.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	17	14.0	101	16 and under 18	.....	16	14.0
Do.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	56	15.0	44	18 and under 20	.....	114	15.0
Do.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	8	16.0	38	20 and under 22	.....	18	16.0
Do.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	26	17.5	36	22 and under 24	.....	1	16.5
Do.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	2	18.0	22	24 and under 26	.....	44	17.5
Do.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	1	18.5	9	26 and under 28	.....	1	18.0
Do.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	35	20.0	3	28 and under 30	.....	43	20.0
Do.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	39	22.5	1	36 and under 38	.....	27	22.5
Do.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	1	24.0	.....	.....	.....	2	23.0
Do.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	.....	.....	.....	.....	.....	2	23.5
Total.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	201	17.5	310	.....	19.1	310	16.6
Machinists.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	84	25.0	5	24 and under 26	.....	24	25.0
Do.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	1	26.0	12	26 and under 28	.....	1	26.5
Do.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	3	26.5	12	28 and under 30	.....	24	27.5
Do.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	72	27.5	9	30 and under 32	.....	16	30.0
Do.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	3	28.5	11	32 and under 34	.....	5	32.5
Do.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	35	30.0	11	34 and under 36	.....	3	35.0
Do.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	20	32.5	4	36 and under 38	.....	1	36.0
Do.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	5	35.0	4	38 and under 40	.....	.....	.....
Do.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	2	37.5	4	40 and under 42	.....	.....	.....
Do.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	.....	.....	1	42 and under 44	.....	.....	.....
Do.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	.....	.....	1	48 and under 50	.....	.....	.....
Total.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	225	27.6	74	.....	32.3	74	28.0
Machinists' apprentices.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	27	5.0	6	4 and under 6	.....	9	5.0
Do.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	5	7.5	5	6 and under 8	.....	3	7.5
Do.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	1	8.7	5	8 and under 10	.....	6	9.0
Do.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	28	9.0	3	10 and under 12	.....	2	9.6
Do.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	31	12.5	4	12 and under 14	.....	5	12.5
Do.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	.....	.....	2	14 and under 16	.....	.....	.....
Total.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	92	8.9	25	.....	9.0	25	8.1
Oilers.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	2	15.0	.....	.....	.....	.....	.....
Pipe repair men.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	1	15.0	.....	.....	.....	.....	.....
Shippers.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	.....	.....	1	28 and under 30	28.5	1	22.5
Sketchers.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	1	12.5	.....	.....	.....	.....	.....
Speed men.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	1	32.5	1	38 and under 40	39.0	1	32.5
Stenographers.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	1	15.0	.....	.....	.....	.....	.....
Superintendents, assistant.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	1	60.1	.....	.....	.....	.....	.....
Superintendents, night.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	.....	.....	1	50 and under 52	50.6	1	40.0
Sweepers.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	3	12.5	.....	.....	.....	.....	.....
Test men.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	.....	.....	1	24 and under 26	24.5	1	20.0
Test stampers.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	.....	.....	1	16 and under 18	.....	2	15.0
Do.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	.....	.....	1	18 and under 20	.....	1	16.5
Do.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	.....	.....	1	20 and under 22	.....	2	17.5
Do.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	.....	.....	2	22 and under 24	.....	.....	.....
Total.....	6	10 ³ / ₁₂	5 ³ / ₁₂	.....	.....	.....	5	.....	20.4	5	16.3

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full working time.				Time workers.		Pieceworkers.				
	Days per week.	Hours per day.			Employees.	Rates per hour.	Actual earnings.		Guaranteed minimum rate per hour.		
		Monday to Friday.	Saturday.	Sunday.			Earnings per hour.				
							Classified.	Average.	Employees.	Minimum.	
MACHINE SHOP NO. 2—conc'd.						<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>		<i>Cents.</i>	
Transportation men.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	.....	1	20 and under 22	.....	1	17.5	
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	.....	1	22 and under 24	.....	1	20.0	
Total.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	.....	2	.....	21.8	2	18.8	
MACHINE SHOP NO. 4.											
Blacksmiths.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	.....	1	34 and under 36	35.2	1	27.5	
Clerks.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	1	16.0	.....	.....	.....	.....
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	4	17.5	.....	.....	.....	.....
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	1	37.5	.....	.....	.....	.....
Total.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	6	20.6	.....	.....	.....	.....
Crane men.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	1	15.0	1	20 and under 22	20.7	1	17.0
Draftsmen.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	1	25.0	.....	.....	.....	.....
Foremen.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	1	40.0	.....	.....	.....	.....
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	1	43.0	.....	.....	.....	.....
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	1	45.5	.....	.....	.....	.....
Total.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	3	42.8	.....	.....	.....	.....
Machine hands and helpers..	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	15	12.5	1	8 and under 10	.....	6	12.5
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	4	13.5	3	12 and under 14	.....	1	13.5
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	17	14.0	8	14 and under 16	.....	8	14.0
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	31	15.0	6	16 and under 18	.....	10	15.0
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	7	16.0	12	18 and under 20	.....	11	17.5
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	1	16.5	8	20 and under 22	.....	2	18.0
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	1	17.0	15	22 and under 24	.....	21	20.0
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	15	17.5	5	24 and under 26	.....	1	21.0
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	2	18.0	12	26 and under 28	.....	21	22.5
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	3	18.5	6	28 and under 30	.....	.....	.....
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	30	20.0	2	30 and under 32	.....	.....	.....
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	1	21.0	1	32 and under 34	.....	.....	.....
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	43	22.5	1	36 and under 38	.....	.....	.....
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	.....	.....	1	46 and under 48	.....	.....	.....
Total.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	170	17.8	81	.....	22.4	81	18.4
Machinists.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	71	25.0	5	24 and under 26	.....	36	25.0
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	47	27.5	10	26 and under 28	.....	12	27.5
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	30	30.0	7	28 and under 30	.....	3	30.0
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	5	32.5	6	30 and under 32	.....	.....	.....
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	1	33.5	7	32 and under 34	.....	.....	.....
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	7	35.0	3	34 and under 36	.....	.....	.....
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	1	37.5	4	36 and under 38	.....	.....	.....
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	.....	.....	1	38 and under 40	.....	.....	.....
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	.....	.....	1	42 and under 44	.....	.....	.....
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	.....	.....	1	44 and under 46	.....	.....	.....
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	.....	.....	2	46 and under 48	.....	.....	.....
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	.....	.....	2	50 and under 52	.....	.....	.....
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	.....	.....	1	52 and under 54	.....	.....	.....
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	.....	.....	1	54 and under 56	.....	.....	.....
Total.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	162	27.4	51	.....	33.3	51	25.9
Machinists' apprentices.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	15	5.0	11	4 and under 6	.....	14	5.0
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	7	7.5	3	6 and under 8	.....	3	7.5
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	12	9.2	7	8 and under 10	.....	7	9.2
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	16	12.5	2	10 and under 12	.....	10	12.5
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	.....	.....	6	12 and under 14	.....	.....	.....
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	.....	.....	3	14 and under 16	.....	.....	.....

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full work- ing time.				Time workers.		Pieceworkers.					
	Days per week.	Hours per day.			Employees.	Rates per hour.	Actual earnings.			Guar- anteed mini- mum rate per hour.		
		Monday to Friday.	Saturday.	Sunday.			Earnings per hour.		Average.		Employees.	Minimum.
							Classified.					
MACHINE SHOP NO. 4—cont'd.						<i>Cents.</i>		<i>Cents.</i>	<i>Cents.</i>		<i>Cents.</i>	
Machinists' apprentices.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$				1	16 and under 18				
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$				1	20 and under 22				
Total.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$		50	8.8	34		9.6	34	8.3	
Office boys.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$				1	4 and under 6	5.1	1	5.0	
MACHINE SHOP NO. 6.												
Blacksmiths.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$		1	35.0						
Carpenters.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$		1	21.0						
Chain men.....	6	12 $\frac{9}{12}$	12 $\frac{9}{12}$		3	14.0						
Do.....	6	12 $\frac{9}{12}$	12 $\frac{9}{12}$		1	15.0						
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$		4	14.0						
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$		3	15.0						
Total.....	6				11	14.4						
Chasers.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$		1	12.0						
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$		1	15.0						
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$		1	18.0						
Total.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$		3	15.0						
Clerks.....	6	12 $\frac{9}{12}$	12 $\frac{9}{12}$		1	25.0						
Do.....	5	12 $\frac{9}{12}$			1	15.0						
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$		1	17.5						
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$		1	20.0						
Total.....					4	19.4						
Crane men.....	6	12 $\frac{9}{12}$	12 $\frac{9}{12}$		2	17.5						
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$		3	15.0						
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$		1	16.0						
Total.....	6				6	16.0						
Elevator operators.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$		1	16.0						
Erecting engineers.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$		1	30.0						
Foremen.....	6	12 $\frac{9}{12}$	12 $\frac{9}{12}$		1	40.0						
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$		2	32.5						
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$		1	50.0						
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$		1	60.0						
Total.....	6				5	43.0						
Grinders.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$		2	15.0						
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$		1	20.0						
Total.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$		3	16.7						
Laborers.....	6	12 $\frac{9}{12}$	12 $\frac{9}{12}$		3	12.5						
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$		13	12.5						
Total.....	6				16	12.5						
Locksmiths.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$		1	22.5						
Machine hands and helpers..	6	12 $\frac{9}{12}$	12 $\frac{9}{12}$		1	15.0						
Do.....	6	12 $\frac{9}{12}$	12 $\frac{9}{12}$		4	17.5						
Do.....	6	12 $\frac{9}{12}$	12 $\frac{9}{12}$		1	18.0						

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full working time.				Time workers.		Pieceworkers.				
	Days per week.	Hours per day.			Employees.	Rates per hour.	Actual earnings.			Guaranteed minimum rate per hour.	
		Monday to Friday.	Saturday.	Sunday.			Earnings per hour.		Employees.	Minimum.	
							Classified.	Average.			
MACHINE SHOP No. 6—conc'd.						<i>Cents.</i>		<i>Cents.</i>		<i>Cents.</i>	
Machine hands and helpers..	6	12 $\frac{1}{2}$	12 $\frac{1}{2}$		1	20.0					
Do.....	5	12 $\frac{1}{2}$			2	14.0					
Do.....	5	12 $\frac{1}{2}$			1	16.0					
Do.....	5	12 $\frac{1}{2}$			3	17.5					
Do.....	5	12 $\frac{1}{2}$			3	20.0					
Do.....	5	12 $\frac{1}{2}$			9	22.5					
Do.....	5	12			1	15.0					
Do.....	5	12			1	22.5					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	11.0					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		2	13.5					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		12	14.0					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		29	15.0					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		6	16.0					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		30	17.5					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		4	18.0					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		26	20.0					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		24	22.5					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		2	23.0					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		2	24.0					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		3	25.0					
Total.....					168	18.3					
Machinists.....	6	12 $\frac{1}{2}$	12 $\frac{1}{2}$		2	25.0	2	30 and under 32	30.6	2	25.0
Do.....	6	12 $\frac{1}{2}$	12 $\frac{1}{2}$		1	27.0					
Do.....	6	12 $\frac{1}{2}$	12 $\frac{1}{2}$		4	27.5					
Do.....	6	12 $\frac{1}{2}$	12 $\frac{1}{2}$		1	32.5					
Do.....	5	12 $\frac{1}{2}$			7	25.0					
Do.....	5	12 $\frac{1}{2}$			2	27.5					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		26	25.0					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	26.0					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	26.5					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		32	27.5					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	28.0					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		15	30.0					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	32.0					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		2	32.5					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		3	35.0					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		2	40.0					
Total.....					101	27.6	2	30 and under 32	30.6	2	25.0
Machinists' apprentices.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		6	5.0					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	9.2					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		7	12.5					
Total.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		14	9.1					
Oilers.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	14.0					
Polishers.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	20.0					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	22.5					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	25.0					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	27.5					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	32.0					
Total.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		5	25.4					
Shippers.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	30.0					
Straighteners.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	15.0					
Watchmen.....	6	13 $\frac{1}{2}$	13 $\frac{1}{2}$		1	12.5					

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full work- ing time.				Time workers.		Pieceworkers.			
							Actual earnings.		Guaran- teed mini- mum rate per hour.	
	Hours per day.						Earnings per hour.			
	Days per week.	Monday to Friday.	Saturday.	Sunday.	Employees.	Rates per hour.	Employees.	Classified.	Average.	Employees.	Minimum.
MECHANICAL.										
Apprentices.....	6	12	12	.....	1	<i>Cents.</i> 10.0	.....	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>
Babblers.....	7	12	12	12	1	20.0	.....	.....	.....	.....
Cable splicers.....	7	12	12	12	1	25.0	.....	.....	.....	.....
Crane inspectors.....	7	12	12	12	1	19.0	.....	.....	.....	.....
Engineers.....	7	12	12	12	2	27.0	.....	.....	.....	.....
Do.....	7	12	12	12	1	30.0	.....	.....	.....	.....
Total.....	7	12	12	12	3	28.0	.....	.....	.....	.....
Foremen.....	7	12	12	12	1	30.0	.....	.....	.....	.....
Do.....	7	12	12	12	1	35.0	.....	.....	.....	.....
Total.....	7	12	12	12	2	32.5	.....	.....	.....	.....
Hydraulic men.....	7	12	12	12	1	25.0	.....	.....	.....	.....
Machine hands and helpers..	7	12	12	12	3	15.0	.....	.....	.....	.....
Do.....	7	12	12	12	3	17.5	.....	.....	.....	.....
Do.....	7	12	12	12	4	20.0	.....	.....	.....	.....
Do.....	7	12	12	12	5	22.5	.....	.....	.....	.....
Do.....	6	12	12	.....	1	20.0	.....	.....	.....	.....
Do.....	6	12	12	.....	1	22.5	.....	.....	.....	.....
Total.....	.....	.....	.....	.....	17	19.6	.....	.....	.....	.....
Machinists.....	7	12	12	12	9	25.0	.....	.....	.....	.....
Do.....	7	12	12	12	2	27.5	.....	.....	.....	.....
Do.....	7	12	12	12	1	30.0	.....	.....	.....	.....
Do.....	6	12	12	.....	1	25.0	.....	.....	.....	.....
Total.....	.....	.....	.....	.....	13	25.8	.....	.....	.....	.....
Master mechanics' assistants.	7	13	13	13	1	37.0	.....	.....	.....	.....
Millwright foremen.....	7	12	12	12	2	32.5	.....	.....	.....	.....
Motor inspectors.....	7	12	12	12	1	23.0	.....	.....	.....	.....
Motor oilers.....	7	12	12	12	1	17.5	.....	.....	.....	.....
Oilers.....	7	12	12	12	3	17.5	.....	.....	.....	.....
Oil-system men.....	7	12	12	12	1	25.0	.....	.....	.....	.....
Pressure men.....	7	12	12	12	2	20.0	.....	.....	.....	.....
MILL, PUDDLING.										
Buggymen.....	6	12	12	.....	.....	.....	1	26 and under 28	.....	.....
Do.....	6	12	12	.....	.....	.....	1	28 and under 30	.....	.....
Total.....	6	12	12	.....	.....	.....	2	.....	27.4	.....
Catchers.....	6	12	12	.....	.....	.....	4	28 and under 30	29.2	.....
Drag outs.....	6	12	12	.....	.....	.....	4	20 and under 22	20.9	.....
Hookers.....	6	12	12	.....	.....	.....	4	22 and under 24	22.9	.....
Puddlers.....	6	12	12	.....	.....	.....	1	18 and under 20	.....	.....
Do.....	6	12	12	.....	.....	.....	8	20 and under 22	.....	.....
Do.....	6	12	12	.....	.....	.....	7	22 and under 24	.....	.....
Do.....	6	12	12	.....	.....	.....	9	24 and under 26	.....	.....
Do.....	6	12	12	.....	.....	.....	10	26 and under 28	.....	.....
Do.....	6	12	12	.....	.....	.....	7	28 and under 30	.....	.....
Do.....	6	12	12	.....	.....	.....	10	30 and under 32	.....	.....
Do.....	6	12	12	.....	.....	.....	6	32 and under 34	.....	.....
Do.....	6	12	12	.....	.....	.....	4	34 and under 36	.....	.....
Total.....	6	12	12	.....	.....	.....	62	.....	27.2	.....

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full working time.				Time workers.		Pieceworkers.			
	Days per week.	Hours per day.			Employees.	Rates per hour.	Actual earnings.		Guaranteed minimum rate per hour.	
		Monday to Friday.	Saturday.	Sunday.			Earnings per hour.			
							Classified.	Average.	Employees.	Minimum.
MILL, PUDDLING—concluded.										
Puddlers' helpers.....	6	12	12	.....		<i>Cents.</i>	2	<i>Cents.</i> 8 and under 10	<i>Cents.</i>	<i>Cents.</i>
Do.....	6	12	12	.....			4	10 and under 12		
Do.....	6	12	12	.....			13	12 and under 14		
Do.....	6	12	12	.....			19	14 and under 16		
Do.....	6	12	12	.....			16	16 and under 18		
Do.....	6	12	12	.....			2	18 and under 20		
Do.....	6	12	12	.....			1	20 and under 22		
Total.....	6	12	12	.....			57		14.8	
Rollers, first.....	6	12	12	.....			1	32 and under 34		
Do.....	6	12	12	.....			1	34 and under 36		
Total.....	6	12	12	.....			2		33.9	
Rollers, second.....	6	12	12	.....			1	30 and under 32		
Do.....	6	12	12	.....			1	32 and under 34		
Total.....	6	12	12	.....			2		31.3	
Stockers.....	6	12	12	.....			13	4 and under 6	4.7	
MILL, 48-INCH, GRAY, BLOOM- ING.										
Engineers.....	7	12	12	12	.....		2	34 and under 36	35.9	
Engine oilers.....	7	12	12	12	.....		2	20 and under 22	21.0	
Extra men.....	7	12	12	12	.....		1	26 and under 28	27.5	
Laborers.....	7	12	12	12	.....		4	14 and under 16	15.5	
Manipulators.....	7	12	12	12	.....		2	30 and under 32	30.7	
Millwrights.....	7	12	12	12	.....		2	26 and under 28	27.0	
Millwrights' helpers.....	7	12	12	12	.....		4	20 and under 22	21.3	
Rollers.....	7	12	12	12	.....		2	60 and under 62	60.8	
Shear men.....	7	12	12	12	.....		2	30 and under 32	30.2	
MILL, 48-INCH, GRAY, SOAKING PITS.										
Bottom men, first.....	7	12	12	12	.....		2	28 and under 30	28.8	
Bottom men, second.....	7	12	12	12	.....		6	32 and under 34	33.4	
Cover boys.....	7	12	12	12	.....		2	8 and under 10	8.6	
Heaters.....	7	12	12	12	.....		2	58 and under 60	58.8	
Recorders.....	7	12	12	12	.....		2	18 and under 20	19.7	
MILL, 48-INCH, GRAY, ROLLING.										
Approach crane men.....	7	12	12	12	1	16.5				
Checkers.....	7	12	12	12	4	17.5				
Checkers' helpers.....	7	12	12	12	4	12.5				
Crane men.....	7	12	12	12	2	16.5				
Do.....	7	12	12	12	5	17.5				
Total.....	7	12	12	12	7	17.2				
Cutters.....	7	12	12	12	.....		2	36 and under 38	36.9	
Engineers.....	7	12	12	12	.....		4	34 and under 36	34.9	
Engine oilers.....	7	12	12	12	.....		2	20 and under 22		
Do.....	7	12	12	12	.....		2	22 and under 24		
Total.....	7	12	12	12	.....		4		21.5	
Foremen, day.....	7	12	12	12	1	25.0				
Foremen, night.....	7	12	12	12	.....		1	54 and under 56	55.7	

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full working time.				Time workers.		Pieceworkers.			
	Days per week.	Hours per day.			Employees.	Rates per hour.	Actual earnings.		Guaranteed minimum rate per hour.	
		Monday to Friday.	Saturday.	Sunday.			Earnings per hour.		Employees.	Minimum.
							Classified.	Average.		
MILL, 48-INCH, GRAY, ROLL- ING—concluded.										
Greasers, first.....	7	12	12	12		<i>Cents.</i>		<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>
Do.....	7	12	12	12			2	16 and under 18 18 and under 20		
Total.....	7	12	12	12			4	18.0		
Greasers, second.....	7	12	12	12			4	14 and under 16	15.2	
Guide setters.....	7	12	12	12			8	26 and under 28	27.8	
Heaters' assistants.....	7	12	12	12	2	29.2				
Heat boys.....	7	12	12	12	2	8.0				
Hydraulic men.....	7	12	12	12	2	25.0				
Inspectors.....	7	12	12	12			2	22 and under 24	22.1	
Machinists.....	7	12	12	12	2	25.0				
Machinists' helpers.....	7	12	12	12	1	12.5				
Markers.....	7	12	12	12			2	16 and under 18	16.4	
Master machinists' assistants.....	7	12	12	12	1	41.1				
Millwrights, foremen.....	7	12 ³ / ₄	12 ³ / ₄	12 ³ / ₄	1	30.0				
Do.....	7	12 ³ / ₄	12 ³ / ₄	12 ³ / ₄	1	32.5				
Total.....	7				2	31.3				
Millwrights.....	7	12	12	12			2	26 and under 28	26.7	
Millwrights' helpers.....	7	12	12	12			4	20 and under 22	21.0	
Motor inspectors.....	7	12	12	12	2	23.0				
Motor inspectors' helpers.....	7	12	12	12	2	19.0				
Motor oilers.....	7	12	12	12	1	16.5				
Pull offs.....	7	12	12	12			2	22 and under 24	23.6	
Pull ons.....	7	12	22	12			2	24 and under 26	24.4	
Recorders.....	7	12	12	12			2	20 and under 22	20.2	
Rigger foremen.....	7	12	12	12	2	20.0				
Rigger laborers.....	7	12	12	12	16	12.5				
Roll grinders.....	7	12	12	12	2	17.5				
Rollers.....	7	12	12	12			2	58 and under 60		
Do.....	7	12	12	12			2	60 and under 62		
Total.....	7	12	12	12			4	60.3		
Saw grinders.....	7	12	12	12	1	20.0				
Saw grinders' helpers.....	7	12	12	12	1	13.0				
Saw men.....	7	12	12	12			2	30 and under 32	30.7	
Scrap men.....	7	12	12	12			2	14 and under 16	14.9	
Screw downs.....	7	12	12	12			2	28 and under 30		
Do.....	7	12	12	12			2	32 and under 34		
Total.....	7	12	12	12			4	31.2		
Shear crane men.....	7	12	12	12	2	16.5				
Stopper setters.....	7	12	12	12			2	16 and under 18	17.7	
Table men.....	7	12	12	12			4	22 and under 24	22.8	
Templet makers.....	7	12	12	12	1	25.0				
MILL, 48-INCH, GRAY, YARD.										
Billet yard:										
Checkers.....	7	12	12	12	2	16.7				
Chippers.....	7	12	12	12	8	13.5				
Clerks.....	7	12	12	12	1	20.8				
Crane men.....	7	12	12	12	1	16.5				
Foremen.....	7	12	12	12	1	30.0				
Laborers.....	7	12	21	12	3	12.5				

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full working time.				Time workers.		Pieceworkers.				
	Hours per day.				Employees.		Actual earnings.		Guaranteed minimum rate per hour.		
							Earnings per hour.				
	Days per week.	Monday to Friday.	Saturday.	Sunday.			Classified.	Average.	Employees.	Minimum.	
MILL, 48-INCH, GRAY, YARD—continued.											
Cold saws:						<i>Cents.</i>		<i>Cents.</i>	<i>Cents.</i>		<i>Cents.</i>
Chain men	7	12	12	12	.....	.....	2	14 and under 16	.....	.....	.....
Do	7	12	12	12	.....	.....	2	16 and under 18	.....	.....	.....
Total	7	12	12	12	.....	.....	4	.....	16.3	.....	.....
Chippers	7	12	12	12	.....	.....	3	14 and under 16	.....	.....	.....
Do	7	12	12	12	.....	.....	4	16 and under 18	.....	.....	.....
Total	7	12	12	12	.....	.....	7	.....	16.1	.....	.....
Clampers	7	12	12	12	.....	.....	1	14 and under 16	.....	.....	.....
Do	7	12	12	12	.....	.....	1	16 and under 18	.....	.....	.....
Total	7	12	12	12	.....	.....	2	.....	15.8	.....	.....
Cutters	7	12	12	12	.....	.....	1	24 and under 26	.....	.....	.....
Do	7	12	12	12	.....	.....	1	26 and under 28	.....	.....	.....
Total	7	12	12	12	.....	.....	2	.....	26.3	.....	.....
Foremen	7	12	12	12	1	25.0	.....	.....	.....	.....	.....
Gang men	7	12	12	12	.....	.....	2	24 and under 26	25.4	.....	.....
Inspectors	7	12	12	12	2	17.5	.....	.....	.....	.....	.....
Laborers	7	12	12	12	2	12.5	.....	.....	.....	.....	.....
Markers	7	12	12	12	.....	.....	1	20 and under 22	.....	.....	.....
Do	7	12	12	12	.....	.....	1	22 and under 24	.....	.....	.....
Total	7	12	12	12	.....	.....	2	.....	22.6	.....	.....
Pilers	7	12	12	12	.....	.....	2	18 and under 20	19.0	.....	.....
Saw operators	7	12	12	12	2	25.0	1	24 and under 26	.....	.....	.....
Do	7	12	12	12	.....	.....	1	26 and under 28	.....	.....	.....
Total	7	12	12	12	2	25.0	2	.....	26.3	.....	.....
Scrap men	7	12	12	12	1	12.5	.....	.....	.....	.....	.....
Step makers	7	12	12	12	2	17.5	.....	.....	.....	.....	.....
Test operators	7	12	12	12	1	17.5	.....	.....	.....	.....	.....
Do	7	12	12	12	1	20.0	.....	.....	.....	.....	.....
Total	7	12	12	12	2	18.8	.....	.....	.....	.....	.....
Straightening:											
Chain men	7	12	12	12	4	15.0	.....	.....	.....	.....	.....
Chain men's helpers	7	12	12	12	4	14.0	.....	.....	.....	.....	.....
Checkers	7	12	12	12	2	20.0	.....	.....	.....	.....	.....
Chippers	7	12	12	12	12	14.0	.....	.....	.....	.....	.....
Drag out operators	7	12	12	12	4	10.0	.....	.....	.....	.....	.....
Inspectors, foremen	7	12	12	12	1	22.9	.....	.....	.....	.....	.....
Inspectors	7	12	12	12	2	17.5	.....	.....	.....	.....	.....
Do	7	12	12	12	2	20.0	.....	.....	.....	.....	.....
Total	7	12	12	12	4	18.8	.....	.....	.....	.....	.....
Laborers	7	12	12	12	3	12.5	.....	.....	.....	.....	.....
Markers	7	12	12	12	4	15.0	.....	.....	.....	.....	.....
Oilers	7	12	12	12	2	17.5	.....	.....	.....	.....	.....
Pulpit men	7	12	12	12	2	14.0	.....	.....	.....	.....	.....
Slip makers	7	12	12	12	2	21.0	.....	.....	.....	.....	.....

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full working time.				Time workers.		Pieceworkers.			
	Days per week.	Hours per day.			Employees.	Rates per hour.	Actual earnings.		Guaranteed minimum rate per hour.	
		Monday to Friday.	Saturday.	Sunday.			Earnings per hour.		Employees.	Minimum.
							Classified.	Average.		
MILL, 48-INCH, GRAY, YARD—continued.										
Straightening—Concluded.						Cents.		Cents.		Cents.
Straighteners.....	7	12	12	12	.....	.....	2	22 and under 24	.....	.....
Do.....	7	12	12	12	.....	.....	2	48 and under 50	.....	.....
Total.....	7	12	12	12	.....	.....	4	35.7	.....	.....
Tablemen.....	7	12	12	12	2	10.0	.....	.....	.....	.....
Tape boys.....	7	12	12	12	3	6.0	.....	.....	.....	.....
General:										
Car blockers.....	7	12	12	12	3	21.0	.....	.....	.....	.....
Car men.....	7	12	12	12	3	16.0	.....	.....	.....	.....
Chain men.....	7	12	12	12	5	14.0	.....	.....	.....	.....
Crane men.....	7	12	12	12	10	16.5	.....	.....	.....	.....
Do.....	7	12	12	12	8	17.5	.....	.....	.....	.....
Total.....	7	12	12	12	18	16.9	.....	.....	.....	.....
Electrical foremen.....	7	12	12	12	1	25.0	.....	.....	.....	.....
Inspectors.....	7	12	12	12	4	22.0	.....	.....	.....	.....
Laborers.....	7	12	12	12	5	12.5	.....	.....	.....	.....
Do.....	7	12	12	12	2	13.0	.....	.....	.....	.....
Total.....	7	12	12	12	7	12.6	.....	.....	.....	.....
Loaders, boss.....	7	12	12	12	1	35.0	.....	.....	.....	.....
Loaders.....	7	12	12	12	1	20.0	.....	.....	.....	.....
Do.....	7	12	12	12	2	25.0	.....	.....	.....	.....
Total.....	7	12	12	12	3	23.3	.....	.....	.....	.....
Millwrights.....	7	12	12	12	2	22.5	.....	.....	.....	.....
Millwrights' helpers.....	7	12	12	12	3	17.5	.....	.....	.....	.....
Motor oilers.....	7	12	12	12	2	16.5	.....	.....	.....	.....
Stock foremen.....	7	12	12	12	1	25.0	.....	.....	.....	.....
Stockers.....	7	12	12	12	2	17.5	.....	.....	.....	.....
Do.....	7	12	12	12	1	23.0	.....	.....	.....	.....
Total.....	7	12	12	12	3	19.3	.....	.....	.....	.....
Stockers chain men.....	7	12	12	12	6	13.0	.....	.....	.....	.....
Stock pilers.....	7	12	12	12	2	15.0	.....	.....	.....	.....
Tool men and clean ups.....	7	12	12	12	1	12.5	.....	.....	.....	.....
Office force:										
Chief clerk.....	7	12	12	12	1	27.4	.....	.....	.....	.....
Clerks, billing.....	7	12	12	12	2	20.0	.....	.....	.....	.....
Clerks, cold saw.....	7	12	12	12	1	17.5	.....	.....	.....	.....
Do.....	7	12	12	12	1	21.0	.....	.....	.....	.....
Total.....	7	12	12	12	2	19.3	.....	.....	.....	.....
Clerks, invoice.....	7	12	12	12	1	24.0	.....	.....	.....	.....
Clerks, manifest.....	7	12	12	12	1	17.5	.....	.....	.....	.....
Do.....	7	12	12	12	1	18.8	.....	.....	.....	.....
Do.....	7	12	12	12	1	20.0	.....	.....	.....	.....
Do.....	7	12	12	12	1	24.0	.....	.....	.....	.....
Total.....	7	12	12	12	4	20.1	.....	.....	.....	.....

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full working time.				Time workers.		Pieceworkers.				
	Hours per day.						Actual earnings.		Guaranteed minimum rate per hour.		
							Earnings per hour.				
	Days per week.	Monday to Friday.	Saturday.	Sunday.	Employees.	Rates per hour.	Employees.	Classified.	Average.	Employees.	Minimum.
MILL, 48-INCH, GRAY, YARD—concluded.											
Office force—Concluded.						<i>Cents.</i>		<i>Cents.</i>		<i>Cents.</i>	
Clerks, mill order.....	7	12	12	12	1	17.5	.....	.....	.....	.....	.....
Do.....	7	12	12	12	1	24.0	.....	.....	.....	.....	.....
Total.....	7	12	12	12	2	20.8	.....	.....	.....	.....	.....
Clerks, mill order (boys).	7	12	12	12	1	10.0	.....	.....	.....	.....	.....
Clerks, product.....	7	12	12	12	2	20.0	.....	.....	.....	.....	.....
Clerks, stock.....	7	12	12	12	2	17.5	.....	.....	.....	.....	.....
Messengers.....	7	12	12	12	2	6.0	.....	.....	.....	.....	.....
Recorders.....	7	12	12	12	1	20.0	.....	.....	.....	.....	.....
Subforemen.....	7	12	12	12	2	31.0	.....	.....	.....	.....	.....
MILL, 40-INCH, BLOOMING.											
Crane men, approach.....	5	12			1	16.5	.....	.....	.....	.....	.....
Crane men, bloom transfer.....	7	12	12	12			1	18 and under 20	18.9	.....	.....
Crane men, not specified.....	7	12	12	12	2	17.5	.....	.....	.....	.....	.....
Engineers.....	7	12	12	12			1	28 and under 30	29.2	.....	.....
Engine oilers.....	7	12	12	12			1	16 and under 18	17.3	.....	.....
Greasers.....	7	12	12	12			1	16 and under 18	17.1	.....	.....
Heater boys.....	6	12	12		1	8.0	.....	.....	.....	.....	.....
Manipulators.....	7	12	12	12			1	28 and under 30	28.4	.....	.....
Millwrights.....	7	12	12	12			2	20 and under 22	21.9	.....	.....
Millwright helpers.....	7	12	12	12			2	16 and under 18	17.2	.....	.....
Recorders.....	7	12	12	12			1	28 and under 30	28.7	.....	.....
Rollers.....	7	12	12	12			1	46 and under 48	47.1	.....	.....
Scrap hole men.....	7	12	12	12			2	14 and under 16	14.3	.....	.....
Shear crane men.....	7	12	12	12			1	16 and under 18	17.2	.....	.....
Shear men.....	7	12	12	12			2	24 and under 26	24.6	.....	.....
Stampers.....	7	12	12	12	1	13.5	.....	.....	.....	.....	.....
Tally boys.....	6	12	12		1	8.0	.....	.....	.....	.....	.....
MILL, 40-INCH, SOAKING PIT.											
Ash foremen.....	7	12	12	12	1	22.0	.....	.....	.....	.....	.....
Ash laborers.....	7	12	12	12	12	13.5	.....	.....	.....	.....	.....
Bottom men, first.....	7	12	12	12			1	30 and under 32	31.4	.....	.....
Bottom men, second.....	7	12	12	12			4	22 and under 24	22.2	.....	.....
Cover boys.....	7	12	12	12			3	8 and under 10	9.8	.....	.....
Crane inspectors.....	7	12	12	12	2	25.0	.....	.....	.....	.....	.....
Crane inspectors' helpers.....	7	12	12	12	1	19.0	.....	.....	.....	.....	.....
Crane men.....	7	12	12	12			6	26 and under 28	27.7	.....	.....
Heaters.....	7	12	12	12			2	60 and under 62	60.3	.....	.....
Heaters' assistants.....	7	12	12	12	2	29.2	.....	.....	.....	.....	.....
Heater boys.....	6	12	12		1	8.0	.....	.....	.....	.....	.....
Recorders.....	7	12	12	12			2	20 and under 22	20.0	.....	.....
MILL, 28-INCH, RAIL.											
Chain men.....	7	12	12	12	2	12.5	.....	.....	.....	.....	.....
Chippers.....	7	12	12	12			10	20 and under 22	20.2	.....	.....
Cinder dump foremen.....	7	12	12	12	1	25.0	.....	.....	.....	.....	.....
Cinder dump laborers.....	7	12	12	12	6	12.5	.....	.....	.....	.....	.....
Clerks.....	7	12	12	12	1	16.4	.....	.....	.....	.....	.....
Crane men.....	7	12	12	12	2	16.5	.....	.....	.....	.....	.....
Do.....	7	12	12	12	2	17.5	.....	.....	.....	.....	.....
Do.....	7	12	12	12	1	18.5	.....	.....	.....	.....	.....
Total.....	7	12	12	12	5	17.3	.....	.....	.....	.....	.....

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full work- ing time.				Time workers.		Pieceworkers.				
							Actual earnings.			Guaran- teed mini- mum rate per hour.	
	Days per week.	Hours per day.			Employees.	Rates per hour.	Employees.	Earnings per hour.				Employees.	Minimum.
		Monday to Friday.	Saturday.	Sunday.				Classified.	Average.		
MILL, 28-INCH, RAIL—concl'd.						<i>Cents.</i>		<i>Cents.</i>	<i>Cents.</i>		<i>Cents.</i>
Drillers.....	7	12	12	12	2	15.0	12	22 and under 24	22.2		
Drill grinders.....	7	12	12	12	1	15.0					
Engineers.....	7	12	12	12			2	32 and under 34	32.0		
Engine oilers.....	7	12	12	12			2	18 and under 20	18.7		
Extra men, rail mill.....	7	12	12	12			2	22 and under 24	22.5		
Filers.....	7	12	12	12	1	12.5					
Foremen, finishing end.....	7	12	12	12	1	25.0					
Gaggers.....	7	12	12	12			5	22 and under 24	22.9		
Greasers.....	7	12	12	12			1	12 and under 14			
Do.....	7	12	12	12			1	14 and under 16			
Total.....	7	12	12	12			2		14.8		
Guide setters.....	7	12	12	12			2	22 and under 24	22.5		
Inspectors, inside.....	7	12	12	12	2	18.8					
Inspectors, outside.....	7	12	12	12	2	22.5					
Loading gang.....	7	12	12	12	7	16.0	7	26 and under 28	27.3		
Manipulators.....	7	12	12	12			2	22 and under 24	22.6		
Millwrights.....	7	12	12	12	2	22.5	1	24 and under 26	24.0		
Millwrights' helpers.....	7	12	12	12			1	18 and under 20	18.7		
Millwrights' oilers.....	7	12	12	12			1	16 and under 18	16.2		
Motor inspectors.....	7	12	12	12	1	22.0					
Pilers.....	7	12	12	12	7	12.5					
Pull offs.....	7	12	12	12	3	12.5	1	14 and under 16	14.1		
Pull ons.....	7	12	12	12	2	12.5	1	14 and under 16	14.4		
Rail test laborers.....	7	12	12	12	2	12.5					
Rail transfer operators.....	7	12	12	12			1	14 and under 16	15.1		
Rail turn overs.....	7	12	12	12			1	18 and under 20	18.0		
Rollers.....	7	12	12	12			1	58 and under 60	58.6		
Rollers' assistant.....	7	12	12	12			1	34 and under 36	34.7		
Rough table men, first.....	7	12	12	12			1	18 and under 20	18.6		
Rough table men, second.....	7	12	12	12			1	22 and under 24	23.0		
Run offs.....	7	12	12	12	15	12.5					
Saw operators, cold.....	7	12	12	12	1	16.7					
Saw operators, hot.....	7	12	12	12			1	18 and under 20	18.0		
Scrap men.....	7	12	12	12			2	14 and under 16	15.4		
Section men.....	7	12	12	12			1	22 and under 24	23.1		
Stampers.....	7	12	12	12			1	10 and under 12	11.8		
Stamp-machine men.....	7	12	12	12			1	14 and under 16	14.4		
Stop men.....	7	12	12	12			1	18 and under 20	18.0		
Straighteners.....	7	12	12	12			5	54 and under 56	54.0		
Straighteners' helpers.....	7	12	12	12	6	13.0					
Tool men.....	7	12	12	12	1	16.7					
Transfer men.....	7	12	12	12			1	22 and under 24	22.5		
MILL, 22-INCH.											
Buggymen.....	6	12	12				2	16 and under 18			
Do.....	6	12	12				2	18 and under 20			
Total.....	6	12	12				4		18.0		
Buggymen, outside.....	6	12	12				9	12 and under 14	13.3		
Catchers.....	6	12	12				2	26 and under 28			
Do.....	6	12	12				2	28 and under 30			
Total.....	6	12	12				4		27.5		
Chargers.....	6	12	12				4	14 and under 16	15.0		
Firemen.....	6	12	12				1	12 and under 14			
Do.....	6	12	12				3	14 and under 16			
Total.....	6	12	12				4		14.4		

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full working time.				Time workers.		Pieceworkers.				
							Actual earnings.			Guaranteed minimum rate per hour.	
	Hours per day.						Earnings per hour.				
	Days per week.	Monday to Friday.	Saturday.	Sunday.	Employees.	Rates per hour.	Employees.	Classified.	Average.	Employees.	Minimum.
MILL, 22-INCH—concluded.											
Heaters.....	6	12	12			<i>Cents.</i>	1	<i>Cents.</i> 22 and under 24	<i>Cents.</i>		<i>Cents.</i>
Do.....	6	12	12				6	24 and under 26			
Do.....	6	12	12				1	26 and under 28			
Total.....	6	12	12				8		24.9		
Heaters' helpers.....	6	12	12				1	12 and under 14			
Do.....	6	12	12				7	14 and under 16			
Total.....	6	12	12				8		14.5		
Hookers.....	6	12	12				12	20 and under 22	20.8		
Roller bosses.....	6	12	12				1	26 and under 28			
Do.....	6	12	12				1	30 and under 32			
Total.....	6	12	12				2		28.9		
Rollers.....	6	12	12				1	34 and under 36			
Do.....	6	12	12				1	38 and under 40			
Total.....	6	12	12				2		37.9		
Roughers.....	6	12	12				1	30 and under 32			
Do.....	6	12	12				1	32 and under 34			
Total.....	6	12	12				2		31.7		
Shear men.....	6	12	12				2	14 and under 16	15.5		
Shear men's helpers.....	6	12	12				3	12 and under 14			
Do.....	6	12	12				3	14 and under 16			
Total.....	6	12	12				6		14.1		
Tumble hookers.....	6	12	12				2	20 and under 22			
Do.....	6	12	12				2	22 and under 24			
Total.....	6	12	12				4		22.0		
MILL, 12-INCH.											
Catchers.....	6	12	12				2	36 and under 38			
Do.....	6	12	12				2	38 and under 40			
Total.....	6	12	12				4		37.5		
Drag outs.....	6	12	12				3	14 and under 16			
Do.....	6	12	12				2	20 and under 22			
Total.....	6	12	12				5		16.5		
Heaters.....	6	12	12				1	24 and under 26			
Do.....	6	12	12				2	26 and under 28			
Do.....	6	12	12				1	28 and under 30			
Do.....	6	12	12				2	30 and under 32			
Total.....	6	12	12				6		28.6		
Heaters' helpers.....	6	12	12				3	14 and under 16			
Do.....	6	12	12				2	16 and under 18			
Do.....	6	12	12				1	18 and under 20			
Total.....	6	12	12				6		16.2		
Hookers.....	6	12	12				4	18 and under 20	18.4		

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full work- ing time.				Time workers.		Pieceworkers.				
	Days per week.	Hours per day.			Employees.	Rates per hour.	Actual earnings.			Guan- teed mini- mum rate per hour.	
		Monday to Friday.	Saturday.	Sunday.			Earnings per hour.		Average.		
							Classified.				
							Employees.			Employees.	Minimum.
MILL, 12-INCH—concluded.						<i>Cents.</i>			<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>
Hookers, extra.....	6	12	12				6	16 and under 18			
Do.....	6	12	12				4	22 and under 24			
Total.....	6	12	12				10		18.8		
Roller bosses.....	6	12	12				1	48 and under 50			
Do.....	6	12	12				1	60 and under 62			
Total.....	6	12	12				2		54.9		
Rollers.....	6	12	12				1	52 and under 54			
Do.....	6	12	12				1	54 and under 56			
Total.....	6	12	12				2		53.9		
Roughers.....	6	12	12				1	38 and under 40			
Do.....	6	12	12				1	40 and under 42			
Total.....	6	12	12				2		40.1		
MILL, 8-INCH.											
Bundlers.....	6	12	12				2	12 and under 14	13.6		
Catchers.....	6	12	12				1	30 and under 32	31.4		
Drag outs.....	6	12	12				1	22 and under 24	22.4		
Finishers.....	6	12	12				1	34 and under 36	35.9		
Heaters.....	6	12	12				1	50 and under 52	50.5		
Heaters' helpers.....	6	12	12				4	28 and under 30	29.1		
Hookers.....	6	12	12				1	22 and under 24	22.4		
Rollers.....	6	12	12				1	94 and under 96	94.2		
Roughers.....	6	12	12				2	36 and under 38	37.4		
Roughers, pony.....	6	12	12				2	32 and under 34	32.9		
Shear men.....	6	12	12				1	22 and under 24	22.6		
Shear men's helpers.....	6	12	12				3	14 and under 16	15.1		
Stockers.....	6	12	12				1	20 and under 22	21.7		
Straighteners.....	6	12	12				2	18 and under 20	19.4		
Stranders.....	6	12	12				2	28 and under 30	29.9		
MILL, STAY BOLT.											
Catchers.....	6	12	12				1	20 and under 22			
Do.....	6	12	12				1	22 and under 24			
Total.....	6	12	12				2		21.2		
Drag downs.....	6	12	12				4	14 and under 16	15.1		
Finishers.....	6	12	12				1	20 and under 22			
Do.....	6	12	12				1	22 and under 24			
Total.....	6	12	12				2		21.3		
Heaters.....	6	12	12				1	36 and under 38			
Do.....	6	12	12				1	38 and under 40			
Do.....	6	12	12				1	40 and under 42			
Do.....	6	12	12				1	42 and under 44			
Total.....	6	12	12				4		40.1		
Heaters' helpers.....	6	12	12				6	14 and under 16			
Do.....	6	12	12				6	16 and under 18			
Total.....	6	12	12				12		16.3		
Hookers.....	6	12	12				4	14 and under 16	14.5		

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full working time.				Time workers.		Pieceworkers.				
	Hours per day.				Employees. Rates per hour.		Actual earnings.		Guaranteed minimum rate per hour.		
							Earnings per hour.				
	Days per week.	Monday to Friday.	Saturday.	Sunday.			Employees.	Rates per hour.	Employees.	Classified.	Average.	Employees.	Minimum.
MILL, STAY BOLT—concluded.						<i>Cents.</i>		<i>Cents.</i>		<i>Cents.</i>	
Rollers.....	6	12	12				1	<i>Cents.</i>			
Do.....	6	12	12				1	36 and under 38 56 and under 58			
Total.....	6	12	12				2		46.6		
Roughers.....	6	12	12				3	22 and under 24			
Do.....	6	12	12				3	24 and under 26			
Total.....	6	12	12				6		23.0		
Shear men.....	6	12	12				1	16 and under 18			
Do.....	6	12	12				1	18 and under 20			
Total.....	6	12	12				2		18.2		
Shear men's helpers.....	6	12	12				3	12 and under 14			
Do.....	6	12	12				3	14 and under 16			
Total.....	6	12	12				6		13.6		
Stockers.....	6	12	12				2	12 and under 14			
Do.....	6	12	12				2	14 and under 16			
Total.....	6	12	12				4		13.7		
Straighteners.....	6	12	12				2	12 and under 14			
Do.....	6	12	12				2	14 and under 16			
Total.....	6	12	12				4		14.2		
Stranders.....	6	12	12				4	18 and under 20			
Do.....	6	12	12				4	20 and under 22			
Total.....	6	12	12				8		19.8		
MILL, GENERAL.											
Cellar engineer tenders.....	6	12	12			2	17.0				
Chippers.....	7	12	12	12		41	15.0				
Cinder men.....	6	12	12			2	14.6				
Clerks.....	6	12	12			1	12.5				
Do.....	6	12	12			1	14.0				
Do.....	6	12	12			1	16.0				
Do.....	6	12	12			1	17.5				
Total.....	6	12	12			4	15.0				
Cold sawyers.....	6	12	12			3	15.0				
Cold sawyers' helpers.....	6	12	12			3	14.0				
Crane men.....	6	12	12			2	16.0				
Engineers.....	6	12	12			2	17.0				
Engineer tenders.....	6	12	12			2	17.0				
Do.....	6	12	12			1	17.5				
Do.....	6	12	12			2	18.0				
Total.....	6	12	12			5	17.5				
Foremen.....	7	12	12	12		1	25.0				
Do.....	6	12	12			1	18.0				
Do.....	6	12	12			1	20.0				
Do.....	6	12	12			1	21.0				
Do.....	6	12	12			1	28.0				
Do.....	6	12	12			1	32.5				
Total.....						6	24.1				

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full work- ing time.				Time workers.		Pieceworkers.			
	Days per week.	Hours per day.			Employees.	Rates per hour.	Actual earnings.		Guaran- teed mini- mum rate per hour.	
		Monday to	Saturday.	Sunday.			Earnings per hour.		Employees.	Minimum.
							Classified.	Average.		
MILL, GENERAL—concluded.										
Gaggers.....	6	12	12	.....	2	<i>Cents.</i> 17.5	<i>Cents.</i>	<i>Cents.</i>		<i>Cents.</i>
Hot saw men.....	6	12	12	.....	2	15.0				
Inspectors.....	6	12	12	.....	1	15.0				
Do.....	6	12	12	.....	3	17.0				
Total.....	6	12	12	.....	4	16.5				
Laborers.....	7	12	12	12	122	12.5				
Repair men.....	6	12	12	.....	4	15.0				
Do.....	6	12	12	.....	6	16.0				
Do.....	6	12	12	.....	2	17.0				
Do.....	6	12	12	.....	2	17.5				
Do.....	6	12	12	.....	2	18.0				
Do.....	6	12	12	.....	1	20.0				
Total.....	6	12	12	.....	17	16.5				
Roll turners.....	6	12	12	.....	2	35.0				
Do.....	6	12	12	.....	1	42.0				
Total.....	6	12	12	.....	3	37.3				
Roll turners, apprentices.....	6	12	12	.....	1	9.2				
Straighteners.....	6	12	12	.....	2	25.0				
Superintendents, assistant.....	6	12	12	.....	1	40.0				
Weighers.....	6	12	12	.....	1	14.0				
Do.....	6	12	12	.....	3	15.0				
Do.....	6	12	12	.....	1	20.0				
Do.....	6	12	12	.....	2	21.0				
Total.....	6	12	12	.....	7	17.3				
OFFICE FORCE AT MILL.										
Clerks.....	7	12	12	12	1	20.0				
Do.....	7	12	12	12	2	20.8				
Total.....	7	12	12	12	3	20.5				
Clerks, stock, ingot.....	7	12	12	12	1	15.0				
Messengers.....	7	12	12	12	1	8.0				
Superintendents, day.....	7	12	12	12	1	27.7				
Superintendents, night.....	7	12	12	12	1	27.7				
OPEN-HEARTH FURNACE, LE- HIGH PLANT.										
Armor plate gang.....	7	12	12	12	.....	2	24 and under 26	25.2	2	22.9
Armor plate gang, helpers, first.....	7	12	12	12	.....	4	20 and under 22	20.4	4	16.5
Armor plate gang, helpers, second.....	7	12	12	12	.....	8	18 and under 20	18.5	8	15.5
Armor plate gang, helpers, third.....	7	12	12	12	.....	16	14 and under 16	15.7	16	12.5
Ash men.....	7	12	12	12	7	13.5				
Bank foremen.....	7	12	12	12	.....	2	20 and under 22	21.6	2	19.0
Bank men.....	7	12	12	12	.....	16	16 and under 18	17.4	16	14.5
Blacksmiths.....	7	12	12	12	2	19.0				
Blacksmiths, helpers.....	7	12	12	12	2	14.0				
Bricklayers.....	7	12	12	12	3	30.0				
Bricklayers, helpers.....	7	12	12	12	5	13.5				
Carbon runners.....	7	12	12	12	.....	3	16 and under 18	17.6	3	17.0

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full working time.				Time workers.		Pieceworkers.				
	Hours per day.				Employees.	Rates per hour.	Actual earnings.		Guaranteed minimum rate per hour.		
							Earnings per hour.				
	Days per week.	Monday to Friday.	Saturday.	Sunday.			Classified.		Average.	Employees.	Minimum.
OPEN-HEARTH FURNACE, LEHIGH PLANT—concluded.						<i>Cents.</i>		<i>Cents.</i>		<i>Cents.</i>	
Chargers, furnace.....	7	12	12	12			4	26 and under 28	27.4	4	51.6
Cinder pit foremen.....	7	12	12	12			2	18 and under 20	18.8	2	18.8
Cinder pit men.....	7	12	12	12			24	12 and under 14	12.6	24	12.5
Clerks.....	7	10	10	10			2	20 and under 22	20.8	2	17.5
Crane men.....	7	12	12	12			2	18 and under 20	19.1	2	16.5
Flank men.....	7	12	12	12			2	16 and under 18	17.8	2	14.5
Floor crane men.....	7	12	12	12	3	16.5					
Foremen.....	7	12	12	12			1	42 and under 44	42.7	1	27.4
Gas house foremen.....	7	12	12	12	2	17.0					
Gas house fillers.....	7	12	12	12		26	13.5				
Gas house dumpers.....	7	12	12	12			12	14 and under 16		20	14.0
Do.....	7	12	12	12			8	16 and under 18			
Total.....	7	12	12	12			20		15.6	20	14.0
Hammer boys.....	6	12	12		1	10.0					
Heaters.....	7	12	12	12	1	17.0					
Helpers, furnace, first.....	7	12	12	12			6	24 and under 26		22	25.0
Do.....	7	12	12	12			6	26 and under 28			
Do.....	7	12	12	12			2	28 and under 30			
Do.....	7	12	12	12			2	30 and under 32			
Do.....	7	12	12	12			2	32 and under 34			
Do.....	7	12	12	12			4	34 and under 36			
Total.....	7	12	12	12			22		29.0	22	25.0
Helpers, furnace, second.....	7	12	12	12			2	16 and under 18		22	17.0
Do.....	7	12	12	12			8	18 and under 20			
Do.....	7	12	12	12			6	20 and under 22			
Do.....	7	12	12	12			2	22 and under 24			
Do.....	7	12	12	12			4	24 and under 26			
Total.....	7	12	12	12			22		20.7	22	17.0
Helpers, furnace, third.....	7	12	12	12			14	18 and under 20	18.0	14	15.5
Ingot gang.....	7	12	12	12			4	16 and under 18	17.9	4	14.5
Laborers.....	7	12	12	12	17	12.5					
Do.....	7	12	12	12	25	13.5					
Total.....	7	12	12	12	42	13.1					
Ladle crane men.....	7	12	12	12			2	22 and under 24		2	16.5
Ladle men.....	7	12	12	12			2	22 and under 24	22.6	2	20.0
Ladle men's helpers, first.....	7	12	12	12			4	16 and under 18	17.8	4	15.0
Ladle men's helpers, second.....	7	12	12	12	2	14.5					
Ladle men's helpers, third.....	7	12	12	12	4	12.5					
Melters.....	7	12	12	12			2	56 and under 58	56.7	2	27.4
Melters' assistants.....	7	12	12	12			2	42 and under 44	43.5	2	20.5
Mixing house foremen.....	7	12	12	12	1	15.5					
Mixing house men.....	7	12	12	12	5	13.5					
Mold liners.....	7	12	12	12			2	18 and under 20	19.4	2	16.9
Mold liners' helpers, first.....	7	12	12	12			6	16 and under 18	16.4	6	14.5
Mold liners' helpers, second.....	7	12	12	12	2	14.5					
Oil boys.....	7	12	12	12	1	12.5					
Pit crane men.....	7	12	12	12			8	18 and under 20	18.0	8	16.5
Pressmen.....	7	12	12	12			2	22 and under 24	23.9	2	21.5
Pressmen's helpers, first.....	7	12	12	12			2	16 and under 18	17.9	2	15.5
Pressmen's helpers, second.....	7	12	12	12			8	16 and under 18	17.1	8	14.5
Superintendents, assistants.....	7	12	12	12			1	32 and under 34	32.0	1	20.8
Test boys.....	7	12	12	12	5	7.0					
Tool house men.....	7	12	12	12	2	14.5					

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full working time.				Time workers.		Pieceworkers.			
	Days per week.	Hours per day.			Employees.	Rates per hour.	Actual earnings.		Guaranteed minimum rate per hour.	
		Monday to Friday.	Saturday.	Sunday.			Earnings per hour.			
							Classified.	Average.	Employees.	Minimum.
OPEN-HEARTH FURNACE, SAUCON PLANT.						<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	
Ash men.....	7	12	12	12	12	13.5				
Box hook-ons.....	7	12	12	12	6	13.5				
Carbon runners.....	7	12	12	12	2	14.6				
Car repairers, ingot.....	7	12	12	12	2	15.0				
Car oilers, ingot.....	7	12	12	12	1	15.0				
Charging machine men.....	7	12	12	12			4	24 and under 26	24.7	
Chemists, assistant.....	7	12	12	12	2	20.8				
Cinder pitmen.....	7	12	12	12			4	20 and under 22	20.9	
Cinder pitmen's helpers.....	7	12	12	12			4	14 and under 16	14.5	
Clerks.....	7	12	12	12	1	20.5				
Coal conveyors.....	7	12	12	12	1	16.0				
Coal crushers, foremen.....	7	12	12	12	1	18.0				
Coal crusher men.....	7	12	12	12	3	13.5				
Coal crusher boys.....	7	12	12	12	1	8.0				
Coal dryers.....	7	12	12	12	1	15.0				
Core makers.....	7	12	12	12	1	20.0				
Crane inspectors.....	7	12	12	12	4	19.0	1	34 and under 36	35.0	
Do.....	7	12	12	12	2	22.5				
Total.....	7	12	12	12	6	20.2	1	34 and under 36	35.0	
Cupola men.....	7	12	12	12	2	16.0				
Floor crane men.....	7	12	12	12	4	22.1				
Foremen, general.....	7	12	12	12	1	34.2				
Do.....	7	12	12	12	1	41.1				
Total.....	7	12	12	12	2	37.7				
Gas foremen.....	7	12	12	12	2	25.0				
Gas men.....	7	12	12	12			4	16 and under 18		
Do.....	7	12	12	12			32	18 and under 20		
Do.....	7	12	12	12			4	20 and under 22		
Total.....	7	12	12	12			40		19.0	
Helpers, furnace, first.....	7	12	12	12			4	30 and under 32		
Do.....	7	12	12	12			12	32 and under 34		
Do.....	7	12	12	12			2	34 and under 36		
Do.....	7	12	12	12			2	36 and under 38		
Total.....	7	12	12	12			20		33.2	
Helpers, furnace, second.....	7	12	12	12			2	20 and under 22		
Do.....	7	12	12	12			12	22 and under 24		
Do.....	7	12	12	12			4	24 and under 26		
Do.....	7	12	12	12			2	26 and under 28		
Total.....	7	12	12	12			20		23.7	
Helpers, furnace, third.....	7	12	12	12			20	14 and under 16	15.6	
Hydraulic men.....	7	12	12	12	1	22.5				
Hydraulic helpers.....	7	12	12	12	2	14.5				
Ingot shippers.....	7	12	12	12	2	15.0				
Laborers, general.....	7	12	12	12	20	12.5				
Do.....	7	12	12	12	9	13.5				
Total.....	7	12	12	12	29	12.8				

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full working time.				Time workers.		Pieceworkers.					
	Hours per day.				Employees.	Rates per hour.	Actual earnings.				Guaranteed minimum rate per hour.	
							Earnings per hour.			Employees.	Minimum.	
	Days per week.	Monday to Friday.	Saturday.	Sunday.			Classified.	Average.				
OPEN-HEARTH FURNACE, SAUCON PLANT—con.						Cents.		Cents.	Cents.		Cents.	
Ladle crane men.....	7	12	12	12			7	24 and under 26	24.5			
Ladle liners.....	7	12	12	12	1	25.0						
Ladle liners' helpers.....	7	12	12	12	3	15.0						
Ladle men, first.....	7	12	12	12			4	20 and under 22	21.9			
Ladle men, second.....	7	12	12	12			4	14 and under 16	14.5			
Melters, first.....	7	12	12	12			2	54 and under 56	54.9			
Melters, second.....	7	12	12	12			2	50 and under 52	51.7			
Millwrights, foremen.....	7	12	12	12	1	30.0						
Millwrights.....	7	12	12	12	4	25.0						
Millwrights' helpers.....	7	12	12	12	6	15.0						
Mixers, foremen.....	7	12	12	12	2	20.0						
Mixer helpers.....	7	12	12	12	4	13.5						
Mixers, weighmasters.....	7	12	12	12	2	17.0						
Molders.....	7	12	12	12	1	25.0						
Molders' helpers.....	7	12	12	12	3	15.0						
Mold yard, foremen.....	7	12	12	12	1	29.2						
Mold yard, crane men.....	7	12	12	12	1	16.5						
Mold yard, laborers.....	7	12	12	12	3	13.5						
Pull ups, boys.....	7	12	12	12	10	8.0						
Ravel makers.....	7	12	12	12	1	15.0						
Do.....	7	12	12	12	1	22.0						
Total.....	7	12	12	12	2	18.5						
Reverse men.....	7	12	12	12	2	13.5						
Slagger bosses.....	7	12	12	12			2	18 and under 20	19.5			
Slaggers.....	7	12	12	12	19	13.5						
Steel pourers.....	7	12	12	12			2	26 and under 28	27.6			
Stock chasers.....	7	12	12	12	2	20.0						
Stockers.....	7	12	12	12	16	13.5						
Stock yard, foremen.....	7	12	12	12			2	22 and under 24	23.4			
Stock yard, foremen, assistant	7	12	12	12			1	14 and under 16	15.3			
Stock yard, crane men.....	7	12	12	12	7	16.5						
Stopper makers.....	7	12	12	12	1	15.0						
Stopper makers' helpers.....	7	12	12	12	1	13.5						
Stopper setters, first.....	7	12	12	12			2	24 and under 26	24.0			
Stopper setters, second.....	7	12	12	12			2	22 and under 24	23.2			
Stripper operators.....	7	12	12	12			2	24 and under 26	24.1			
Stripper operators' helpers.....	7	12	12	12	4	15.0						
Test boys.....	7	12	12	12	2	8.0						
Weighmasters.....	7	12	12	12	3	18.0						
PATTERN SHOP.												
Foremen.....	6	10 1/2	5 1/2		1	47.5						
Foremen, assistant.....	6	10 1/2	5 1/2		1	40.0						
Laborers.....	6	10 1/2	5 1/2		3	12.5						
Machine hands.....	6	10 1/2	5 1/2		1	25.0						
Pattern makers.....	6	10 1/2	5 1/2		6	25.0						
Do.....	6	10 1/2	5 1/2		23	30.0						
Do.....	6	10 1/2	5 1/2		6	32.5						
Total.....	6	10 1/2	5 1/2		35	29.6						
Pattern makers' helpers.....	6	10 1/2	5 1/2		19	18.0						
Do.....	6	10 1/2	5 1/2		4	20.0						
Do.....	6	10 1/2	5 1/2		2	22.5						
Total.....	6	10 1/2	5 1/2		25	18.7						
Pattern makers' apprentices.....	6	10 1/2	5 1/2		3	5.0						
Do.....	6	10 1/2	5 1/2		1	7.5						

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full working time.				Time workers.		Pieceworkers.				
	Days per week.	Hours per day.			Employees.	Rates per hour.	Actual earnings.		Guaranteed minimum rate per hour.		
		Monday to Friday.	Saturday.	Sunday.			Earnings per hour.		Employees.	Minimum.	
							Classified.	Average.	Employees.	Minimum.	
PATTERN SHOP—concluded.											
Pattern makers' apprentices.	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		4	Cents. 9.2	Cents.	Cents.		Cents.	
Do.	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	10.0					
Do.	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	12.5					
Total.	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		10	8.2					
PRESS FORGE.											
Clerks.	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	20.0					
Crane engineers.	6	12	12		4	17.5					
Crane shifters.	6	12	12		8	19.5					
Crane valve men.	6	12	12		2	23.0					
Do.	6	12	12		2	23.5					
Total.	6	12	12		4	23.3					
Dumpers, gas house.	7	12	12	12	2	16.5					
Electric crane men.	6	12	12		2	16.5					
Forgers.	6	12	12		3	42.0	1	64 and under 66	65.8	1	42.0
Furnace tenders.	6	12	12		2	14.0					
Do.	6	12	12		4	20.5					
Total.	6	12	12		6	18.3					
Furnace tenders' helpers.	6	12	12		3	12.5					
Porters, bar.	6	12	12		16	17.5					
Press valve men.	6	12	12		4	26.0					
Pump engineers.	6	12	12		2	13.5					
Do.	6	12	12		2	19.5					
Total.	6	12	12		4	16.5					
Racket-turners.	6	12	12		4	20.0					
Superintendents, night.	5	13					1	80 and under 82	81.5		
Tiller.	7	12	12	12	4	15.0					
PROJECTILE FORGING.											
Blacksmiths.	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		3	25.0	1	34 and under 36	34.2	1	25.0
Do.	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	27.5					
Total.	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		4	25.6	1	34 and under 36	34.2	1	25.0
Blacksmiths' helpers.	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		4	16.0	1	18 and under 20	19.3	1	16.0
Furnace tenders.	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	16.0	1	18 and under 20		1	15.0
Do.	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$				1	20 and under 22		1	16.0
Do.	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$				1	26 and under 28		1	20.0
Total.	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	16.0	3		22.5	3	17.0
Inspectors.	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	17.5					
Machinists' helpers.	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	12.5	1	18 and under 20	18.0	1	16.0
Pressmen.	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	35.0	1	20 and under 22		1	16.0
Do.	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$				2	22 and under 24		3	20.0
Do.	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$				1	24 and under 26			
Total.	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	35.0	4		23.2	4	19.0

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full working time.				Time workers.		Pieceworkers.					
	Days per week.	Hours per day.			Employees.	Rates per hour.	Actual earnings.				Guaranteed minimum rate per hour.	
		Monday to Friday.	Saturday.	Sunday.			Earnings per hour.					
							Classified.	Average.	Employees.	Minimum.		
PROJECTILE FORGING—CON.												
					<i>Cents.</i>		<i>Cents.</i>	<i>Cents.</i>		<i>Cents.</i>		
Pressmen's helpers.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	1	12.5	2	12 and under 14		2	12.5		
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	2	16.0	2	16 and under 18		2	15.0		
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$			4	18 and under 20		10	16.0		
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$			6	20 and under 22		2	20.0		
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$			1	24 and under 26					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$			1	42 and under 44					
Total.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	3	14.8	16		20.6	16	16.0		
Repair men.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	1	30.0							
PROJECTILE SHOP.												
Blacksmiths, foremen.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$			1	36 and under 38	37.0	1	35.0		
Blacksmiths.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$			2	32 and under 34		2	25.0		
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$			3	34 and under 36		2	27.5		
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$						1	32.5		
Total.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$			5		33.8	5	27.5		
Blacksmiths' helpers.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	1	17.5	1	16 and under 18		9	16.0		
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$			2	18 and under 20		2	18.0		
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$			7	20 and under 22		1	20.0		
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$			1	22 and under 24		1	22.5		
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$			1	24 and under 26					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$			1	28 and under 30					
Total.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	1	17.5	13		21.3	13	17.1		
Hammer boys.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	2	11.0							
Inspectors.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$			1	14 and under 16		1	15.0		
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$			1	20 and under 22		1	20.0		
Total.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$			2		18.2	2	17.5		
Machinists, foremen.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	1	42.5							
Machinists, foremen, assistants.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	1	30.0							
Machine hands and helpers.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$			1	12 and under 14		5	12.5		
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$			2	14 and under 16		1	14.0		
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$			10	16 and under 18		3	15.0		
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$			7	18 and under 20		10	16.0		
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$						1	18.0		
Total.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$			20		17.4	20	15.0		
Machinists' helpers.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	5	12.5							
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	3	14.0							
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	8	15.0							
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	10	16.0							
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	1	17.5							
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	2	18.0							
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	2	22.5							
Total.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	31	15.6							
Repair men.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	1	30.0							
Tappers.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$			1	14 and under 16		1	14.0		
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$			1	18 and under 20		1	15.0		
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$			1	20 and under 22		1	18.0		
Total.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$			3		18.9	3	15.7		
Tool makers.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	1	30.0							

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full working time.				Time workers		Pieceworkers.			
	Days per week.	Hours per day.			Employees.	Rates per hour.	Actual earnings.		Guaranteed minimum rate per hour.	
		Monday to Friday.	Saturday.	Sunday			Earnings per hour.		Employees.	Minimum.
							Classified.	Average.		
PROJECTILE TREATMENT.						<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>		<i>Cents.</i>
Gas men.....	6	10 $\frac{1}{2}$	5 $\frac{4}{12}$		1	14.0				
Laborers.....	6	10 $\frac{1}{2}$	5 $\frac{4}{12}$		3	15.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{4}{12}$		1	17.5				
Total.....	6	10 $\frac{1}{2}$	5 $\frac{4}{12}$		4	15.6				
Machinists' helpers.....	6	10 $\frac{1}{2}$	5 $\frac{4}{12}$		1	15.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{4}{12}$		1	16.0				
Total.....	6	10 $\frac{1}{2}$	5 $\frac{4}{12}$		2	15.5				
Treaters and helpers.....	6	10 $\frac{1}{2}$	5 $\frac{4}{12}$		1	17.5				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{4}{12}$		1	20.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{4}{12}$		1	25.0				
Total.....	6	10 $\frac{1}{2}$	5 $\frac{4}{12}$		3	20.8				
REPAIR SHOPS—BOILERS, PUMPS, AND COMPRESSORS.										
Foremen.....	6	12	12		1	27.5				
Mechanical engineers.....	6	10	10		1	36.0				
Repair men.....	6	12	12		32	12.5				
Do.....	6	12	12		4	13.5				
Do.....	6	12	12		7	14.0				
Do.....	6	12	12		1	14.5				
Do.....	6	12	12		15	15.0				
Do.....	6	12	12		1	15.5				
Do.....	6	12	12		3	16.0				
Do.....	6	12	12		1	16.5				
Do.....	6	12	12		4	17.0				
Do.....	6	12	12		1	17.5				
Do.....	6	12	12		1	19.0				
Do.....	6	12	12		1	20.0				
Do.....	6	12	12		1	25.0				
Total.....	6	12	12		72	14.2				
ROLL TURNING.										
Chippers.....	7	12	12	12	1	12.5				
Do.....	7	12	12	12	5	13.0				
Do.....	7	12	12	12	1	14.5				
Do.....	6	12	12		1	12.5				
Total.....					8	13.1				
Clerks.....	6	9	9		1	25.0				
Foremen.....	7	12	2		1	40.0				
Roll turners.....	7	12 $\frac{6}{12}$	12 $\frac{6}{12}$	12 $\frac{6}{12}$	3	35.0				
Do.....	6	12 $\frac{6}{12}$	12 $\frac{6}{12}$		1	25.0				
Do.....	7	10 $\frac{6}{12}$	10 $\frac{6}{12}$	10 $\frac{6}{12}$	1	25.0				
Do.....	7	10 $\frac{6}{12}$	10 $\frac{6}{12}$	10 $\frac{6}{12}$	1	27.5				
Do.....	7	10 $\frac{6}{12}$	10 $\frac{6}{12}$	10 $\frac{6}{12}$	3	35.0				
Do.....	6	10 $\frac{6}{12}$	5 $\frac{4}{12}$		2	27.5				
Total.....					11	31.1				
Roll turners' helpers.....	7	12 $\frac{6}{12}$	12 $\frac{6}{12}$	12 $\frac{6}{12}$	1	15.0				
Do.....	7	12 $\frac{6}{12}$	12 $\frac{6}{12}$	12 $\frac{6}{12}$	1	22.5				
Do.....	6	12 $\frac{6}{12}$	12 $\frac{6}{12}$		1	15.0				
Do.....	7	10 $\frac{6}{12}$	10 $\frac{6}{12}$	10 $\frac{6}{12}$	2	15.0				

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full working time.				Time workers.		Pieceworkers.				
	Days per week.	Hours per day.			Employees.	Rates per hour.	Actual earnings.			Guaranteed minimum rate per hour.	
		Monday to Friday.	Saturday.	Sunday.			Earnings per hour.				
						Employees.	Classified.	Average.	Employees.	Minimum.	
ROLL TURNING—concluded.											
Roll turners' helpers	7	10 $\frac{5}{12}$	10 $\frac{5}{12}$	10 $\frac{5}{12}$	1	<i>Cents.</i> 22.5	<i>Cents.</i>	<i>Cents.</i>		<i>Cents.</i>	
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$		1	15.0					
Total.....					7	17.1					
Tool grinders.....	7	12	12	12	1	14.5					
Tool makers.....	7	10 $\frac{5}{12}$	10 $\frac{5}{12}$	10 $\frac{5}{12}$	1	27.5					
Do.....	7	10 $\frac{5}{12}$	10 $\frac{5}{12}$	10 $\frac{5}{12}$	2	30.0					
Total.....	7	10 $\frac{5}{12}$	10 $\frac{5}{12}$	10 $\frac{5}{12}$	3	29.2					
STEEL FOUNDRY.											
Annealing firemen.....	7	12	12	12	2	15.0					
Do.....	6	12	11		1	15.0					
Total.....					3	15.0					
Apprentices.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$		3	5.0	1	4 and under 6	3	5.0	
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$		1	7.5	1	8 and under 10	8	9.2	
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$		2	9.2	3	10 and under 12	9	12.5	
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$		8	12.5	5	12 and under 14	3	18.0	
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$				4	14 and under 16	1	20.0	
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$				5	16 and under 18			
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$				3	20 and under 22			
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$				1	24 and under 26			
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$				1	30 and under 32			
Total.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$		14	10.1	24		15.5	24 11.5	
Blacksmiths.....	6	12	12		1	18.0					
Do.....	6	12	12		1	20.0					
Total.....	6	12	12		2	19.0					
Blacksmiths' helpers.....	6	12	12		1	12.5					
Do.....	6	12	12		1	15.0					
Total.....	6	12	12		2	13.8					
Carpenters.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$		1	17.5					
Do.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$		1	22.5					
Total.....	6	10 $\frac{5}{12}$	5 $\frac{4}{12}$		2	20.0					
Chain men.....	6	12	11		1	15.0					
Do.....	6	12	11		1	17.5					
Total.....	6	12	11		2	16.3					
Chippers.....	7	12	12	12	18	12.5	4	14 and under 16			
Do.....	7	12	12	12			12	16 and under 18			
Do.....	7	12	12	12			1	18 and under 20			
Do.....	7	12	12	12			2	20 and under 22			
Do.....	6	12	11		36	12.5	2	10 and under 12			
Do.....	6	12	11				3	12 and under 14			
Do.....	6	12	11				21	14 and under 16			
Do.....	6	12	11				13	16 and under 18			
Do.....	6	12	11				1	20 and under 22			
Total.....					54	12.5	59		15.9	59 12.5	

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full work- ing time.				Time workers.		Pieceworkers.			
	Days per week.	Hours per day.			Employees.	Rates per hour.	Actual earnings.		Guaranteed mini- mum rate per hour.	
		Monday to Friday.	Saturday.	Sunday.			Earnings per hour.		Employees.	Minimum.
							Classified.	Average.		
STEEL FOUNDRY—continued.										
Clerks.....	6	12	11			<i>Cents.</i> 2 17.5	<i>Cents.</i>	<i>Cents.</i>		
Do.....	6	12	11		1	22.5				
Do.....	6	10 $\frac{8}{12}$	5 $\frac{4}{12}$		2	15.0				
Do.....	6	10 $\frac{8}{12}$	5 $\frac{4}{12}$		3	16.0				
Do.....	6	10 $\frac{8}{12}$	5 $\frac{4}{12}$		1	17.5				
Do.....	6	10 $\frac{8}{12}$	5 $\frac{4}{12}$		1	22.5				
Do.....	6	10 $\frac{8}{12}$	5 $\frac{4}{12}$		2	27.5				
Total.....	6				12	19.2				
Core makers.....	6	12	6		1	25.0				
Do.....	6	10 $\frac{8}{12}$	5 $\frac{4}{12}$		11	25.0	1 26 and under 28		6	25.0
Do.....	6	10 $\frac{8}{12}$	5 $\frac{4}{12}$				1 28 and under 30			
Do.....	6	10 $\frac{8}{12}$	5 $\frac{4}{12}$				2 30 and under 32			
Do.....	6	10 $\frac{8}{12}$	5 $\frac{4}{12}$				1 32 and under 34			
Do.....	6	10 $\frac{8}{12}$	5 $\frac{4}{12}$				1 34 and under 36			
Total.....	6				12	25.0	6	31.2	6	25.0
Core makers' helpers.....	6	12	11		1	18.0				
Do.....	6	12	11		1	22.5				
Do.....	6	12	6		1	20.0				
Do.....	6	12	6		1	22.5				
Do.....	6	10 $\frac{8}{12}$	5 $\frac{4}{12}$		4	20.0	2 16 and under 18		1	15.0
Do.....	6	10 $\frac{8}{12}$	5 $\frac{4}{12}$		10	22.5	1 22 and under 24		1	16.0
Do.....	6	10 $\frac{8}{12}$	5 $\frac{4}{12}$				3 24 and under 26		1	17.5
Do.....	6	10 $\frac{8}{12}$	5 $\frac{4}{12}$				2 26 and under 28		6	22.5
Do.....	6	10 $\frac{8}{12}$	5 $\frac{4}{12}$				1 38 and under 40			
Total.....	6				18	21.6	9	25.1	9	20.4
Core oven firemen.....	7	12	12	12	4	15.0				
Crane men.....	6	12	11		28	16.0				
Flask fitters.....	6	12	12		12	12.5				
Do.....	6	12	12		1	20.0				
Total.....	6	12	12		13	13.1				
Foremen.....	6	12	12		1	20.0				
Do.....	6	12	12		3	27.5				
Do.....	6	12	12		1	32.5				
Do.....	6	12	12		1	35.0				
Do.....	6	12	12		1	40.0				
Do.....	6	12	11		1	20.0				
Do.....	6	10 $\frac{8}{12}$	5 $\frac{4}{12}$		1	25.0				
Do.....	6	10 $\frac{8}{12}$	5 $\frac{4}{12}$		1	27.5				
Do.....	6	10 $\frac{8}{12}$	5 $\frac{4}{12}$		1	30.0				
Do.....	6	10 $\frac{8}{12}$	5 $\frac{4}{12}$		1	32.5				
Total.....	6				12	28.8				
Helpers.....	7	12	12	12	3	15.0				
Do.....	6	12	12	12	1	17.5				
Do.....	6	12	11		1	10.0				
Do.....	6	12	11		3	15.0				
Do.....	6	12	11		1	16.0				
Do.....	6	12	11		1	18.0				
Do.....	6	10 $\frac{8}{12}$	5 $\frac{4}{12}$		2	10.0				
Do.....	6	10 $\frac{8}{12}$	5 $\frac{4}{12}$		3	15.0				
Total.....					15	14.4				

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full working time.				Time workers.		Pieceworkers.				
							Actual earnings.			Guaranteed minimum rate per hour.	
	Hours per day.						Earnings per hour.				
	Days per week.	Monday to Friday.	Saturday.	Sunday.	Employees.	Rates per hour.	Employees.	Classified.	Average.	Employees.	Minimum.
STEEL FOUNDRY—continued.						<i>Cents.</i>		<i>Cents.</i>			<i>Cents.</i>
Knocking-out men.....	6	12	12	.....	7	12.5					
Do.....	6	12	12	.....	1	17.5					
Total.....	6	12	12	.....	8	13.1					
Laborers.....	7	12	12	12	37	12.5					
Do.....	6	12	11	.....	62	12.5					
Total.....					99	12.5					
Machine hands.....	6	12	11	.....	3	15.0	4	16 and under 18		12	15.0
Do.....	6	12	11	.....			7	18 and under 20			
Do.....	6	12	11	.....			1	22 and under 24			
Total.....	6	12	11	.....	3	15.0	12		18.7	12	15.0
Mold closers.....	6	12	12	.....	1	20.0					
Do.....	6	12	12	.....	1	22.5					
Do.....	6	12	12	.....	1	25.0					
Do.....	6	12	12	.....	2	27.5					
Do.....	6	12	12	.....	1	30.0					
Total.....	6	12	12	.....	6	25.4					
Molders.....	6	12	11	.....	1	27.5					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....	35	25.0	3	26 and under 28		21	25.0
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....	19	27.5	11	28 and under 30		21	27.5
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....	2	30.0	12	30 and under 32		10	30.0
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....			14	32 and under 34			
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....			5	34 and under 36			
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....			2	36 and under 38			
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....			2	38 and under 40			
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....			1	40 and under 42			
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....			2	42 and under 44			
Total.....	6			.....	57	26.1	52		32.5	52	27.0
Molders' helpers.....	6	12	6	.....	1	15.0					
Do.....	6	12	6	.....	1	20.0					
Do.....	6	12	6	.....	1	22.5					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....	1	15.0	3	20 and under 22		1	16.0
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....	2	18.0	1	24 and under 26		3	17.5
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....	3	20.0	3	26 and under 28		1	18.0
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....	7	22.5	2	28 and under 30		1	20.0
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....			1	30 and under 32		4	22.5
Total.....	6			.....	16	20.4	10		26.0	10	19.7
Office boys.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....	1	5.0					
Pattern house men.....	6	12	11	.....	1	20.0					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....	2	12.5					
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$	.....	2	16.0					
Total.....	6			.....	5	15.4					
Repair men.....	6	12	11	.....	2	16.0					
Do.....	6	12	11	.....	1	22.5					
Total.....	6	12	11	.....	3	18.2					
Sand blast men.....	6	12	12	.....	1	15.0					
Do.....	6	12	12	.....	1	17.5					
Total.....	6	12	12	.....	2	16.3					

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full working time.				Time workers.		Pleceworkers.						
							Actual earnings.		Guaranteed minimum rate per hour.				
	Days per week.	Hours per day.			Employees.	Rates per hour.	Employees.	Earnings per hour.			Employees.	Minimum.	
		Monday to Friday.	Saturday.	Sunday.				Classified.	Average.				
STEEL FOUNDRY—concluded.													
Sand mixers.....	6	12	12	.....	10	Cents. 13.5		Cents.	Cents.			Cents.	
Tool room men.....	6	12	12	.....	1	13.0							
Do.....	6	12	11	.....	1	17.5							
Do.....	6	10 ¹ / ₂	5 ¹ / ₂	.....	1	10.0							
Total.....	6			.....	3	13.5							
Welders.....	6	12	11	.....	1	15.0							
Do.....	6	12	11	.....	3	17.5							
Do.....	6	12	11	.....	1	18.0							
Do.....	6	12	11	.....	1	20.0							
Do.....	6	12	11	.....	1	25.0							
Total.....	6	12	11	.....	7	18.6							
TEMPERING.													
Chain men.....	6	12	12	.....	6	15.0							
Do.....	6	12	12	.....	1	16.0							
Total.....	6	12	12	.....	7	15.1							
Clerks.....	6	10	5 ¹ / ₂	.....	2	20.8							
Do.....	6	10	5 ¹ / ₂	.....	1	23.3							
Total.....	6	10	5 ¹ / ₂	.....	3	21.6							
Crane men.....	6	12	12	.....	2	15.0							
Errand boys.....	6	10	10	.....	2	5.0							
Foremen.....	6	12	12	.....	1	30.0							
Furnace tenders.....	6	12	12	.....	2	15.0							
Do.....	6	12	12	.....	1	18.0							
Do.....	6	12	12	.....	2	19.5							
Do.....	6	12	12	.....	2	20.0							
Total.....	6	12	12	.....	7	18.1							
Gas foremen.....	6	12	12	.....	1	18.0							
Gas men.....	6	12	12	.....	7	15.0							
Heaters.....	6	13	13	.....	1	24.0							
Laborers.....	6	12	12	.....	2	12.5							
Do.....	6	12	12	.....	3	15.0							
Total.....	6	12	12	.....	5	14.0							
YARD STOCKING.													
Blacksmiths.....	6	12	12	.....	1	15.0							
Chain men.....	6	12	12	.....	13	13.0							
Clerks.....	6	12	12	.....	1	10.5							
Do.....	6	12	12	.....	1	15.0							
Do.....	6	12	12	.....	1	18.0							
Total.....	6	12	12	.....	3	14.5							
Crane men.....	6	12	12	.....	9	16.5							
Do.....	6	12	12	.....	2	20.0							
Total.....	6	12	12	.....	11	17.1							
Floor men.....	6	12	12	.....	2	13.0							

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full working time.				Time workers.		Pieceworkers.			
	Hours per day.				Employees.	Rates per hour.	Actual earnings.		Guaranteed minimum rate per hour.	
							Earnings per hour.		Employees.	Minimum.
	Days per week.	Monday to Friday.	Saturday.	Sunday.			Classified.	Average.		
YARD STOCKING—concluded.										
Floor men, assistant.....	6	13	13	.....	1	<i>Cents.</i> 16.0		<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>
Do.....	6	13	13	.....	1	22.5				
Do.....	6	12	12	.....	1	14.0				
Do.....	6	12	12	.....	2	15.0				
Do.....	6	12	12	.....	1	16.5				
Do.....	6	12	12	.....	2	17.0				
Do.....	6	12	12	.....	2	18.0				
Do.....	6	12	12	.....	7	20.0				
Do.....	6	12	12	.....	1	22.5				
Total.....	6	.....	.....	.....	18	18.4	.....		
Laborers and unloaders.....	6	12	12	.....	140	12.5	11	12 and under 14		
Do.....	6	12	12	.....			45	14 and under 16		
Do.....	6	12	12	.....			6	16 and under 18		
Do.....	6	12	12	.....			5	18 and under 20		
Do.....	6	12	12	.....			6	20 and under 22	140	12.5
Do.....	6	12	12	.....			4	22 and under 24	1	15.0
Do.....	6	10 ¹ / ₂	5 ¹ / ₂	.....	1	11.5	7	12 and under 14		
Do.....	6	10 ¹ / ₂	5 ¹ / ₂	.....	95	12.5	14	14 and under 16		
Do.....	6	10 ¹ / ₂	5 ¹ / ₂	.....			23	16 and under 18		
Do.....	6	10 ¹ / ₂	5 ¹ / ₂	.....			12	18 and under 20		
Do.....	6	10 ¹ / ₂	5 ¹ / ₂	.....			7	20 and under 22		
Do.....	6	10 ¹ / ₂	5 ¹ / ₂	.....			1	22 and under 24		
Total.....	6	.....	.....	.....	236	12.5	141	.....	16.3	141 12.5
Motormen.....	6	12	12	.....	8	17.0				
Observers.....	6	12	12	.....	1	22.5				
Oilers.....	6	12	12	.....	2	14.5				
Repair and crane men.....	6	12	12	.....	1	22.5				
Stockers.....	6	12	12	.....	2	20.0				
Stockers, assistant.....	6	12	12	.....	5	15.0				
YARD TRANSPORTATION.										
Brakemen.....	7	12	12	12			12	18 and under 20	19.2	
Do.....	6	12	12	.....	18	15.5				
Do.....	6	12	12	.....	12	16.0				
Do.....	6	12	12	.....	15	17.0				
Do.....	6	12	12	.....	17	18.0				
Total.....				.....	62	16.6	12	18 and under 20	19.2	
Car inspectors.....	6	12	12	.....	1	17.0				
Do.....	6	12	12	.....	1	20.0				
Total.....	6	12	12	.....	2	18.5				
Conductors.....	6	12	12	.....	32	20.0				
Engineers, broad gauge.....	7	12	12	12			8	22 and under 24	23.1	
Do.....	6	12	12	.....	1	20.0				
Do.....	6	12	12	.....	26	22.8				
Total.....				.....	27	22.7	8	22 and under 24	23.1	
Engineers, narrow gauge.....	6	12	12	.....	13	19.0				
Do.....	6	12	12	.....	13	20.0				
Total.....	6	12	12	.....	26	19.5				
Firemen.....	6	12	12	.....	20	17.0				
Flagmen.....	6	12	12	.....	1	13.0				

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full work- ing time.				Time workers.		Pieceworkers.			
	Days per week.	Hours per day.			Employees.	Rates per hour.	Actual earnings.		Guar- anteed mini- mum rate per hour.	
		Monday to Friday.	Saturday.	Sunday.			Earnings per hour.		Employees.	Minimum.
							Classified.	Average.		
YARD TRANSPORTATION—CON.						<i>Cents.</i>		<i>Cents.</i>		<i>Cents.</i>
Foremen, narrow gauge.....	6	12	12	.....	1	21.0				
Do.....	6	12	12	.....	1	25.0				
Total.....	6	12	12	.....	2	23.0				
Helpers.....	6	12	12	.....	2	14.5				
Do.....	6	12	12	.....	17	16.0				
Total.....	6	12	12	.....	19	15.8				
Hostlers.....	6	12	12	.....	4	16.0				
Repair men.....	6	12	12	.....	12	15.0				
Do.....	6	12	12	.....	1	16.0				
Total.....	6	12	12	.....	13	15.1				
Switchmen.....	6	12	12	.....	1	12.5				
Weighmasters.....	7	12	12	12	1	16.0				
Do.....	7	12	12	12	1	17.0				
Total.....	7	12	12	12	2	16.5				
Yardmasters.....	6	13	13	.....	1	22.5				
Do.....	6	13	13	.....	2	25.0				
Do.....	7	12	12	12	.....	1	22 and under 24	23.5		
Do.....	6	12	12	.....	3	20.0				
Total.....				.....	6	22.1	1	22 and under 24	23.5	
Yardmasters, assistant.....	6	13	13	.....	1	20.0				
Do.....	6	13	13	.....	2	22.5				
Do.....	7	12	12	.....	.....	2	24 and under 26	24.0		
Total.....				.....	3	21.7	2	24 and under 26	24.0	
MISCELLANEOUS.										
Blacksmiths.....	7	10 $\frac{5}{12}$	10 $\frac{5}{12}$	10 $\frac{5}{12}$	1	25.0				
Do.....	7	10 $\frac{5}{12}$	10 $\frac{5}{12}$	10 $\frac{5}{12}$	1	30.0				
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	1	20.0				
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	1	21.0				
Total.....				.....	4	24.0				
Blacksmith helpers.....	7	12 $\frac{5}{12}$	12 $\frac{5}{12}$	12 $\frac{5}{12}$	1	16.0				
Do.....	7	12 $\frac{5}{12}$	12 $\frac{5}{12}$	12 $\frac{5}{12}$	1	20.0				
Do.....	7	10 $\frac{5}{12}$	10 $\frac{5}{12}$	10 $\frac{5}{12}$	4	16.0				
Do.....	7	10 $\frac{5}{12}$	10 $\frac{5}{12}$	10 $\frac{5}{12}$	1	18.5				
Do.....	7	10 $\frac{5}{12}$	10 $\frac{5}{12}$	10 $\frac{5}{12}$	1	21.5				
Do.....	7	10 $\frac{5}{12}$	10 $\frac{5}{12}$	10 $\frac{5}{12}$	1	22.5				
Do.....	7	10 $\frac{5}{12}$	10 $\frac{5}{12}$	10 $\frac{5}{12}$	1	24.0				
Total.....	7			.....	10	18.7				
Bricklayers, foreman.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	1	40.0				
Bricklayers.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	3	25.0				
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	8	27.5				
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	23	30.0				
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	30	35.0				
Do.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	2	37.5				
Total.....	6	10 $\frac{5}{12}$	5 $\frac{5}{12}$	.....	66	32.0				

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full working time.				Time workers.		Pieceworkers.			
	Days per week.	Hours per day.			Employees.	Rates per hour.	Actual earnings.		Guaranteed minimum rate per hour.	
		Monday to Friday.	Saturday.	Sunday.			Classified.	Average.	Employees.	Minimum.
MISCELLANEOUS—continued.						<i>Cents.</i>		<i>Cents.</i>		<i>Cents.</i>
Bricklayers' helpers.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		7	12.5				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		100	13.5				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	17.5				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		3	20.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		2	22.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	25.0				
Total.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		114	13.9				
Carpenter, foreman.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	35.0				
Carpenters and helpers.....	7	12	12	12	3	21.0				
Do.....	7	12	12	12	2	25.0				
Do.....	6	12	12		1	17.5				
Do.....	6	12	12		2	21.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		2	12.5				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		2	15.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	17.5				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		10	19.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		54	21.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	22.5				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		3	23.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	25.0				
Do.....	6	10	10		1	20.3				
Total.....					83	20.6				
Car repair men.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	18.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		2	19.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		2	21.0				
Total.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		5	19.6				
Chasers (bricklayers).....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	16.5				
Clerks.....	7	12	12	12	1	15.0				
Do.....	7	11	11	11	1	16.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	17.5				
Total.....					3	16.2				
Drivers, team.....	6	11 $\frac{1}{2}$	11 $\frac{1}{2}$		2	13.5				
Foremen, general.....	7	12	12	12	1	40.0				
Foremen, general, assistant.....	7	12 $\frac{1}{2}$	12 $\frac{1}{2}$	12 $\frac{1}{2}$	1	22.5				
Do.....	7	12			1	25.0				
Total.....					2	23.8				
Laborers, general.....	7	12	12	12	191	12.5				
Do.....	6	12	12		3	12.5				
Do.....	6	12	12		1	13.5				
Do.....	6	12	12		1	13.8				
Total.....					196	12.5				
Messengers.....	6	12	12		1	5.0				
Painters, foremen.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	21.0				
Painters.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		21	16.0				
Pipe fitters, foremen.....	7	10 $\frac{1}{2}$	10 $\frac{1}{2}$	10 $\frac{1}{2}$	1	40.0				
Pipe fitters.....	7	13	13	13	1	30.0				
Do.....	7	10 $\frac{1}{2}$	10 $\frac{1}{2}$	10 $\frac{1}{2}$	1	25.0				
Do.....	7	10 $\frac{1}{2}$	10 $\frac{1}{2}$	10 $\frac{1}{2}$	2	27.5				
Total.....					4	27.5				

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full working time.				Time workers.		Pieceworkers.			
	Days per week.	Hours per day.			Employees.	Rates per hour.	Actual earnings.		Guaranteed minimum rate per hour.	
		Monday to Friday.	Saturday.	Sunday.			Earnings per hour.		Employees.	Minimum.
							Classified.	Average.		
MISCELLANEOUS—continued.						<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>		
Pipe fitters' helpers.....	7	13	13	13	1	20.0				
Do.....	7	10 $\frac{1}{2}$	10 $\frac{1}{2}$	10 $\frac{1}{2}$	1	17.5				
Do.....	7	10 $\frac{1}{2}$	10 $\frac{1}{2}$	10 $\frac{1}{2}$	1	23.0				
Total.....					3	20.2				
Planing mill foremen.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	25.0				
Planing mill hands.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		2	15.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	19.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		4	21.0				
Total.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		7	19.0				
Planing mill apprentices.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	5.0				
Repair men, foremen.....	6	12	12		1	40.0				
Repair men, general.....	6	12	12		1	14.0				
Do.....	6	12	12		2	15.0				
Do.....	6	12	12		4	16.0				
Do.....	6	12	12		4	17.5				
Do.....	6	12	12		8	20.0				
Do.....	6	12	12		1	22.5				
Do.....	6	12	12		1	25.0				
Do.....	6	12	12		1	27.5				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		2	13.5				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		2	15.0				
Total.....	6				26	18.1				
Repair men, locomotive.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	20.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		3	22.5				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	25.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	27.5				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	30.0				
Total.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		7	24.3				
Rigger foremen.....	7	12	12	12	1	18.0				
Do.....	7	12	12	12	2	20.0				
Total.....	7	12	12	12	3	19.3				
Rigger foremen, assistant.....	7	12	12	12	2	18.0				
Riggers.....	7	12	12	12	14	15.0				
Do.....	7	12	12	12	2	16.0				
Do.....	7	12	12	12	1	18.0				
Do.....	7	12	12	12	1	20.0				
Total.....	7	12	12	12	18	15.6				
Saw grinder, foremen.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	45.0				
Saw grinders.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		2	17.5				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	20.0				
Total.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		3	18.3				
Scrap shear men.....	7	12	12	12	1	18.0				
Do.....	7	12	12	12	1	20.0				
Total.....	7	12	12	12	2	19.0				

REGULAR FULL WORKING TIME AND EARNINGS PER HOUR OF
EMPLOYEES IN SPECIFIED DEPARTMENTS OF THE BETHLEHEM
STEEL WORKS, BY OCCUPATIONS, JANUARY, 1910—Continued.

Department and occupation.	Regular full working time.				Time workers.		Pieceworkers.			
	Days per week.	Hours per day.			Employees.	Rates per hour.	Actual earnings.		Guaranteed minimum rate per hour.	
		Monday to Friday.	Saturday.	Sunday.			Earnings per hour.		Employees.	Minimum.
							Classified.	Average.		
MISCELLANEOUS—concluded.	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$			<i>Cents.</i>		<i>Cents.</i>		<i>Cents.</i>
Slaters.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		2	21.0				
Slater helpers.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	15.0				
Stablemen, head.....	7	12 $\frac{1}{2}$	12	12	1	17.0				
Stablemen.....	7	12	12	12	1	13.0				
Storehouse laborers.....	6	12	12		1	18.0				
Do.....	6	10 $\frac{1}{2}$	10 $\frac{1}{2}$		1	16.0				
Do.....	6	10 $\frac{1}{2}$	10 $\frac{1}{2}$		1	20.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	15.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	16.0				
Total.....	6				5	17.0				
Tinsmiths.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	20.0				
Tool treaters and helpers.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		2	16.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	18.0				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	22.5				
Do.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		1	25.0				
Total.....	6	10 $\frac{1}{2}$	5 $\frac{1}{2}$		5	19.5				
Track foremen.....	7	12	12	12	2	14.0				
Do.....	7	12	12	12	1	19.0				
Do.....	7	12	12	12	1	22.5				
Do.....	7	12	12	12	1	27.0				
Do.....	6	12	12		3	18.0				
Total.....					8	18.8				
Track laborers.....	7	12	12	12	119	12.5				
Watchmen.....	7	12	12	12	1	12.5				
Water boys.....	7	12	12	12	1	8.0				

APPENDIX B.

DESCRIPTION OF BETHLEHEM STEEL COMPANY'S WORKS.

(In the photograph given at the beginning of this report the numbers on the buildings refer to the consecutive numbers shown in the following descriptive list of buildings.)

No. 1.—Brass foundry.

The production of brass, bronze, and manganese-bronze castings of all descriptions, such as ordnance castings, propeller-shaft sleeves, general valve work, etc. Capacity about 100 tons per month.

No. 2.—No. 4 foundry cleaning building.

Cleaning of iron castings of all descriptions, and machining of cast-iron tunnel segments.

No. 3.—No. 4 foundry.

The production of all classes of iron castings, from the smallest (such as shrapnel heads) up to large engine and hydraulic press bedplates and platens, marine-engine cylinders, etc. The production of this department is from 3,000 to 5,000 tons per month, depending on the class of work.

No. 4.—No. 6 machine shop.

General machine repair shop for entire works. Used also for building and assembling of heavy machinery, gas engines, etc.

No. 5.—Construction and boiler shops.

Contains construction department, which does general structural work, such as building and bridge trusses, columns, etc. Other end of building contains the boiler department, which has charge of construction and repairs of boilers, ladles, and sheet-steel work generally.

No. 6.—General office building.

Contains general offices of the company and the drafting rooms of the engineering department.

No. 7.—Pattern and carpenter shops.

Contains the pattern shop, which produces all classes of ordnance, engine, and hydraulic press patterns; carpenter shop, which does the general carpenter work for the works.

No. 8.—No. 4 machine shop.

Three-story machine shop for the manufacture of field guns, caissons, field-gun carriages, sights, breech mechanisms, and all the smaller sizes of ordnance work generally, such as fuses for shell and shrapnel, gun sights, and projectiles, also hydraulic jacks.

No. 9.—Projectile press shop.

Contains hydraulic presses of different sizes up to 1,000 tons' capacity, and produces all descriptions of press work, such as shell, shrapnel bodies, cream separators, stamp-mill shoes, and dies.

No. 10.—Projectile machine shop.

Does all the machine work on the different classes of projectiles. One end of building contains plant for the treatment of projectiles.

No. 11.—Drop-forge die shop.

Produces dies of all descriptions used in the drop-forge department.

No. 12.—Drop-forge hammer shop.

Produces all descriptions of drop forgings, such as automobile axles, crank shafts, gears, etc., of special steels, as well as general forgings of tool steel, nickel steel, chrome steel, wrought iron, etc.

No. 13.—Drop-forge treatment shop.

Is used for heat treatment (oil tempering, annealing, etc.) of drop forgings.

No. 14.—No. 3 smith shop.

Produces all kinds of steel forgings, such as breech mechanisms and gun-mount parts, small-gun forgings, shafts, locomotive axles. Contains, in addition to a number of smith fires for hand forgings, steam hammers. Capacity, 1,500 tons per month.

No. 15.—Gas producers.

Gas producers for the press-forge and open-hearth departments.

No. 16.—Annealing and storage building.

Is used for the annealing and straightening of forgings of all descriptions, shafts, gun forgings, merchant bars of all descriptions, etc., as they come from the press forge.

No. 17.—Press-forge and open-hearth building.

The press-forge department contains two (2) hydraulic presses, the larger of which is of 5,000 tons capacity. This department produces a general line of large steel forgings, such as gun, marine, engine, and special solid and hollow forgings. Forgings up to about 80,000 pounds weight are made here. Capacity, 1,500 tons per month.

Next to the press-forge department are the open-hearth furnaces, eleven (11) in number. These furnaces produce ingots of carbon and alloy steels for the forge and armor-plate departments and rolling mills. In addition to the furnaces is a Whitworth fluid compression plant, with a capacity for pressing up to a 60"-diameter ingot. These ingots are used for gun and large hollow forgings generally. Capacity of this open-hearth department about 15,000 tons of steel per month.

No. 18.—Steel foundry.

Produces open-hearth steel castings of all descriptions; all kinds of ordnance castings, gun mounts, etc.; locomotive castings, frames, wheel centers, eccentrics, driving boxes, etc.; large hydraulic press castings, hydraulic cylinders, general engine castings, etc. Capacity is about 1,500 gross tons per month.

No. 19.—No. 2 machine shop.

This is the largest machine shop in the company's plant, and is 1,467 feet long. Rough machined forgings of all kinds are machined in this shop, such as gun forgings, marine and general engine forgings, and parts for hydraulic presses and machine tools. Much heavy machinery is built in this shop, such as large and small hydraulic presses, roll trains, planers, lathes, hydraulic riveters, cotton presses, wheel presses, boring

mills, etc. The lower end of the shop is used for ordnance manufacture, light and heavy finished cannon "complete," sights, gun mounts of all kinds, disappearing carriages of all sizes, turret mechanisms, etc. Output is about 6,000,000 pounds of finished and rough machined forgings per month. The eastern end of the shop contains an assembling plant used for 6" guns and below. This end of the shop is used by the inspecting officers of the Government for the inspection of finished ordnance. This shop has a tool dressing and treating department and a very complete tool-room system.

No. 20.—Steel casting cleaning shed.

Castings are cleaned in this building, annealed, sink heads and gates are cut off, and castings prepared for shipment.

No. 21.—Treatment department.

Building for heat treatment of steel forgings for ordnance, marine, and general use. Contains heating and annealing furnaces, tempering tanks, gas producers, etc.

No. 22.—Pattern storage house.

Stores patterns for steel casting department.

No. 23.—Armor forge.

Contains a 14,000-ton hydraulic press for forging armor plate, large cranks, shafts, field rings, turbine rims, etc. Has a large 18,000-horsepower engine for furnishing power for press, with necessary hydraulic pressure pumps, etc. There is a large hydraulic bending press for bending and shaping armor plates, with necessary heating furnaces, etc. The capacity of the armor-plate department is about 12,000 tons of finished armor plates per year.

No. 24.—No. 3 machine shop.

Contains the large planers, milling machines, drill presses, etc., used in the machining of armor plate of all classes, as well as gun shields and armor-plate vaults.

No. 25.—Armor-plate treatment plant.

Contains heating and annealing and carbonizing furnaces for the treatment of armor plates, gun shields, armor-plate vaults, etc., with the necessary tempering tanks, water sprays, scaling machines, pumps, etc.

No. 26.—Tempering plant No. 2.

Contains furnace and oil tank for oil tempering large gun forgings which are too large to be treated in building No. 21. This building also contains an assembling plant for assembling the larger sizes of guns, from 6" up to 12", 13", and 16".

No. 27.—Ore stock yard.

This contains the ore, limestone, and fuel for the blast furnaces. It is served by a loading bridge, which loads the cars which take the stock over the electric elevated railroad and deliver it to the blast-furnace stock bins.

No. 28.—Laboratories.

A well-equipped chemical laboratory, which takes care of the analysis of the various raw materials and products of the entire plant.

To the east of this is a physical laboratory, equipped with suitable testing machines for making tensile, vibratory, and alternating stress tests of the different materials produced by the company. Among these is an emery hydraulic machine of 200,000 pounds capacity, which is very accurate and sensitive, and which has its results frequently checked by the government machine at Watertown Arsenal. There is also a 400,000-pound Rheile machine for testing large sections.

No. 29.—No. 1 mill.

This department contains the puddling furnaces, squeezer, and puddle mill. Stay bolt, chain iron, horseshoe iron, as well as a very pure low phosphorus iron (used in the production of high grade tool steel) are made in this mill. This building also contains a 22" and 12" roll train, used in rolling various shapes and sizes of bar steel, as well as billets and angles. The various special steels made by the company are rolled here. Capacity as follows: Puddle mill, 1,200 tons; 22" mill, 5,000 tons; 12" mill, 800 tons; all per month.

No. 30.—Stay bolt mill.

This building contains a modern mill for rolling stay bolt iron. It is also used for special sizes of bar steel, file steel, etc. Capacity, 1,500 tons per month.

No. 31.—Eight-inch mill.

This building has an 8" roll train used in rolling the smaller sizes of tool steel, file steel, etc. Capacity, 600 tons per month.

No. 32.—Crucible steel department.

This building, marked 32, contains the melting plant of the crucible steel department. There are four (4) gas-heated crucible furnaces. Here are melted all of the special high speed, self-hardening, and carbon finishing steels, projectile steel, as well as the ordinary tool steels.

To the rear of this building are the hammer shops of this department, with equipment of hammers, heating furnaces, etc., for the cogging down and finishing of the tool steel. Capacity, 800 tons of steel per month.

Nos. 33 to 37.—Blast furnace plant.

This plant contains four (4) blast furnaces in active operation, with a capacity of 330,000 tons per year. "E" furnace (No. 37) is equipped with a skip-hoist and bin system, and receives its stock from the stock yard (No. 27) over the elevated electric road shown in the photograph. The bin system also serves the other furnaces. This furnace plant produces foundry, basic, Bessemer forge, and low phosphorus iron. The metal is sent molten to both open-hearth plants. The plant is equipped with a pig casting machine, which delivers the pig iron on cars.

Nos. 38 to 41.—The Saucon plant.

This is the new plant lately completed for the production of open-hearth steel rails, beams, and structural shapes generally.

No. 38.—Open-hearth department.

This building contains ten (10) 60-ton open-hearth furnaces, with a capacity of 35,000 tons per month, using direct metal from the blast furnaces, and producing the ingots for the rail, gray beam, and structural mills. The ingots are cast on cars and stripped by an electric stripper.

No. 39.—Soaking-pit department.

Contains soaking pits for heating the ingots for the rail and structural mills.

No. 40.—Power plant.

Contains the boilers and power plant of the Saucon works.

No. 41.—Rail mill.

Mill for rolling open-hearth rails. Contains blooming mill, rail mill, saws, hotbeds, straightening presses, drill presses, and shipping yard. Capacity, 2,000 tons per day.

No. 42.—Gray mill.

Contains the mills for rolling the patent gray beams. Capacity, 1,000 tons per day.

No. 42.—Twenty-eight inch structural mill.

Mill for production of standard structural shapes. Not operated since February, 1909.

There is now authorized and in course of execution a construction programme calling for an expenditure of about \$12,000,000.

In the main these additions to the plant consist of three (3) blast furnaces, duplicates of the present "E" furnace, which will increase the annual output of pig iron to 700,000 tons.

A 2-20 ton converter plant to work in conjunction with Saucon plant open hearth on the duplex process, thus more than doubling the plant's steel output.

A 6,000-ton per day by-product coke plant.

Additions and improvements to machine shops, tempering plant, forge department, steel and iron foundries, projectile department, crucible department, and mills.

Also a complete electrification of the Lehigh plant.

PRODUCTION FOR 1909.

Department.	Tons.	Department.	Tons.
Blast furnace:		Puddle mill.....	7,000.09
A.....	59,680.00	Stay-bolt mill.....	4,995.59
B.....	60,980.00	8-inch mill.....	4,109.36
C.....	52,502.00	12-inch mill.....	6,390.03
E.....	120,120.00	22-inch mill.....	15,742.92
Total pig iron.....	293,282.00	Steel foundry.....	11,721.95
Open hearth:		Iron foundry.....	30,516.30
No. 1.....	130,055.09	Brass foundry.....	738.98
No. 2.....	363,849.00	Crucible ingots.....	3,005.42
Total ingots.....	493,904.09	Press forge.....	15,497.08
40-inch bloomer.....	187,069.61	Hammer forge.....	12,095.33
28-inch rail mill.....	141,742.06	Drop forge.....	1,448.44
28-inch structural mill.....	1,102.06	Machine shop:	
46-inch bloomer.....	163,819.73	No. 2.....	20,904.00
48-inch structural mill.....	148,299.47	No. 4.....	2,761.09
		No. 6.....	458.71
		Smith shop.....	180.46

BETHLEHEM STEEL COMPANY—ACCOUNTING DEPARTMENT.

CAPITAL, FUNDED DEBT, AND SURPLUS.

Capital stock (paid in).....	\$13,500,000.00
Surplus.....	421,261.93
Purchase money mortgage, 6 per cent bonds.....	7,500,000.00
First extension mortgage, 5 per cent bonds.....	11,330,000.00
Six per cent gold notes.....	7,880,000.00
Total.....	<u>40,631,261.93</u>
Total wages for year, 1909.....	\$4,876,742.92
Cost of material shipped.....	\$15,884,427.75
Gross manufacturing earnings.....	\$2,494,598.63
Average number of employees, 1909.....	6,707
Labor days.....	2,166,331
Per cent of wages to company earnings.....	195.5
Per cent of wages to cost of material sold.....	30.7
Company earnings per \$1 wages.....	\$0.51
Company earnings per employee.....	\$371.94
Average wages per employee.....	\$727.11
Company earnings per man per day.....	\$1.15

APPENDIX C.

MEMORANDUM SETTING FORTH NATURE OF BONUS SCHEMES IN USE IN BETHLEHEM STEEL COMPANY'S MACHINE SHOPS.

In submitting memorandum of the bonus schemes in use in our machine shops, attention is invited to the fact that in all cases the man receives a minimum daily rate, which is a representative compensation for a day's work, the hourly rate on which this daily wage is computed being shown on the company's pay roll, and that there are absolutely no methods or systems of penalization. The method used in applying the different bonuses is as follows:

The first items of consideration are the speed and feed of the machine (which, for purposes of illustration, we will assume to be a lathe), and which are determined by observation, and tabulated (see card A). The pulley power of the machine is next considered, and observations made of the maximum pulley capacity of the machine under full load. If it is found that a machine tool will run at a 45-foot cutting speed with one-half inch depth of cut, and carry an eighth of an inch feed per revolution on a 0.65 carbon steel, we assume this to be the maximum running capacity, and from this know our ratio for material of different hardnesses. We then proceed to prepare master cards for this machine with a range of all grades of material, depth of cut, cutting speed, and width of feed for all diameters (see card B).

These master cards are then taken by the man in charge of the rating, who receives from the forge department a sketch of the forging, together with the drawing of same, and the grade of material, and issues a work slip (see card C) to the machine operator, using the master cards as a guide, the office retaining a duplicate copy.

Standard information, such as "chuck," "change machine," "change gears," "set rest," "turn end for end," "remove," "cut off," etc., has all been determined by observation, and our standards for each type of machine are on file with the master cards.

Assume that the operator (a 25-cent per hour man) has run for a day on the speed card (card C) and completed two axles, and a third axle with the exception of cutting off one end, for a day's work of $10\frac{5}{12}$ hours. The operator fills out an observation card (card D), which is O. K.'d by the foreman to check the work, and turned into the office for computation. Suppose that the amount of work turned in (as per card D) amounts to $12\frac{2}{3}$ hours; as $10\frac{5}{12}$ is our regular day, the operator has equaled his card, and saved $1\frac{9}{12}$ hours. For having equaled his day rate he receives a bonus of 20 per cent over his hourly earnings, or 20 per cent of $10\frac{5}{12} \times 25$ cents (or 20 per cent of \$2.60) equals 52 cents. For the overtime turned in he receives 50 per cent of his earnings for this amount of work as an extra compensation, or 50 per cent of $1\frac{9}{12} \times 25$ cents (or 50 per cent of 44 cents) equals 22 cents. His entire bonus, over and above his hourly rate earnings, therefore, is 52 cents plus 22 cents, or 74 cents.

On multiple work, which may take from one minute to three hours for each job, the foreman takes observations as to the best possible time in which the job can be done, and reports this time to the office. A contract (see card E) is then issued to the operator, with the usual 20 per cent added for meritorious work. Assuming the time allowed at 10 minutes, and the operator receiving a rate of 25 cents per hour, the price given him would be 25 cents plus 20 per cent, or 30 cents \times one-sixth of an hour, or 5 cents each.

CARD A.

BETHLEHEM STEEL COMPANY.

No. 4 SHOP.		LATHES.			
4101-4102-4103-4104-4105-4106-4107-4108-4109.					
1st speed.		2nd speed.		3rd speed.	
Point.	Rev. per min.	Point.	Rev. per min.	Point.	Rev. per min.
1	1.25	1	2.5	1	4.5
2	1.5	2	2.75	2	5.0
3	1.625	3	3.25	3	5.5
4	1.75	4	3.5	4	6.25
5	1.875	5	3.75	5	7.0
6	2.125	6	4.25	6	8.0
4th speed.		5th speed.		6th speed.	
Point.	Rev. per min.	Point.	Rev. per min.	Point.	Rev. per min.
1	10.0	1	20.0	1	36.0
2	11.5	2	23.0	2	40.0
3	13.0	3	25.0	3	44.0
4	14.0	4	27.5	4	50.0
5	15.0	5	30.0	5	56.0
6	17.0	6	34.0	6	64.0
Symbol.	Feed per rev.		Position of lock pin.	Size gear.	
	Rack.	Screw.		Spindle.	Screw.
A	.0214	.0714	Out.	20	70
B	.025	.0833		20	60
C	.0261	.087		24	69
D	.0272	.0909		24	66
E	.03	.1		24	60
F	.0333	.111	Center.	24	54
G	.0375	.125		30	60
H	.0429	.143		20	70
I	.05	.167		20	60
J	.06	.2		24	60
K	.075	.25	In.	30	60
L	.10	.333		20	60
M	.12	.4		24	60
N	.15	.5	Center.	30	60
O	.30	1.0		60	30
P	.45	1.5		60	20
Q	.6	2.	In.	60	30

CARD B.

10'' to 12'' diameter.

SPEED CARD.

Machine number 4101—9

[illegible]

CARD C.

CLASS OF WORK. <i>Axle.</i>		STANDING ORDER.		ORDER NUMBER. <i>17284.</i>		
MACHINE NUMBER. <i>4101 to 9.</i>		CLASS OF METAL.		FORGING NUMBER.		
	Description of operation.	Length of cut.	Minutes per inch.	Feed.	Speed.	Time al- lowed.
	<i>Change machine.....</i>					<i>15</i>
1	<i>Chuck.....</i>					<i>10</i>
2	<i>Return 2 cuts.....</i>	<i>150''</i>	<i>.75</i>	<i>E</i>	<i>4 S 4</i>	<i>110</i>
3	<i>Lay out.....</i>					<i>10</i>
4	<i>Turn end for end.....</i>					<i>10</i>
5	<i>Cut off 2 ends.....</i>		<i>.45</i>			<i>90</i>
6	<i>Remove.....</i>					<i>10</i>
7						<i>4 hrs. 5 min.</i>
8						
9						
10						
11						
12						
13						
14	<i>Axle 10'' Dia. X, 6 ft. long finished.</i>					
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
Card number.	Drawing number.	Month.	Day.	Year.	Signed.	
<i>2740</i>	<i>11238$\frac{1}{2}$</i>	<i>12</i>	<i>6</i>	<i>09</i>	<i>R. C.</i>	

When machine can not be run as ordered speed boss must at once report to man who signed this slip.

CARD D.

OBSERVATION CARD.			Machine number 4101.	
Month.	Day.	Year.	Day	Shift
12	6	09	Night	
Man's number			John Doe Machine man	
Man's number			Machine helper	
Time taken O. K.			C. H. Adams Foreman	
Order number.	Speed card number.	Drawing number.		
17284	2740	112384		
Forging number.		No. pcs. fin.	Time taken.	
		2	10.5	
			8 15	
			3 10	
			3 45	
2 axles and 1-2-3-4 and 1/2 of 5			12hr. 10 min.	
Change machine.				
Order number.	Speed card number.	Drawing number.		
Forging number.		No. pcs. fin.	Time taken.	

Time taken to correspond with time cards on each job.

CARD E.

BETHLEHEM STEEL COMPANY.

May 10, 1909.

Contract number 2731 Drawing number 194824c
 With John Doe No. 27 Machine number 3120
 For Fin. turn thread and cut off

Order number.	No. pieces.	Name of piece or part.	Price.	Amount.
1722	500	1" Bolts	.05	25.00

..... Contractor.
 Foreman.
 Date started..... Date completed.....

APPENDIX D.

ACCIDENT RECORD, AND RELIEF AND BENEFITS.

A relief and beneficial association is maintained among the employees. The company has one representative on the board of managers.

To this association the company makes regular contributions in proportion to the dues paid by members, the company's contributions for 1909 being \$12,581.60.

The association pays its members \$5 per week during sickness or disability on account of any accident, and in addition makes certain specified payments for loss of bodily members, or on death of a member or member's wife.

The contribution by the company is not used in any way as an offset to any legal liability by the company in case of accident.

The cost to the men for this protection was in 1909, 26 $\frac{3}{4}$ cents per month.

First-aid boxes, stretchers, and blankets are provided in each department, and one at least of the employees in each department is designated to provide "first aid." At Saucon plant one man on day turn and one on night turn has supervision over such accidents as it may be necessary to call to his attention. A dispensary is provided with a first-aid man on duty on each turn. These first-aid men are at the call of any department for any accident of a serious nature. The dispensary has an ambulance always in readiness. Local physicians, with offices or residences near the works, are called whenever their services are required. Minor injuries are dressed, as often as required, at the dispensary. Services of physicians, etc., as above, are said to be at the expense of the company. Serious accidents are sent to St. Luke's Hospital, South Bethlehem, where the cost of treatment, it is stated, is borne by the company. Previously the company for some time maintained its own hospital, but the better service to be secured by the more experienced staff and elaborate equipment of a large hospital made it advisable to abandon this, though the charge made by St. Luke's exceeds the cost of maintaining the private hospital.

The records of accidents for the year 1909 appears in the table below, and covers the following points: Total number of accidents reported; total number of serious injuries (involving loss of one week or more of time); total number of injuries causing loss of bodily members (including fingers); number causing loss of arm or

leg; number causing loss of life; total time lost from injuries, by those recovering from injury:

STATISTICS OF ACCIDENTS IN THE BETHLEHEM STEEL WORKS AND TIME LOST FROM INJURIES IN 1909, BY DEPARTMENTS.

Department.	Total number of accidents reported.	Number of accidents causing—				Total time lost in 1909 from injuries by those recovering from injury. (a)
		Loss of more than one week's time.	Loss of bodily members (including fingers).	Loss of leg or arm.	Loss of life.	
						Weeks.
General.....	1	1				6.86
Electrical.....	3	3				18.14
Accident and hospital force.....	1					
Boilers (b).....	8	9				50.29
Railroads.....	25	17	2	2	2	121.19
Storekeepers.....	1					
Mixing house at open hearth No. 1.....	1	1				3.29
Labor gang.....	54	31			2	112.31
Boiler shop.....	7	1	1			17.00
Carpenter shop.....	10	7	1			31.43
Bricklayers.....	14	12				41.14
Construction gang.....	25	13	2			64.71
Pattern shop (b).....	4	5	1			16.14
Building No. 1 repair gang (b).....	2	4				32.23
Smith shop No. 1.....	1					
McAfee quarry (b).....	14			1		63.15
Armor plate department.....	22	12	1		1	71.88
Machine shop No. 6.....	14	8			1	40.00
Blast furnaces.....	72	52		1	5	235.43
Iron foundry (b).....	38	39	1			173.86
Crucible department (b).....	11	13	1			35.00
Brass foundry.....	5	4				13.72
Steel foundry (b).....	23	41	5			276.14
Treatment department (b).....		2				4.00
Machine shop No. 2 (b).....	58	61	4		2	337.61
Open hearth No. 1.....	63	34			1	131.57
Press forge.....	11	11				47.86
Mill No. 1 (b).....	33	41			1	189.14
Hammer forge (b).....	25	29			c 2	138.91
Treatment department (b).....		3				12.71
Machine shop No. 4 (b).....	23	34				158.86
Drop forge.....	16	8	1			40.00
Projectile shop (b).....	7	15	2	1		87.29
Smith shop—No. 2 machine shop (b).....		3				13.43
Saucon boilers (b).....	2	5				18.43
Saucon carpenters (b).....		1				4.72
Saucon electrical.....	8	3				40.72
Fabricating shop (b).....	13	14				51.43
Special structural shapes mills.....	30	26	3		1	142.15
Saucon laborers.....	40	23	1		1	116.28
Saucon machinists.....	8	5				31.14
Saucon narrow gauge railroad (b).....	3	11				60.57
Saucon open hearth.....	94	52	3			238.74
Rail mill gas producers (b).....	4	6				24.29
Rail mill and standard structural mill.....	46	40				187.15
Saucon storage and shipping yard.....	96	40	3	1	3	238.34
Roll turners.....	4					
Total.....	927	754	38	6	c 21	3,739.25

a This covers total time lost in 1909 from accidents in that year or previous year.

b The numbers of reported accidents given in first column are numbers formally reported to accident department. The numbers of cases involving more than one week lost time are taken from the records of the relief and beneficial association of men who drew relief. In the cases here noted the number of men drawing relief exceed the number of accidents formally reported. This may occur in case of an accident too slight to seem at the time necessary to report, but which may later develop consequences which will keep the man from work and on which he therefore draws relief.

c One of these deaths was due to heat prostration and not to an accident.

The following tables show the receipts and expenditures of the relief fund for the six years 1905 to 1909, both inclusive, and also the membership and classes of accident benefits paid during the same period.

BENEFICIARY WORK OF RELIEF ASSOCIATION, 1905 TO 1909.

	Eleven months ending April 30, 1905.	Year ending April 30, 1906.	Eight months ending December 31, 1906.	Year ending December 31, 1907.	Year ending December 31, 1908.	Year ending December 31, 1909.
Number of members in good standing at beginning of year.....	3,408	4,391	7,460	7,780	6,897	6,246
Number of members admitted during year.....	2,786	7,847	5,732	13,909	6,708	12,908
Number of members who died during year.....	17	36	25	71	59	68
Number of members who left during year.....	1,786	4,742	5,387	14,721	7,300	10,548
Number of members in good standing at end of year.....	4,391	7,460	7,780	6,897	6,246	8,538
Number of sick benefits paid during year.....	450	604	433	824	784	809
Number of accident benefits paid during year.....	358	602	526	956	754	823
Number of death benefits paid, on death of members, during year.....	17	36	25	71	59	68
Number of sick benefits paid during year, by diseases:						
Abscess (all forms).....	16	24	12	28	45	61
Appendicitis.....	2	7	13	9	26	22
Asthma.....	2			7		4
Blood poison.....	5	9	5	3	1	
Bronchitis.....	2	6	12	40	33	40
Cancer.....		1	1	1		
Catarrh.....				13	4	
Catarrhal fever.....	2	5				15
Congestion of brain.....	1	1				
Consumption.....	16	24	22	26	32	40
Cramps.....	2	1				1
Diabetes.....					1	
Diarrhea.....	5	4				3
Diphtheria.....	2	6	2	4	6	
Dropsy.....		2	1	3	1	2
Eczema.....		1	3	1	1	1
Erysipelas.....	2		1	7	7	4
Gastritis.....			18	15	26	24
General debility.....				5	9	11
Heart trouble.....	5	5	4	7	1	3
Hives.....		1				
Hydrocele.....						2
Inflammation of bladder.....	1					1
Inflammation of bowels.....	1	2				1
Insanity.....		3			1	
Ivy poison.....	1		2			2
Jaundice.....			1	1		
Kidney trouble.....	14	20	14	13	11	15
La grippe.....	163	187	76	253	181	147
Liver trouble.....	2	4	4	2	1	4
Lumbago.....	11	5	13	13	12	5
Malaria.....	4	5	1	7	5	7
Measles.....	2			1	3	2
Mumps.....			1	4		15
Nervous prostration.....	2	1	2			1
Neuralgia.....	4	3	1		5	5
Paralysis.....	11	6	2	4	3	2
Piles.....	2		1	2	8	5
Pleurisy.....	4	6	7	24	14	11
Pneumonia.....	11	45	17	32	44	31
Quinsy.....	4	7	3	7	3	4
Rheumatism.....	55	83	72	143	108	172
Rupture.....	11	9	7	7	6	19
Scarlet fever.....		1		1	2	1
Scurvy.....						
Smallpox.....	1	1	1			
Sore eyes.....	21	18	9	22	17	10
Sore feet.....	2					
Sore leg.....		2				
Stomach trouble.....	29	48	62	38	69	38
Sunstroke.....			2			
Tonsillitis.....	8	18	10	25	21	33
Tumor.....	1					
Typhoid fever.....	18	30	29	52	72	43
Vertigo.....	4	3		2	4	2
Total.....	450	604	433	824	784	809

BENEFICIARY WORK OF RELIEF ASSOCIATION, 1905 TO 1909—Concluded.

	Eleven months ending April 30, 1905.	Year ending April 30, 1906.	Eight months ending December 31, 1906.	Year ending December 31, 1907.	Year ending December 31, 1908.	Year ending December 31, 1909.
Number of accident benefits paid during year, by part of body injured:						
Ankles.....	8	16	12	17	23	16
Arms.....	21	41	57	82	59	77
Back and shoulders.....	34	35	17	38	35	22
Body.....						29
Chest, sides, and ribs.....	27	15	28	33	41	10
Eyes.....	15	21	19	25	32	37
Face.....	1	14	10	24	15	11
Feet.....	73	130	82	172	126	144
Hands and fingers.....	116	218	184	370	284	331
Head.....	15	19	9	44	22	17
Hip.....	1	1	9	5	5	13
Knee.....	5	7	6	14	9	8
Legs.....	40	63	85	117	82	93
Neck.....						2
Pelvis.....						1
Privates.....		5				
Rectum.....		1				1
Rupture.....					2	
Spine.....	1	9				1
Stomach.....					2	
Wrist.....	1	7	8	15	17	10
Total.....	358	602	526	956	754	823
RECEIPTS.						
Amount on hand at beginning.....	\$7,326.59	\$7,216.17	\$7,381.44	\$9,046.60	\$6,939.23	\$5,813.60
From Bethlehem Steel Co.....	5,423.40	8,326.00	6,433.80	10,749.80	11,847.80	12,581.60
From members—dues.....	8,211.95	12,613.50	9,694.60	16,108.41	17,848.50	18,956.40
From members—assessments.....	1,797.30	3,381.25	2,955.65	4,605.90	5,742.50	5,837.50
From application fees.....	154.01	392.35	2,660.90	6,971.50	3,354.00	6,382.50
From fines.....	4.56	5.00	7.75	3.00		
From refund of benefits overpaid.....	22.28	1.14				
From refund of benefits unclaimed.....			15.65	273.19	83.45	121.30
Less refund, erroneous collection.....					77.20	75.70
Total.....	22,940.09	31,935.41	29,149.79	47,758.40	45,738.28	49,617.20
EXPENDITURES.						
For sick and accident benefits.....	12,015.74	17,956.24	15,391.66	30,015.67	30,750.73	33,335.74
For loss of eye.....	100.00	150.00	50.00	200.00	350.00	300.00
For loss of both eyes.....				100.00		
For loss of arm.....		75.00	75.00	75.00	150.00	225.00
For loss of hand.....		50.00		50.00	150.00	
For loss of fingers.....				50.00		50.00
For loss of leg.....	100.00		500.00	400.00		400.00
For loss of foot.....		50.00			100.00	
For loss of toes.....	50.00					50.00
For death benefits.....	2,650.00	4,950.00	3,150.00	8,600.00	7,050.00	8,100.00
For services.....	688.83	1,131.98	806.76	1,217.00	1,231.00	1,487.00
For sundry expenses.....	119.35	190.75	129.77	111.50	142.95	233.94
Total.....	15,723.92	24,553.97	20,103.19	40,819.17	39,924.68	44,181.68

The following tables show the amounts paid out by the Relief and Beneficial Association of the Employees of the Bethlehem Steel Company during the year ending December 31, 1909, the first table specifying the amount of each kind of benefit paid and the second the total benefits paid, according to departments:

ACCIDENT, SICK, AND DEATH BENEFITS PAID BY THE RELIEF AND BENEFICIAL ASSOCIATION OF THE EMPLOYEES OF THE BETHLEHEM STEEL COMPANY, YEAR ENDING DECEMBER 31, 1909.

	Number of cases.	Amount paid.
ACCIDENT BENEFITS.		
For injuries to—		
Feet.....	144	\$2,552.88
Legs.....	93	2,590.05
Ankles.....	16	297.15
Arms.....	77	1,504.90
Hands and fingers.....	331	4,221.09
Wrist.....	10	104.29
Back and shoulder.....	22	266.00
Hip.....	13	260.71
Chest, sides, and ribs.....	10	170.00
Head.....	17	402.37
Face.....	11	205.00
Eyes.....	37	796.43
Knee.....	8	97.85
Spine.....	1	8.57
Rectum.....	1	30.00
Body.....	29	827.87
Neck.....	2	11.43
Pelvis.....	1	235.00
Total.....	823	14,581.59
Loss of arm.....	3	225.00
Loss of eye.....	6	300.00
Loss of leg.....	4	400.00
Loss of toes.....	1	50.00
Loss of finger.....	1	50.00
Total.....	15	1,025.00
SICK BENEFITS.		
La grippe.....	147	2,260.84
Pneumonia.....	31	688.86
Typhoid fever.....	43	1,210.02
Malaria.....	7	104.49
Stomach trouble.....	38	667.15
Kidney trouble.....	15	269.29
Liver trouble.....	4	67.14
Heart trouble.....	3	160.00
Bronchitis.....	40	1,080.01
Cramps.....	1	10.00
Tonsillitis.....	33	323.57
Quinsy.....	4	19.29
Pleurisy.....	11	188.57
General debility.....	11	735.00
Appendicitis.....	22	622.08
Scarlet fever.....	1	26.43
Rupture.....	19	353.58
Abscess (all forms).....	61	1,246.55
Measles.....	2	12.86
Gastritis.....	24	375.72
Rheumatism.....	172	4,519.14
Lumbago.....	5	80.00
Catarrhal fever.....	15	196.71
Eczema.....	1	10.00
Consumption.....	40	2,331.44
Paralysis.....	2	85.00
Vertigo.....	2	25.71
Piles.....	5	131.43
Ivy poison.....	2	8.57
Sore eyes.....	10	253.56
Insanity.....	1	145.00
Erysipelas.....	4	56.43
Dropsy.....	2	120.00
Mumps.....	15	130.70
Hydrocele.....	2	63.57

ACCIDENT, SICK, AND DEATH BENEFITS PAID BY THE RELIEF AND BENEFICIAL ASSOCIATION OF THE EMPLOYEES OF THE BETHLEHEM STEEL COMPANY, YEAR ENDING DECEMBER 31, 1909—Concluded.

	Number of cases.	Amount paid.
SICK BENEFITS—concluded.		
Asthma.....	4	\$65.72
Inflammation of bowels.....	1	16.43
Diarrhea.....	3	21.14
Neuralgia.....	5	68.58
Nervous prostration.....	1	3.57
Total.....	809	18,754.15
DEATH BENEFITS.		
Members.....	68	6,800.00
Wives of members.....	26	1,300.00
Total.....	94	8,100.00
SUNDRY EXPENSES.		
For services.....		1,487.00
For auditors.....		9.00
For refund dues.....		.90
For printing, advertising, stationery, etc.....		132.60
For doctors' fees to examinations.....		29.50
For team hire.....		3.50
To cost of Solomon Flore lawsuit against association.....		29.44
Reclaiming balances.....		29.00
Total.....		1,720.94
Grand total.....		44,181.68

AMOUNT PAID BY RELIEF AND BENEFICIAL ASSOCIATION OF THE EMPLOYEES OF THE BETHLEHEM STEEL COMPANY, BY DEPARTMENTS, YEAR ENDING DECEMBER 31, 1909.

Department.	Amount.	Department.	Amount.
General office.....	\$782.13	Drop forge.....	\$370.72
Electrical department.....	227.87	Drop-forge machine shop.....	267.15
Boilers.....	1,050.00	Drop-forge treatment.....	26.43
Railroad tracks.....	1,612.84	Projectile shop.....	259.28
Water.....	40.00	Projectile machine shop.....	313.66
Storehouse.....	50.00	Smith shop No. 4.....	166.42
Mixing house.....	11.43	Total.....	32,326.52
General yards.....	1,480.72	SAUCON PLANT.	
McAfee quarry.....	1,130.95	Superintendent's office.....	
Boiler shop.....	345.71	Boilers.....	213.58
Carpenter shop.....	178.57	Carpenters.....	33.57
Bricklayers.....	332.86	Electrical.....	309.29
Construction gang.....	454.30	Gray mill.....	1,293.60
Pattern shop.....	219.30	Laborers.....	747.14
Press forge repair.....	49.71	Machinists.....	200.71
Armor plate department.....	1,549.43	Open-hearth No. 2.....	2,517.86
Machine shop No. 6.....	739.29	Gas producers.....	90.01
Blast furnace.....	1,892.17	Rail mill.....	2,368.64
Iron foundry.....	2,249.65	Roll turners.....	72.14
Crucible steel department.....	487.16	Saucon fabricating.....	694.29
Brass foundry.....	112.15	Saucon structural.....	1,325.32
Steel foundry.....	3,309.27	Narrow-gauge locomotives.....	268.07
Annealing department.....	10.00	Total.....	10,134.22
Machine shop No. 2.....	5,472.94	Miscellaneous expense.....	1,720.94
Open-hearth No. 1.....	1,617.84	Grand total.....	44,181.68
Press forge.....	521.43		
Mill No. 1.....	1,536.44		
Hammer department.....	1,462.83		
Tool-treating department.....			
Treatment department.....	58.56		
Machine shop No. 4.....	1,946.31		

APPENDIX E.

UNCOMPLETED CONTRACTS FOR CONSTRUCTION OF NEW WAR SHIPS.

Letter from the Acting Secretary of the Navy, transmitting a reply to the inquiry of the House as to certain uncompleted contracts for the construction of new war ships.

April 4, 1910.—Referred to the Committee on Naval Affairs and ordered to be printed.

DEPARTMENT OF THE NAVY,
Washington, April 1, 1910.

MY DEAR MR. SPEAKER: In compliance with House resolution of the 17th ultimo calling for information concerning uncompleted contracts of the Bethlehem Steel Company, of South Bethlehem, Pa., for shafting and turret tracks for the *Florida*, castings for the *Missouri*, miscellaneous castings, bars, and other supplies for general use, armor for the *Wyoming* and *Arkansas*, guns, gun mounts, sights, and gun forgings for various vessels, and target shells and armor-piercing shells for guns of different calibers, I have the honor to transmit herewith tabular statements answering the inquiries inclosed in the resolution.

Contract No. 318, for shafting for the *Florida*, requires that delivery shall be completed by January 10, 1910. The first line of shafting is three and a half months overdue, but the records show that the contract is 85 per cent completed.

Delivery of castings under contract No. 39, pistons for the *Missouri*, was to be completed January 28, 1910, but only about 25 per cent of the material has been delivered.

Faithfully, yours,

BEEKMAN WINTHROP,
Acting Secretary.

THE SPEAKER OF THE HOUSE OF REPRESENTATIVES.

Open contracts, Bethlehem Steel Company.

No.	Date.	Material.	Quantity.	Whole amount.	Outstanding.	Per cent completion.
324	Feb. 20, 1909	5-inch guns.....	16	\$129,746	\$64,873	51
353	Nov. 24, 1909	6-inch guns.....	12	187,656	187,656	0
356	Feb. 2, 1910	7-inch guns.....	4	87,400	87,400	0
311	Dec. 10, 1908	12-inch guns.....	3	200,736	16,728	92
354	Nov. 26, 1909	do.....	5	364,100	364,100	0
339	Oct. 22, 1909	Gun forgings (sets 5-inch sets 8-inch.....)	11 7	173,798	.....	a 100
342	Sept. 13, 1909	12-inch gun forgings (sets).....	10	472,359	281,460	40.5
329	Apr. 26, 1909	5-inch mounts.....	16	134,745	134,745	0
316	Jan. 20, 1909	12-inch mounts.....	2	92,424	.....	a 100
282	Aug. 15, 1907	Armor (tons).....	3,579	1,493,240	.....	a 100
319	Jan. 20, 1909	do.....	3,137	1,324,502	.....	a 100
347	Sept. 27, 1909	do.....	b 4,594	1,959,643	901,232	53
331	May 19, 1909	Target shell.....	1,600 1,600 10-inch..... 8-inch.....	64,996	.....	a 100
334	June 22, 1909	Target shell.....	25,000 2,000 7-inch..... 8-inch.....	89,470	.....	a 100
346	Sept. 18, 1909	Target shell (5-inch).....	2,000	10,780	10,780	0
293	Mar. 2, 1908	A. P. shell (5-inch).....	4,000	83,600	.....	a 100
327	Apr. 12, 1909	A. P. shell.....	10-inch..... 8-inch.....	265,770	202,834	24
333	June 22, 1909	A. P. shell (12-inch).....	2,100	356,769	356,769	0
				7,491,734	2,608,577	.....

^a Work all performed and contract completed, except payment of reservation required by law.

^b This armor is for the U. S. S. Wyoming and Arkansas. There remain undelivered for the U. S. S. Wyoming 545 tons and for the U. S. S. Arkansas 1,678 tons. The company is ahead of its contract, having until about December 1, 1910, to complete it.

NOTE.—The above are Navy Department and Bureau of Ordnance contracts. There is also a Philadelphia pay office contract, as follows: No. 80, June 21, 1909, ordnance requisition 273, one 7-inch mount, sight, and shield, \$15,000, undelivered, and no payments have been made.

Open contracts with the Bethlehem Steel Company.

Date.	No.	Contract by—	Articles.	Amt.	Unit.	Unit price.	Contract price.	Amount unpaid.
June 14, 1909	318	P. O., N. Y...	Shafting, U. S. S. Florida.	(a)	Lb..	(b)	\$69,088.00	\$68,420.56
Mar. 6, 1909	240	do.....	Turret tracks, etc., Florida.	5	Set.....	.....	35,926.58	c 14,371.63
Feb. 16, 1909	15	P. O., Ports...	Round steel bars.....	14,900	Lb..	\$0.09	1,341.00	1,341.00
Dec. 31, 1909	19	P. O., Chas...	Machinery steel: Flat..... Hexagonal..... Round..... Square.....	8,000 1,400 18,400 10,500	Lb.. Lb.. Lb.. Lb..	.03268 .03543 .03353 .03174	1,261.26	1,261.26
Jan. 11, 1910	0-8312	Bu. S. & A...	Steel bar: Medium, flat..... Medium, round .. Medium, round and square.	1,000 2,000 5,000	Lb.. Lb.. Lb..	.0274 .0264 .0259	209.70	209.70
Dec. 3, 1909	12309	do.....	Round.....	16,000 14,958	Lb.. Lb..	.025 .0475	1,110.51	1,110.51
Jan. 29, 1910	12647	do.....	Medium, flat.....	1,000 600	Lb.. Lb..	.03185 .03385	.....	.....
			Mild.....	8,000 7,000 5,000 7,000	Lb.. Lb.. Lb.. Lb..	.02935 .0301 .03135 .0331	886.11	886.11
Nov. 2, 1909	39	P. O., Bost...	Castings, steel for pistons, etc.	12,000	Lb..	.065	780.00	476.90
Nov. 20, 1909	12234	Bu. S. & A...	Forgings, armor steel 5' mts.	82,000	Lb..	.43	35,260.00	35,260.00
Jan. 18, 1910	12587	do.....	Billet steel.....	19,000	Lb..	.0275	522.50	522.50
Feb. 7, 1910	12689	do.....	Forgings for 12" mt. Forgings for dudgeon hammer.	34,000 5,760	Lb.. Lb..	.0475 .09	2,133.40	2,133.40
Jan. 26, 1909	V17-46	Bu. Ord.....	License to manufacture breech mechanism as patented by Bethlehem Steel Co.	.....	.....	.....	148,519.06	125,993.57

^a Contract calls for certain shafts to be paid for by the pound.

^b 20, and 25 and 32 cents.

^c Two sets yet to be delivered.

No. 39, P. O., Bost., is contract for castings for U. S. S. Missouri.

APPENDIX F.

ACTION OF THE UNITED STATES STEEL CORPORATION REDUCING SUNDAY WORK.^(a)

An important step has been taken by the United States Steel Corporation in the direction of the abolition of Sunday labor to the largest possible extent at the plants of the various subsidiary companies. This matter has been agitated in the councils of the Steel Corporation for more than three years. It has been admitted by those who have stood for the right of every man in the employ of the companies it represents to have one day out of seven for rest and recreation, that conditions in the steel industry could not at once be adjusted so as to make this possible. The continuity of blast-furnace operations has been accepted as a necessary condition the country over. Certain practices in steel works also have encroached to an extent upon Sunday hours, and at some plants the tendency has been in the past few years to an increase in the amount of repair work, rolling-mill operations, and even loading and unloading performed on Sunday. That the Steel Corporation heads have determined to take a firm stand in opposition to Sunday labor is indicated by the following telegram recently sent by Chairman Gary to the presidents of all the subsidiary companies:

NEW YORK, *March 21, 1910.*

Mr. Corey, Mr. Dickson, and I have lately given much serious thought to the subject-matter of resolution passed by finance committee April 23, 1907, concerning Sunday or seventh-day labor. Mr. Corey has written you on the subject within a day or two. The object of this telegram is to say that all of us expect and insist that hereafter the spirit of the resolution will be observed and carried into effect. There should and must be no unnecessary deviation without first taking up the question with our finance committee and asking for a change of the views of the committee, which probably will not under any circumstances be secured. I emphasize the fact that there should be at least twenty-four continuous hours interval during each week in the production of ingots.

(Signed) E. H. GARY.

The previous action to which Judge Gary's telegram refers was taken by the finance committee at its meeting of April 23, 1907, and is recorded in the minutes of the committee as follows:

On motion, it was voted to recommend to all subsidiary companies that Sunday labor be reduced to the minimum; that all work (excepting such repair work as can not be done while operating) be suspended on Sunday at all steel works, rolling mills, shops, quarries, and docks; that there shall be no construction work, loading or unloading of materials. It is understood that it is not at present practicable to apply the recommendation to all departments, notably the blast furnaces, but it is desirable that the spirit of the recommendation be observed to the fullest extent within reason.

The pressure of business in the greater part of 1907, as is well known, was not favorable to the largest observance of the spirit of the above resolution. As time passed, even though there was no such demand for mill products in 1908 and a portion of 1909 as in the two preceding years, the competition for tonnage records appears to have led to a continuance of certain Sunday schedules followed in those crowded years.

^a From the Iron Age, March 31, 1910.

APPENDIX G.

STATEMENTS AND CIRCULARS OF THE COMMITTEE OF STRIKING WORKMEN.

WASHINGTON, D. C., *April 7, 1910.*

SIR: We, the committee representing the striking workmen of South Bethlehem, Pa., employed by the Bethlehem Steel Company, present to you a statement of their grievances, which we believe will merit a thorough investigation. We believe that an enlightened nation should take a deep interest in the welfare of men who labor upon government work, particularly when the employers are enjoying the benefits of a high protective tariff and are the recipients of valuable government contracts. On behalf of these workmen we charge:

1. That the strike which has caused great delay upon government work was wholly due to the arbitrary methods of the Bethlehem Steel Company, in demanding that the men labor many hours in excess of the recognized workday, as well as compelling the workers to labor upon the Sabbath day and legal holidays.

2. That the company has discharged many men who failed or refused to work these excessive hours or labor on Sundays and legal holidays.

3. That the rate of compensation paid to the workmen is extremely low, a rate entirely inadequate for decent, respectable workingmen in our country, and entirely too low for the class of work requiring the highest skill. Hundreds of men receiving $12\frac{1}{2}$ cents per hour are compelled to labor regularly twelve hours per day, seven days per week; while hundreds of men in skilled occupations receive from 14 cents to 22 cents per hour; those receiving in excess of 25 cents per hour are limited to a small number.

4. We charge that during the night work and overtime, defective work is surreptitiously and artificially treated, patched, and welded, thereby escaping the vigilance of inspectors who are not required to work overtime by the Government.

5. The employees fear to furnish information to the government inspectors relative to defective work or faulty construction. To do so would be at their peril.

6. That the Bethlehem Steel Company enjoys the benefits of a high protective tariff and is the recipient of valuable government contracts amounting to millions of dollars annually, from which it obtains enormous profits. In spite of these advantages it exacts a maximum of toil for a wholly inadequate minimum wage and constantly strives to lower the standard of living to the barest point of existence.

7. We further call to your attention that the group of business men who called upon you April 6 were favorably disposed to the workers in their attempt to secure better compensation and the

abolition of overtime as well as Sunday labor, until Mr. Charles M. Schwab threatened to close down the works unless these same business men came to his defense. Mr. Schwab declared that it had cost him \$1,000,000 to land the contract for the construction of battle ships for the Argentine Republic. He then appointed a committee of business men to go to Congress to offset the efforts of the laboring men who had urged Congress to withhold further government contracts until labor received better and more humane treatment at the hands of the Bethlehem Steel Company.

8. We protest against the United States Government giving additional contracts to the Bethlehem Steel Company while the inhuman conditions herein referred to are maintained by the company, and we further protest against exposing the brave defenders of the nation in the army and navy to the unnecessary dangers of defective armaments.

9. To further show how the general interests of society are endangered, we quote from an address made to the strikers by Father Fretz, who is a lover of his kind and an honored spiritual leader in South Bethlehem. Father Fretz said:

"I have labored among my people in this community for nineteen years and I know that the Bethlehem Steel Company is a human slaughterhouse."

10. Therefore in the public interest, as well as direct representatives of citizens with serious grievances, we bring these charges to you as the Executive of the nation, and in the name of the workers we represent we enter a most emphatic protest against the Government of the United States engaging in an unholy alliance with a group of predatory interests whose chief aim is profits and who care not what effect their methods have upon the American workman and the American home.

11. We urgently request that you give this important grievance your careful consideration and prompt action. We also request that you direct that the report of the Department of Commerce and Labor, which has recently made a partial investigation of conditions which obtain at South Bethlehem and of the Bethlehem Steel Company in its relations to the workers there, be immediately made public.

Respectfully submitted.

DAVID WILLIAMS,
JOHN LOUGHERY,
Committee.

Hon. WILLIAM H. TAFT,
President of the United States.

A copy of the following was sent to Members of Congress:

Whereas information has reached the striking employees that the Bethlehem Steel Company is circulating petitions for the purpose of securing a large number of signatures asking the United States Government to favor them with valuable contracts; and

Whereas we see in this plan a scheme on the part of the corporation to lead the government officials to believe that a large number of

men have returned and that they again have their expert machinists and other skilled tradesmen to work, which is positively untrue; and

Whereas the United States Government is running grave risks in letting any contracts to the Bethlehem Steel Company, so far as the company being able to complete its contracts, as well as its inability to produce a high-class product, knowing that the entire plant is in a deplorably disorganized state, a seething mass of discontent in all of its mechanical departments; and believing that it is the duty of all patriotic men at all times to assist our Government in furnishing to it accurate information regarding matters which concern the Army and Navy departments, particularly relating to such implements of war as they require for a proper defense on land and sea in order that our soldiers and sailors may not be sacrificed in fighting a foe with useless, in fact ineffective and inefficient implements; therefore be it

Resolved, That we, the striking employees of the Bethlehem Steel Company, being unable to secure from the company just wages were compelled to stop work, and through this cessation of labor have made it impossible for the company to produce a first-class product in practically all departments; we believe that the giving or letting of any contracts to the Bethlehem Steel Company by the United States Government would be inexpedient, unwise, and a grave mistake, fraught with great danger and which might lead to serious consequences unless said company would adjust the trouble, pay living wages, and secure the return of the large number of highly skilled employees now on strike.

Therefore we appeal to you to use your influence to give no contracts to the Bethlehem Steel Company until such time as they adjust the present difficulties of their employees.

BIG STRIKE OF STEEL WORKERS AGAINST THE SOUTH BETHLEHEM STEEL COMPANY FOR BETTER CONDITIONS—FINANCIAL AID IS NEEDED.

For years the thousands of men employed by the Bethlehem Steel Company have suffered under the iron heel of the most crushing institution known to the civilized world. Its chief owner, Mr. Charles M. Schwab, has boasted and advertised the world over that he owned and controlled the lives of human beings as though they were mere cattle, willing to obey and suffer under the lash of an intolerant master, without rights which the autocratic power of the giant institution is bound to respect.

AT LAST THEY REVOLTED.

Humiliated by him, denied the right of organization or representation, at last they rebelled. They struck as a last resort, hoping through this action to thoroughly organize this plant involving 8,000 workmen, the vast majority, in fact nearly all, being the lowest paid workmen in the United States and Canada.

Charles M. Schwab is known the world over for his lavish expenditure of money which he has been able to extract from his victimized and unfortunate employees.

Money is required to carry on this great battle. We appeal to union men for assistance. We appeal to the sympathizers, to the business men, and every one who recognizes that through union alone can we fight a crushing corporation as described.

The Bethlehem Steel Corporation has been a special favorite of the United States Government. It has contracts amounting to \$40,000,000 of public work upon which this corporation expects to realize millions of dollars, due to the low wages paid.

The pages of the Congressional Record are filled with column after column of matter, "The story of Schwab's armor plate," which shocked the entire nation. We appeal to you to act at once. Don't delay. Send in your subscriptions as soon as action is taken to assist us in the struggle, be they small or large.

The American Federation of Labor has full charge of the situation, organizing and protecting the interests of the suffering men, and unionizing all the trades interested.

Following is a list of international unions who are involved in this fight and who have or expect to have their men organized: Boiler makers, blacksmiths and hammermen, carpenters, engineers, electrical workers and crane men, firemen, iron and steel workers, molders, pattern makers, painters, polishers and platers, machinists, teamsters, and laborers.

We ask you in the name of all these trades to assist us in the fight against this mighty corporation. Please appoint committees to raise funds.

We trust that you will do what you can. All contributions will be thankfully received and acknowledged.

Fraternally, yours,

JACOB TAZELAAR,

General Organizer American Federation of Labor.

J. P. MCGINLEY,

Organizer Hotel and Restaurant International Association.

CHARLES R. WITHAM,

Organizer International Iron Molders Union.

J. J. KEPPLER,

Vice-President International Association of Machinists.

H. F. LA CLAIR,

Washington Lodge International Association of Machinists.

T. P. BEHNEY,

General Organizer of Pattern Makers League.

H. H. SCOTT,

General Organizer International Steam Engineers.

DAVIS WILLIAMS,

President Local Union 368 of Machinists of South Bethlehem.

P. COURTNEY,

Treasurer Local No. 368 of South Bethlehem.

(Representatives in Charge.)

Send all contributions to P. Courtney, Box 151, South Bethlehem, Pa.

Urge all workingmen to stay away from South Bethlehem, Pa.

WAGE EARNERS OF SOUTH BETHLEHEM ORGANIZE—IMPROVE YOUR CONDITIONS THROUGH ORGANIZATION.

Assist the workers who are now on strike for an honest living. Every day you remain at work you are aiding the corporation and injuring yourself.

Demand higher wages, demand shorter hours. Join the union. Hundreds of thousands of workingmen have improved their conditions through the union.

Join now. Don't wait. This is the most opportune time.

Everywhere there is a demand for machinists, molders, pattern makers, and other metal-trades men at higher wages and one or two hours per day less and time and a half for overtime.

Never has a more opportune time presented itself to the workers to organize to secure justice and better pay and to meet the constant increase in the cost of living. Secure higher wages through organization in order that our wives and children will enjoy more comforts and better homes.

The South Bethlehem Steel Company has big contracts. It must employ competent help. By united efforts the workers can secure an improvement and secure a fairer share of the wealth they produce. Arrange to organize now. Every possible effort will be made to assist you in improving your condition.

EXECUTIVE COMMITTEE,
Room 8, Municipal Hall.

APPEAL TO HIS EXCELLENCY THE GOVERNOR OF PENNSYLVANIA, IN BEHALF OF THE WORKINGMEN EMPLOYED AT THE BETHLEHEM STEEL WORKS, SOUTH BETHLEHEM, PA.

"My country, 'tis of thee, sweet land of liberty."

SOUTH BETHLEHEM, PA., *March 4, 1910.*

To His Excellency the GOVERNOR OF PENNSYLVANIA.

DEAR SIR: The borough of South Bethlehem, Pa., has been forced into a most deplorable situation through your assistance in complying with the request of Sheriff Robert Person, of Easton, Pa., in sending the state constabulary into this borough, based upon information wired to you by him on February 25 or 26 (as per newspaper reports).

These statements are positively false, practically untrue, and misleading in every respect, and have forced a libel against the good citizens of this borough; and, regardless of the consequences which the State may suffer in the matter of suits for indemnity, resulting from assaults committed, false arrests, and imprisonment and murder, you should thoroughly investigate the conduct of the sheriff, and the state law permitting removal from the office which he has disgraced and prostituted should be applied.

A cold-blooded murder has been committed by those thugs for which the State and county is held responsible; residents have been brutally assaulted and denied their liberty, for which the sheriff of this county is directly responsible, and you as governor indirectly for complying with his request without thoroughly investigating the

necessity of sending the state constabulary to this city before taking action.

The borough of South Bethlehem has been terrorized, its citizens driven to despair, and, in fear of murder, arrest, and riot, people were compelled to arm themselves, not against a mob or an organized body of men who had made threats or had done illegal or unlawful acts, but to protect their lives, their homes, and their children against the state constabulary, which you caused to be brought here in a community where peace reigned and not a single overt act had been committed, and not over a complaint received from any citizen during the three weeks in which a large number of men were idle, due to a cessation of work.

No overt act had been committed or the peace disturbed until the hired strike breakers, known as the state constabulary, appeared on the scene, and immediately upon their arrival began a campaign of slugging, arrests, murder, assault, and riot without cause, the viciousness and brutality of which beggars description, and that under the authority of this great Commonwealth, done by your subordinates.

So terror-stricken have become the citizens that borough officials and aldermen congregated in the office of the chief of police, giving voice to their indignation and condemnation, demanding and persisting that these men, known as the state constabulary, committing these riotous acts in the name of the State of Pennsylvania, be immediately ordered to cease their campaign of terrorism, which the civil borough authorities, out of fear for their lives, were unable or unwilling to comply with. Police officers of the borough come to the office of the chief of police, surrendering their badges, uniforms, and other regalia, resigning their commissions rather than serve this borough as officers of the peace under such humiliating and most revolting conditions, forced upon this community by false statements of the sheriff and assistance rendered by you as governor.

And what can be the purpose of all of this? The answer is easy. To stampede the men back to work, to break a peaceful and orderly strike, and compel men to accept the present wages and conditions, thereby assisting the Bethlehem Steel Company, regardless of the most damnable outrageous falsehood told by Sheriff Person, of Northampton County, and the bringing of the official strike breakers, known as the state constabulary, by you as governor of this State, presumably in the interest of Mr. C. M. Schwab, they riding roughshod over peaceful citizens, terrorizing the entire population, murdering and assaulting innocent men and imprisoning a number of them—the men remained loyal and did not stampede back to work, and are still out, no one knowing who may next be assaulted or murdered.

Through your assistance and the false information furnished you by the sheriff of Northampton County, 17 men were arrested upon charges made by these men, the state constabulary, one of whom is already charged with manslaughter.

Seventeen men are held as prisoners upon what we believe to be trumped-up charges by the constabulary, for the purpose of covering up their disgraceful acts, their misconduct, their terrorism, which as herein stated resulted in murder, murderous assault, and false imprisonment.

Incarcerated upon the steel company property, denied the right of counsel, finally tried under the direct supervision of Mr. C. M. Schwab's agents, these men were finally held under excessive bail and removed to the county prison at Easton, and all this in the year 1910, in the State of Pennsylvania.

Respectfully submitted.

David Williams, chairman, Arthur Mellin, Peter Coyle, J. C. McIntyre, W. F. Smith, Walter Edgar, Thomas Doily, John Coulter, Theodore Kepper, C. H. Steven, F. J. Gillispie, John F. Forging, Peter Forn, L. J. Thomas, John Maley, Elmer Werkheiser, John Boyle, Thomas Bender, Patrick Courtney, George Benker, Charles Watts, Allen Steager, Eugene Doyle, George Sheets, Ed. P. Lucas, William C. Duffy, George Becker, James Bellow, Thomas McGunness, Aug. Sheetz, Oscar Victor DeGaigne, Carl Ehrgott, Hamilton Harrison.

Room 8, Municipal Building, South Bethlehem, Pa.

NOTORIOUS SCABS.

BETHLEHEM, PA., *March, 1910.*

Men who deserted their friends and fellow-workers during the great campaign in the year 1910 against the Bethlehem Steel Company for living conditions and against industrial slavery.

What Benedict Arnold was to his country so may these men be known as traitors to the cause of labor the world over.

In order that the future may brand these men as they properly should be branded, the striking employees of the Bethlehem Steel Company hereby give to the public their names to be inscribed upon the memory of future generations.

NOTE.—The names of other traitors to labor's cause will be added and published as soon as reported and found scabbing. Save this circular for future reference.

APPENDIX H.

RESOLUTIONS OF THE INDUSTRIAL COMMISSION, BUSINESS AND PROFESSIONAL MEN OF THE BOROUGH OF BETHLEHEM, PA., ADOPTED AT A MEETING HELD IN TOWN COUNCIL CHAMBERS, APRIL 1, 1910.

The business and professional men of Bethlehem, in meeting assembled in town council chambers at the invitation of our industrial commission, after thoroughly considering the situation existing between the Bethlehem Steel Company and a number of misled men on strike through the efforts of nonresidents and unscrupulous agitators, desire to publicly go on record as follows:

SECTION 1. We wish to emphasize the fact that of the 7,000 men at work to-day at the Bethlehem Steel Company plant over 3,000 (efficient workmen) are citizens of the borough of Bethlehem.

SEC. 2. Whereas the object of the industrial commission is to obtain, protect, and foster industries, new and old, protect the welfare of the workingman, and to encourage citizens to invest their money in homes, we denounce the assertions of the unscrupulous and nonresident agitators as irresponsible, inflammatory, untrue, and destructive of the purposes of this commission and of the development of the town, to the great pecuniary loss of the business interests and of the invested capital of our citizens.

SEC. 3. We condemn the publishing of the names of reputable citizens of this borough as "scabs" by professional agitators, and we know that it does not represent the opinion of the citizens of Bethlehem.

SEC. 4. We commend the judges of Northampton and Lehigh counties for their prompt action in prohibiting the sale of liquors, thus preventing riot and bloodshed.

SEC. 5. We approve the action of the sheriff of Northampton County in preserving law and order through the state police force and his deputies. We appreciate the excellent services rendered by the state police force.

SEC. 6. We desire to express our appreciation to Mr. Charles M. Schwab for the great things he has already accomplished for this community and trust he will not be diverted by the unfortunate industrial dissensions from continuing to carry out his great plans. We stand ready now as in the past to aid him in whatever way we can.

SEC. 7. We condemn the action of these agitators in forwarding to Members of Congress and representatives of foreign Governments requests to withhold contracts for work from the Bethlehem Steel Company as a most vicious means of obtaining personal ends. We are confident that the efficiency of the Bethlehem Steel Company has not been impaired by the action of the few hundred employees led by professional agitators.

SEC. 8. *Resolved*, That copies of these resolutions be published in our local and city papers and that copies be printed and placed before the President of the United States and members of his Cabinet and Members of Congress and representatives of foreign Governments.