TABLE VI.

Statistics Concerning the Day Labo	r Force	of the	Sewer	Departmer	its of Various	Cities.	
			per	per	al-	-ilo	
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TO THE AND A SUMMER OF THE SHEET PARTY			na	ual	lay	hal	ea
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	Nur	Len	Rathr	Rathr	Sati lo	Pay di	Allo
Lynn Maca	TOT	8	2816	28 7	Max-Oct	Ves	*None
Haverhill Maco	101	0	2816	28.7	June-Sent	Ves	+None
Fall River Moss	178	81/	2816	2816	Ves	+	None.
Brockton Mass.	1/0	8	2816	2816	No.	+	§None.
New Haven Conn	100 100	0	27 7/0	27 7/0	No.		*None.
Cambridge Mass	21	8	25	26.1	May-Nov.	Yes.	None.
Springfield Mass 72	8-153	8	25	25 1/2	Work 7 hrs.	Yes.	tNone.
Chicopee Mass		8	25	25	No.		*None.
Holvoke Mass	1.44	8	25	25	Yes.		*
Lawrence Mass	114	8	25	25	Yes.	t	Half-pay.
Lowell, Mass.	1. 1. 1. 1.	8	25	25	In summer.	±	None.
Marlboro'. Mass		8	25	25	No.		None.
Medford, Mass.		8	25	25	No.		None.
New Bedford, Mass	86	81/2	25	25	Yes.	‡	*None.
Newport, R.I.		8	25	25	No.		None.
Waltham, Mass		8	25	25	No.	and the second	†None.
Newburyport, Mass	5	8	25	25	No.		None.
Quincy, Mass		8	23 1/8	231/8	No.		§None.
Worcester, Mass	168	8	231/8	231/8	No.		None.
Hartford, Conn		9	22 2/9	22 2/9	No.		None.
Waterbury, Conn	14	9	22:2/9	22 2/9	NO.		TINOne.
Bangor, Maine	4	9	22 2/9	22 2/9	NO.		INONE.
Fitchburg, Mass		0	22	22	No.		None
Albany, N.Y		0	21 0/9	21 8/9	No.		+None
North Adams, Mass.	20	o ç	21 8/9	21 8/9	No.	P. Constant	None.
Newton, Mass	15	0 .	10 1/0	10 1/0	No		*None
Concord, N.H.	Section .	9	19 4/9	10 1/0	No	A DE LAND	SNone.
Portland, Maine	N. Contraction	8	1834	1834	No.		Full nav
Hudson, N.Y.	81	0	17	17.2	July-Aug.	Yes.	tNone.
Providence, R.I.	10	0	16%	16%	No.		†None.
New London, Conn	8-15	8			In summer.		None.
Somerville, Mass	000	8	303/1	31 1/2	Yes.	Yes.	tFull pay
Boston, Mass	,	A State State	5-14	5	and the second second second		Eng.

* In case of injury, submitted to a committee.

+ Full pay if injured on work. Work forty-eight hours per week, but time divided so that Saturday is a half-holiday.

Unless injured on work.

Maintenance only; construction by contract.

I Full pay may be allowed not to exceed sixty days when approved by mayor.

Decrease in Efficiency of Labor Force in Boston Water Department.

The city engineer of Boston has for many years kept a careful record of the cost of trench work done in connection with the laying of certain classes of water pipe. The results of this tabulation are shown by Diagram A. The upper line, beginning in 1878, shows the cost per foot for labor upon trench work for pipe up to 12 inches in diameter. In this compilation the engineers have carefully excluded all work done under unusual conditions, so that the figures are as nearly as possible comparable from year to year. The lower line indicates the same costs reduced to a uniform basis of wages and hours of labor. It will be noticed that during the first two years the cost per foot was a little over 20 cents, and during 1905 it was about 88 cents. The cost, after reducing to a uniform basis of ten hours per day and a wage of \$2, was, of course, increased during the periods when the employees were receiving \$1.75 per day, and decreased

during the latter years when the hours of labor and wages were less than sixty hours per week, and more than \$2 per day, respectively, and shows accurately the relative efficiency of the labor from year to year.

These data have been used in producing an efficiency curve (Diagram B) by averaging the unit costs for the first fifteen years, during which period there was no marked tendency either up or down (1880 to 1895), and assuming that that average represents an efficiency of 100 per cent. Stating the premises in another way, the average number of feet of pipe laid for \$1 during those fifteen years represents an efficiency of 100 per cent. The variation from year to year is shown by the dotted line, and the average for fifteen years (100 per cent.), as well as the curve showing the general tendency from 1895 to 1907 by the heavy line. Beginning in 1895, it will be noticed that the line of efficiency fell gradually until it reached 50 per cent. in 1907. (To be Continued)

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