

ment in proportion to the amount spent by them in team hire.

Moose Jaw has a built-up area of 4.87 square miles, and an estimated population of 20,000. All household refuse is removed weekly, and is separated into two classes for removal, *viz.*, (1) garbage, which includes animal and vegetable wastes, and household rubbish, and (2) ashes. The garbage is disposed of by burning in the city refuse destructor, which is situated about 1.33 miles from the centre of the city. The ashes are used for filling up low-lying places in the city. Householders must supply a covered galvanized can of about 2 cubic feet capacity for

Table 1.—Refuse Removal, 1915.

Month.	Garbage (tons)	Ashes (tons)	Total (tons)
January	354.17	169.50	523.67
February	296.77	196.50	493.27
March	284.15	157.50	441.65
April	406.85	246.00	652.85
May	479.59	134.25	613.84
June	297.94	201.00	498.94
July	211.08	135.50	344.58
August	237.57	117.00	354.57
September	239.59	136.50	376.09
October	238.73	88.50	327.23
November	231.02	607.50	838.52
December	152.45	430.50	582.95
Totals	3,429.91	2,618.25	6,048.16

garbage, which must be placed at the rear end of the lot for convenience of handling by the teamsters. The wagons used in garbage collection are of wood with canvas cover, and of $3\frac{1}{2}$ cubic yards capacity. No effort has been made to insist on ashes being deposited in cans; householders simply deposit these at the rear of their lots, so that they may be readily collected and removed. Last year the average number of teams employed removing refuse was 5.9; the largest number used was 9.8 in May, and the minimum 4.1 in August.

Diagram 1 shows the monthly variation in percentages of garbage removed annually, and Diagram 2 the monthly removal in percentages of the total refuse removed.

Table 2 gives the quantity of refuse removed and detailed statement of the expenditure for removal, as well as the cost per ton.

Table 2.

Quantity of refuse removed—		
Garbage	3,429.91 tons	
Ashes	2,618.25 tons	
Total	6,048.16 tons	
Cost of removal—		
	Total cost.	Cost per ton.
Teaming	\$7,217.75	\$1.202
Supplies	98.93	0.006
Superintendence	688.65	0.112
Engineer's office expense ...	145.10	0.024
Insurance	100.44	0.016
Totals	\$8,250.87	\$1.36
Less credits	618.25	0.10
Net cost	\$7,632.62	\$1.26

The percentage of garbage removed to ashes was:—
 Garbage and rubbish 56.71 per cent.
 Ashes 43.29 per cent.
 100.00 per cent.

The cost of removing each class of material was:—

	Cost.	Cost per capita.
Garbage and rubbish	\$6,017.63	\$0.30
Ashes	1,614.99	0.08
	\$7,632.62	\$0.38

The quantity of each class of refuse removed per capita was:—

	Per capita per annum.	Per capita per day.
Garbage and rubbish	342.98 lbs.	0.94 lbs.
Ashes	261.82 lbs.	0.72 lbs.
Total	604.80 lbs.	1.66 lbs.

Based on the above figures, and assuming six persons per family, which is a fair average for Moose Jaw, the quantity of refuse removed per family per annum was 1.81 tons at a cost of \$2.28.

The refuse destructor is of the Heenan and Froude type, and was erected in 1912. It has a capacity of 50 tons per day of 24 hours, and in 1913 it was run at full capacity, but owing to the decrease in population which occurred in Moose Jaw, in common with all Western cities, it was only operated 56 per cent. of the total possible hours of working, and as a consequence, the cost per ton of incineration was much higher than in 1913.

The total quantity of refuse destroyed was 6,027 tons, and Table 3 shows the expenditure in detail, together with the cost per ton.

Table 3.

	Total cost.	Cost per ton.
Wages	\$ 7,595.88	\$1.261
Repairs and supplies	701.53	0.116
Hauling clinker	519.20	0.086
Light and water	338.80	0.056
Insurance	137.27	0.023
Engineer's office expenses	51.74	0.008
Total operating cost	\$ 9,344.42	\$1.55
Depreciation	553.04	0.091
Interest on invested capital ...	2,378.86	0.394
Gross total	\$12,276.32	\$2.035
Less steam sold	454.46	0.073
Net cost for 1915	\$11,821.86	\$1.96

Summing up, these results show the following costs of refuse removal and disposal for 1915:—

Table 4.

	Removed or destroyed (tons).	Cost.	Cost per capita per annum.	Cost per family per year.
Refuse removed..	648.16	\$ 7,632.62	\$0.3816	\$0.044
" destroyed..	6,027	11,821.86	0.591	0.068
		\$19,454.48	\$0.0726	\$0.112

All refuse is weighed at the destructor. The weight of ashes is computed.

A charge of \$2 per load is made for the removal of trade refuse. The city does not remove all manure.

Closely connected with this subject is the question of night soil removal. All houses in Moose Jaw not having