The can which we allow to be installed must not contain more than 35 gallons, and is about 18 x 30 inches in size. However, for waste-paper we allow a larger can. Cans must be placed in suitable and accessible locations where they can be conveniently handled and loaded, since the time consumed in loading a ton of waste when taken from cans convenient and accessible as against cans inconveniently located amounts to practically 27 per cent.

We have not been operating with the auto trucks long enough to know exactly what the saving is amounting to over the horse-drawn collection. It is our opinion at this time, however, that we are collecting with the auto truck our Waste at a saving of not less than 45 cents on the dollar. We have attempted to lessen the price of the haul by installing at different places in the city small bunkers arranged in cells, each cell having a capacity of about six tons. These are filled by the horse-drawn vehicles. This material is taken from the bunkers by the auto trucks to the incinerators and also at the present time to a large open dump. Five of these auto trucks are being used by the city in this work. They are the rear dump with bed 11 feet long and 61/2 feet wide. By the use of these trucks we save the long team haul, the most important money-saving feature of our entire scheme.

The two new furnaces we have installed have each an auxiliary boiler. These were placed with the idea of allowing the sale of steam. We develop 225 h.p. at each plant, but on account of the drawing of our fires about once in four hours, we find it necessary, in order to guarantee the sale of steam, to install the auxiliary boiler, its furnace to be fed with the same material, i.e., the city's waste.

TABLE OF MINERAL PRODUCTION OF THE **PROVINCE OF QUEBEC DURING 1912.**

	Produc	Value in	
Ashances.	Quantities.	Value.	1911.
Ash, tons	111,175	\$ 3,050,084	\$3,026,306
Contraction cons	25,471	23.358	19,802
opper and sulphur			
Gold	62,107	631,963	240,097
Silve ounces	980	10,024	11,800
Bog , ounces	26,526	14,591	.11,500
Ochro ore, tons			4,041
Chron. tons	7,054	32,010	28,174
Mico Mico			2,469
Phoen!		99,463	76,428
Granti, tons	164	1,640	5,832
Mineral, pounds	1,210,278	50,680	33,613
Titanis Water, gals	39,452	9,854	65,648
Slates ores, tons	2,949	4,935	5,684
Cemer, squares	1,894	8,939	8,248
Magne, barrels	2,684,002	3,098,350	1,931,183.
Marbie, tons	1,714	9,645	6,416
Flaget		250,939	143,457
Gran:		600	500
Lime · · · · · · · · · · · · · · · · · · ·		358,749	308,545
Limes, bushels	1,705,037	455,570	284,334
Brickstone		1,361,082	1,128,402
Tiles, M	100,146	1,284,232	1,129,480
Ding, drain and sewer			and the second second
Kaoli, pottery, etc		203,100	142,223
Felder, tons	40	520	
Peat, tons	IIO	2,200	600
Glass	500	2,000	7.00
Sand sand	152	418	1,179
Quart	81.800	33,200	62,000
	Compti reads	tita and the state	1,125
and the second second	and the second	\$11,017,046	\$8;679;786

Records an increase of \$2,337,260 in 1912 as compared with 1911. For the last ten years, the record of increases of each year over the previous one has been unbroken, as the following table shows :-

able	Showing	the	Annual	Value	of	the	Mineral	Production
	05 th	- 0	manihan			01-		

of the Flowings of	Quenec Since 1903.
Year.	Value.
1903	\$ 2,772,762
1904	3,023,568
1905	3,750,300
1906	5,019,932
1907	5,391,368
1908	5,458,998
1909	5,552,062
1910	7,323,281
1911	8,679,786
1912	11,017,046

Notes on Mineral Production in 1912.

Asbestos .- Asbestos, as in the past years, heads the list of the products of the Quebec mines in 1912. After having passed through a severe crisis, the asbestos market is steadily improving. This is specially true for the higher grades, crude and long fibre mill-stock. The demand for the short mill-stock is not brisk, and, as a consequence, the qualities under \$30 a ton have to be sacrificed to some extent.

Therefore, under these circumstances, of good prices for high-grade stock and low prices for short mill-stock, it is quite easy to understand that only the mines which can produce the better qualities are able to operate satisfactorily. Hence, none of the mines of the Broughton district were operated during 1912, as the Broughton rock is essentially a milling rock, containing as a rule a gool percentage of disseminated fibre, but short and low in value. The same remark applies to most of the mines of the Robertson district.

On the other hand, the Thetford mines and the Black Lake mines worked steadily and the shipments are higher than for 1911.

WATER REQUIREMENTS OF A LARGE RAILWAY SYSTEM.

At the meeting of the Illinois Water Supply Association C. R. Knowles, general foreman of waterworks, read a paper, of which the following is an abstract :----

The consumption of water by railway systems has greatly increased, and it has been necessary to raise the standard of the supply, both in quantity and quality, to meet traffic conditions. In former years it was the practice to erect a tank and establish a water station at any point where water of any kind was most convenient, with little regard to the quality or future requirements. This has necessitated many changes to meet the new conditions and added requirements, such as relocating water stations with due regard to curvature, grades and the many previously unknown expedients of operation.

To accomplish these results it is often necessary to pipe water a considerable distance, or, if an ample supply is not otherwise available, to sink wells or construct a reservoir impounding a storage supply. In the event that the available supply is not satisfactory in quality, it is often necessary to erect treating plants to convert it into a suitable water for locomotive purposes. All these changing conditions and increasing requirements have made it necessary to maintain a waterworks department organization, whose duties are similar to those of a city waterworks department.

The amount of water required for all purposes by one railroad 6,500 miles long is approximately 16,500,000,000 gal. annually. In the State of Illinois, on 2,000 miles of road,