

# THE CANADIAN ENGINEER

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## IRON AND STEEL BOUNTIES.

Statement showing bounties paid to the various iron and steel companies of Canada on iron, steel, etc., during the fiscal year ended March 31st, 1910.

These bounties are for 740,244 tons of pig-iron, 695,752 tons of steel, and 538,812 tons wire.

Company.	Pig-iron.	Steel.	Wire Rods.	Totals.
Algoma Steel Co., Ltd., Sault Ste. Marie, Ont. ....	\$136,068.40	\$182,746.37	\$.....	\$318,814.77
Dominion Iron and Steel Co., Ltd., Sydney, N.S. ....	174,442.96	316,248.59	538,812.30	1,029,503.85
Nova Scotia Steel and Coal Co., Ltd., Sydney Mines, N.S. ....	36,075.60	61,270.19	.....	97,345.79
Hamilton Steel and Iron Co., Ltd., Hamilton, Ont. ....	162,013.64	76,394.71	.....	238,408.35
Canada Iron Corporation, Midland, Ont. ....	31,935.79	.....	.....	31,935.79
Canada Iron Corporation, Radnor Forges, Que. ....	7,691.71	.....	.....	7,691.71
Canada Iron Corporation, Drummondville, Que. ....	520.56	.....	.....	520.56
Lake Superior Iron & Steel Co., Sault Ste. Marie, Ont. ....	.....	54,628.56	.....	54,628.56
Ontario Iron & Steel Co., Welland, Ont. ....	.....	4,463.73	.....	4,463.73
Atikokan Iron Co., Pt. Arthur, Ont. ....	15,099.76	.....	.....	15,099.76
Standard Chemical Co., Deseronto, Ont. ....	10,120.46	.....	.....	10,120.46
	<u>\$573,968.88</u>	<u>\$695,752.15</u>	<u>\$538,812.30</u>	<u>\$1,808,533.33</u>

## DENSITY OF POPULATION.

The density of the cities of the old world has been frequently referred to and reliable data is readily secured. The density of population in America is becoming a study and the increase in density will call for increased attention to health and conveniences.

The American cities, with a population of over three millions, or an average of 338,838 each, have a total area of 195,168 acres, or 21,685½ acres per city, equivalent to 2,788 square feet per capita.

City.	Area Acres.	Per Capita Sq. Feet.
Buffalo .....	26,880	2,918
Cincinnati .....	27,840	2,526
Detroit .....	23,040	2,221
Indianapolis .....	19,840	3,485
Jersey City .....	12,288	3,091
Kansas City .....	16,640	2,396
Los Angeles .....	19,840	2,875
Minneapolis .....	34,080	4,791
Newark .....	14,720	2,004
Toronto .....	17,920	2,399

Toronto, with 2,399, is 389 square feet per capita behind the average of these nine cities of the United States, all of which are thickly populated.

The eighteen cities of Ontario aggregated, cover a total area of 80,341 acres. This is equivalent to 4,813 sq. feet per head of population, including streets, parks and open spaces. The proportion of streets, parks, public buildings, churches, etc., has been variously estimated at from ¼ to ½ of the total area. The latter figure is doubtless the more accurate, being based on the opinions of about 20 city engineers furnished the writer some time ago. On this basis the eighteen cities have a net area of 53,561 acres.

The position of Toronto, last in the table, is more or less problematical. With 44.76 per cent. of the population of all the cities of Ontario, only 22.3 per cent. of the total area is at her credit, as assessed in 1910. If the area should be doubled the "Queen City" would still be 120 acres short of the average standards, a serious situation, requiring at-

ention. Apart from the street car imbroglio, this overcrowding may not be apparent to the individual observer, but nevertheless it is a real, vital fact. Even London, England, has 358 square feet per capita more than Toronto.

## CANADIAN RAILWAY STATISTICS.

The annual report of the Comptroller of Railway Statistics, Mr. J. L. Payne, presented to Parliament on December 16th, gives some illuminative figures as to the marked railway development of the Dominion during the twelve months ending with June 30th last.

The total railway mileage increased from 24,104 in 1909 to 24,731 in 1910, an addition of 627 miles. Of this increase, 519 miles were in the four Western provinces. These figures do not include any mileage attaching to the Grand Trunk Pacific, which is officially regarded as "under construction," although over 1,000 miles were in actual operation during 1910. It is estimated that 4,500 miles of railway were under construction on June 30th last. During the past four years there has been an increase of 2,279 miles of main line track, 476 miles of second track and 1,063 miles of yard track, a total of 3,818 miles.

During the year \$101,816,271 was added to capital liability, bringing the total up to \$1,410,297,687, of which \$687,557,387 was represented in stocks and \$722,740,300 in bonds. The actual outstanding liability on June 30th last, after eliminating duplications, was equal to \$52,361 per mile of line.

Cash subsidies during the year amounted to \$1,789,723, bringing up the total to \$146,932,180 by the Dominion, \$65,837,060 by the Provinces, and \$17,983,823 by the municipalities. In addition, 55,292,321 acres of land have been granted, of which 32,040,378 were alienated by the Dominion. The guarantees to June 30th amounted to \$127,336,357.

The public service of Canadian railways was represented in the carrying of 35,894,575 passengers and 74,482,866 tons of freight, an increase over 1909 of 3,211,267 passengers and 7,640,608 tons of freight. The average number of passengers per train was 59, and the average