

perceives that the men must have more room and reasonable comfort. And indeed, if any Montreal fireman should visit Toronto or some other Ontario cities and see the healthful surroundings and comfortable quarters provided for these often hard-worked and much-exposed servants of the community, he would scarcely wish to return to the discomforts of some Montreal fire stations. We must notice, however, that not all the stations in that city are equally defective. At No. 12, the bedrooms are large and good; at No. 8 the accommodation is very good. Repairs and alterations are already in progress at some of them, and the chairman promised further alterations elsewhere next spring.

RAILWAYS ON THIS CONTINENT.

A railway map of the United States, showing in diverse colors the roads existing in 1886, those added in 1887, and the track laid from the 1st January to 30th June of the present year, is an object lesson which strikes one who sees it much more forcibly than would the reading of the figures describing the constructions aforesaid. That the new railway built in 1886 reached 12,668 miles—longer by 1,100 miles than in that year of most extraordinary railway development, 1882—and in the first half of 1888 reached 8,471 miles, does not seem to the reader so remarkable a thing as to perceive by a map of the United States that there is not a State in the Union, save possibly Utah and Nevada, but has added something to the length of its railways in the period under notice. These additions in the aggregate are equal to nearly 14 per cent. of the total length of railway now existing in the States.

In the issue for 1888 of Poor's *Manual of Railroads for the United States*, that well-known repository of statistical information on the subject indicated by its name, the total length of railway track is given at 149,912 miles at the close of December, 1887. This extent of track is owned by companies whose total assets are put down at \$9,199,954,000; and the cost of the railways and their equipment was \$7,799,471,000, or say \$52,000 per mile. The remaining assets appear under the heads of real estate, stock, bonds, and other investments, \$984,975,000, and cash, bills receivable, current accounts, etc., \$415,507. Liabilities are thus given:

Capital stock	\$4,191,562,029
Funded debt	4,186,943,116
Unfunded debt	294,682,071
Current debt	223,243,998

Total liabilities \$8,896,431,214
Showing an excess of assets equal to \$303,523,301.

There was a total mileage of railway, completed at the close of the fiscal years of the different companies, of 147,998 miles in 1887; and of this total, full statistics as to cost, working, return, &c., are given respecting 136,986½ miles, or 92½ per cent. of the whole. The remaining 11,012 miles, not reporting earnings, consists chiefly of new roads not yet brought into full operation. Let us see what was done in the way of carriage by this network of 136,986½ miles of railroad in the last calendar year:

The quantity of freight moved was, in tons.....	552,074,752
Tons moved one mile.....	60,061,069,996
The number of passengers carried was	428,225,513
Total passenger mileage.....	10,570,306,710

We may remark that the total train mileage of the year was 643,978,896 miles, of which freight trains represent 394,191,000, passenger trains 238,756,000, and mixed trains the remainder. Total earnings were \$931,385,154, as compared with \$829,940,836 by 125,185 miles of road in 1886, with \$772,568,833 on 123,320 miles of road in 1885, and \$770,684,908 by 115,672 miles of road in 1884. But in 1883 a less extensive mileage of railway earned \$823,772,000. A short table will exhibit the nature of the earnings of last year, thus:

Passenger earnings	\$240,542,876
Freight "	636,666,223
Other "	54,176,055

Total	\$931,385,154
Deduct operating expenses, at 64.44 per cent.....	600,294,478

Leaves net earnings.....	\$331,135,676
Other receipts, including rentals received by lessor companies..	83,164,355

Making total available revenue..\$414,300,031

The disposition made of this large sum was: to pay interest on bonds, \$195,418,710, and other interest, \$6,590,200; rentals, \$42,042,277; dividends, \$90,013,458; miscellaneous payments, \$14,168,903. There is here a total of \$375,233,548, which leaves the excess of available revenue over actual payments therefrom, \$39,066,483 for the year. We are not told what has been done or is to be done with this considerable sum.

A very hopeful view is taken by Messrs. Poor of the prospects of American railways in the near future. Contrasting the period of extreme activity in railway building and operating in the five years ending with 1883, when 40,000 miles of road were constructed, with several succeeding years, the volume shows (page xix. of introduction) what a shock to trade was produced by the sudden falling off in construction—only 4,000 miles having been built in 1884. From an expenditure on railways of three hundred millions per annum in 1882 or 1883 to one of only 60 or 80 millions in 1884, was a staggering change in many respects; there was a glut of products, laid in because of the expectation that the commercial activity of 1884 would equal 1883, and as it did not, these found no market. Since 1884, however, when railway earnings were much depressed, a decided advance has taken place. The year 1886 showed an increased ratio of earning over 1885, and showed some 10,000 miles more road open than in 1884; while in the year just past, the increased railway earnings amounted to \$198 per mile gross and \$121 per mile net over 1884.

	1887.	1884.
Capital stock per mile of completed road.....	\$28,321	\$30,064
Bonded debt per mile of completed road.....	28,290	29,317
Cost of road and equipment p. m. of completed road....	52,699	55,329
Passenger earnings per mile of road in operation.....	1,756	1,801
Freight earnings per mile of road in operation.....	4,649	4,382
Net traffic earnings per mile of road in operation.....	2,444	2,318

Percentage of expenses to earnings.....	64.45	65.21
Gross earnings per revenue train mile.....	1,445	1,410
Gross expenses per revenue train mile	0,931	0,918
Net earnings per revenue train.....	0,514	0,492
	per cent.	per cent.
Passenger earnings—proportion of gross.....	25.82	27.1
Freight earnings—proportion of gross	68.38	65.9
Other earnings—proportion of gross.....	5.80	7.0
	cents.	cents.
Earnings per passenger per mile.....	2.276	2.356
Earnings per ton per mile....	1.063	1.124
	miles.	miles.
Average distance per passenger.....	24.68	26.24
Average haul per ton.....	108.79	112.07

We have not space at the moment to give the voluminous figures of groups of railways, such for example as the New England group, the Middle States, the Pacific States, &c., as they are given with minuteness in the *Manual*, but we note that the middle group of States, comprising the six States, New York, New Jersey, Pennsylvania, Delaware, Maryland, and West Virginia, and having within its borders the great eastern trunk lines, viz.: the New York Central, the Erie, the Pennsylvania, and the Baltimore and Ohio, as well as all the great coal-carrying roads, shows, in comparison to the extent of its territory and of its railroad mileage, the most marked gain. For 1887 the gross earnings of this system of railroads were \$264,700,889, as against \$243,863,730 in 1886; \$214,661,445 in 1885, and \$223,745,346 in 1884, the increases made in 1887 over the preceding years being as follows: in 1887 over 1886, \$20,837,159, or 8 per cent.; 1887 over 1885, \$50,039,449, or 23 per cent.; 1887 over 1884, \$41,055,543, or 18 per cent.

ASSESSMENT AND OTHER LIFE INSURANCE.

In another place will be found a letter signed "FRATERNAL," which purports to be a reply to an editorial in our issue of Oct. 12th, with the foregoing heading. We have eliminated from the letter some portions which are merely abuse of this journal, and the offensive references to all and sundry who do not see eye to eye with "Fraternal," as they do not in any way affect the question at issue, which we take to be, "Is co-operativism a desirable form of life insurance?" It is admitted at the outset that there is a difference between the fraternal societies and the ordinary speculative co-operative associations, in the sense that the former are not organized for the sake of plunder; and that the lodge room influence may, and undoubtedly does tend, towards the persistence of the certificate-holder. Further, there is usually less expense connected with it than with its speculative twin sister, and there is some protection besides from the practice of making assessments when there are no death losses, as has been too common among the speculative concerns. But here the advantages cease. Both are alike dangerous, in that those who accept their certificates are too prone to pin their faith to them, and neg-