

## Railways.

### RAILROAD INVESTMENTS.

Railroad securities constitute probably the most popular form of investment of a personal nature open to the people of the United States. A sort of mania as regards them may be said to exist. This is very clearly shown in the rapid development of our railroad system, which is now progressing with an almost incredible rapidity. As recently as the last Presidential election in 1868, the greatest amount of railroad construction in any one year had been in 1856, the year preceding the memorable panic. It then amounted to 3,643 miles, costing probably \$140,000,000. It would at this time be interesting to inquire how far so great a withdrawal of the active wealth of the country from immediate circulation, and its permanent investment in a form temporarily both unprofitable and inaccessible, contributed to the crisis of 1857. In a greater or less degree, however, it was unquestionably one of the immediate causes of that catastrophe, which was at once followed by a falling-off in railroad construction, until in 1861 it had almost ceased, being reduced for that year to 621 miles. From that period it gradually but slowly began to revive, until in 1869 it reached 5,000 miles, and 7,453 in 1871. The permanent investment of the last year in railroad development, and the consequent withdrawal of wealth from active circulation, can hardly be estimated at less than \$275,000,000, though it must be admitted that a considerable portion of this is foreign capital.

With the columns of the newspapers crowded with advertisements of bonds pressed upon the market at rates of interest varying between 7 and 12 per cent., most people, even those tolerably well informed, would be somewhat surprised at being told that railroad securities in America are not more profitable on the whole, while decidedly less secure, than the bonds of the United States. Yet such is indisputably the fact. United States 5 per cents. (gold) are now selling in the neighborhood of par (gold). The cost of the railroad system of the country has been at least three thousand millions of money, actually expended in construction. The gross annual earnings of this system are about \$455,000,000, of which not more than 33 per cent can be set down to net profit, or a total of about \$150,000,000—being exactly 5 per cent on the cost. The system is, in fact, a thorough lottery, and hence probably one great cause of its attractiveness to investors. What with dividends in money and dividends in scrip and rapid fluctuations in value; what with the noise made over a few great successes and the silence preserved as regards numerous failures, the general public is thoroughly dazed and bejuggled. Yet the figures, few and poor as they are, are inexorable. In his recent "Manual," Mr. H. V. Poor has given a table, very incomplete and far from correct, but yet sufficient for present purposes, of 364 railroads. Of these 104 only, or less than one out of three, pay any dividends on stock at all; of the 104 dividend-paying enterprises, 4 pay dividends of over 10 per cent; 30 pay 10 per cent; 39 pay between 7 and 10; and 30 pay less than 7. The remaining 260 pay no dividends at all. Dividends on capital stock represent, however, but a small portion of the net earnings of the system, the great bulk of which is necessarily devoted to the payment of interest and to development. As regards the proportion which their reported net earnings, whether devoted to dividends or however applied, bear to the entire cost of their construction, the roads of Massachusetts appear to be the most prosperous in the country, their percentage rising as high as 8.41; Pennsylvania comes next with 8.3; Connecticut reports 7.16;

New York, 7.5; while Ohio, the only other State which furnishes reliable returns, falls as low as 4.9 per cent.

It is in the extreme West, however, that the railroad development is most rapid, and that the greatest inducements are held out to investors. How far the railroad mania has there gone, and what a surprising lottery it has become, is, in the almost total absence of reliable statistics, not easily estimated. We are, however, not wholly in the dark on the subject. Take the State of Kansas, for instance. In 1864, Kansas possessed 40 miles of railroad, all newly constructed; in 1871, she boasted of 1,760 miles, having built 260 miles in that year and 570 in the previous one. She now possesses, therefore, 154 more miles of completed road than Massachusetts, and a little more than half as many as Ohio. These railroads were mainly constructed out of the proceeds of the sale of bonds, many of them, it is true, secured on valuable land grants, but all of them bearing a high rate of interest, ranging, indeed, on their cost price as originally issued at from 9 to 20 per cent. How is this interest to be earned? What burden, in other words, does a reasonable remuneration for the cost of this mushroom railroad system impose upon the people of the State? Upon this point we have the means of arriving at some conclusions—not very exact, perhaps, but withal exceedingly suggestive.

Railroads, as a matter of course, have to draw their income from the community they serve. The population of the United States, for instance, is in round numbers 38,000,000, and its railroads earn a gross annual income of \$455,000,000. Upon an average, therefore, each inhabitant of the United States pays within a few cents of \$12 per annum to the support of the railroad system. Few States have carried the science of railroad statistics to a sufficient degree of excellence to enable us, so far as their inhabitants are concerned, to verify this average with sufficient accuracy. In Massachusetts—a wealthy manufacturing community, with a large suburban trade—the average payment of each inhabitant is \$13.90; in Connecticut it is \$12.60; in Pennsylvania, where the returns are less exact and an enormous coal traffic is carried on, it is reported at about \$48; in Ohio it falls below the average to \$11.40. These are old and wealthy communities, and two of them at least, Pennsylvania and Ohio, are States through which passes the bulk of the through or transit business of the country. With this annual *per capita* contribution these States, as we have seen, succeed in paying on the capital invested in their railroad systems a moderate annual remuneration, varying between 4.5 and 8.4 per cent. Yet Massachusetts has to-day some 10 per cent fewer miles of railroad than Kansas, with, as nearly as may be, four times the population and seventeen times the wealth. To render the railroad system of Kansas equally remunerative with that of Massachusetts, each of its inhabitants ought to pay to its support \$61 annually; to render it equally remunerative with that of Ohio, each should pay \$41. Each does contribute, as nearly as can be ascertained, about \$17.60, or an annual aggregate in round numbers of \$6,400,000. This is the gross return, and evidently, in view of the wealth, products and business of the State, all that its inhabitants can now pay. Meanwhile, the Kansas roads report a capital in stock and indebtedness of \$95,000,000, or only a trifle less per mile than those of Massachusetts, of which amount no less than \$58,000,000 is in the shape of interest-bearing securities, as against less than \$18,000,000 in the older State. At present, therefore, the railroad system of Kansas would seem to be earning in gross a little less than 8 per cent per annum on its capital stock and indebtedness, instead of 29 per cent as in

Massachusetts, or 17 per cent as in Ohio; and its earnings on its debt alone, without allowing anything for the cost of operating, are but 11 per cent, or hardly, if indeed at all, sufficient to meet its annual coupons. Yet he would be a very sanguine man, and know but little of Kansas roads, who would as a permanence allow much less than 60 per cent of this amount for operating expenses. There remains, then, about 4.5 per annum on the amount of bonded indebtedness alone as the total net earnings. In other words, as regards Kansas, the future has been frightfully discounted. Instead of earning the interest so liberally promised, the roads of that State are as yet realizing but a low remuneration on their actual cash cost. The process of railroad construction is, however, still going on as actively as ever in that State.

The same course of reasoning might be extended to other Western States as well as Kansas, though nowhere else, probably, has the process of railroad construction been so thoroughly overdone. The rule here applied is one of well-nigh universal application. No railroad system can be considered well established which calls upon those whom it serves for a larger *per capita* contribution than at the most, \$20 per annum. More than this no people can pay, and, under ordinary circumstances, no people should be called on to pay so much. Where, however, the amount necessary to a reasonable remuneration greatly exceeds this sum, it is not unsafe to conclude that a long period of extreme depression and embarrassment is impending over the system involved; unless, as in 1857, a financial crisis, by sweeping away the rotten superstructure, puts railroads and community in a position to start afresh.

In these days, when it seems only necessary to buy a railroad bond to secure an annuity, it is well to remind a credulous public of these stern realities. We by no means seek to imply that much money has not been made, and will not hereafter be made, and that too in the immediate future, in railroad enterprises. In the face of existing facts, such a proposition would in no way be tenable. What we do mean to say is, that a form of investment always hazardous, and returning at best more blanks than prizes, is at this time more hazardous than usual, and its risks are daily increasing. We see no reason to suppose that any general panic or financial crisis is now immediately impending over the country at large. On the contrary a financial condition which stood firm under the shock of the Chicago fire cannot be otherwise than sound. But unless we are greatly deceived, within the next few years a great many handsomely engraved railroad bonds will go to protest, and certificates of stock by the million will find their way into the hands of the trunk makers. It is very improbable that the United States can construct for any length of time 7,000 miles of railroad a year, without getting more than the people on the soil can conveniently support. They apparently need some \$10, or even \$12, of railroading apiece each year; they may even tolerate \$15, and perhaps \$20, but when they are called on for \$30, \$40 or \$50, it will assuredly be seen that they are getting altogether too much of a good thing.—*The Nation*.

ANOTHER TUNNEL THROUGH THE ALPS.—The St. Gothard Railway Company has just signed a contract for the construction of another tunnel through the heart of these mighty mountains at a cost of \$10,000,000, to be completed in eight years, \$1,000 per day to be allowed for each day of completion in advance of the termination of the time stipulated. The constructor is M. L. Favre, a Frenchman, said to have been a Parisian carpenter, but who has risen to fame by industry and ability.