

support in the matter of election, you must stop (or use your influence to stop), this persecution of railroads, and do so at once.

They should be better paid for handling both freight and passenger business, and in some communities should be allowed to get on their feet.

If the men in all departments, regardless of how small they may seem, would only stop to realize that if the railroads could only make more money for the service they perform for the public, they, as employes, would have less trouble and would meet with less resistance when they ask for better working conditions or increase in salary.

As it is today, everybody is in favor of reduction of some kind in both freight and passenger rates, which cuts the earning power of railroads—they don't care how much, just so there is a reduction.

When you stop to think of the elegant trains that are run for the accommodation of the traveling public (and many of them do not pay the expense of the running, to say nothing about the wear and tear on track and equipment) it is absurd to talk about cheaper rates. Of course, certain ones may say, "Why, they surely are making more now, look at the railroads today and twenty years back, if they had made money then, why they are making money now. Look at the increase of cars in all trains."

Just stop and think how much the cost of operating these trains has increased, from salary of the men up. The railroad has to be more perfect—bridges, block signals, interlocking plants and other things too numerous to mention, to say nothing about the cost of all kinds of equipment which are an absolute necessity, and are in almost all cases required by the law, and are a good thing for all concerned.

When all these different things are expected by the public of the railroads, why should the railroads not be permitted to have better working conditions in the way of rates to overcome the said extra expense of these improvements. No, instead the public want to reduce all rates and income to the railroads, but increase the cost of operation in almost every way.

It is every man's duty to do all he can for the good of the company for which he works and by so doing he not only helps himself and his family, but every man and every man's family working for said railroads.

Don't look at this matter in a light way, but in a serious way, for if the present conditions continue, you may be the unfortunate one to be out of work and when you suffer your family certainly does also.

Help the company for which you work and it will help you.

Now is the time—do not delay.

REAL RAILROAD RELIEF REQUIRES RESTORATION OF RATES.

By George G. Boardman

The real relief needed by the railroads of the United States today is, first, a restoration, or at least partial restoration, of their rates to those prevailing a few years ago, and second, to be let alone by the Federal and State Governments and not to be hampered by increased and unnecessary expenses caused by unwise legislation.

The expression "restoration" of rates rather than "increase" of rates has been intentionally used because the railroads have suffered for years from an almost continuous reduction in their rates, both for passengers and freight, and it will be shown here that if they were to be allowed a restoration of even one-half of such reduction, their present serious condition would be cured, which would result in a much needed stimulation to general business conditions all over the country such as nothing else could bring about.

In the compilation of the figures presented here much care has been used, and while they are necessarily approximate, the intention has been to understate rather than to overstate them. They cover the total railroad mileage of the United States, which on June 30, 1914, represented about 255,000 miles.

What the gradual reduction in rates referred to above has meant to the railroads may well be shown by the following:

About twenty-five years ago, or soon after the Interstate Commerce Commission was created, the railroads received an average of \$2.35 for hauling a passenger 100 miles. This last year, over much more costly roadbed, in

equipment far more expensive, and with superior service, they received \$2.00 for the same haul. This reduction of 35 cents for carrying a passenger 100 miles may seem small to some, but when it is realized that on the passenger business of last year it represented a difference of \$123,000,000 its importance to the railroads becomes evident.

During the earlier period the railroads received an average of \$1.00 for hauling a ton of freight 100 miles. Last year, giving far better service, their average receipts were less than 73 cents for the same work. This reduction of 27 cents applied to last year's freight business meant a difference of \$791,000,000. In other words, had the same passenger and freight rates prevailed the past year as were in force twenty-five years ago, the Net Earnings of the railroads would have been \$914,000,000 more than they were. One-half of this, brought about by a reasonable restoration of rates, would have enabled them not only to have paid all their interest charges and a fair return on their capital, but also to have made much needed additions and improvements, and to have carried many millions to their surplus accounts to provide for lean years. Moreover, their ability to do all these things out of their earnings would have immeasurably enhanced their credit so that there would have been no trouble in securing the funds needed for the construction of the 5,000 or 6,000 miles of new railroad which a fast-growing country like ours should build each year.

When we make a careful examina-

tion of the expense side of their accounts the first thing which naturally attracts our attention is the increased cost of maintenance of way and equipment, a large proportion of which is represented by labor. The following figures show the average cost of maintenance for each mile of road this last year in comparison with the year 1889:

	1914.	1889.	Inc.	Pct.
Maintenance of Way	\$1,655	\$ 945	\$ 710	75%
Maintenance of Equipment ..	2,125	698	1,427	204%
Total Maintenance Mile. .	\$3,780	\$1,643	\$2,137	130%

The above figures disclose at least one fact, namely: that for every \$100 paid for maintenance per mile of road in 1889, it cost the railroads \$230 in 1914—an increase of 130 per cent, or much more than double the amount.

So much has been written regarding the increased cost of labor, materials, and fuel, that it seems futile to more than refer to the large increase in Transportation Expenses which are made up of those three items. The average increase in the cost of those items since the earlier period referred to is at least 40 per cent, and probably nearer 50 per cent. As to labor, few realize that it absorbs directly or indirectly sixty dollars out of every \$100 earned, forty-five dollars being paid directly to labor and fifteen dollars indirectly through such part of the cost of materials and fuel as is represented by labor. Rolling stock costs over 50 per cent more, after making due allowance for increased capacity and durability. Rails and ties cost over 40 per cent more per mile of road. In the meantime taxes have increased from \$179 to \$559 per mile, or 212 per cent.

The time has come for the thinking public—and Americans are intel-

ligent thinkers—to pause and ponder over the railroad situation of the present, and to ask themselves if our transportation lines which make possible the commerce of our country should not be allowed a more nearly just return for their work; for an unbiased mind need make little more than a casual study of the real situation of the railroads to become convinced of their urgent need for better rates, and of the benefits which would result therefrom, not only to the roads themselves, but also to general business throughout the country.

Would not any business man be deeply concerned to discover that his expenses were increasing faster than his receipts? And yet that is the condition of the railroads today. Four years ago their net earnings were \$838,000,000; this last year they were \$718,000,000—a decrease of \$120,000,000. During these four years one and one-half billion dollars of fresh capital was put into the railroads in the construction of 14,000 miles of new roads and in additions and betterments to existing roads. To have earned 5 per cent on such new capital the net earnings should have been \$75,000,000 more than they were in 1910, while as a matter of fact, as shown above, they were \$120,000,000 less. Even during the past year, and in the face of an increase of over 4,000 miles of operated road, their gross earnings were \$75,000,000 less than the year before, while their expenses and taxes were \$49,000,000 more—the net earnings being \$124,000,000 less. Let any business man ask himself what sort of a business proposition this is; what incentive there is for a man to invest any part of his capital in a business which, with increased capital put into it, shows a decrease in

return. Such conditions ought not to be allowed to continue. The remedy lies with our Federal and State Governments and it cannot be too quickly applied. Railroads have only one thing to sell—transportation. They are not permitted to say what they shall sell it for. They have many things to buy, such as engines, cars, rails, ties, labor, material, fuel, and other supplies, for all of which they are forced to pay much more than formerly.

Some of the largest shippers in the United States, the men out of whose pockets would come any restoration of freight rates which may be allowed, have begun to realize the necessity for higher rates and have openly expressed themselves in favor of a substantial increase, for the reason that in their judgment it would not only benefit the railroads but would result in material benefit to their own business and to all business.

Two or three years ago the head of one of the biggest shipping houses in the country, whose freight bills are among the heaviest of any shippers, openly stated that the solution of the railroad rate matter was of the utmost importance to the general prosperity of the country, and that he believed it would be to the advantage of the average merchant to pay some increase in freight rates. He took as an example a retail business with gross receipts of \$1,000,000 a year, located west of the Mississippi, and which paid about \$25,000 a year on freight from the East, and stated that if the freight rates were to be raised 12 per cent such business would pay \$3,000 additional each year to the railroads. He then said, "Let any merchant look back carefully over his records and note the fat years and the lean years and then mark the

years of general railroad extension and improvement on the one hand, and the years of railroad retrenchment on the other, and I am sure he will find that his prosperity on the average has increased with the progress of the railroads and has waned with their lack of progress." His conclusion was that if the retail business referred to were to pay the \$3,000 additional in freight rates his investigation had led him to believe that the general activity which renewed buying by the railroads would induce would increase that retail business at least 5 per cent, and perhaps as much as 10 per cent or 15 per cent, and that at a minimum increase of 5 per cent such concern would get additional sales amounting to \$50,000, at slight additional expense, excepting for freight, and that it would be entirely safe to say that its net profit on such sales, before deducting the increased payment to the railroads, would be at least \$6,000, or twice as much as it would have to pay by reason of such increased rates.

The vice-president of one of the largest manufacturing concerns in the world, whose works are in St. Louis, and whose freight shipments are enormous, has for several years been a strong advocate for a reasonable advance in railroad rates, and believes that if it were granted there would be a large increase in business, in which his company would share, and that the recollections resulting from such increase in business would remain long after the amount of the increased rates was forgotten.

Although the need for a partial restoration of rates is apparent as to almost every railroad in the country, it is most urgent to the roads west of the Mississippi which run through

sparsely settled territory and haven't the advantage of the dense traffic, both in freight and passengers, which is a help to the eastern roads.

These eastern roads, by the way, have been seeking an increase of 5 per cent in their freight rates, which has been only partially allowed. The vital need of a substantial increase in rates for all roads in the country—the southern and western ones as well as the eastern ones—may be more easily realized when it is known that if all the roads in the United States were to be allowed the equivalent of a full 5 per cent increase in freight rates it would mean only \$107,000,000 to them, based on this last year's freight business, while it has already been shown that their net earnings for last year decreased \$124,000,000 over the preceding year.

In other words, even had all the roads been benefited by such 5 per cent increase this past year they would still have been \$17,000,000

worse off as to their net earnings than they were the year before!

The railroads' condition today may be compared with that of a man laid up sick in bed and unable to move to help himself, although he has obeyed instructions and done what he could to recover his health. Doctors and nurses are standing around saying that there isn't anything they can do for him. The railroads are in a similar state, for they are unquestionably in a weakened condition from the medicine which they have been forced to take; they need a different prescription; one which has at least an element of encouragement in it; and even if they get such encouragement through partially restored rates, there is bound to be a period of convalescence before they are able to get on their feet again and properly handle the increased business which is sure to come to them within the next few months.



Work on the double 14-foot segmental concrete arch, at Bridge C-335, Northern Division, shown in the above reproduction, has just recently been completed.

This arch is constructed of crushed

stone instead of the chat material usually used for such structures.

Foreman D. Abbiatti, who was in charge of the work, may be seen standing in the center of the group of men shown in the picture.