C. M. & St. P. Deficit After Charges \$11,070,609

Improves Position Nevertheless by Acquisition of New Lines and Large Amount of Equipment

THE YEAR 1922 PROVED an extremely arduous one for the Chicago, Milwaukee & St. Paul. The final result was a deficit after fixed charges of \$11,070,609. In 1920 the system had a net after fixed charges of \$4,366,071, but in 1920 the road had the advantage of standard return

for two months and guaranty for six.

The St. Paul's troubles in recent years have been many. They were evidenced in striking fashion during federal control as is shown by the fact that whereas the property had a standard return of about \$28,000,000, it earned for the government in 1918 a net railway operating income of not quite \$4,000,000, and in 1919 only slightly over \$3,000,000. For 1920 it reported a deficit of \$15,000,000, which had to be made up partly by standard return and guaranty. For 1921 it reported in its December statement to the Interstate Commerce Commission a net railway operating income, or net after rentals, of \$5,117,329, an improvement over 1920, but by no means a sufficient one to keep the corporate net after fixed charges from showing a figure in red of \$11,070,609, as noted above.

Readers of the Railway Age are familiar with the St. Paul's outstanding difficulties. They have resulted in great measure from its former policy of over-expansion, the two most important factors of which were its building of the Chicago, Milwaukee & Puget Sound line to the Pacific Coast, and its electrification. It is now generally admitted that both of these projects were carried out away ahead of the demands of traffic. On the other hand, it is also now beginning to be realized that the St. Paul will probably be able to realize on its Puget Sound extension and its electrification as business increases sufficiently. The Puget Sound extension puts the road in a position to handle more business, and gives it an outlet to the west. Electrification will presumably put it in a position to handle this business more efficiently, and the savings in fuel costs will be considerable and important. It still remains the fact, nevertheless, that the St. Paul has thus far not had this increase in traffic, or, to be more exact, the desired increase in traffic density. The increased costs under federal control and the period immediately following, and also the falling off in business in 1921, which for the St. Paul was very severe, therefore, had to be met while the property was still handicapped by having to carry the costs of its greatly increased investment. The result we have seen in the figures which have been Nor is it yet evident that conditions have given above. changed sufficiently in the St. Paul's territory to put an especially favorable aspect on the St. Paul's present operating results.

Showing for 1921

The showing for 1921 was, in brief, as follows: By way of introduction, it should be noted that the St. Paul leased effective July 1, 1921, the lines of the Chicago, Terre Haute & Southeastern, owning 361 miles of line and operating 48 under trackage rights. The earnings and tonnage of this property are included in the St. Paul figures from July 1, 1921.

The St. Paul, in 1921, had freight revenues of \$104,894,-848 as compared with \$117,183,815 in 1920, a reduction of \$12,288,968. This reduction was in spite of an increase in the rate per ton mile from 1.029 cents in 1920 to 1.266 cents in 1921; the reduction in tonnage, in other words, was in greater proportion than the reduction in freight earnings.

The passenger earnings totaled \$26,915,456, a reduction of \$4,118,138. The total operating revenues totaled \$146,765,-766 as compared with \$168,156,734, or \$21,392,968 less than in 1920. As compared with this reduction in revenues, there was a reduction of \$36,740,119 in operating expenses. The 1921 expenses totaled \$127,957,002 as compared with \$164,-697,212 in 1920. The 1921 operating ratio was 87.18. Although too high to indicate a favorable state of affairs, it compared with a ratio in 1920 of 97.64. In connection with the reduction in operating expenses of about \$37,000,000, it should be noted that the reduction in maintenance of way was \$10,823,341; in maintenance of equipment, \$6,013,301, and in transportation, \$19,396,821. The St. Paul does not show figures in its annual report as to the amount of new rail, ballast or ties laid or put in track, so comparisons of this nature must be omitted. With reference to equipment maintenance, it may be said that the condition, as shown by the figures of bad-order cars or unserviceable locomotives, is about average with the rest of the country in the case of cars, and better than average in the case of locomo-

Reduction in Tonnage

The St. Paul's total revenue tonnage in 1921 was 34,067,-136 as compared with 45,041,277 in 1920. The 1921 figures show that the St. Paul's traffic was divided in that year as follows: Products of agriculture, 19.8 per cent; products of animals, 6.1 per cent; products of mines, 33.7 per cent; products of forests, 17.9 per cent, and manufactures and miscellaneous, 17.4 per cent. The most pronounced reductions in tonnage were in products of mines, including particularly bituminous coal and iron ore, in "other ores and concentrates," in lumber, in pig iron and in building materials of one kind or another. The bituminous coal tonnage, which constituted in 1921 19.4 per cent of the total tonnage totaled 6,594,041 as compared with 8,196,798 tons in 1920. The item of "other ores and concentrates" in 1920 showed 3,265,895 tons, or 7.2 per cent of the total. In 1921 this traffic had decreased to but 875,401 tons, or to only 2.6 per cent of the total tonnage. Products of forests showed a reduction from 9,010,252 tons to 6,086,767 in 1921.

It is evident that what the St. Paul needs is tonnage. It did not have this tonnage in 1921. The question next arises as to whether the road's tonnage may have begun to pick up recently. The answer is that it has-slightly. The St. Paul's car loadings are reported separately for the St. Paul and for the Chicago, Terre Haute & Southeastern. The St. Paul's weekly loadings have shown increases in nearly every week of the past few months over the cor-responding weeks of last year. The C., T. H. & S. E. is predominantly a coal road and it has been affected by the strike. It showed increased loadings up to April 1, but in the week ending April 15 it loaded only 2 cars of coal as against last year's corresponding figure of 1,411 cars. Insofar as concerns the St. Paul's own increased loadings, the increase in lumber loadings has been especially noticeablerunning about 50 per cent. There have also been increases in manufactures and miscellaneous. There is no particular conclusion that can be drawn from all these figures except that it is apparent that conditions at present look better than they were a year ago, although not strikingly better. It may be further noted that the St. Paul had a deficit after rentals in the first three months of 1922, although its March earnings were good. In March there was a net of \$1,055,902, for the three months a deficit of \$287,903. In the first three months of 1921 there was a deficit after rentals of \$2,473,-236.

Acquisition of New Lines

The picture that has been painted of St. Paul conditions is by no means a favorable one. There are, however, some favorable aspects of its activities. These include primarily the lease of the Chicago, Terre Haute & Southeastern, the acquisition of the Chicago, Milwaukee & Gary and the large acquisitions of equipment, all of which should have a favorable effect on the fortunes of the property. As noted above, the Chicago, Terre Haute & Southeastern was leased effective July 1, 1921. This company's lines extend from Chicago Heights south to Terre Haute, Ind., and thence east to Westport. Trackage rights give the line its entrance into Chicago and to Franklin Park, Ill., where connection is made with the Illinois division of the parent company. The line is a coal carrier and gives the St. Paul a traffic in that commodity as well as helping it secure a more favorable fuel supply. To supplement the acquisition of the C., T. H. & S. E., the St. Paul has also acquired by stock ownership the Chicago, Milwaukee & Gary, a line about 100 miles in length. This property is in the nature of an outer belt line around Chicago. It connects with the C., T. H. & S. E. at Delmar and with the St. Paul itself at Kirkland on the Illinois division and at Rockford on the Racine and Southwestern division. Besides permitting the move-ment of coal from the C., T. H. & S. E. without its going through the congested Chicago terminals, the road is also of value because it connects at Delmar and Momence, Ill. with the New York Central and Chicago & Eastern Illinois, thus facilitating the interchange business between these two carriers and the St. Paul.

New Equipment

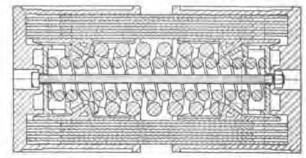
The St. Paul's acquisitions of new equipment have been one of the striking developments of their kind. It is not generally realized just how much the road has done in this connection. The system was allocated by the Railroad Administration 100 Mikado locomotives and 4,000 box In 1920 it ordered from the Baldwin Locomotive Works an additional 100 Mikado locomotives, of which 71 were received that year and 29 early in 1921. There were also received in 1920, 15 electric locomotives. then supplemented all these acquirements with orders placed, in 1921, with the Haskell & Barker Car Company for 1,500 and the Bettendorf Company for 1,000 50-ton steel underframe gondola cars. It has recently placed additional orders for 25 Mikado locomotives and 4,000 box cars for 1922 delivery. Except for the electrical equipment the new cars and locomotives so far delivered have represented in large measure not so much additions to the former equipment as replacements of old small or weak locomotives or cars. This is shown by the fact that in 1920-in which year the road received 171 steam locomotives, 15 electric locomotives and 4,000 box cars -it eliminated 5 steam locomotives and 3,103 cars. 1921 it retired 46 steam locomotives and 1,512 cars. road has also been converting a number of compound to simple type superheated locomotives. It has been devoting considerable attention to improved water stations. The system should be able to make all these things show in reduced operating expenses.

THE CAR-REPAIR SHOPS of the Missouri, Kansas & Texas at Sedalia, Mo., have been reopened under a contract with A. S. Hecker Company, of Cleveland, Ohio. The workmen are to be paid on a piece-work basis. Not many former employees reported for duty.

Hall Multiplate Friction Draft Gear

FTER MANY experiments and tests to develop a draft gear with the maximum resistance to wear, high capacity, a moderate and positive release, sturdy in construction, simple to manufacture, and easily handled on application and repairs to rolling stock, the Hall Draft Gear Corporation has placed on the market the Hall multiplate friction draft gear.

A friction draft gear of proper design and manufacture



Cross Section Showing Working Parts of the Gear

should meet the following conditions: The resistance to wear should exceed the life of the equipment to which the draft gear is applied. The high resistance should build up uniformly without sticking and jumping so as to keep the sill stresses at a minimum for the shocks absorbed. release should be moderate and positive so as not to return more shock than necessary to the rolling stock, but at the

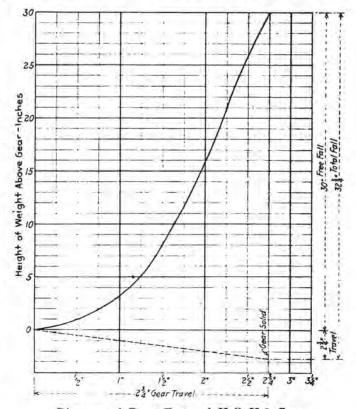


Diagram of Drop Tests of Hall H-2 Gear

same time insure a positive release in order that the draft gear will be ready for operation at any position of the coupler. Sturdy construction is necessary if the draft gear is to give continuous service without repairs, as there is always more or less liability of rough handling of rolling stock. The first cost should be kept down to the minimum; this likewise applies to application and repairs. The draft gear