rod is connected with a push button on each side of the cab, so that the observer at the car side, on approaching a mile post, presses the button, the hinge of the electrical apparatus flapping, drawing the datum pencils towards it momentarily, a spring forcing them back to normal position on the release of the button, the jog in the datum thus made forming the mile post indication.

Both speed and pull are recorded on the paper to a known scale, but in operation, as a double check, it is the practice to mark the pressure and speed indicated on the indicating gauges on the paper at the same time that the number of the mile post is marked opposite the datum jog. Intermediate points are also pencilled down on the paper, where the table observer notes any points in the traced curves that he wishes to record. Memoranda can also be written down in the margin at the same time. For this purpose, and to observe the paper as it passes over the table for the greatest period of time, there is a glass plate let into the table face near the front edge, under which the paper passes. The pressure, as given by the indicating pressure gauge, is in lbs. per sq. in., and in order to interpolate into the drawbar pull. this must be multiplied by the area of

## Victoria Rolling Stock and Realty Co. of Ontario, Ltd.

The annual report for the year ended Feb. 15 says that during the year the company did not issue any new debentures, and outstanding debentures against leases were reduced by \$160,000. All payments

ASSETS.	
bligations on leases\$	906,741.66
Debentures held by company and	
accrued interest	24,536.13
ash in bank	104,208.77
all loans	240,000.00
The second s	

\$1,275,486.56 LIABILITIES.

Capital stock subscribed..\$600,000.00 Capital stock paid up ...... Debentures outstanding ..... \$ 240,000.00 960,000.00

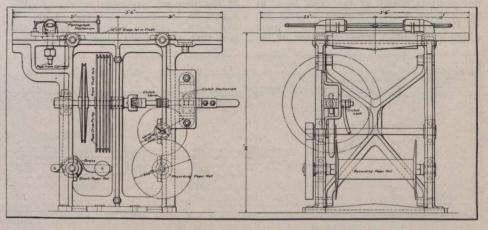


Fig. 5.-Dynamometer Table with Throw In Apparatus.

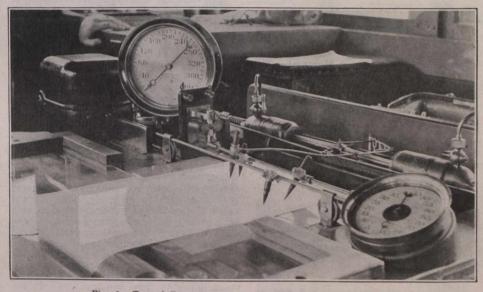


Fig. 6.-Top of Dynamometer Table, with Indicating Apparatus.

Balance at credit of profit and loss account, Feb. 15, 1912 .......... Rents received and accrued on leases and interest on advances and deben-tures held by company ..... \$ 50,500.11 77.312.52 \$127,812.63 \$127,812.63 

PROFIT AND LOSS ACCOUNT.

Interest accrued on same ...... Balance at credit of profit and loss.

\$ 960,000.00

8,000.00 67,486.56 \$1,275,486.56

Wilkie.

the dynamometer cylinder, which, for the forward end, is 188 sq. ins.

The wisdom in constructing such a car was soon demonstrated by a few trial runs over different divisions of the system. The tonnage rating of nearly all the locomotives was found to be far too low, and with the information gleaned from the observations made, the loading was in-Praccreased in a great many instances. tically every one of the many C.N.R. lines through the west have been gone over with the different locomotives used on the division, and the maximum rating over each section, for each of the different locomo-tives, determined. This information on each of the divisions is placed in the hands of the locomotive foreman, so that he now knows exactly what loading each locomotive can be given to obtain its maximum efficiency, when an order for a locomotive is given him by the operating department.

One advantage of steel interior finish on steel passenger cars, is that the finish can be made up in special shops and rapidly assembled in the car, instead of the slow method of cutting and fitting as followed for wooden interior finish.

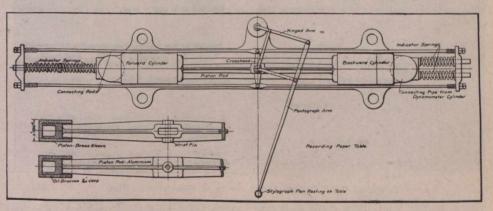


Fig. 7.-Indicating Oil Cylinders with Pantograph Mechanism.

maturing during the year were promptly met. The profit on the year's business after charging up directors' fees and exbusiness pense account, was \$31,386.45, out of which a dividend of 6% per annum on the paid up capital stock was paid, amounting to \$14,400, leaving \$16,986.45 carried forward to profit and loss account, which now stands at \$67,486.56.

The theory of the collapsible vestibule is that in the event of a collision the closing up of the car bodies through the depth of of the vestibule gives the cars that much extra shock-absorbing space, amounting to approximately 8 ft. between each pair of cars, removing to a large degree the shock and resulting damage to the car body and the human load.

## 251