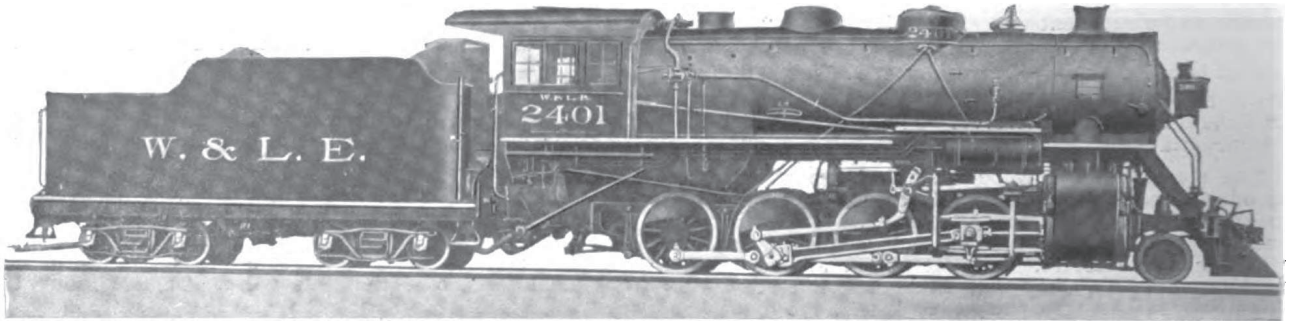


Freight Locomotives



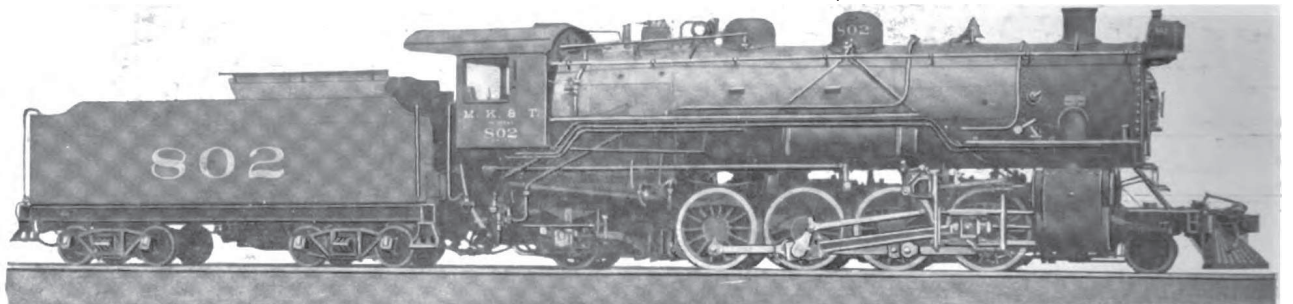
CONSOLIDATION TYPE—WHEELING & LAKE ERIE RAILROAD.

Total Weight of Engine, 266,500 pounds; Weight on Drivers, 236,000 pounds; Diameter of Drivers, 57 inches; Boiler Pressure, 185 pounds; Cylinders, 26 x 30 inches; Maximum Tractive Power, 55,900 pounds.

These locomotives are the leaders of their class because they are the heaviest Consolidations built. They demonstrate the possibility of obtaining a perfectly satisfactory boiler on this type of engine where freight service does not demand a speed greater than can be obtained economically by 57-inch wheels.

Eastbound on the Toledo division they are handling 820 tons, or 35.4 per cent greater train loads than older locomotives of the same type.

Westbound on the same division they are handling 930 tons, or 35.1 per cent greater train loads.



MIKADO TYPE—MISSOURI, KANSAS & TEXAS RAILWAY.

Total Weight of Engine, 314,000 pounds; Weight on Drivers, 233,500 pounds; Diameter of Drivers, 61 inches; Boiler Pressure, 185 pounds; Cylinders, 28 x 30 inches; Maximum Tractive Power, 60,600 pounds.

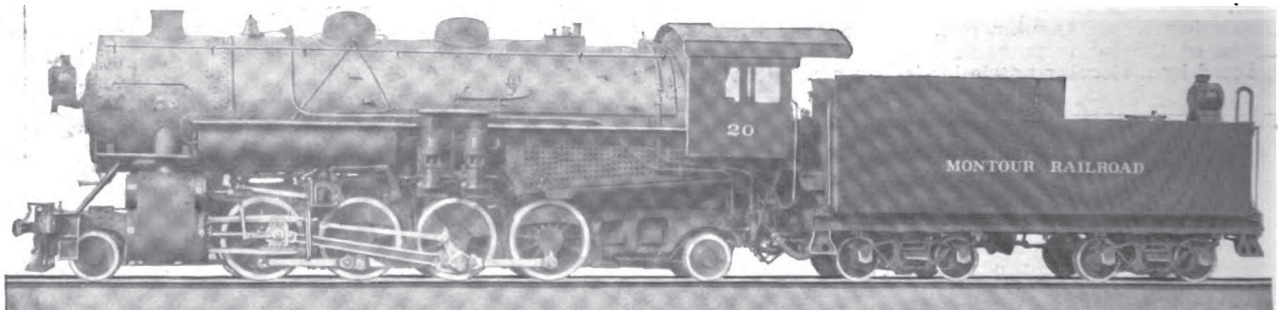
These locomotives are a development of Mikado engines introduced on the Missouri, Kansas & Texas in 1913.

The new Mikados have a total weight, engine and tender, of 479,100 pounds, and the older engines have a total weight, engine and tender, of 457,100 pounds. The new Mikados have a tractive power of 60,600 pounds

and the older Mikados a tractive power of 54,500 pounds.

With an increase in weight of only 4.8 per cent an increase in tractive power of 11.2 per cent is obtained.

In the big locomotives of to-day an increase in power greater in proportion than the increase in weight can be secured by the application of the knowledge and experience gained through years of designing.



MIKADO TYPE—MONTOUR RAILROAD.

Total Weight of Engine, 296,500 pounds; Weight on Drivers, 249,500 pounds; Diameter of Drivers, 57 inches; Boiler Pressure, 185 pounds; Cylinders, 27 x 32 inches; Maximum Tractive Power, 64,500 pounds.

These locomotives were designed for a special condition requiring a large amount of backing. On some occasions they are required to back up a distance of 32 miles. To meet these conditions an inside bearing constant resistance type truck of the same general design is used front and rear.

These locomotives are exceptional in the comparison between total weight and tractive power. They weigh only 296,500 pounds and have a tractive power of 64,500 pounds. They are also exceptional in the proportion of total weight on drivers. The weight on drivers is 249,000 pounds, or 84.2 per cent of the total weight.