GRAND TRUNK RAILWAY OF CANADA.

Specification of a Locomotive Engine of 4 ft. 81 Gauge, with

Cylinders 17 x 24 inches. Rice 88000 USC.

For a Passenger Engine the Driving Wheels must be $5\frac{1}{2}$ feet diameter, and for a Freight Engine 5 ft.; centres of Driving Wheels 8 ft.; from do to Truck and Cylinder centre 10 ft. 5"; Truck centres 5 ft. 6".

BOILER-Telescope. Boiler 4': 3" largest outside diameter, x 10':

5" long; barrel to be in 3 plates; outside fire box is to be of the straight top description, 5 : 111 long x 6'; 11" deep x 3' 61" wide,-all boiler plates 3" thick, except throat plate, which is to be 7-16" thick. One steam dome 2": 2" diameter x 2': 3" high, of 7-16" plate, flanged, riveted, and stayed as shown in drawing No. 1164. The cast-iron cover is 11 thick having 8 ribs 3" deep x #" thick and secured by thirty-two #" studs to 21" square wrought iron ring, rivetted inside at top of dome. Furnace of 5-16" approved steel, 5'; 41" deep, x 5:3" long, x 2:10" wide, with a 31" water space all round, the ring at bottom is $2\frac{1}{2}$ deep and riveted by # rivets, 14 pitch. One row of hollow water space stays ($\frac{3''}{8}$ hole) all round box, about 12" above grate level. Other screwed stays are #" diameter, screwed 12 threads to the inch, and spaced not more than 41 centres. Crown stays are 3 dia meter, riveted For cross bars 2 plates 6" x 3", with ends welded together and clip washer on top and tapered ferrules below, may be used if preferred to the solid forged crown bar shown in drawing. In either case the ends of these bars must be carefully hand-fitted to front and back edges of crown. Tube plate in furnace of 1" steel; tube plate in smoke box of 4" iron flanged and secured to barrel by 31" angle iron with 2" web. All iron used to be of best York-