

Coaling Plants on the National Transcontinental Railway.

The National Transcontinental Ry. Commission placed a contract recently for six coaling stations at Monk, Bridge, Fitzpatrick, Parent, Doucet and O'Brien, Que. The plants will be of the mechanical type, as illustrated herewith, which has been adopted as a standard on the N.T.R., displacing the previously accepted standard coaling plant, of the ramp type, which was described and illustrated in Canadian Railway and Marine World for March, 1913.

Fig. 1 shows the coaling station as it will be actually built, the completed structure to a slightly different design being shown in fig. 2, which shows a U.S. installation built by the same contractors. The structure is entirely of reinforced concrete, the intention being to make them absolutely fireproof. The coal pockets are 23 ft. square, with an average depth of coal of 17 ft., the capacity being 200 tons of run of mine coal, without trimming. The coal pocket is a concrete shell, the floor of which slopes at an angle of about 30 degrees to the horizontal, towards the outer side, and with the top covered with a steel framing sheathed galvanized iron. The 6 supporting columns for this pocket are also of reinforced concrete, at 21 ft. 5 in. centres across the tracks, and 10 ft. 10 in. centres parallel with the track. The coal pocket spans one delivery track, the other delivery track being along the depressed side of the

over top of the receiving hopper, on tracks supported on I beams, and dumped into it. This hopper is 20 ft. long and 15 ft. wide, the slope of the bottom being in three directions, all tending to throw the coal towards an opening at the front. Immedi-

opening of which there is a roller attached to it, which bears against a guide extending from the bottom of the pit to the dumping point over the bin. As the bucket descends into the pit in front of the revolving hopper, it engages a bar which operates the revolving feeder, causing the feeder to cut off the flow of coal from the receiving hopper and discharge its contents into

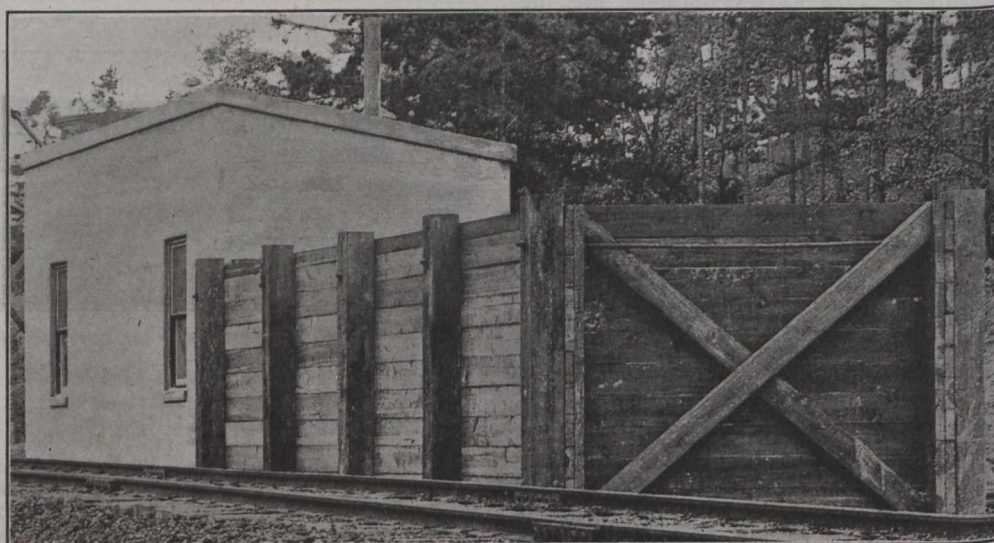


Fig. 3.—Sand Drying Auxiliary to Coaling Plant, N.T.R.

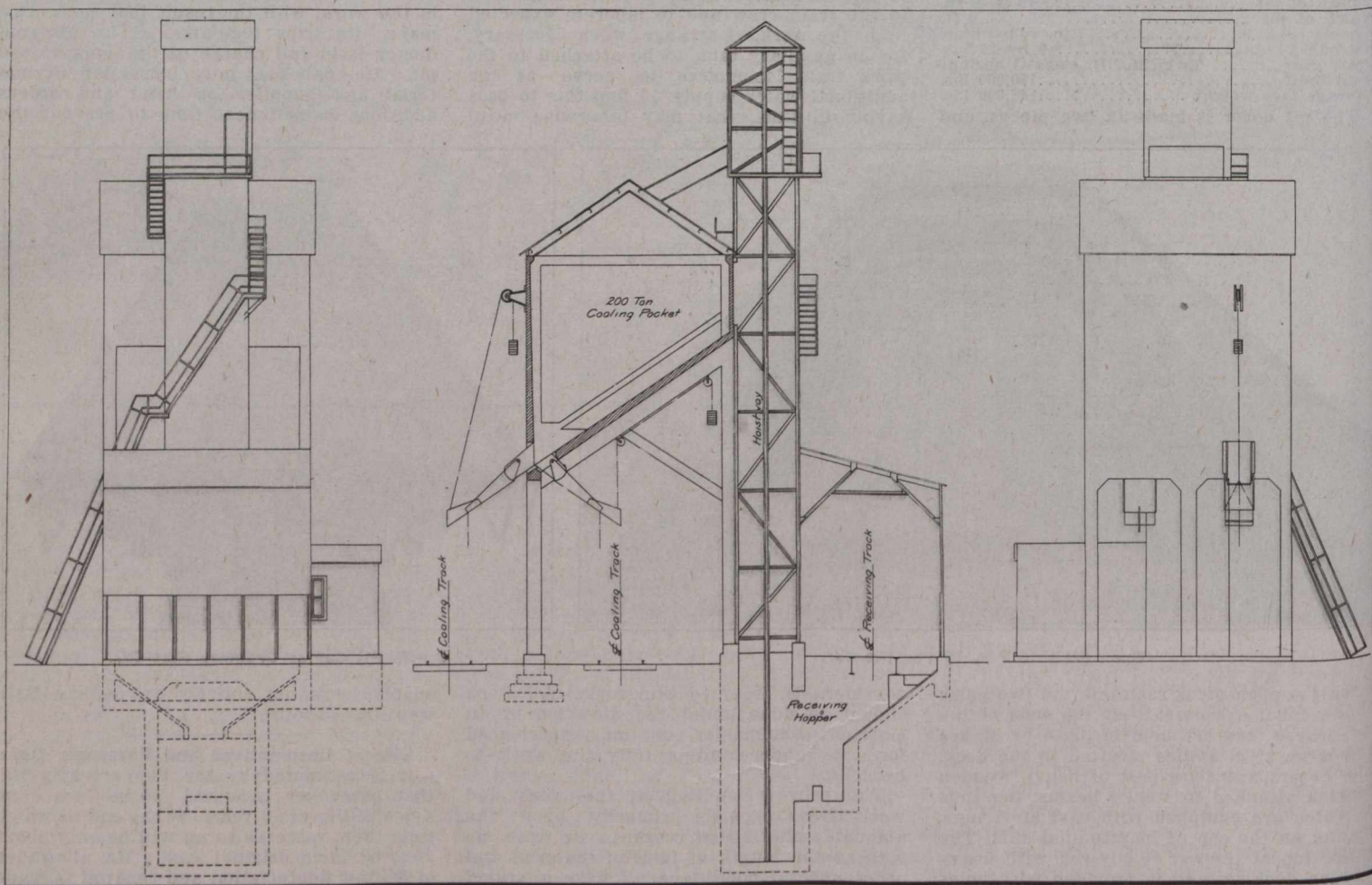


Fig. 1.—Typical Coaling Plant on the National Transcontinental Ry., Six of Which Are Being Built.

coal pocket bottom. The delivery spouts are in either end of the pocket depression.

At the back of the pocket is located the receiving hopper, consisting of a concrete lined, sloping floor hopper, the slope of which corresponds with that in the upper hopper. The coal intended for the coaling plant is delivered on cars, which are run

atly in front of this opening in the receiving hopper there is located a large steel revolving feeder, which is in reality a gate, a chute and a feeder. This feeder delivers coal in measured quantities automatically to a $2\frac{1}{2}$ ton bucket. The bucket is 5 ft. square and has an apron or folding chute on the front side, to prevent the accidental

the bucket. As the bucket rises in the hoistway it revolves the feeder, allowing the coal to flow into it from the receiving hopper.

The hoistway is a structural steel frame, entirely enclosed in galvanized sheathing, and has a total height of 70 ft. above the ground, as well as extending to the bottom