

Weight—on driving wheels	146,700 lbs.
“ on truck, front	39,200 lbs.
“ on truck, back	38,200 lbs.
“ total engine	224,100 lbs.
Tender—total engine and tender	375,000 lbs.
wheels, number	8.
wheels, diameter	34 ins.
journals	5½ x 10 ins.
tank capacity	8,000 gals.
fuel capacity	10 tons.

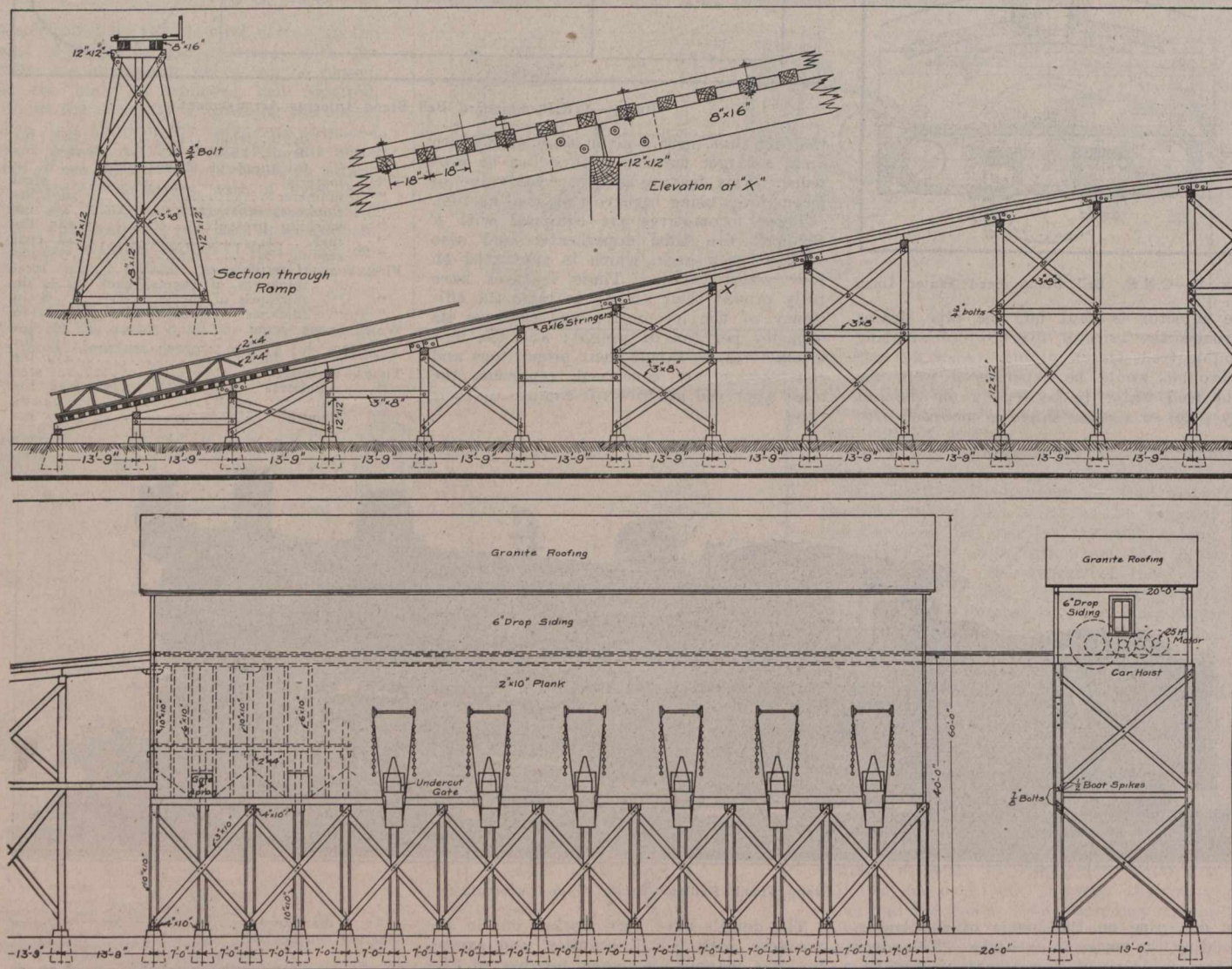
1,000 Ton Coaling Station on National Transcontinental Railway at Cochrane.

The National Transcontinental Ry.'s coaling station at Cochrane, Ont., is shown in elevation in the accompanying illustrations. It is typical of the coaling stations building and to be built on the eastern section of the transcontinental line, the type being built on the G.T.P.R. section having been described in Canadian Railway and Marine World last August. The two types differ essentially, the latter having a pusher ramp while the former operates by power. The N.T.R. one is roofed, and the G.T.P.R. one open. Other details of design differ, the principal difference being in the distribution of coal pockets.

port 62,560 lbs., and the other columns, 18 ft. long, on concrete pedestals 3½ ft. square at base, calculated to support 44,000 lbs. All piers are sunk to a depth of 5 ft. below the ground level. The inner two rows of columns slope together at the top directly under the two rails, with the outer ones forming the perpendicular sides of the coal pockets. The sides and ends of the coal pockets are sheathed with 2 by 10 in. plank, and the covered over top has 6 in. drop siding. The height to the under side of the coal pockets at the edge is 18 ft., rising in the centre on a slope of 1¼ to 1. The chutes along both sides are located 14 ft. apart, with a clear height above the rails of the coaling tracks of 14½ ft., 7½ ft. beyond the outer columns. The coaling tracks are 50 ft. centres.

The trestle approach ramp is supported on three rows of 12 by 12 in. wooden columns, the sets of three being 13¼ ft. centres. At the top of the ramp the outer column bases are 20 ft. 10 ins. apart, and at the lower end 7 ft. apart. All the piers are 3½ ft. square at the base. The ramp approach is steeper than in usual practice,

this information has been obtained. He claims for the plant the following advantages over the conventional design:—1. Elimination of liability of pushing locomotives or a string of cars over the trestle. 2. The building being under cover permits of the unloading of cars in all sorts of weather. 3. Man in charge can get any cars of coal that are on the track without awaiting the arrival of the switching locomotive and crew, and at times thus avoid running out of coal in the pockets, with the consequent delays in train movements. 4. More years of service for the trestle because it is not necessary to run a locomotive on it. 5. Saving of time and expense of switching locomotive and crew. 6. By having a hoist to move car when needed, it is unnecessary to lengthen the pocket beyond the length required for storage capacity, as is necessary with the standard design of coaling trestle in order to place a number of cars for unloading at one time, or at one visit of the switching locomotive and crew. 7. Saving of ground space by reducing the length of building and trestle by about 400 ft.



1,000 Ton Coaling Station on National Transcontinental Ry. at Cochrane, Ont.

The Cochrane plant is 112 by 30 ft., with a total height above ground of 60 ft., the coal car rail level being 40 ft. above ground. The structure is of wood throughout, and is supported on 10 by 10 in. posts, in sets of 4, at 7 ft. intervals the length of the building. The inner columns, 26 ft. long, are 14 ft. apart on concrete pedestals, 4½ ft. square at the base, calculated to sup-

which is made possible by the power hoist at the rear end of the plant. In a small cabin at this end of the plant there is housed a hoist, driven through gearing by a 25 h.p. electric motor. The coal cars are elevated on the platform up the steep ramp by this means.

The plant was designed by W. J. Press, Mechanical Engineer, N.T.R., from whom

Railway Lands Patented.—Letters patent were issued during December, in respect of Dominion railway lands in Manitoba, Saskatchewan, Alberta and British Columbia, as follows:—

Calgary and Edmonton Ry.	Acres.
Canadian Pacific Ry.	643.00
Qu'Appelle, Long Lake and Saskatche-	4.77
wan Rd. and Steamboat Co.	3,214.59
Total	3,862.36