

The principal cross-sections of the cantilever spans are given in diagrams of transverse vertical planes lettered to correspond with the references on the general elevation. The sway bracing consists in general of heavy upper cross struts & multiple intersection diagonal angles, with a light bottom cross strut, or with no lower cross strut at all. Where the roadway is elevated the most above the lower chord, there is transverse diagonal bracing below the floorbeams. At the anchor ends of the cantilevers, the end lower-chord pins are connected by a transverse strut attached at the middle of the floorbeam with short diagonal braces. The under-side of this strut has a projection which slides in a longitudinal seat in a casting bolted to the pier masonry, so as to allow for temperature movements of the truss, & to hold it securely against any lateral displacement. The main lateral system is that in the plane of the floorbeam lower flanges, where each panel between the planes of the trusses is braced by struts made up of 4 angles riveted together back to back, & riveted to connection plates on the bottoms of the floor beams. Besides these, the alternate panels included between the projecting ends of the floor beams outside the trusses & the stringers are X-braced with single angles. There is X-bracing of pairs of angles in every panel of the top chords except in the second panel each side of the main post of the truss. The diagonals are complemented by the top struts of the sway-bracing systems, & by a continuous center longitudinal strut running through every panel.

In order to simplify the supports & save room on the top of the masonry, the ends of the adjacent bottom chords of the cantilever & the 247 ft. river span, are to be supported by single pedestals common to both spans on top of pier 4. The essential features & gen-

eral arrangement are shown by an elevation made from the accepted study for the pedestal. A 4x6 ft. grillage of 10 in. longitudinal I beams, with top & bottom plates, sets on the masonry & receives 2 nests of rollers. Between these there is a space left for the steel loops which engage the end pin of the cantilever span above, & pass down through the pier well to connect with the anchorage platform built into the masonry. Above the rollers is a second grillage made of two sets of 8 in. transverse I beams, with very heavy top & bottom plates, which supports a tall pedestal with two pins. The lower one receives the anchor bars & the cantilever truss members; the upper one is about 2 ft. above it in the same vertical plane, & receives the members of the short truss & the pedestal of the pier floorbeam. At the south end of the cantilever span the pedestal on pier 1 receives only the anchor-arm truss & is anchored by 6 in. vertical eye bars. The grillage is composed of eight 15 in. longitudinal I beams 4½ ft. long, & the pedestal is seated on the rollers without the interposition of an upper grillage.

The bridge is being built under the supervision of G. C. Dunn, acting Chief Engineer of the Ottawa & Gatineau, & of the Pontiac Pacific Junction railways.

RAILWAY FINANCE, MEETINGS, &c.

Atlantic & Lake Superior.—The Sheriff of Bonaventure, Que., gives notice in the Quebec Official Gazette that on July 19, in the case of Bellhouse, Dillon & Co., against the A. & L.S.R., he will sell at auction the portion of the railway running from lot 120, Township of Hamilton, to lot 1188, in the Township of Cox, a distance of about 20 miles, the wharf at New Carlisle, together with stations at Bonaventure & New Carlisle, workshops & other

appurtenances. On the same day he will sell at auction the Baie Des Chaleurs Railway running from Metapedia to the Township of Hamilton, a distance of 80 miles, with station-houses, rolling stock, etc., at the instance of A. F. Riddell & T. Watson, curators to the property of H. & G. Macfarlane of Toronto.

Brockville, Westport & Sault Ste. Marie.—The annual meeting was held at Brockville, Ont., July 10. Following is the official list for the current year: President, E. R. Dock, Philadelphia, Pa.; Vice-President, W. H. Cole, Brockville; General Manager, S. Hunt, Cincinnati, Ohio; Superintendent, Treasurer & General Freight Agent, J. Mooney, Brockville; other directors, R. Bowie, G. H. Weatherhead, D. Derbyshire & D. W. Downey, Brockville; W. C. Fredenburg, Westport, Ont.; R. G. Murphy, Elgin, Ont.; R. A. Williams, Philadelphia, Pa.; Secretary, General Passenger Agent & Traffic Auditor, E. A. Geiger, Brockville. Owing to the illness of receiver J. Mooney no report was presented & the meeting adjourned till Aug. 1.

Calgary & Edmonton.—Net earnings for April, \$15,141.08 against \$9,842.89 in April, 1899. Net earnings for May, \$11,310.68 against \$7,913.16 in May, 1899.

It is announced that the net earnings to April 30 last, together with the Dominion Government subsidy for the 6 months ended June 30, will permit of a distribution of 2½% on the 1st mortgage bonds in respect of the interest due July 1.

Canada Atlantic Taxation.—In the Trial Court at Toronto, June 28, judgment was given in the suit of this Co. vs. Township of Cambridge, an action tried at Ottawa. The defendant's assessor assessed not only the land occupied by the Co. (the plaintiff), but also the rails, ties & telegraph poles. The

The Northey Gasoline Engine with Triplex Pump, for Tank Duty.

We here illustrate one of our Triplex Pumps operated by the Northey Gas and Gasoline Engine for railroad tank pumping. The Northey Engine offers the best example of an easily operated—safe—inexpensive—handy power on the market. The pump used is an improved model of our Triplex Power Pump. This combination gives excellent results, and is built with a view to ensuring an ample margin of strength for heavy, continuous service. We have recently installed two such plants at Coteau Junction, Que.

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