

is expected that the shore steamer of the Yarmouth S.S. Co. will run between Barrington & Halifax in connection with the road, instead of running all the way to Yarmouth. The Western Union Telegraph Co. is rapidly completing the telegraph line along the railway between East Pubnico & Barrington, so that it may be ready for operation when the road is opened. (Oct., pg. 293.)

Dyea, Alaska, to Bennett.—A person who arrived in Victoria, B.C., recently from Skagway, stated that 200 men & 100 horses were engaged in grading for a railway from Dyea to Bennett. In the absence of confirmation, this story should be accepted with reserve, as it is doubtful if capital could be found for another line in that district, the White Pass & Yukon already connecting Skagway & Bennett.

Edmonton, Alta., Bridge.—The raising of the piers of the Dominion Government's bridge 8 ft. has been completed, & the iron superstructure is now being placed in position. (Oct., pg. 293.)

Great Northern of Canada.—The contractors' engineer recently stated that early next summer the line will be completed from the St. Maurice to the Ottawa, & connection made between deep water at Quebec & Parry Sound. Grading was about to commence on two new sections, from Shawenigan to Montcalm, 53 miles, & from St. Jerome to Hawkesbury, 35 miles. A middle section of the road between St. Jerome & Montcalm has been practically rebuilt. Track laying is still being pursued between Lachute & St. Jerome. A regular train is running between St. Jerome & St. Elizabeth. Many bridges have had to be built, including one over the Ottawa. The contractors hope to have the whole line completed by Aug., 1900. (Oct., pg. 294.)

Great Northwest Central.—The 20 miles extension from Hamiota, Man., to Parkissimo, has been completed. (Oct., pg. 294.)

Intercolonial.—It is said W. Kitchen has been given a contract for enlarging the tunnel through Morrissey's rock, about 5 miles west of Campbellton. It is intended to increase the height of the tunnel about 4 ft.

An extension of about half a mile is being built from the terminus at Pictou, N.S., to the Copper Crown Co.'s works. The work is rather heavy, there being 2 or 3 deep cuttings.

Increase of business at Sydney has necessitated considerable enlargement of the freight shed, also an increase of siding accommodation.

The grain elevator at the deep-water terminus at St. John, N.B., is about completed.

It will have a capacity of about 500,000 bush. (June, pg. 175.)

Interprovincial Bridge, Ottawa & Hull.—On Oct. 26 we were officially informed as follows:—"All the water piers of the bridge are now completed, with the exception of one course & the coping still to be laid on the deep-water pier. Work on the Ottawa approach is now being rushed, & the Hull approach will be started in a few days. The foundations of the piers are composed of concrete deposited in bottomless caissons which were sunk on bed-rock, the concrete being deposited in the usual way in buckets holding about one yard & being tripped when they reached bottom. The best Portland cement was used & the greatest care exercised in mixing, depositing, etc. The concrete for 4 of the water piers was mixed by hand, & for the other 2 piers by a concrete mixer, an excellent machine which gave very satisfactory results. The concrete was so deposited to within a few feet of low-water mark, after which the caisson was pumped out, the concrete levelled off & masonry constructed in the usual manner. The superstructure is exceedingly heavy & massive, & is probably one of the largest bridges of its design in Canada. The cantilever span is 556 ft. long. Considerable trouble was experienced with sawdust, which was around one of the piers to a depth of about 25 ft. The design would have been simplified had it not been for the amount of sawdust under the cantilever span, the depth of which was found, by using a diamond bit, to be about 60 ft. No. 2 pier is also very deep, being about 70 ft. to top of concrete & about 25 ft. masonry over this. Owing to the depth of this pier it was considered advisable, to satisfy everybody concerned of the stability of the structure, to make diamond drill borings through the pier to bed-rock underneath. This test was in every way satisfactory, core being produced all the way down. As far as can be learned this is the first test of the kind on record in the history of concrete in which a core was procured from any depth of bore." G. C. Dunn is acting Chief Engineer for the Bridge Co.

G. H. Duggan, C.E., from whose design the superstructure is being constructed, has supplied us the following information:—"The bridge has a total length of 2,050 ft., consisting of a cantilever span of 556 ft., which together with its anchor arms has a length of 850 ft., one 247-ft. span, one 140-ft. span, 750 ft. of trestle approach on the Hull side & 60 ft. of trestle approach on the Ottawa side. The trusses of the cantilever & other river spans are spaced 24 ft. apart centre to centre, giving room between for a single-track railway

& 2 wide sidewalks. Outside the trusses on each side brackets are extended 19 ft. to provide for the electric railways, & wagon traffic. The bridge has been designed for very heavy traffic,—a load of two 125-ton engines followed by a train of 3,000 lbs. per lineal foot having been taken for the railway track, & trains of 4 electric cars of 30,000 lbs. each on the electric railway tracks, the whole being taken at the railway unit stresses specified by the Department of Railways & Canals."

It is not expected that the superstructure will be erected before next spring. The Ottawa City Board of Works has not sustained the City Engineer's objections to the approaches to the bridge on the Ottawa side. (Oct., pg. 294.)

Inverness & Richmond.—Good progress is being made with the first section of this line from the Strait of Canso to Port Hood, N.S., 30 miles. Tracklaying is going on & it is expected to finish the same early in Dec. Ballasting has commenced, & the section is likely to be operated early in 1900. The present contract with the N.S. Government provides for the building of the line from the Strait of Canso to Broad Cove mines, 58 miles, & it is expected to complete this next year. An extension to Cheticamp, some 50 miles further, is contemplated. Messrs. Mackenzie & Mann were in Nova Scotia recently in connection with the enterprise, & their visit gave rise to press reports that they will develop the Inverness coal fields & ship the coal to Quebec & Ontario points. Cheticamp would be the port for summer shipments. (Oct., '99, pg. 295.)

James Bay.—A partial survey has been made of the proposed 5-mile section from the main line of the Canada Atlantic to the town of Parry Sound, but construction has not been started, & the Parry Sound Star says the survey party is now at work on another route, which would not touch Parry Sound. Some Parry Sounders are said to be in favor of the town itself building the 5 miles, for which bonuses have been granted by the Dominion & Ontario Governments, & which could then be leased to the Canada Atlantic, or to the Toronto-Sudbury line should the latter be built. (Oct., pg. 295.)

Kingston & Pembroke.—There is no present prospect of this line being extended from Renfrew into the mineral belt of Quebec in the vicinity of Bryson, though steps are being taken to interest the Co. in the matter. (Oct., pg. 295.)

Kootenay Ry. & Navigation Co.—The latest report about this Co.'s line from Bonner's Ferry, Idaho, to Kuskanook, B.C., was

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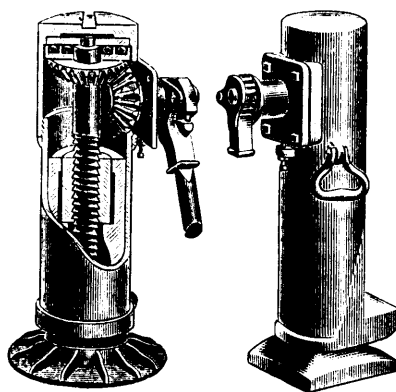
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