

are two highly-objectionable features to this proposed plan—1st, the wedging in of the footpaths between the railway track in the centre & the trusses on either hand; & 2nd, that half the traffic on the Ottawa side of the Ottawa River must perforce go down grade to a low level in order to pass through the subway & then up again to reach the level of Sussex St. In order to remedy these defects, he suggests that the centre of the bridge, between the trusses, 24 ft., shall be given over to steam cars; that the up-river side shall be devoted to trams going both ways, there being no objection to their going down grade through the subway & up again; & that the down-river side shall contain next to the truss, a 14 ft. space for vehicles, & on the outside, overlooking the river, a 5 ft. walk for pedestrians. The bridge people admit that the original plan is not at all satisfactory, but they maintain it is the best way of disposing of all the traffic. The city contributes a bonus of \$100,000 on the understanding that free accommodation be provided for foot passengers & vehicular traffic.

After the falling of the Ottawa & New York Ry. bridge at Cornwall, the Government, fearing that it was caused by defective concrete in the piers, decided to make a thorough examination of the piers of the Interprovincial Bridge. Diamond drill borings have been made & it is said the result is satisfactory.

Inverness & Richmond.—Work is progressing favorably & it is expected to have 30 miles of this line, from the Strait of Canso to Port Hood, N.S., finished this year, & to reach Broad Cove Mines, a further 28 miles, next year. Several small sailing vessels have been employed carrying ties from points on the Gaspe coast to Port Hastings, N.S., for use on this line. The rate obtained was about 9c. a tie. (July, pg. 209.)

James Bay.—Engineer Hazlewood is making a survey for the 5 miles of this line to be built from the main line of the Canada Atlantic Ry. to the town of Parry Sound. A contract for construction is said to have been let to McCormick & McLeod. (Aug., pg. 236.)

Kingston & Pembroke.—This Co. is building a 5 mile spur to the Martell & Caldwell mines, & expects to finish the work this fall. (Aug., pg. 236.)

An attempt is being made to get this Co. to extend its line into the mineral belt of Quebec in the vicinity of Bryson. This mineral cannot be developed on account of the lack of transportation. Twelve miles of new track from the K. & P. terminus at Renfrew would take the line to Portage du Fort, where there are Gaboury's mine and marble quarry. Eight miles further would take it to Bryson, the county town of Pontiac, at the head of the Grand Calumet Falls, a beauty spot for tourists. There are said to be iron, marble, zinc, galena, silver, gold & mica prospects; the Grand Calumet Mining Co. is at work within two miles of the village. This extension would, it is claimed, tap one of the best water powers in Canada. Between Bryson & Pembroke are a dozen lakes, affording good sport. The extension would also open up a territory of unfloatable timber, maple, birch, elm & oak, which cannot be brought to market without a railway.

Kootenay Valley Ry. & Navigation Co.—Rails are being laid north from Bonner's Ferry, Idaho, towards Kuskanook, B.C., on the Co.'s subsidiary line, the Bedlington & Nelson. N. D. Miller, formerly Chief Engineer of the line, & later Chief Engineer of the Great Northern, U.S.A., has resumed his old position on the K.V.R., vice W. H. Knowlton, resigned. (July, pg. 209.)

Under the order of the Railway Committee of the Privy Council, the Bedlington & Nelson Ry. has running powers over the C.P.R.'s Crow's Nest Pass line for about 8 miles, from a point 4 miles west of Creston to about $\frac{3}{4}$ of

a mile west of Sirdar. From the latter point to Kuskanook, the Kootenay Lake terminus of the B. & N.R., is a distance of 3 miles.

Lake Erie & Detroit River.—It is said this Co. will erect an hotel at Erieau, the summer resort on Rondeau Harbor acquired with the Erie & Huron Ry.

Manitoba & Northwestern.—The Saskatchewan & Western Ry., which runs from Minnedosa to Rapid City, Man., 15.47 miles, & is leased to the M. & N.W.R. Co., is being extended $2\frac{1}{2}$ miles, near Rapid City, to connect with the Great Northwest Central Ry. The work is light, & there are no structures of any importance upon it. See also under head of "Great Northwest Central Ry," on pg. 294.

Manitoba & Southeastern.—Grading from La Broquerie, last year's terminus, has gone ahead with fair progress, & tracklaying has been started. The eastern boundary of the Province will it is expected be reached this year, but it is hardly likely that the line can be got through to Rainy River before winter, as was expected, & it is said application has been made to the Manitoba Government for an extension of time. It is said a contract has been let for clearing the right of way through Minnesota. (Aug., pg. 236.)

Michigan Central.—The work of placing a third truss on the cantilever bridge at Niagara Falls, necessitated by the increased weight of rolling stock, is well under way. On the Canadian side the masonry is being laid, & on the U.S. side the concrete foundation is ready for the masonry. With the view of ascertaining the profile of the river bottom under the bridge soundings were taken. The bridge is situated just over the head of the whirlpool rapids, where the current is very swift, & unusual methods had to be resorted to in getting the depth. The sinkers on the sounding-lines were egg-shaped masses of cast iron, one weighing 600 lbs. & the other 150 lbs., the sounding line being a steel wire about $\frac{1}{8}$ in. in diameter. In order to keep the sinkers from twisting a long fin was attached to the rear of each. The depth at mid-stream was ascertained to be 78 ft., & the depth at 100 ft. from shore 43 ft. In the course of subsequent soundings the weights were lost. By means of these soundings the engineers were able to make accurate maps of the river at the point of crossing, the importance of which can be readily surmised when it is known that the piers supporting the cantilever bridge are located close to the water's edge on either side of the stream (May, pg. 137.)

Midland of Nova Scotia.—Track has been laid from Windsor to the Shubenacadie River, 45 miles, & the remaining 15 miles between the river & Truro will be laid as soon as the grading is completed, probably during October. It is doubtful whether the bridge over the Shubenacadie will be completed this year. It is proposed to construct a railway dock at Windsor. (Aug., pg. 236.)

Musquodoboit.—There is a division of opinion as regards the route to be taken by this projected line. Dartmouth wishes the line diverted so as to pass through the town, & at a meeting of the promoters recently representatives from there insisted strongly upon this feature being included in the Co.'s plans. The road is intended to begin at Parker's Rock in the Musquodoboit valley in the eastern section of Halifax county & to extend to Windsor Jct. or its vicinity. The charter permits a choice of two routes, & it is over this that differences have arisen. Although the charter provides that the railway shall be operated as a steam road we believe the better plan will be to use electricity, & the cost will be much lighter as power can be obtained from the several water powers that lie along the proposed route, & it will be possible

to use the railway as a nucleus to extend to many other points in Halifax county which are as yet unprovided with these necessary facilities. It is understood that the building of this road will begin in a short time aided by the Provincial & Federal Government subsidies.—Maritime Merchant. (May, pg. 134.)

Northern Pacific.—Good progress is being made with the construction of the 20 miles extension of the Portage la Prairie branch from Portage la Prairie northwesterly, & also with the construction of the spur of 9 miles from Portage la Prairie northerly towards Lake Manitoba. Both are to be completed this season. The recently issued annual report of the Co. states that it is building these lines under separate charters, without use of funds derived from its mortgages. The capital stock & indebtedness of these subsidiary companies is held in the N. P. Ry. Co.'s treasury & it is believed that the control of these companies will secure valuable additional territory to the N.P. lines & contribute to the earning power of the system. (Aug., pg. 236.)

The crossing of the two branches mentioned above over the main lines of the C.P.R. & the M. & N. W. R. at Portage la Prairie has caused some local excitement. The Railway Committee of the Privy Council made an order authorizing the crossings, but in the case of the C.P.R. crossing, the Northern Pacific was required to construct & maintain at its own cost an interlocking, derailing & signal system. The N. P. management, to save time, wanted to put in a diamond crossing temporarily. The C.P.R. objected to this & kept a locomotive patrolling the track at the proposed crossing so as to prevent a diamond being put in without leave. The matter having come before the Railway Committee again an interim order was granted to allow the crossing to be made by a diamond until Nov. 15, when the interlocking appliances are to be installed.

The rebuilding of the Winnipeg offices, destroyed by fire, has been completed & the staffs have moved in. The roof of the train shed, broken by falling bricks at the fire, has been repaired, & the north end has been boarded up. (July, pg. 209.)

North Lanark.—An Ottawa despatch, dated Sept. 5, said: "The directors of this Co. are pushing the preliminary work for building the road as speedily as possible. At a meeting lately held at Ottawa, the president, J. Stewart, of Waba; J. Bell, secretary-treasurer, of Arnprior; A. Bell, C.E., & W. J. Wylie, of Almonte entered into an agreement by which an option was given to Mr. Gade, agent for an English railway construction company, to build & equip the entire road from Mile Lake, on the K. & P. Ry., to Arnprior."

Some time since we were informed that the intention in regard to this line was to build a rough tramway to get out timber, iron ore, etc.

Nova Scotia Southern.—Unconfirmed reports are to the effect that C. B. Wilkins & Co., of Yarmouth, N.S., have the contract for this line, & that they are making fair progress with the work, including the bridge crossing the La Have River, also that they are prepared to sublet contracts for work between the northern end of the road & the Indian Gardens. (July, pg. 209.)

Ontario & Rainy River.—The various contractors on the first 80 miles west of Stanley, on the P.A.D. & W.R., where the line starts, are making as good progress as possible, but have been much hampered by wet weather & scarcity of men, many teams having stood idle for want of drivers. There has also been unavoidable delay in the delivery of rails. Track-laying has been begun with a small force, so as not to overrun the bridge construction and grading. A bridge construction outfit, pile-drivers, framers, etc., began work 4 days ahead of track-laying, & both bridge-builders and track-layers will continue until