

commenced this season. Engineers have been employed for a considerable period surveying the line & estimating the cost of the additional track, & are still working at the surveys & estimates.

It is said a branch will be built from Port Huron, Mich., south to the Jenks Ship Building Co.'s yards if sufficient business is guaranteed.

Surveys are said to be in progress for a new line from the west into Battle Creek, Mich., to avoid a steep grade.

Place Viger Station, Montreal.

The subject of the enlargement of the old Quebec Gate Barracks station yard, & the building of a combined station & hotel, was first taken up by the City Council of Montreal & the C.P.R. Co. in 1893. Several sites were proposed, & finally it was arranged that the City should expropriate the block bounded by Craig, Berri, Notre Dame & Lacroix sts., should sell the buildings thereon, & hand over to the Co. the vacant ground, comprising a total area of 208,450 ft., inclusive of parts of streets in the block.

The City also agreed to erect a bridge to carry Notre Dame st. & a part of Lacroix st. over the new yard, & to subscribe \$150,000 towards the cost of a building not less than 4 stories high to be used as a station & hotel, on condition that the Co. should spend not less than \$350,000 on the building & its appurtenances, & should cede to the City several valuable properties comprising an area of 184,856 ft. By Nov., 1895, the City had acquired the entire block & had removed all the buildings therefrom, except a fire station at the corner of Notre Dame & Lacroix sts. In Jan., 1896, the Notre Dame st. bridge was completed. In May, 1896, the deed was passed conveying the new block to the Co., & the properties above mentioned to the City.

The surface of the new block was very irregular, being at an elevation above city datum of about 64 ft. next Notre Dame st., & 29 ft. adjoining Craig st.

As the level of the new yard is about 34 ft., the excavation amounted to about 75,000 yards, exclusive of the excavation required for the erection of the bridge under Notre Dame st. & part of Lacroix st. In July, 1896, the Co. began the erection of the new freight shed in the old Quebec Gate Barracks yard, now called the Barracks yard, & work was commenced on the station building in Aug., 1896, & was carried on continuously until Aug. 15, 1898, when the station was opened for traffic. The hotel was opened a few days later.

The new yards being at right angles to the tracks which led to the old station, it was necessary to lay out the new tracks oblique to the new station in order to provide a sufficient length of straight track next the station. These tracks are shown on the plan on pg. 107. At present track no. 1 leads past the

stores building & the end is used for repairs. Tracks nos. 2 & 3 are for baggage & express cars, which are, in the future, to be loaded opposite the baggage & express platforms, & pulled out & coupled to front of outgoing trains a few minutes before train time. At present, however, the baggage is taken on trucks up to baggage cars at their place in front of trains. Tracks nos. 4 & 5 are for passenger car storage. Nos. 6, 7 & 8 are outward passenger tracks, & nos. 9, 10 & 11 are inward passenger tracks. Tracks nos. 12 to 17, both inclusive, are for delivery of freight direct from cars to trucks. These are all the tracks in the new Place Viger yard.

There are at present no passenger tracks in the old yard, now called the Barracks yard. Tracks nos. 1 & 2 of this yard are for freight delivery from cars into the lower storey of the old station building, which is to be used for freight storage, while the space below Notre Dame st. bridge, next the old station, is being closed in & connected with the old building by four 8-ft. doors, & will be used for delivery of freight to trucks. The top storey of the old station, at the level of Notre Dame st., is fitted up as offices for the Division Engineer & his staff, the Superintendent of Terminals, the Roadmaster, & the Stationery Department & stores. It is proposed to put in an intermediate floor between the two storeys above mentioned for freight storage. Tracks nos. 3 & 4 are for unloading freight direct from cars into trucks, nos. 5 & 6 are for storing cars of freight for delivery to city, & no. 7 is for freight delivery direct from cars to trucks. Tracks nos. 8 to 16, both inclusive, are for delivery from cars into freight sheds. No. 17 is for car storage, no. 18 is for freight delivery direct from cars to trucks, & nos. 19 & 20 are grain elevator tracks.

There is a complete system of water, steam & air pipes laid across the entire head of the Place Viger yard, the pipes also extending from the head of the yard for about 210 ft. between tracks 5 & 6, for about 350 ft. between tracks 7 & 8, & for about 670 ft. between tracks 9 & 10, & between tracks 11 & 12. These pipes are laid from 5 to 6 ft. below base of rail, & are enclosed in a wooden box of 2-inch plank. At the head of the yard, between each pair of tracks, and also at intervals of about 100 ft. along the lines of pipes between the tracks above described, there are vertical shafts, $2\frac{1}{2} \times 2\frac{1}{2}$ ft. clear inside, rising to the level of the top of the rail, made of 3-in. plank. Stand pipes for water, steam & air, with the usual rubber pipe connections, are set in these shafts. The boxes in which the pipes are laid have a grade of $2\frac{1}{2}$ ins. per 100 ft. towards the head of the yard, so that any water collecting in them may drain off into a 10-in. pipe running under the station building opposite the end of track 4.

The platforms between the tracks have an umbrella-roof covering the full width of the

platforms, supported on a single row of cedar posts along the centre line of the platforms. This arrangement of the posts is much more convenient than the double row adopted by some railways, as it does not interfere with passengers getting on or off trains, & as it separates the passengers coming from or going to trains on either side of the platform. These covered platforms are lighted by an incandescent lamp between each pair of posts.

The station & hotel building is the early 16th century style of French Renaissance. The exterior face of the walls, up to the sill of the first floor windows, is of pick-faced, grey Montreal limestone, plainly treated. The remainder of the exterior face is of Glenboig firebrick of buff color with dark mottling, the quoins, heads, string courses, etc., etc., being of Montreal grey limestone. There is a covered portico, 16 ft. wide, on the Craig st. face, extending along the entire length of the main building, having a stone colonade in front, & being approached by five stone steps running the whole length of the portico. The roof of this portico is used as a promenade during the summer. The roof of the entire building is of slate with copper flashing.

The whole of the work was carried out under the supervision of the Co.'s Chief Engineer, P. A. Peterson, J. P. O'Leary being inspector of works. We are indebted to Mr. Peterson for the foregoing description, which was written by H. Irwin. A plan of the yards & a view of the station & hotel building appear on pages 107 & 109.

The Crow's Nest Pass Railway.

Some interesting particulars about this line are given in a report made by the Government Superintending Engineer, G. R. L. Fellowes, under date of Dec. 1 last, as follows :-

The railway was given under contract to the C.P.R. Co. to be constructed & equipped for a subsidy of \$11,000 a mile, from Lethbridge to Nelson, the total amount of subsidy not exceeding \$3,630,000. The line was to be opened for traffic on or before Dec. 31, 1898, as far as the south end of Kootenay Lake, there providing train transfer facilities, without transhipment, not later than that date, from that point to Nelson, B.C., the service to be kept up until the balance of the road to Nelson was completed & put in operation for public traffic, the contract allowing the Co. until Dec. 31, 1900, to complete it.

The section of road to Kootenay Lake will be in safe condition to be opened for traffic before the close of the present month; it is equipped with rolling stock sufficient for the requirements of the traffic. Car loads of freight have already been carried from the south end of Kootenay Lake to Nelson, B.C., by water in transfer barges & steamers, thereby giving the public a traffic service before the expiration of the time limit named in the contract.

Spokane Falls & Northern System. Nelson and Ft. Sheppard R'y Co. Red Mountain R'y Co.

THE DIRECT AND ONLY ALL RAIL ROUTE
BETWEEN THE

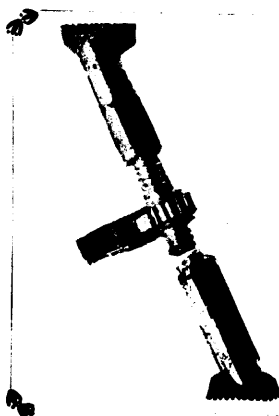
KOOTENAI DISTRICT

And all British Columbia Points, Pacific Coast Points, Puget Sound Points, Eastern Canada and the United States.

Connects at Spokane with Great Northern Railway, Northern Pacific Railway, O.R.R. & Nav. Co.

Maps furnished. Tickets sold and information given by local and connecting line ticket agents.

C. G. DIXON, G.P. & T.A., Spokane, Wash



Pearson Car.... Replacing Jack

Quickest Working and Most Popular
Device for Rerailing Cars.

Prominent R. R. Officials say: "Best device on the market for work intended."

Used on 200 Electric and 100 Steam Roads.

Send for list of Roads and Official Reports.

F. E. Came, 17 Place d'Armes Hill, Montreal