

is absolutely necessary you should have standard wheels so that there is no danger of their running off the tracks at the different blocks and switches.

President Gossler: You must have found it very much to your advantage to have put in the ballast you have there and the heavy rail?

E. G. Evans: Undoubtedly. That was one of the points I omitted to mention. Before we put in the double track we were operating on the old track, 56 lb. rail, with ordinary old-fashioned single fish-plates. The traffic increased to such an extent that we had positively to double the track the first six or seven miles, and in doing so we put in 70 pound T rails and a special 3 ft. long fish plate, double angle, an angle on both sides; the result of that has been very satisfactory, so much so that our electrical engineer in testing the power taken in running the cars on both tracks, finds that on the old track it takes 10 h.p. more to operate our 48,000 lbs. car than it does on the new track, showing the advantage of having the heavy rail and good joints, which, in my opinion, is more important than the heavy rail.

Mr. Reynolds: I would like to ask Mr. Evans in regard to the distribution of power. Is there a sub-station on the road beyond the power plant, or is that all direct feed, and how many miles is that?

E. G. Evans: The power is taken from a 600 kw double current generator at Montmorency, seven miles from Quebec; there on the d.c. end we distribute seven miles to Quebec and seven miles to Montmorency, making 14 miles d.c. distribution from that machine. We send a.c. current to Ste. Anne de Beaupre, 14 miles away, at 11,000 volts; there it passes through a 200 kw rotary transformer, and feeds back seven miles to meet the d.c. current coming from Montmorency.

Sir Wm. Van Horne in Cuba.

Weldon Fawcett writes:—"The railway systems, existent and prospective, in Cuba constitute one of the most important factors in the promised development of the new republic. To a neglect in the past to comprehend the full value of transportation facilities must be attributed, in a measure, the retardation of the commercial and industrial advance of the country; but nevertheless the dawn of the new era in Cuba has found ready to hand a very fair foundation equipment of rail lines, steam or electrically operated. Moreover, the inauguration of American military control was coincident with the promulgation of an enterprise for the construction of a great trunk line through the center of the island—a long-awaited and sorely-needed undertaking of pre-eminent importance; and finally, other projects of only slightly lesser importance but awaited the establishment of a stable government to take definite shape."

After describing the steam railways already in operation, he continues:—

"However, the enterprise of supreme importance in the transportation field, if not indeed in the entire range of activities on the island, is found in the project being carried out by Sir Wm. Van Horne, the builder of the Canadian Pacific Ry., and the capitalists associated with him in the construction of a central line of railroad throughout the length of the island. This 'backbone railway,' as it has been aptly termed, and which will exert a more powerful influence for the general development of the island and all resources than any other one undertaking, was an objective institution with foreign capitalists for half a century prior to the Spanish-American war; but all their schemes failed of consummation. The main line from Santa Clara to Santiago, to be completed this spring, is about 350

miles in length; but there will be feeders to the north and south coasts, which will bring the aggregate length of the system to approximately 1,000 miles. The branches or feeders will reach such ports as Nipe, Baracoa, Gibara and Manzanillo, connecting them with the interior and affording an outlet to deep water shipping points for the plantations along the lines.

"The Cuba Co., as the Van Horne syndicate is known, has carried on its construction work in the face of many difficulties, not the least of which was found in an inability to secure a governmental franchise or even a permit for construction, and the consequent necessity of purchasing outright a private right of way. However, the same energetic tactics which characterized the construction of the C.P.R. were adopted, a working force

which at times exceeded 6,000 men was employed, and at certain portions of the route the line was carried forward at a rate considerably in excess of a mile a day. The construction of this new railroad has been thoroughly in accord with the latest approved modern practice in every respect. Although it has been necessary to provide an immense number of bridges, owing to the volume of water which falls during the rainy season, steel construction has been employed exclusively, and the rolling stock and equipment is identical with that to be found on the most important railroads in the U.S."

The Nelson Electric Ry. Co. has ceased operating its line in Nelson, B.C. (Jan., pg. 39.)

Enameled Iron Signs

For Steam & Electric Railways, Steamship,
Express, Telegraph, Telephone and
Advertising purposes.

Railway Station Names, Switch Targets, Whistle
& Diamond Crossing Signs, Semaphore Arms,
Numbers for Sections, Mileage, Bridges,
Signal Houses, &c.;
Street Car Route Signs, Steamship & Ferry Signs,
Express, Telegraph & Telephone Office Signs,
and Advertising Signs, of every descrip-
tion, size and color made
to order.

Enameled Iron Plates for Doors of Stations, Offices,
Hotels, &c., carried in stock.

These signs last practically for ever, they never fade or tarnish, they are ever bright and attractive, they are absolutely impervious to heat or cold, they are the only signs that will withstand the effects of weather in all climates.

For Prices, Illustrated Catalogues, etc., address

THE ACTON BURROWS COMPANY,
29 Melinda Street,
TORONTO, - - - CANADA.