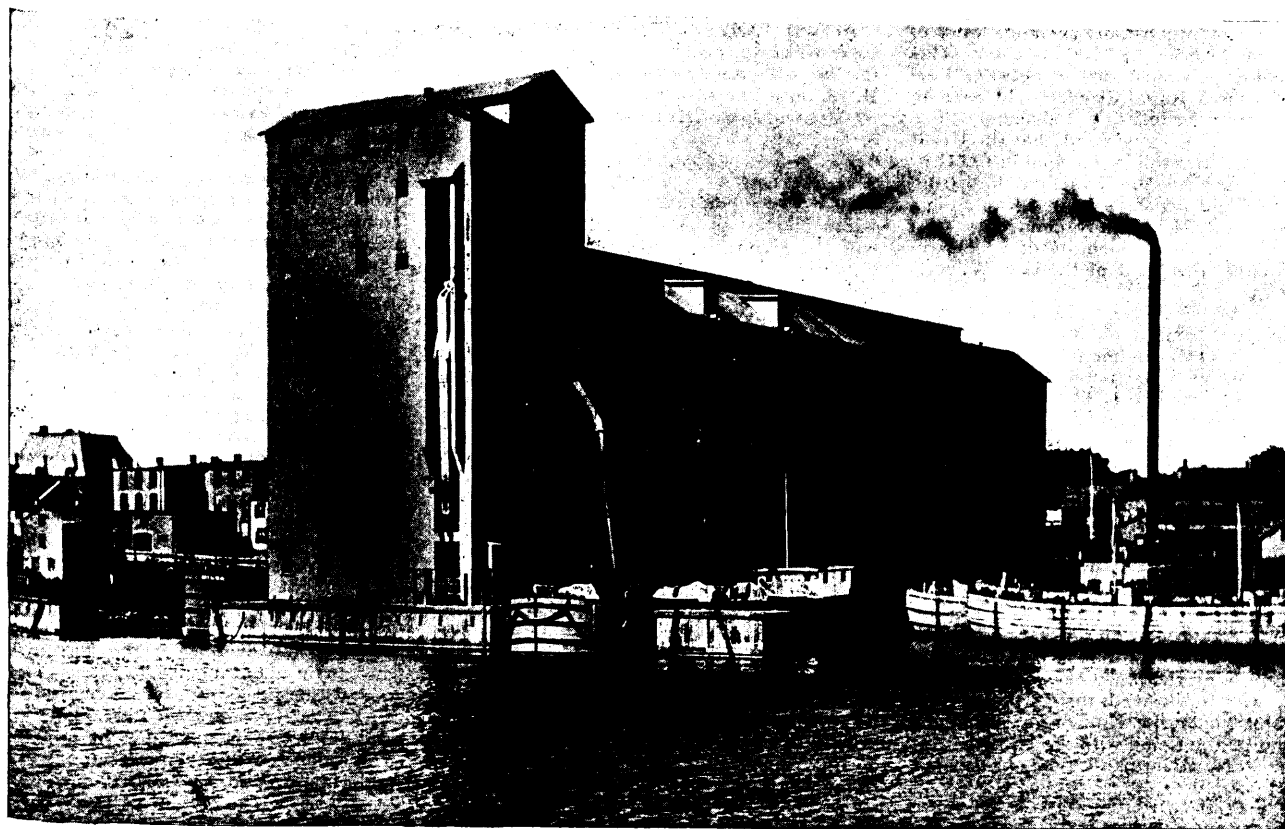


vived. The branch line, recently constructed, from Dartmouth to Windsor Junction, follows nearly the same route as that formerly laid down by the promoters for the Musquodoboit Ry. to follow, & thereby contributes to shorten the length & reduce the cost of the present enterprise. In 1898 the N.S. Legislature incorporated the Musquodoboit Ry. Co. to build a line from or near Windsor Jct., on the I.C.R., easterly by the Musquodoboit Valley, 40 miles to near Parker's Corner, or from Dartmouth easterly to Musquodoboit Harbour, thence up the valley of the Musquodoboit to Parker's Corner. The Co. has also power to extend the line to Halifax, Dartmouth, or to other points approved by the Governor-in-Council. The Government agreed to defray the cost of the engineering for a survey, the Co. to pay for such ordinary labor as might be required. The Co. expressed its desire to select the line of route & the intermediate

From the 25th to the 48th mile, the profile shows a rough rugged surface, that would be expensive to construct a line through, & expensive to operate traffic over, owing to heavy gradients. However, considering the greater length of 25½ miles so favorable for construction & operation, with the gradients reduced to our normal standard, the alignment on the whole, taken all in all, should not be condemned or pronounced impracticable. W. Yorston, C.E., was in charge of the survey. After the plans & reports on the survey were submitted, some persons interested suggested a deviation of route to obtain lighter work & easier gradients at one or two points. The request for further examination was complied with, & F. A. Creighton, C.E., was authorized to proceed with any survey for a diversion of the line they wished to make. Improvements in any preliminary survey can always be effected. No engineer can assert that he has absolutely

the survey has not been all that we could wish, yet it serves a good purpose by representing to the promoters the class & character of the line they may expect over the route they have selected, & it gives some data for making a close estimate of the probable cost. Still more, it indicates the necessity for further reconnaissance. It may yet be considered advisable to adopt a more easterly route from Dartmouth to connect with the Valley of the Musquodoboit River, although a longer one, & thus avoid the range of high ground that trends across the route surveyed over. The problem is:—which course is the most advisable, over the hills with steeper gradients yet practical route, or around them with a longer line but one more favorable, to construct & less expensive to operate?"

Newfoundland.—During the past year there has been completed the Placentia branch from Whitbourne, N.F., to Placentia, 27 miles;



THE PRESCOTT ELEVATOR CO.'S ELEVATOR AT PRESCOTT, ONT.

This elevator, built in 1895, is 280 ft. long & 72 wide, with a storage capacity of 1,000 bus. The depth of water at the front is 20 ft., & at the sides, where barges are loaded, 14 ft.

points to be connected along its course; and the survey made last year followed its direction. It commenced at Upper Musquodoboit & proceeded via Little River & Wise's Corner to a point on the Dartmouth Branch of the I.C.R., as near as practicable to Windsor Junction.

Provincial Government Engineer Murphy reports on it as follows:—"For the first 25½ miles, from Upper Musquodoboit to Wise's Corner, a very favorable location is available; the work of construction would be light & the traffic operation could be cheaply conducted. In the next 3½ miles, between the 25½ and the 29th mile, there is an ascent of 274 ft., 1 mile of which would require gradients of from 90 to 100 ft. per mile. This 3½ miles of heavy gradient is a very objectionable feature; but it may be improved by increasing the length. From here to the Junction with the Dartmouth Branch the maximum inclination at any place need not exceed 1.50 per 100, or 79.2 per mile.

laid down the best line of location over a broken, undulating country. One thing is clear in this respect. A summit of 370 ft. above Musquodoboit river has to be approached & crossed in a distance of 6 miles, 270 ft. of which has to be overcome in a distance of 3½ miles. We may obtain easier gradients by winding about the slopes of the hill-sides, which is necessary & desirable in making the ascent, but the summit has to be reached all the same, & it takes the same mechanical power to get over it whether in the long or short way. Still there is the very material difference that we can, with the power at command, carry on traffic with greater ease & with greater economy over moderate inclines than we can over heavier gradients. If the Musquodoboit Ry. is to be a competing line for heavy traffic, the gradients over which the traffic is to be moved should not exceed those of the other lines that may enter into competition with it. Although the result of

the Brigus & Carbonear branch, from Brigus Junction to Carbonear, 38.34 miles, & the Tilton & Carbonear branch, from Whitbourne to Tilton, 15 miles. In addition to these the main line is completed from St. John's east across the island to Port aux Basques, 548 miles. The proprietor is at present building the Burnt Bay branch from Quinette north to Burnt Bay, 9¼ miles. He proposes soon to build an extension from Dunsmere to St. John's at the west end terminus, some 9 miles. Of this 6½ miles is to be completed in 1899.—*Railroad Gazette.*

Northern Pacific.—For some time past the settlers west of Portage la Prairie, Man., between the main line of the C.P.R. & the M. & N.W.R., have been agitating for the construction of a railway from Portage la Prairie to Rapid City. In our Feb. issue, pg. 35, we gave particulars of 2 notices of application to the Manitoba Legislature to incorporate a company to build from Portage la Prairie