

of this tramway a line of two steamers run to Edmonton, a distance of about twelve hundred miles. These steamers can carry a large quantity of freight, and they are now being arranged so as to afford good accommodation for passengers. They are now run at very considerable cost, and at great risk, owing to the obstructions which exist at certain points. Having just come down the river from Prince Albert, partly in a York-boat, and partly by steamer, and having made careful enquiries, from all who are competent to afford correct information, I am enabled to state what is required to greatly improve the navigation. There are seven places between Grand Rapids and Prince Albert which require immediate attention.

The first is a long and swift rapid called Rocher Rouge, up which a steamer has to be assisted by a rope, worked by a steam capstan on the boat and fastened to a tree on the shore. By placing a pier near the head of the rapid the length of rope required would be reduced from three thousand feet to less than two thousand feet, and the time and difficulty of ascent materially diminished. The next obstruction is at the Demichars rapids, a very heavy piece of water, taking at present an entire day to ascend. The rope used is one mile and a quarter in length, having to be carried across a lake at the head of the rapids, and fastened to trees on the opposite shore. The erection of a pier just above the rapids would allow of a rope of not more than two thousand feet being used, and would be of very great advantage at this dangerous place. The next obstruction is at the Narrows, where a large boulder in the centre of the channel, requires to be removed.

The next place is Tobin's Rapids, a long shallow rapid. It sometimes take two days to ascend these rapids, the steamer scraping the whole way up. A few rocks require to be taken out here, and a couple of wing dams constructed for which the materials are on the spot. This done the rapid would be easily ascended. Above Tobin's rapids are these named Nepowin, where some rocks require to be taken out in two places. The next place is the Little Rapids below Cole's Falls, where some rocks require to be removed. The next and seventh point is Cole's Falls, perhaps the worst place in the river. It was here, in a York boat drawing only one foot of water, that we struck a rock in the rapids, and hung over it for about half an hour. At this place several rocks

require to be removed and wing walls constructed, for which again there are ample materials on the spot.

The works named at these seven places would most materially improve the navigation—would give in low water at the worst places a depth of three and a half feet instead of less than two feet as at present—and would enable the boats to run with regularity and comfort from the 1st of June to the 1st of October. There are rocks requiring to be removed between Prince Albert and Edmonton, but not having gone personally over that portion of the river I cannot speak about them definitely. But I think it is safe to say, from all the information I have been able to obtain, that the improvements I have mentioned between Prince Albert and the mouth of the Red River, including what will be required up to Edmonton, could all be completed for about \$50,000. That is a small sum for which to improve the navigation for a distance of nearly sixteen hundred miles, and which would ultimately prove of great advantage in placing important and valuable districts of country in easy means of communication with the railway system. All the plant required would be a dredge, which certainly will be required for other places, and for the Saskatchewan a couple of stout barges with large lifting cranes to be worked by steam. The line of steamers already exists, and it only needs the improvements I have named to make them of the greatest possible service in the development of the settlement and trade of the country. The south branch of the Saskatchewan will no doubt also hereafter require to be improved. One of the steamers already mentioned has been up this branch about sixty miles. The south branch runs nearly to the Cypress Hills, and by the junction with the Bow, Belly and Red Deer rivers, can be made to reach Fort McLeod, Fort Calgary and other points at the base of the Rocky Mountains. The extent of country that would thus be brought into connection with the railway system would be enormous. As a large number of the Indian reserves are placed on the various rivers I have mentioned, the time and economy saved to the Government in transporting the supplies sent to the Indians will be very great, as the system of navigation becomes enlarged and improved.

The steamers at present running between the Red River and Edmonton belong to the

Hudson's Bay to accommodate supplies to, as posts along north as the sufficient to take that will arise as the need port, both for using these compared with vile" is the from the low mouth of the strongly built does her work about ten miles. The depth of size. When and a half feet of her cargo loaded after dredging of by forty yards loaded, and being constructed arises. The the steamer daylight. thirty-four Grand Rapids up to Carlton of the ore wood. She twenty-five can make fourteen days are carried date all the capacity by the north. From C completed also stern of steel a boat is a rocky fall to build engines, will carry quired. with large which, across the upper When Winnip seventy state o