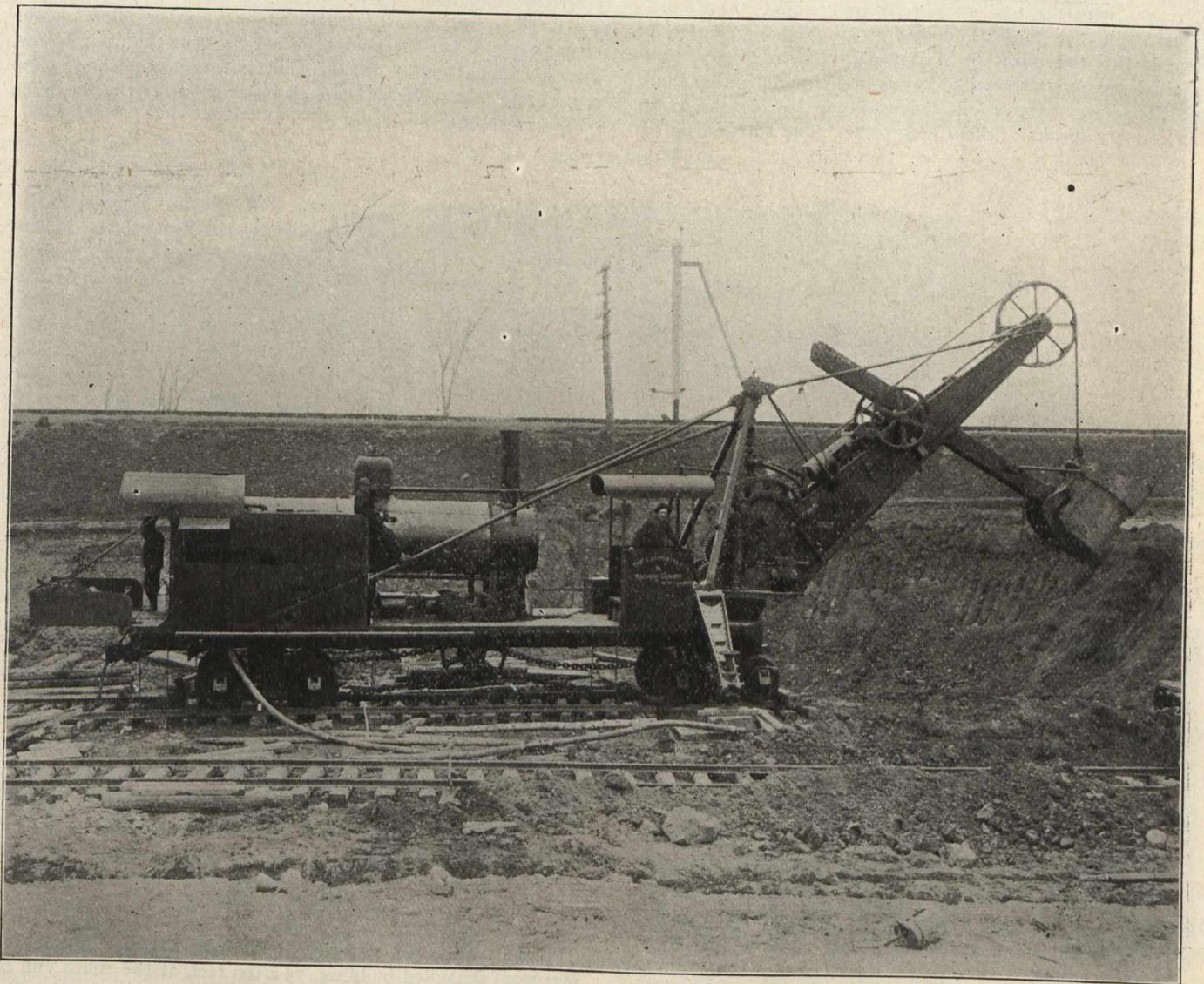


tion of the river bank, the finest of the gorge. Foundations are now being built for the towers on both sides of the river. Connections between the banks have already been made. This was accomplished by James Wadsworth, of Queenston, Ont., rowing across the rough stream and carrying the line with him, letting it unreel as he progressed. The trip was successful, and now the line hangs high above the water and will serve as the means to pull wires and cables across. A large transformer house is being erected on the top of the high bank on the New York side, the cost to be about \$50,000.

In the accompanying illustration the relation of the station of the Ontario Power Company and the Horseshoe Falls of Niagara are for the first time accurately portrayed,

while high on the bluff, up from the power station, the new distributing station of the Ontario Power Company is shown. This distributing station is 550 feet back from the power house and about 255 feet above it. It is expected that this distant control of the current will remove some of the dangers common to such work and operation. The cables and wires for control will leave the power house through the penstock tunnel, and from the top of the bank will run to the distributing station through clay conduits. The low-pressure bay upon the main floor of the distributing station contains the 12,000-volt automatic oil circuit-breakers, while in the chamber beneath are the sectional duplicate bus bars and their immediate connections. The transformers stand in pits in the transformer room.—(Western Electrician.)

3½ YARD "ATLANTIC" TYPE STEAM SHOVEL.



The above is a photographic illustration of a 3½ yard "Atlantic" Type Steam Shovel, recently built by the Locomotive and Machine Company, of Montreal, Ltd. This shovel—the weight of which is about 80 tons approximately, was designed by A. W. Robinson, of Montreal, formerly of the Bucyrus Company. The engraving shows one of the shovels in trial operation by the Canadian Pacific Railway Company at Montreal Junction, and on the strength of its successful performance, the company, through W. R. Baker, has ordered three more. It has been subjected to most exhaustive tests, and on comparing its performance with that of a Bucyrus shovel, on the same work, it was found to have excavated fifty per cent. more material in the same working time, and to have consumed only three-fourths of the fuel. Mr. Robinson is also the designer of the Bucyrus machine, which is so well and favorably known, about a thousand of them being in service; but in this latest production he has made a most

remarkable advance in speed, power and efficiency. Some idea of the power of this machine may be gained from the fact that it can dig a cutting 60 feet wide and 25 feet deep at one time, loading the material on a train of cars alongside. It loads standard cars, 34 feet long, in 1¾ minutes each, scooping up five tons at a time with its immense steel dipper. Although so large and powerful, it is handled with greater ease and rapidity than the old style, and seems almost human in its motions. It is a matter of satisfaction that these machines are now built in Canada, as heretofore they have all been imported from the United States. Not only that, but this Canadian design is being largely used in the United States, where it is being introduced by the American Locomotive Co., and bids fair to supersede the old style by reason of its superior speed and efficiency.

One of these shovels has also been sold to the Canada Copper Company, for digging heavy ore.