

leaving the permanent work to be done later ; but when this is done, careful soundings should be taken and the method of doing the permanent work and its probable cost fully considered. What the author says of the objection to heavy fillings across soft bogs applies even more strongly in the case of ponds or lakes with soft and muddy bottoms, which are virtually bogs covered with a certain depth of water.

descriptions are correct as to the details of the work as it exists to-day. Readers of THE CANADIAN ENGINEER will therefore be glad to have an idea of what has actually been done and of the plans upon which the water power of Niagara is now being developed, and for this we are indebted to DeCoursey May, the engineer in charge, and to recent sketches in the Buffalo Express.

The idea of diverting the waters of the Niagara river to commercial purposes is not a new one. As long



JUNCTION OF HORSESHOE TUNNELS.
WATER POWER AT NIAGARA FALLS.

Accounts of the enterprise now being carried out to use the gigantic powers of Niagara Falls for commercial purposes have appeared from time to time in the scientific journals and newspapers, but since the first conception of this remarkable enterprise so many changes have been made in the plans that none of these

ago as 1847 it was proposed by General Peter Porter and Judge Porter, who used water-power there in a small way, and no doubt it came into the minds of many a visitor long before that date. In 1885 the late Thomas Evershed, of Rochester, an engineer on the Erie canal, suggested a water-power tunnel discharging immediately below the American Falls, and taking the water over a mile above the falls. It was proposed to have