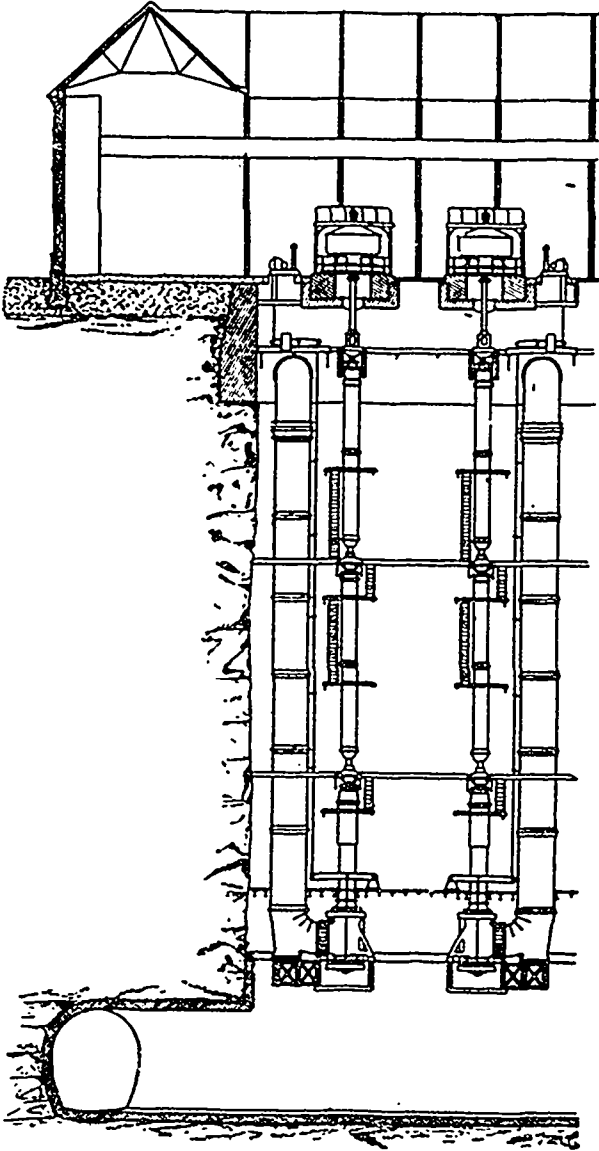


capable of providing 125,000 horse-power, so that the enormous influence of such a franchise can be easily understood, especially if they realize their prediction that power will be supplied at one-half the cost of ordinary water power and one-third the cost of steam at the same place. The company have shown their faith in the work by purchasing 1,500 acres of land there and expending between \$3,500,000 and \$4,000,000, and they have already formed what is to be a new town or city, called Echota, on the American side.



REAR VIEW OF PENSTOCKS AND SHAFTING

It was F. W. Hawley, one of the directors of the enterprise, who last summer carried out the experiment for operating the boats in the Erie Canal by electricity. Mr. Hawley's idea was to supply, during the winter months, electric light and heat over a wide area of country in New York State, and in the summer, when little light and heat would be required, to devote the electric energy to moving the canal boats, thus turning the power to account all the year round. He now considers the propulsion of canal boats perfectly feasible, and said in a recent interview with the *Rochester Democrat*:

"When the Niagara work is completed, and electric theories become established facts, there will be many generating plants erected. The water power now going to waste at many of the smaller falls will be utilized for local purposes. Sites will be chosen in the great coal fields where there is now no output on account of the impossibility of getting the product economically to the railroads, and countless dynamos will become in-

stinct with electric energy. In fact the 'electric age' will open boundless fields for human effort and progress, and render it easier for the artisan, the mechanic and the laborer to acquire a competence.

"The introduction of electricity throughout the State of New York will mark an era of unparalleled advancement and improvement. The discovery of the possibilities of steam awoke the world from the long slumber of the Middle Ages. The advent of electricity will cause it to take gigantic strides onward. Compared to its subtle energy steam is but a blind and clumsy giant. It can reach out a million arms to turn the wheels and spindles of the commonwealth with a power as of countless genii."

This may be a rosy picture, but whatever is in store for the combination of water and electricity, no country in the world is favored like Canada. As we have two-thirds of the fresh water of the globe, so we have probably one-half of the water power of all the continents, and what industrial development this means, time and opportunity alone can tell.

MONTREAL is gaining quite a reputation as a convention city, and the engineering and kindred professions and trades have been especially favored during the past two years. The latest acquisition of this kind is that of the American Street Railway Association, which has decided to hold its next annual convention in Montreal on the 15th of October, 1895. The convention will last three days and it is expected that about 300 delegates will attend. There will be an exhibition of apparatus and inventions relating to electric and other street railways, and the proceedings will be varied by a banquet and by excursions in and about Montreal.

In the "post card correspondence" of the *Toronto Empire* a writer signing himself "Canadian Cement" makes a very just complaint against the Dominion Government for awarding a contract to a Belgian firm for 11,000 barrels of Portland cement for use on the Lachine Canal improvements. Owing to the stagnation in the building trades, the cement industry is more than usually depressed, and one would think that a Government so inclined to protection and paternalism would consider it a duty to award such a large contract at home, even if Canadian cement were a grade or two below the quality of the average imported article; but when it has been demonstrated by the fairest tests that some brands of Canadian Portland cement are far superior to the average foreign article, what shall we say of the patriotism which sends such an enormous order abroad, with the result of closing one or two of the Canadian works, and the stove mills, which are dependent upon them for the barrels needed? The act of the Public Works Department in this particular case is an outrageous injustice to the home industry, and we should like to know on what pretence it has been perpetrated.

LAST year two articles appeared in *THE CANADIAN ENGINEER* outlining a scheme for bringing water from Lake Erie to Hamilton, both for water works purposes and as a source of electrical power. These articles directed the attention of engineers and others to the possibilities of the scheme, and it has so far taken shape that two or three engineers, working on independent lines, have outlined a plan for the work. One of these engineers is Wm. Golding, of New Orleans, who, it appears, as far back as March, 1888, made a formal proposition to the mayor of Hamilton, suggesting the scheme. His idea was to dredge the Grand River from its mouth back to