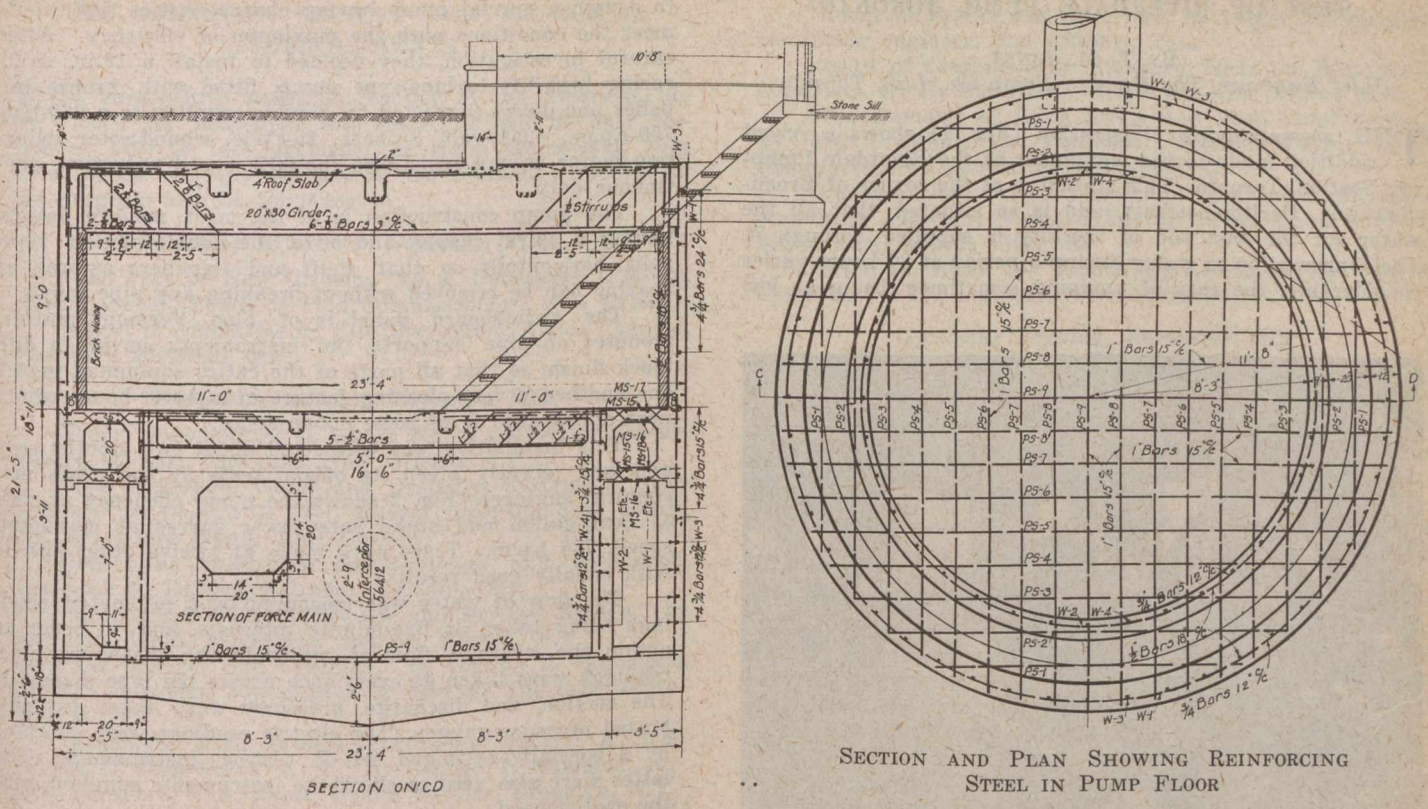

SECTION AND PLAN SHOWING REINFORCING STEEL IN PUMP FLOOR

to take its place. This principle of ventilation, by exhausting the air from near the floor, was decided upon because gasoline vapors and other heavier-than-air gases, if encountered, would settle to the floor and require removal.

Waterproofing

The exterior of the pumping station, down to the level of the motor room floor, will be waterproofed with alternate layers of wool felt and coal tar applied hot. Over this, a 6-in. layer of gravel will be placed to drain the ground water from the top and the upper side walls of the station.

Superstructure

As the pumping station is located in a small park containing a bathing beach which is very popular in the summer time, it was deemed desirable to have the superstructure present a pleasing appearance. It will, therefore, be built of gray brick, with cut-stone trimmings, and will be covered with a copper-frame, wire-glass skylight.

Contractors and Personnel

The equipment was furnished by Darling Bros., Ltd., Toronto, and consists of Canadian General Electric motors, Sundh self-starters, Yoemans pumps and Yoemans float switches.

The pumping station is being constructed by the R. Wescott Co., Ltd., contractors, of Windsor, Ont., who are doing the excavation and concrete work at actual cost plus 15%, and the installation of pumping units and other equipment at a bid price. The total estimated cost, including two pumping units and engineering and contingencies, is $18,900.

The station was designed by Willard R. Rhoads under the direction of the writer, the firm of Morris Knowles, Ltd., being the engineers for the Essex Border Utilities Commission.

"BORE FOR POWER!" SAYS SIR CHAS. PARSONS

IN an address recently delivered in London, Eng., Hon. Sir Chas. A. Parsons, inventor of the Parsons turbine, said that "failing new and unexpected discoveries in science, such as the harnessing of the latent molecular and atomic energy in matter, the great position of England cannot be maintained for an indefinite period. At some time or other, more or less remote, the population will gradually migrate to those countries where the natural sources of energy are the most abundant."

England is using up its coal more rapidly than most other countries, and Sir Charles states that long before it reaches the point of exhaustion, it may pay England to import coal from countries where it is workable at lower cost. Ultimately water-power will be more rapidly developed, although the cost of harnessing all the water-power of the world would be about £8,000,000,000.

What shall England do to be saved from the disaster threatened by the exhaustion of its coal and the competition of other lands with plenty of cheap power? Sir Chas. Parsons' advice may be summed up in the one word: "Bore." There may be cheap power waiting, ready to be tapped, down deep in the crust of the earth, he says.

He recalled that some years ago he suggested boring a shaft 12 miles deep, or about 10 times deeper than any in existence. At that time the cost was estimated at £5,000,000, and the time that would be required at 85 years! Since then, he added, experiments have been made, showing that in limestone a depth of 15 miles is probably practicable, and in granite a depth of 30 miles might be reached.

"Little is at present known of the earth's interior," said Sir Charles. "When we consider that the estimated cost of sinking a shaft to a depth of 12 miles at present-day prices is not much more than the cost of one day of the war to Great Britain alone, the expense seems trivial compared with the possible knowledge that might be gained by an investigation into this unexplored region of the earth."

In Italy, at Lardarello, he said, bore holes have been sunk which discharge large volumes of high-pressure steam, which is used to generate about 10,000 h.p. by turbines. A similar project is on foot near Naples to supply power to the great works in that district.

Without promising that a 12-mile bore hole in England would yield ready-made steam-power, Sir Chas. Parsons urged that "the whole subject merits the most careful consideration."