Answers to Questions on Electric Railway Topics.

Following are answers to questions in the American Electric Railway Association's question box, sent in by officials of Canadian electric railways:—

Shop Men's Instructions. — Should not more detailed and specific instructions and data be furnished shop men, and if so, what should be its nature? Shop men are disposed, in most instances, to do exactly what is desired, but in very many cases, do they really know what is wanted, and how to do it efficiently?

W. R. McRae, Master Mechanic, Toronto Ry.—"Most decidedly shop men should be furnished with full data and instructions relative to the work in which they are engaged. The practice of this company is to engage only those men who have had, at least, a good common school education and who speak English. Blue prints, printed instructions, both electrical and mechanical, are supplied the men. In addition to this, blue prints and instructions are posted in convenient places both in the shops and the several divisions. We also have an apprenticeship course, which has been very beneficial in securing trained men for the service."

Foremen's Visits to Other Shops.—While officers and heads of departments get together and interchange ideas at conventions, meetings, etc, is there not too much stay at home for foremen and sub foremen of smaller shops and departments? Would it not be to the advantage of the railway companies, creating as well a better feeling among the men who are on the firing line, to have occasional visits to shops, and see men engaged on lines of neighboring companies?

W. R. McRae, Master Mechanic, Toronto Ry.—"For the past few years, and it still is, the policy of this company to send officials and employes to neighboring companies' shops, to see what is being done along similar lines to their own work, the company, of course, paying all expenses. The above outlined practices, in conjunction with skilled, painstaking foremen, are undoubtedly responsible for the high standard of the shop men employed by this company."

Collection of Transfers and Free Tickets.

—What are the advantages of collecting transfers and free tickets at the end of each trip?

F. L. Hubbard, Assistant to Manager, Toronto Ry.—"Do not see much, if any. Certainly no advantage under our system of collecting fares with portable hand box. The conductor makes a record of the transfers collected on each half trip and encloses the transfers for each round trip in an envelope, which is then sealed. At the termination of his run, the conductor wraps envelopes in a folder and deposits same at division office. Free tickets are deposited in fare box by passengers in same manner as revenue fares."

Advertising Attractions.—Of the following, which plan or system of advising the public as to band concerts, special entertainments, such as carnivals, circuses, ball games, etc., has given the best results—printed signs or notices on dash of cars, signs on interior or exterior of car windows, interior advertising rack signs, hanging of folders in cars so that passengers can help themselves to copies?

F. L. Hubbard, Assistant to Manager, Toronto Ry.—"We use boards with printed paper signs pasted thereon, 29½ by 21½ ins. in size, displayed on the upright portion of fender in front of dash of car. By limiting, whenever possible, the printed

matter to four lines in large type, a plain, bold sign is obtained, which experts consider is the best advertisement in the city for the purposes named. We use this method to advertise features at our summer park, and the privilege is much sought after for other large events in the city."

Road Construction. With crushed stone ballast and concrete paving foundation, are creosoted ties an ultimate economy? (a) When concrete paving foundation comes only to the top of the tie; (b) When concrete paving foundation comes 2 ins. above top of tie.

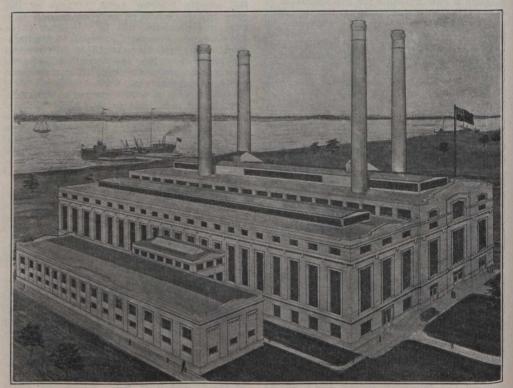
W. F. Graves, Chief Engineer, Montreal Tramways Co.—"Do not consider the use of creosoted ties an ultimate economy in any track construction with crushed stone ballast and concrete paving base."

What has been your experience regarding the wear of the grooved granite block paved up to the gauge side of the T rail track on a narrow street where the vehicular traffic is heavy? Do you find that a groove block it is necessary to leave the work to use toilets, when portable toilets are used?

W. F. Graves, Chief Engineer, Montreal Tramways Co.—Most urban systems use the portable toilet in connection with the sewer manholes on construction work. They should be about 4 by 4 by 6 ft. in height, and under all circumstances have a roof. The matter of keeping check on track laborers should be directly under the supervision of the gang foreman, as toilets should be located sufficiently close so that he would have supervision of his men at all times.

Dominion Power and Transmission Co.'s Steam Plant.

The steam power station which is to be erected in Hamilton, Ont., by the Dominion Power and Transmission Co., is designed for the accommodation of six 10,000 kilowatt generating units, turbines, operated by steam at 200 lbs. pressure, 200 degrees superheat. The auxiliaries will be mostly steam driven, except the exciter, which will be motor driven. There will also be



Dominion Power and Trans mission Co.'s Power House.

laid in connection with a T rail on such a street keeps vehicular traffic out of the railway strip, as compared with the modern groove girder rail?

W. F. Graves, Chief Engineer, Montreal Tramways Co.—On a narrow street, where vehicular traffic is heavy, it should have the type of rail which offers the least resistance to getting in and out of the track, and that is the grooved girder rail. If necessary to use T rail, the granite nose block should be used in preference to any other block. The grooved block laid with T rail on such a street would probably tend to keep the vehicular traffic out of the railway strip, providing there is sufficient roadway on either side, but it is very much to the detriment of the car traffic.

detriment of the car traffic.

Are there any systems using portable toilets, connecting to sewer manholes in streets where construction work is in progress? What is the best design of such portable toilets? What is the best method of keeping check on track laborers where

one or two steam driven exciters. There will be used surface condensers, turbine driven, air and hotwell pump, circulating pump and boiler feed pump. The feed heater will be of the open type. The boiler plant will ultimately consist of 14 units of 1,050 h.p., each equipped with superheaters and underfeed stokers.

The accompanying illustration shows the location of the boiler room, turbine room offices and transformer house, as they will be when completed. Definite plans of the interior arrangements are not yet finally arranged.

The plans show two buildings. The larger one will be the boiler room, and the smaller one the transformer room. The foundation work for the first part of the structure is expected to be started early in March and will be done under the direction of the company's own staff. Tenders will be invited at a later date for the steel and other work of the structures. W. C. Hawkins, Hamilton, is Managing Director.