

suspension of intercourse a matter of less injury to electric lighting interests. We are still dependent upon our neighbors to a certain extent, and it behooves us to look ahead a little and determine what can be done to best forward the interests of our industry. We are in receipt of communications from central station owners strongly advocating the formation of an association for purposes of mutual benefit, and shall be glad to hear further from any others on this point. It has been suggested that Toronto, being a central location, might be made the place of meeting for the inception of such an institution. Some time about or during the coming Industrial Exhibition might be mentioned as a suitable time. There is some talk of building a new Machinery Hall by the Association, in which, no doubt, there would be ample facilities and space for a first-class exhibition of electrical apparatus. Electricity has made rapid strides during the last year or two, and if it were made generally known that during the time mentioned electricians and electric light men would meet in conclave, special efforts would be made to centralize and exhibit all that is newest and best in electrical methods and appliances. The exhibition authorities would no doubt earnestly co-operate to make this branch of the Industrial a complete success. An association of this kind should consist of those engaged in the business of manufacturing and selling electricity from central stations. The annual fee might at first be made nominal—simply sufficient to cover ordinary working expenses, until such time as it would naturally extend and place itself upon a firmer basis. Let those who are willing to take a hand in the formation of such an organization and to become charter members, as it were, speak out, and that with no uncertain sound, and on our part we will do our utmost to give publicity to any correspondence or suggestions bearing upon the subject.

FOR a number of years the idea of providing the city of Toronto with water from Lake Simcoe has from time to time been brought before the public. At present the idea seems to be popular, and on the face of it, there seems much to commend it. The lake is a large one, and stands so high above the city that it is supposed the water would freely flow down and supply even the highest parts of the city with an ample supply at sufficient pressure for every purpose. No pumping would be required, and consequently there would be no expensive engines to buy, and to repair when they broke down, and no large coal bills to pay, in order to keep the pumps going. Such may be said to be the popular view of the gravitation scheme. The distance of Lake Simcoe from the city, about 40 miles, need not be considered as an insuperable difficulty. Water is now being brought to Manchester, Eng., by a conduit 96 miles long. Liverpool has one 67 miles long. Glasgow brings its water from Loch Katrine, a distance of 34 miles, and in that distance there are 70 tunnels, one of which is 600 feet below the surface of the ground. The supply to New York by the Croton Aqueduct is brought over 40 miles, and has a capacity of 115,000,000 gallons in 24 hours. With such examples there is apparently nothing unreasonable in suggesting that Toronto's water supply could be brought from Lake Simcoe. There are, however, other things to be taken into account. Lake Simcoe is the highest part of the fresh water supply filling the great lakes. It is higher than Lake Superior, consequently the supply to it is limited to the rain fall over a comparatively small section of country. Its natural outlet is to the north by means of river and lakes with a slow current, and the quality and quantity of water available for city supply are still unknown quantities. Between Toronto and Lake Simcoe the height of land passes, forming a high ridge running east and west. The ridge is so high that the water cannot run over it, and must be brought under it or through it. We do not know the exact figures, and until an exact survey is made possibly no one knows, but it has been stated that to get through the height of land involves a cutting over 11 miles long and from 200 to 300 feet deep, or making a tunnel. Then there are hollows to be crossed, which can be done by inverted syphons, but which increase the cost. The probabilities are that by the time a conduit has been built, it will be found that the interest on the outlay will amount to a much larger sum than the cost of pumping an equal amount of water from Lake Ontario. After all, probably the strongest reason why Toronto should not go to Lake Simcoe for a water supply is the fact that Lake Ontario is so

near and contains an unlimited supply of water of the best quality, and which can be had for the pumping. If Glasgow, Liverpool, Manchester and New York could have obtained such water as we have in Lake Ontario on the same terms, the long conduits would never have been built.

We publish elsewhere an epistle from the exponents of a storage battery who apparently take exception to our remarks on storage batteries in general. We should have been better satisfied if, instead of claiming superiority for their battery, they had shown or made an attempt to show in what respect it is superior to others in experimental use to-day. Wherein does the construction differ? Does the material used differ from others, and if so, what is the advantage of the difference? If the battery is covered by patent, there should be no hesitation in courting the fullest publicity on these points. The refusal of an offer of car, track, and motor to demonstrate its efficiency, is to say the least of it, curious. When it is well known, and has been so expressed by us that a successful storage battery is the El-Dorado of street railway men, that it is the crying need of the electrical world to-day, we should have thought that the proprietors of this bonanza would have jumped at the chance to show their goods without cost to themselves. This journal has no antagonism to any individual or industry. We aim to chronicle the progress of electrical science as it actually presents itself, and while of course we court the advertising patronage of our electrical friends, our highest aim is to make the ELECTRICAL NEWS of value to all engaged in electrical and engineering pursuits. To do this we intend to express our opinions of men and things without fear or favor, to chronicle events and discoveries as they actually present themselves, and to condemn the sharks who make use of a little smattering of electrical knowledge to make a raid upon the pocket books of the unwary in the name of science. By adopting a straightforward course and issuing a journal that can be depended upon, we shall increase our circulation to an extent that will make it necessary for any progressive concern to make use of its columns to reach the public. If we express opinions that to our readers may seem to be open to criticism, we shall be most happy to hear from them, and if we make a statement that appears not to be borne out by facts, and such is demonstrated to us, we will make full, public and complete recantation. We are proud to say, however, that during our publication of the ELECTRICAL, MECHANICAL AND MILLING NEWS from its inception till it gave place to the present paper, we have had no occasion for anything of the sort, but on the contrary, "coming events" have so plainly "cast their shadows before," that in every case changes and developments which are so rapidly taking place in this progressive science have been accurately and completely foreshadowed by us. We make no exception in this matter of the storage battery. We have expressed our opinions of it, knowing what we talk about. We have said that no imitations of those "not dead" perhaps, but simply "gone before," will ever solve the problem, and that success must be looked for on new lines. We are, however, more anxious that our increasing clientele should have the fullest information on what is doing and actual facts connected therewith, than we are for our own glorification, therefore we make this offer to the storage battery people in question: Produce fifty of your cells, place them in charge of an expert appointed by us and one by you for a thorough and exhaustive test, and the results shall be made public without fear or favor. You have the floor.

IT is announced that the Hon. John Costigan intends to introduce a measure during the next session of the Dominion Parliament, having for its object the appointment of a Government inspector of electric light. That is all right; there should be more inspectors. This country is not half enough governed. We need a few more officials to relieve the over-burdened producer of some of the superfluous shekels he has accumulated despite the harassments and uncertainties of governmental interference. There is not enough risk in electrical investments at present even to make things interesting, so by all means let us have an electric light inspector; also let him have an assistant. Let there be a deputy assistant inspector and likewise a board of electric light inspection, with a chairman and secretary; also a vice-chairman and a few clerks, and charge up the expense