

given the complete ownership and 'responsibility of the working of the London tramway system, obstruction meets it at almost every turn. The Council early realized the error made originally in binding itself unconditionally to the conduit system, especially when many unforeseen expenses continually cropped up in connection with the removal of existing cables and pipes to accommodate the 'trenching for the conduit. In a very short time the more reasonable policy was adopted of using the conduit system at all busy centres, and the overhead system in the outlying parts. The borough councils, in the possession of a veto foolishly given a few years ago by the County Council, as to the choice of system in their particular districts, at first cavilled a good deal, but one by one they have given in to the views of the County Council. The Stepney Borough Council, however, remained steadfast in its objection to the overhead system, and after years of negotiation the G.B. surface contact system, was agreed upon as a way out of the difficulty. The County Council were thus pardonably to be excused if they considered the matter settled, but it was not to be so. Outside the London boundary there are a number of other tramway systems upon the trolley system each of which is anxious to have through running into London. Therefore, immediately the agreement with Stepney was made known, protests were made by these authorities to the Board of Trade that the adoption of the surface contact system would interfere with any idea of through running which was so essential to the well-being of the travelling public. On the face of it, however, practical difficulties did not appear to exist, for cars could very easily be equipped for both systems and so preserve the continuity. I am pleased to say that the Board of Trade have been advised to this end, and yesterday gave its decision to grant the London County Council the necessary official sanction to adopt the surface contact system proposed. The last move of the opposing councils is to urge for a conference of the authorities concerned.

New Home Office Electrical Regulations.

Within the past month the Home Office has issued a code of regulations for application to all buildings coming within the scope of the Factory Acts, which are to be complied with in respect to the use of electricity. The details of these regulations are not of supreme interest here, being of more or less local application, but it is to be noted that the most strenuous opposition is being offered to them on the ground that they are of such a character as to restrict the use of electricity in buildings of this nature. The main point is that if these regulations come into force, two sets of regulations will have to be obeyed, for there already exist a similar set issued many years ago by the Board of Trade, and, not unnaturally, the two, in some respects clash. Central station engineers and supply authorities generally are doing their best to organise a campaign in the responsible technical press in order to bring about drastic alterations. As a matter of fact, a period of one month is allowed within which objections to the regulations may be lodged, the original set published being only in draft form. Electrical engineers rightly feel that the industry is being very badly treated at the hands of the legislature. In the first place, the original electric lighting acts passed in 1882 and 1888 have never been revised, notwithstanding the great strides which have been made since those days, whilst the Tramway Act of 1870, passed in the days when mechanical traction on roads in any form was unknown, is to-day the measure controlling electric tramway traction. Repeated efforts have been made to have these Acts of Parliament brought up to date whilst the first move made by a Government department within recent years suggests a method of regulation which may hamper the industry still further.

Threatened Railway Strike.

The industrial world generally in Great Britain is just now contemplating with anything but an easy mind, the possibility of a more or less complete railway strike, which if carried out, would have a most paralyzing effect upon

trade. The position has arisen in this way. For more than a year the Amalgamated Society of Railway Servants, which has more than one representative in Parliament, has been asking the railway companies to acknowledge them as the accredited mediators between the companies and the men in respect of all grievances. This the directors of the majority of the railway companies have steadfastly refused to agree to, and something approaching negotiation has gone on until at the present time the men are being ballotted as to whether or not they shall support the demands of their society in a practical manner by ceasing work. There is much to be said on both sides especially in a more or less democratic country such as England is supposed to be, but the men have somewhat alienated themselves from public sympathy by the intimation that they have a large number of grievances. The directors, and a good portion of the public, foresee, that once the principle of recognition of the society is granted, there will be no great lapse of time before reforms will be demanded, and in the present state of traffic economics it is difficult to see where any considerable concessions can be made. The situation is a serious one but a definite result will doubtless be arrived at before my next notes are despatched.

Suggested Union of Electrical Interests.

The present depressed condition of the British electrical industry is too well known to need dilating upon. With the object of finding a remedy for the present state of things the proposal has been made that a union of electrical interests should be formed whose members should be everyone who is interested in electricity, either as shareholder, employer, consulting engineer, manufacturer or employee. The union will start without any political bias and with neutrality as regards municipal trading and such like matters. The proposed procedure is, when sufficient subscribers have been enlisted, to classify the subscribers according to the branches of the industry in which they are specially interested, and to ask each branch to elect one or two members of a provisional council. There will be a subscription of 2s. 6d. annually. It will be seen that a good many details have yet to be settled, and I fear that a much more definite programme will have to be prepared to induce a large membership.

A Dynamometer Car.

There has recently been constructed for the North Eastern Railway Company a dynamometer car for the purpose of testing locomotives and rolling stock. The object aimed at in having this car constructed is to obtain information which will be valuable in connection with present day demands for greater speed and generally to secure increased efficiency. By the aid of electro-magnetic pens the draw bar pull is graphically shown. Other measurements which can be taken are the wind pressure, the pressure in the steam chest, and brake tests including the pressure in the brake cylinder and so on. I believe this is the first instance of such a car being built here.

ENGINEERING AND MACHINERY EXHIBITION, LONDON.

(From Our London Correspondent.)

The Engineering and Machinery Exhibition now in progress at Olympia, London, is the immediate outcome of a similar exhibition held in the autumn of 1906, and which was admittedly a great success. The feature of the previous show was an exceptional showing of machine tools. So pronounced and definite was this that the Advisory Committee, after the close of the exhibition, expressed regret that, while the tool section was splendidly represented, more of the larger engineering firms did not avail themselves of such a favorable opportunity of demonstrating the progress of British manufactures during recent years. It was, therefore, with the avowed object of remedying this defect that another show was organized this year, for I understand that