

INTERNATIONAL FIRE PREVENTION CONGRESS.

At one meeting of the above Congress, on 9th ult., a paper was read on "Electric Wiring and Fire Risks," by Mr. E. C. de Segundo. The author, in the course of his paper, said that the essential condition of a properly-erected wiring installation consisted in providing that the electric current should be kept within its prescribed bounds, and that if by any unforeseen contingency a way should be opened for the current to travel in any unauthorized direction, the supply should be cut off automatically and instantly. No absolutely trustworthy means had as yet been devised whereby possible trouble due to electricity "out of bounds" could be guarded against, and the efforts of those who were working in the cause of fire prevention should be directed towards bringing about the adoption of the best kind of insulation and the most suitable kind of mechanical protection for the wires. For safety against risk of fire, one must depend entirely upon the means adopted for keeping the electric current within its designed sphere of action—namely, the character of the insulation of the wires or the means adopted to prevent contact between wires of opposite polarity. This included the insulation on the wire and the means adopted to guard against mechanical injury and damp. Up to the present nothing had been found to touch best quality rubber specially prepared to resist the oxidising action of the atmosphere, and the deleterious influence of any rise in temperature of the conductor. It was possible, however, that before long a new form of insulator might be introduced upon the English market which, while possessing all the useful properties of gutta-percha, was practically indifferent to the action of light and air, and was very much harder than gutta-percha. Large quantities of wires insulated with this material had already been used on the continent with excellent results. The ideal method of wiring a building, in his opinion, was to use nothing but the highest class of vulcanized or other suitable rubber insulation, with some suitable form of mechanical protection in the way of braiding, and to enclose the wires in a continuous system of cold drawn steel tubes specially selected for smoothness of bore, with joint boxes inserted at all points necessary to enable the drawing in of the wires to be carried out without injury to their protective covering, and to facilitate inspection, withdrawal of any wires for the purpose, if need be, of increasing their size, etc., the whole system of steel tube and joint boxes being connected to earth.

In a paper on "Safeguards against Fires caused by Lightning," Mr. Hands, he stated that thunderstorms were increasing all over Europe. In London the average in last 60 years had risen from 12 to 22 per annum. Professor Woolson, of Columbia University, New York, in a paper on, "Non-flammable and Fire-Retarding Wood," said he preferred the term, "fire-resisting," to "fire-proof" wood. He declared

that most experts who had carefully studied the subject considered that the fire-proofing of wood was a safeguard, and under ordinary conditions would greatly reduce the fire risk. It would, however, be consumed by continued application of flame, and under certain conditions especially favourable to fire might support a slow combustion by itself, but the same conditions of heat would also ruin many other accepted fire-proof materials. He was of opinion that the non-flammable nature of the material was its greatest value. Mr. Sacho, chairman of the Congress, said that the British Fire Prevention Committee endorsed the views of Prof. Woolson. The executive, he remarked, were desirous of discriminating between fire-resisting materials and systems of construction affording temporary protection, partial and full protection against fire, and to classify all building materials and systems of construction under these three headings. They also suggested minimum requirements of fire resistance for building materials, which they said it was desirable should become universal.

In the section on fire losses and insurance, as reported in the "Insurance Observer," papers were read compiled by Mr. C. E. Noverre (Norwich Union Fire Insurance Society) on "Fire Insurance and its Influence upon Fire Risks," by Mr. W. H. Stratton (National Fire Protection Association, U.S.A.), and by Mr. J. Sheppard (North British and Mercantile Insurance Company), dealing with "The Importance of Statistical Research for Determining the General Causes of Fire."

Mr. Sheppard observed that to guard effectually against the occurrence of fire it was necessary to have as full a knowledge as possible of the causes from which fires originated, and such information needed to be tabulated for different periods, districts, and trades, so that reliable comparisons could be made with the view of applying remedies which these returns might show to be necessary, and so prevent the recurrence of fires and place due restraint on negligent, dishonest, or malicious fire raising. In a leading article, he said, "The Times," of June 9, 1903, advocated an official investigation into the causes of fires, using the following argument: "It is obvious that a knowledge of causes, some of which are likely to be at least occasionally overlooked, might prepare the way for measures of precaution against risks, the very nature of which may now be unsuspected." Such a quotation proved that the necessity for an official investigation into the causes and circumstances connected with fires was generally acknowledged.

The International Fire Prevention Congress is considered to have been quite successful in eliciting the views of a number of the leading experts in Great Britain, Europe and the United States, including chiefs of the largest fire brigades in the world; some eminent architects, engineers and electrical authorities, also underwriters of high standing. A pleasant feature was the presentation by the Duchess of Marl-