

This clause will then read as follows:—

(b) Any licensed telephonic business of the company which by virtue of the Telegraph Act, 1899, or of any of the agreements in writing between the Postmaster-General and the company particularly specified in the first schedule hereto, or of any other agreement in writing between the Postmaster-General and the company (made before the date of this agreement), can be transacted for any period after December 31st, 1911.

The Committee states:—

"After allowing due weight to the criticisms that have been passed upon details, we think that the agreement provides on balance the best security available in the circumstances that the property purchased shall be good and suitable in quality, and that no more than a reasonable price shall be paid. . . . While, therefore, we recommend that in the general public interest the House of Commons should not disapprove of the agreement, we think that the agreement, with the modifications that we have proposed, should not be allowed to become operative until a pledge has been given to the House that between now and January, 1912, nothing shall be done by the Government whereby the question of the future ownership and management of local telephone installations (as distinct from the ownership and management of trunk lines) may be prejudiced, and that, unless by a vote of the House it has otherwise been determined, the Post Office shall continue to grant licences to municipalities on terms not more onerous in respect of royalties than the terms of the standard telephone licence as revised in January, 1902."

The Committee's recommendations as to the treatment of the staff read:—

(a) All officers and servants who shall have been not less than two years continuously in the service of the company on December 31st, 1911, shall, as from that date, become officers and servants of the Postmaster-General on the terms of hiring and conditions of employment which obtain in the grade to which they are transferred.

(b) Such officers and servants as are not beneficiaries of the pension scheme of the National Telephone Co., but who, if in the service of the Postmaster-General, would be on the established list, on entering the service of the Postmaster-General shall, for the purpose of superannuation and of being placed on the established staff, be entitled to count their past years of continuous service with the National Telephone Co., subsequent to 1909, as years passed in the Civil Service of the Crown.

(c) The company should be required to submit all candidates for the National Telephone Co.'s service from August 31st, 1905, to the same, if any, medical examination as that required for officers and servants entering the Government service in the same grade. And we recommend that employés of any class now in the service of the company, and in their service on December 31st, 1911, should, if taken over by the Post Office, not be required to submit themselves to medical examination.

The Committee recommend "an undertaking by the Postmaster-General that no servant of the company taken over by the Post Office shall suffer by this transfer whenever it takes place, i.e., that the employés of the company shall have the option of either continuing on the same terms as to pensions which they now enjoy under the company, or adopting the superannuation terms and conditions of the Post Office service. Having regard to what we have recommended, and assuming that those recommendations are carried out, we do not think that the coming into operation of the Agreement will place the staff in any worse position than that in which they stood on February 2nd, 1905."

BUSINESS NOTES.

Exhibition.—The Ironmongery, Hardware, Electrical and Allied Trades Exhibition and Market, held under the auspices of the Ironmongers' Federated Association at the Agricultural Hall, Islington, from the 25th ult. to the 4th inst. was an excellent one as regards the two former trades. The same, however, cannot be said of the electrical industry, but doubtless the approaching Olympia Exhibition is monopolising the attention of the electrical manufacturer.

MESSRS. F. A. GLOVER & CO., LTD., Vine Street, Clerkenwell Road, E.C., were represented by an attractive stand, on which were displayed electric motors, fans, rheostats, fittings, &c., an electrically driven air deodoriser and also a self-contained polishing motor, the polishers being attached to the armature spindle.

MESSRS. RICHARD JOHNSON & NEPHEW, LTD., 65, London Wall, E.C., and Bradford Iron Works, Manchester, had an excellent exhibit of steel, iron, bar and copper wires of all sizes, and for all purposes, staples, &c. We would draw attention to the fact that Messrs. Johnson & Nephew about 18 months ago erected a modern plant for the drawing and tinning of copper wire. This new plant forms an addition to their Manchester works, and they are now in a position to supply cable-makers, &c., with high conductivity copper wire.

THE AMERICAN ELECTRICAL NOVELTY AND MANUFACTURING CO., LTD., and THE HORSFALL DESTRUCTOR CO., LTD., were also represented at the exhibition.

Petrol-Driven Dynamo Sets.—The BRITISH EMPIRE MOTOR TRADES ALLIANCE has received an inquiry for the names and addresses of British firms who manufacture petrol-driven dynamo sets. British manufacturers who can supply these are requested to communicate with J. B. King, secretary, 11, Red Lion Square.

Electricity and the Chilean Mining Industry.

Reporting on Mines and Mining Operations in Chili, the German Consul-General at Valparaiso remarks that the question of smelting by electricity will in a few years play an important part in the Chilean industry, as there is a rich supply of water-power from the Cordilleras, particularly in the neighbourhood of the iron and other ore deposits. By the construction of dams the water could be made even more serviceable. In the neighbourhood of the iron ore deposits there are several valuable rivers, e.g., in Central Chili, the Maipo, the Mapocho, and the Aconcagua; in the province of Coquimbo the Illapel, the Choapa, the Limari and the Coquimbo, and in Atacama the Huasco. Already a company, the Sociedad de Altos Hornos (smelting furnaces) Eléctricos, has been founded in Chili by an Italian, José Pedro Alessandri, which will deal with copper as well as iron. The company is seeking to acquire several water properties, especially those of the rivers Teno and Tinquirica.

Electricity in India.—The *Englishman* (Calcutta)

recently published an article on electricity in India, which may be of interest to the electro-technical industry of Great Britain, as showing the present development of the use of electricity and the further possibilities for its introduction. The writer states that electricity was first used in the Madras Presidency for tramway purposes. Bengal has adopted electric light and electrical fans. Calcutta is wealthy, and coal is only Rs. 5 per ton, so that electrical companies are able to pay handsome dividends. Coal and labour are cheaper in Calcutta than at any commercial centre in Great Britain. Travelling north, the price of coal rises mile by mile, and the general flatness of the country renders the idea of utilising the sluggish waters of the rivers quite impracticable. The only place where water-power has been used in Bengal is said to be Darjeeling, where a pioneer installation on a small scale was carried out some few years ago. Water-power has been used in the Southern Presidency at Coonoor to supply power to the Government cordite factory and a further utilisation of the same stream to work the railway from Metapalliam to Ootacamund has been proposed by a large firm of engineers in London. In Bombay there are many small steam-driven installations for light and the working of fans, but for tramway purposes horse power is still used, although this method of traction is likely soon to be changed. Bombay, however, suffers from the absence of cheap coal and adequate water power. Rumours are afloat to the effect that it is proposed to raise capital for the purpose of constructing in the Ghats, 40 miles from Bombay, some huge reservoirs to hold up sufficient water to produce, all the year round, the power necessary to furnish Bombay with the energy so large a city requires. It is feared, however, that the cost of the reservoirs and dams necessary to effect this purpose would make the power very costly. The chief commercial city of the United Province, viz., Cawnpore, uses roughly in its factories and mills about 7,000 H.P. To produce this small amount of power, and to transmit it from the nearest possible source of hydro-electric generation, would mean locating the works 230 miles away on the Surda River; Cawnpore and Lucknow will, therefore, apparently have to depend on steam-generated electricity for light, fans, and traction in the future as at the present time. The Indian Electric Supply and Traction Co. have undertaken to provide this commercial centre with power. Further north there are great prospects of utilising the power of the waterfalls of the United Provinces and Punjab Canals, and of the rapids of the Himalayan rivers. At Peshawar, the water-power of a canal deriving from the Cabul River is shortly to be used for lighting and fans for that cantonment, to be followed by an extension of the scheme to the city, and, possibly, later on, for traction between it and the cantonments. The prospects of a railway between the Punjab and Kashmir, starting from Hassan Abdal, and entering the Jhelum Valley at Musafirbad, are being restudied with a view of this line being carried out as an electric railway. Further east in the Jhelum River, works to generate electricity to be used for pumping for agricultural purposes are in hand. At Lahore a concession has been, or will shortly be given, to a syndicate, which, probably in co-operation with another powerful syndicate that proposes to work the water-power of an adjoining canal, will supply electricity at a moderate rate. It is intended also to supply Amritsar with cheap power from the same canal, so that the city's commercial future should be assured in spite of the high price of coal. Delhi is unfortunate in being too far from any fairly permanent source of water power, but this difficulty may be overcome in time. Other cities, such as Saharanpore, which is situate at the junction of four lines of railways, and has the Eastern Jumna flowing through it, may, if commercial magnates rise to the occasion, become towns of great industrial importance.

German Imports and Exports of Electrical Machinery.

—So far this year there has been a slight decrease in the exportation of electrical machinery from Germany, the returns for the five months ending with May last showing a total of only 5,466 tons, as compared with 5,640 tons in the corresponding period of last year. On the other hand, the imports of foreign electrical machinery into Germany show a slight increase—from 500 tons in the first five months of 1904 to 534 tons in the months ending with May last.

Uralite.—A fire test was carried out on July 25th by the BRITISH URALITE CO., LTD., at the Garden City, Letchworth. A section of timber partition, protected by Uralite, was subjected to a very fierce heat, and in the middle of the flames a wooden box,