

strictly limited overtime for young persons more than sixteen years of age and its prohibition for those less than sixteen, as well as prohibition of night work for a period of 11 hours, and it is considered essential that immediate steps be taken to give statutory protection to the unregulated young persons covered by the Report. It is recommended that the regulation of the hours of work of those employed in connexion with factories, docks and warehouses should be entrusted to the Factory Department of the Home Office and, for the remainder, to the local authorities responsible for administering the Shops Acts.

#### Traffic in Women and Children in the East

A CONFERENCE of Central Authorities in Eastern Countries on the Traffic in Women and Children in the East opened at Bandoeng, Java, on February 2, as the outcome of investigations in 1930-31 by the League of Nations' Commission of Enquiry into the Traffic in Women and Children in the East. This Commission established that the international traffic in Oriental women and girls in the Near, Middle and Far East is, in the aggregate, large. The bulk of this traffic is Asiatic women from one country to another, mainly in victims of Chinese race, Japanese, including Korean and Formosan, coming next in numerical importance, and other nationalities being very much less represented. Traffic in Occidental women to the East, with certain exceptions, chiefly in the Mediterranean Near East, has markedly decreased. The agenda of the Conference consisted of six points covering the chief suggestions of the report for closer collaboration between central and other authorities; and between authorities and voluntary organizations; the protection of migrants, especially minors, victims, or potential victims, of the traffic; the employment of women officials; the question of the continued existence of licensed or tolerated houses, which are the chief agents of internal and international traffic in the Indian and Pacific Oceans; and problems involved in the position of women of Russian origin in the Far East. Nine Governments, including the United Kingdom (Governments of the Straits Settlements, Federated Malay States and Hong Kong), China, France, India, Japan, the Netherlands, Portugal, Siam and the United States of America participated, as well as representatives of the International Criminal Police Commission.

#### Exhibition of Chemical Engineering

AN exhibition, Achema VIII, devoted to chemical technology, in which nearly three hundred firms have already arranged to take part, will be held in Frankfurt-on-Main on July 2-11. Concurrent with the exhibition will be held the National Congress of German Chemists, the semi-centenary of the Verein Deutscher Chemiker, thereby providing the organizers of the exhibition with a unique opportunity of establishing the importance of the chemical engineer to the modern industrial community. The Hohenzollernplatz near to the University has been selected as the site of the exhibition, which will be housed in

four separate buildings. In the first of these buildings, having a floor area of 125,000 square feet and subdivided into three sections, termed Halls I, II and IIIa in the official foreword, will be shown scientific apparatus including measuring, regulating and laboratory equipment, technical plant constructed from non-metallic materials, as well as machines for the manufacture, machining and shaping of synthetic materials. Two buildings, namely Hall III, having a floor area of 20,000 square feet, and Hall IV, with a floor area of 100,000 square feet, will be used to display technical equipment on a large scale such as machines and complete plants for the chemical and associated industries and similar exhibits. The last building is again subdivided into two parts, namely Hall IIIa with a floor area of 10,000 square feet which will be devoted to that part of the chemical industry engaged on the production of, and spinning of, artificial fibres, and Hall IIIb with a floor space of 5,000 square feet in which will be shown the publications of the various German scientific associations and societies. Arrangements have also been made for special meetings, conducted tours, showing of industrial films, excursions for visitors to the exhibition. Further information can be obtained about the meeting by application to the Deutsche Gesellschaft für Chemisches Apparatewesen EV, Achema Bureau, Berlin W 35, Potsdamer Strasse 103a.

#### Broadcasting in 1936

A REVIEW of the activities of the British Broadcasting Corporation during 1936 is given in the tenth annual report of the Corporation, which has recently been issued as a white paper (Cmd. 5406. London: H.M. Stationery Office. 6d. net). The year 1936 was conspicuous in the first instance because three successive kings were involved in turn in certain of the broadcast programmes. The report contains details of the outstanding items in a wide variety of programmes broadcast throughout the year, during which the home transmitters were in operation for 71,123 hours, of which the proportion of breakdown periods was 0.031 per cent. The corresponding aggregate time for the Empire transmitters was 16,577 hours, an increase of more than forty per cent on the figure for 1935. Apart from the maintenance of the stations and plant required for these services, the activities of the B.B.C. on the engineering side included the putting into service of the high-power transmitter at Lisnagarvey in Northern Ireland, the completion of a similar transmitter at Burghead in the north of Scotland and the construction of a medium power transmitter at Beaumaris in Anglesey, which has been put into service in the current year. Good progress has also been made with large-scale extensions to the Empire Station at Daventry. These include the commencement of a third transmitter of considerably higher power than those now in operation; together with the erection of additional masts for an improved aerial system, which is the outcome of experiments carried out at the Empire Station since it was first put into service in 1932.

Mention must also be made of the considerable experimental and engineering work involved in the equipment of the London Television Station at Alexandra Palace towards the end of the year under review. The report concludes with a summary of the financial position of the Corporation as at December 31, 1936.

### The Need for Motor-car Inspection

REVISED regulations for the construction and use of motor vehicles in Great Britain have just been issued by the Ministry of Transport. They provide, among other matters, for the testing of brakes, steering gear, etc., of a vehicle on the road. In about a dozen of the States forming the U.S.A., it is compulsory for motorists to have their cars inspected to see that they comply with safety regulations. According to a recent note issued by Science Service, of Washington, D.C., it is an even chance whether the motorist will find that his car falls below the requirements for safety on the road or not. The most common fault is bad brakes, but it is not unusual to find that lights are out of focus and wheels out of alignment. In some cases, the owner finds that it would cost him more than his car is worth to make the repairs and so it is relegated to the scrap heap, an action which may possibly have saved the lives of other people as well as his own. Last year in Pennsylvania alone, nearly 15,000 of the vehicles were found to be decrepit, and quietly passed out of circulation. Whenever inspection laws are passed in a State, it has been noticed that there is a great decrease in the number of 'collegiate' models which run on the roads on four wheels with no brakes. It is impossible to say what percentage of highway accidents can be attributed to mechanical defects of the cars, as after a wreck there is little left to test. It is reasonable to conclude that when about half the cars in a State have faulty brakes, they are to blame for some of the tragedies which occur. Because cars are fitted with good tyres and good brakes initially, we are apt to forget that the average car on the road is nearly five years old and is generally slightly shaky. Railway trains and air liners, operated by experts, have to pass a rigid inspection to see whether they are safe. Motor-car drivers are usually amateur mechanics; it is rash to assume that their equipment is safe.

### Education in Canada

CANADIAN education, as seen in the course of a four-months winter visit, was the theme of a paper read by Dr. F. H. Spencer, late chief inspector, Education Department, London County Council, before the Royal Society of Arts on November 11 last, and recently made available in print. Although the purpose of the visit was to lecture on English, not to investigate Canadian education, and Dr. Spencer disclaims any title to be listened to as an authority on this subject, his comparisons of school buildings, organization, teacher-training and university extension work in Canada and in England are enlightening, even though admittedly superficial. The most

satisfactory of his impressions was of the prevalent enthusiasm for popular education, and the most unsatisfactory was of excessive regimentation alike in the primary and in the secondary schools. He was struck by the importance of the service rendered by the universities through their extension departments, and especially their correspondence courses, to remote but interested and ambitious students in the backwoods. The travels of the university extension tutors in the winter into such remote regions provide them with a stimulating adventure—an experience to which a counterpart has sometimes been found in Great Britain, for remoteness is not always to be measured in miles. In the course of the discussion following the reading of the paper, Prof. Krug of Mt. Allison, New Brunswick, observed that there have been few more worthy contributions to Canadian education and to Empire unity than the visit paid to Canada last year by a group of British school administrators and inspectors; a visit which made, he said, a really deep impression.

### Physiology and Hygiene in Education

THE place of physiology and hygiene in general education has yet to be effectively established. Intellectual assent has been generally accorded to Herbert Spencer's dictum—that such a course of physiology as is needful for the comprehension of its general truths, and their bearings on daily conduct, is an all-essential part of a rational education—but those responsible for curricula have not so generally given practical effect to such assent. The subject has lately been investigated by Dr. J. P. Rogers for the United States Office of Education. In his report on "Instruction in Hygiene in Institutions of Higher Education" (Washington, D.C.: Government Printing Office, 10 cents), he observes that only a third of the colleges and universities require attendance at a course in hygiene by their students, and it is rare that any instruction concerning the human body is furnished in the last three years of secondary school work. He quotes some interesting criticisms by university authorities of the methods of instruction in use: one president remarks "my observation has been that this course has been too technical and not sufficiently practical. *I have yet to find an instructor who can put the information in a practical way*". It takes an artist, says Dr. Rogers, to fill such a requirement, and the best teacher of hygiene is the master and not the servant of that body of tradition which passes for 'science' in his day.

### Extension of Scientific Buildings in Oxford

A FORECAST of extensions of scientific departments in Oxford is contributed by Dr. A. S. Russell, of Christ Church, to the spring number of *Oxford*, the journal of the Oxford Society. Within three or four years, a new physics laboratory for Prof. F. A. Lindemann will, it is hoped, be put up in the Parks, when the Clarendon Laboratory, now occupied by him, could be adapted to the uses of the Department of Geology now inadequately housed in the Museum. These improvements are expected to be closely