Indexes arranged according to subjects and to authors are provided. The importance of the work of the Institute of Plant Industry, the extent of its activities, and the diversity of its serial and non-serial publications, make its bibliographical publications indispensable to applied botanists.

Ocean Transportation of Petroleum in Bulk

OWING to world trade depression and to production problems within the industry, there is now actually available excess oil tanker tonnage over demand. Of the world's steam tanker tonnage 44 per cent is, however, more than fifteen years old, consequently new tankers will shortly have to be constructed to replace these and to meet anticipated increase in demand when trade recovers. Mr. R. F. Hand read a paper on April 5 before the North East Coast Institution of Engineers and Shipbuilders, in which he indicated some of the problems attendant on ocean transportation of petroleum in bulk. Great care must be exercised in allocating vessels for specific work, account being taken of condition, size, position and capability of the tanker to carry the cargo in question. Freights cannot be imposed on a basis of cost plus a reasonable margin of profit, but must be fixed at a rate which the traffic can bear. Ultimate profit must be envisaged over a number of years, and provision made for periods when goods may actually have to be carried at a loss. A classification is suggested for petroleum products from the point of view of marine transport and types of vessel most suitable for carrying the various grades indicated. Operating costs are difficult to assess at the present time owing to the complex foreign exchange situation; but such data as are available prove that though the motor tanker is more economical for long hauls it is not always so in the case of short hauls.

The Science Museum

ACCORDING to the Report of the Science Museum for the year 1934 (London: H.M. Stationery Office, 1935, 1*s*. net) well over a million visitors have made use of the Museum, including more than a thousand organised groups and parties of about thirty, and the attendances at lectures were well over 30,000. The policy of holding special exhibitions to illustrate the advance of science into industry has been most successful, and the attendance at those on refrigeration from April until September 1934 and on rubber from November 1934 until April 1935 was very gratifying. The children's gallery has been visited by 13,000 children in school parties, and the introductory collection installed there has proved very attractive. Short accounts are given in the Report of the progress in each of the five divisions: industrial machinery and manufactures, mechanical and civil engineering, air and water transport, mathematics, astronomy and chemistry, physics and geophysics, and it is quite evident that the delay in reconstructing the central block is a serious obstacle in the way of a more instructive display of the material now crowded into inadequate cases. The Science Library now possesses a quarter of a million books, and nearly 50,000 readers have made use of them. The free space for new books is nearly exhausted and temporary housing will have to be provided until the central block becomes available.

Fuel Research Institute of South Africa

DR. J. G. VOGEL, director of the Fuel Research Institute of South Africa, has recently described the activities of the Institute (*S. African J. Sci.*, **31**, 194–209, Nov. 1934). Initially, the Union Government wished to encourage the export trade in coal, and prevent the damaging effect on the export of coal of unreliable grade. Now all coal loaded for export or bunkers must be graded by the Institute before shipment. The programme is determined by the fact that the coal industry is neither very old nor extensive, and the information available is limited. A first step is therefore a chemical survey. Already the Institute has made a notable contribution to the difficult problem of coal sampling by devising a novel sampling device. It consists essentially of a rotary drill working inside a sheath, up which a rapid current of air passes. The air and the coal abraded by the drill are drawn into a container after the manner of a vacuum cleaner, where the solids are retained. This apparatus not only enables samples to be collected from seams, but also from waggons—a problem which has not hitherto received a satisfactory solution. The Institute is equipped for research in coal chemistry and coal processing, and also for the study of liquid and gaseous fuels.

Census Statistics

THE normal series of publications dealing with the figures of the 1931 census is completed by the issue of General Tables, a volume of some two hundred and fifty pages (London: H.M.S.O. 11*s*.). It contains tables giving the populations by sex of the constituent regions of England and Wales—counties, boroughs, urban and rural districts—showing the changes that have occurred in recent intercensal periods. It also gives an analysis of the age and marital condition of the population at successive censuses during the last ninety years. Particulars are given of the birth-places and nationalities of the population in regions, boroughs and other urban areas, and comparative figures for England and Wales at successive censuses. There are also figures of population speaking the Welsh language. Much of the information given in the volume has hitherto been obtainable only by laborious extraction from separate county records.

The Imperial Institute

WE have received the annual report of the Imperial Institute, recently presented by the director, Sir Harry A. F. Lindsay, to the Board of Governors (London: Imperial Institute, 2*s*.). This gives a general account of the activities of the Institute and details of many special investigations which have been made with Empire products. These comprise work on silk, cordage fibres, tung oil, shellac, hides and leather, oil seeds, tanning materials, drugs and insecticides,