

acting under the instructions of the Secretary of State for the Colonies. The present voyage is under the leadership of Mr. G. E. R. Deacon, with Lieut. L. C. Hill, R.N.R., in executive command. The other members of the scientific staff are Mr. J. W. S. Marr and Dr. F. D. Ommanney, with Mr. A. Saunders as laboratory assistant and photographer.

#### Racial Studies

A NEW publication devoted to racial studies may count with certainty on an interested audience at the present moment, when racial questions have come to have an outstanding importance in international and national affairs. Racial characters have ceased to be regarded as of purely academic interest; but since they have been made the pivotal factor in nationalist propaganda, the public, bewildered by conflicting statements as to the meaning and province of 'race' in the modern world, welcomes an impartial and scientific examination of both general and specific problems. The *Zeitschrift für Rassenkunde und ihre Nachbargebiete*, which has completed its first volume by the issue of a third part in May last, has been founded for the purpose of examining problems of race on scientific lines, dealing not only with broader issues, but also investigating racial problems as they arise in defined areas and specific groups. The treatment of the subject is not confined to discussion of physical characters alone, but will take into account the evidence of psychology and social anthropology, prehistory and linguistics. It is proposed thus to cover the whole field of the racial problems which arise in the study of the development of man in time and space. The editor is Egon, Freiherr von Eickstedt, director of the Anthropological and Ethnological Institute of Breslau; and he has secured a promise of co-operation and collaboration from a large and representative body of anthropologists from all over the world. Two volumes of three parts each will be published annually at a subscription price of 22 gold marks for each volume. The first part of the second volume appeared in July.

#### Food of Peking Man

AN interesting light is thrown on the mode of life of Peking man in a communication by Dr. Ralph W. Chaney, of the Department of Palaeontology, University of California, and research associate of the Carnegie Institution of Washington, D.C., which is issued in the *News Service Bulletin* of the Institution. It would appear that Peking man supplemented the meat diet provided by the game animals of the hills and plains by vegetable food, which he obtained as a 'food-gatherer'. About twenty feet above the lowest level of human occupation in the Chou-kou-tien cave and in a breccia containing numerous quartz artefacts and bone fragments, there is a layer several inches thick, made up of thousands of fragments of the shells of seeds. The markings on the shells indicate that they are hackberry seeds, globular bodies smaller than peas. The modern hackberry (*Celtis*) occurs as a small tree in the forests

both of North America and Asia, but is most characteristic as a shrub on semi-arid slopes and stream borders. As it is improbable that they could have been introduced into the cave by any other agency than animals or man, it may safely be assumed that they formed part of the food of one or the other, their shells having been crushed while being eaten. In the United States the berries are extensively used as food by birds, rodents and the Indians, especially in the south-west. The most common use is as a flavouring for meat or bread. In order to eliminate the possibility of these seeds having been introduced into the cave by rodents, experimental observations have been made in which it was found that monkeys alone broke up the shells in a manner corresponding to that in which the shells in the cave had been broken. It is, therefore, more than probable that the seeds were brought to the cave by human agency and that the hackberry seeds afford the earliest known example of a vegetable food used by primitive man.

#### New Flying Boats for British Empire Air Lines

IT is announced that Imperial Airways have placed an order with Messrs. Short Bros., Ltd., of Rochester, for a fleet of flying boats specified to be both larger and faster than any of a similar class now in existence. The order provides several innovations, the most startling of which is that the type of engine will not be decided until absolutely necessary for the completion of the design. It will thus be possible to take advantage of accumulating experience in the use of several different types, some of which are as yet not very thoroughly tried out under such conditions. It is also understood that the number of machines to be ordered is not yet settled, but will depend upon their suitability for the varying conditions in the different Empire routes. The new boats are to be high-wing monoplanes, without external bracing, and carrying wing tip floats. These will be the first marine aircraft in Imperial Airways fleet to depart from the more usual biplane construction. The size of the hull is such that the forepart can be given two decks, the upper one for the crew, ship's offices, and cargo, and the lower one for passengers. Their total loaded weight will be  $17\frac{1}{2}$  tons, about 30 per cent increase upon the present largest boat in Imperial Airways service, of which  $3\frac{1}{2}$ –5 tons is available for paying load, depending upon the length of the flight between refuellings. The estimated speed is nearly 200 miles per hour, with a range of up to 1,500 miles. This allows them to undertake the two longest stages on the all-Empire route (except the Atlantic), that is, between England and Gibraltar, and Australia and New Zealand.

#### History of Medicine Congress at Madrid

AT the International Congress of the History of Medicine, held at Madrid on September 23–29, under the patronage of the President of the Spanish Republic, there was an exhibition of medical manuscripts, documents, instruments, etc. The Wellcome Historical Medical Museum contributed some interesting

illustrations and objects to this exhibition. Among these were illustrations of Arabian surgical instruments from early fourteenth century manuscripts; examples of the medical and other works of Maimonides, the Hispano-Jewish philosopher and physician of the twelfth century; replicas of the earliest MSS. of the life of Andres Laguna, physician to Charles V and Pope Julian III; Roman, medieval, Hindu and modern surgical instruments; historical objects such as Egyptian artificial eyes, anatomical models, and a special section devoted to the evolution of



FIG. 1. Diorama of a Hispano-Moresque apothecary's shop.  
Copyright: The Wellcome Historical Medical Museum (The Wellcome Foundation, Ltd.).

spectacles. Part of the Museum's exhibit comprised interesting dioramas including Nicholas Monardes of Seville (1512-88) depicted working in his private museum of curiosities; a historic incident connected with the discovery of cinchona bark as a remedy for malaria (1630); a thirteenth century apothecary's shop in Cordova (Fig. 1); and an interior view of the hospital of Santa Cruz at Toledo as it appeared in the sixteenth century.

#### Scientific Control of Road Traffic

ON September 10, at the British Association meeting in Norwich, Mr. A. T. V. Robinson opened a joint discussion in Sections G (Engineering) and J (Psychology) on the control of road traffic. He said that the question is far wider than merely the prevention of accidents; that it is how to move with a minimum of delay, discomfort and damage a system consisting of heterogeneous units of passengers and goods travelling for industry and pleasure in all directions. Of the year's total of 7,000 fatal accidents, about 2 per cent were due to the defects of the vehicle, somewhat less than 2 per cent to defects of the road, and the remaining 96 per cent were due to the personal equation. Engineers study either the roads or the vehicles, and the psychologist studies the drivers and pedestrians. Mr. Robinson emphasised the importance of the colourisation of the 'carpeting' of the road, and said we ought to endeavour to get

road carpeting of a lighter hue. In the future it is possible that on all the busy roads lights on the vehicles may be unnecessary and the approaching driver will see the oncoming vehicle, not as a couple of spots of dazzling light on a black background, but as a dark silhouette against an adequately illuminated road. The improvements in vehicles, especially the introduction of four-wheeled brakes, has greatly facilitated free movement of traffic on the streets, and the compulsory test for every new driver has worked admirably, about 12 per cent being rejected. It is recognised that certain drivers are 'accident prone'. and these must be eliminated as soon as possible. Science may help us to keep the demonstrably unfit off the road, but until science, and not a human driver, assumes control of the vehicle, occasional breakdowns in traffic control are bound to occur.

#### Fewer Accidents in Well-Lighted Streets

ACCORDING to the *Electrician* of September 20 the first accident statistics for the section of the highway between Versailles and Ville d'Avray have been published. This road has recently been lighted with sodium vapour lamps (discharge tube lamps), and the statistics show a reduction of 74 per cent in the number of accidents, none of which

was of a serious nature. Local authorities should consider these figures, which prove that lives can be saved by the proper lighting of rural roads.

#### Closing Down of Private Electric Generating Stations

SEVERAL of the large factories in Great Britain have been considering whether it is an economical proposition to close down their generating stations and take their electric supply from the Grid. As the facilities offered by the public supply increase and the price diminishes, the advantages in its favour are rapidly increasing. Messrs. Lever Bros., of Port Sunlight, who were well known to have one of the largest and most efficient private plants in the country, have now entered into an arrangement whereby their power station becomes associated with the Grid, and will, under the direction of the Central Board, be operated by the Birkenhead Station. The load taken will be 40 million units a year, which is equivalent to the needs of a large town. The consumption of Birkenhead itself is 41 million units and the consumption of towns such as Oxford, Peterborough and Plymouth are less than 40 million units. Port Sunlight, the centre of the great soap and similar products manufacturing business, has an area of about 2,000 acres, and several other firms have established factories on the estate. The demand is likely to increase in the future. Among other large firms which have recently changed over from a private to