

This super-abundance of certain staple foodstuffs has led to a cheap food supply for the people—at least for certain kinds of food. Unfortunately, those foodstuffs which have a special health value are still relatively expensive. At present retail prices, 3,000 Calories, roughly the amount required by an average man, can be obtained in the form of certain foodstuffs, for example, white bread, rice, sugar, margarine, for 3*d.*–5*d.*; but the same number of Calories costs about 2*s.* in the form of milk, 3*s.*–5*s.* in the form of vegetables, 4*s.* in the form of eggs, and 1*s.*–3*s.* in the form of meat. Production of these more expensive foodstuffs is increasing in efficiency with a corresponding fall in wholesale prices. Distribution, however, is still relatively inefficient and expensive, and schemes for the marketing of agricultural produce are now being undertaken.

#### Suppression of Weeds

OUR knowledge in the use of artificial fertilisers has now become very extensive, and a great deal of information has also been acquired with regard to the destruction of weeds by chemical means. Further, certain fertilisers have a two-fold value in that they act as weed destroyers as well as encouraging the growth of the crop. Spraying for weed eradication was introduced in France towards the end of last century, when copper sulphate was used to kill charlock and wild radish. The practice soon became widespread and at the present time the use of sulphuric acid is rapidly becoming a recognised means of destroying various annual weeds in cereal crops, as is also the fertiliser cyanamide, while chlorates seem likely to attain a position of importance in the future for the destruction of particular weeds in certain circumstances. Mr. H. C. Long, of the Ministry of Agriculture, has just published a simple and concise account of the subject in a brochure entitled "The Suppression of Weeds by Fertilizers and Chemicals". The use of lime, calcium cyanamide, sulphuric acid, sulphates of copper and iron, chlorates and arsenical compounds are the substances chiefly dealt with, and recommendations for the destruction of many weeds that commonly occur in serious quantities are described. The booklet extends to 57 pages, and includes 17 photographic illustrations and 5 line drawings. It may be obtained from the author at "The Birkins", Orchard Road, Hook, Surbiton, price 2*s.* net (by post 2*s.* 2*d.*).

#### Sociological Studies

Two reports in the "Special Report Series" of the Medical Research Council, recently issued (London: H.M. Stationery Office), are of considerable, though somewhat specialised, interest. No. 190, "A Study of Growth and Development", by Miss R. M. Fleming, contains a record of observations in successive years on the same children, with continuous observation on a number of anatomical characters, and an attempt to relate to them psychological characters of the growing individuals and their reactions to the physical and psychical

environments in which they lived. No. 192, "Housing Conditions and Respiratory Disease", by Dr. C. M. Smith, deals with the amount, nature and incidence of sickness occurring during one year among a population of two thousand people living in a poor quarter of Glasgow, one half being housed in a slum-type district, the other half in a rehousing scheme area. Comparison of the morbidity in the two groups does not yield conclusive results, and the value of the work lies rather in indicating the fallacies and difficulties involved in reaching reliable conclusions in investigations of this kind.

#### Blindness

SIR JAMES BARRETT has prepared an analysis of the causes of their blindness in applicants for admission to an Institute for the Blind (*Med. J. Australia*, 1933, December 30, p. 872). Among those over fifteen years of age, myopia (short sightedness) heads the list with 15 per cent of the total. Of all cases, venereal diseases probably cause 40–50 per cent. In another paper in the same journal (July 15, p. 69), Sir James gives an account of the development of the Braille system. Introduced in 1834, various modifications were attempted, so that at the end of last century there were several kinds of Braille in the English-speaking world. In 1905, Great Britain decided to adopt Braille uniformly; about the same time the Americans appointed examiners to inquire into the various Braille systems, and in 1913 they reported that the original Braille system came out of the test as the best, and it was adopted in America in 1918.

#### Crocodiles and Alligators

A NEW part of "Das Tierreich" by Dr. Franz Werner of Vienna (Pp. xiv+40. Berlin and Leipzig: Walter de Gruyter and Co. 8.75 gold marks) deals with Reptilia Loricata and contains keys and short descriptions of the distinguishing characters of gavials, crocodiles and alligators, as well as short notes on colour, habitat and distribution. The characters selected as discriminating are readily appreciated and the descriptions are helped by 33 text-figures. Old names are changing; the once familiar *Crocodilus niloticus* has become *Champs vulgaris*, and as a generic name *Crocodylus* is, paradoxically, confined to two alligators from South America, one of which is named *Crocodylus niloticus*—a native of British Guiana, Bolivia and that region! This and other points are referred to in a letter on p. 835 of this issue.

#### Investigations of Rudi Schneider

In the article "From a Correspondent" on MM. Osty's investigations on Rudi Schneider in our issue of May 19, p. 747, the importance of an independent repetition of these experiments is urged. Prof. D. F. Fraser-Harris writes to direct attention to the investigations of Lord Charles Hope and others published in the *Proceedings of the Society for Psychical Research* of June 1933. These experiments, however, did not include any graphs of the rhythmic

obscuration of an infra-red ray in time with Schneider's breathing, to which our correspondent specially referred.

#### Tenth Satellite of Jupiter

ACCORDING to *Science Service*, Dr. H. M. Jeffers of the Lick Observatory photographed a very faint object (of the nineteenth magnitude) which appears to have the same motion in the sky as the eighth satellite of Jupiter. The new satellite has presumably a diameter even smaller than that of the eighth, which is only 25 miles. If the new object's identity as a satellite of Jupiter is established, that planet will lead the field as a satellite holder, Saturn having but nine. Jupiter is now very prominent in the evening sky, and the four brightest satellites can be seen with a modest telescope. But for the glare from the planet they should just be visible to the naked eye in a good climate. (It has been stated that certain Kalahari natives can distinguish Jupiter's satellites with the naked eye.) With the most powerful telescope, however, nobody will see the new satellite of the nineteenth magnitude. It can only be photographed by giving fairly long exposures on a large telescope.

#### Announcements

MAURICE, DUC DE BROGLIE, has been elected to a seat in the Académie Française, the section of the Institut de France which concerns itself with language and literature. M. de Broglie is well-known as a physicist for his work on X-ray spectra and allied subjects, for which he was awarded the Hughes Medal of the Royal Society in 1928. For the past ten years he has been *académicien libre* of the Académie des Sciences, which is the scientific section of the Institut de France.

THE second conversazione this year of the Royal Society will be held at the Society's rooms on June 20 at 9 p.m.

It is announced in the *Times* that Sir Charles Brooke, Rajah of Sarawak, has given £20,000 towards the building scheme for the Imperial Forestry Institute at Oxford.

THE research laboratories of the Callenders Cable and Construction Co., Ltd., 38, Wood Lane, Shepherd's Bush, London, W.12, will be opened by Lord Rutherford on Friday, June 22.

THE annual general meeting of the British Science Guild will be held in the lecture theatre of the Royal Society of Arts on Tuesday, June 12, at 4 p.m. Following the meeting, a popular lecture entitled "Friction" will be delivered by Prof. E. N. da C. Andrade.

At the anniversary meeting of the Linnean Society of London held on Thursday, May 24, the following officers were elected:—*President*: Dr. W. T. Calman; *Treasurer*: Mr. F. Druce; *Botanical Secretary*: Mr. John Ramsbottom; *Zoological Secretary*: Dr. Stanley W. Kemp. The Linnean Gold Medal was presented to Sir Sidney Harmer.

THE secretary of the University Press of Liverpool, referring to the notes on the centenary of the Liverpool Medical School in *NATURE* of May 19, p. 753, asks us to state that "The Liverpool Medical School 1834-1934" is the production of the University Press, and is published by the Press, with Messrs. Hodder and Stoughton, Ltd.

UNDER the title of "The Silk Industry of Japan" the Imperial Council of Agricultural Research (India) has issued (1933) a comprehensive monograph by Mr. C. C. Ghosh on this subject. It is primarily based upon the results of a study made by Mr. Ghosh in Japan in 1929 and provides a useful illustrated account of the biological, technical and administrative aspects of the industry. The work can be obtained through booksellers, or through the Office of the High Commissioner for India, Aldwych, London, W.C.2, price 6s. 9d.

APPLICATIONS are invited for the following appointments, on or before the dates mentioned:—A lecturer in physics and elementary science (including nature study) at the City of Leeds Training College—The Director of Education, Education Department, Calverley Street, Leeds (June 5). A teacher of physical chemistry at the Northern Polytechnic, Holloway, London, N.7—The Clerk (June 6). An assistant professor and a lecturer in mathematics at the Royal Naval College, Greenwich—The Adviser on Education, Admiralty, Whitehall, S.W.1 (June 11). A lecturer in mathematics at the Constantine Technical College—The Director of Education, Education Offices, Middlesbrough (June 9). A temporary assistant lecturer in agricultural botany at the University College of North Wales, Aberystwyth—Prof. R. G. Stapledon, Agricultural Buildings, Alexandra Road, Aberystwyth (June 12). A lecturer in chemistry at the Medway Technical College, Gardiner Street, Gillingham, Kent—The District Education Officer, 15, Mew Road Avenue, Chatham (June 16). A part-time assistant (biology) in the Department of History and Method of Science at University College, Gower Street, London, W.C.1—The Secretary (June 16). A lecturer in political science at the London School of Economics and Political Science, Houghton Street, Aldwych, W.C.2—The Secretary (June 22). Examiners in various branches of science in the University of London—The External Registrar, University of London, South Kensington, S.W.7 (July 8). A professor of mining and a professor of geology in the University of the Witwatersrand, Johannesburg—The Secretary, Office of the High Commissioner, South Africa House, Trafalgar Square, London, W.C.2 (July 14). A senior lecturer in psychology, a lecturer in geology and a lecturer in mathematics (at Pietermaritzburg) and a lecturer in civil engineering, a lecturer in mathematics and chemistry and a lecturer in English and psychology (at Durban) in Natal University College—The Registrar, Natal University College, Pietermaritzburg (Aug. 1). A technical adviser on industries to the Bureau of Industry and Commerce, Ceylon—The Crown Agents for the Colonies, 4, Millbank, London, S.W.1.