the medieval and later economic and social life of the city and surrounding country in agriculture, trades— Gloucester is famous for its early iron-working—and the home. A special exhibit arranged for the jubilee conference of the Museums Association at Cheltenham in July had as its most prominent exhibit a selection of the local horn industry, which has existed in Gloucester since medieval times and still survives in one small factory.

# Indian Association for the Cultivation of Science

THE annual report of the Committee of Management of the Indian Association for the Cultivation of Science for the year 1938 records a membership of 128 at the end of the year (Calcutta : Indian Association for the Cultivation of Science, 1939). Financial stringency has limited the purchase of reference books and periodicals for the library and also that of scientific apparatus, and for the same reason the Government of India has been unable to restore the ten per cent cut in the annual grant of 20,000 rupees for the year 1938-39. Appendixes include lists of periodicals available in the library and of books purchased as well as an account of research work carried out in the laboratories of the Association. An arrangement has been devised for magnetic measurements, at low temperatures in the range obtainable with liquid air, on typical paramagnetic salts of the rare earth and the iron group. Magnetic measurements on rhodochrosite, MnCO<sub>3</sub>, indicate that this crystal should prove a more suitable substance than the hydrated sulphates and selenates of manganese for use as the medium for the production of very low temperatures by the demagnetization method. Other studies have included the magnetic anisotropy of hydrated gadolinium sulphate, crystalline fields in rare earth salts, magnetic studies in relation to valency problems and to crystal structure, magnetic studies on organic crystals of the aromatic class, and optical studies of the chrysene molecule. Other work has been concerned with the absorption spectra of arsenic and antimony sulphides and of the sulphur molecule.

# Adult Education in Household Science

HOME-LIFE problems have become, under the impact of social and economic changes, increasingly complex and baffling, and among expedients employed in the United States for coping with the situation is the promotion of adult classes for home economics. Such classes are becoming increasingly important, and the Office of Education has issued a stimulating and helpful guide entitled "Homemaking Education Programs for Adults" (Washington, D.C.: Government Printing Office. Pp. 126. 15 cents). A detailed discussion of principles and methods of instruction appropriate for communities of different types and the preparation of teachers and leaders is followed by illustrations drawn from various parts of the United States. As an example of the scope of the work of the classes, here is a list of headings taken from a Kansas leaflet for use by itinerant teachers : food for the family,

clothing, child-care and development, home-management, care of the sick, shopping, home-planning and furnishing, hospitality in the home. The extent and character of the existing provision for such classes vary widely in different parts of the country, but the discussion reveals the existence of an increasing emphasis in American theory and practice on the necessity for "the extension of educational activities beyond the confines of the school building into the community", involving acceptance by the public educational authorities of responsibility for provision of nursery schools and adult classes. The bulletin contains much that should interest household science schools, organizers of adult education and women's institutes.

# Health Organisation of the League of Nations

THE annual report of the Health Organisation is contained in its recently issued Bulletin (8, Nos. 1-2, Allen and Unwin, Museum Street, W.C.1. 58.). Prevention and treatment of malaria, cancer, leprosy, nutrition, housing and physical education, biological standardization and drug traffic are some of the subjects that are covered by the activities of the League's Health Organisation. A considerable report on rural housing and planning is contributed by M. Vignerot (France). The last article, of 260 pages, is a survey by Dr. Walch-Sorgdrager of Leptospiroses, diseases of man and animals caused by infection with minute spirilliform micro-organisms, which include infectious jaundice or Weil's disease of man and infectious jaundice of dogs. A recently differentiated epidemic disease of man, 'mud fever', is fully described. It occurs in regions of the Danube, Elbe and Oder which are liable to floods, though is not necessarily connected with flooded districts, and is caused by a species of Leptospira, L. grippotyphosa. The disease is an acute and severe febrile condition, but is never fatal. The natural habitat of this microbe is uncertain, as is also the problem of transmission to man. A bibliography of 70 pages completes this important article. A review designed to show how the Health Organisation functions, entitled "World Health and the League", is also issued by the League (Messrs. Allen and Unwin. 6d.).

# Birth Customs in East Anglia

In the June issue of Folk-Lore, Miss Barbara Newman and Mr. Leslie Newman record the result of a questionnaire sent to a large number of nurses in Norfolk, Suffolk, Essex and Cambridgeshire for information on husband's 'labour pains' and husband's pains other than labour, such as sympathetic morning sickness and toothache, the use of herbal remedies to ensure easy labour or to quicken labour, and customs connected with the placenta, umbilical cord and caul. Nearly all the midwives agreed that 'husband's pains' were quite usual. In one case a medical man had himself suffered therefrom. and had no doubt that in cases which had come under his observation the pains were both genuine and severe. As regards the prevalence of 'husband's toothache', it was reported that at a town council (Continued on p. 437)

meeting in an east-Midland town, when the question of dental service for expectant and nursing mothers was raised, a member declared that the husbands required treatment rather than the wives. The belief in the power of the caul to confer protection and good luck is gradually dying out, but at one time cauls were carried by the shore fishermen all along the coast of eastern England to protect them from death by drowning. In addition to the criminal use of savin and pennyroyal for abortifacient purposes, the legitimate employment of herbal remedies, especially raspberry tea, is widely spread in the eastern counties and north-east London for relieving the many inconveniences and minor troubles of pregnancy.

### Ultra-Violet Lighting

MR. R. H. FINCH of the Lighting Section of the British Thomson-Houston Co. Ltd., has written a paper published in the *Electrical Review* for August 25 on the use in generating stations in war-time of ultra-violet lighting. The whole station could be bathed in ultra-violet energy and light produced only where needed, as, for example, on the handles of switches, meter scales, push buttons, telephones, doors, keyholes, tables, stairs, fire-extinguishers, etc., by the application to them of a dab of fluorescent paint or dye. Small press buttons should be surrounded by circles. Fuse positions can be delineated by outlining them, or by spotting the carriers with paint on the floor. In front of every switchboard a line should be painted about 12 inches away. The shape of every obstruction near an open switchboard or in a control room should be delineated by floor lines or patches of paint. Fluorescent chalks are also available for writing emergency warnings. The waves given off by the black lamps used are of a definite wave-length and produce no sun-burning or other dangerous effects. They are used in connexion with invisible fluorescent laundry marking systems and have been in constant operation for several years without a single case of ill effects to operators. Ultra-violet lighting is recommended for the emergency lighting in generating stations and similar premises in the Home Office A.R.P. Department pamphlet entitled 'War Time Lighting Restrictions for Industrial and Commercial Premises'.

### African Linguistics

THE International Institute of African Languages and Cultures publishes in the July number of Africa a survey of linguistic questions relating to Africa, which includes a number of tasks with which the Institute is concerned. The issue by the Institute of a "Short Guide to the Recording of African Languages" has produced results of no little importance in their bearing on the study and classification of African languages. Prof. D. Westerman has compiled a list of no less than thirty-one previously and littleknown languages which have been recorded through its use. This material has been sent to the Institute. Some will be published; the remainder, with such additional linguistic material as may accrue from time to time, will be available at the Institute for consultation by students. A valuable indication of

the linguistic work already done, and of the field still to be covered in this department of investigation in Negro Africa, will be afforded by a series of articles which is to appear in Africa. The first in the current issue is a survey by Dr. Johannes Lukas of linguistic research between the Nile and Lake Chad. In addition to pointing out the regions to which future research can most usefully be directed, the series will serve as a preliminary classification of African languages. An interesting problem is discussed by Prof. C. M. Doke, who deals with the position and relation of European and Bantu languages in South Africa. While he admits that owing to political and economic factors European languages, and especially English, are ousting Bantu, he maintains that certain of the Bantu languages will persist for their cultural value in literary development and their private, family, and devotional use. Other contributions to this issue of Africa deal with indigenous literature, the study of intonation and of phonetics, and the facilities for the study of African languages in Great Britain, on the Continent and in South Africa. Consideration of the relation between language study and anthropology is reserved for future consideration.

#### Why Smallpox?

IN an editorial so entitled in Public Health Reports of June 23, it is stated that the United States leads all the other nations in the world except India in the number of smallpox cases reported in 1937, when there were 11,673 cases in that country. In 1938 the disease was more prevalent than it has been during the past five years, the number of cases being approximately 15,000. In 1936, according to the Health Section of the League of Nations, England and Wales, with a population of 40,839,000, reported only 12 cases. France, with 41,906,000 inhabitants, reported 273 cases, and Germany with a population of 67,346,000 had no cases. Some of the States in the Union have had no smallpox for several years. New Jersey, for example, with a population of about 4,400,000, has not had a case for more than seven years, while the States of North Dakota, South Dakota, Montana, Idaho, Oregon, Wyoming and Utah, with a combined population less than that of New Jersey, reported a total of more than 12,000 cases during the same period. The persistence of smallpox in the United States is simply due to neglect of vaccination, the explanation though not excuse for this being the comparative mildness of the disease in recent years and the reduced incidence compared with fifteen or twenty years ago. The possibility of the malignant type developing from the mild type is a disputed question, but there is always the possibility of the malignant type being introduced from foreign countries, especially in these days of air travel.

#### Olfactory Electricity

IT is stated in the *Beama Journal* of July that electricity is now being used to measure a smell. Various electrical devices are used in everyday work to make measurements in the domain of sight, touch