

not warrant the cost of an institute, it does call for a standing committee empowered to speak with authority for the profession. To implement formation of this central geological committee, it is suggested that a government departmental committee of inquiry be appointed to review and report on the present organisation of British and Colonial geology, to consider the position of existing institutions and make recommendations in relation to them. There has been a marked lag in development of British geological survey organisation during the past twenty years. Furthermore, there is a scarcity of entrants into the profession, due possibly to the break in training during the war years, but more probably to conditions of pay and service, which are not comparable with those offered by industry. The writer of the article believes that many Present difficulties might be resolved by a speedy reorganisation of institutions in the United Kingdom to meet the needs of a joint British and Colonial survey.

Education for Adjustment to Ageing

IN the British Isles the proportion of persons sixty years of age and more will be about 20 per cent in 1979 as against about 5 per cent in 1901. This ageing of the population creates serious problems for the individual and for society, particularly when considered in relation to the great reduction in manpower required to produce the goods and services needed in the country. After investigating some of these individual and social problems, a year ago the University of Michigan carried out an experimental twelve-weeks course on the adjustment to ageing; details of the course have been set out by Clark Tibbets, director of the Institute for Human Adjustment, University of Michigan, in the July issue of *Health Education* (7, No. 3; 1949). The course was based on the principles that growing old is a life-long process of development and atrophy and requires individual behaviour adjustment as each new stage is reached, and that successful living at any age requires preparation. All phases of life were covered in eight broad groups, and practical suggestions were given to aid in individual adjustment. The eight groups included biological ageing, psychological changes, maintenance of physical and mental health, living arrangements, creative activities, religion, social and economic security, and legal problems. Some interesting results were obtained on the courses. The first drew fifty people; the second had an enrolment of ninety. The students took a more objective attitude to ageing, giving more attention to their physical well-being and seeking ways to exercise their mental capacities as well as demanding opportunity for self-expression and social participation.

Outline of the History of Mathematics

A RECENT number of the *American Mathematical Monthly* (56, No. 1, Pt. 2, pp. 114; University of Buffalo, N.Y.; 1 dollar), entitled "Outline of the History of Mathematics" by R. C. Archibald, contains a very remarkable synopsis of the history of mathematics, beginning with the Babylonians and Egyptians, and proceeding to the Greeks, then to Hindu, Arabic and Persian mathematics, and thence to European mathematics to 1600 A.D. Following this are sections dealing with the seventeenth, eighteenth and nineteenth centuries and later. The literature list and notes and the index of names at the end are most helpful to anyone consulting the book.

Nest Records of the Song-Thrush

UNDER its nest record card scheme, members of the British Trust for Ornithology are asked to complete a card for every nest of every species that they find, giving details of locality, situation, number of eggs and young and other particulars, together with the dates of recording. This method of inquiry represents a valuable advance in the technique of field ornithology, and, in a recent issue of *British Birds*, Miss E. T. Silva shows that much interesting material has been collected from 173 nest record cards for the song thrush (*Turdus ericetorum*) (42, No. 4; April 1949). The collated information shows that the usual laying period for the song-thrush in Britain is from mid-March to mid-July, when it generally lays a clutch of four or five eggs. The average clutch-size in Britain increases from early spring to a peak in May, and then decreases again. A similar seasonal variation occurs in Holland and Finland; but in the latter the peak occurs in June. The average clutch-size is larger in Holland than in Britain and larger still in Finland, at the same time of year. There is a significant variation in average brood-size in different years in Britain, and predation is the most usual cause of nesting failure. Nesting success does not vary appreciably with clutch-size or season. The song-thrush usually lays one egg each day until the clutch is complete; a few exceptions have been recorded, but more observations are needed. The average incubation period is 13.4 days and the nestling period is 13.2 days. Both periods appear to be slightly longer in the early part of the season.

National Museum of Victoria

THE annual report of the National Museum of Victoria for 1947-48 states that representations made to the Government have resulted in the acquisition of a site in the King's Domain for a new museum building. It is intended to house the natural history and ethnology in this new accommodation. The present Museum is so restricted both as regards the exhibition galleries and storage space that the prospect of a new building is especially welcome to museum staff and public alike. The director (Mr. R. T. M. Pescott) was granted seven months leave of absence to study design of museum buildings in Europe and the United States.

Quicker Forcing of Seakale

PRE-HEATING seakale crowns in water at 35° C. for three hours is shown by I. F. Storey and N. Montgomery (*J. Hort. Sci.*, 24, Nos. 3 and 4, 214; Dec. 1948) to give an increased yield of forced kale. About one-third more was obtained with ordinary commercial varieties, and larger increases with new early forcing types. Pre-heating could also be used to reduce the length of the forcing period.

Man-power Statistics of the British Civil Service

IN a written reply to a question in the House of Commons on November 29, the Financial Secretary to the Treasury stated that there were 411,762 established non-industrial Civil servants on October 1, 1949, as against 382,308 on January 1, 1949. An accompanying analysis by staff groups of the established and unestablished figures for October 1 shows that in the administrative class there were 2,689 established and 663 unestablished; 12,808 professional (scientific and technical I) established and 7,808 unestablished; 14,230 scientific and technical II established, and 21,426 unestablished; 19,566

ancillary technical established and 25,317 unestablished. The grand total was 448,192 men and 245,809 women, and of these only 12,608 men and 31,115 women were part-time.

Annual Conference of the Science Masters' Association

FOR the first time in the forty-nine years of the history of the Science Masters' Association, the annual conference for 1950 will be held in Scotland, at the King's Buildings, University of Edinburgh, during January 3-6. The presidential address, by Sir Edward Appleton, principal and vice-chancellor of the University of Edinburgh, will be devoted to "Radio Waves of Extra-Terrestrial Origin", and Prof. C. H. Waddington will give a public lecture on "Science and Human Affairs". Other speakers and their subjects will be: Prof. J. Ritchie, "Civilization and Wild Life"; Prof. G. F. Marrian, "Recent Advances in the Study of Hormones of the Animal Body"; Dr. J. Paton, "Optical Properties of the Atmosphere"; Mr. J. P. Stephenson, "Science Teaching and Education"; Sir James Learmonth, "The Background of Modern Surgery"; Prof. J. Macmurray, "Science in Religious Education"; Mr. E. G. Dymond, "Exploration in the Upper Atmosphere". The general public will be welcome to attend the evening lectures and scientific workers the morning lectures. Laboratory space has been set aside for members to display ideas and devices for teaching science, and there will also be manufacturers' and publishers' exhibitions. University demonstrations and several excursions and visits have been arranged. The local secretary for the Edinburgh conference is W. A. J. Musson, 10 Hope Place, Musselburgh, and the annual-meeting secretary is W. G. Rhodes, 318 Granville Road, Sheffield, 2.

Fourth World Power Conference

IN connexion with the Fourth World Power Conference to be held in London during July 10-15, 1950 (see *Nature*, 162, 988; 1948), a provisional programme has recently been published together with a supplementary booklet containing the titles of papers and names of authors, corrected to October 27. Most of the pages in the provisional programme are taken up with details of the tours in the United Kingdom, each of which will last about a week, beginning on July 17 after the Conference. Other new points of interest are: the technical sessions will take place in the buildings of the Institutions of Civil, Electrical and Mechanical Engineers, with headquarters and reception and information offices in the first-named Institution; the working languages of the Conference will be English and French, and possibly a third language; and the halls will be equipped for simultaneous interpretation. The general secretary, Mr. C. H. Gray, will deal with all questions involving policy, presentation of papers and other technical matters, and such correspondence should be addressed to him at 201 Grand Buildings, Trafalgar Square, London, W.C.2. All other queries, including administrative problems, should be referred to the Office of the Fourth World Power Conference, 414 Cecil Chambers, 76/86 Strand, London, W.C.2.

Joint Engineering Conference, 1951

THE Councils of the Institutions of Civil, Mechanical and Electrical Engineers have decided to hold, in London, a joint engineering conference during June 4-15, 1951, to coincide with the Festival of Britain which is to be held that year. The theme of the

conference will be to place on record the achievements of British engineers and will afford an opportunity for the engineers of the world to discuss the future trends of developing the great sources of power in Nature for the use and convenience of man. The conference will also underline the interdependence of all branches of engineering, for none of the great developments in the past hundred years would have been possible without the constant and ever-growing co-operation of the members of the three major engineering institutions in Great Britain. Mindful of the importance of maintaining the high standard and technical efficiency of British engineers in the future, the conference will also discuss the development of the system of education of engineers in Great Britain. The detailed arrangements of the conference are being prepared and will be announced later.

American Societies for Experimental Biology

THE Federation of American Societies for Experimental Biology will hold its thirty-fourth annual meeting during April 17-21, 1950, at Atlantic City, New Jersey with headquarters at the Hotel Traymore. Affiliated societies are: American Physiological Society; American Society of Biological Chemists; American Society for Pharmacology and Experimental Therapeutics; American Society for Experimental Pathology; American Institute of Nutrition; and American Association of Immunologists. Attendance will be open to members of the constituent societies and their associates and to interested biologists in all countries. Those wishing to read papers at the meeting should submit the titles and abstracts to the secretary of the appropriate society not later than January 10, 1950. Further information can be obtained from the Federation Secretary, 2101 Constitution Avenue, Washington 25, D.C.

Announcements

A TINE Tamme Prize of 500 guilders (about £46) is being offered for 1950 and 1952. That for the former year will be awarded for a study on the cytogenetics of a group of species of Phanerogams, and the other for a study on genes and their chemical activity. The prize-winning papers and others of sufficient merit will be published in *Genetica*. Manuscripts for the two prizes should be submitted before December 1, 1950 and 1952, respectively, to Prof. M. J. Sirks, Genetisch Instituut, Huis de Wolf, Haren (Gron.), Netherlands, from whom further details can be obtained.

A SHORT vacation course on wool, organised by the International Wool Secretariat, and specially designed to assist teachers in all types of schools and training colleges, will be held during January 2-6, 1950, at the London County Council Technical College for the Distributive Trades, 107 Charing Cross Road, London, W.C.2. The course will be concerned with all aspects of wool, with lectures on wool-growing and marketing, the historical and geographical development of the wool trade, the science of wool, wool cloth manufacture, design and construction, judgment of quality, and the development of fashion, and there will also be some handicrafts demonstrations. Further information can be obtained from the Department of Publicity, International Wool Secretariat, Dorland House, 18-20 Regent Street, London, S.W.1.

ERRATUM. In "Line-Broadening in Solar Flares" (*Nature*, December 3, p. 964), lines 5 and 6, for " $H\alpha$, $H\beta$, etc., show smaller widths than $H\gamma$ " read " $H\beta$, $H\gamma$, etc., show smaller widths than $H\alpha$ ".