

geodesy is a most ancient science, its applications are much widened by present-century developments, peaceful and otherwise. The scientific surveyor of the second half of the twentieth century requires a wide basic training; and the problem of its provision awaits solution. The trustees of the Ohio State University deserve credit for their constructive effort, and the progress of the new Institute and school will be watched with much interest and may perhaps stimulate similar action elsewhere.

#### Memoranda of the Indian Science Congress Association

FOUR memoranda prepared by the Indian Science Congress Association, at the request of the United Nations Educational, Scientific and Cultural Organization, have been issued under the title "Scicong Memoranda for Unesco" (pp. 59. Calcutta 16: the Association, 1951). The first of these is a review of the energy and power resources of India, prepared with reference to the Unesco discussion theme for 1950, "World Energy and Power Resources", to which a bibliography is appended. The second memorandum outlines the activities of some typical science clubs in India; these include the students' scientific societies in connexion with universities and like institutions, and some suggestions are made for the further development of such societies, including the use of educational and documentary scientific films and of exhibition boxes of scientific interest. The third memorandum, on the popularization of science through books, gives a fairly comprehensive picture of the position of publication and of science writing in India. Although a start has been made in the popularization of science in India in this way, science writing is unlikely to develop into a professional occupation for some years. The fourth memorandum, on international collaboration between existing associations for the advancement of science, reviews briefly the history of the Indian Science Congress Association and discusses the desirability of forming an international federation of associations for the advancement of science. One reason for advocating the formation of such a federation is that it might deal more satisfactorily with questions relating to freedom of scientific inquiry, and the dangers involved by secrecy in science, than the Committee of Social Relations of the International Council of Scientific Unions has done. The value of that Council for purely academic and scientific problems is fully recognized; but the Indian Science Congress Association would welcome the formation of a federation to encourage symposia and discussions of scientific problems of wide social and international import and the publication of an international journal covering such matters.

#### Survey of the Ticks of South Africa

THE *Onderstepoort Journal*, created in 1933 to replace and continue the annual reports of the director of veterinary services and animal industry of the Department of Agriculture, Union of South Africa, has earned a permanent place in all libraries that cater for readers interested in the welfare of domesticated animals, the diseases that afflict them and the organisms that cause these diseases. The papers it publishes reflect the wide scope of the work done at the Onderstepoort Veterinary Research Station, from which the *Journal* is published. A feature of this work has always been its broadly biological outlook. Typical of this is the survey of

the ticks of South Africa, which has been undertaken as part of a zoological survey of the Union. Ticks collected all over the Union by government veterinary officers have been sent to the Onderstepoort Laboratory, and the material thus collected is being studied by Miss Gortrud Theiler. In Part 1 of her report (*Ond. J.*, 23, 217; 1948 [*sic*]) she comments on the difficulties created by the methods adopted for the collection of the ticks. She has, however, been able to draw certain conclusions from her studies. The species discussed by Miss Theiler are as follows: in Part 1, *Amblyomma hebraeum*, the vector of 'heart-water'; in Parts 2-3 (*Ond. J.*, 22, 255; 1949 [*sic*]), *Boophilus decoloratus*, the blue tick, and *Rhipicephalus appendiculatus*, the brown tick; and in Parts 4-6 (*Ond. J.*, 24, 1; 1950), *Rhipicephalus capensis*, *R. evertsi*, and *Ixodes pilosus* and *I. rubicundus*. Each of the articles is accompanied by maps which show the localities in which each of the ticks discussed was present, together with information about the nature of the districts concerned and about the relevant climatic factors.

#### Prehistoric Sites on the North Cornish Coast

A VERY useful article entitled "Prehistoric Sites on the North Cornish Coast between Newquay and Perranporth", by Joan R. Harding (*Antiquaries J.*, 30, July-October 1950), deals with a coastal area of Cornwall which is a little more restricted than is indicated by the title and covers the coast from Kelsey Head to the Penhole Sands. At the former site Mesolithic and Iron Age finds have been made, and at the latter relics of the Mesolithic and Bronze Ages have been discovered. Judging from the illustrations, the Mesolithic finds recall those made farther north at Constantine Bay near Padstow. Culturally, the flint industries are undoubtedly Mesolithic, though in time they may well be later and even overlap with the early metal age. Miss Harding is to be congratulated on bringing forward some very interesting finds.

#### Scottish Postgraduate Agricultural Scholarships

THE Department of Agriculture for Scotland has recently awarded postgraduate agricultural scholarships, commencing this year, to the following: *Husbandry*, N. H. Cuthbert (Glasgow), dairy husbandry at the University of Reading; A. F. Gristwood (Edinburgh), poultry husbandry at the University of Edinburgh; P. C. Harper (Aberdeen), rural science at the University of Edinburgh; A. M. MacNair (Glasgow), agriculture at the University of Cambridge; I. S. Robertson (Edinburgh), agriculture at the University of Cambridge; T. Webster (Glasgow), agricultural science at the University College of Wales, Aberystwyth; *Agricultural Economics*, H. C. Currie (Edinburgh), agricultural economics at the Agricultural Economics Research Institute, Oxford. Three current awards have been extended for a further period of study as follows: *Husbandry*, A. O. Ballantyne (Glasgow), Ph.D. degree at the University of Edinburgh; H. G. Livingston (Aberdeen), dairy husbandry at the University of Minnesota; *Statistics*, St. C. S. Taylor (Edinburgh), Ph.D. degree at the University of Edinburgh.

ERRATUM.—In the article "Britain's Scientific Shrines (6)" in *Nature* of September 15, p. 443, column 2, for "Dr. William Browning" read "Dr. William Brownrig".