appropriately be transferred to special regional organisations. Relieved of these purely business functions, local authorities could devote themselves with greater efficiency to their remaining duties, for which they should be given greater responsibility and autonomy than in the past.

# British Empire Cancer Campaign

At the recent quarterly meeting of the Grand Council of the British Empire Cancer Campaign, the following grants for the calendar year 1934 were made for the continuation of research into the cause and cure of cancer: Middlesex Hospital, £5,400; Cancer Hospital, £2,700; St. Bartholomew's Hospital, £2,250; St. Mark's Hospital, £540; Marie Curie Hospital, £540; Radon Centre at the Middlesex Hospital (through the Medical Research Council), £350; Mount Vernon Hospital, £900; Strangeways Research Laboratory, Cambridge, £350; Westminster Hospital Annexe, £300; Mr. I. Hieger (at the Cancer Hospital), £550; Dr. P. R. Peacock (Glasgow Royal Cancer Hospital), £300 and Dr. Alexander Haddow (at the University of Edinburgh), £200. Prof. E. Mellanby, who has succeeded the late Sir Walter Fletcher as secretary of the Medical Research Council, was elected a member of the Grand Council. The Grand Council resolved that attention should be invited to the fact that essays on "The Biological Effects and Mode of Action of Radiations upon Malignant and other Cells" for the 1933 Garton prize medal should reach the offices of the Campaign not later than December 31 next.

# Earthquake in the Santa Elena Peninsula, Ecuador

WE have received from Dr. George Sheppard, State geologist in the Republic of Ecuador, a brief account of the severe earthquake that occurred at 10.31 a.m. on October 2 in the Santa Elena peninsula, Ecuador. Off Salinas, the cable that runs southward was broken at a distance of 14 miles from land. At La Libertad, the sea receded immediately after the earthquake, rose to high-tide level at 11.30 a.m. (low tide having been at about 10 a.m.), fell to low water at noon, and rose again to the former mark at 2 p.m. At Ancon, the ground was seen by Dr. Sheppard to be slowly undulating, and the water in a large tank flowed over the north-east side, from which it is inferred that the origin lay towards the west and beneath the Pacific. Among the after-shocks was one at 5.36 a.m. on October 3, of only slightly less intensity than the principal earthquake. It would seem, from the above account, that the epicentre was not far from that of the Colombian earthquake of January 31, 1906, the first of the three great earthquakes of that year that occurred along the Pacific coast of America.

### Cultivation of Raspberries

THE Ministry of Agriculture and Fisheries has recently issued Advisory Leaflet No. 180 to set forth the results of modern research upon the cultivation of raspberries. The characteristics of present-day varieties are enumerated, and general directions for cultivation are given. Organic manures are deemed

to be more suitable for the raspberry crop than artificials. Pruning for heavy crops of good quality demands more than mere thinning of the canes; the methods are set forth in the leaflet. Insect pests are not described, as other leaflets do this with requisite detail. Blue stripe wilt, a Verticillium disease, and mosaic, are the chief diseases. The methods of combatting the latter malady are the best that can be recommended, but the leaflet perhaps does not take sufficient notice of the fact that some of the best commercial varieties are resistant to mosaic, and therefore menaces to more susceptible varieties in the neighbourhood.

#### Science in Poetry

Following upon an article in Nature of August 26 entitled "Nature and Science in Poetry", Mr. E. Heron-Allen contributed to our issue of September 16 a letter in which he gave further examples of poems on scientific themes, among them being an "exquisite and delicate fantasy" which he attributed to the late Sir Arthur Shipley. Mr. H. S. Webster, 53 Loraine Road, London, N.W.7, has, however, written to Mr. Heron-Allen to point out that the verses were from a poem entitled "Solomon Redivivus, 1886" by Constance Naden, published in the volume of her complete poetical works, reviewed in Nature of October 18, 1894. The poem consists of sixteen quatrains, three of which read as follows:—

We were a soft Amœba In ages past and gone, Ere you were Queen of Sheba, And I King Solomon.

Unorganed, undivided, We lived in happy sloth, And all that you did I did, One dinner nourished both:

Till you incurred the odium Of fission and divorce— A severed pseudopodium You strayed your lonely course.

# National Radium Trust

OWING to a rise of 30-40 per cent in the price in sterling of radium, consequent on the departure of Great Britain from the gold standard, the National Radium Trust pursued a conservative policy during 1932-33 and purchased only 3.76 mgm. of new radium, the needs of radium treatment centres being met by a re-distribution of the stock held. The Radium Commission has published details of the general policy adopted with regard to radium therapy for cancer, and summaries of reports from radium treatment centres (Fourth Annual Reports of the National Radium Trust and Radium Commission, 1932-1933. H.M. Stationery Office).

#### Health in the Tropics

The October supplement of the *Tropical Diseases Bulletin* summarises the medical and sanitary reports from British Colonies, Protectorates and Dependencies

for 1931. While primarily intended for medical, research and administrative officers, the information given should also prove useful for those visiting the Colonies and Dependencies for pleasure, or those intending to reside there. The vital statistics included should also prove of value to insurance offices and business houses.

## Polar Year Book

The "Polar Arboken" for 1933 is the first annual publication of the Norwegian Polar Club. It is a well-illustrated little volume containing a number of papers by well-known polar travellers on various aspects of Norwegian activity in north and south polar regions. Most of the articles are of general rather than scientific value, but they include much useful information about whaling, coal mining in Spitsbergen and hunting in various parts of the arctic.

#### Announcements

THE Organising Committee of the Sixth International Botanical Congress has decided to change the date of meeting of the Congress. The Congress will meet at Amsterdam on September 2-7, 1935. The secretary is Dr. M. J. Sirks, Wageningen, Holland.

LEVERHULME research fellowships have been awarded to Miss E. M. Denby, organising secretary of the Kensington Housing Trust, Ltd., to study slum clearance and rebuilding at home and abroad; and to Miss D. A. E. Garrod, for excavation of palæolithic cave sites on Mount Carmel, Palestine.

The Secretary of State for the Colonies has recently made the following Colonial agricultural appointments: Mr. E. J. Gregory to be manager, St. Augustine Experimental Station, Trinidad; Mr. A. Thompson, assistant mycologist, to be mycologist, Agricultural Department, Malaya.

The Williams prize of the Iron and Steel Institute has this year been awarded jointly to Mr. D. F. Marshall, of Sheffield, for his paper on "The External Heat Loss of a Blast-Furnace", which was presented at the last annual meeting of the Institute in London, and to Mr. A. Robinson, of Scunthorpe, for his paper on "Some Factors Leading to Greater Production from a Steel Furnace", which was presented at the autumn meeting of the Institute held in Sheffield in September last.

At the annual general meeting of the Cambridge Philosophical Society, the following officers were elected:—President, Prof. J. Barcroft; Vice-Presidents, Dr. F. H. A. Marshall, Dr. F. W. Aston, Prof. E. K. Rideal; Treasurer, Mr. F. A. Potts; Secretaries, Mr. F. P. White, Dr. J. D. Cockcroft, Dr. H. Hamshaw Thomas; New members of Council, Mr. F. T. Brooks, Prof. J. E. Lennard-Jones, Mr. H. L. H. H. Green, Dr. O. M. B. Bulman, Mr. P. I. Dee.

The following officers of the University of Durham Philosophical Society have recently been elected for the Session 1933-34: President, Prof. R. A.

Sampson; Hon. General Secretary, Mr. W. M. Madgin; Hon. Treasurer, Mr. J. W. Bullerwell; Editor, Prof. G. W. Todd; Assistant Editor, Mr. J. F. Wood; Hon. Librarian, Dr. F. Bradshaw; Assistant Librarian, Mr. E. Patterson.

THE Institute of Metals now issues a monthly set of abstracts of the world's metallurgical literature, and follows this up by re-issuing these abstracts in volume form, with index, at the end of the year. In accordance with a scheme that has recently been adopted by the Council, the issue of separate 'preprints' of papers to be read at the two half-yearly meetings just before each meeting will cease. Instead, the advance copies will appear, two or three at a time, in the Institute's monthly Journal along with the metallurgical abstracts. As in the case of the latter, the papers will be re-issued in volume form later for permanent retention.

THE Food Group of the Society of Chemical Industry will hold a symposium on "Bread and Milk" in the Hall of the British Medical Association, Tavistock Square, London, W.C.1, on Thursday and Friday, November 23-24. The symposium is to be divided into three sessions under the chairmanship of Prof. W. W. Jameson, Sir John Russell, and Prof. H. E. Armstrong, respectively. Papers will be read by the following: Prof. H. D. Kay (Reading), Prof. A. J. Kluyver (Delft), Prof. A. D. Orla-Jensen (Copenhagen), Dr. E. T. Minett and E. J. Pullinger (London), Prof. J. R. Katz (Amsterdam), Holger Jorgensen, Prof. Max Samec (Czechoslovakia), Dr. H. G. Bungenberg de Jong (Utrecht), C. W. Brabender (Duisberg), Prof. J. C. Drummond (London), Prof. G. S. Wilson and M. P. Cowell (London), Dr. J. Vargas Eyre (Epsom), Dr. D. W. Kent-Jones (Dover) and W. Jago (Hove). Applications for invitations and further information should be made to the Secretary, Food Symposium, Society of Chemical Industry, 46, Finsbury Square, London, E.C.2.

APPLICATIONS are invited for the following appointments, on or before the dates mentioned :-- A lecturer in chemistry in Rhodes University College, Grahamstown-The Secretary, Office of the High Commissioner of South Africa, Trafalgar Square, London, W.C.2 (Nov. 30). A head of the School of Pharmacy in the Robert Gordon's Technical College, Aberdeen-The Secretary (Nov. 30). An engineer to the Essex Rivers Catchment Board-The Clerk of the Board, Dorset House, Duke Street, Essex A student probationer (zoologist or physiologist) at the Marine Biological Laboratory, Plymouth (Dec. 31). An assistant curator at the Raffles Museum, Singapore, Straits Settlements-Director of Recruitment (Colonial Service), Colonial Office, 2, Richmond Terrace, Whitehall, London, S.W.1 (Jan. 31). A director of water examination to the Metropolitan Water Board-The Clerk of the Board, Offices of the Board, 173, Rosebery Avenue, London, E.C.1 (Feb. 10). A chemist to the Sudan Government, Khartoum-The Controller, Sudan Government London Office, Wellington House, Buckingham Gate, London, S.W.1.