

the discharge mechanism; it was not realized that such springboard structures are chiefly, if not exclusively, operated by raindrops. The calyx tube and pedicel of *Salvia lyrata* serve as a springboard mechanism from which the nutlets are thrown out violently when raindrops land on the distal part of the upper lip of the calyx. The force of the striking raindrop depresses the springy pedicel and, when this returns to its normal position, the nutlets are thrown from the calyx tube as a swimmer is projected from a diving board. The nutlets become surrounded by a coat of extruded mucilage as soon as they are wetted. *Ocimum basilicum* and other members of the Labiatae have similar springboard dispersal mechanisms which are operated by raindrops. The plantlets or gemmæ of the succulent plant *Kalanchoë tubiflora* develop on narrow outgrowths from the parent leaf. These attachments serve as springboards from which the plantlets are violently discharged by raindrops. The plantlets are cup-shaped and are very effective in catching raindrops. The splashing action of raindrops may sometimes be an important agency effecting the pollination of certain cup-shaped flowers such as those of *Ranunculus*. About eighteen rain-operated dispersal mechanisms are now recognized. These are distributed among four of the major groups of the plant kingdom, and it is probable that some examples will be found in all phyla of land plants.

#### United States National Museum : Annual Report

THE annual report for the year ended June 30, 1954, of the United States National Museum (pp. 100; Washington, D.C.: Smithsonian Institution, 1954) provides ample evidence of statesmanlike vision and executive activity at this great institution. Thus, the modernization of the hall devoted to Latin American archaeology was completed and now exhibits man's cultural development from his earliest known beginnings in Latin America to the high civilizations of the Inca, Aztec and Maya. The cases show the advance of various cultures from the simple hunting, fishing and gathering level of existence to the highly advanced societies practising well-developed agriculture with complex social and political organizations and skilled technologies. The scale of the activities of this Museum may be realized from the fact that during the year nearly 650,000 individual specimens were added to the collections, which now total more than thirty-two million.

#### Animal Production from Grass : Meeting in Reading

THE European Association for Animal Production is holding its fifth study meeting in Reading during July 9-13. The subject of the meeting will be "Animal Production from Grass"; Prof. M. M. Cooper, of King's College (University of Durham), Newcastle upon Tyne, will give a paper on animal management for intensive production from grass, and there will also be a paper by two Dutch contributors. About 100-150 delegates are expected. Before the meeting there will be a visit to the Royal Show at Nottingham and to the Research Farm at Thurgarton, Nottingham, of Boots Pure Drug Co., Ltd. Visits will also be made to the Grassland Research Station, Hurley, the National Institute for Research in Dairying, Shinfield, and to Mr. Maurice Passmore's farm in Warwickshire. The arrangements for the meeting are being made by the British Society of Animal Production, which is the United Kingdom member of the European Association. Further information can be obtained from the secretary-

treasurer of the Society, J. P. Maule, Commonwealth Bureau of Animal Breeding and Genetics, King's Buildings, West Mains Road, Edinburgh 9.

#### Colonial Service : Recent Appointments

THE following appointments have recently been made in the Colonial Service: A. P. A. Forbes (chief agricultural officer, Nyasaland), deputy director of agriculture, Tanganyika; C. R. Groves (assistant director of agriculture, Bermuda), director of agriculture, Bermuda; J. R. P. Soper (deputy director of agriculture, Tanganyika), director of agriculture, Tanganyika; E. Williams (assistant director of agriculture, Nyasaland), deputy director of agriculture, Nyasaland; K. E. Woodcock (field officer, Insecticide Research Department, Tanganyika), field officer, Tsetse Control Department, Uganda; J. O. Meehan, assistant conservator of forests, Northern Rhodesia; R. Pickering, geologist, Tanganyika; J. R. Cutler, scientific officer, West African Stored Products Research Institute, Nigeria; M. J. Henigan, veterinary officer, Singapore; C. H. Brown, senior principal scientific officer, British Guiana and British Honduras.

#### Announcements

PROF. SERGEI BERNSTEIN, formerly director of the Institute of Mathematical Sciences, Kharkov, and Prof. Bernard Houssay, director of the Institute of Experimental Biology and Medicine, Buenos Aires, have been elected foreign associates of the Paris Academy of Sciences.

THE following appointments have been made in the Imperial College of Science and Technology, London: Dr. J. H. Argyris, reader in the theory of aeronautical structures, to the University chair of aeronautical structures; and Dr. G. D. Hobson, lecturer in oil technology, to the University readership in oil technology.

THE new Water Pollution Research Laboratory at Stevenage of the Department of Scientific and Industrial Research will be opened by the Lord President of the Council on June 20 at 3.30 p.m.

THE Royal Meteorological Society will hold a two-day meeting during July 21-23 in Ashburne Hall, University of Manchester, which will be open, without entrance fee, to non-members. The meeting will take the form of two symposia on "Some Aspects of Turbulence in the Atmosphere" and on oceanographic topics, respectively. Bookings for accommodation, excursion, etc., should be made not later than July 7; further information and reservation forms are available from the Assistant Secretary of the Society, 49 Cromwell Road, London, S.W.7.

THE British Association's Division for Social and International Relations of Science will be holding a conference on "Land Use" during July 15-16 in the Washington Singer Hall, University College of the South-West, Exeter, under the chairmanship of Mr. P. Ritchie Calder. The topics to be discussed will be: the allocation of land—the administrative functions of central and local government; the need of land—agriculture and forestry; the preservation of amenities in relation to land use; the needs of the Armed Forces for land; the need of land for mineral exploitation—land restoration; and the need of land for urban and industrial development. Further information can be obtained from the Secretary, British Association, Burlington House, London, W.1.