

lishes the list of journals, but all data concerning the library facilities are obtained and compiled by this office. It is a valuable aid to research workers.

An *Index* to the seven volumes of *International Critical Tables* has recently been completed and will be ready for distribution by April 1, 1933. The *Index* was made in this office, the director of the Service being one of the associate editors of the *Tables*. The *Index* is a volume of 323 pages and contains about 42,000 references and 9,000 cross references. It will be a great asset to users of the *Tables*.

These are examples of the type of compilation in which the Research Information Service is now engaged. No attempt has been made to list all the publications for which it has been responsible. A

complete list of these may be obtained from the Publications Office of the Council.

The Research Information Service has always had a very definite conception of its responsibility to the divisions of the Council. It has therefore cooperated at all times in furnishing information when called upon, has acted as agent in obtaining books from outside libraries, and maintains a small but valuable library of source books, such as abstract journals, periodical bibliographies, and reference material. No attempt has been made to go outside this limited field, but it is fitting to acknowledge at this time the indebtedness of the Service to the government libraries which are so generous in lending their books upon request.

SCIENTIFIC EVENTS

THE LEVERHULME SCHOLARSHIPS

As announced in the *London Times*, the trustees of the will of the first Lord Leverhulme, who died in 1925, have decided to devote £12,000 a year to the establishment of a scheme of research fellowships which are intended in the first instance for the assistance of experienced workers rather than to add to the provision already existing for workers in the early stages of their careers.

A statement has now been issued by the advisory committee which was appointed to select the fellows and for the general supervision of the scheme, and the committee reports that from the applications received 17 selections have been made by the advisory committee and approved by the trustees of the will of the late Lord Leverhulme and are for varying periods up to two years. The names of the fellows in the sciences and the subjects of the researches are as follows:

- E. C. BULLARD, B.A., Ph.D., demonstrator in geodesy, University of Cambridge.—“Gravity and magnetic measurements.” Research to be carried out in Great Rift Valley, East Africa.
- C. R. BURCH, B.A. (Cantab.), physicist, Metropolitan-Vickers Electrical Company, Limited.—“On the production of aspherical optical surfaces and on their imaging properties in combination.”
- F. FRASER-DARLING, Ph.D., chief officer, Imperial Bureau Animal Genetics, Edinburgh.—“An ecological study of a herd of Scottish red deer, with special reference to behavior.”
- C. S. ELTON, M.A., director of Bureau of Animal Population, University of Oxford, and university demonstrator in zoology.—“Fluctuations in numbers of wild mammal populations.”
- D. H. HAMMICK, M.A., fellow and tutor, Oriel College, Oxford.—“Investigations on the interaction of nitro-compounds with aromatic bases and hydrocarbons.”
- H. S. HATFIELD, Ph.D., London.—“The behavior of crystalline substances in electric and magnetic fields.”

L. S. B. LEAKEY, M.A., Ph.D., F.S.A., fellow of St. John's College, Cambridge.—“The pre-history of East Africa.”

D. L. R. LORIMER, C.I.E., M.R.A.S., F.R.G.S., lieutenant-colonel, Indian Army (retired), late of Foreign and Political Department.—“Anthropological and linguistic research in the Gilgit region of the Karakorum and Hindukush.”

A. G. LOWNDES, M.A., Marlborough College, Wilts.—“The polygraphic process. Ultra-rapid cinema photomicrography.”

MISS J. A. WALES, employment officer in the Ministry of Labor, secretary to Chelsea and Fulham Juvenile Advisory Committee.—“The study of methods of vocational guidance for young people, as at present used in Germany.”

W. F. K. WYNNE-JONES, B.Sc., lecturer in physical chemistry, University of Reading.—“The nature of acids and bases.”

AGRICULTURAL REORGANIZATION IN MEXICO

It is reported by Science Service that the most radical reorganization of the Ministry of Agriculture in Mexico's history along scientific, social and economic bases has been planned by government officials and technical experts, in an effort to turn national agriculture from its haphazard development of the past into directed channels.

Mexico is fundamentally an agricultural country, and yet imports fundamental food that she can raise herself. Her agricultural sanitation is so defective that she often can not sell her products to the United States or other countries. Although her location in the semi-tropics and tropics makes agricultural possibilities almost unlimited, most of the best lands are not advantageously utilized. To correct these and other defects, the federal government hopes to take her national agriculture in hand, direct it economically, socially and technically. This will be easier to

do than in a country like the United States, because Mexico's government has always been paternal, and central authority the rule, and harder, because the government will have more primitive communities and individuals to deal with.

A national Agricultural Advisory Council, made up of representatives of rural organizations of various classes, of state and federal representatives and of technicians, will direct major agricultural policies, directly under a cabinet member. Four scientific bureaus will divide up the work aside from administrative bureaus to carry out the results of their investigations.

A Bureau of Geography, Meteorology and Hydrology will study physical outlines of the country with a view to agricultural application, and map and explore inaccurately known parts. A Bureau of Agricultural Improvement will study the application of vegetable and animal genetics, pest fighting and the like with a view to improving quality and quantity of products, and other factors tending to that purpose. A Bureau of National Lands and Colonization will administer the parceling out and exploitation of lands reclaimed in recent irrigation works; the better distribution of rural population, utilization of desirable regions now abandoned, and the like. In this bureau ethnological surveys and studies of rural sociology will be made. A Bureau of Agricultural Economy will compile statistics, plan programs of agricultural betterment, distribution, consumption and control of production.

THE SOUTHERN CALIFORNIA RIFT CLUB

THE twenty-second meeting of the Southern California Rift Club, an informal organization intended to familiarize southern Californians with the innumerable rifts which divide and subdivide their part of the Golden State into deep blocks of earth-crust, involved a two-day excursion going to and returning from a point on the northern slope of the San Bernardino Mountains overlooking the Mohave Desert. The outward trip was made northward through the Cajon Pass between the San Gabriel and the San Bernardino mountains; and then eastward near the base of the latter range and across the aggraded Lucerne intermont basin, which centers in an extensive playa; finally up a side road on the mountain flanks to a deserted mine, the bare buildings of which the party was allowed to occupy for the night.

Some sixty-three members gathered there in twenty-six automobiles, under the leadership of A. O. Woodford, professor of geology at Pomona College, who in the evening gave an informal account of the huge landslide which is outspread at the mountain base, where it covers an area of six or eight square miles. The next morning the great scar on the mountain

side left by the slide was examined. Then, descending over the slide, the longer return trip was begun; first continuing eastward near the mountain base, where Professor W. M. Davis described the greatly degraded surfaces which there characterize the desert; then turning southward to the deep Morongo Valley at the east end of the range, where heavy "Louderbacks" were seen high on its slopes; and thus was reached the heavily aggraded pass between the San Bernardino and the San Jacinto mountains which opened a westward and homeward route. The distance covered by most of the members of the excursion was about two hundred miles. An autumn excursion is planned for September 24 to the Charlton Flats, an uplifted lowland of subdued relief which now, deeply dissected, makes part of the San Gabriel Mountains north of Pasadena.

THE EXHIBIT OF THE BUREAU OF FISHERIES AT THE CENTURY OF PROGRESS EXPOSITION

THE Bureau of Fisheries has an exhibit in the south wing of the United States Government Building at "A Century of Progress" in Chicago. The display cases are made in the modern style of architecture designated for all bureaus of the Department of Commerce, to conform with the general architectural scheme of the fair. These cases are painted with natural pearl essence paint, which is made from fish scales.

At the front of the space allotted to the bureau and on each side are two aquaria containing species of fish propagated at the hatcheries; and in the center is a display of packaged quick-frozen fish and shellfish. The latter display was made possible through the cooperation of several firms which prepare these products.

In the center of the exhibit are four cases which have displays on two sides. In three of them are dioramas; one showing a typical trout hatchery, another modern oyster culture and the third the nutritive value of marine products. On the other side of the cases which contain the dioramas are illustrated the fresh-water mussel fishery and industry, oyster propagation and seed collection, and a display of packaged fish with charts showing the vitamin content of various fish oils and the amount of iodine in certain fish. The fourth case exhibits on one side a model of a Great Lakes pound net and gill net with pictures showing the method of fishing these nets, and the method of determining the age of different species of fish from their scales. On the other side of this case is graphically displayed the bureau's research on the preservation of fish nets.

At the back of the exhibit space are three large