Stops will be made at all the experiment stations and agricultural colleges that can be reached on this trip and also a large number of additional stops are being planned to examine and study the soils in the various sections of the country. General agricultural conditions, type of crops, methods of tillage and similar features will also be taken up.

The tentative schedule for California calls for a stop in the Mojave Desert on the way in, then a day at Riverside, a day at Fresno and a day at Berkeley. The plans for these stops are not yet worked out, but provisionally, at Riverside a half day will be spent driving over that general portion of the state, visiting six selected excavations where the soil conditions can be studied and also visiting and studying citrus groves and irrigation and fertilization experiments. The afternoon will be spent at the Citrus Experiment Station studying the work that is there being carried on. At Fresno it is planned to spend a half day driving about the general region, visiting three or more representative excavations where the soil and subsoil conditions can be observed. Considerable time will be spent on the drainage and alkali reclamation tract at Kearney Park and in addition a visit will be made to the Association Packing Plant at Fresno. At Berkeley the entire time will be spent in the laboratories and greenhouses of the agricultural department.

THE SCIENTIFIC DIVISION COMMITTEE OF THE UNITED STATES FISHERIES ASSOCIATION

ON November 15, 1926, President Dana F. Ward appointed Lewis Radcliffe as chairman of the scientific division committee, a new division of the U. S. Fisheries Association, with instructions to select the committee and organize the group. Mr. Ward suggested that the "scientific division" would serve as an advisory committee in helping to establish the association's policy with respect to scientific investigations, to keep its members advised of advances in science and to aid in the building up of research organizations through federal, state and private agencies.

The following tentative program of operation has been evolved:

1. The branches of science selected for inclusion in the division's organization are—bacteriology, dietetics, economics, statistics and technology.

(a) Bacteriology plays a very important part in questions pertaining to the spoilage of food. Examples—reddening of cod; decomposition of canned foods; taking and marketing of oysters.

- (b) Biological investigations must furnish the fundamental facts as a basis for sane legislation and to insure the highest development of our fishery resources without depletion or exhaustion.
- (c) Dietetics—the fishing industry should capitalize on the revolutions of science as to man's food requirements. Aquatic products are unusually rich in elements shown to be necessary to man's well being.
- (d) Economics—the accumulation of fundamental data on marketing of fish at home and abroad is basically essential to the growth, stabilization and permanence of our fisheries industries.
- (e) Statistics—complete, continuous and comparable statistics of the catch are an essential to the proper husbanding of this resource; trade statistics in the fisheries industries as in others are necessary to level out the peaks and valleys of production and to serve as a stabilizing factor.
- (f) Technology—through technological investigations and their application America has forged to the front in developing improvements in the methods of catching, handling and merchandising fishery products. Continued investigations on a larger scale are essential to maintenance of that position.

2. Division activities.

- (a) To aid the association in developing a policy on scientific matters along broad fundamental lines.
- (b) To coordinate the effort of federal, state, municipal and private scientific fisheries research agencies; promote harmony; and when requested, to advise such agencies as to lines of research which promise to be of greatest benefit to the fullest development of our fisheries for the common good of our people.
- (c) To keep those engaged in American fisheries informed as to the advances made in the several sciences affecting fisheries. This would include reviews of scientific articles not easily accessible and their interpretation.

The scientific division committee consists of thirtyfour members, divided into six sections. Dr. P. B. Parsons, New York Conservation Commission, Albany, is chairman of the bacteriology section; Elmer Higgins, U. S. Bureau of Fisheries, of the biological section; Dr. D. K. Tressler, Mellon Institute, of the dietetics section; L. T. Hopkinson, U. S. Tariff Commission, Washington, of the economics section; J. H. Mathews, New York City, of the statistical section, and H. F. Taylor, Atlantic Coast Fisheries Co., New York City, of the technological section.

FELLOWS OF THE ROYAL SOCIETY OF EDINBURGH

AMONG the candidates recommended by the council for election as fellows of the Royal Society of Edin-

burgh are the following: D. A. Allan, lecturer in geology, Armstrong College, Newcastle-upon-Tyne; S. E. Bastow, managing director, Bruce Peebles and Co., Limited; D. L. Bryce, student of microzoology, Quekett Microscopical Club, Surrey; H. G. Cannon, professor of zoology, Sheffield University; T. M. Finlay, lecturer in paleontology, Edinburgh University; A. W. Greenwood, assistant in the animal breeding research department, Edinburgh University; J. M. Gulland, demonstrator in organic chemistry, Oxford University; H. S. Holden, senior lecturer in botany, University College, Nottingham; O. D. Hunt, assistant naturalist, Plymouth Marine Station, temporary lecturer in zoology, Glasgow University; J. Hyslop, lecturer in mathematics, Glasgow University; E. T. Jones, professor of natural philosophy, Glasgow University; W. P. Kennedy, Carnegie research fellow in physiology, Edinburgh University; J. M. M. Kerr, professor of midwifery, Glasgow University; C. G. Lambie, lecturer in clinical medicine and assistant in therapeutics, Edinburgh University; D. McIntyre, assistant physician, Glasgow Roval Maternity and Women's Hospital and Glasgow Samaritan Hospital; M. R. Madwar, assistant Helwan Observatory, Egypt; F. N. K. Menzies, medical officer of health and school medical officer, London; T. P. Noble, professor of surgery, University, Bangkok, Siam; W. J. Owen, Member Royal Society Victoria, histologist, National Museum of Australian Zoology; C. Patterson, Marine Engineers, lecturer in mechanical engineering, design and theory of machines, Edinburgh University; H. H. Read, senior geologist, H. M. Geological Survey; J. E. Richey, district geologist, H. M. Geological Survey, Scotland; I. Sandeman, science master, George Heriot's School; R. Schlapp, lecturer in applied mathematics, Edinburgh University; F. W. Sharpley, professor of electrical and mechanical engineering, Indian School of Mines, Dhanbad, India; E. Shearer, professor of agriculture and rural economy, Edinburgh University; C. W. Wardlaw, lecturer in botany, Glasgow University; W. T. H. Williamson, assistant lecturer in chemistry, Edinburgh and East of Scotland College of Agriculture.

NATIONAL RESEARCH FELLOWSHIPS IN THE BIOLOGICAL SCIENCES

THE board of national research fellowships in the biological sciences announces the following appointments and reappointments for the year 1927–28, made at its meeting on February 4 and 5:

REAPPOINTMENTS

Kenneth S. Cole, biophysics Sherburne F. Cook, botany Carroll Lane Fenton, paleontology Adriance S. Foster, botany Samuel M. Gordon, biochemistry Harry D. Kruse, biochemistry Eduardo Quisumbing, botany R. C. Travis, psychology Conway Zirkle, botany

NEW APPOINTMENTS

Dean Turner Burk, botany Robert Emerson, botany Hudson Hoagland, psychology Theodore F. Karwoski, psychology Otto Klineberg, psychology Raymond C. Parker, zoology Gregory G. Pincus, zoology George Salt, zoology Charles F. Swingle, botany Raymond H. Wallace, botany

The second, and in all probability the final, meeting of the board for the year for the consideration of 1927-28 appointments is planned for the latter part of May. Applications for this meeting should be filed by April 15. Information and application forms may be obtained from the Secretary, Board of National Research Fellowships in the Biological Sciences, National Research Council, Washington, D. C.

> FRANK R. LILLIE, Chairman Board of National Research Fellowships in the Biological Sciences

SCIENTIFIC NOTES AND NEWS

THE two hundredth anniversary of the death of Isaac Newton on March 20 will be celebrated at Grantham in Lincolnshire, where Newton attended the grammar school and at Woolsthrope Manor House, his birthplace, six miles away. There will be meetings at which Sir J. J. Thomson, Sir F. Dyson, Dr. Horace Lamb, Professor G. H. Hardy and Dr. J. H. Jeans will speak.

ON February 24 a dinner was given in honor of Dr. A. P. Coleman, F.R.S., professor emeritus of geology in the University of Toronto. It was arranged by some of his colleagues, former students and other friends, and was the occasion of the presentation to the University of Toronto of a portrait of Professor Coleman and also of a fund for the maintenance of a gold medal to be known as the Coleman Medal. This medal is to be awarded annually to the student who has obtained, at the time of graduation, the highest standing in his class in geology and mineralogy.

DR. LORRAIN S. HULBURT, collegiate professor of mathematics in the Johns Hopkins University, has retired from active service. Dr. Hulburt has been a member of the faculty of the university for thirty-