#### COMMITTEES

Committee on Resolutions: F. J. Crider, Superior, Arizona, chairman.

Committee on Exhibits: C. A. Heiland, University of Denver, chairman.

Committee on Reception: R. E. Nyswander, University of Denver, chairman.

Committee on Press Service: J. H. McLennan, University of Denver, chairman.

Committee on Registration: R. G. Gustavson, University of Denver, chairman.

Committee on the Sigma Xi Dinner: M. H. Reese, University of Denver, chairman.

The executive committee has ruled that a registration fee of \$1 shall be charged.

Further announcement concerning arrangements will be made at the earliest possible date.

M. R. Schneck,

Secretary

UNIVERSITY OF ARIZONA, TUCSON

### THE PACIFIC DIVISION OF THE AMERICAN ASSOCIATION FOR THE ADVANCE-MENT OF SCIENCE

THE sixteenth annual meeting of the Pacific Division, American Association for the Advancement of Science, is to be held at the State College of Washington, Pullman, from June 15 to 18. The following affiliated and associated societies intend to join in the meeting through the holding of scientific sessions:

American Association of Economic Entomologists, Pacific Slope Branch. Secretary: H. A. Scullen, Oregon State College, Corvallis, Oregon.

American Chemical Society, Pacific Intersectional Division. *Chairman*, *Program Committee*: J. L. St. John, State College of Washington, Pullman.

American Meteorological Society. Secretary: Edward H. Bowie, U. S. Weather Bureau, San Francisco, California.

American Physical Society. Local Secretary for the Pacific Coast: Leonard B. Loeb, University of California.

American Phytopathological Society, Pacific Division. Secretary: B. A. Rudolph, Box 232, San José, California.

American Society of Ichthyologists and Herpetologists, Western Division. Secretary: Geo. S. Myers, Department of Zoology, Stanford University.

Astronomical Society of the Pacific. Secretary: C. H. Adams, 506 Merchants Exchange Building, San Francisco, California.

Botanical Society of America, Pacific Section. Secretary: F. DeF. Heald, State College of Washington, Pullman, Washington.

San Francisco Aquarium Society (joint meeting with Society of Ichthyologists and Herpetologists). Secretary: Mrs. Ethel Seale, Steinhart Aquarium, Golden Gate Park, San Francisco, California.

Society for Experimental Biology and Medicine, Pacific Coast Branch. Secretary: T. D. Beckwith, University of California.

Western Society of Naturalists. Secretary: E. G. Moberg, The Scripps Institution of Oceanography, La Jolla, California.

Western Society of Soil Science. Secretary: E. E. Thomas, Citrus Experiment Station, Riverside, California.

It is also hoped that a joint session of the Society of American Foresters, California, and North Pacific sections, and the western group of ecologists may be arranged. The Pacific Northwest section of the American Association of Cereal Chemists (J. L. St. John, State College of Washington, chairman of the program committee) is also expected to meet at Pullman during the third week of June.

Information concerning the presentation of papers or of other matters pertaining to the programs of the participating societies may be obtained from the secretaries mentioned above or from J. Murray Luck, secretary of the Pacific Division, American Association for the Advancement of Science, Stanford University, California. Correspondence regarding guest accommodation and matters of local arrangement should be addressed to W. E. Bradt, Department of Chemistry, State College of Washington, Pullman, chairman of the local committee.

## SCIENTIFIC NOTES AND NEWS

Dr. Theobald Smith, who recently retired as director of the department of animal pathology of the Rockefeller Institute for Medical Research at Princeton, has been elected a corresponding member of the Paris Academy of Sciences.

Dr. Lafavette B. Mendel, professor of physiological chemistry at Yale University, is honored in the March issue of the Yale Journal of Biology and Medicine, which is dedicated to him. This issue is called "The Mendel Anniversary Number" in recognition of

the sixtieth anniversary of his birth, and contains eighteen papers written by leading scientific men. The *Journal* has as a frontispiece the portrait of Professor Mendel executed by John Quincy Adams and presented to him by four hundred former students and associates on his sixtieth birthday.

Dr. Warren Weaver, professor of mathematics at the University of Wisconsin, was on February 1 appointed director for the natural sciences in the Rockefeller Foundation and in the General Education Board. He succeeds Dr. Herman Augustus Spoehr, who has resumed work with the Carnegie Institution of Washington.

Dr. Albert Einstein, who has been visiting professor at the California Institute of Technology, sailed from San Francisco for Germany on March 4.

Dr. Sven Hedin, who has been visiting the United States, sailed for China on March 3.

SIR F. GOWLAND HOPKINS, Sir William Dunn professor of biochemistry at the University of Cambridge, has been granted leave of absence with stipend for such one term as the general board may approve in each academic year in which he holds the office of president of the Royal Society.

AT a recent meeting of the Royal Astronomical Society, Dr. H. Knox-Shaw, Radcliffe observer, Oxford, was reelected president. New members of the council elected are Mr. C. R. Davidson, Sir Arthur Eddington, Mr. John Evershed and Dr. R. Stoneley.

Dr. E. A. Holbrook, dean of the School of Engineering and Mines, University of Pittsburgh, has been elected president of the Coal Mining Institute of America.

Dr. Georg Gever, emeritus director of the Austrian Geological Survey at Vienna, celebrated his seventy-fifth birthday on February 20.

Dr. Adolf Schmidt, formerly director of the Meteorological-Magnetic Observatory at Potsdam, will celebrate the fiftieth anniversary of his doctorate on March 20.

Dr. Albert Hassall, senior zoologist and assistant chief of the zoological division of the Bureau of Animal Industry, who has been in the bureau for fortyfour years, was honored recently by a gathering in Washington of fifty-five scientific workers of the department and others engaged in related technical fields. The speakers on the occasion were Dr. U. G. Houck, associate chief of the bureau; Dr. M. C. Hall, chief of the zoological division; Dr. Benjamin Schwartz, senior zoologist; Dr. N. A. Cobb, Bureau of Plant Industry; Dr. Paul Bartsch, National Museum, and Dr. W. W. Cort, the Johns Hopkins University. Dr. Hassall has specialized in the compilation of index catalogues of zoological literature descriptive of more than 50,000 animal parasites. The author catalogue is being brought up to date, and the term of service of Dr. Hassall, who has just reached his seventieth year, has been extended to enable him to continue this work.

THE Journal of the American Medical Association reports the retirement of Dr. Albert Allemann at the end of February from active duty in the library of the

surgeon general's office, where he has been since 1900. Dr. Allemann was born in Switzerland in 1860 and came to the United States in 1884. He entered the library in 1900 and began the study of medicine, graduating from George Washington University School of Medicine in 1904. Dr. Allemann was for fifteen years principal assistant librarian and editor of the "Index Catalogue." At one time he was assistant editor of the "Index Medicus" and later was on the staff of the "Quarterly Cumulative Index Medicus." Testimonials of the esteem and affection of his fellow workers at the library were presented to Dr. Allemann at the time of his retirement.

Dr. Willard Rouse Jillson, director and state geologist of the Kentucky Geological Survey since 1918, resigned on February 15. During his administration 230 county and regional maps, principally in standard colors and at the scale of one inch to the mile, covering the entire commonwealth, were surveyed and published, 51 full and fractional U. S. Geological Survey topographical sheets, scale 1: 62,500, and three new colored geological, geographic and relief maps of Kentucky, scale 1: 500,000. During this time there were prepared and published 47 cloth-bound volumes and 27 pamphlets on the geology and mineral resources of Kentucky.

Mr. Donald Scott has been elected director of the Peabody Museum, Harvard University, to succeed Dr. Edward Reynolds. Mr. Scott has been assistant director of the Peabody Museum since 1929.

Dr. George Samuel Bond, formerly of the Johns Hopkins University School of Medicine, has been named head of the newly organized department of cardiology at the Indiana University School of Medicine at Indianapolis.

Mr. Don S. Anderson, of the division of agricultural economics at the University of Minnesota, has been appointed a member of the staff of agricultural economics at the Wisconsin College of Agriculture, the appointment to become effective on March 29.

Dr. G. F. J. TEMPLE has been appointed to the chair of mathematics at King's College, London.

Dr. George Pacher Berry, who has been associated with the Rockefeller Institute for Medical Research, has resigned to become professor of bacteriology and assistant professor of medicine in the medical school of the University of Rochester.

Dr. Livingston Farrand, president of Cornell University, has been appointed a member of the Public Health Council of New York State by Governor Roosevelt, to succeed Dr. Jacob Goldberg, whose term of office has expired.

Dr. ALEXANDER SILVERMAN, head of the chemistry department at the University of Pittsburgh, has been appointed a trustee of the American Ceramic Society.

Mr. Chester Rhines, a graduate of North Dakota Agricultural College, has been appointed by the committee on the microbiology of the soil of the National Research Council to carry on investigations on the relation of amoeboid organisms to the development and persistence of acid fast bacteria in the soil, at the department of soil microbiology of the New Jersey Agricultural Experiment Station.

THE title of fellow of University College, London, has been conferred on Mr. Sidney George Brown, inventor of the Brown Gyro Compass and of the Frenophone; Dr. Harold John Channon, Johnston professor of biochemistry in the University of Liverpool, late biochemist on the staff of the department of experimental pathology and cancer research in the University of Leeds; Professor Henry Albert Harris, professor of clinical anatomy at University College and University College Hospital Medical School, Hunterian professor of the Royal College of Surgeons; Professor John Turner Macgregor-Morris, professor of electrical engineering at the East London College; Dr. Egon Sharpe Pearson, senior lecturer in the department of applied statistics and eugenics, University College, London; Professor Archibald Read Richardson, professor of mathematics in the University College of Swansea, late assistant professor of mathematics in the Imperial College of Science and Technology, and on Mr. Herbert Tilley, lately surgeon to the Ear, Nose and Throat Department of University College Hospital.

GRANTS made by the Committee on Scientific Research of the American Medical Association include: \$1,000 to Dr. Ernest Carroll Faust, professor of parasitology in the Tulane Medical School, for a study of Strongyloides infections in man and other mammalian hosts; \$650 to Dr. Wm. D. McNally, for a study of the effects of tobacco tar upon the lungs of rats and other animals; \$400 to Dr. William C. Langston and Dr. Paul L. Day, of the School of Medicine, University of Arkansas, at Little Rock, for further investigations in vitamin G deficiency with particular reference to cataract, the monkey being the experimental animal; \$500 to Dr. Israel S. Kleiner. professor of physiological chemistry at the New York Homeopathic Medical College and Flower Hospital. for the investigation of enzymes; \$400 to Dr. Clinton H. Thienes, professor of pharmacology at the University of Southern California School of Medicine, for the continuation of his work on the intrinsic nervous system of the intestine; \$250 to the departments of medicine and surgery, College of Medicine, University of Cincinnati, toward a study of temperature

variations in different parts of the skin; an additional grant of \$250 in order to continue an investigation of the problem of carbo-hydrate metabolism and cancer growth; \$250 to Dr. M. S. Burman, of New York City, for the study of fluorescent phenomena in cartilage, and \$200 to Dr. Nicholas A. Michels, of the Daniel Baugh Institute of Anatomy of the Jefferson Medical College, for work on erythropoiesis. Grants were also made to Dr. E. A. Smith, of the department of zoology at the Iowa State College, for a study of the effects of certain gases on the animal body, and to Dr. H. E. Himwich, of Yale University, for an investigation of the effects of alcohol on metabolism, and for the study of the regulation of metabolism by the autonomic nervous system.

DR. WARREN WEAVER, professor of mathematics; F. P. Woy, professor of engineering administration, and Dr. Gordon Ritchie, assistant professor of pathology, have been granted leave of absence from the University of Wisconsin, not from the University of Michigan, as was erroneously reported in SCIENCE.

MR. FRANK H. H. ROBERTS, Jr., archeologist at the Bureau of American Ethnology, has been detailed to the Carnegie Institution of Washington to serve as consulting archeologist for excavations at Chichen Itza

Dr. J. Enrique Zanetti, professor of chemistry at Columbia University, will represent the Chemical Foundation of New York and synthetic nitrate interests in the United States in a survey of the Chilean Nitrate Industry.

DR. J. PAUL VISSCHER, head of the department of biology of Western Reserve University, left for Europe on March 8 to continue his work on barnacles. He plans to work at Naples until May and later at Plymouth.

Mr. Carl O. Erlanson and Dr. Howard MacMillan are members of an American research mission to Peru, whose principal object is the study and collection of fly pests which are attacking fruit-bearing shrubs and trees.

Dr. C. B. WILLIAMS, lecturer in entomology at the University of Edinburgh, has been appointed professor of entomology at the University of Minnesota for the spring quarter. During that time he will give a series of lectures in advanced economic entomology. At the termination of this appointment Dr. Williams will return to England to become chief of the department of entomology at the Rothamsted Experimental Station.

PROFESSOR L. J. HENDERSON, of Harvard University, gave a public lecture on "The Influence of Galileo on Medical Science" on March 8.

Dr. Leslie T. Webster, of the Rockefeller Institute, will deliver the sixth Harvey Society Lecture at the New York Academy of Medicine, on Thursday, March 17, on "Experimental Epidemiology."

Dr. Lewellys Barker, of the Johns Hopkins University, delivered the annual Alpha Omega Alpha Lecture at the Jefferson Medical College, Philadelphia, on Friday evening, March 4, on "Medical and Other Conditions in Soviet Russia."

The Minnesota chapter of Sigma Xi recently sponsored the following series of lectures on "Evolution and Civilization": "Critical Epochs in Plant Evolution," Dean E. M. Freeman; "Physical Development of Man," Dean R. E. Scammon; "Primitive Men and Their Cultures," Professor A. E. Jenks, and "Evolution and Life Values," Professor David F. Swenson. The lectures were held in the Northrop Memorial Auditorium on the campus and were open to the public. The attendance was as large as forty-five hundred.

During the week of February 8, Dr. Carroll Lane Fenton gave four illustrated lectures before the Department of Geology at the Massachusetts Institute of Technology. His subjects were: "The Environment and its Records"; "Animal Associations of the Sea," "Natural History of Fossils" and "Theories and Records of Evolution."

At the University of Glasgow, Sir Arthur Keith delivered the Fraser Lecture in anthropology on March 4.

THE American Association of Pathologists and Bacteriologists will meet in Philadelphia from April 28 to 29, instead of from March 24 to 25.

THE Seventeenth Congress of the German Dermatological Society will be held in Vienna from May 16 to 18, when the principal subject for discussion will be cancer of the skin, introduced by Lubarsch of Berlin and Miescher of Zürich.

An Associated Press dispatch reports that preservation of approximately 6,000 acres of redwood forests in northern California has been made possible by a gift of \$500,000 by Mr. Edward S. Harkness, of New York. The contribution has been matched in part by funds from the California State Park Commission and a deed to the forest lands has been acquired by the commission.

The enlargement of the Bandelier National Monument in New Mexico to approximately 30,000 acres, to give additional protection to its unique prehistoric Indian ruins, and the transfer of jurisdiction over the area from the Forest Service to the National Park Service by presidential proclamation was recently announced.

### DISCUSSION

# DIRECT FINANCING FOR BASIC SCIENTIFIC RESEARCH

It is a familiar lament that no part of the financial profit returns directly to science in many cases where scientific research results in applications of great monetary value. Professional tradition forbids the scientist to patent his findings for personal gain, and scientists as a group have been slow to take financial advantage of new knowledge that might be used in support of investigation. There are, however, signs of a changing attitude. In recent years there have been a number of cases in which patents have been taken by individuals or institutions either to protect the public from extortion, in a medical product like insulin, or to secure funds for future investigation. A number of universities derive revenue for research from such royalties, and a corporation has been organized by American psychologists with this as one of its major purposes. The dictum that a scientific laboratory might "live by its findings" appeals to many as sound. If the initial findings were of sufficient practical value a laboratory might even become endowed by a single discovery.

The latest conspicuous example of this movement on the part of American scientists is the current financing of the Basic Science Research Laboratory of the University of Cincinnati. As first conceived by President Schneider, who was then dean of Engineering, this laboratory was to be a cooperative undertaking designed for a physico-chemical approach to biological problems by individuals trained in different fields. It was further hoped that results of commercial value might be obtained and thus financial independence be secured. As the annual budget that could be provided by the school of engineering was a modest one, it was necessary at the outset to undertake certain "commercial" research, and as there was no other housing available the work began literally in a garret. But those who visited that garret in its early years were impressed and not so greatly surprised when the youthful enthusiasm and the downright ability of its investigators brought forth results of scientific importance and commercial value.

With President Schneider as the presiding genius, who conceived the plan and gave it backing in the face of discouragement, and with Professor Sperti as the leader in the laboratory, results have been obtained that have exceeded expectations. The group of investigators that is being developed at Cincinnati can now proceed with adequate financial support of their own making and may hope that other facts of commercial as well as theoretical importance will