

of geology, University of Utah, Salt Lake City, Utah.

4. The conservation of the waters of the Colorado River from the standpoint of the Reclamation Service: Mr. Frank E. Weymouth, chief of construction, United States Reclamation Service, Denver, Colorado.

5. The interstate and international aspects of the Colorado River problem: Dr. C. E. Grunsky, vice-president of the Pacific Division, American Association for the Advancement of Science, San Francisco, California.

The preliminary announcement of the meeting will be issued shortly to members with further details of the meeting.

While none of the sections of the national association will arrange to hold sessions at this summer meeting the various fields of science will be represented in the meetings of the affiliated societies of the Pacific Division. Those scheduled to hold meetings at Salt Lake City are:

The American Physical Society.

The American Meteorological Society.

The American Phytopathological Society, Pacific Division.

The Ecological Society of America.

The Society of American Foresters.

The Cooper Ornithological Club.

The Pacific Coast Entomological Society.

The Pacific Slope Branch, American Association of Economic Entomologists.

The Plant Physiologists.

The Utah Academy of Sciences.

The Western Psychological Association.

The Western Society of Naturalists.

SCIENTIFIC NOTES AND NEWS

THE degree of doctor of science will be conferred in May by Liverpool University on Sir Charles Sherrington, Waynflete professor of physiology at the University of Oxford, president of the Royal Society and of the British Association for the Advancement of Science.

THE honorary degree of doctor of science has been conferred on Sir Thomas Muir by the University of Cape Town, in recognition of his researches in mathematics and mathematical history. Sir Thomas Muir was superintendent-general of education for Cape Colony from 1892 to 1915.

THE University of Dublin will confer the honorary degree of master of surgery upon Dr. George E. Armstrong, professor of surgery at McGill University, Montreal.

PROFESSOR EDWIN G. BORING, of Clark University, gave a lecture at Wellesley College on April 18, on "The language of the emotions."

DR. MAX PLANCK, professor of mathematical physics at Berlin, has been elected a foreign member of the Swedish Academy of Sciences, Stockholm.

IN order to secure scientific data on the value of moving pictures for use in teaching, the Commonwealth Fund, of New York, has given \$10,000 for the use of Professor Frank N. Freeman, of the University of Chicago, in the systematic study of the educational value of various kinds of pictures.

At the recent meeting of the German Microbiologic Society, the annual prize from the Aronsohn Foundation, amounting to 25,000 marks, was awarded to Dr. J. Morgenroth, professor of bacteriology at the University of Berlin and chief of a department in the Koch Institute.

DR. R. D. CARMAN, of the Mayo Foundation, has been elected an honorary member of the Roentgen Society of London.

SIR GERALD EDWARD CHADWYCK-HEALEY, Bt., has been appointed a member of the Royal Commission on Awards to Inventors, to fill the vacancy caused by the resignation of Lord Rayleigh.

DR. C. S. MYERS has resigned from the directorship of the psychological laboratory of the University of Cambridge in order to devote his whole time to the work of the British National Institute of Industrial Psychology.

FREDERICK W. SPERR, JR., chief chemist of the Koppers Company, Pittsburgh, Pa., has been awarded the Beal medal by the American Gas Association, in recognition of his work and paper, presented at the convention of the organization last November, entitled "The Seaboard Liquid Process of Gas Purification."

At a meeting held in Chicago on April 7, a Chicago Association for the Relief and Prevention of Heart Disease was formed to undertake the type of work carried on by similar

organizations in New York and Philadelphia. The following officers were elected: *President*, Dr. James B. Herrick; *vice-president*, Dr. R. B. Preble; *secretary*, Dr. Sidney Strauss; *treasurer*, Frank O. Hibbard.

THE sixth annual clinical session of the American Congress on Internal Medicine held in Rochester, Minn., April 3 to 6, was attended by about three hundred physicians. Dr. Sydney R. Miller, of Baltimore, was re-elected president, and Dr. H. S. Plummer, of Rochester, first vice-president of the organization.

PROFESSOR HAROLD E. BABCOCK, of Cornell University, has sailed for Bermuda at the request of the Colonial Government, and will remain there a month to assist the agricultural population of the islands to increase their efficiency in the production and distribution of their crops.

THE Entomological Club of Madison (Wisconsin) arranged for a radio phone lecture on "Bugs and Antennæ" by Dr. E. P. Felt, state entomologist of New York, sent out by the broadcasting station of the General Electric Company at Schenectady on April 24. Madison is well within the range of this station with fair conditions and the lecture could therefore be heard over much of the eastern United States and Canada.

DR. C. H. MAYO delivered the Joyce lecture in neurologic surgery before the Academy of Medicine at Portland, Oregon, and the Jerome Cochran lecture before a meeting of the Medical Association of the State of Alabama at Birmingham.

SIR THOMAS LEWIS will deliver the Noble Wiley Jones lectures under the auspices of the medical school of the University of Oregon between May 15 and 19. The lectures will deal with auricular fibrillation, quinidine and digitalis.

DR. P. CHALMERS MITCHELL gave two lectures during March at the Royal Institution on "The cinema as a zoological method."

THE Oxford Romanes lecture for 1922 will be delivered on May 24 by Professor A. S. Eddington, Plumian professor of astronomy at Cambridge and president of the Royal Astronomical Society. The subject will be "The

theory of relativity and its influence on scientific thought."

LINGAN STROTHER RANDOLPH, consulting engineer and professor of mechanical engineering at the Virginia Polytechnic Institute for twenty-five years, died on March 7, at the age of sixty-three years.

GEORGE BALLARD MATHEWS, F.R.S., who was lecturer in pure mathematics and then professor of mathematics at the University College of North Wales, Bangor, from 1884 to 1896, has died at the age of sixty-one years.

THE death is announced, at the age of fifty-four years, of Professor Emil Heyn, director of the Kaiser Wilhelm Institut für Metallforschung, Berlin-Dahlem.

A FELLOWSHIP at the University of Manchester for the encouragement of research in preventive medicine has been instituted in memory of the late Auguste Sheridan Delépine, professor of public health and bacteriology in the university from 1891 to 1921.

THE John Macoun Memorial Committee of the Ottawa Field Naturalists' Club announces that, as the number of copies to be issued of the autobiography of the late Professor John Macoun, naturalist to the Geological Survey of Canada, is limited, orders, with or without the subscription price of \$3.00, should be sent in by May 15, addressed to Mr. Arthur Gibson, treasurer, John Macoun Memorial Committee, Birks Building, Ottawa, Canada.

THE *Journal of the American Medical Association* says in regard to the centennial of the birth of Pasteur, who was professor of chemistry at Strasbourg from 1852 to 1854, that two celebrations are planned in that city, one on the exact date, and another, with great ceremony, on June 1, 1923, when an exhibition will be opened to demonstrate the progress that has been realized in consequence of Pasteur's discoveries, and the Pasteur monument will be unveiled. Professor Borrel, 3 rue Koeberlé, Strasbourg, is in charge of the exposition. The Academy of Medicine has decided to devote one of its sessions in honor of the work of Pasteur. As the Pasteur Institute intends to commemorate this anniversary on the exact date, December 27, 1922, the Academy of Medi-

cine has chosen December 26, the eve of the Pasteur Institute's celebration, in order that the same guests may participate in the two ceremonies. At the session will be presented data showing the progress accomplished since Pasteur's days in general biology, medicine, surgery, obstetrics, veterinary medicine and hygiene. Members of the academy who have been chosen to deliver addresses are: Widal, medicine; Delbet, surgery, Wallich, obstetrics; Barrier, veterinary medicine, and Calmette, hygiene.

THE United States National Museum has recently secured by purchase, through the co-operation of the United States Department of Agriculture, the large private herbarium of Dr. Otto Buchtien, formerly director of the Museo Nacional, La Paz, Bolivia, built up by him through many years of botanical exploration in South America and through exchanges with institutions in many parts of the world. The herbarium consists of approximately 45,000 specimens, and is notable for its large proportion of tropical American species, particularly of the floras of Bolivia, Chile, Argentina and Paraguay.

THE thirty-fourth meeting of the German Society of Internal Medicine will be held at Wiesbaden from April 24 to April 27, under the presidency of Professor L. Brauer. The chief subjects for discussion will be jaundice, introduced by Professor Eppinger, of Vienna, and the hypophysis, introduced by Professor Biedl, of Prague.

THE American Medical Association announces that the committee on therapeutic research of the Council on Pharmacy and Chemistry will consider applications for grants to assist research in subjects which, in the opinion of the committee, are of practical interest to the medical profession, and which research might not otherwise be carried out because of lack of funds. Requests should state the specific problem which is to be studied, the qualifications of the investigator, the facilities available to him, and, if work is to be undertaken in an established research institution, the name of the individual who will have general supervision. The committee will also appreciate offers from research workers to undertake in-

vestigations of questions which may be suggested by the council. Applications should be addressed to Chairman, Therapeutic Research Committee, Council on Pharmacy and Chemistry, 535 North Dearborn Street, Chicago, Illinois.

IT is announced in *La Géographie* for November 1921 that an attempt to cross the Sahara with twelve motor vehicles will shortly be made. The starting-point will be Tuggurt, the terminus of the Algerian railway, and the proposed route leads by Insalah, the Hogger region, and Adar of the Iforas, to Bureni on the Niger, 200 kilometers east of Timbuktu. The leader of the expedition will be Commandant Lafargue, and it will include a dozen members representing various government departments and other interests, among them being a cinema operator. It is hoped that the difficulty caused by the evaporation of the motor spirit in so torrid a climate has been overcome, but it is pointed out that there is a vast difference between the exceptional use of motor traction in this region for a special purpose, which may be feasible, and its regular commercial use.

DR. WALTER LIBBY, the historian of science, is delivering a novel series of lectures to the Industrial Fellows of the Mellon Institute of Industrial Research, the faculty members of the University of Pittsburgh, and the students of the graduate school of the university. The aim of this series of discourses is to discover the mental conditions of successful research. Dr. Libby takes account of certain phases of individual (or differential) psychology, deals with some of the more fruitful logical processes, and considers the means of stimulating the spirit of scientific discovery. The illustrative material is drawn from the records of the progress of chemistry and other sciences. The following is an outline of the course of lectures: (1) The Scientific Imagination; (2) The Hypothesis; (3) Conceptual Thinking; (4) Induction (contrasted with Deduction); (5) Reasoning by Analogy; (6) The Nature of Cause; (7) Experiment and Observation; (8) Scientific Laws; (9) Social Stimulation of Investigation; (10) The Suggestive Value of the Industries; (11) The Classification of the Sciences; (12) The Genetic Method. Dr.

Libby devotes a part of each period, say, twenty minutes of the hour, to a colloquium or critical discussion of the nature and application of the subject under consideration. In this way scientific technic is deliberated upon in all its aspects. These lectures are being delivered from 8:30 to 9:30 a.m. on Tuesday of each week of the present university semester, in the Fellows' Room of the Mellon Institute.

UNIVERSITY AND EDUCATIONAL NOTES

THE will of the late Miss Janet Williams, of Frederick, Md., contains a bequest of \$30,000 to Hood College, to create and maintain an astronomical building in memory of her father, John H. Williams, to be known as the Williams Observatory.

FESTIVITIES are being planned for this spring in honor of the founding of the University of Padua in 1222. Professor Lucatello, the rector of the university, is in charge of the arrangements.

THE Japanese ambassador at Vienna has presented the sum of 6,500,000 crowns to the university as a personal donation in tribute to the scientific work being done there in spite of the unfavorable circumstances.

DR. CLARENCE C. LITTLE was elected president of the University of Maine on April 7. Dr. Little graduated from Harvard in 1910 and received the doctor's degree in 1914. In 1916 he became an assistant dean of Harvard College and research fellow in genetics for the Cancer Commission of Harvard University. Since his discharge from the army as major he has been research associate in the Station for Experimental Evolution of the Carnegie Institution.

DR. D. S. ROBINSON, assistant professor of philosophy at University of Wisconsin, has accepted the professorship of philosophy at Miami University. Dr. E. B. Powell has held the chair of philosophy since 1905 and resigns the chair at the close of this year to devote his time to writing.

JOHN ARTHUR RANDALL, secretary of the Advisory Board of the General Staff of the War Department, has been appointed president

of Rochester Mechanics Institute. Mr. Randall was selected by the trustees to continue the development of a technical educational program containing liberal components.

DR. GEORGE THOMAS, formerly professor of economics in the University of Utah and since 1921 superintendent of public education in Utah, has been installed as president of the university.

DISCUSSION AND CORRESPONDENCE

POPULAR SCIENCE

TO THE EDITOR OF SCIENCE: I am very much interested in Dr. Slosson's letter about popular science writing which appears in SCIENCE for March 3, just received. Since some of my own information and experience is along this line it may be worth while for me to make some additional comment.

I think that I can see a large number of conditions involved in the fact mentioned by Dr. Slosson that there is a dearth of popular science writers in this country, but I shall only discuss one or two of them. First and foremost is the malodorous condition of the popular science field which for some time has been so largely and so conspicuously occupied by fabricators, exaggerators, emotionalists, ignoramuses and exploiters that many people of training and ability hesitate to enter. Furthermore if an entrance is attempted by use of an informative article of clarity and real merit the author may have the humiliation of seeing his work rejected for that of some irresponsible clown or gaudy sentimentalist who is successful in assembling a group of highly stimulating words ("lots of pep") which may or may not have some relation to fact.

Even more important than such discouragement to potential writers is the effect of lax, inaccurate and falsified statement of scientific material upon the reading public. I am sure that for a period of fifty years more hoaxes have been perpetrated by newspapers in the name of science than in any other way. As much as thirty years ago most intelligent people were suspicious of material presented by the public press as science. In the last