

on Lake Mendota and inspection of the chemical laboratories on the university's campus.

A program of scientific papers and general addresses, which will be opened by President Glenn Frank, of the University of Wisconsin, will be given, which, it is hoped, will bring to a focus the conspicuous lines of chemical investigation characteristic of that being carried on in the research centers of the middle west. Following the precedent set by the national society, visitors will be asked to be "paying guests," a registration fee of two dollars having been fixed to help defray the expenses of the meeting.

#### A SCIENTIFIC STUDY OF EDUCATIONAL WORK IN MISSISSIPPI

DURING the last three months of 1925, a survey of the entire public educational system of Mississippi was completed under the direction of Professor M. V. O'Shea, of the University of Wisconsin. It was found while the work was in progress that there were a number of educational and scientific problems that could not be solved without an extensive application of intelligence tests and measurements of educational achievement. Bernard B. Jones, of Washington, D. C., a former resident of Mississippi, who has contributed liberally to the support of higher education in the state, agreed to finance a comprehensive test and measurement program and appropriated a very generous sum for the work. The funds are being administered by Governor Whitfield. Professor O'Shea, who is directing the work, has the counsel of a board of consultants of twelve leaders in work in intelligence tests and educational measurements, in addition to Professor V. A. C. Henmon, Curtis Merriman and John G. Fowlkes, all of the University of Wisconsin, who are associated with Professor O'Shea in carrying through the program and scoring, tabulating and interpreting the results. Intelligence tests, measurements of achievement and tests for aptitudes will be applied to approximately 50,000 pupils in the elementary and high schools and the colleges and university, and in addition data relating to the hygiene and educational conditions of school buildings and the dietary regimen of pupils will be secured and correlated with intelligence and educational data. It is expected that a large amount of data of educational and scientific value will be secured from this thorough-going program, which is more extensive than has ever been carried through in any state heretofore.

#### SCIENTIFIC NOTES AND NEWS

A BUST of Dr. William H. Welch, director of the School of Hygiene and Public Health at the Johns Hopkins University, was unveiled on February 22 on the occasion of the commemoration day exercises

of the university. Dr. Simon Flexner, director of the Rockefeller Institute, made the presentation speech.

PRESENTATION of the William H. Nichols Medal to Dr. S. C. Lind, associate director of the Fixed Nitrogen Research Laboratory, will take place at a meeting of the New York Section of the American Chemical Society at the Chemists Club on March 5. Dr. Colin G. Fink, of Columbia University, will speak on "My Friend, Lind," and Dr. Arthur B. Lamb, of Harvard University, on "Lind, the Chemist." Dr. S. C. Lind will deliver the address of acceptance on "Chemical Activation by Alpha Particles."

DR. K. F. HERZFELD, professor of theoretical physics and chemistry in the University of Munich, will arrive next month to fill an appointment as the first James Speyer visiting professor at the Johns Hopkins University. The professorship was recently established with an endowment of \$50,000 given by James Speyer to provide for an exchange of knowledge between Germany and the United States by bringing a distinguished German scientist to this country each year.

ROY CHAPMAN ANDREWS, of the American Museum of Natural History, had conferred upon him an honorary degree by Brown University on February 24.

THE Robert W. Hunt medal was awarded to C. L. Kinney, Jr., metallurgist, of Chicago, at the annual meeting of the American Institute of Mining and Metallurgical Engineers, held in New York, for his paper on "The Economic Significance of Metalloids in Basic Pig Iron in Basic Open-hearth Practice." The J. E. Johnson, Jr., award was given to S. P. Kinney, metallurgist, U. S. Bureau of Mines Experiment Station, Pittsburgh, in recognition of his research work along blast-furnace lines.

THE Royal Danish Society of Science has awarded one of its annual gold medals for prize treatises to Harry Raymond and Ralph E. Wilson, both of the Dudley Observatory, Albany, for their observations in relation to the sun and certain stars.

LOYD A. JONES, physicist of the Eastman Kodak Co., has been awarded a prize of \$250 by the Association of Scientific Apparatus Makers of America, for his paper on "Photographic Spectrophotometry." The prize was given for the best paper on scientific instruments presented during 1924 for publication in the instrument section of the *Journal* of the Optical Society of America and *Review of Scientific Instruments*.

DR. G. CLARIDGE DRUCE, of England, was elected a corresponding member of the Botanical Society of Geneva at the recent jubilee celebrations.

THE French government has conferred upon Sir Robert Hadfield the cross of the officer of the Legion of Honor in recognition of his contributions to metallurgy.

THE Académie de Médecine of Paris has awarded the Buisson prize of 12,000 francs to Dr. Levaditi for his work on bismuth in the treatment of syphilis.

PROFESSOR H. BRERETON BAKER has been nominated to the office of president of the Chemical Society of England, in place of Dr. Arthur W. Crossley, who has resigned on account of ill health. The annual general meeting of the society will be held at the University of Manchester on March 25.

THE retirement of Professor Carl H. Barus, who has been professor of physics and dean of the graduate department of Brown University for twenty-three years, is announced. Professor Rowland G. D. Richardson, head of the department of mathematics, will succeed Professor Barus.

OWING to his absence from the United States for a period of several months, Dr. C. H. Myers has resigned the executive secretaryship of the section for agronomy of the International Congress of Plant Sciences. Dr. R. G. Wiggans, of the department of plant breeding, Cornell University, has been appointed to fill the vacancy.

THEODORE J. BRADLEY, dean of the Massachusetts College of Pharmacy, Boston, has been elected president of the American Pharmaceutical Association for 1926-27.

DR. ADA POTTER, until recently first assistant in the clinic and laboratories of Dr. Cornelius Winkler in the University of Utrecht, Holland, has been appointed for a term of two years as associate in the research program in cerebral physiology of the State University of Iowa, with the title of research associate professor of psychiatry.

AN exchange professorship has been arranged between Dr. J. G. Thomson, director of protozoology in the London School of Hygiene and Tropical Medicine, and Dr. R. W. Hegner, professor of protozoology in the School of Hygiene and Public Health of the Johns Hopkins University. Dr. Hegner will sail on March 31 to take up his duties in London.

DR. MAX ELLIS, professor of physiology at the University of Missouri, has been granted a year's leave of absence to do research work abroad.

DR. FREDERICK L. HOFFMAN, consulting statistician, Prudential Insurance Company of America, is making arrangements for an extended trip to Mexico and Guatemala during the coming summer. Dr. Hoffman will be chiefly concerned with Mexican mortality prob-

lems, but will also give attention to the physical anthropology of different Indian tribes and the effects of tropical conditions on the duration of life among Europeans and white settlers from North America.

DR. L. H. DEWEY, chief of the office of fiber investigations, U. S. Bureau of Plant Industry, has gone to Porto Rico for two months of field work.

DR. ALICE M. OTTLEY, associate professor of botany at Wellesley College, has returned from South Africa where she has been exchange professor of botany at the University of Witwatersrand in Johannesburg. In addition to her teaching, Dr. Ottley collected plants in several regions of very different climatic and soil conditions, centering her work in the Union of South Africa and in the regions around Cape Town.

DR. ALMA J. NEILL, associate professor of physiology at the University of Oklahoma, has been awarded a scholarship by the American Association of University Women, and will spend the next academic year, on leave from the university, in work abroad.

RECENT visitors to the United States include: Sir George Buchanan, senior medical officer of the Ministry of Health, London; H. Bennett Johnson, of the Wellcome Tropical Research Laboratory, Khartum, Sudan; J. G. Meyers, entomologist, Wellington, New Zealand; Kota Monzen, of the Imperial College of Agriculture and Forestry, Morioka, Japan, and Dr. V. V. Nikolsky, chief of the entomological section, Moscow Tropical Institute, Moscow, Russia.

PROFESSOR PAUL SABATIER, director of the Institute of Chemistry at the University of Toulouse, France, will visit the United States next September.

DR. CUTHBERT CHRISTY has left Nyasaland for London with 5,000 specimens of fish, including many new species, from Lake Nyasa, the result of a ten months' fishing expedition on behalf of the British Museum.

DR. HENRIK LUNDEGARDH, director of the Ecological Station at Torekov, Sweden, recently gave at the U. S. Department of Agriculture an illustrated account of investigations in plant ecology conducted on the island where his station is located.

DR. J. BARCROFT, professor of physiology at the University of Cambridge, delivered a lecture entitled "Hæmoglobin," before the Chemical Society, of England, on February 11, in the Chemical Laboratory at University College, London.

A SERIES of three lectures under the auspices of the Bartol Research Foundation will be given by Dr. E. O. Hulburt, of the Naval Research Laboratory,

Washington, D. C., in the Lecture Hall of the Franklin Institute, at four p. m., as follows: March 9, "The Kennelly-Heaviside Layer and Radio Wave Propagation"; March 12, "Hydrogen Spectrum Lines in the Stars and in the Laboratory"; and on March 17, "The Pressure of Light on Electrons."

PROFESSOR GEORGE G. SCOTT, of the Biology Department of the College of the City of New York, lectured before the Williams College Faculty Science Club, at Williamstown, Mass., on February 19, on "A Biological Interpretation of Human Society."

ON February 13, Dr. Barnum Brown, of the American Museum of Natural History, delivered an address to the Royal Canadian Institute on the subject "A Journey through India and Kashmir."

Two peaks of the Sierra Nevada Mountains in California hitherto unnamed have been given the titles of Mount Irvine and Mount Mallory, in honor of the two members of the British expedition for the conquest of Mount Everest, who perished near its summit in 1924.

PROFESSOR ARTHUR ROBERTSON CUSHNY, of the chair of materia medica and pharmacology in Edinburgh University since 1918, died on February 25, aged sixty years.

DR. H. KAMERLINGH ONNES, emeritus professor and director of the physical laboratory at the University of Leyden, died on February 21, aged seventy-six years. He received the Nobel prize for physics in 1913.

PROFESSOR GUNNAR SCHOTTE, director of the Swedish State Forest Experiment Station at Stockholm, recently died at the age of fifty-one years.

THE United States Civil Service Commission announces an open competitive examination for archeologist, receipt of applications for which will close on April 6. The examination is to fill a vacancy in the Bureau of American Ethnology, Smithsonian Institution, and vacancies occurring in positions requiring similar qualifications, at an entrance salary of \$3,800 a year. The duties are to study various phases of prehistoric life of Indians and Hawaiians by archeological field work, and to write reports and bulletins on this field work for publication with a view to the advancement and diffusion of knowledge relating to the American Indians.

AT a meeting of the Northeastern section of the American Chemical Society to be held at the Massachusetts Institute of Technology on March 12, Dr. Benjamin T. Brooks, consulting chemist on the staff of Arthur D. Little, Inc., will speak on "The Relation of Research to the Petroleum Industry," and Professor Frederick G. Keyes, head of the department of

chemistry in the Massachusetts Institute of Technology, will read a paper on "The Importance to Chemical Theory of a Knowledge of the Physical Properties of Substances."

THE Ohio Phytopathological Society held its annual winter meeting at the Ohio State University on February 4. At the afternoon meeting papers were given by Curtis May, A. G. Newhall, J. W. Baringer, S. S. Humphrey, W. G. Stover and E. G. Hambleton, R. C. Thomas, R. B. Wilcox, Paul E. Tilford, H. A. Runnels, W. G. Stover and H. A. Runnels and H. C. Young. Two papers were on the treatment of cereals for the control of smut, two on mosaic, two on tomato streak, two on Fusarium, one on Appressoria of *Colletotrichum lagenarium*, one on chemical structure of fungal walls and one on the progress of barberry eradication. The business meeting was held after the banquet following the afternoon program. The following officers were elected for the coming year: *President*, Dr. W. G. Stover, Ohio State University; *secretary-treasurer*, S. S. Humphrey, Ohio State University; *member executive committee*, D. H. C. Young, Ohio Agricultural Experiment Station.

THE bill to prohibit teaching in tax-supported schools the theory that man "ascended or descended from lower animals" was passed by the Mississippi Senate on February 24, 29 to 16, after three hours debate. The bill was passed by the House of Representatives on February 8 by a vote of 76 to 32.

THE Stanley P. Black Memorial Fund is endeavoring to provide for a lecture on medical and allied subjects two or three times a year by scientists of national reputation. The lectures will be similar in scope to the Lane lectures at the Stanford University Medical School. The Stanley P. Black Memorial Hall in the Professional Building, Pasadena, will be completed March 1, and Dr. Alfred S. Warthin, professor of pathology, University of Michigan Medical School, will inaugurate the series of lectures in March or April.

THE will of the late Dr. Henry Crain Tinkham, dean of the University of Vermont College of Medicine, Burlington, provides for establishing one or more scholarships in the college to be known as the Dr. H. C. Tinkham scholarships; Dr. Tinkham also gave his medical library to the college, and his surgical instruments to the Mary Fletcher Hospital.

THE Museum of the American Indian, Heye Foundation, has filed plans for a three-story brick museum and storehouse, to occupy a plot 60 by 100 feet, on the west side of Eastern Boulevard in the Bronx, New York City. The building will cost \$100,000. The ground is a part of a six-acre triangular plot presented to the museum by Archer M. Huntington.

DR. WILLARD ROUSE JILLSON, director and state geologist of the Kentucky Geological Survey, Frankfort, Ky., recently gave his private geological collection consisting of mineral ores, rocks and fossil specimens to the University of Louisville, Louisville, Kentucky. The collection consists of several hundred specimens.

SIX hundred specimens of rocks from the Hawaiian Islands, collected by Sydney Powers, chief geologist of the Amerada Petroleum corporation, Tulsa, have been contributed to the department of geology at the University of Oklahoma.

UNDER the auspices of the Commission of Standardization of Biological Stains a *Journal of Stain Technology* has just been started under the editorship of H. J. Conn, chairman of the commission, who represents the field of bacteriology. The fields of chemistry, zoology, pathology and botany are represented, respectively, by the following associate editors: W. C. Holmes, S. I. Kornhauser, F. B. Mallory and W. R. Taylor. The journal is devoted primarily to the nature and uses of biological stains, also including articles dealing with microscopic technic in general when they have a close bearing on staining procedures. Brief notes of only one or two paragraphs dealing with new staining procedures are welcome. This journal is called to the attention of those who have matter for publication along the lines indicated. Authors are invited to submit the manuscript to the editor at the address: Lock Box 299, Geneva, New York.

ACCORDING to *Museum News*, an exposition of new discoveries in science was opened at the Carnegie Museum, Pittsburgh, on January 9, the exhibit being patterned somewhat after the demonstration made each year at the president's reception of the British Royal Society in London, which the director of the museum, Douglas Stewart, attended last summer. In developing plans for the exposition the Carnegie Museum has secured the cooperation of the Engineers Society of Western Pennsylvania, the Pittsburgh Section of the American Chemical Society, the Federal Bureau of Mines, the Mellon Institute of Industrial Research of the University of Pittsburgh and the Carnegie Institute of Technology. Each of these organizations has recently developed products on exhibition. In addition all the large industrial concerns of the district have offered their assistance in working out the displays. The uses of the various exhibits, inventions and products were explained and demonstrated to visitors to the museum.

ACCORDING to the *Electrical Review* a new institution has been formed, to deal in a scientific manner with the problem of preparing and utilizing our fuel resources with much greater efficiency. This new

organization, which is called "The Institution of Fuel Economy Engineers," was inaugurated at a meeting of experts held recently at the Engineers' Club, London. Among those taking part in the proceedings were Dr. T. Barratt, Professor Bacon, Mr. W. C. Goodchild (representing Sir Henry Fowler), Dr. R. Lessing, Messrs. E. W. L. Nicol, John Bruce, S. W. Bettony, J. S. Gander and A. C. Mahar. The first council was elected and it was decided to form sections in different parts of the country. It is hoped to make this new institution the responsible organization representing every section of fuel technology throughout the country.

SINCE January 1, 1926, the secretarial office and the office of the *Journal of the American Pharmaceutical Association* have been located at 10 West Chase Street, Baltimore. All mail for the American Pharmaceutical Association and for the *Journal of the Association* should be sent to this address. Combination of the offices of the association, which have heretofore been located in different cities, is a preparation for the greater service to be promoted by the American Pharmaceutical Association when the new headquarters building, for which a campaign has been in progress, will be procured. The location of the proposed new building has not yet been decided on.

THE Leningrad Institute of Applied Botany is organizing a series of expeditions to the tropical countries for the purpose of importing the seeds of cereal plants which do not exist in USSR, but can be successfully cultivated. Professor Vavilov, director of the Department of Field Cultures, will proceed to the Mediterranean Archipelago, Egypt, Abyssinia, Syria and Palestine to investigate the cultures of barley, beans, flax, etc. Last year Professor Vavilov imported about 7,000 samples of seeds from Afghanistan. Professor Burasov is at present studying the cultures of potatoes, tomatoes, maize, sunflower, etc., in the Western Andes of South America. Professor Voronov is at work in the Brazilian mountains, studying the types of rubber trees that can stand a severe climate.

ONE of the finest country estates in the vicinity of Boston has been presented to the New England Federation of Bird Clubs as a gift to be maintained in perpetuity as a sanctuary for birds and other species of wild life. The donors are Gorham Brooks, of Boston and Medford; Mrs. Robert W. Emmons, 2d, of Boston and Bourne, and Mrs. James Jackson, of Boston and Westwood. The estate consists of a large brick mansion house, a brick stable, one large cottage and more than eighty-four acres of land of the finest kind of rolling territory, forested in spots, studded with spring-fed ponds and possessing large fertile fields for such cultivation as may be required in con-

nection with its proper management in the future for wild life conservation.

ACCORDING to an associated press dispatch, a refund of taxes to the Nobel Foundation which would greatly increase the value of the Nobel prizes for next year has been recommended to the Riksdag by the minister of finance, who admits that the taxes so far automatically imposed on the Nobel estate have been out of proportion to the burden laid on the rest of the country. The government proposes to refund three fourths of the sums paid by the estate for 1926, and asks the Riksdag for a special appropriation for that purpose.

### UNIVERSITY AND EDUCATIONAL NOTES

THE University of Pennsylvania has received the sum of \$100,000 as a memorial to former Provost Charles C. Harrison, a gift from his sons and daughters. The fund is to be used for an endowment to establish visiting lectureships at the university.

THE late John D. Larkin has bequeathed to the University of Buffalo the sum of \$100,000, which is to be added to the John D. and Frances H. Larkin Foundation, toward which Mr. Larkin has previously given \$250,000. The fund is primarily for the endowment of the school of chemistry.

Two \$100,000 gifts have been received by the Johns Hopkins half century committee, making a total of \$1,358,283 collected. It is hoped to raise in Maryland \$1,500,000. Mr. and Mrs. Henry Walters are the donors of the first \$100,000, and Mr. R. Brent Keyser, president of the board of trustees of the university, of the second \$100,000.

VASSAR COLLEGE has received a gift of \$75,000 by an anonymous friend for the erection of a demonstration laboratory in connection with the course in eugenics recently established at the college. The laboratory will serve for the scientific study and demonstration of the care and nurture of children from infant years to school age. It is expected that the building will be erected on the Wing Farm, land recently acquired by the college.

MRS. FRANK R. LILLIE has made an additional gift of \$4,000 to the University of Chicago toward the construction and equipment of the Whitman laboratory of experimental zoology, making a total of \$94,000 given by Professor and Mrs. Lillie for the laboratory.

DR. JAMES NATHANIEL JENNE, professor of clinical medicine and therapeutics in the College of Medicine of the University of Vermont, has been elected acting dean of the college. Dr. Jenne succeeds the late Dr. H. C. Tinkham, whose death occurred last December.

DR. CHARLES H. KEENE, professor of hygiene and director of physical education at the University of Buffalo, has been appointed lecturer in physical education at the Graduate School of Education, Harvard University, and also director of the Harvard summer school of physical education.

PROFESSOR H. W. TAYLOR, formerly professor of mathematics at Emporia College, has been appointed professor of mathematics at Southwestern College.

AT the University of Aberdeen, Dr. John Cruickshank, reader in bacteriology, has been appointed to the new chair of bacteriology, and Dr. A. W. Borthwick, chief research officer and education officer to the forestry commission, has been appointed to the new chair of forestry.

### DISCUSSION AND CORRESPONDENCE BLEACHED FLOUR AND NEUTRALIZED CREAM

IN justice to the milling industry as well as to the bread-eating public, I feel that some statements in Dr. H. W. Wiley's two recent book reviews in *SCIENCE* of October 16, 1925, p. 352, and December 4, 1925, p. 511, in which he takes occasion to attack what he calls "corpse-white" flour, should have some comment. The present writer is not an apologist for flour bleaching, indeed, he has frequently been accused of being an active opponent of all kinds of bleaching, but in fairness to the readers of *SCIENCE*, not all of whom may consider themselves expert in the subject of nutrition, the demand of some part of the public for a pure white, bleached flour should be considered, as also the demand for a flour not containing the bran.

I am glad to note that Dr. Wiley is willing to allow the importance of bread by calling it our "fundamental diet"—a statement that admits considerably more than the statement of one who said it had "little more food value than plaster of Paris." I am also glad to note his admission of the greater digestibility of the protein and starch in standard patent flour as compared with graham flour, though he follows it up by a quotation which, as an offset, aims to magnify the importance of the mineral and vitamin content of graham flour.

It is difficult for one who has interested himself in the methods and details of milling and the efforts of millers to produce from wheat the maximum amount of pure flour to have sympathy with his criticisms directed against wheat conditioning methods in which the purpose of the miller is to produce as sharp a separation between the branny and the floury portion of the wheat grain as is possible. Once having learned the effect which water has in preventing the comminution of the bran, it would