

cine and surgery, Grant Medical College, Bombay; Mr. J. C. F. Fryer, director, Ministry of Agriculture and Fisheries Pathological Laboratory, Harpenden; Lieutenant-Colonel F. J. M. Stratton, professor of astrophysics in the University of Cambridge; Mr. G. Stuart, assistant director, laboratories, Department of Health, Palestine. *M.B.E.*: Mr. E. W. Davy, assistant director of agriculture, Nyasaland Protectorate.

### SCIENTIFIC NOTES AND NEWS

THE degree of doctor of laws was conferred at the commencement exercises of the University of Michigan on Dr. Robert A. Millikan, director of the Norman Bridge Laboratory of the California Institute of Technology.

BOSTON UNIVERSITY has conferred the degree of doctor of laws on Dr. Walter Bradford Cannon, George Higginson professor of physiology at Harvard University, and on Frank Alexander Horne, known for his work on the development of mechanical refrigeration.

AT the commencement exercises of Northwestern University Dr. William J. Mayo, of Rochester, Minnesota, and Professor William Hammond Wright, of the Lick Observatory, received honorary doctorates of science.

DR. JAMES F. NORRIS, professor of organic chemistry and director of the research laboratory at the Massachusetts Institute of Technology, was the recipient of the degree of doctor of science at the commencement exercises at Bowdoin College.

ON June 10 Professor Ralph H. McKee, of Columbia University, received the degree of doctor of laws from the University of Maine, where he was head of the department of chemistry and chemical engineering from 1909 to 1916. On June 17 he was awarded the degree of doctor of science from the College of Wooster, where he received his collegiate training.

THE doctorate of science has been conferred by Colgate University on Dr. Borden Smith Veeder, physician and author of medical books, and on Mr. Albert Edward Wiggam, lecturer, editor and author.

AT the approaching meeting of the American Medical Association which will be held at Portland, Oregon, from July 8 to 12, Dr. Malcolm Harris, of Chicago, will be installed as president, succeeding Dr. William S. Thayer, of the Johns Hopkins University. Addresses will be made by Governor Isaac L. Patterson, of Oregon, and by Dr. Harris.

G. W. PIERCE, Rumford professor of physics at Harvard University and director of the Cruft Laboratory, is this year's recipient of the medal of honor which is awarded annually by the Radio Institute for outstanding achievements in radio communication.

THE *Journal* of the American Medical Association reports that at the diamond jubilee of the city of Rochester, Minnesota, the Olmsted County Business Men's Association on June 11 placed a tablet which was inscribed "as a tribute to Rochester's most illustrious citizens, William James Mayo, Charles Horace Mayo, surgeons, scientists, lovers of their fellowmen." The Mayos were guests of honor also on June 6 at a testimonial dinner, given by the faculty of the clinic and foundation. The faculty voted to establish an annual W. J. and C. H. Mayo lectureship to be delivered in Rochester by a member of the faculty on a subject related to some contribution which the Mayo family had made to the advancement of medicine. Dr. Henry S. Plummer has been invited to deliver the first Mayo lecture.

FRIENDS of Dr. John Uri Lloyd, professor emeritus of chemistry and pharmacy at the Eclectic Medical College, recently gave a dinner at the Cincinnati Club to commemorate his eightieth birthday. Dr. John M. Withrow was toastmaster. Among the speakers were Mr. E. G. Eberle, editor of the *American Pharmaceutical Journal*; Professor Edward Kremers, of the University of Wisconsin, and former Judge John W. Peck.

IN honor of his seventy-fifth birthday on May 31 a dinner was tendered to Dr. George P. Merrill by his friends and colleagues at the Cosmos Club. The committee in charge consisted of Dr. Alexander Wetmore, chairman; Dr. Marcus Benjamin and Dr. Paul Bartsch. Sixty-two guests were present. Dr. Abbot presided and the speakers were Drs. Benjamin, L. O. Howard, H. S. Washington and Harvey Wiley. A book of congratulatory letters was presented by Miss Moody.

PROFESSOR MARY WHITON CALKINS, of the department of philosophy and psychology of Wellesley College, has retired from active service with the title of research professor. Dr. Calkins has taught at Wellesley since 1888. She was president of the American Psychological Association in 1905.

DR. WILLIAM S. THAYER, of the Johns Hopkins University, has been elected an overseer of Harvard College to serve for a period of six years.

DR. HUGO FRICKE, formerly director of the department of biophysics of the Cleveland Clinic Founda-

tion, has been appointed to take charge of the biophysical laboratory being constructed by the Long Island Biological Association at Cold Spring Harbor. The building will contain a chemistry laboratory and Roentgen-ray room, a machine shop, a record room and research rooms, the last relatively sound-proof, free from vibration and of comparatively constant temperature. The laboratory will be in use this summer.

DR. DOUGLAS JOHNSON, of Columbia University, has a year's leave of absence which he plans to spend on a trip around the world. He and Mrs. Johnson sailed for England on June 15. They will first visit South Africa to participate in the International Geological Congress and the meetings of the British Association for the Advancement of Science.

DR. JOHN S. KARLING, professor of botany at Columbia University and physiologist of the Tropical Plant Research Foundation, Washington, D. C., left New York City in the early part of June for British Honduras, where the foundation is carrying on extensive experiments for the American chewing gum companies to put chicle production on a plantation basis. This is the third expedition Dr. Karling has led into this region of Central America.

DR. TRUMAN MICHELSON, ethnologist of the Bureau of American Ethnology, has left Washington to take up field work in Oklahoma, Kansas and Iowa. The main object of his work is to ascertain whether it is not possible to reduce the Arapaho and Cheyenne languages to normal Algonquian by the application of phonetic shifts. The social organization of the various Algonquian tribes of these states will also be studied.

DR. LEUMAN M. WAUGH, associate dean of the school of dental and oral surgery of Columbia University, has been commissioned by the U. S. Public Health Service to conduct an expedition of dental research and relief to the primitive Alaskan Eskimo. Dr. Waugh has received a commission as dental surgeon in the Health Service Reserve and has been detailed to the Coast Guard Service with the rank of lieutenant-commander. He will leave Seattle on July 6, joining the cutter *Northland* at Unalaska, and carrying with him the first X-ray instrument and complete dental equipment that has penetrated the northern reaches of the continent.

PROFESSOR H. F. CLELAND, of Williams College, will spend the first semester of the coming college year in California. During his absence his courses in geology will be conducted by Professor C. A. Malott, of Indiana University.

DR. NATHAN C. FOOT, professor of pathology, University of Cincinnati College of Medicine, will spend

a sabbatical year of study abroad, returning in the fall of 1930.

DR. AQUILINO VILLANUEVA, chief of the health department of Mexico, is visiting the United States as a guest of the Rockefeller Foundation.

DR. WERNER HEISENBERG, of the University of Leipzig, recently lectured at Oberlin College on "The Principle of Indeterminism in the Quantum Theory," and at the Ohio State University on "Recent Progress in the Application of Quantum Mechanics."

E. B. FORD, of the department of zoology of the University of Oxford, delivered a lecture before the Eugenics Society in the rooms of the Royal Society, London, on May 29, on "Recent Work on the Physiology of Genetics and its Bearing on Human Problems."

A MEMORIAL tablet in honor of Edward Suess, of the school of geology at the University of Vienna, who was born in London on August 30, 1831, has been placed by the Geological Society of Great Britain on his house at 4<sup>1</sup> Duncan Terrace, Islington. The tablet was unveiled by Baron G. Frankenstein, Austrian minister to Great Britain. The president of the society, Dr. J. W. Gregory, made the principal address. Other speakers were the Right Honorable Sir Maurice de Bunsen, on behalf of the Royal Geographical Society; Dr. F. A. Bather, representing the Royal Society, and Alderman Harper, the mayor of Islington. Sir Arthur Smith Woodward and Professor W. J. Sollas moved a vote of thanks to the Austrian minister.

THE Board of Scientific Directors of The Rockefeller Institute for Medical Research announces the following appointments and promotions to the scientific staff: *Associates*: Dr. Albert P. Krueger, Dr. A. L. Patterson, Dr. Oskar Seifried. *Assistants*: Dr. Alf S. Alving, Mr. Frank H. Babers, Dr. Bernard Benjamin, Dr. George P. Berry, Mr. Robert T. Dillon, Dr. Samuel E. Hill, Dr. William H. Kelley, Dr. Franklin R. Miller, Miss Clara Nigg, Mr. Merritt P. Sarles, Dr. Maxwell P. Schubert, Dr. Mark P. Schultz, Mr. Albert B. Scott, Dr. J. Murray Steele, Jr., Mr. Philip G. Stevens, Dr. Bettina Warburg, Dr. Bruce K. Wiseman. *Promotions of Assistant to Associate*: Dr. Lawrence R. Blinks, Dr. Louis A. Julianelle, Dr. Philip Levine, Dr. John B. Nelson, Dr. Theodore Shedlovsky, Dr. Harold J. Stewart.

CREATION of the Stephen Walter Ranson lectureship in medicine at Northwestern University, named in honor of Dr. Stephen Walter Ranson, physician and director of the institute of neurology at the university, has been announced by the Phi Beta Pi medical fraternity which has permanently endowed the lectureship. The first Ranson lecture will be delivered on the McKinlock campus in October by Dr. G. Carl

Huber, professor of anatomy at the University of Michigan.

THE annual meeting of the Royal Society of Canada was held in Ottawa from May 20 to 22. The president, Monseigneur Camille Roy, rector of Laval University, Quebec, addressed the society on "Provincialisme intellectuel au Canada." Prior to this presidential address gold medals were presented, including in science the Flavelle medal, to Professor A. H. R. Buller, F.R.S., of the University of Manitoba, immediate past president, for his work on fungi. Professor J. C. Chamberlain, of Columbia University, gave by invitation the popular evening lecture on "The United States Government and International Relations." At the annual luncheon of the society brief addresses were given by Sir Robert Borden, the Honorable Wm. Phillips, U. S. Minister to Canada; the Honorable Jean Knight, minister from France to Canada, and Sir Wm. H. Clark, British high commissioner. Some one hundred and fifty papers were communicated in the three scientific sections. The meeting in 1930 will be held at McGill University, with Dr. A. S. Eve, F.R.S., professor of physics and director of the laboratory, as president.

THE Fourth World Poultry Congress is to be held at the Crystal Palace, London, from July 22 to 30, 1930, followed by a series of tours covering the British Isles. The Ministers of Agriculture for England and Wales and Northern Ireland and the Secretary of State for Scotland will serve as presidents of the congress, with F. C. Elford, of Canada, the president of the International Association of Poultry Instructors and Investigators, as first vice-president; P. A. Francis as director of the congress, and Dr. V. E. Wilkins, of the British Ministry of Agriculture, as secretary.

THE American Phytopathological Society will meet for its summer conference at Raleigh, North Carolina, from July 28 to 31 in the first joint session with its Southern Division. The committee in charge—R. F. Poole, chairman and president of the Southern Division; S. G. Lehman, G. W. Fant, S. A. Wingard and G. M. Armstrong—has planned a three-day tour which includes stops at North Carolina State College of Agriculture, Duke University, the University of North Carolina and other points where intensive studies will be made of the diseases of tobacco, sweet potatoes, peach, soybeans, cotton and other crops. The membership is requested to communicate with the chairman of the committee at North Carolina State College, Raleigh, as soon as possible so that complete arrangements may be made for all.

SIGMA PI SIGMA, national honorary physics fraternity, completed the installation of chapters for the present school year by formally admitting to

its chapter roll groups at Ohio Wesleyan University and St. Lawrence University. The installation ceremonies were in charge of Dr. Marsh W. White, national secretary of the society. At Ohio Wesleyan University on June 5 thirteen charter members were initiated, including Professors W. G. Hormell, C. W. Jarvis and D. A. Woodbury. Mr. G. Robert Klein is president and Mr. Orval L. Linebrink is secretary of the Kappa chapter. The Iota chapter at St. Lawrence University, consisting of fifteen charter members, including Professors Ward C. Priest, J. F. Comstock and Frederick A. May, was installed on June 7. A number of other chapters are to be installed early in the fall term.

THE state experiment station appropriations for the biennium ending June 3, 1931, of the Kansas College and station aggregate \$2,607,000. This is \$125,000 less than for the present biennium, largely because of the policy determined upon by the legislature of authorizing no new buildings at any of the five state educational institutions during the next two years. The appropriations for salaries were increased by \$32,450 per annum, or 3.2 per cent. of the salary budget, and will provide for both promotions and new positions. There was also an increase of \$50,000 per annum for maintenance and an increase of \$87,450 to \$106,500 for the four substations, mainly for additional improvements and equipment at Fort Hays. New items include \$10,000 for a study of shipping fever and \$6,000 for remodeling the greenhouses.

THE *Harvard Alumni Bulletin* reports that a bequest of \$68,000 which Harvard University declined some time ago has been given by the Pennsylvania courts to Jefferson Medical College. Dr. J. Ewing Mears bequeathed the sum for a department of eugenics at Harvard. He said in his will: "It is my wish that the subject be taught in all of its branches, notably that branch relating to the treatment of defective and criminal classes by surgical procedures, as I have advocated in my writings on the subject." The president and fellows voted to refuse the bequest, "feeling that the corporation would be unable to apply it in accordance with the desires of the testator." The Pennsylvania courts held that Jefferson Medical College was qualified to carry out the directions of the testator.

HAVING for its object an impartial and strictly scientific inquiry into the alcohol question, the Alcohol Research Council was formed in Sydney, Australia, May 1. The objects of the council are to find the truth concerning the relation of alcohol to human life, to enlist the services of the best authorities possible for this purpose, and to make the conclusions of the council readily available. The first investiga-

tion proposed has to do with the industrial possibilities of alcohol in Australia. Although this preliminary study relates chiefly to the commercial aspect, the council's main purpose is to investigate the social and physiologic effects of alcohol, and the rules for conducting these investigations set out that reports of results "shall not be couched in terms which advocate or oppose any scientific reform or existing condition." The president of the council is Mr. I. V. Newman (botanic research department of Sydney University); Dr. Arthur (minister for health in New South Wales) is the vice-president, and Mr. E. R. Walker (lecturer on economics of the Sydney University) is the assistant director of research.

### UNIVERSITY AND EDUCATIONAL NOTES

A GRANT of \$1,000,000 has been given to Princeton University by the General Education Board. In making this announcement President Hibben said: "This generous gift of the General Education Board is most gratifying. It is made in recognition of the extensive capital expenditures already made by the university for the construction of buildings and developments of research work in the field of pure sciences. We were compelled to draw on the capital funds of the university for this purpose and are now able to return to our general endowment \$1,000,000. By so doing we are relieved from the necessity of curtailing general university expenditures in order to put through our far-reaching program in the fundamental sciences."

ANNOUNCEMENT was made at the commencement exercises of Wellesley College of gifts to the semi-centennial fund amounting to \$472,000, making the total to date \$8,057,000 and leaving \$943,000 to be raised to complete the \$9,000,000 program. The largest single item was the conditional gift of \$175,000 from Edward S. Harkness, of New York, if the college can raise \$525,000 by July 1. To date \$300,000 of this amount has been obtained.

PROFESSOR E. A. MILNE, of the University of Oxford, lectures on problems in astrophysics during the present summer session of the University of Michigan.

DR. HAROLD R. PHALEN, professor of mathematics and instructor in physics at St. Stephen's College, Columbia University, has been appointed dean of the college.

DR. GEORGE W. HUNTER, 3d, of the Rensselaer Polytechnic Institute, has been elected assistant professor of biology at Wesleyan University.

DR. W. STILES, F.R.S., of the University of Reading, has been appointed Mason professor of biology in the University of Birmingham.

### DISCUSSION

#### THE NORTHERN LIGHTS OF JUNE 7, 1928

ON the night of June 7, 1928, an aurora borealis of unusual splendor was visible to observers of the Washington, D. C., region. So striking were the attendant phenomena in the skies that I have decided to place it on record, as it appeared to me and as I have recorded its phenomena in my notes.

I left the city at 10:20 P. M., arriving at Clarendon, Virginia, at 10:50. At that time the skies were exceptionally clear. The northern sky was strikingly radiant with a broad zone of whitish light similar to the sky illumination normally seen over a city. From this diffused zone of light streamers, narrow and broad, were flashing upwards in a vivid display. So vivid were these streamers that two young men sitting on a doorstep beholding the phenomenon had judged them to be some queer, restless search-light play of humans upon the northern skies. Shortly after this one of the most spectacular auroral displays I have ever seen came quickly into expression. The northern glow advanced rapidly upward from the horizon like tenuous cloud mists, soon covering the entire northern sky, and swinging somewhat more rapidly eastward than westward as it appeared. A zone of light then appeared to hang almost overhead like thin, far-away impalpable clouds catching moonlight. Eastward of my position these luminous clouds, on their outermost or southerly edges, were a decided greenish coloration bordering a broad reddish or pink zone to the northward, or to the left of the greenish luminosity as I faced the east. This reddish light reminded me of the thin pinkish light sometimes seen attending a lightning flash in the rapidly thinning clouds of a passing thunderstorm in the late afternoon. From time to time beautiful lance-like streamers and broad beams of light shot quickly upward to a point somewhat past the zenith. It appeared as if the focus of these was here, and at one time many radiated from this zenith point as it seemed, perhaps as a result of the phenomenon of optical perspective. The advance of the great auroral sheet of light was rapid, and it was but a short time until the front of the luminous zone of greenish or reddish light had reached a point somewhat south of the zenith line. The pivoting of the display appeared to be at the zenith point, but the luminous clouds swung more rapidly eastward than westward, so that the display eastward reached its highest development and glory and faded some time before the westward display, attended with the same tenuous luminosities of red and green, had reached the peak of its glory. At all times there were long, lance-like, quivering streamers at play straight to the zenith, some of them flashing from easterly and some