

SCIENTIFIC NOTES AND NEWS

DR. ALBERT F. BLAKESLEE, director of the department of genetics of the Carnegie Institution of Washington, Cold Spring Harbor, Long Island, was elected at Columbus on December 30 president of the American Association for the Advancement of Science. He succeeds Dr. Walter B. Cannon, George Higginson professor of physiology at the Harvard Medical School. Dr. Blakeslee is a member of the National Academy of Sciences and of the American Philosophical Society and was chairman of the section for the botanical sciences of the association in 1918.

DEAN EDWARD ELLERY, professor of chemistry and chairman of the faculty of Union College, Schenectady, N. Y., was elected president of the Society of the Sigma Xi at the Columbus meeting. Dr. Ellery has been national secretary of the society for eighteen years. His place as secretary will be taken by Professor George A. Baitsell, of Yale University, the retiring president of the society.

THE American Philosophical Society, meeting at Columbia University, held a special three-hour morning session on December 27 in honor of Dr. John Dewey, professor emeritus of philosophy at the university, who celebrated his eightieth birthday last October. The speakers were Dr. William E. Hocking, professor of philosophy at Harvard University; Dr. Morris R. Cohen, professor emeritus of philosophy at the College of the City of New York, and Dr. Dewey.

DR. A. ADRIAN ALBERT, assistant professor of mathematics at the University of Chicago, was awarded the Cole prize for mathematics of the American Mathematical Society at the Columbus meeting. This prize is awarded every five years to "the person who solves a famous or difficult problem in mathematics."

PRESENTATION of the Theobald Smith Award in the Medical Sciences, founded by Eli Lilly and Company, "to recognize demonstrated research in the field of the medical sciences, taking into consideration independence of thought and originality," was made to Dr. Albert B. Sabin, associate professor of pediatrics at the University of Cincinnati and fellow of the Children's Hospital Research Foundation, formerly of the Rockefeller Institute for Medical Research, on December 28 at the Columbus meeting of the American Association. Dr. Walter B. Cannon, president of the association, made the presentation, after which Dr. Sabin described the work for which the award was made. His address, which will shortly appear in SCIENCE, was entitled "Constitutional Barriers to Involvement of the Nervous System by Certain Viruses."

DR. JOHN G. KIDD, research assistant of the Rocke-

feller Institute for Medical Research, has received the 1939 Eli Lilly Award of \$1,000 and a bronze medal of the Society of American Bacteriologists for his research work on animal cancer. The award is made annually to a man or woman under thirty-one who has made outstanding contributions to knowledge in the fields of bacteriology or immunology while conducting investigative work in a college or university in the United States or Canada.

DR. FRANK N. WILSON, professor of internal medicine at the University of Michigan, has been awarded the Henry Russell lectureship. Dr. Wilson is the fifteenth member of the faculty of the university to be named to the lectureship, which was established by a bequest of the late Henry Russell, of Detroit, a member of the class of 1873. The lecturer is chosen each year by the council of the University Research Club.

DR. RAYMOND PEARL, professor of biology in the School of Hygiene and Public Health of the Johns Hopkins University, was elected at the Philadelphia meeting a member of the Board of Directors of the American Statistical Association. Dr. Pearl is the retiring president of the association.

DR. CHARLES THOM, who is in charge of soil microbiology in the Bureau of Plant Industry of the U. S. Department of Agriculture, was elected at the New Haven meeting president of the Society of American Bacteriologists to succeed Dr. Arthur T. Henrici, of the University of Minnesota. Dr. Oswald T. Avery, member of the Rockefeller Institute for Medical Research, was elected vice-president; Dr. I. L. Baldwin, professor of bacteriology and dean of the College of Agriculture of the University of Wisconsin, was elected secretary-treasurer.

THE REV. DR. JOHN M. COOPER, professor of anthropology at the Catholic University of America, was elected president of the American Anthropological Association at the thirty-eighth annual meeting in Chicago. Other officers elected were: *First Vice-president*, Dr. Elsie Clews Parsons; *Second Vice-president*, Dr. Earnest A. Hooton, of Harvard University; *Third Vice-president*, Dr. William Duncan Strong, of Columbia University; *Treasurer*, Della Weitzner, of the American Museum of Natural History; *Editor of the American Anthropologist*, Professor Ralph Linton, of Columbia University. The next annual meeting will be held in December at Philadelphia.

DR. S. S. WILKS, assistant professor of mathematics at Princeton University, was elected president at the

Philadelphia meeting of the Institute of Mathematical Statistics. Dr. Allen T. Craig, assistant professor of mathematics at the State University of Iowa, and Dr. Cecil C. Craig, associate professor of mathematics at the University of Michigan, were elected vice-presidents. Dr. Paul R. Rider, associate professor of mathematics at Washington University, St. Louis, was elected secretary-treasurer.

OFFICERS for the coming year of the Botanical Society of Washington have been elected as follows: *President*, M. C. Merrill; *Vice-president*, Nellie W. Nance; *Recording Secretary*, Charles Drechsler; *Corresponding Secretary*, Miriam L. Bomhard; *Treasurer*, N. Rex Hunt; *Councillors*, M. T. Jenkins, S. B. Detwiler; *Representative to the Washington Academy of Sciences*, Charles Thom.

DR. CARLOS EUGENE PITKIN has been promoted to a clinical professorship of otolaryngology at the School of Medicine of Western Reserve University.

DR. HALE F. SHIRLEY, assistant professor of psychiatry, State University of Iowa College of Medicine, Iowa City, has resigned to become assistant professor of psychiatry and pediatrics at Stanford University School of Medicine and director of the Child Guidance Clinic, San Francisco.

ACCORDING to the *London Times*, the Governor of Ceylon, using his emergency powers, has appointed Dr. Collingwood Startup professor of physiology and registrar of the Medical College. Dr. Startup was selected by the Secretary of State, but the Medical Council, supported by the State Council, refused to sanction the appointment.

DR. ALEXIS CARREL, formerly a member of the Rockefeller Institute for Medical Research, has joined the staff of the French Ministry of Public Health for the duration of the war.

DR. ALEXANDER W. BLAIN, professor of clinical surgery at the College of Medicine of Wayne University, has been reelected for a fourth three-year term as a director of the Gorgas Memorial Institute of Tropical and Preventive Medicine. The institute maintains executive offices in Washington and a research laboratory in Panama.

DR. JUSTIN L. POWERS, assistant professor of pharmacy at the University of Michigan, was elected chairman of the Committee on National Formulary and director of the laboratory of the American Pharmaceutical Association at the recent semi-annual meeting held in Washington. He succeeds Dr. E. N. Gathercoal, who has been chairman of the committee since 1929 and director of the laboratory since it was established in 1935. Dr. Gathercoal will continue in an advisory capacity until after the meeting of the asso-

ciation in Richmond in May. Dr. Powers will give his full time to the position and will after March 1 have his headquarters in the American Institute of Pharmacy in Washington, D. C. Dr. Robert R. Hannon, superintendent of New York Hospital, New York City, has been appointed secretary of the New York State Board of Medical Examiners and executive secretary of the Medical Grievance Committee.

DR. FRITZ ROSTLER, of the Wilmington Chemical Corporation, has been appointed to the research fellowship in chemical technology established by the corporation at Newark, N. J.

THE Committee on Scientific Research of the American Medical Association has made a grant to Dr. A. S. Wiener, serologist and bacteriologist in the office of the Chief Medical Examiner of New York City, for his research on agglutinogens of human blood and the Kline test.

DR. SAMUEL L. SIEGLER, of Brooklyn, N. Y., has received a grant from the Lakeside Laboratories, Inc., of Milwaukee, to be used in a study on the metabolism of progesterone.

DR. C. E. DOBBIN, geologist in charge, and W. B. Kramer, associate geologist, at the Denver office of the mineral classification division of the Conservation Branch of the U. S. Geological Survey, have recently completed and submitted for official use detailed maps of the areal and structural geology of the East Lance Creek Oil and Gas Field, Niobrara County, Wyo., and of the Red Springs Anticline, Hot Springs County, Wyo.

DR. EDWARD D. CHURCHILL, John Homans professor of surgery at the Harvard Medical School and chief of the West Surgical Service at the Massachusetts General Hospital, will give the seventh E. Starr Judd lecture at the University of Minnesota on March 14. His subject will be "Surgery of the Lungs." The late Dr. Judd, an alumnus of the Medical School of the University of Minnesota, established this annual lectureship in surgery a few years before his death.

THE officers of the International Pediatric Congress, planned to be held in Boston in 1940, have announced that the congress has been indefinitely postponed.

THE fifty-sixth meeting of the American Association of Anatomists will be held at the University of Louisville, Kentucky, on March 20, 21 and 22.

THE eighth biennial symposium on organic chemistry of the American Chemical Society opened at St. Louis on December 28. The address of welcome was made by Dr. Edward A. Doisy, professor of chemistry at St. Louis University and director of the department. The response was made by Dr. Frank C. Whitmore, research professor of organic chemistry

and dean of the School of Chemistry and Physics of Pennsylvania State College, a past president of the American Chemical Society. Other speakers included: Dr. Carl R. Addinall, research chemist, director of library services of Merck and Company, and Dr. Lee I. Smith, chief of the division of organic chemistry of the University of Minnesota.

THE *Journal* of the American Medical Association announces the endowment of the J. B. Whitehead chair of surgery at the School of Medicine of Emory University. The establishment of the chair was made possible by the gift of \$250,000 by the Joseph B. Whitehead Foundation.

A CONTRIBUTION of \$10,000 from an anonymous donor to finance the continuation of research work in cancer during 1940 at St. Luke's Hospital, New York City, has been announced. The work will be carried on under the direction of Dr. Francis Carter Wood, director of laboratories.

E. I. DU PONT DE NEMOURS AND COMPANY will award six post-doctorate fellowships for research in organic chemistry and twenty post-graduate fellowships for research in the field of chemistry for the academic year 1940-41, an increase of two post-graduate awards during the coming academic year. The post-doctorate fellowships are for \$2,000 each, and the post-graduate fellowships are for \$750 each. Fellowships in advanced work in chemistry were established in 1918. The fellowships are not restricted to subjects connected with the company's products, but may be in any chemical research deemed appropriate by the university. The university also selects the beneficiary.

THE object of the du Pont Fellowship Plan is to promote the advancement of science and to cooperate with the educational institutions in their efforts to carry on advanced research work. The institutions to which awards will be made are: to the University of California, the University of Chicago, Columbia University, Cornell University, Harvard University, the University of Illinois, the Johns Hopkins University, the Massachusetts Institute of Technology, the University of Michigan, the University of Minnesota, Northwestern University, the Ohio State University, Pennsylvania State College, the University of Pennsylvania, Princeton University, Purdue University, Stanford University, the University of Virginia, the University of Wisconsin and Yale University.

THE American Institute of Electrical Engineers announces that the Westinghouse Electric and Manufacturing Company has established a trust fund of \$25,000 to provide graduate fellowships in electrical engineering as a memorial to Charles LeGeyt Fortescue "in recognition of his valuable contributions to the

electric power industry, whose outstanding achievements were his development of symmetrical coordinates, his work on transformer design, and his theories of lightning behavior." Beginning in 1940 the fellowship committee will select annually the "most promising candidates" to receive the Fortescue awards, which provide a minimum allowance of \$500 each. The committee is also empowered to grant additional allowances. The 1940 awards will be made before April 1. Professor D. F. Miner, of the Carnegie Institute of Technology, is secretary of the committee.

A GIFT of \$250,000 has been made by Edward S. Harkness toward a fund of \$2,967,000 being raised for a new twelve-story building for Roosevelt Hospital, New York City. The gift is conditional upon the raising of the remainder of the fund by June 1, 1940. Including the Harkness gift, the sum of \$1,034,093 has been subscribed.

Industrial and Engineering Chemistry reports that the Committee of the American Chemical Society on Recommendations for Awards from the Herman Frasch Foundation, Pittsburgh, appointed at the request of the United States Trust Company, met recently to consider requests for grants. The members of the committee are C. A. Browne, *chairman*; Roger Adams, Thorne M. Carpenter, W. H. MacIntire and H. B. Vickery. It was unanimously voted to make the following recommendations with reference to allotments of funds from the foundation for the next five-year period beginning on January 1. (1) Nine thousand dollars to be allotted annually to the Department of Agriculture of the University of Minnesota, University Farm, St. Paul, for research on the project entitled "A Comprehensive Study of Sulfur Metabolism of Plants," with the suggestion that this project in its application be made as general as possible so as to include consideration of sulfur-deficient soils in all parts of the United States. (2) Eight thousand dollars to Purdue University, for research on the project entitled "The Composition of Plants and Their Nutritive Quality as Affected by Cultural and Storage Conditions." (3) Eight thousand dollars to the College of Agriculture of Rutgers University, for research on the project entitled "The Role of Grass and Legume Silages in the Feeding of Dairy Animals."

DR. F. F. BARNES, the geologist of the Alaska Railroad, has recently reported in Washington for service in the office of the Alaskan Branch of the Geological Survey, where he will be afforded facilities for continuing his study of the data collected in Alaska during the past field season. The field studies were made in connection with the considered change in the line of the Alaska Railroad near the head of Turnagain Arm, Kenai Peninsula. The new route would traverse the

narrow, but mountainous neck of land that ties Kenai Peninsula to the mainland and would have its deep water terminus on Passage Canal, an arm of Prince William Sound. The geologic investigation involved examination of the character and structure of the bed-rock of the ridges through which it would be necessary to drive tunnels, one of which would be approximately 13,000 feet long; study of the conditions at the near-by glaciers which might jeopardize the project by ad-

vances or destruction of drainage; and observation of any other features that might be helpful in the selection of a route so as to avoid snowslides, springs and unstable ground.

A METEOROLOGICAL observatory is being built by the Soviet authorities on Kazbek, one of the highest mountains of the Caucasian range. Mount Kazbek is 16,546 feet high, and the observatory is being built above the snow line at an altitude of 13,125 feet.

DISCUSSION

THE DISTRIBUTION OF POLIOMYELITIS IN LOUISIANA

DURING the ten-year period ending January 1, 1939, there were reported to the State Department of Health from the 64 parishes of Louisiana 676 cases of poliomyelitis, nearly all of which were paralytic. Through the cooperation of parish public health units and other interested physicians, the exact residence of each patient at the time of the onset of the disease was plotted on large, detailed parish maps furnished by the Departments of Agriculture and Economics of Louisiana State University. It was thus possible to circumvent the custom of rural residents of giving the nearest town as the home address.

The population of all incorporated communities, wards and parishes in Louisiana was obtained from the fifteenth United States Census Reports (1930). The population of unincorporated communities was obtained from a commercial atlas, and was corrected, whenever this was possible, by data in the possession of the State Department of Health.

Rural areas, when interpreted as unincorporated communities of 0-99 inhabitants, and small urban communities of 5,000-49,999 inhabitants, had the same low incidence of poliomyelitis, 32.1 and 30.6 per 100,000 population, respectively, the two rates not being statistically different. The incidence in the only two large cities of Louisiana corresponded to the incidence of the disease in the rural and small urban communities. Statistically significant preponderances of poliomyelitis, however, were found in incorporated communities of 100-2,999 population, the rates of 68.2 and 92.7 cases per 100,000 population amounting to three times the rate for rural and larger (over 5,000) urban communities. The highest incidence was found in communities of 1,500-1,999 inhabitants.

The preponderance of poliomyelitis in the small towns of Louisiana could not be explained by age, sex or race factors. The only factor which was found to be statistically correlated with the preponderance of poliomyelitis in the small towns was the presence of a water supply system and the absence of an adequate

sewage disposal system. A study of the water supply and sewage disposal systems was therefore undertaken in relation to the incidence of poliomyelitis, official data being used.¹

The 64 incorporated communities in Louisiana which were without water supply and sewerage systems had 12 reported instances of poliomyelitis, or 39.7 cases per 100,000 inhabitants, which approximates the basal rural-urban rate. The 27 incorporated communities with both water supply and sewerage systems had 184 cases, or 26.6 cases per 100,000 inhabitants. The 87 incorporated communities with water supply but without sewerage systems had 101 cases of poliomyelitis among 120,811 inhabitants, a rate of 83.6 cases per 100,000. These values were of statistical significance.

The highest rates of poliomyelitis, 120 cases per 100,000 inhabitants, which were found in communities with water supply but with no sewerage systems, were in those communities in which the average daily water supply was from 50 to 89 gallons per capita. In communities in which the per capita daily water supply was from 90 to 500 gallons but which were without sewerage systems the rate of poliomyelitis for the decade was 39.0 cases per 100,000 inhabitants, or essentially the basal rural-urban rate. These values were of statistical significance.

These data suggest the effect of large amounts of fluid as a dilution factor or as a factor increasing the rate of flow. The studies also suggest the possibility that the epidemicity of poliomyelitis in the past few decades may have been influenced by the growing tendency of communities to liquefy their excreta without making adequate provision for the disposal of the accumulated fluids.

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¹J. H. O'Neill, "Louisiana Water and Sewerage Systems," Publication of the Louisiana State Board of Health, 1938, New Orleans.