

Chicago. The Construction Engineering Prize was presented to Howard L. King, of Lackawack, N. Y.

THE WILKES EXPLORING EXPEDITION

THE centenary celebration by the American Philosophical Society, Philadelphia, of the Wilkes Exploring Expedition of the United States Navy, 1838-1840, and a symposium on American Polar Exploration will be held on February 23 and 24 in the hall of the society, Independence Square.

The program follows:

Friday Morning, February 23

Roland S. Morris, president, in the chair

THE WILKES EXPEDITION

Edwin G. Conklin, vice-president and executive officer, American Philosophical Society, and James A. G. Rehn, corresponding secretary, Academy of Natural Sciences of Philadelphia. "Connection of the American Philosophical Society and the Academy of Natural Sciences of Philadelphia with Our First National Exploring Expedition."

Captain G. S. Bryan, Hydrographic Office, U. S. Navy. "The Purpose, Equipment and Personnel of the Wilkes Expedition."

William H. Hobbs, professor emeritus of geology, University of Michigan. "The Discovery of Wilkes Land, Antarctica."

F. W. Reichelderfer, chief, U. S. Weather Bureau. "The Contributions of Wilkes to Terrestrial Magnetism, Gravity and Meteorology."

Harley H. Bartlett, chairman, department of botany and director, Botanical Garden, University of Michigan. "The Expedition Reports and the Work of the Specialists in Science."

Mary E. Cooley, instructor in geology and geography, Mount Holyoke College. "The Exploring Expedition in the Pacific."

Luncheon for members and invited guests, 1 o'clock.

Friday Afternoon

Vilhjalmur Stefansson, Arctic explorer; past president of the Explorers Club, in the chair.

AMERICA IN THE ANTARCTIC

Colonel Lawrence Martin, chief, Division of Maps, Library of Congress. "The First Discovery of Antarctic Land by Captain Nathaniel Brown Palmer of Stonington, Connecticut."

John E. Hoffmeister, professor of geology, University of

Rochester. "James Dwight Dana's Studies of Volcanoes and of Coral Islands."

Henry W. Fowler, curator of fishes, Academy of Natural Sciences of Philadelphia. "The Fishes Obtained by the Wilkes Expedition."

Captain Harold E. Saunders, U. S. Navy. "The Flight of Admiral Byrd to the South Pole and the Exploration of Marie Byrd Land."

W. L. G. Joerg, chief, Division of Maps and Charts, The National Archives. "Demonstration of the Peninsular Nature of Palmer Land, Antarctica, through Ellsworth's Flight of 1935."

Earle B. Perkins, zoologist of the Second Byrd Antarctic Expedition; assistant professor of zoology, Rutgers University. "Animal Life of the Antarctic." (Moving pictures.)

Friday Evening Lecture, 8:15 o'clock

Laurence M. Gould, senior scientist and second-in-command, First Byrd Antarctic Expedition; professor of geology, Carleton College. "Glaciers of the Antarctic." The lecture will be followed by a reception.

Saturday Morning, February 24

Dr. Isaiah Bowman, president of the Johns Hopkins University, in the chair

AMERICA IN THE ARCTIC

W. Elmer Ekblaw, scientist of MacMillan's four-year Arctic Expedition; professor of geography, Clark University. "The Arctic Voyages and the Discoveries of DeHaven, Kane and Hall."

Commander Edward Ellsberg, U. S. Naval Reserve, author of the *Saga of the Jeannette*. "The Drift of the *Jeannette* in the Arctic Sea."

Brigadier General David L. Brainard, U. S. Army (ret.). "The Ill-fated Greely Expedition of 1882-83 and the Farthest North of Lockwood and Brainard."

Vilhjalmur Stefansson, Arctic explorer; past president of the Explorers Club. "New Lands and Seas Discovered by Stefansson's Arctic Expeditions."

Hugh J. Lee, Peary's companion on the crossing of Greenland, 1895. "Peary's Transactions of North Greenland, 1892-95."

Captain Robert A. Bartlett, Lieutenant Commander, U. S. Naval Reserve, commander of the Arctic ship *Roosevelt* and Peary's principal assistant. "Peary's Extended Exploration of Arctic Lands Culminating in the Attainment of the North Pole."

Luncheon for members and invited guests, 1 o'clock.

SCIENTIFIC NOTES AND NEWS

THE Gold Medal of the Royal Astronomical Society, London, has been awarded to Dr. Edwin P. Hubble, director of the Mount Wilson Observatory, "for outstanding work on distances, velocities, distribution and nature of extra-galactic nebulae."

THE Symons Gold Medal of the Royal Meteorological Society, London, has been awarded to Professor

Dr. J. Bjerknes, of the Geophysical Institute at Bergen.

DR. ALBRECHT PENCK, professor of geography at Berlin, has been elected an honorary member of the Norwegian Geographical Society.

THE National University of Ireland has conferred the honorary degree of doctor of science on Dr. F. G.

Donnan, professor of chemistry emeritus of the University of London.

THE rank of Commander of the Order of Leopold has been conferred by the King of the Belgians on Dr. Corneille Heymans, professor of pharmacodynamics at the University of Ghent. Last November Dr. Heymans was awarded the Nobel Prize in physiology and medicine for 1938 in recognition of his work on the sinus aorta mechanism in breathing.

DR. E. W. GUDGER, associate ichthyologist and bibliographer of the American Museum of Natural History, has been elected a corresponding member of the Zoological Society of London.

PROFESSOR FRANCIS CARTER WOOD, director of the Institute of Cancer Research of Columbia University and director of the laboratories and of the Roentgen Department for Therapy of St. Luke's Hospital, delivered the Carmen Lecture before the December meeting in Atlanta of the Radiological Society of North America. At the completion of his lecture he was presented with the Gold Medal of the society "in recognition of achievement in the science of radiology."

THE Oersted Medal of the American Association of Physics Teachers, awarded annually for "notable contributions to the teaching of physics," was presented at the Columbus meeting to Dr. Benjamin H. Brown, emeritus professor of physics at Whitman College, Walla Walla, Wash.

HOWARD W. BLAKESLEE, general science editor of The Associated Press, was presented at a luncheon meeting at Cornell University on January 20 with the Wilson L. Fairbanks Award of the American College Publicity Association as "the individual who has done the most for the interpretation of higher education to the general public." The morning session was devoted to a discussion of "Science in the News," Mr. Blakeslee giving the newspapers' view-point; Professor O. F. Curtis, of the department of botany of Cornell University, the view-point of scientific men, and Dean S. C. Hollister, of the College of Engineering, the view-point of the colleges.

THE officers of the American Society of Naturalists for 1940 are: *President*, Dr. J. H. Bodine, professor of zoology and head of the department at the State University of Iowa; *Vice-president*, Dr. Karl Sax, professor of botany at Harvard University; *Treasurer*, Dr. Harold H. Plough, Rufus Tyler Lincoln professor of biology at Amherst College; *Secretary*, Dr. Ralph E. Cleland, professor of botany and head of the department at Indiana University. Honorary members elected at the Columbus meeting were Dr. J. McKeen Cattell, Dr. Edwin G. Conklin and Dr. L. R. Jones.

OFFICERS of the American Society of Zoologists were elected at the Columbus meeting as follows: *President*, Dr. W. R. Coe, professor of biology at Yale University; *Vice-president*, Dr. D. H. Wenrich, professor of zoology at the University of Pennsylvania; *Secretary*, L. V. Domm, research associate in zoology at the University of Chicago; *Member of the Executive Committee*, Dr. J. T. Patterson, professor of zoology and director of zoological research at the University of Texas.

DR. E. N. TRANSEAU, professor of botany at the Ohio State University, was elected at the Columbus meeting president of the Botanical Society of America, and Dr. Neil E. Stevens, professor of botany at the University of Illinois, was elected vice-president.

THE Royal Astronomical Society of Canada at the annual meeting held at the University of Toronto on January 16 elected Dr. J. A. Pearce, assistant director of the Dominion Astrophysical Observatory, Victoria, B. C., president for 1940. Dr. Frank S. Hogg, of the David Dunlap Observatory of the University of Toronto, and Dr. A. Vibert Douglas, of the department of physics of McGill University, were elected vice-presidents. E. J. A. Kennedy, of Toronto, was re-elected general secretary; J. H. Horning, of Toronto, treasurer, and Dr. Peter M. Millman, of Toronto, librarian. Dr. William Findlay, professor of mathematics at McMaster University, Hamilton, Ont., will deliver the address of the retiring president before the society at the annual "at-home" held in the McLennan Physics Laboratory of the University of Toronto on January 26. He will speak on the year's achievements in astronomy and allied sciences.

DR. ALFRED H. STURTEVANT, professor of genetics and director of the William G. Kerekhoff Laboratories of the California Institute of Technology, has been appointed visiting lecturer on genetics at Harvard University for the second half of the current academic year.

DR. R. A. RASMUSSEN, instructor of agricultural chemistry at the University of Missouri, has recently been appointed assistant professor of animal husbandry at the Utah State Agricultural College, where he will have charge of the teaching and research work in animal nutrition.

PROFESSOR DONALD J. KAYS has been appointed chairman of the department of animal husbandry of the Ohio State University. He will succeed on July 1 Dr. Carl W. Gay, who has asked to be relieved of administrative work after serving for twenty years as chairman. Dr. Gay will continue as a member of the department.

THE National Foundation for Infantile Paralysis

has made a grant of \$7,000 to Dr. Albert B. Sabin, of the College of Medicine of the University of Cincinnati, for a study of poliomyelitis.

DR. ELMER D. MERRILL, administrator of botanical collections, Harvard University, and director of the Arnold Arboretum, has been elected president of the Board of Directors of the Fairchild Tropical Garden at Coconut Grove, Florida. The Fairchild Tropical Garden was organized in 1935 and dedicated in March, 1938.

DR. MARTHA TRACY, dean of the Woman's Medical College of Pennsylvania, has been appointed assistant director of public health of Philadelphia. Dr. Tracy will continue as dean of the college until the end of the present college year or until her successor is elected. She has been a member of the city board of health since 1936.

CHARLES E. CHAMBLISS, of the Bureau of Plant Industry, delivered on January 18 his address as retiring president of the Washington Academy of Sciences. He spoke on "The Botany and History of *Zizania Aquatica* L."

DR. JULIAN L. COOLIDGE, professor of mathematics and master of Lowell House, Harvard University, is giving a series of Lowell lectures in the Boston Public Library, entitled "Topics in the History of Geometry."

CHARLES GILMAN HYDE, professor of sanitary engineering at the University of California, spoke before the Society of Sigma Xi of Iowa State College on January 11. The subject of his address was "Progress in Water Purification and Sewage Treatment."

THE New York Chapter of the American Institute of Chemists held a dinner meeting at the Chemists' Club on Friday, January 19, at 8 P.M. Dr. W. S. Landis, vice-president of the American Cyanamid Company, made an address entitled "The Training of the Chemical Executive."

WATSON DAVIS, director of Science Service, lectured on January 18 before the Lancaster Branch of the American Association for the Advancement of Science. He spoke on "Science in the News." On the same day he addressed the Rotary Club, taking as his subject "New Materials in a New World."

American Journal of Physics is the new title of the bi-monthly publication known since its inception in 1933 as *The American Physics Teacher*, according to an action taken recently by the American Association of Physics Teachers concerning its official journal. Remaining under the editorship of Professor Duane Roller, of Hunter College, and under the publication management of the American Institute of Physics, the journal will continue to stress the educational, historical, socio-economic and philosophic as-

pects of physics, and the instruction of students who take physics as part of a liberal education as well as of those who specialize in the science.

DR. HARRY H. LAUGHLIN resigned on January 1 from his position as assistant director of the Department of Genetics of the Carnegie Institution of Washington, at Cold Spring Harbor, Long Island. At the time of his retirement Dr. Laughlin was presented with a pair of field glasses accompanied by a letter of appreciation and good wishes to him and Mrs. Laughlin from his colleagues. A correspondent writes: "Dr. Laughlin went to Cold Spring Harbor when Mrs. E. H. Harriman established the Eugenics Record Office (now the Genetics Record Office) in the summer of 1910. He continued in charge of this office for thirty years, during which time, in 1918, it was transferred by Mrs. Harriman to the Carnegie Institution and later, in 1921, became a part of the Department of Genetics, of which Dr. C. B. Davenport was director. During this period Dr. Laughlin undertook first-hand studies of inheritance in families and built up the archives with their important records of human heredity. For many years his researches centered on the basic qualities in human races and, with financial assistance from W. J. Salmon, on the inheritance of racing capacity in the thoroughbred horse whose pedigree is known better than that of any human stock." Dr. Laughlin has taken up his residence in Kirksville, Missouri.

THE *Journal* of the American Medical Association reports that the Association of Military Surgeons of the United States has announced the annual competition for the Wellcome Gold Medal and cash prize of \$500, awarded "for researches, discoveries, inventions, designs, improvements, essays or any other acts or deeds which the executive council of the association may consider desirable and helpful to the objects of the association, and relating to any phase of medicomilitary affairs and disease control associated with the army, navy, militia and public health and marine hospital service in times of peace or war at home or abroad." The competition is open to any member of or person eligible for membership in the Association of Military Surgeons of the United States. Additional information may be obtained from the secretary of the association, Army Medical Center, Washington, D. C.

At the last annual meeting of the trustees of the Elizabeth Thompson Science Fund, the following grants were awarded: \$200 to Dr. Robert Virtue, University of Denver, for a study of the effect of bile acids on fat absorption; \$100 to Dr. Charles E. Renn, Harvard University, for a study of the decomposition in organic residues in natural marine and polluted fresh-water muds; \$180 to Dr. J. F. McClendon, Uni-

versity of Minnesota Medical School, for thyroxine determinations in tissues; \$157 to Dr. J. O. Pinkston, American University of Beirut Medical School, for studies on the pharmacological relationship between the sympathomimetic drugs and the chemical mediators of the sympathetic nervous system; \$200 to Dr. Alfred C. Lane, Cambridge, Mass., for analyses of radioactive minerals; \$150 to Dr. Alfred Romer, Harvard University, for aid in rewriting Williston's "Osteology of the Reptiles." The next meeting of the trustees will be held in April. Applications for grants should be made to the secretary, Dr. Jeffries Wyman, Jr., Biological Laboratories, Harvard University, Cambridge, Mass.

Nature states that the Ministry of Labor has announced that technical committees associated with University Recruiting Boards have been set up to deal with offers of service from men less than twenty-five years of age with qualifications in engineering, chemistry, metallurgy, physics, the biological sciences and mathematics, in order that they may be allocated to an appropriate form of national service. The committees will sit in all cities with universities or university colleges in Great Britain and Northern Ireland, and applications, which should be made in the first instance to a local office of the Ministry of Labor, will be referred to the technical committees and the University Recruiting Boards. This offer is open to men who are starting on their final year of a degree course, or already hold a university degree in any of the following subjects: engineering, chemistry, metallurgy, physics, the biological sciences (including agriculture) and

mathematics (including statistics); and to men who are starting on their final year of study or already hold a Higher National Diploma or Higher National Certificate in mechanical or electrical engineering, or the associateship of the Institute of Chemistry.

It is reported from Bucharest by the *Journal* of the American Medical Association that the government some time ago empowered the Ministry of Health to appoint technical committees to study public health problems and to make proposals regarding most urgent matters needing attention. In all, nineteen committees have been appointed to study typhus fever, malaria, eugenics, maternity and child welfare, insurance against tuberculosis, cancer, venereal diseases, rheumatism, malnutrition and deficiency diseases and dentistry with especial attention to the function of dental technicians. Committees are also being appointed to stimulate the campaign against alcoholism and trachoma, to promote the standardization of biologic products and to investigate means of fostering international relations in health matters.

It is reported in *Nature* that the British Film Institute, London, one of the objects of which is to collect and disseminate information concerning the use of films for educational purposes, is engaged in compiling a bibliography on the scientific uses of cinematography. Very few books have been written on the subject, and the list will consist almost entirely of references to reports of scientific associations and to articles which have appeared in scientific and film journals. The institute would be glad to receive any information bearing on the undertaking.

DISCUSSION

ORIGINAL SOURCES IN VERTEBRATE EMBRYOLOGY AND ANIMAL CYTOLOGY

THE volume of current literature in the biological sciences has long been a matter of concern to investigators, teachers and librarians. For many years students have asked questions concerning the original sources of literature in vertebrate embryology and animal cytology, particularly in respect to the number of articles published and the journals containing these, which I, for one, could answer only in the most general way. The establishment of *Biological Abstracts* in 1927 was a most welcome event, and with the completion of its tenth volume, an opportunity to obtain statistical material presented itself. With the assistance of two undergraduate tabulators provided through NYA funds I have prepared the accompanying tables of the abstracts printed under the rubrics "Vertebrate Embryology" and "Cytology, Animal." These do not, of course, include all abstracts containing embryological data, for example, for those printed under other

rubrics and referred to by cross-reference were not tabulated.

An examination of Table 1 shows that during the

TABLE 1
SOURCES AND NUMBERS OF ABSTRACTS CONCERNING VERTEBRATE EMBRYOLOGY FOUND IN "BIOLOGICAL ABSTRACTS," 1927-1936

Sources	594
Number of abstracts	3,469
Ten journals most frequently abstracted:	
<i>Zeitschrift für wissenschaftliche Biologie</i> (Berlin)	190
<i>Anatomical Record</i> (Baltimore)	144
<i>Journal of Experimental Zoology</i> (Baltimore) ..	138
<i>Anatomische Anzeiger</i> (Jena)	122
<i>Journal of Anatomy</i> (London)	111
<i>Zeitschrift für die gesamte Anatomie</i> (Munich)	101
<i>Comptes rendus de séances, Société de Biologie</i> (Paris)	99
<i>Jahrbuch für Morphologie und mikroskopische Anatomie</i> (Leipzig)	90
<i>American Journal of Anatomy</i> (Baltimore)	76
<i>Archiv für experimentelle Zellforschung</i> (Jena)	75
Subtotal	1,146
Per cent. of total	33

years 1927-1936 abstracts of 3,469 titles in vertebrate embryology appeared, an average of 347 titles annually. This output of embryological research may