physiological activity of substitutes of the choline type.

\$400 to Professor H. I. Schlesinger, University of Chicago. For an investigation of the absorption spectra of inorganic compounds, particularly the oxides of sulphur and the compounds obtained by the interaction of certain salts with nitric oxide.

Applications for grants will next be considered in April, 1923, and should be filed, together with endorsements, with the chairman of the board, Professor Ross G. Harrison, Osborn Zoological Laboratory, Yale University, New Haven, Connecticut, on or before April 1. Blank forms of application will be sent on request.

SCIENTIFIC NOTES AND NEWS

DR. ROBERT A. MILLIKAN, of the California Institute of Technology, Pasadena, has been awarded the 1922 Edison medal of the American Institute of Electrical Engineers, for "meritorious experimental achievement in electrical science."

OWING to a severe illness arising from a wound received during the war in France, Sir T. W. Edgeworth David has resigned his position as president of the Australian National Research Council. His place has been filled by the election of Dr. Orme Masson, professor of chemistry in the University of Melbourne. Professor David continues to serve the council as vice-president.

SIR HUMPHREY ROLLESTON has been appointed representative of the Royal College of Physicians on the British General Medical Council in succession to Sir Norman Moore.

THE diploma of doctor *honoris causa* of the University of Strasbourg has been conferred upon Sir James Frazer, author of "The Golden Bough."

IN recognition of his contributions to resuscitation from mine gases, Dr. Yandell Henderson, professor of applied physiology at Yale University, was elected an honorary member of the Coal Mining Institute of America at its meeting in Pittsburgh on December 13.

MR. GEORGE H. RHODES has resigned as as-

sistant in the department of chemistry of the Massachusetts Institute of Technology, Cambridge, Mass., to accept a position in the color laboratory of Cheney Brothers, South Manchester, Conn.

H. A. Noves has been appointed research chemist for the State Department of Agriculture at Lansing, Michigan, having severed his connection with the Mellon Institute.

PROFFESSOR S. WINOGRADSKY, at one time director of the Imperial Institute for Experimental Medicine in Petrograd, has been recently appointed as chief of a newly organized division of soil microbiology at the Pasteur Institute. This division is situated at Brie-Comte-Robert (Seine-et-Marne), France. Professor Winograsky would appreciate literature on soil microbiology.

DR. LOUISE W. FARNAM, a daughter of Professor Henry W. Farnam, of Yale University, reached Changsha on September 21 and has begun her work as head of the department of pediatrics in the Hunan-Yale Hospital and Medical School.

LEAVE of absence has been granted to Dr. A. B. Stout, of the New York Botanical Garden, who will spend the period in southern California in studies of citrus fruits. He will also lecture at Pomona College.

CAPTAIN ROALD AMUNDSEN, head of a polar expedition that left Seattle in June, arrived by dog-team at Nome, Alaska, on December 14. He came from Wainwright, near Point Barrow, where he is wintering.

ROBERT T. AITKEN and John F. G. Stokes, of the Bishop Museum, have returned to Honolulu after an absence of two years devoted to anthropological studies in connection with the Bayard Dominick Expedition Their field of work included the islands of Rapa, Rurutu, Ravaivai and Tubuai of the Austral group. On his return journey to Papeete, several islands of the Tuamotu group were visited by Mr. Stokes.

AT a meeting of the committee on the C. M. Warren Fund of the American Academy of Arts and Sciences held on December 8, a grant DECEMBER 22, 1922]

of \$250 was made to Professor James B. Conant, of Harvard University, to be used in furthering his research in connection with the electro-chemical study of the reversible reduction of organic compounds. The next meeting of the committee for the awarding of grants will be held on March 1, 1923. Applications for these grants must be in the hands of the chairman of the committee, Professor James F. Norris, Massachusetts Institute of Technology, Cambridge, Mass., before this date.

THE Indian Botanical Society took over ownership and control of the *Journal of Indian Botany* in October. Professor P. F. Fyson, who started the journal in 1919 as a private enterprise, will continue as editor.

PROFESSOR WIELAND has been appointed to the editorial board of *Liebig's Annalen* in place of the late Professor Wislicenus. The board consists, in addition, of Professors Waklach, Graebe, Zincke and Willstätter.

At the College of Physicians in Philadelphia Dr. James Ewing, of the Cornell Medical School, recently delivered the Muetter Lecture for 1922 on "The principles of the radiation treatment of cancer."

DR. K. F. WENCKEBACH, former professor of surgery at the University of Strasbourg, will deliver the twelfth course of Herter lectures in pathology at the Johns Hopkins University Medical School. Dr. Wenckebach will arrive in this country in April.

THE French committee of organization for the commemoration of the centenary of Pasteur recently held its first meeting under the presidency of M. Strauss, minister of marine. The sum of two million francs has been voted by the French parliament and an exposition has been organized at Strasbourg, where a monument will be erected by public subscription facing the university buildings. Conferences for the popularization of the work of Pasteur will be held throughout France. The celebrations at Paris will take place from May 22 to June 3. The exposition at Strasbourg, which is under the direction of Professor Borrel, will open on June 1.

THE hundredth anniversary of Pasteur's birth will be celebrated on December 27 by Chicago physicians, chemists and bacteriologists at a dinner and meeting under the auspices of the Chicago Medical Society and the Chicago section of the American Chemical Society. Dr. Ludvig Hektoen will preside. The address on Pasteur will be delivered by Professor Victor C. Vaughan, and the response in behalf of France will be made by M. Antonin Barthelemy, consul for France.

SIR ISAAC BAYLEY BALFOUR, for thirty-four years professor of botany at the University of Edinburgh, has died at the age of sixty-nine years.

THE death is announced of Henry John Elwes, past president of the Royal English Arboricultural Society and of the Royal Entomological Society of London.

HARRY J. POWELL, a leader in the scientific development of the manufacture of glass in England, died on November 26 at the age of sixty-nine years.

DR. JOLYET, formerly professor of physiology of the Bordeaux Medical School, has died at the age of eighty-two years.

PROFESSOR ERASMUS MAJEWSKI, the Polish anthropologist, died in Warsaw on November 15.

THE program committee of the Pennsylvania State College Branch of the American Association for the Advancement of Science arranged to have Dr. W. A. Orton, from the Bureau of Plant Industry, Washington, D. C., address the meeting which followed the annual dinner at the University Club on December 12. Dr. Orton discussed the newer knowledge of the properties of plants important in special diet and the necessity of introducing and disseminating additions to our list of vegetables and of providing an all-the-year supply."

Sigma Delta Epsilon, graduate women's scientific fraternity, will hold its national convention in Boston at the time of the meetings of the American Association for the Advancement of Science. There will be an informal luncheon for all scientific women interested in the need of such an organization on Thursday, December 28. At this luncheon Mrs. Anna Botsford Comstock will speak on "The need of organization among scientific women," and Miss Christianna Smith, national president, on "Sigma Delta Epsilon, graduate women's scientific fraternity."

A CAJAL prize is offered this year by the Academy of Medicine and Surgery at Barcelona, as part of the tribute to Professor Ramón y Cajal. The prize, 1,000 pesetas, will be awarded for the best work describing original research on any histologic topic, accompanied with slides, photomicrographs, etc.

JOHN B. HENDERSON, a regent of the Smithsonian Institution, has purchased for the Division of Mollusks the General Evezard collection of mollusks estimated at from 7,000 to 10,000 specimens, including a large number of types.

An expedition to study seismic disturbances on the bed of the Pacific Ocean under the auspices of the Carnegie Institution of Washington and the Hydrographic Office of the Navy, will leave San Francisco in the near Two American destroyers, the Hull future. and the Corry, have been selected for the work. They will carry the sonic depth finder, by means of which it is hoped to make continuous soundings for 7,000 miles along the Pacific coasts of the United States and Mexico. The soundings will be made on parallel lines, approximately at right angles to the 2,000 fathom curve, at intervals of five to ten miles, extending from the coast to a point on the deeper floor of the Pacific Ocean. The expedition, through a more accurate charting of the bed of the Pacific Ocean, aims to throw new light on the causes and the effects of the seismic disturbances that so often occur off the Pacific Coast of North America.

WE learn from the London *Times* that a meeting to consider the question of a memorial to Mr. William Henry Hudson, the writer on natural history, who died last August, was held on November 27 at the offices of his publishers, Messrs. J. M. Dent and Sons, Limited. Mr. R. B. Cunninghame Graham presided and was

supported by Lord Grey of Fallodon. It was agreed that the memorial should take the form of a drinking and bathing fountain for birds, to be erected in London, preferably, if the Office of Works approved, at the entrance to one of the bird sanctuaries which are being developed in certain of the public parks, the sanctuary itself to be dedicated to Mr. Hudson. It was further agreed that the portrait of Mr. Hudson painted by Professor A. D. Rutherston should be acquired and presented (subject to its acceptance by the trustees) to the National Portrait Gallery, and such moneys as might be further subscribed to the memorial fund should be devoted to objects similar to those mentioned in Mr. Hudson's will. Mr. Hudson left the residue of his property to the Royal Society for the Protection of Birds, to be used for the purpose of printing leaflets and pamphlets designed to excite in children "that interest in and love of the birds which leads to their protection."

THE council of the Royal Aeronautical Society announces that, through the generosity of the trustees of the Carnegie United Kingdom Trust, they have been able to arrange for the purchase of a large number of valuable historical books on aeronautics. This purchase, together with the works already possessed by the society, renders its collection of early and modern aeronautical literature probably unsurpassed in any country. In recognition of their generosity, the council of the Royal Aeronautical Society has, at the request of the Carnegie trustees, agreed to make the books in the society's library available for any student in the British Isles through the medium of the Central Library for Students, 9 Galen Place, W. C. 1. The library has been formed by the Carnegie trustees to provide a loan collection for students of technical books, which are unsuitable for placing in rural libraries.

It is stated in *Nature* that the suggestion made by Mr. F. Gill, president of the Institution of Electrical Engineers, in his recent address, that an international European conference should be held with the view of establishing on a commercial basis a practical system of long-distance telephony in the European DECEMBER 22, 1922]

trunk lines, has now been realized by M. Paul Laffont, the French minister of telegraphs and telephones. He proposes to invite a conference at Paris of the technical administrators of the western European countries, and he urges that France would naturally be the center of the vast telephone system formed by combining the systems of these countries. The long-distance telephone calls in daily use in America show that, from an engineering point of view, the scheme presents few difficulties. Thus the New York-San Francisco call (3,000 miles) is equivalent to communication between London and Baghdad; the Key West (Florida) and Los Angeles call via New York and San Francisco is equivalent to a London-Delhi communication.

THE Department of Commerce announces that provisional figures compiles by the Bureau of the Census for the first six months of 1922 indicate higher death rates than for the corresponding six months of 1921. For the states compared the death rate for the six months was 12.6 in 1922 against 12 for the first six months of 1921. The highest mortality rate for the half year is shown for Maine (15.7)and the lowest for Idaho (8.2). These figures forecast for the year 1922 a somewhat higher rate for the death registration area than the record low rate (11.6) for the year 1921. Provisional birth figures for the first six months of 1922 indicate lower birth rates than for the corresponding six months of 1921. For the states compared the birth rate for the first six months was 22.7 in 1922 against 24.8 in 1921. The highest birth rate for the half year (30)is shown for North Carolina and the lowest (18.1) for Vermont. Births so far reported for the first six months of 1922 indicate a lower birth rate for the year than the 1921 rate for the birth registration area (24.3).

UNIVERSITY AND EDUCATIONAL NOTES

A BEQUEST of \$100,000 for the erection of a building for the department of mechanical engineering at the University of Maine, to be named for the donor, is made in the will of Oliver Crosby, head of an engineering firm in St. Paul, Minn.

BAKER UNIVERSITY announces a gift of \$100,000 from Mr. Joab Mulvane, a retired banker of Topeka, Kansas, and a member of the board of trustees of the university. The money will be used in the erection of the Mulvane Science Hall.

THE faculty of Case School of Applied Science, Cleveland, Ohio, were notified in October of a new and advanced scale of salaries, which took effect at once. Full professors, of whom there are twelve, will receive \$5,000; associate professors, of whom there are eight, will receive \$3,300; assistant professors, of whom there are nine, will receive \$2,800; and instructors, of whom there are thirty-three, will receive \$2,000 to \$2,200. The enrolment at Case this year is slightly less than a year ago, numbering 615, with a freshman class of 198.

SIR AUCKLAND GEDDES, British ambassador to the United States, and previously a distingushed professor of anatomy, delivered the address in dedication of the J. William White Surgical Pavilion of the University of Pennsylvania, on December 14. The pavilion is named after the late Dr. J. William White, who was for many years professor of surgery. It was built at a cost of \$1,000,000, of which \$350,000 was contributed by the state and the remainder by friends of the university.

PROFESSOR GEORGE DAVID BIRKHOFF, of Harvard University, has been appointed lecturer in mathematics at Yale University for the second term. He will give a course in the Graduate School during Professor Ernest W. Brown's absence.

LOUIS AGASSIZ FUERTES, the artist, has been appointed lecturer in ornithology in Cornell University.

Dr. H. M. JENNISON, who recently received the degree of Ph.D. from Washington University, has been appointed associate professor of botany at the University of Tennessee, after having completed eleven years' service at the Montana State College.

Dr. A. W. GIBB has been appointed to the