For state agents for rural schools, \$53,200. For rural education of negroes, \$50,974.

For current support of negro colleges and industrial schools, \$102,200.

For farm demonstrations, including canning club work and boys' corn and tomato clubs in Maine and New Hampshire, \$36,500.

Additional appropriations for various projects, aggregating \$80,000, of which the sum of \$50,000 was given for the purpose of promoting educational studies and research.

In making this last appropriation of \$50,000 for educational research the board is continuing a policy begun two years ago.

It was also announced that Frederick T. Gates, who has been Mr. Rockefeller's adviser in benefactions for many years, had resigned from the chairmanship of the board. He is to be succeeded by Dr. Wallace Buttrick, who has been secretary. Mr. Buttrick's place is taken by Dr. Abraham Flexner.

THE RAMSAY MEMORIAL FUND

As was noted in Science at the time a public meeting was held last October at University College, London, to consider the best means of establishing a memorial to the late Sir William Ramsay. We learn from Nature that since then the organization of the appeal has been set up and is now complete. Mr. H. H. Asquith has consented to act as president of the fund, whilst the vice-presidents include the ambassadors and ministers of allied and neutral powers, Mr. Lloyd George, the president of the Board of Education, the president of the Royal Society and the chancellors of the universities of Cambridge, Glasgow and Lon-The general committee, consisting of the subscribers, is under the chairmanship of Lord Rayleigh. Lord Glenconner and Professor J. N. Collie share the office of honorary treasurer, and Dr. Smiles is acting as honorary secretary.

An executive committee, formed under the chairmanship of Sir Hugh Bell, has drawn up an appeal, which is at present only privately issued, but will shortly be circulated publicly. The committee aims at obtaining a sum of £100,000, and whilst the final form to be taken by the memorial will be submitted to the subscribers, and will necessarily depend on the

amount obtained, the objects recommended are: (1) The provision of Ramsay Research Fellowships, tenable wherever the necessary equipment may be found; and (2) the establishment of a Ramsay Memorial Laboratory of Engineering Chemistry in connection with University College, London, where Sir William Ramsay's most important discoveries were made during his twenty-six years' tenure of the chair of chemistry. The committee has also in mind the inclusion of other forms of memorial, such as the institution of a Ramsay Medal for Chemical Research.

The sum already obtained by the private efforts of Sir William Ramsay's friends and from their own generosity amounts to about £13,500. This includes the donation of £5,000 from Messrs. Brunner, Mond, Ltd.; £1,000 each from the Rt. Hon. Lord Glenconner, Sir Hugh Bell, Sir Ralph C. Forster, Sir Robert Hadfield, Mr. Robert Mond and Mr. Hugh Brunel Noble; and £500 each from the president of the British Science Guild and Miss Lilias Noble.

SCIENTIFIC NOTES AND NEWS

THE New York Academy of Sciences has been compelled to postpone the celebration which had been planned, but on the evening of May 28 the following program was given in honor of the one hundred years of scientific activity of the academy:

The relation of pure science to the national crisis: Professor Michael Idvorsky Pupin, president of the academy.

The academy's scientific survey of Porto Rico: Dr. Nathaniel Lord Britton.

Our first hundred years—a summary: Dr. John Hendley Barnhart.

Professor T. H. Morgan, of Columbia University, has been elected a foreign member of the Linnean Society, London.

Dr. Isaiah Bowman, director of the American Geographical Society, was in April awarded the Bonaparte-Wyse gold medal of the Geographical Society of Paris for his explorations in and publications on South America.

We learn from *Nature* that the Pereira prize of the Pharmaceutical Society of Great Britain has been awarded to Miss Ivy Roberts, and the silver and bronze medals of the society have been awarded, respectively, to Mr. H. Jephson and Miss Doris Gregory. The Hanbury gold medal has been awarded to Professor H. G. Greenish, professor of pharmaceutics to the Pharmaceutical Society.

THE Swedish Society of Physicians has elected Colonel Robert Jones, C.B., inspector of British military orthopedices, to be a foreign member.

THE Jacksonian prize of the Royal College of Surgeons of England for 1916 has been awarded to Mr. E. W. H. Groves for his dissertation on "Methods and results of transplantation of bone in the repair of defects caused by injury or disease." The subject for the Jacksonian prize for 1918 is "The injuries and diseases of the pancreas and their surgical treatment."

The British Medical Journal states that the post of director of the Institute for Experimental Therapy and of the Georg-Speyer House in Frankfurt-a.-Main, left vacant more than a year and a half ago by the death of Professor Ehrlich, has been given to Professor Kolle. He was one of Koch's pupils, and was his assistant when he investigated the causes of rinderpest in British South-west Africa in 1896. Kolle was then only twenty-eight. In conjunction with Pfeiffer, he investigated the problems of typhoid immunization, and the typhoid vaccine experiments carried out at the time of the Herero rising were continued during the present war. He has also made observations on cholera, plague and dysentery.

It was announced at a resumed annual meeting of the Iron and Steel Institute of Great Britain that awards had been made by the council from the Carnegie Research Scholarship Fund to the following: Mr. W. C. Hancoek, £50, to enable him to continue his investigations on refractory materials, with special reference to the manufacture of cokeoven bricks; to J. L. Nauchton and D. Hanson, a grant of £100 to enable them to continue

their joint research on iron-phosphorous and iron-carbon-phosphorous steels; to J. Hurst a grant of £100 for an investigation on the wearing and the micro-structure of worn castiron specimens; to J. H. Whiteley and A. F. Hallimond, a grant of £100 for a joint research on the chemical detection of strain in iron and steel.

CHANCELLOR DAY, of Syracuse University, has appointed the following representatives from the faculty, trustees and alumni to act as the local Research Council: Dr. C. W. Hargitt, chairman; Professor E. N. Pattee, secretary; Dean W. P. Graham, Acting Dean Frank F. Moon, Dr. Frank P. Knowlton, Mr. Edmund L. French, Mr. William J. Harvie.

Professor George R. McDermott, the professor of structural design in Sibley College, has been appointed a member of the staff of General George W. Goethals, who is taking charge of the construction of an emergency fleet.

Dr. Allerton S. Cushman, president of the Institute of Industrial Research, with head-quarters at Washington, has been commissioned a major in the Officers' Reserve Corps, and will do special research work under the ordnance section on the chemistry of high explosives.

MR. HARRY S. SWARTH has accepted the position of curator of ornithology and mammalogy in the museum of the California Academy of Sciences, and will enter on the work on October 1. Mr. Swarth has been curator of birds in the museum of vertebrate zoology of the University of California since 1915. He is a fellow of the American Ornithologists Union.

Dr. THOMAS CROWDER, medical director of the department of sanitation and medicine of the Pullman Company gave a lecture on May 14 at the University of Illinois College of Medicine, his subject being "Ventilation and sanitation of sleeping cars."

THE Bakerian lecture of the Royal Society was delivered by Mr. J. H. Jeans on May 17 upon the subject of the configuration of astronomical masses and the figure of the earth.

Sir William Osler delivered the annual oration of the Medical Society of London on May 14. His subject was "The anti-venereal campaign."

THE Sydney Ringer biennial memorial lecture was delivered on Friday, May 25, at the University College Hospital Medical School, London, by Professor A. R. Cushny, on "Digitalis and auricular fibrillation."

A STATUE of Berthelot, the great chemist, has been unveiled in the gardens of the Collège de France. He did much of his work in the laboratories of the college.

MISS NELLIE FOSDICK, instructor in botany at Wellesley College, died on May 19.

MISS RUTH HOLDEN, Alice Freeman Palmer fellow in botany at Wellesley College from 1914 to 1915, has died in Moscow, Russia, from typhoid fever, contracted during her work as a member of the Red Cross relief work for Polish refugees in Russia.

SIR MARC ARMAND RUFFER. distinguished for his work in preventive medicine, has lost his life while engaged in Red Cross work.

Major P. G. Bailey, known for his work in genetics, was killed in action on April 26.

THE death is announced at Paris of Louis Landouzy, known for his work in tuberculosis, aged seventy-two years.

Professor H. F. E. Jungersen, professor of zoology and director of the zoological museum in the University of Copenhagen, has died at the age of sixty-three years.

A New journal for physical anthropology has been established in Italy. It will be known as the *Giornale per la Morfologia dell' Uomo e dei Primati*, and is edited and published by Professor G. L. Sera, of the University of Pavia.

The Angrand prize of the Bibliothèque Nationale of Paris, of the value of 5,000 francs, is to be awarded in 1918 for the best work published during 1913–17 on the pre-Columbian history, ethnography, archeology or linguistics of the American aborigines.

WE learn from the *British Medical Journal* that the triennial prize of the Royal College of Surgeons of England, consisting of the John

Hunter medal in gold to the value of fifty guineas, or, at the option of the author, a medal executed in bronze, with an honorarium of £50, will be awarded for the best essay on "The development of the hip-joint and the knee-joint of man." Essays must be received at the college not later than Tuesday, December 31, 1918. The subject of the Jacksonian prize for this year, essays in competition for which must be received on December 31, 1917, is "The causation, diagnosis and treatment of traumatic aneurysm, including arterio-venous aneurysm." As already announced, the subject of the prize for 1918 is "Injuries and diseases of the pancreas and their surgical treatment."

The Lakeside laboratory of the Iowa State University on the shores of Lake Okoboji, begun nine years ago by President Emeritus Thomas H. Macbride, will open its annual session on June 18. The staff of instruction, in addition to members from the university, will include Professor T. C. Stephens, of Morningside College, zoology, and Mr. A. F. Ewers, of St. Louis, botany. Dr. F. C. Stromsten, of the university, has charge of work on aquatic animals. Professor R. B. Wylie, also of the university, is the director.

The annual summer courses which are given at the marine station of the University of Washington, Friday Harbor, are scheduled to begin on June 18, and will last six weeks. The work this session will be on the development of marine animals and will be under the supervision of Hjalmar L. Osterud, instructor in zoology at the university. He will be assisted by Dr. John Bovard, professor of zoology in the University of Oregon, who will give the general course in marine zoology. Dr. H. S. Brode, of Whitman College, will lecture in ecology, while Dr. Theodore C. Frye, professor of botany at the State University, will teach algology.

Professor Nelson C. Brown, head of the department of forest utilization at the New York State College of Forestry, Syracuse University, has obtained a leave of absence for one year and a half, and will go to Europe as a government trade commissioner in an investi-

gation of the lumber needs of the warring nations for reconstruction purposes. Early in May, the trade commissioners met at Washington for the purpose of organization. There they gathered data concerning tariffs, freight rates, probable future shipping facilities and other information bearing on the matter of lumber exports after peace has been declared. They will spend two or three months in visiting lumber-producing centers in this country, interviewing lumbermen. This preliminary work will be for the purpose of obtaining exact knowledge as to how much lumber the European countries now at war can purchase here and in what particular markets. Professor Brown and his associates expect to sail for Europe in August or September.

THE Johns Hopkins Alumni News states that it has lately become known that two of the most successful devices introduced by the allies in the present war are due to Dr. Robert W. Wood, professor of experimental physics. They are the lachrymose or "tear" gas, used to render the enemy temporarily blind, and a photographic screen of a special type, which is especially well suited to the requirements of modern warfare. Dr. Wood sent the formula for the former to a friend in Paris soon after the outbreak of the war. Several weeks after submitting his plan, Dr. Wood received word that it had been turned over to the proper authorities. Nothing was done, however, until three months later when the Germans began the use of poisonous gases; since then the tear gas proposed by Dr. Wood has been used on both sides. The gas has a powerful effect on the eyes, the slightest trace closing them and starting the tears. benzyl-bromide, or choracetone, vapor and produces temporary blindness but not permanent injury. Its use was in no way a violation of The Hague conventions or the usages of civilization. It was Dr. Wood's idea that the gas might be used in a single great drive, being released over the whole battle front simultaneously. The other of Professor Wood's inventions being used extensively in the fighting on the west front is the infra-red screen for the panchromatic plates for photography. By the use of the screen the Allied airmen are enabled to obtain accurate photographs of the enemy's position, batteries, etc., right through the thick pall of smoke which hides them from view.

UNIVERSITY AND EDUCATIONAL NEWS

YALE UNIVERSITY has received from Mrs. Edward H. Harriman, of New York, bonds yielding \$4,600 a year for the purpose of establishing the Harriman Fund for Orthopedics.

The late J. T. Apperson, member of the board of regents of the Oregon Agricultural College since its founding and at one time president of the board, left the residue of his estate to the trustees of the college as a permanent loan fund to worthy students who make their own way through school. The benefaction will amount to from \$25,000 to \$40,000, and will be invested by the State Land Board.

THE new building of the dental school of Western Reserve University is nearing completion and will be occupied in the fall of 1917. The building is situated alongside the university campus and near the site for the new medical school plant. The dental school, formerly affiliated, is now an integral department of the university. An extensive revision of the curriculum and an increase in entrance requirements are contemplated.

SR CHARLES HOLCROFT bequeathed to the University of Birmingham the sum of £5,000 for research work in science. Sir Charles Holcroft contributed, during his lifetime, about £100,000 to the university.

The board of trustees of the Long Island College Hospital announces the appointment of Dr. James C. Egbert, director of extension teaching, Columbia University, as president of the medical college. Dr. Otto V. Huffman has been appointed dean; Dr. Wade W. Oliver, formerly of the University of Cincinnati, has been called to the chair of bacteriology and Dr. Carl H. Laws, formerly of the department of pediatrics in the University of Michigan, has been appointed professor of pediatrics.

Dr. J. Bronsenbrenner has resigned the position of director of research laboratories of the Western Pennsylvania Hospital in Pittsburgh to accept the appointment of associate