burn, of New York City. There is a statue of Mme. Curie over the door of Hepburn Hall. Preceding the dedication there was a service in Gunnison Memorial Chapel, at which Dr. Richard Eddy Sykes, president of the university, conferred the honorary degree of doctor of science upon Mme. Curie. An address was delivered by Dr. George B. Pegram, dean of the college of engineering of Columbia University, and an original poem in honor of Mme. Curie was read by Dr. Charles Kelsey Gaines, professor of English literature at St. Lawrence University. At the dedication service the building was presented by Mrs. Hepburn, a trustee of the university, and was accepted by Mr. Owen D. Young, president of the university corporation. Mme. Curie then read a speech of dedication.

On October 30 Mme. Curie received from the hands of Mr. Hoover a gift of $50,000 with which to purchase a gram of radium. The presentation was made at the auditorium of the National Academy of Sciences Building.

Dr. Vernon Kellogg, permanent secretary of the National Research Council, presided and introduced Dr. William H. Welch, of the Johns Hopkins University, who spoke on behalf of the scientific men of America. Mr. Hoover was then introduced and said:

I am sure that I represent the whole American people when I express our gratification to Mme. Curie that she should have honored our country by coming here. We give to her the welcome for the beneficent service she has given to all mankind.

It is not necessary for me to recount the great fundamental discovery associated with the names of her late husband and herself. The discovery of radium was an outstanding triumph of research in the realm of pure science.

It was indeed a great and successful exploration into the unknown, from which a new truth has brought to the world a practical revolution in our conceptions of substance. It has advanced all thought on the constitution of matter. And, like all discoveries of fundamental substance and fact, it has found application to human use. In the treatment of disease, especially of cancer, it has brought relief of human suffering to hundreds of thousands of men and women.

As an indication of the appreciation and the respect which our people feel for Mme. Curie, generous-minded men and women, under the leadership of Mrs. William Melony, have provided the fund with which a gram of radium is to be purchased and presented to the Hospital and Research Institute which bears her name in Warsaw. The construction of this hospital was a magnificent tribute by the city of her birth and the Polish people, in which the American people are glad to have even this opportunity of modest participation.

The whole of this occasion where we pay tribute to a great scientist is again a recognition of the fundamental importance of scientific research, and a mark of public appreciation of those who have given their lives to human service through its profession.

In reply, Mme. Curie said:

Mr. President, Dr. Welch, ladies and gentlemen:

I am conscious of my indebtedness to my friends in America, who for the second time, with great kindness and understanding, have gratified one of my dear wishes. My work is very much my life, and I have been made happy by your generous support of it.

I feel deeply the importance of what has been said by the president of the United States about the value of pure science; this has been the creed of my life. Scientific research has its great beauty and its reward in itself; and so I have found happiness in my work.

It has been, however, an additional as well as an unexpected happiness to know that my work could be used for relief in human suffering.

I do not believe that I deserve all the praise that has been given me, but I highly value the friendly feeling expressed by the president and by Dr. Welch.

Mr. President, in my native land your name is revered for having saved, by your humanitarian work, a large part of the young generation. Your kind work of to-day will add to the gratitude of the Polish people toward you.

In accepting this precious gift, which will hasten the opening of the radium institute in Warsaw, I offer you and my American friends my most profound thanks. My laboratory in Paris will keep in close relation to the Warsaw institute, and I will like to remember the American gifts of radium to me as a symbol of enduring friendship binding your country to France and to Poland.

SCIENTIFIC NOTES AND NEWS

THOMAS A. EDISON has been named an honorary member of the Italian Academy of Sciences and Letters of Genoa, in recognition of his "distinguished services to science, industry and humanity."

DR. HENRY FAIRFIELD OSBORN, president of the American Museum of Natural History, has been elected a foreign member of the Accademia Nazionale dei Lincei, Rome.

IT is reported in an Associated Press dispatch from Stockholm that the Nobel prize in medicine will be divided between Dr. Frederick Gowland Hopkins, professor of biochemistry at the University of Cambridge, and Dr. C. Eijkmann, professor of hygiene and legal medicine at the University of Utrecht. Both have worked on problems of nutrition related to what are now known as vitamins.

WE regret to learn that Dr. Harvey W. Wiley, chief chemist in the U. S. Department of Agriculture from 1883 to 1912, is seriously ill.

CORNELIUS F. KELLEY, president of the Anaconda Copper Mining Company, received the eleventh annual award of the gold medal of the Mining and Metallurgical Society of America for conspicuous services in the field of metallurgy at a reception at the Savoy-Plaza Hotel on October 22.

THE council of the Royal Meteorological Society has awarded the Symons gold medal for 1930 to Dr. G. C. Simpson, F.R.S., director of the Meteorological Office at the Air Ministry. The medal is awarded for distinguished work in connection with meteorological science, and will be presented at the annual general meeting on January 15.

PROFESSOR JOSEPH GRINNELL, of the University of California, was elected president of the American Ornithologists' Union at the closing session of the Philadelphia meeting of the society on October 21. James H. Fleming, Toronto, Canada, and Arthur C. Bent, Taunton, Massachusetts, were elected vice-presidents; Dr. T. S. Palmer, Washington, D. C., secretary, and W. L. McAtee, Cherrydale, Virginia, treasurer.

DR. ALICE H. FARNSWORTH, professor of astronomy at Mount Holyoke College, was elected president of the American Association of Variable Star Observers at its recent meeting held at Harvard University.

DR. ISRAEL S. KLEINER, professor of physiological chemistry at the New York Homeopathic Medical College and Flower Hospital, has received a grant from the Lucius N. Littauer Foundation to aid him in his studies on the blood-sugar in diabetes.

DR. W. E. GARREY, professor of physiology at the Vanderbilt University School of Medicine, has recently been elected to serve as member at large on the medical division of the National Research Council. Dr. Garrey is also a member of the executive committee of the biological division of the council.

J. REID MOIR has been elected president of the Ipswich Museum in succession to the late Sir E. Ray Lankester, in recognition of his services to science and to the museum.

THE RIGHT HONORABLE CHRISTOPHER ADDISON, M.P., has been appointed by the prime minister chairman of a committee to inquire into the question of establishing one or more national parks in Great Britain with a view to the preservation of natural characteristics, including flora and fauna, and the improvement of recreational facilities for the people.

MAX ZIMMERMANN, formerly chief chemist of the Portsmouth Dye and Chemical Company, Portsmouth, N. H., has accepted a position in the research department of the Firestone Tire and Rubber Company, Akron, Ohio.

DR. E. P. CLARK, research chemist of the Interstate Cottonseed Crushers' Association, and Dr. Herbert L. J. Haller, associate in the department of chemistry of the Rockefeller Institute for Medical Research, have accepted appointment in the insecticide division of the chemical and technological research unit of the bureau.

DR. LOUIS C. FLECK, chemist in the section of derived products at the U. S. Forest Products Laboratory, Madison, Wis., has joined the research staff of the Kimberly-Clark Corporation at Kimberly, Wis., where he will be in charge of organic chemical research. Ervin F. Kurth, chemist in the section of derived products at the U. S. Forest Products Laboratory, left the laboratory on November 1 to join the DuPont Company at Wilmington, Delaware.

DR. SAMUEL PALKIN, who since 1911 has been engaged in research work in the former Bureau of Chemistry and subsequently in the food, drug and insecticide administration, has been appointed senior chemist in the Bureau of Chemistry and Soils to do fundamental research work on naval stores.

DR. G. A. WELTZ, of Munich, and Professor Storm, of Leyden, are making a series of balloon ascents in Upper Bavaria in order to investigate climatic phenomena.

DR. ALEXIS E. CHICHIBABIN, dean of the chemical faculty of the Polytechnical Institute, Moscow, is visiting the United States.

PROFESSOR C. H. OSTENFELD, director of the Botanical Garden and Museum, Copenhagen, Denmark, recently spent several days in Washington, giving particular attention to Alaskan plants in the National Herbarium, especially to those of Arctic Alaska. His studies were undertaken in connection with the preparation of a flora of northern Canada, a project upon which he is jointly engaged with Dr. M. O. Malte, chief botanist of the Canadian National Herbarium, Ottawa.

PROFESSOR A. S. HITCHCOCK, custodian of grasses, U. S. National Herbarium, has returned from Africa. He attended by invitation the meeting of the British Association for the Advancement of Science at Cape Town and Johannesburg. He visited Pretoria, Kimberley, Bulawayo, Victoria Falls, Fort Victoria, the Zimbabwe ruins and Salisbury. From Beira in Portuguese East Africa, he sailed for East Africa, stopping at Dar-es-Salaam and Zanzibar. Landing at Tanga (Tanganyika) he proceeded to Amani, where there is an experiment station, and then to Moshi. From the neighboring town of Marangu he ascended Mt. Kilimanjaro to the limit of vegetation (14,000

feet) and then went to Nairobi (Kenya). A trip was made to Kisumu, across Lake Victoria to Entebbe, by motor car to Kampala and Jinja, by rail back to Nairobi, with stops at Elderet, Nakuru and Naivasha. Large collections of grasses were obtained, especially in East Africa where, Mr. Hitchcock states, the conditions for collecting were the best he ever encountered.

KNOWLES A. RYERSON, in charge of the office of foreign plant introduction, in company with W. H. Alderman, head of the department of horticulture in the University of Minnesota, and W. R. Leslie, of the Dominion experimental farm, Morden, Manitoba, recently returned from a plant-collecting trip in northern Manitoba and eastern Saskatchewan. The object of this trip was to obtain wild native fruits at or near their northern limits for use in developing hardy types in this country and the prairie provinces of Canada. Among the material collected by the expedition are several types of berries, an early maturing wild grape and large-fruited gooseberri s. In addition to the native fruits a collection of ornamental and flowering plants was made.

PROFESSOR H. L. CALLENDAR, of the Imperial College of Science and Technology, delivered the Thomas Hawksley lecture of the British Institution of Mechanical Engineers on November 1. His subject was "Critical Relations between Water and Steam."

STANLEY BALDWIN opened the new building for geology at the University of Liverpool on October 21. He also unveiled a bronze tablet to the memory of Lady Herdman, wife of the late Sir William Herdman, Derby professor of natural history. On Lady Herdman's death in 1922 Sir William Herdman added to his earlier gifts the sum of £20,000 towards the cost of the new geological laboratories.

Nature reports that the Norman Lockyer lecture for 1929 of the British Science Guild will be given by Sir Walter Morley Fletcher, who will speak on certain aspects of medical research and their applications, on November 19. The guild has also established an Alexander Pedler lecture in memory of Sir Alexander Pedler, for many years honorary secretary of the guild. The lecture will be an annual one, dealing with some subject of scientific interest, and will be given outside London. The first Alexander Pedler lecture will be delivered on November 26 by Dr. G. C. Simpson on "Past Climates." It will be held under the auspices of the Manchester Literary and Philosophical Society.

AT the meeting of the subcommittee on Standardization of Symbols for Heat and Thermodynamics of the American Standards Association Symbols Project, held at Harvard University on October 12, a vote was passed in appreciation of the work of the late Professor G. A. Goodenough, of the University of Illinois, who was a member of the subcommittee.

THE will of William Herbert Rollins, of Boston, leaves a trust fund of $100,000 to the Smithsonian Institution at Washington, D. C., to continue his experiments regarding "the drag of the light medium in the magnetic field" and to provide for solving problems in physics and chemistry. The will leaves to John C. Phillips, son of Dr. J. C. Phillips, the testator's tracts of land in Wellfleet and Truro for a sanctuary for plants, birds, animals and fishes with the hope "that Mr. Phillips will try to join the lands thus making a long tract of land fronting the Atlantic Ocean which, kept free of buildings or other evidences of civilization, will be very restful. Before many years the shore will be ruined by evidences of a crude civilization unless held in this way."

THE University of Minnesota recently received a gift from the Rockefeller Foundation to help to establish a laboratory for the analysis of rocks. It is believed that the demand for chemical work on rocks will be so great that in a few years the laboratory may become self-supporting. Professor Frank F. Grout has general supervision of the work, which is to be conducted in conjunction with the petrographic laboratories of the department of geology and mineralogy. The first analytical work is to be done by Dr. Reuben B. Ellestad, formerly research assistant at Harvard University and instructor in chemistry at Tufts College. If the work increases as it is expected, there will be further appointments and probably some fellowships open to advanced students in geology and chemistry who wish to acquire skill in the chemical methods of rock analysis.

THE Daniel Guggenheim Fund for the Promotion of Aeronautics, which will have expended nearly $5,000,000 in the development of aviation by the end of the present year, will finish its work at that time. An additional donation of half a million dollars has been made to the fund by Mr. Daniel F. Guggenheim. The fund is being closed on the advice of the trustees and officers, who point out that the tasks which the fund undertook at its inception have been completed. The fund was established in January, 1926, with deeds of gift from Daniel Guggenheim totaling $2,500,000, of which both interest and principal were available for expenditure. The purposes of the fund as stated at its founding were: "To promote aeronautical education throughout the country; to assist in the extension of aeronautical science, and to further the development of commercial aircraft, particularly in its use as a regular means of transportation." From time to time after the first gift Mr. Guggen-

heim made additional gifts, and these, with the fund which established the Guggenheim School of Aeronautics at New York University, and which was not included originally, bring the fund's total to approximately $4,500,000. Of this sum nearly $2,000,000 has gone directly to schools. Special gifts and fellowships have taken $19,840; aeronautical societies $60,000, while the prizes for the safety contest will require $150,000.

Industrial and Engineering Chemistry reports that the membership of the American Institute of Chemical Engineers by a recent letter ballot overwhelmingly indicated a preference for setting the institute upon a more businesslike basis and employing a full-time business manager or executive secretary to undertake the management of the institute's affairs. It is probable that the council will take official action on that expression. This will lead to the establishment of a permanent headquarters, provided with the customary office facilities for the conduct of business. The opportunity resulting from this probable action should interest a number of those qualified, particularly progressive and active young chemical engineers, and those whom this may attract are invited to communicate with H. C. Parmelee, secretary, Tenth Ave. at Thirty-sixth St., New York City. Sufficient particulars concerning training and experience of any interested should accompany the communication in order that the council may have the fullest possible details before it in considering applications.

THE London *Times* states that the British delegates who attended the meetings of the International Council for the Exploration of the Sea which were held in London last April have published their report. It shows that the discussions ranged over a variety of practical and scientific problems connected with fishery, but perhaps those most generally interesting concerned the protection of whales. The Whaling Committee of the Council, says the report, had the advantage of having as chairman Dr. Hjort, who has wide knowledge of Arctic whaling and is well informed on the economic aspects of Antarctic whaling. The committee had also the assistance of Dr. Kemp, director of the *Discovery* investigations, who gave information on the relative numbers of mature and immature whales killed at certain tropical stations on the African coast, besides facts revealed by the work of the *Discovery* expedition. The general feeling of the committee was that, although it is not at present possible to put forward recommendations which can be said to have a strictly scientific foundation, nevertheless it "feels strongly that the enormous expansion of the whaling industry in recent years constitutes a real menace to the maintenance of the stocks of whales, and that if the expansion continues at the present rate there is a real risk of those stocks being so reduced as to cause serious detriment to the industry." The report admits that until scientific researches have reached a definite conclusion it is impossible to devise permanent measures of protection, but the committee thinks that the governments of the countries interested should, as a matter of urgency, seriously consider taking immediate temporary measures to deal with the menace. Among the measures suggested is the prohibition of killing certain species of whales, principally right whales, the protection of cows with calves and immature whales, and the prohibition or restriction of the capture of whales in certain regions, notably in the tropics.

FOR nearly seven years bird sanctuaries have been established in the royal parks in London and its vicinity. We learn from *Nature* that the occasion of the publication of the Annual Report for 1928 has been taken to review the progress made. The sanctuaries have been created at small cost and without withdrawing from the public ground to which they already had access. Development has followed on very simple lines. In certain enclosures grass has been allowed to grow, unshorn by the gardener, and additional shrubs and undergrowth such as gorse and brambles have been planted to afford cover and nesting sites for the birds. Periodical thinning is carried out where necessary in order to admit light and air, nesting-boxes and nesting-material have been provided, food is supplied during hard weather, and vermin are kept down so far as practicable. The result has been excellent from the birds' point of view, and the public shows an increasing interest in the sanctuaries and their inhabitants. Appendices to the report describe the more interesting happenings at the various sanctuaries, and give lists of breeding birds and bird visitors.

UNIVERSITY AND EDUCATIONAL NOTES

ON October 17, the University of Buffalo opened a campaign for five million dollars, to be added to its endowment fund. The campaign closed on October 29, at which time there had already been pledged a total of $5,331,670. Among the gifts were $1,000,000 from the Schoellkopf family, $500,000 from Mr. and Mrs. J. F. Schoellkopf, $500,000 from Thomas B. Lockwood for a new library building, $200,000 from William H. Crosby and his family which with previous gifts will be used to erect a building for the