Among the events in honor of Mr. Edison which will take place on October 21 will be a dinner given to the inventor by Henry Ford at Dearborn, Michigan, which will be attended by eight hundred leaders of American industry. On the same day, the completely restored Menlo Park Laboratories, where Edison perfected the electric light, will be dedicated at Dearborn. The laboratories, which have been restored by Henry Ford, will contain not only a record of the life and inventions of Edison, but a collection of his original tools and retorts. Eight carloads of discarded tools and primitive incandescent lamps which Mr. Edison threw into a pond many years ago have been sent to Dearborn under Mr. Ford's direction and will be exhibited in the museum.

A third feature of the day will be the dedication of the Edison Institute of Technology, founded by Ford with a gift of \$5,000,000. The institute building is an exact replica of Independence Hall.

SCIENTIFIC NOTES AND NEWS

Dr. A. A. MICHELSON, of the University of Chicago, left on May 8 for Pasadena, California, where he will continue his measurements of the velocity of light, using a vacuum chamber a mile in length.

Dr. WILLIAM H. WELCH, now professor of the history of medicine and director of the new medical library at the Johns Hopkins University, was guest of honor at a dinner celebrating his seventy-ninth birthday on April 8.

At the recent Charter Day exercises, the University of California conferred the degree of LL.D. on Dr. L. O. Howard and on Dr. Roscoe Pound, dean of the Harvard Law School. In presenting the degree to Dr. Howard, President Campbell said: "Energetic and able student of insects in their relations to the welfare of mankind; unsurpassed benefactor of the farmers of the United States and therefore a perpetual creditor of all his countrymen; esteemed and beloved leader in the councils of American science."

DR. ELMER A. SPERRY, engineer and inventor, has been elected "a member with distinction" in Tau Beta Pi, the engineering society. This honor has been conferred only once before. The initiation, followed by a dinner, took place on April 18 at the Hotel Astor, New York.

Professor Michael I. Pupin, of Columbia University, was the honor guest at a dinner given at Tucson on April 5 by the Arizona chapter of Sigma Xi. Dr. T. F. Buehrer, professor of chemistry in the university and president of the Arizona chapter, presided. Following the dinner Professor Pupin gave an address on "Ionization."

ONE hundred and fifteen members of the staff of the Mayo Clinic attended a dinner in Rochester on April 25 in honor of Dr. Russell M. Wilder, who will leave the clinic soon to become head of the department of medicine at the University of Chicago.

A COMMITTEE composed of Professors Borst, Doederlein, Romberg and Sauerbruck has awarded the Sofia A. Vordhoff-Jung prize for work on the etiology of cancer to Professor Katsusaburo Yamagiwa, of the University of Tokio.

PROFESSOR PIETER ZEEMAN, of the University of Amsterdam, has been elected an honorary fellow of the Physical Society of London.

Dr. MAX RUBNER, of the University of Berlin, has been elected an honorary member of the Physiological Society of London.

Dr. Hugo Obermaier, professor at the University of Madrid, has been elected an honorary member of the Anthropological Society in Vienna.

M. CHARLES ACHARD, professor of clinical medicine in the University of Paris, has been elected a member of the section of medicine of the Paris Academy of Sciences to succeed the late M. F. Widal.

Nature reports that at the annual general meeting of the Ray Society held on March 21, the following officers were reelected: President, Professor W. C. M'Intosh; treasurer, Sir Sidney F. Harmer; secretary, Dr. W. T. Calman. Dr. R. W. T. Gunther was elected a vice-president, and Mr. R. Adkin and Mr. R. Gurney were elected new members of the council.

COMMANDER RAYMOND S. PATTON, hydrographic and geodetic engineer, has been appointed director of the U. S. Coast and Geodetic Survey to succeed E. Lester Jones, who died on April 9. Mr. Patton joined the survey in 1904 and spent twelve years' field service in Alaska, the Philippine Islands and along the coasts of the United States, where he commanded one of the survey ships. In 1917, he was transferred to the Navy Department, where he served until April, 1919. Since that time he has been chief of the division of charts in the Washington office of the survey.

Dr. Basil E. Gilbert, acting director of the Rhode Island Experiment Station since February, 1928, has been appointed director.

Dr. C. L. Holmes, head of the college department of agricultural economics at Iowa State College and of the agricultural economics section of the experiment station, has resigned to become principal agricultural economist in charge of the division of farm management and costs of the bureau of agricultural economics of the U. S. Department of Agriculture.

Dr. Horace H. F. Jayne, of Wallingford, Pa., an authority on eastern art, has been elected director of the University of Pennsylvania Museum, filling the vacancy left by the death in January, 1927, of Dr. George Byron Gordon.

Dr. CHARLES C. HEDGES, assistant director of the Johns Hopkins Hospital, has been appointed director of the Babies and Children's Hospital, a unit in the Columbia University Medical Center.

WILLIAM NEWTON has been appointed plant pathologist for the Dominion Department of Agriculture in British Columbia.

Dr. James Davidson, chief assistant entomologist at the Rothamsted Experimental Station, has been appointed head of the department of entomology at the Waite Agricultural Research Institute of the University of Adelaide.

Dr. H. A. Brouwer, professor of geology at the Technical University, Delft, Holland, has accepted a call as director of the newly founded Geological Institute of the University of Amsterdam. Dr. Brouwer will occupy the chair of general geology and petrology and expects to begin his work in October after his return from the East Indies, where he is leading an expedition in the island Celebes and where he will act as delegate to the fourth Pacific Science Congress.

Louis C. Hill, construction engineer of Colorado; Andrew J. Wiley, of Idaho, construction engineer on dam design of the U. S. Department of Agriculture, and William F. Durand, formerly of Stanford University, California, have been appointed consulting engineers to collaborate with R. F. Walker, chief engineer, who will have general charge of the building of the Boulder Dam.

Dr. Charles A. Browne, chief of chemical and technological research in the bureau of chemistry and soils of the U. S. Department of Agriculture, has left for a year's leave of absence in Europe, during which he will visit various laboratories and experiment stations in England and on the continent, and also do some historical scientific research in the libraries.

The second Northwestern University expedition to Dutch Guiana for the study of the Negro will sail from New York on June 14, under the leadership of Dr. Melville J. Herskovits, assistant professor of anthropology. In the upper reaches of the Surinam River, Professor and Mrs. Herskovits expect to spend six weeks studying the customs, laws, beliefs and language of the people.

Dr. E. W. Berry, of the Johns Hopkins University, addressed a joint meeting of the botany and geology societies at the University of Cincinnati on April 15 on "The Evolution of Floras."

Dr. Nasu, professor in the University of Tokyo, will leave for the United States on May 23. He will give lectures at the University of Chicago on population, food and emigration problems. Dr. Nasu expects to return to Japan next autumn after a journey through European countries.

VILHJALMUR STEFANSSON opened his lectures at Magdalene College, University of Cambridge, on April 20. His subject was "Abolishing the Arctic."

The Journal of the American Medical Association reports that the San Diego meeting of the California Medical Association was held from May 6 to 9. The speakers and their subjects at the four general sessions included Dr. William S. Thayer, Baltimore, president of the American Medical Association, on "Sir William Osler"; Dr. John H. Musser, New Orleans, president of the American College of Physicians, on "Functional Disorders"; Edward R. Stitt, until recently surgeon-general of the Navy, on "Trends in Medical Aviation," and William J. Mayo, Rochester, Minnesota, on "The Enlarged Spleen."

Dr. Alfred Charles True, formerly director of the office of experiment stations and later of the states relations service of the U. S. Department of Agriculture, died on April 23 in his seventy-sixth year.

Dr. Albert Barlow Hale, assistant professor of economic geography in the University of Porto Rico, for many years a resident of Chicago, died on March 31 in Rio Piedras.

M. ULYSSE GAYON, biologist, chemist and honorary dean of the faculty of sciences at Bordeaux, has died in his eighty-third year.

THE recent death of Professor Shozaburo Watase, of the University of Tokyo, was reported last week in Science. A correspondent writes: "Professor Watase came to this country in 1887, having previously taken the degree M.Agr. at Sapporo and D.Sc. at Tokyo. He was a graduate student and fellow at the Johns Hopkins University from 1887 to 1890 and received the degree of Ph.D. in the year last named. From 1890 to 1892 he was lecturer and assistant in zoology at Clark University, and from 1892 to 1899 he was at first reader and then assistant professor of zoology in the University of Chicago. During the summers of the years he spent in this country he was a regular attendant at the Marine Biological Laboratory at Woods Hole. By his stimulating intellect, his charming courtesy and his delightful sense of humor, he made many devoted friends among his associates and students. In 1899 he was called to the professorship of zoology and head of the department at the Imperial University of Tokyo and he continued in this position until made honorary professor at the prescribed age for retirement in the Japanese universities"

In accordance with action proposed by the executive committee of the Federation of American Societies for Experimental Biology and the councils of the component societies and approved by the various societies two years ago, there will not be a spring meeting of the federation this year. The usual meeting of the federation is replaced by that of the Thirteenth International Physiological Congress at Boston, August 19 to 23, 1929. There will be no scientific sessions of the component societies of the federation as All arrangements in regard to papers and demonstrations are in the hands of the program committee of the congress, by whom a notice has already been sent out in regard to the submission of titles and The usual business meetings of the four societies of the federation will be held on August 19, prior to the opening session of the congress. The secretaries of the congress are Dr. Edwin J. Cohn and Dr. Alfred C. Redfield, Harvard Medical School, Boston, Massachusetts.

Dr. George E. Johnson, secretary of the Kansas Academy of Science, reports that the sixty-first annual meeting was held at the Kansas State Agricultural College, Manhattan, Kansas, from April 25 to 27. With the aid of local science organizations two special speakers were secured. Dr. Herbert M. Evans, of the University of California, spoke informally at a noon luncheon on "The Relation of Nutrition to Reproduction," and in the afternoon delivered a lecture on "The Function of the Anterior Hypophysis," both on April 26. Major Haig Shekerjian, of Fort Leavenworth, gave a lecture on "Chemical Warfare" on April 25. Besides the general program of fifty-two papers, there was held also a program of twenty-eight chemistry and physics papers, and a psychology program of eight papers. The Kansas Entomological Society met as a section of the academy and had a program of six papers on April 27. Other features of the meeting were the annual banquet, the address of the retiring president, L. D. Wooster, and three motion picture films. Officers were elected as follows: W. B. Wilson, president, Ottawa University; Hazel E. Branch, first vice-president, University of Wichita; W. M. Goldsmith, second vice-president, Southwestern College; R. Q. Brewster, treasurer, University of Kansas; G. E. Johnson, secretary, Kansas State Agricultural College; J. Willard Hershey, L. D. Havenhill, R. L. Parker and E. R. Wood, additional members of the executive council. The academy authorized the publication of Volume 32 of the Transactions of the academy. The 1930 meeting will be held at Hays, Kansas.

Dr. A. M. Peter, secretary of the Kentucky Academy of Science, writes that the academy has just held a very successful annual meeting at Berea College. Berea, Ky. The attendance was good and much interest was taken in the papers presented. Officers elected are: Dr. Frank L. Rainey, Center College, Danville, Kv., president: Dr. Cloyd N. McAllister, Berea College, Berea, vice-president: Dr. A. M. Peter, Experiment Station, Lexington, secretary: Professor W. S. Anderson, Experiment Station, Lexington, treasurer: Professor V. F. Pavne, Transvlvania College, Lexington, councillor in the American Association for the Advancement of Science. The address of President Hutchins in the afternoon was an outstanding feature. After adjournment many of the members enjoyed an interesting hour inspecting the plant at Berea College.

At the annual meeting of the Boston Society of Natural History, held on May 1, the following officers were elected for 1929-30: President, Charles H. Taylor; vice-presidents. Nathaniel T. Kidder, Glover M. Allen, William M. Wheeler; secretary, Clinton V. MacCov; treasurer, Augustus P. Loring, Jr.; trustees, Thomas Barbour, Joseph A. Cushman, Laurence B. Fletcher, Frederic H. Kennard, W. Gordon Means, John C. Phillips. At the same meeting the annual "Walker Prize in Natural History," which was offered this year for the best paper submitted on any subject in the field of geology or mineralogy, was awarded to Dr. M. W. Senstius, of the department of geology of Rutgers University, for a memoir entitled "Studies in Weathering and Soil Formation in Tropical High Altitudes."

The centenaries occur this month of the death of Sir Humphry Davy and Thomas Young, both long associated with the Royal Society and the Royal Institution, and both commemorated in Westminster Abbey. Young died in London, May 10, 1829, and is buried at Farnborough, while Davy is buried at Geneva, where he died on May 29, 1829.

The tenth Annual Industrial Conference and the Personnel Research Federation will meet together at the Pennsylvania State College from May 16 to 18. Public addresses will be given by Dr. Walter V. Bingham, director of the Personnel Research Federation; Professor Walter B. Jones, University of Pittsburgh; C. S. Ching, United States Rubber Company, and F. A. Merrick, vice-president and general manager of the Westinghouse Electric and Manufacturing Company. The program centers around the general subject of "Personnel Problems and the Engineering Graduate."

Arrangements for the reception of one hundred of Europe's most distinguished engineers and scientific

men, who will arrive in New York during the summer en route to the World Engineering Congress at Tokio, have been placed in charge of Roy V. Wright, president of the United Engineering Societies, as chairman of the New York reception committee, according to announcement from Maurice Holland, executive secretary of the American committee of the congress, of which Dr. Elmer A. Sperry, president of the American Society of Mechanical Engineers, is chairman. Mr. Wright will be aided by a committee of New York engineers. It is expected that the foreign engineers will arrive in separate delegations of approximately forty each from Great Britain and Germany, and the remainder from Sweden, Denmark, France and Italy, probably during August and September. Each of these countries has indicated that its foremost engineers will be included in its delegation. The foreign delegations will sail from the Pacific coast for Japan about the time that the American delegation, which is now composed of 235 engineers and their families from all parts of the country, sails from San Francisco on a special ship on October 11.

A GENERAL course in ecology is being planned to be held in Arizona between June 17 and August 16 to consist of a field study of the distribution of plants and animals as influenced by environment; a study of the various mammal, bird, reptile, insect and plant communities in the alpine-meadow, spruce-fir, yellowpine, juniper-piñon, chaparral, short-grass, sagebrush, creosote-bush and desert-shrub areas at altitudes varying from 12,800 to 1,000 feet above sea-level. Emphasis will be placed on criteria for distinguishing the different plant and animal communities and the methods of measuring and evaluating soil, atmospheric and biotic factors. Eight semester hours' credit. Prerequisite, twenty semester hours of biological science. The instruction will be given by H. L. Shantz, Vernon Bailey, Walter P. Taylor, G. A. Pearson, Forrest Shreve, E. D. Ball, J. J. Thornber, C. T. Vorhies and W. G. McGinnies. Students will be required to furnish a cot and bedding. A charge of \$75 will cover all field expenses. The class expects to be in the field throughout the whole period and will study the Kaibab Forest, Little Colorado, Painted Desert, Grand Canyon, San Francisco Peak, Coconino Plateau and Deserts of Salt River and Gila Valley.

SATURDAY afternoon lectures beginning at 4 o'clock at the New York Botanical Garden are being given as follows:

May 4.—"Tulips and Narcissi in Holland," Mr. John C. Wister, secretary, Pennsylvania Horticultural Society.

May 11.—"Wild Flower Preservation," Mr. P. L. Ricker, president of the Wild Flower Preservation Society. May 18.—"Landscaping Your Own Garden," Mrs. C.
Albert Schwab, Federated Garden Clubs of

May 25.—"Azaleas and Rhododendrons," Mr. Henry Hicks, nurseryman and rhododendron specialist.

June 1.—"American Iris Breeders," Mrs. Wheeler H. Peckham, honorary curator, Iris and Narcissus Collection.

June 8.—"Day Lilies," Dr. A. B. Stout, Director of the Laboratories.

June 15.—"Flowers in the Perennial Border," Mr. Kenneth R. Boynton, head gardener.

June 22.—"Roses," Dr. Marshall A. Howe, assistant director.

June 29.—"Economic Fungi," Dr. Fred J. Seaver, Curator of Fungi.

THE London Times reports that work has begun on the building of an observatory for meteorological and scientific research on the Jungfraujoch (11,340 feet). The promoter of the scheme is the Swiss meteorologist, M. A. de Quervain, and the £20,000 needed for the carrying out of the enterprise has been raised.

A NATIONAL monument in Grand County, Utah, was established by presidential proclamation on April 22. It consists of two areas, known locally as the "Devil's Garden" and the "Windows," containing approximately 2,600 acres and 1,920 acres, respectively. Within these areas are extraordinary examples of wind erosion in the shape of gigantic arches, natural bridges, "windows," spires, balanced rocks and other unique wind-worn sandstone formations, the preservation of which is desirable because of their educational and scenic value.

PAUL G. REDINGTON, chief of the Bureau of Biological Survey, and W. L. McAtee, in charge of the bureau's division of food habits research, recently visited southern Georgia and northern Florida, where they viewed with H. L. Stoddard, stationed at Thomasville, Georgia, the results of Mr. Stoddard's study of quail conditions on southern game preserves. A group of prominent men have contributed more than \$40,000 for a thorough study by the Biological Survey of the quail, its habits, migrations, diseases, propagation and enemies. Opportunity was afforded Mr. Redington and Mr. McAtee to travel extensively over the territory to see the application by owners of the game preserves of ideas developed by Mr. Stoddard. who is in charge of the work. A stop was made at Savannah, Ga., where, with United States Game Protector E. B. Whitehead, Mr. Redington had an opportunity to view the Savannah River bird refuge. maintained by the Biological Survey, along the Savannah River northwest of the city.

An investigating committee of five members has been appointed by the U.S. Department of Agriculture to formulate plans and recommendations upon which the U.S. Department of Agriculture and cooperating agencies will base a program of soil-erosion investigations of nation-wide scope, according to an announcement made by Dr. A. F. Woods, director of the scientific work of the department. The investigations have been made possible by an item of \$160,000 in the agricultural appropriation act of 1930, of which \$40,000 is now available. The committee consists of A. G. McCall, chief of the division of soil investigation, Bureau of Chemistry and Soils (chairman); S. H. McCrory, chief of the division of agricultural engineering, Bureau of Public Roads; A. H. Clapp, in charge of the branch of research, Forest Service; J. G. Lipman, director of the New Jersey Experiment Station, and A. B. Conner, director of the Texas Agricultural Experiment Station.

THE Department of State has completed the arrangements for the participation of this government in an international conference to consider the revision of international classifications of the causes of death. This conference is to be held in Paris during October of this year and the invitation was extended through the French Ambassador. The following list of American delegates has been approved by the President: Dr. Timothy F. Murphy, chief statistician for vital statistics. Bureau of the Census. Washington; Dr. Haven Emerson, chairman, Committee on Reliability of Statements of Causes of Death, vital statistics section, American Public Health Association, New York City; George H. Van Buren, Metropolitan Life Insurance Company, New York City; Dr. William H. Guilfoy, director of records, City Department of Health, New York City; Dr. W. J. V. Deacon, director of statistics, State Department of Health, Harrisburg, Pennsylvania; Dr. Jessamine S. Whitney, Statistician, National Tuberculosis Association, New York City: Assistant Surgeon-General Rupert Blue, U. S. Public Health Service, Washington; Dr. Emlyn Jones, chief of the bureau of vital statistics, State Department of Health, Harrisburg, Pennsylvania; Edgar Sydenstricker, U. S. Public Health Service, Washington.

UNIVERSITY AND EDUCATIONAL NOTES

LOUISE ALLEN PRYOR has left her residuary estate of about \$40,000 in trust to the New York Polyclinic Medical School and Hospital as a scholarship fund in memory of her father, who for many years was a professor at the institution.

THE Collège de France, founded by François the first in 1530, will celebrate its four-hundredth anniversary next year. A large attendance of delegates from French and foreign universities is expected.

In the issue of Science for April 25 there was an error in regard to the Henry Barnard Davis professorship in geology at Yale University. Professor Chester R. Longwell has been appointed to this new chair, established by the mother and the aunt of Mr. Davis, who graduated from Yale College in 1911 and died recently.

PROFESSOR JOSEPH W. BARKER, of the Massachusetts Institute of Technology, has been appointed head of the department of electrical engineering at Lehigh University. He will succeed the late Professor William Esty.

HARRY M. GEHMAN, assistant professor of mathematics at Yale University, has been elected professor of mathematics and head of the department in the University of Buffalo to succeed the late Professor W. H. Sherk.

Dr. Joseph Marchand Hayman, associate in medicine in the University of Pennsylvania, has been appointed associate professor of medicine in the school of medicine of Western Reserve University, Cleveland.

Dr. C. H. Gordon has resigned as head of the department of geology at the University of Tennessee, but retains the professorship of geology, which he has held since 1907. Dr. G. M. Hall, associate professor, has become acting head of the department.

Dr. Charles H. Best, who was associated with Dr. Banting in the discovery of insulin, has been appointed professor of physiology at the University of Toronto to succeed Professor J. J. R. Macleod, who has accepted a chair at the University of Aberdeen, Scotland.

DISCUSSION

ON THE PHYLOGENY OF HORSES, DOGS AND CATS

Dr. Austin Clark in the current (March 8) number of Science makes certain remarks about horses, cats and dogs to which I find it necessary to take exception. He cites the horse as an example of "linear evolution involving a time element," but states, correctly enough, that gaps are found in all these evolutionary lines, and that "many of these gaps appear to be real—that is, they were never, as far as we have been able to learn, bridged by so-called missing links." As a matter of fact, the fossil record