who had reached the age limit, have been retired. Professors who had not felt that they needed to be pensioned as yet have complained bitterly of their enforced retirement. It may be that many of these were perfectly able to carry on for some time longer, but, in general, when the age of 68 has been reached it is time for younger men to take the helm. In Germany, enforced retirement on attaining a certain age is all the more justified for two reasons: (1) During the war many professors aged more rapidly than normally, and (2) during the war fewer promotions were made, and there is consequently a larger number in the oncoming generation awaiting openings. One thing that makes the pensioning of head professors more endurable is the fact that it affects only the management of institutes, clinics and the like. Otherwise, pensioned professors are entitled to continue holding their lectures; they remain members of the faculty and receive also the entire salary and lecture fees that they collect from students. During recent years, the aforementioned retirement regulation has brought about many changes in the medical faculty at Berlin and elsewhere.

"At the University of Berlin the following head professors of the medical faculty have been retired: Rubner, the physiologist, and Hans Virchow, the anatomist. At the end of this semester, F. Kraus and Goldscheider (internal medicine clinics); F. Strassmann, legal medicine, and Williger, dentistry, will be pensioned. As the post left vacant by the death of Hofmann, physiologist, must be filled, and an occupant for the chair of pharmacology must be found, there are six professorships awaiting new incumbents. It is the general opinion that Kraus will probably be succeeded by his former pupil von Bergmann, of Frankfort-on-the-Main, the son of the famous surgeon, now deceased. As to the successor of Goldscheider, the outcome is not as yet certain. One prominent candidate is Professor Umber, director of the Charlottenburg Municipal Hospital, who has made a name for himself in the field of diseases of metabolism-more particularly by his excellent text-book."

In addition to the men in the medical sciences listed in the *Journal*, the retirement is announced of Dr. Max Planck, professor of physics in the University of Berlin; of Dr. Eugen Korschelt, professor of zoology in the University of Marburg, and of Dr. Wilhelm Wedding, professor of electrotechnics at the Berlin Technical Institute.

## SCIENTIFIC NOTES AND NEWS

At the recent meeting of the British Association for the Advancement of Science, the University of Oxford conferred the honorary degree of doctor of science on the following men of science: Dr. Niels Bohr, professor of physics in the University of Copenhagen; Sir Frank Watson Dyson, astronomer royal; Dr. Arthur Stanley Eddington, Plumian professor of astronomy at the University of Cambridge; Sir Daniel Hall, chief scientific adviser to the British Ministry of Agriculture; Dr. Henry Fairfield Osborn, director of the American Museum of Natural History; Dr. Vita Volterra, professor of mathematics at the University of Rome, and Professor Wilhelm Wien, professor of experimental physics at the University of Munich.

At the Oxford meeting, Dr. Henry F. Osborn gave one of the principal lectures on "The Methods and Results of the American Museum Expeditions in the Gobi Desert," and an address before the section of zoology on "The Problem of the Origin of Species as it appeared to Darwin in 1859 and as it appears to us To-day."

Other American men of science who expected to attend the Oxford meeting of the British Association are: Dr. George D. Birkhoff, professor of mathematics at Harvard University; Dr. Douglas H. Campbell, professor emeritus of botany of Stanford University; Dr. Frank Wigglesworth Clarke, chief chemist of the U.S. Geological Survey; Professor Edwin G. Conklin, professor of zoology at Princeton University; Dr. A. E. Kennelly, professor of electrical engineering at Harvard University and the Massachusetts Institute of Technology; Dr. F. L. Stevens, professor of plant pathology at the University of North Carolina; Professor Henry B. Ward, professor of zoology in the University of Illinois; Dr. Vernon Kellogg, secretary of the National Research Council, and Dr. William McDougall, professor of psychology at Harvard University.

The Eighth International Congress of Psychology meets at Groningen, Holland, from September 6 to 11. The American psychologists on the program include Professor Edwin G. Boring, Professor William McDougall and Professor Daniel Starch, of Harvard University; Professor James H. Leuba, of Bryn Mawr College; Professor Herbert S. Langfeld, of Princeton University, and Dr. L. J. O'Rourke, of the U. S. Civil Service Commission.

The forty-ninth anniversary of the invention of the phonograph in 1877 by Thomas A. Edison was observed on August 12 by appropriate ceremonies at the Edison Laboratories in West Orange, N. J. Mr. Edison was greeted by more than a hundred members of the sales force of the Edison organization from all parts of the United States and Canada.

Dr. Simon Flexner, director of the Rockefeller

Institute for Medical Research, has been elected a corresponding member of the Sociedad Médico-Quirúrgica del Guayas, of Guayaquil, Ecuador.

The Terry lectures for 1926-27 will be given at Yale University by Professor Robert A. Millikan, Ph.D., of the California Institute of Technology, on October 13, 14 and 15, and repeated in Bridgeport on October 17, 18 and 19. Other lecturers on this foundation have been J. Arthur Thomson, author of the "Outline of Science"; Professor Henry N. Russell, of Princeton University, and Professor William Ernest Hocking, of Harvard University.

Professor von Eiselsberg, of Vienna, who last June was awarded the Lister Medal of the Royal College of Surgeons, London, for distinguished contributions to surgical science, with an honorarium of \$500, has undertaken to give an address at the Royal College of Surgeons on July 7, 1927.

The honorary degree of D.Sc. of the University of Wales has been conferred on Sir T. W. Edgworth David, professor of geology in the University of Sydney, and on Dr. A. H. Church, lecturer in botany at the University of Oxford.

In observance of the completion of his thirty years as a member of the faculty of Cornell University, the graduate students of Dr. Benjamin Freeman Kingsbury. Ph.D., '95, presented to the university on June 10 a portrait painted by Professor Olaf M. Brauner. Professor James G. Needham, '89, presiding at the gathering of friends and former students of Dr. Kingsbury, introduced Dr. Frederick W. Stewart, '16, who, in behalf of the graduate students, gave the presentation address. After the unveiling of the portrait by Dr. Kingsbury's daughter, Dean William A. Hammond accepted it for the university. presentation of the portrait in the afternoon was followed in the evening by a banquet in honor of Dr. Kingsbury, presided over by Professor Needham. Professor Simon H. Gage and Professor Pierre A. Fish were among the speakers.

Former students of Dr. L. R. Jones, professor of plant pathology at the University of Wisconsin, presented to the university an oil painting of their teacher at the International Congress of Plant Pathology at Cornell University on August 19. The group of donors includes men and women who have studied under Professor Jones at Wisconsin and also at the University of Vermont where he taught and conducted research before coming to Wisconsin. Their intention is to commemorate his contribution to the knowledge of plant pathology and his successful conduct of graduate work in that field. The portrait will hang in Agricultural Hall with those of

other members of the university who have made outstanding contributions to knowledge.

ASSOCIATES and friends of Professor V. A. C. Henmon, who has resigned the directorship of the school of education at the University of Wisconsin to become research professor in educational psychology at Yale University, recently gave him a dinner sponsored by Phi Delta Kappa, the honorary educational fraternity. Professor M. V. O'Shea, the oldest member of the faculty of the department of education, and Professor F. D. Cheydleur, of the department of Romance languages, expressed the appreciation of Professor Henmon's colleagues for his direction of the work in education.

THE title of emeritus professor of electrical engineering in the University of London has been conferred on Professor J. A. Fleming, on his retirement from the chair of electrical engineering at University College.

WE learn from *Nature* that on July 8, on the occasion of his retirement from the Bayer chair of zoology in Manchester University, Professor Sydney J. Hickson was presented with a check by Sir William Boyd Dawkins, on behalf of a number of his former students, colleagues and friends. Sir William Boyd Dawkins, the principal, referred to Professor Hickson's services to science, to the work which he has done for the university, and for the cause of education in natural science. A dinner has been arranged in Professor Hickson's honor at the University Refectory on October 29.

PROFESSOR WILLIAM J. MILLER, chairman of the department of geology in the University of California, Southern Branch, Los Angeles, was given the honorary degree of doctor of science by the College of the Pacific at its diamond jubilee commencement.

The following are the newly elected officers of the American Society of Plant Physiologists: President, F. E. Lloyd, McGill University; Vice-President, Wright A. Gardner, Alabama Polytechnic Institute; Secretary-Treasurer, Scott V. Eaton, University of Chicago.

The officers of the Alabama Academy of Science for the current year are: President, J. Lloyd Stewart, University of Alabama; First Vice-President, W. C. Jones, Birmingham-Southern College; Second Vice-President, J. F. Duggar, Alabama Polytechnic Institute; Secretary-Treasurer, J. R. Sampey, Howard College.

THE following have been elected officers of the British Institution of Electrical Engineers for the year 1926-27: President, Dr. W. H. Eccles; Vice-

President, Colonel T. F. Purves; Honorary Treasurer, Lieutenant-Colonel F. A. Cortez Leigh.

SENATOR G. FANO, professor of physiology at the University of Rome, has been elected president of the newly organized Italian Society of Experimental Biology.

EDGAR S. BLOOM, a vice-president of the American Telephone and Telegraph Company, was on August 6 elected president of the Western Electric Company, succeeding Charles G. Du Bois, who had been president for the past seven years and who continues with the company as chairman of the board of directors.

AT a recent meeting of the Royal College of Surgeons, London, under the presidency of Sir Berkeley Moynihan, Sir Anthony Bowlby, Sir D'Arcy Power and Mr. Sampson Handley were elected members of the executive committee of the Imperial Cancer Research Fund.

Dr. Ernest Marsden, assistant director of education in New Zealand, has been appointed permanent secretary of the new industrial and scientific research department that is being established as recommended by Sir Frank Heath, secretary of the British Department of Scientific and Industrial Research. Dr. Marsden was formerly a fellow of Manchester University and professor of physics at Victoria College, New Zealand University. The purpose of the department is to encourage research and organize the application of the results to primary and secondary industries.

PROFESSOR JOCELYN F. THORPE, professor of organic chemistry in the Imperial College of Science and Technology, South Kensington, has been appointed chairman of the British Explosives in Mines Research Committee, in succession to Sir Frederic L. Nathan, who has resigned. Mr. F. E. Smith, director of scientific research under the Admiralty, has been made an additional member of the committee.

THE retiring address of Professor G. D. Birkhoff, of Harvard University, as president of the American Mathematical Society to be read at the annual meeting in conjunction with the sessions of the American Association for the Advancement of Science will have as title: "A Mathematical Critique of Some Physical Theories."

Dr. Allen John Smith, professor of pathology and comparative pathology at the University of Pennsylvania and a brother of Dr. Edgar Fahs Smith, formerly provost of the university, died on August 19, aged sixty-three years.

Dr. Fred S. Mandlebaum, who organized the pathological laboratory at Mount Sinai Hospital, New

York City, and who was pathologist of the hospital, died on August 7, aged fifty-nine years.

THE executive committee of the Alabama Academy of Science has given its approval of the affiliation of the academy with the American Association for the Advancement of Science. Dr. Wright A. Gardner will represent the academy on the council of the association.

COMMEMORATING the founding of the society in 1906, the twentieth anniversary convention of the Illuminating Engineering Society is to be held in Spring Lake, New Jersey, from September 7 to 10, with headquarters at the Essex and Sussex Hotel. A comprehensive program of papers has been arranged including subjects of scientific, commercial and practical interest. The twentieth anniversary of the founding of the society will be fittingly observed, an entire session depicting "Twenty Years of Lighting Progress" having been set aside for this purpose. Another outstanding feature of the program will be the Lighting Service Session, planned particularly for the illuminating engineers of the central-station industry, with the view to supplying them with the best and latest ideas in their field.

In connection with the gift of \$300,000 from the Daniel Guggenheim Fund for the Promotion of Aeronautics to the California Institute recently reported in Science, we are informed that the facilities of the Douglas Airplane Company in Santa Monica, with its large corps of engineers, will be added to those of the institute for both instructional and research purposes in the effort to make a center of the first importance in Southern California for the development of both the theoretical and practical phases of aeronautics. Dr. von Karman, of Aachen, Germany, one of the foremost mathematical physicists and outstanding aeronautical engineers of Europe, has accepted the invitation of the Daniel Guggenheim Fund to visit the aeronautical centers of this country in the near future. He will go immediately to Pasadena for the sake of advising with the aeronautical staff of the institute, both as to the best type of aeronautical installation and as to the design of new planes already being perfected there.

HUGH BANCROFT, of Cohasset, has deeded to the Federation of the Bird Clubs of New England twelve acres of land for a bird sanctuary at Cohasset, to be known as the Bancroft Wild Life Reservation. This is the eleventh bird sanctuary secured by the Federation of the Bird Clubs of New England, by gift, purchase or by legislation.

Professor William James Lewis, F.R.S., professor of mineralogy at the University of Cambridge and senior fellow of Oriel College, Oxford, who died

on April 16, aged seventy-nine years, bequeathed to the Mineralogical Museum, Cambridge, such of his books and scientific apparatus as his successor, or the demonstrator for the time being, may select; the balance to be offered to Bedford College for Women, London, to select such books as may be useful to the students.

WE learn from Nature that in order to commemorate the great services made to polar exploration by the late Dr. W. S. Bruce, leader of the Scottish National Antarctic Expedition, a fund has been raised by subscription, the proceeds of which will be awarded biennially "for some notable contribution to natural science, such as to zoology, botany, geology, meteorology, oceanography and geography, the contribution to be in the nature of new knowledge, the outcome of a personal visit to the polar regions on the part of the recipient." The award will consist of a medal, inscribed "Exploration of Polar Regions" and on the reverse "For Valuable Services," modelled on that designed by Dr. Bruce to commemorate the return of the Scotia, with in addition a sum of money. In the making of the award, preference will be given, other things being equal, to an explorer of Scottish birth or origin, and to one at the outset of his career as an investigator. The Royal Society of Edinburgh has been asked by the subscribers to accept and has accepted custody of the Bruce Memorial Fund, and awards will be made by a joint committee representing that society, the Royal Physical Society and the Royal Scottish Geographical Society. The first award will be made in 1926.

## UNIVERSITY AND EDUCATIONAL NOTES

By the will of the late Dr. J. William White, formerly John Rhea Barton professor of surgery in the University of Pennsylvania, the university receives a bequest of \$150,000, the income of which is to be devoted to a chair of research surgery. The incumbent, when appointed, will be attached to the surgical staff with clinical facilities in the University Hospital.

By the will of Mrs. Gertrude Baldwin Woods, wife of Dr. James Haughton Woods, professor of philosophy at Harvard University, \$20,000 is left to establish the James H. Woods fellowship in philosophy at Harvard University, and \$25,000 is left to Oberlin College to establish a Baldwin lectureship pertaining to art.

Dr. RICHARD B. MOORE, of the University of Cincinnati, formerly chief chemist of the U. S. Bureau of Mines, has been appointed dean of the school of science of Purdue University.

Dr. H. W. Manter, assistant professor in the department of zoology of the Louisiana State University, has resigned to accept a position at the University of Nebraska. The vacancy created by the resignation of Dr. Manter has been filled by the appointment of Dr. Roy L. Mayhew, of Des Moines University, Iowa.

Dr. A. M. Hjort, of the Research Laboratories of Parke, Davis Company, Detroit, has been appointed a professor of pharmacology on the faculty of the Dartmouth Medical School.

Dr. Fritz Paneth, professor of inorganic chemistry in the University of Berlin, will give a series of lectures on radioactivity at Cornell University during the coming academic year.

Dr. Norman E. Woldman, formerly research engineer for the American Bosch Magneto Corporation, Springfield, Mass., is now assistant professor of chemistry and metallurgy at the Postgraduate School of the Naval Academy at Amapolis, Md.

Dr. E. A. Spessard, instructor in biology at the Harrison Technical High School, Chicago, Ill., has been elected professor of botany and head of the department of biology at Ouachita College, Arkadelphia, Arkansas.

E. B. VERNEY, who has for the last four years held a Beit Memorial Fellowship, has been appointed professor of pharmacology in University College, London.

AT the University of Cambridge, Mr. T. C. Hodson has been appointed reader in ethnology in succession to Dr. A. C. Haddon.

## DISCUSSION

## WAS PAUL GULDIN A PLAGIARIST?

STUDENTS of engineering and pure mathematics usually become familiar with the name of Guldin during their college days as a result of the very useful so-called Guldin's theorem, which states, among other things, that the volume generated by a plane figure rotated about a straight line is equal to the product of its area and the length of the circumference of the circle described by its center of gravity. In view of this familiarity it is naturally of unusual interest to such students to find statements in various places which reflect discredit on Guldin's integrity. One of the most forceful statements along this line appears on page 433, volume 1, of the recent "History of Mathematics," by D. E. Smith, and reads as follows:

Two other Swiss mathematicians of the 17th century deserve mention,—one a genius, the other a plagiarist. The genius was Jobst Bürgi. . . . The other Swiss writer