erly directed, so the forest of this and other states must be studied and developed that they may be more effective playgrounds for the people of the state.

This new department of forest recreation in the college of forestry will be in charge of Professor Henry R. Francis, who has made a specialty of this line of work and who during the past five years has been carrying on landscape extension work both in New York and Massachusetts. During the coming summer Professor Francis will begin systematic studies of forest and park areas in New York to prepare bulletins for recreational development, and late in the season will make a trip through the National Forests and National Parks of the west to see what has already been done by the national government and by the western states in developing the recreational possibilities of forest lands.

SCIENTIFIC NOTES AND NEWS

Professor Edward S. Morse has been reelected president of the Boston Society of Natural History.

THE Edison Medal for meritorious achievement in electrical science or electrical engineering, has been awarded to Benjamin G. Lamme, of the Westinghouse Electric and Manufacturing Company, and was presented to him at the annual meeting of the American Institute of Electrical Engineers. The presentation was made by William B. Jackson, vice-president of the institute.

WILLIAM D. HURD, director of the extension service of the Massachusetts College and Station since its establishment in 1909, has resigned, his resignation to take effect about June. 1, to accept a position with the National Fertilizer Association with headquarters in the middle west.

CAPTAIN P. E. LANDOLT, of the Nitrate Division, Army Ordnance, has resigned from the service and has returned to his work as chemical engineer with the Research Corporation at New York City.

Professor Vaughan Harley, owing to ill health, has resigned from the chair of patho-

logical chemistry at University College, London.

M. Forneau, head of the chemical division of the Pasteur Institute, has been elected a member of the Paris Academy of Medicine in the section of pharmacy.

The seventy-second annual meeting of the Paleontographical Society was held on April 25. Mr. Henry Dewey, Dr. F. L. Kitchin, Mr. W. P. D. Stebbing and Mr. Henry Woods were elected new members of council. Dr. Henry Woodward, Mr. Robert S. Herries and Dr. A. Smith Woodward were reelected president, treasurer and secretary, respectively.

THE British list of New Year honors, the publication of which has been delayed by circumstances arising out of the armistice, was issued on April 27. Nature selects the following names of workers in scientific fields: Baronet: Dr. Norman Moore, president of the Royal College of Physicians. Knights: Mr. R. T. Blomfield, past president of the Royal Institute of British Architects; Lieutenant-Colonel J. M. Cotterill, C.M.G., consulting and late acting surgeon, Edinburgh Royal Infirmary, and lecturer in clinical surgery, Edinburgh School of Medicine; Professor Israel Gollancz, secretary of the British Academy since its foundation; Professor R. A. Gregory, chairman of the organizing committee, British Scientific Products Exhibition; Mr. H. J. Hall, organizer under the Ministry of Munitions of the section dealing with the production of fertilizers; Dr. Edward Malins; Mr. J. H. Oakley, president of the Surveyors' Institution; Professor W. Ridgway, professor of archeology, University of Cambridge; Dr. C. S. Tomes, F.R.S., and Dr. T. J. Verrall, chairman of the Central Medical War Committee.

The British Medical Journal writes: "The Council of the British Medical Association has asked the president, Sir Clifford Allbutt, K.C.B., F.R.S., to accept a portrait of himself as a gift from members of the medical profession, and he has consented to give sittings for the purpose to an artist of eminence. Sir Clifford Allbutt has been president of the association since August, 1914, and has on

many occasions shown the deep interest he takes in its work. Age sits lightly upon him; he took an active part in the recent most successful Special Clinical and Scientific Meeting in London, and will be in the chair at the annual meeting to be held at Cambridge in 1920. Sir Clifford Allbutt has been Regius professor of physics in the University of Cambridge since 1892. So great is the respect, and, if we may be permitted to say, the affection, in which he is held by all ranks of our profession, that very many will without doubt wish to join in this presentation to him. It has accordingly been decided to limit the amount of individual subscriptions to one guinea. The treasurer of the British Medical Association is now prepared to receive subscriptions of this or lesser amount from any member of the profession. Cheques should be made payable to the 'Sir Clifford Allbutt Presentation Fund,' and crossed London county, Westminster, and Parr's Bank."

Sir John Rose Bradford will give a discourse at the Royal Institution of Great Britain on Friday, May 30, on filter-passing virus in certain diseases. On the following Friday Sir Ernest Rutherford, who has recently succeeded Sir J. J. Thomson as Cavendish professor of experimental physics at Cambridge, will deliver a discourse on atomic projectiles and their collisions with light atoms.

The Cornell University Medical College conducted during the month of May a series of special lectures, as follows: May 6, Dr. Burton J. Lee, "Surgery of the breast;" May 3, Dr. Lee, "Military surgery, particularly blood transfusion;" May 20, Dr. Henry H. M. Lyle, "Military surgery, organization at the front;" May 27, Dr. George W. Hawley, "Military surgery, compound fractures."

Major Joseph Leidy, M.R.C., U.S.A., medical director, Department Gas Defense, delivered an address, illustrated with lantern slides, on "Poison Gas in War" before the Historical Society of Pennsylvania on May 12.

PROFESSOR JOHN C. MERRIAM, of the University of California, acting chairman of the

National Research Council, delivered an address before the Washington Academy of Sciences on May 15, on "Cave hunting in California." The address was illustrated with lantern slides.

DR. WILLIAM E. CASTLE, of Harvard University, gave during Health Promotion Week at Northwestern University three free public lectures on genetics and eugenics. The subjects of the lectures were as follows: May 14, "Heredity and health," illustrated by lantern slides. May 15, "Principles of race improvement," illustrated by lantern slides. May 16, "Can we breed a better human race?"

Dr. Joseph Jacobs recently presented to the Crawford Long Infirmary, on the campus of the University of Georgia, Augusta, a life size portrait of the late Dr. Crawford W. Long, discoverer of surgical anesthesia.

WALTER GOULD DAVIS, director of the Meteorological Bureau of Argentina for many years before 1915, when he resigned from that position, died on April 30 in Danville. Vt., where he was born in 1851. His earliest scientific work was in civil engineering, especially in railroad surveying through the White Moun-While still a young man he went to Argentina as assistant to Dr. Benjamin Apthorp Gould, director of the astronomical observatory at Cordoba, and later became director himself. From Cordoba he was transferred to Buenos Ayres, and placed at the head of the National Weather Bureau, which he organized and built up. His work in this office gave the Argentine Meteorological Service a high scientific rank, and won its director an international reputation.

ALEXIS ANASTAY JULIEN, curator in geology at Columbia University from 1897 to 1909, died on May 7, aged seventy-nine years.

A. McHenry, the Irish geologist, died on April 19. He was for more than forty years on the staff of the Geological Survey.

Dr. L. S. DAUGHERTY, for sixteen years professor of biology in the State Normal School, Kirksville, Missouri, and later in Missouri

Wesleyan, author of "Principles of Economic Zoology," died on February 28.

FERNAND PRIEM, the French paleontologist, has died at the age of sixty-two years.

THE deaths are announced of the Danish astronomer, Hans Emil Lau, and of A. M. Liapounoff, professor of applied mathematics at the Academy of Petrograd.

WE learn from Nature there was held recently a conference of chemists in Paris attended by Professor Chavanne (Belgium), Professors Moureu and Matignon, M. Kestner and M. Poulenc (France), Senator Paterno and Dr. Pomilio (Italy), Mr. Henry Wigglesworth, Col. Norris and Dr. Cottrell (United States), and Sir William Pope, Professor Louis and Mr. Chaston Chapman (Great Britain). It was decided to form an interallied confederation for pure and applied chemistry which should organize permanent cooperation between the various countries, and coordinate scientific and technical knowledge as well as contribute to the advancement of chemistry in its fullest extent. The interallied council is to consist at the moment of six representatives from each of the nations mentioned above. The first meeting, will be held in London on July 15-18, when the interallied council will be the guests of the Society of Chemical Industry. For the time being the secretary of the inter-allied federation will be M. Jean Gerard, 49 rue des Mathurins, Paris. Particulars of the London meeting can be obtained in due course from Dr. Stephen Miall, 28 Belsize Grove, N. W. 3.

The Salters' Company has established an Institute of Industrial Chemistry to assist in promoting the training and welfare of students who desire to pursue an industrial career, and of workers engaged in the chemical industry. The London Times states that during the present interval of reconstruction the committee of the institute is awarding several post-graduate fellowships to young chemists whose training has been interrupted by some form of war service, and who consequently require to devote an appropriate period to further study, in order to equip

themselves for an industrial post in a manner calculated to render them useful to their future employers. In pursuance of this policy, fellowships have been awarded to Messrs. W. H. Gough, B.Sc., and W. A. Haward, B.Sc. (Imperial College of Science and Technology), Captain L. J. Hudleston, B.Sc. (Reading University College), Lieutenant K. H. Saunders, M.C., and Mr. Gordon M. Wright, B.Sc. (University of Cambridge), Mr. P. N. Williams, B. Sc. (University of Liverpool), and Lieutenant Dudley C. Vining (Finsbury Technical College), who will continue their training at the university college indicated. Substantial support in the work of the institute has been received from firms prominent in the chemical manufacturing industry.

Through the generosity of the late Mr. Wm. H. Graffin, of Baltimore, a scholarship, to be known as the Graffin Scholarship, and three assistantships for the year 1919-20 have been established in the department of chemistry of the Johns Hopkins University. The Graffin Scholarship will be awarded annually to a candidate having a training equivalent to that leading to the Ph.D. degree and who therefore has had experience in research. It may be awarded twice to the same candidate. The holder of the scholarship will receive \$1,000 a year and will be expected to devote his entire time to research. The three research assistantships each pay \$750 a year and are open to chemists having the equivalent of a Ph.D. degree. The holder of a research assistantship will not be required to do any formal teaching but will be given the opportunity to devote his entire time to research and to assist in the direction of research. Applications for the above position for the year 1919-20 should be sent to the department of chemistry, Johns Hopkins University, 321 Druid Hill Avenue, Baltimore, Md., before August 1.

THE University of Arizona through the Arizona Bureau of Mines is offering an eight weeks' summer course in field geology and mining, to begin July 1 and end August 18, 1919. The work will be under the supervision of Professor C. J. Sarle, of the department of

geology, and Professor M. Ehle, department of mining of the College of Mines and Engineering. It will include geodetic and topographic surveying, mapping of areal geology, making of geologic cross-sections, studying of mines or prospects and undeveloped ore deposits, and making mine examinations and re-The region selected lies in the connected Chirichua and Dos Cabezas Mountains, fault-block ranges in southeastern Arizona. The choice of the field was based upon the varied structural features, diversity of formations and their great range in age, rich in metallization and mining development, ideal summer climate, fine camping sites, and accessibility. Maps and bulletins covering the area worked will be prepared by the professors in charge and will be published by the Arizona Bureau of Mines. Such students as are especially well prepared may collaborate on reports, and data secured may also be worked up into theses. The university will furnish a full field equipment, including housing, camp cook, surveying instruments and conveyances. The class is limited to sixteen, and is open to students of all universities and colleges who have had at least a course in physical and historical geology and mineralogy. Applications should be received by June 1. For further information address the director, Arizona Bureau of Mines, Tucson, Arizona.

UNIVERSITY AND EDUCATIONAL NEWS

We learn from Nature that Mr. Lawrence Philipps has offered University College, Aberystwyth, the sum of £10,000 to found a plant-breeding institute for Wales in connection with the agricultural department of the college. He has guaranteed a further sum of £1,000 per annum for ten years towards the maintenance of the institution. The governors of the college have appointed Mr. R. G. Stapleton, who was for some years connected with the college as advisory botanist, to a chair of agricultural botany and to the directorship of the new institution.

The first school of practical forestry in

Scotland has been opened at Birnam, in Perthshire. The school building that has been erected at Birnam is itself an example of what can be done in forestry, being entirely built of home-grown wood. At present the school has twelve students. The course will cover two years and will consist of both practical work and lectures. The Duke of Athol has placed his woodlands at the board's disposal for practical instruction and the aim of the school is both provision of technical instruction and the furnishing of openings for discharged service men.

WILLIAM D. Ennis, who has since his release from military service been acting professor of mechanical engineering at Columbia University, has been appointed professor in marine engineering in the post-graduate department of the United States Naval Academy.

Dr. Tobias Dantzig and Dr. G. A. Pfeiffer have been appointed instructors in mathematics at Columbia University.

Dr. James Drever has been appointed Coombe lecturer in psychology at the University of Edinburgh.

Professor F. Soddy, F.R.S., of the University of Aberdeen, has been elected to the second chair of chemistry recently established in the University of Oxford.

DISCUSSION AND CORRESPONDENCE ON THE AURORAL DISPLAY OF MAY 2, 1919

To the Editor of Science: The following observations of the auroral flash visible in Washington on the nights of May 2 and 3, 1919 and observed by us between the hours of 3:30 A.M. and 5 A.M. may be of sufficient interest for record. There is one point mentioned later which to us seemed very striking.

The general appearance of the phenomenon reminded one of a searchlight display. The streaks of lighted sky were at times very similar to the streaks of diffused light along the paths of searchlight beams. The brightness of the auroral streaks was comparable in brightness to that of the path of the searchlight beam on clear nights when seen from a great dis-