drug on the market before the war, have become valuable. New electrochemical industries, like that of metallic magnesium, have been started and the whole electrochemical development is of the utmost importance to the American nation. The New York Section of the American Electrochemical Society has therefore arranged a symposium on "Electrochemical War Supplies" which it will hold jointly with the New York sections of the American Chemical Society and the Society of Chemical Industry at the Chemist's Club, 52 East 41st St., New York, Friday evening, February 11. The program will include the following papers:

Lawrence Addicks: "Electrochemical War Supplies."

W. S. Landis: "Air Saltpeter."

E. D. Ardery (U. S. Army): "Hydrogen for Military Purposes."

Albert H. Hooker: "New War Products."

William M. Grosvenor: "Magnesium."

G. Ornstein: "Liquid Chlorine."

Geo. W. Sargent: "Electric Steel."

On December 13, there was installed at the University of Pittsburgh, the Beta chapter of the Sigma Gamma Epsilon, the charter members of the new chapter consisting of Dean H. B. Meller, dean of the school of mines, Professor H. C. Ray, professor of metallurgy, and sixteen undergraduates. The Sigma Gamma Epsilon fraternity was founded at the University of Kansas during the past year, and its membership is confined to teachers of geology, mining, or metallurgy, and students who are specializing in those subjects.

The executive committee of the Association of American Universities held a meeting at the University of Pennsylvania on January 24. There were present the following representatives of five universities: Dr. Thomas McBride, president of the State University of Iowa, the president of the association; President Frank J. Goodnow, of Johns Hopkins University, vice-president of the association; President William A. Bryan, of Indiana University; President A. Ross Hill, of the University of Missouri. The University of Pennsylvania was represented by Provost Edgar F. Smith and Dean Herman V. Ames, the University of Pennsylvania, being secretary of the association. The chief business before the committee was to arrange the next annual meeting of the association, which it was voted should be held next fall at Clark University, Worcester, Mass. The following topics were selected for discussion at that time: "How Can Universities be Organized so as to Stimulate work for the Advancement of Science"; "Military Training in Universities and Colleges"; "The Correlation of Work for Higher Degrees in the Graduate School and in Professional Schools."

For ten weeks during the summer of 1916 a party of students and professors from the department of forestry of the New York State College of Agriculture at Cornell University will be in camp on the forest tract belonging to Mr. T. C. Luther at the south end of Saratoga Lake. Last year the Cornell forestry department was in camp on a forest tract in the Northern Adirondacks, on which an estimate of the standing timber was made and a general plan for management was drawn up. A similar study will be made on Mr. Luther's tract, except that in 1916, owing to the proximity of this tract to numerous wood-using mills, greater attention can be paid to the problems of forest utilization.

UNIVERSITY AND EDUCATIONAL NEWS

A "Plan for the Development of the University of California Medical School" has been formally adopted by the regents of the University of California, as a policy to be worked toward. The University of California has now increased to a total of $162,221 per annum its expenditures on medical instruction, over and above the hospital receipts, and within the next few months it will complete the erection, at a cost of $615,000, of a new 216-bed teaching hospital. The regents have now outlined as the immediate future needs of the medical school, a new laboratory build- for anatomy and pathology, to cost $150,000; an "out-patient" building in conjunction with the new teaching hospital, to cost $100,-

000; a nurses' home for 100 nurses, to cost $100,000; and alterations of the existing buildings on the Parnassus Avenue site in San Francisco to accommodate the departments of physiology and physiological chemistry, administrative offices and the medical library.

EDWARD PLAUT, of the class of 1912, has presented $5,000 to Princeton University to establish the Albert Plaut Memorial Library of Chemistry, in memory of his father.

MR. CHRISTOPHER WELCH has left his real estate in the county of Somerset to the University of Oxford for the endowment of scholarships for the study of biology, to be known as the "Welch" scholarships. They are to be tenable for four years and their value is to be £400 a year, any surplus income to be paid into a reserve fund formed by the residue of his estate, to be used for the upkeep of the estate and for furthering the study of biology. If the university does not accept the conditions attached to the bequests then the amount goes to six London hospitals, one of which shall be St. George's Hospital; but no hospital where vivisection is disallowed or discountenanced is to benefit, "antivisectionists being enemies of the human race."

SIR ALEXANDER M'ROBERT has given to Aberdeen University an endowment of about £750 per annum for a Georgina M'Robert lectureship on pathology, with special reference to malignant diseases. The donor recently gave an endowment of £373 per annum to the Aberdeen Royal Infirmary. He is director of the Cawnpore Woollen Mills Company, but before going to India thirty years ago he was Neil Arnott lecturer in experimental physics at the Aberdeen Mechanics' Institution and lecturer in chemistry at Robert Gordon's College, Aberdeen.

THE one hundred and fiftieth anniversary of the founding of the medical school by John Morgan at the University of Pennsylvania will be celebrated by a dinner to be given by the Society of the Alumni of the Medical School at the Bellevue Stratford on the evening of February 4. The committee expects to make this event the largest gathering of its kind ever held by the medical alumni, since it also marks the celebration of the beginning of medical teaching in the United States.

MR. R. M. RAYMOND, managing director of the El Oro Company, has been appointed professor of mining in the School of Mines of Columbia University, succeeding Professor Henry S. Munroe, who retired last June after twenty-seven years of service.

DR. CLARENCE W. FARRAR, of the State Hospital for the Insane, Trenton, has been appointed lecturer on abnormal psychology in Princeton University.

DISCUSSION AND CORRESPONDENCE

FIREFLIES FLASHING IN UNISON

FIFTY years ago in Gorham, Maine, while walking along the road I passed an open field and noticed to my astonishment hundreds of fireflies flashing in perfect unison. I watched this curious sight for some time and the synchronism of the flashing was unbroken. Many times after I have watched these luminous insects, hoping to see a repetition of this phenomenon, but the flashes in every instance were intermittent. Since that time I have read about these insects in various books without meeting any allusion to this peculiar behavior. At last I have found a confirmation of my early observations. In *Nature* of December 9, page 414, is the report of an interesting paper read before the South London Entomological and Natural History Society by K. G. Blair entitled "Luminous Insects" in which reference is made to the remarkable synchronism of the flashes in certain European species of fireflies. The explanation offered as to the cause of this behavior seemed to me inadequate. One often notices in the stridulation of the Grillidæ the perfect time the insects keep in their concerts and it seems likely that the same impulse must animate these flashing beetles, and the light emitted could be more easily followed than the sound.

The following is an extract from Mr. Blair's paper:

Apart from its principal function in securing the proper mating of the sexes, the light seems