ical department of the University of Cincinnati, and in 1909 the Miami Medical College also become a part of the university.

The building of the present medical college and the city hospital was largely the achievement of Dr. Christian R. Holmes, through whose efforts the University of Cincinnati Medical College has taken front rank in medical education.

At the exercises on November 6, Dr. J. C. Oliver gave a historical sketch of the college and Dr. William T. Sedgwick, of the Massachusetts Institute of Technology, spoke on the relationship of medicine to public health. Dr. Joseph Ransohoff reviewed work of Drake and Holmes and other teachers in the college. Following the addresses, honorary degrees were conferred, and a portrait in oil of Dr. Christian R. Holmes was unveiled.

At the banquet in the evening the principal address was made by the British Ambassador, Sir Auckland Geddes, formerly professor of anatomy at McGill University. President Frederick C. Hicks was the toastmaster and other speakers were: Hon. John Galvin, Judge John Barton Payne, Dr. James R. Angell, Dr. Charles R. Stockard and Dr. Louis Schwab.

Honorary degrees conferred were as follows: Doctor of laws, James Rowland Angell, President of the Carnegie Foundation; Mrs. Mary Muhlenberg Emery; Sir Auckland Geddes; Ludwig Hektoen; professor of pathology, University of Chicago; Christian R. Holmes; Frederick S. Novy, professor of bacteriology, University of Michigan; Hon. John Barton Payne, secretary of the interior; Joseph Ransohoff, professor of surgery, London; William Thompson Sedgwick, professor of biology and public health, Massachusetts Institute of Technology; Louis Schwab, physician. Doctor of science: Charles Cassidy Bass, professor of experimental medicine, Tulane University; Ross Granville Harrison, professor of comparative anatomy, Yale University; Dean DeWitt Lewis, professor of surgery, University of Chicago; Robert Williamson Lovett, professor of orthopaedic surgery, Harvard Medical School; Elmer Vernes McCollum, professor of chemical hygiene, Johns Hopkins University; William Snow Miller, University of Wisconsin; Charles R. Stockard, professor of anatomy, Cornell Medical College; Henry B. Ward, professor of geology, University of Illinois; John C. Webster, professor of gynecology, University of Chicago; Edwin O. Jordan, professor of bacteriology, University of Chicago.

SCIENTIFIC NOTES AND NEWS

The American Society of Mechanical Engineers, which will hold its annual meeting from December 7 to 10, in the Engineering Societies' Building, New York City, has arranged a memorial program in honor of Dr. John Alfred Brashear, scientific man and maker of astronomical instruments, who died last April in Pittsburgh at the age of eighty years. The principal eulogy of Dr. Brashear will be delivered by Dr. Henry S. Pritchett, president of the Carnegie Foundation for the Advancement of Teaching.

Dr. William C. Braisted, surgeon-general, U. S. Navy, and president of the American Medical Association, has been awarded the Navy distinguished service medal for meritorious service during the war.

A portrait of Dr. William S. Miller, professor of anatomy in the University of Wisconsin Medical School, has been formally presented to the university at exercises held in Science Hall. The portrait was painted by Christian Abrahamson and is the gift of Dr. Miller's colleagues, friends in the medical profession, and former students.

Dr. Bernard L. Wyatt, of the Rockefeller Institute, has been made a knight of the Legion of Honor of the French Republic in recognition of his services in organizing the French campaign against tuberculosis.

Professor T. W. Edgeworth David, professor of geology in the University of Sydney, has been appointed a knight commander of the Order of the British Empire for services in connection with the war.

Professor F. O. Bower has been elected president of the Royal Society of Edinburgh

and Professor D. Noël Paton, Professor A. Robinson, Sir A. Berry, Professor W. Peddie, Sir J. A. Ewing and Professor J. W. Gregory, have been elected vice-presidents.

AT the recent session of the board of trustees held in Chicago, Dr. Rudolph Matas, New Orleans, was elected vice-president of the American Medical Association, succeeding the late Dr. Isadore Dyer.

PROFESSOR C. B. RIDGAWAY, head of the department of mathematics, at the University of Wyoming, is retiring after twenty-four years of service.

DR. ALEXANDER L. MCKAY, Toronto, has accepted an appointment with the Rockefeller Foundation Medical Research Committee.

MR. A. V. BLEININGER, ceramic chemist and head of the ceramic division of the Bureau of Standards, has resigned to become research chemist for the Homer-Laughlin China Company, of East Liverpool, Ohio.

PROFESSOR CLARENCE E. MICKEL has resigned as extension entomologist, college of agriculture, University of Nebraska, to accept a position as research entomologist with the American Beet Sugar Company, Rocky Ford, Colorado.

H. S. MULLIKEN, of Lexington, Mass., has been appointed metallurgical engineer of the Bureau of Mines, and has been assigned by Dr. F. G. Cottrell, the director, as an assistant to him in special professional work connected with the bureau.

PROFESSOR VICTOR LENHER, of the department of chemistry of the University of Wisconsin, has recently been chosen a member of the advisory committee which has been established by the Smithsonian Institution, Washington, to be concerned with the collection of chemical types. The collection was undertaken by the National Museum under the will of Morris Loeb, of New York, who left a fund to the American Chemical Society for chemical research work.

PROFESSOR EDWARD J. KUNZE, head of the department of industrial engineering at the Pennsylvania State College, was elected a director and vice-president in charge of research, of the Society of Industrial Engineers at their recent convention in Pittsburgh on November 10.

MR. F. V. MORLEY, of the Johns Hopkins University, has been appointed a Rhodes scholar at Oxford University.

DR. SOLOMON LEFSCHETZ, professor of mathematics at the University of Kansas, is absent on leave during this academic year and is at present in Europe.

BARON GERARD DE GEER, professor at the University of Stockholm, delivered a lecture before the students and faculty of the Department of Geology at the University of Minnesota on November 5. The lecture was on his geochronological investigations in Sweden and their application to the Quaternary geology of America.

DR. HIDEYO NOGUCHI, of the Rockefeller Institute for Medical Research, of New York, gave a lecture to the faculty and students of the Army Medical School on November 17, on "Recent studies of yellow fever," at the auditorium of the National Museum.

ON October 28, Professor Daniel Hull, assistant superintendent of the El Paso High School, gave under the auspices of the Southwestern Division, of the American Association, a lecture on "The glacial periods of North America and their relation to astronomy." Before the lecture the tentative program of the coming first annual meeting of the Southwestern Division was announced. The meeting will be held in El Paso on December 2, 3 and 4. Other lectures in El Paso are announced as follows: Mr. R. R. Coghlan, on "Chemistry and manufacture of cement;" November 9, Professor W. H. Seamon, on "Prehistoric mammals," illustrated with lantern slides, on November 16.

A COURSE of twelve free Swiney lectures on geology is being given by Dr. J. D. Falconer, of the Royal School of Mines, South Kensington, beginning on November 8. The subject is "The Modelling of the Earth's Crust."

THE *Journal* of the American Medical Association reports that a national committee

has been at work during the year since the death of Dr. J. G. Hermández, of Caracas, and recently completed its labors by unveiling an oil portrait in the university, with memorial tablet, and also a monument in the cemetery, and founding a biennial prize in his name with a fund of 15,770 bolivars. The tablet and monument bear the inscription "Homenaje Nacional." The ceremonies included a large representative gathering and addresses, with music. in the university, and also ceremonies in the cemetery.

In the recent California referendum the bill prohibiting vivisection was defeated by an overwhelming majority. The other anti-health measures, including anti-vaccination were also defeated.

Under date of August 13 Captain Roald Amundsen, the Arctic explorer, sent the following telegram from East Cape, Siberia: "We sailed from Nome immediately after my wire of August 8, with only three men, as the others claimed wages of £300 sterling monthly. The following day we were held up by pack ice in Behring Sea. All aboard well."

In the fire which destroyed the Agricultural building of the Alabama Polytechnic Institute on October 17, the department library, which probably contained the best collection of American and foreign journals in the south, was destroyed. The plant collections of Underwood, Earle and Atkinson which were part of the department herbarium were burned as was also the research equipment of the department. Dr. Wright A. Gardner and Mr. G. R. Johnstone lost their entire botanical libraries.

The Yale Corporation has made arrangements for the establishment of four fellowships, to be known as Bishop Museum Fellowships, and to be awarded for study and research in anthropology, botany, zoology, geology and geography. The fellows are to be appointed by the corporation of Yale University from candidates recommended by the trustees of the Bishop Museum in Honolulu. They will receive $1,000 a year. Their researches, which are to be in the general field of the science of the Pacific, are to be submitted to the Bishop Museum for publication. Applications for fellowships should be made to the dean of the graduate school of Yale University, or to the director of the Bishop Museum in Honolulu.

The will of General Rush C. Hawkins gives the residue of his estate to Norwich University at Northfield, Vt. The will also makes specific public bequests of more than $400,000, including $100,000 to the University of Vermont, and $100,000 to Brown University. Of his bequest to Norwich University General Hawkins said he made it because he believed "above all else in a military education, its tendencies being to develop self-respecting, men, who are more likely than others to be faithful in all relations, which should adorn decent society. I am proud of the records made by the Norwich graduates in the field and at sea whenever they have been called upon to serve their country." General Hawkins left $100,000 to the Society for the Prevention of Cruelty to Animals, of which he had been a director, with the instruction that the income of this bequest be used "to abate the wicked horrors of vivisection and to compel those who practise it to make known to the public the actual methods of their unspeakable calling."

Through the courtesy of the director of naval communications and the commissioner of lighthouses, the Bureau of Fisheries has made arrangements to have the occurrence of schooling fishes reported by the keepers of Pollock Rip, Nantucket Shoals, and Fire Island Lightships. Messages will be sent by radio from each of these vessels at noon daily, reporting any observations which may be made during the preceding 24 hours. The reports will be relayed over the leased wires of the Navy from New York or Newport to Boston Navy Yard, whence they will be communicated by telephone to the Bureau's representative, F. F. Dimick, who will post them at the Fish Exchange and give them such other publicity as may be desirable. Important information of interest to Gloucester fishermen will be telegraphed to Henry F.

Brown, the Bureau's representative at that port, for appropriate publication. The service is being established near the close of the season, but it is desired to have it in working order, so that it may be efficient on the resumption of more active fishing in the spring, when it is hoped to extend it to the coast of Maine.

UNIVERSITY AND EDUCATIONAL NEWS

A GIFT of $700,000 to the University of Colorado for the construction of a medical school and hospital by the General Education Board of the Rockefeller Foundation is announced.

Two bequests to Yale University are announced, one of $46,360 from the late Allen P. Lovejoy, of the class of 1904, of Janesville, Wisconsin, for general university purposes, and one of about $113,000 from the estate of Levi I. Shoemaker, of Wilkes-Barre, Pa.

THE president of Argentina has approved the law ordering the immediate construction of a surgical institute for the chair at Buenos Ayres in charge of Professor José Arce. Four hundred thousand dollars have been provided for this work.

THE following changes have been made in the pathological chemistry staff of the New York Post-Graduate Medical School and Hospital: George Eric Simpson, Ph.D., has resigned as instructor to become assistant professor of biochemistry at McGill University. James J. Short, M.D., has resigned as instructor to complete his interneship in the hospital. To fill this latter position, Hilda M. Croll, A.M., formerly associate professor of physiological chemistry at the Woman's Medical College of Pennsylvania, has been made associate. Cameron V. Bailey, M.D., has been appointed assistant professor, to devote his time largely to respiratory and metabolic work.

THE department of physics, West Virginia University, reports the following additions to the staff: Fred A. Molby, Ph.D. (Cornell); formerly of the University of Cincinnati, associate professor. E. F. George, Ph.D. (O. S. U.), formerly of the Research Laboratory of B. F. Goodrich Rubber Company, assistant professor. O. R. Ford, B.S. (Salem), instructor.

MISS LOUISE OTIS, a graduate of Northwestern University, formerly chief chemist of The Arco Company, Cleveland, O., and recently chemist with Glenn H. Pickard, of Chicago, has been appointed instructor in food chemistry at Northwestern University.

PROFESSOR H. H. CONWELL, associate professor of mathematics in the University of Idaho, has resigned to accept a similar position in Beloit College.

DISCUSSION AND CORRESPONDENCE

A POSSIBLE RELATION BETWEEN MECHANICAL, CHEMICAL AND ELECTRICAL QUANTITIES

TO THE EDITOR OF SCIENCE: It is always of interest to find an unexpected numerical relation between different physical constants, and when the only numerical factor turns out to be a multiple of 10, one is led to expect that in the absolute system it is a rational, unity relation, if the units are properly chosen.

At present the numerical connecting link between chemical and electrical quantities is the electrochemical equivalent of silver, an empirically determined constant whose accepted value now is 0.00111800 gram per coulomb. If this value were only about 3/10 of 1 per cent. higher the writer has found the following curious and totally unexpected relation would be true for all the elements:

$$\text{grams} \times g = 10 \times \text{coulombs} \times \text{atomic weight}/g.$$

in which g is the acceleration of gravity numerically equal to 980.597; it will be noticed that the only coefficient is 10. The faraday (the number of coulombs per gram ion) then would be equal to $g^2/10 = 96{,}157$, now generally taken as 96,500. The first term (grams $\times g$) represents a force in dynes, if the grams represent a mass. The physical meaning of the right hand term is not clear, but to balance the physical dimensions the factor