awarded to Pedro C. Sanchez, director of the Central Mexican Bureau of Geography and Climatology in recognition of his contributions to Mexican cartography. Senor Sanchez has been in charge of the geodetic service of Mexico since 1912. He is responsible for the topographic survey of the Federal District on the scale of 1:100,000; the map of the state of Vera Cruz, 1:400,000 (1918), and the Atlas Geográfico de la República de México (1920). He has also conducted explorations in little-known parts of his country.

The Cullum Geographical Medal for 1925 is awarded to Harvey C. Hayes, research physicist of the United States Navy, for his invention of the Sonic Depth Finder. This instrument designed in the interests of navigation has put into the hands of science a practical means of mapping the ocean floor in detail and of furnishing data for more effective study of continent building and of the general problem of isostasy.

The Cullum Geographical Medal for 1925 is awarded to Lucien Gallois, of the University of Paris, for his work in the advancement of geography. His earlier studies established his reputation in the field of historical geography. His later work, embracing both physical and human aspects and finding expression in regional studies, furnishes an admirable exposition of the broad modern concept of geography. By his efforts as teacher, as collaborator and editor of the *Annales de Géographie,* and as president of the Association de Géographes Français, and especially by the spirit and method of his writings, his influence has carried far afield.

REVISION OF EDUCATIONAL METHODS IN THE YALE SCHOOL OF MEDICINE

A THOROUGHGOING revision of its educational methods with a view to placing less emphasis on routine class work and more on independent thought and research is planned by the Yale School of Medicine, according to an announcement made by Dean Milton C. Winternitz.

The faculty is considering the abolition of the year system of study and the resultant division of the student body into classes. This program will also involve the abolition of the system of examinations at the end of the different courses. The student will be allowed to select the sequence of his studies in the subjects which at present comprise the first two years of the medical curriculum, and then after qualifying for the clinical subjects, he will again be allowed liberty of choice. Their arrangement and his completion of them in any period of time will be largely a matter of his choice and ability. Admission to a course will depend on his fitness for the work as determined by the instructor in charge of it. This is the reverse of the present practice. A teacher now has no voice in determining what students shall enter his classes. He determines only whether they shall proceed into other classes. Thus, the student often thinks only of the examination which he is to take at the end of the year, and misses the application of the knowledge he is being offered.

Dean Winternitz made the following statement regarding the plan:

> These changes may seem radical but they are in accord with adopted systems of graduate education, and medical education is graduate education.
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> There must, of course, be some check on the students' accomplishments; group examinations, as well as the graduating thesis, will serve this purpose. For the convenience of the faculty such examinations may be given at fixed times, but within reasonable limits the student may determine when he will present himself for such a test.
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> Aside from other advantages, such a system will be equally valuable to the student who acquires knowledge rapidly and to his slower colleague. It is hoped that by the elimination of the class system, the pupil who acquires knowledge less rapidly will be less reluctant to spend more time in preparation, while the more brilliant scholar will be more willing to spend longer periods in investigation and specialization.

THE 1926 MEETING OF THE PACIFIC DIVISION OF THE AMERICAN ASSOCIATION

THE 1926 annual meeting of the Pacific Division of the American Association for the Advancement of Science will be held at Mills College, California, from June 16 to 19. Mills College is delightfully situated in the foothills near Oakland, California, and is easily accessible from all points of the San Francisco bay region. Established in 1852 it has played an important part in the intellectual life and development of the Pacific Coast and now stands unique as the only accredited college for women west of the Mississippi. With a campus of 150 acres, beautifully designed landscape and buildings, it will prove a most attractive and commodious meeting place for the annual meeting. As there is a large membership of the Pacific Division in this vicinity a very successful meeting is assured.

Preparations for the meeting are already in progress. A research conference, under the direction of President Aurelia Henry Reinhardt, will be arranged on the relation of the college to research. A symposium on the constitution of matter or a kindred subject will be arranged, with physicists of note participating, and one or more public addresses will be given by visiting European scientists.

It is likely that the greater portion of the 27

affiliated societies of the Pacific Division will arrange to hold their annual meetings at Mills College.

A meeting of the affiliation committee, comprising delegates from the various affiliated societies, will be held early in February to consider matters relating to their respective meetings.

The Executive Committee of the Pacific Division is constituted as follows:

Robert G. Aitken, president; associate director, Lick Observatory, Mount Hamilton, California.

Joel H. Hildebrand, vice-president and chairman of the executive committee; professor of chemistry and dean of men, University of California, Berkeley.

Walter S. Adams, director, Mount Wilson Observatory, Pasadena.

Bernard Benfield, consulting engineer, Kohl Building, San Francisco.

Leonard B. Loeb, assistant professor of physics, University of California, Berkeley.

E. G. Martin, professor of physiology, Stanford University.

Emmet Rixford, professor of surgery, Stanford University.

J. O. Snyder, professor of zoology, Stanford University.

O. F. Stafford, professor of chemistry, University of Oregon, Eugene.

SCIENTIFIC NOTES AND NEWS

DR. FREDERICK GARDNER COTTRELL, director of the Fixed Nitrogen Research Laboratory of the United States Department of Agriculture, has been awarded the gold medal for 1924 of the Mining and Metallurgical Society of America. The medal was presented at a luncheon held in his honor at the Cosmos Club, Washington, D. C., on December 7.

PROFESSOR A. N. TALBOT, head of the department of theoretical and applied mechanics in the University of Illinois, has been elected an honorary member of the American Society of Civil Engineers.

DR. C. E. K. MEES, director of research in the laboratories of the Eastman Kodak Co., has been made an honorary member of the French Photographic Society in recognition of his work on the fundamentals underlying the physics and chemistry of photography.

DRS. FEWKES, Swanton, Michelson and Mr. Hewitt, of the U. S. Bureau of Ethnology, have been notified of their election to honorary membership in the Hermann Barth Gesellschaft, of Vienna.

DR. RICHARD MOLDENKE, of New Jersey, was recently chosen to be the first recipient of the Joseph S. Seaman gold medal, awarded by the American Foundrymen's Association in recognition of his many contributions to the foundry industry.

MR. GEORGE EASTMAN, chairman of the board of directors of the Eastman Kodak Company, has been elected an honorary member of the Synthetic Organic Manufacturers Association in recognition of the work done by the company in its research laboratories in the manufacture of synthetic organic chemicals.

SIR WILLIAM BRAGG had conferred upon him the honorary degree of laws by St. Andrews University, on the occasion of the opening of the new laboratories of physics and chemistry at the University on December 4.

DR. HANS OSCAR JUEL, professor of botany at the University of Upsala, and Dr. Svante Marbeck, director of the Botanical Gardens at Lund, Sweden, have been elected foreign members of the Prussian Academy of Sciences.

PROFESSOR H. A. LORENTZ, of Leyden, on December 11 celebrated the fiftieth anniversary of his appointment as doctor of mathematics and philosophy. Among those who were present at Leyden University to honor the distinguished scholar were Professor A. S. Eddington, of Cambridge; Madame Curie, of Paris, and Professor Einstein, of Berlin.

DR. R. D. M. VERBEEK, the well-known East Indian geologist, has celebrated his eightieth birthday at The Hague. A "gift-book" was presented to him, containing forty-five scientific contributions from geologists in the Netherlands, the Netherlands East Indies, Japan, the Malay States, Indo-China, New Zealand, Australia, Papua, the Philippines, the United States, Germany and France.

THE university council of the University of Wisconsin has voted to recommend that the mining engineering building, which was largely designed by Dean Stephen M. Babcock and in which he carried on his work for seventeen years, be named Babcock Hall in his honor. Professor Babcock recently celebrated his eighty-second birthday.

S. W. PARR, professor of applied chemistry in the University of Illinois, has been elected to the board of directors of the American Chemical Society to succeed Professor William Hoskins, of Chicago.

DR. HARRY C. OBERHOLSER, ornithologist in the Biological Survey of the United States Department of Agriculture, has been elected president of the Biological Society of Washington.

DR. A. J. CARLSON, professor of physiology at the University of Chicago, was elected president of the Institute of Medicine of Chicago at a meeting of the board of governors on December 9. Dr. Robert B. Preble was elected vice-president; Dr. George H. Coleman, secretary; Dr. John Favill, treasurer, and Dr. Ludvig Hektoen, chairman of the board.