on June 15. In the afternoon an address on "The Contribution of Astronomy to General Culture" was given by Edwin B. Frost, of the Yerkes Observatory, and in the evening an illustrated lecture on "The Revelations of the Telescope" was delivered by John A. Brashear, of Pittsburgh.

The observatory is a very beautiful structure of white marble, and its interior finish is in excellent harmony with the elegant exterior. The principal instrument is a nine-inch telescope, with object-glass by the J. A. Brashear Company, with the latest style of mounting by Warner & Swasey, complete in every detail, and with a filar micrometer by the same firm, of which the donor is vice-president. A fine four-inch combined transit and zenith-telescope is also provided, together with a chronograph, all by the same makers. The equipment also includes two Riefler clocks, for mean and for sidereal time, and a sidereal clock for the dome. The observatory is very well situated upon a high ridge commanding the horizon, and is admirably adapted for its purpose, principally educational, but the equipment is also sufficient for useful contributions to research.

SCIENTIFIC NOTES AND NEWS

THE Paris Academy of Sciences has conferred the Janssen Prize, consisting of a gold medal, on Director W. W. Campbell, of the Lick Observatory, University of California.

DR. JOHN BENJAMIN MURPHY, professor of surgery in Northwestern University, has been elected president of the American Medical Association, for the meeting to be held next year at Los Angeles.

THE University of Pittsburgh has conferred the doctorate of science on Professor H. L. Fairchild, professor of geology in the University of Rochester.

DR. OSCAR BOLZA, professor of mathematics in the University of Chicago since its establishment eighteen years ago, has been made non-resident professor, and will live in Freiburg, Germany. He will receive his regular salary. WE learn from the *Journal* of the American Medical Association that a bronze relief portrait of Dr. William Osler has been placed in Osler Hall of the Medical and Chirurgical Faculty, Baltimore. It is by F. C. V. de Vernon, a French sculptor, and is an enlargement of a small one made in 1903 by the same artist and now in the Johns Hopkins Medical Library. It will be placed by the side of the Osler portrait by Corner on the north wall, and on the other side will be hung the Welch medallion.

AFTER nearly continuous service of nine years in the American Museum of Natural History, Director Hermon C. Bumpus has been granted a vacation by the trustees, beginning June 15. Dr. Charles H. Townsend, director of the New York Aquarium, has been released from his duties for the same period and has been appointed acting director of the museum during the absence of Director Bumpus, which will probably extend to December 15. 1910. Professor Raymond C. Osburn, Ph.D. (Columbia), of the Biological Department of Barnard College, has been recalled from Naples to take charge of the aquarium. during the same period, under Director Townsend's general supervision. It is the intention of the Zoological Society to make Professor Osburn a permanent member of the aquarium staff.

DR. HARVEY W. CUSHING, of the Johns Hopkins University, has been appointed chief of the surgical staff of the new Peter Bent Brigham Hospital at Cambridge, Mass. The hospital, which is the teaching hospital of the Harvard Medical School, will not be completed until about 1912. The fund has been accumulating for about twenty-five years and the original bequest of \$1,800,000 has grown to about \$8,000,000.

PROFESSOR H. A. EDSON, of the University of Vermont, has resigned, to accept a position in the Bureau of Plant Industry, Washington, D. C.

DR. THEODORE WHITTELSEY has resigned as associate professor of chemistry in Northwestern University to become chief chemist of the Rubber Regenerating Co. His address is Mishawaka, Ind.

DR. CHAS. W. HARGITT, professor of zoology in Syracuse University and director of the zoological laboratories, has been granted leave of absence for the coming year, and will devote his attention to research at several American and European laboratories.

PROFESSOR ROBERT H. RICHARDS, of the Massachusetts Institute of Technology, left on June 10 for summer school work with his mining students. He was accompanied by Professor Bugbee and Instructor Hayward. The party go to Buffalo, and from there take an ore steamer to Duluth, where they will see the ore docks. They expect to visit the Michigan copper region at Keweenaw Point, the nickel mines at Sudbury, Ontario, and the silver mines at Cobalt, Ontario.

THE collection of fresh-water sponges of the U. S. National Museum is now being critically examined by Dr. Nelson Annandale, superintendent of the Indian Museum in Calcutta, an authority on this subject.

M. DARBOUX, permanent secretary of the Paris Academy of Sciences, has been elected president of the Société de secours des Amis des Sciences.

PROFESSOR J. C. EWART, F.R.S., of Edinburgh, will give a course of lectures on the principles of breeding, at the Graduate School of Agriculture to be held at Ames, Ia., in July.

A BUST of Pasteur was unveiled on June 5^{4} in the garden of the Ecole Normale Supérieure, Paris, where was his first laboratory and where he taught for thirty-seven years.

IN memory of the late Dr. Howard T. Ricketts, of the University of Chicago, who recently died in Mexico of typhus fever while investigating the disease, there has been established in Rush Medical College, of the university, a prize of the value of \$25 to be awarded annually to the student presenting the best thesis embodying the results of original investigation on some topic relating to dermatology. The prize will be known as the "Howard T. Ricketts Prize." DR. WILLIAM HENRY SEAMAN, examiner in the U. S. Patent Office and professor of chemistry in Howard University, died on June 12, at the age of seventy-three years.

THERE will be a New York State Civil Service Examination on June 25, for the position of civil engineer, at a salary of \$2,224, and of chemist in the Department of Agriculture, at a salary of \$900 to \$1,200.

ELABORATE plans for the enlargement of the New York Aquarium are now being prepared by the Zoological Society, under the supervision of Director Townsend, by Mr. J. Stewart Barney, architect. The plans involve greatly improved architectural effect and will treble the present capacity of the aquarium. The institution is by far the most popular of its kind in the world. The attendance, under the administration of the Zoological Society, has increased very rapidly. This year it will probably equal, if not exceed, four and a half millions.

PLANS for the extension of the American Museum of Natural History are now being prepared by the trustees, and designs for the new west entrance pavilion and transept on Ninth Avenue will soon be submitted to the commissioner of parks. The committee on building and plans is also at work upon designs for the completion of the entire south half of the great museum of the future. The present building, erected between 1874 and 1908, includes eight units, that is, the south transept (the original building), the south entrance pavilion (the second building), three facade wings (two on the south and one on the west) and two corner pavilions, completing the south façade. The plans now in preparation contemplate the addition of six units more, which will complete the central hall and east and west transepts, the east entrance pavilion and the southeast facade.

WE learn from *Nature* that the valuable collections of native African art made by Mr. E. Torday in the southern Belgian Congo are now being classified and arranged by the authorities of the British Museum. The most

remarkable specimens in the collection are the wooden portrait statues of past rulers, which throw a new light on savage art in Africa. Next in importance are a splendid carved throne of the paramount chiefs, wooden caskets and cups, and specimens of remarkable textiles resembling velvet, made from the fiber of the upper skin of the palm leaf (raphia). This collection was made before the almost complete disappearance of native art work due to the importation of cheap European productions.

COURSES in wood technology and the mechanical engineering of wood manufacturing plants are to be added to the curriculum of the University of Wisconsin for the coming year, the college of engineering cooperating with the new U.S. forest products laboratory in the instruction. The courses are to be primarily of a technical nature, arranged especially to meet the needs of students in the mechanical and chemical engineering courses who wish to prepare themselves for positions in the wood manufacturing industries. Three phases of the forest utilization problem are to be dealt with in these courses, including a study of the physical and chemical properties of wood, of the utilization of such wood products as are now wasted and the preservation of timber, and of engineering operations of manufacturing and preservative processes. Four courses in wood technology, including work in wood distillation, wood preservation, the chemical constituents of wood, and the physical properties of wood, are to be given by various members of the staff of twenty government experts at the laboratory. In addition there are to be lectures and demonstrations of the different operations in logging and wood manufacturing machinery, at the college of engineering, by Professor Robert McArdle Keown, of the department of machine design. In the course on the properties of wood, which will be given the first semester, the elementary structure of wood of various species will be studied, and the relation of its physical properties and its uses in the arts and industries. Lectures and demonstrations will also be given regarding methods of testing

and conditioning wood. The course in constituents and fibers of wood, to be given the same semester, will deal with the chemical construction, lignoceric materials and fibers with their bearing on industrial and art uses of wood. The utilization of the waste in the lumber industry will be the special aim of the study of the principles, processes and products of hardwood and softwood distillation in the course in wood distillation to be given the second semester. The work in wood preservation will cover the structure and properties of different kinds of timber as regards their resistance to destructive agencies and conditions of deterioration. Both surface applications and antiseptic impregnation will be tested in the study of preservative processes, when the theory and effect of pressure in these treatments will also be considered.

UNIVERSITY AND EDUCATIONAL NEWS

HORACE RUSSELL, '65, president of the Dartmouth Alumni Association, has made a conditional gift of \$10,000 to Dartmouth College toward an endowment fund to be used for the early increase of salaries of full professors, provided that additional sums can be raised to make the amount \$100,000.

At the commencement exercises of the University of Pittsburgh, on June 15, a School of Engineering was dedicated, the principal address being made by E. K. Morse, president of the Engineers Society of Western Pennsylvania. At the same time the cornerstone of the building for the School of Medicine was laid, an address being given by Dr. James Ewing, of the Cornell Medical School.

AT Stanford University Dr. Albert C. Crawford, of the Bureau of Animal Industry, has been appointed professor of pharmacology, and Dr. Hans Zinsser, of Columbia University, has been appointed associate professor in charge of bacteriology.

At the University of Illinois Mr. Frank C. Becht, of the University of Chicago, has been appointed acting head of the department of physiology in place of Dr. J. H. McClellan, who resigns to complete his medical studies.