As soon as possible the work of tearing down the old buildings will be started and their sites will be landscaped or used for other purposes. The site of Budd Hall will be utilized for the Eshleman Memorial Building to house student publications. Aside from these eleven structures, other obsolete buildings which new construction is replacing are: the old student infirmary, replaced by the new $450,000 Cowell Memorial Hospital; the old power house, replaced by a new $400,000 heating plant capable of supplying the augmented needs of the campus.

The Life Sciences Building, in addition to its more than 400 laboratory and office rooms and the Museum of Vertebrate Zoology, has an auditorium seating 500, and a library with a capacity of 90,000 volumes.

HONORARY DEGREES FROM YALE UNIVERSITY

THE citations on the occasion of the conferring of honorary doctorates of science at the recent commencement of Yale University were as follows:

EDWIN GRANT CONKLIN, SC.D.

Professor Phelps: Biologist. Bachelor of Science, Ohio Wesleyan University, 1885. B.A. 1886, M.A. 1889. Ph.D. Johns Hopkins, 1891, and recipient of many honorary degrees. Held the chair of biology at Ohio Wesleyan, and since then has been professor of zoology at Northwestern, University of Pennsylvania, and since 1908 at Princeton. He is a member of many learned societies in Europe and in America. His publications are numerous and important; including "Heredity and Environment," "Mechanism of Evolution," "Direction of Human Evolution," "Biology and Democracy" and other works on heredity and education. The range of his interest is as wide as life itself. He is a great scholar and a great citizen. His investigations have been largely in the fields of cytology, particularly cell division, and of embryology, both descriptive and experimental. In his work on the development of mollusks and ascidians he has followed closely the changes from the single-celled egg through all successive cell divisions, to the formation of the principal organs of the adult body. His work has all been done with great attention to detail, with extraordinary accuracy and with completeness. His papers have always been finished with artistic perfection. He has been willing to spend a fair portion of his time in making his science comprehensible to the general reader. In this he has been most successful, as his popularity as lecturer and author testify.

President Angell: Everywhere recognized as one of the distinguished biologists of your time, you possess two qualities rarely conjoined in eminent scientific men—a genius for sound and exhaustive work of the greatest precision, issuing in fruitful and striking discoveries, combined with a broad and profound outlook on the whole field of biological science, especially in its remoter human implications, about which you write so lucidly that even the interested layman may understand. In recognition of these remarkable gifts, Yale University is proud to confer upon you the degree of Doctor of Science, admitting you to all its rights and privileges.

CHARLES SCHUCHERT, SC.D.

Professor Phelps: One of the most distinguished of the scientists of Yale, in the front rank of paleontologists, and the world's leading authority on paleo-climatology. A youth in Cincinnati, while belonging to the younger generation, he was paradoxically a collector of fossils. He taught paleontology in Kentucky, New York and Minnesota, coming to Yale in 1892. He has done work for the U. S. Geological Survey, for the U. S. National Museum, and in 1904 was appointed at Yale professor of paleontology and historical geology, becoming professor emeritus in 1923, since when he has, if possible, worked harder than ever. He may be seen at an early hour every morning entering the Peabody Museum. He is the author of a standard work, "Historical Geological Paleogeography of North America." His services to Yale University have been and are now invaluable. Although his professional interests are concerned with prehistoric time, he is held in the warmest affection by contemporary men; every one who knows him is his friend.

President Angell: You have long served Yale with fidelity and distinction. She has been proud of your leadership in the field of your special study, a leadership which no one challenges. In token of the high respect in which your scientific work is held and in affectionate remembrance of your long years of devoted service to her interests, Yale University gladly confers upon you the degree of Doctor of Science, admitting you to all its rights and privileges.

SCIENTIFIC NOTES AND NEWS

A TRIBUTE to President W. W. Campbell, who retired from office at the University of California on July 1, was paid by the regents at their last meeting. Prepared by Regent Chester A. Rowell, the following resolution of appreciation was adopted: "On the eve of the retirement of President William Wallace Campbell, after nearly forty years of distinguished service to the University of California, the regents hereby record their appreciation of a great scholar, an outstanding administrator and an inspiring character. After a long and notable career as astronomer and director of Lick Observatory, Dr. Campbell came to the presidency at a time of many and difficult problems. Already eminent in the world of intellect and of knowledge, his high ideals, fine spirit, clear vision, decisive judgment and administrative efficiency as an ex-

ecutive have left a permanent record of achievement in the progress of the institution over which he presides. In the midst of complex external problems and great material development, he has never lost sight of the main purposes of a university: the advancement of teaching and learning and the increase of usefulness to its students and to the state. With regret that the time of official retirement has arrived, and with the affectionate hope of many years of happiness and usefulness, the regents tender this tribute of acknowledgment."

DR. HARVEY WASHINGTON WILEY, from 1883 to 1912 chief chemist of the U. S. Department of Agriculture, died at Washington, D. C., on June 30, at the age of eighty-five years.

DR. E. STARR JUDD, of the Mayo Clinic, professor of surgery in the Graduate School of the University of Michigan, was elected president of the American Medical Association at the recent Detroit meeting.

NORTHWESTERN UNIVERSITY has conferred the doctorate of science on Olin H. Basquin, Chicago engineer and one of the organizers of the School of Engineering at Northwestern University, and on Dr. G. Carl Huber, professor of anatomy and dean of the graduate school of the University of Michigan.

THE University of Michigan has conferred on Mr. Frank Leverett, lately glacialist on the staff of the U. S. Geological Survey and staff lecturer on glacial geology at the university, the honorary degree of doctor of science.

HAMLINE UNIVERSITY at its recent commencement conferred the degree of doctor of laws on Dr. Charles Horace Mayo, of the Mayo Foundation.

DR. J. TRUEMAN THOMPSON, professor of civil engineering at the Johns Hopkins University, has been appointed manager of the sixth International Road Congress. The congress, which it is expected will be attended by leading highway engineers, administrators and economists from virtually every civilized country in the world, will meet in Washington from October 6 to 11 at the invitation of the United States government.

DR. EDWIN O. JORDAN, professor of bacteriology at the University of Chicago, has been elected a member of the board of scientific directors of the International Health Division of the Rockefeller Institute.

COLONEL HARLEY B. FERGUSON, Corps of Engineers, has been appointed a member of the Board of Engineers for Rivers and Harbors, to succeed Colonel George B. Pillsbury.

M. CH. FABRY and M. Ch. Maurain have been elected to the council of the National Bureau of Scientific Research and Invention, Paris, in succession to the late M. Pateau and the late M. Sebert.

DR. MARCUS BENJAMIN, the editor of the publications of the United States National Museum, was one of the five recipients of the Medal of Service given for the first time at the recent commencement of Columbia University. The award was made in recognition of Dr. Benjamin's "long years of patient and effective work in his chosen field of endeavor."

DR. THURMAN D. KITCHIN, dean of the Medical School of Wake Forest College for thirteen years, has been elected president of the college. He succeeds Dr. Francis P. Gaines, who resigned to become president of Washington and Lee University.

LYMAN D. PHIFER, associate in botany at the University of Washington, has been named assistant director for the spring of 1930–31 of the university's Oceanographic Laboratories in the upper Puget Sound. He will aid Dr. Thomas G. Thompson, recently appointed to direct the laboratories in the program of scientific research in oceanography which is being outlined. Dr. Thompson is now on an extended European tour studying oceanographic methods in the Mediterranean, Central Europe and North Atlantic laboratories. He holds a traveling fellowship granted him by the Rockefeller Foundation.

AT a recent meeting of the board of regents, the appointment of a new executive committee to govern the University of Michigan Medical School was approved. The directorship of the division of preclinical medicine will go to Dr. Frederick G. Novy, head of the department of bacteriology and a member of the old executive committee. Graduate medicine will be under the supervision of Dr. James D. Bruce, present supervisor of the work. Clinical medicine will be directed by Dr. Udo J. Wile, of the department of dermatology and syphilology. Dr. Harley A. Haynes will have complete direction of the University Hospital and Dr. Arthur C. Curtis, former assistant to the dean of the medical school, now becomes secretary. Dr. Hugh Cabot is said to have resigned from his chair in the university.

DR. EARL W. PHELAN, of Western Reserve University, has been appointed professor of chemistry at the Georgia State Womans College, Valdosta, Georgia.

DR. WALTER R. FIESELER, formerly medical supervisor of athletics at the University of Iowa, has resigned from the faculty of the college of medicine to become associate medical director at the University of Southern California.

AT the University of Cambridge there will be established for three years a temporary professorship of colloidal physics, which in the first instance is to be

held by Mr. E. K. Rideal, of Trinity Hall. The professorship is to be primarily assigned to the faculty of physics and chemistry.

AT the Paris Observatory, M. Fayet, director of the Nice Observatory, and M. Lambert, associate astronomer at Paris, have been appointed astronomers to succeed the late M. Fatou and M. Hamy, who recently retired.

DR. WILLIAM R. MAXON, associate curator of the division of plants of the U. S. National Museum, has sailed for Europe. As a representative of the Smithsonian Institution he will attend the International Botanical Congress to be held at Cambridge this summer. Part of his time will be spent at the British Museum (Natural History) and the Royal Botanic Gardens, Kew, where he will continue preparation of the fern volume for the Flora of Jamaica.

DR. WARREN D. SMITH is conducting a course in geography and geology of the Pacific Basin on the University of Oregon Summer School cruise to Hawaii from June 25 to August 1. During the fall quarter of 1930–31 he plans to visit the west coast of South America.

DR. GEORGE B. RAY, associate professor of physiology in the School of Medicine of Western Reserve University, sailed from New York on July 5 to spend the summer in Germany. From September to March, Dr. Ray will study with Dr. Joseph Barcroft, professor of physiology at the University of Cambridge.

DRS. W. A. ALBRECHT and Samuel Brody, associate professors, respectively, of soils and dairy chemistry at the University of Missouri, have been given a year's leave of absence to be spent in Europe.

A SPECIAL cable dispatch to the New York *Sun*, under date of July 3, reports that a storm in the Gobi Desert, which wrecked his camp and scattered his supplies on June 10, forced the return to Peiping of Roy Chapman Andrews to obtain supplies.

THE annual address before the Kentucky Chapter of Sigma Xi was delivered by Professor Leo E. Melchers, head of the department of botany of the Kansas State Agricultural College. The lecture was illustrated and entitled "Life and Scenes along the Nile." The speaker recently returned from Egypt where he had been making a study of Egyptian agriculture.

THE Huxley Memorial Lecture of the Imperial College of Science and Technology next year will be delivered by Sir A. Smith Woodward, on "Modern Progress in Vertebrate Paleontology."

THE ninety-eighth annual meeting of the British Medical Association will be held at Winnipeg from August 26 to 29.

AS a result of the action taken at the first International Congress of Soil Science held in Washington in 1927, the second congress will be held in Russia from July 20 to 31. The first International Congress was held under the joint auspices of the U. S. Department of Agriculture and the American Society of Agronomy. Meetings for the first six days of this year's congress will be in Leningrad and the remaining time will be spent in Moscow. Following the congress, an excursion of 29 days will be made across the soil zones of European Russia, during which members of the congress will have an opportunity to study the soils and visit schools, agricultural experiment stations and farming and industrial enterprises.

THE Second International Pediatric Congress will meet in Stockholm, from August 18 to 21, under the presidency of Professor I. Jundell, of the University of Stockholm. Three main subjects will be considered: (1) The biological effect of direct and indirect ultra-violet irradiation, which will be reviewed by Dr. Hess of New York. (2) The physiological and pathological significance of the thymo-lymphatic system, reviewed by Dr. Hammar of Uppsala, Cattaneo of Milan, Moro of Heidelberg and Mouriquand of Lyons. (3) The psychology and pathology of childhood, reviewed by Gillespie of London, Hamburger of Graz, Krasnogorski of Leningrad and Péchère of Brussels. Other subject will be discussed in various section meetings.

UNDER the patronage of H. M. King Albert of Belgium, it is proposed to hold an International Congress of Historical Geography at Brussels, from August 11 to 14. It is possible, according to the *Scottish Geographical Magazine*, that a meeting may be arranged at Liége, and one at Antwerp, and the date of the congress will coincide with that of the International Exhibitions at Liége and Antwerp, and with the festivities organized in commemoration of the centenary of the independence of Belgium. The president of the congress is Professor H. Van der Linden, of the University of Liége, and the general secretary is Professor F. Quicke, of the Royal Athénée, Brussels. Communications should be sent to the latter at 3 Avenue Saint-Augustin, Forest-Brussels.

THE will of the late Colonel William Boyce Thompson leaves his collection of minerals and carved stones to the American Museum of Natural History, with the provision that the collection shall remain at his residence as long as his widow and daughter reside there, unless permission to remove it is given. The collection is to be designated by the museum as "the

Boyce Thompson mineral collection." The will provides a fund of $20,000 to the museum for preparation of a room or building to house the collection and another fund of $50,000 for the purchase of additions to the collection and for its maintenance. No further endowment is provided by the will for the Boyce Thompson Botanical Institute.

CONGRESS without a dissenting vote has passed the Smoot-Elliott bill authorizing an appropriation of $6,500,000 for the enlargement of the U. S. National Museum.

THE Research Institute of the Lankenau Hospital announces the opening of a Marine Experimental Station at North Truro, Cape Cod, Massachusetts, to extend the study of the chemistry of cell division to marine animals. This was made possible by a gift of land from the L. D. Baker estate and a building the gift of Mr. A. Bein, of Philadelphia.

CEREMONIES in connection with the laying of the cornerstone of the new engineering laboratory of the Westinghouse Electric Company built at a cost of $2,000,000 took place on June 10. As Mr. W. S. Rugg, vice-president of the company, placed the model cornerstone in position, delicate relays controlled by the "electric eye" operated the hoist that swung the actual cornerstone into place. The actual cornerstone, and a model on a crane at the right of Mr. Rugg, exactly followed his movements as he placed the model stone in place on the model building. The laboratory, which will be the largest and tallest arc-welded structure in the world, will contain twenty-five elaborately equipped laboratories for nearly every branch of the electrical industry.

THE *Journal* of the American Medical Association reports that the new School of Public Health and Tropical Medicine was opened in Sydney, on March 6. It will carry on the work of the School of Tropical Medicine, which has been in existence since 1907 at Townsville. It is housed in its own building within the grounds of the university, close to the medical school. Erected at a cost of £35,000, it provides for departments of parasitology, entomology, bacteriology, pathology and chemistry, while sections dealing with physiology, industrial hygiene, epidemiology, vital statistics and sanitary engineering are contemplated. It will be under the control of a council composed of representatives of the commonwealth government and the University of Sydney. Dr. Harvey Sutton has been appointed director. It will provide especially for the graduate training of public-health personnel, but will also include special non-medical courses of school hygiene in the diploma of education and of tropical hygiene in the diploma of anthropology. The courses for the diploma in public health and for the diploma in tropical medicine have already been commenced, and a diploma of tropical hygiene is contemplated. A library to deal with public health and tropical medicine is being built up from a nucleus, previously existing at Townsville, which, it is hoped, will be complete in all Australian aspects.

A NEW zoological institute and a combined physical and chemical institute will be erected at the University of Munich through funds given by the Rockefeller Foundation. The donation makes it possible to abandon a previous plan to provide for the two departments of the university by making additions to the Wilhelminum, the renaissance palace in the Neuhauserstrasse. This plan is said to have met with opposition from Munich artists and friends of art.

THE Chemical Foundation, Inc., has made a gift of $100,000 to the recently created National Institute of Public Health.

THE Rockefeller Foundation has informed the senate of the University of Sydney that it will contribute £100,000 to provide laboratory facilities for the departments of surgery, pathology, bacteriology and allied subjects.

THE acquisition by Columbia University of a Weights and Measures Library containing works from 1520 to the present time and forming what is said to be the most comprehensive collection of volumes on the science of weights and measures in the possession of any educational institution has been announced. The collection is the gift of Samuel S. Dale, of Boston, formerly editor of the *Textile World Record*, an authority on weights and measures, in memory of his father and mother, Thomas and Fanny Dale, of Little Falls, N. Y. The works number between 1,100 and 1,200 volumes, with some 700 pamphlets.

WE learn from *Nature* that the question of the destiny of the Radcliffe Observatory site and buildings has now come officially before the University of Oxford in the form of a decree in congregation. By this it is proposed to accept the offer of Sir William Morris, the purchaser of the site from the Radcliffe trustees, to vest the whole of the property in the hands of a body of trustees, in order that it may be used for the benefit of the Radcliffe Infirmary and the Medical School of the university. The terms of the trust provide that the old observatory building shall be used for the purpose of medical teaching and research, and that the observer's house and garden shall be used as a residence for the director of the institute of research to be constituted.

CONSTRUCTION of an observatory to house a 5-inch equatorial telescope, recently secured by the Panama Canal from the United States Navy, is in progress. The building is being erected on a small hill a short distance to the northwest of the Miraflores filtration plant, and will be a circular structure 14 feet in diameter, with 6-inch concrete wall. It will be topped with a mobile steel dome equipped to travel on a circular track, permitting the use of the telescope toward all points of the compass and facilitating the observation of celestial bodies in all parts of the heavens. The observatory is being established through the efforts of the Canal Zone Astronomical Society, with the assistance of the canal administration, and is to be used for the instruction of students of the Canal Zone high schools and for Panama Canal employees interested in or associated with astronomical societies. Ground was broken for the building on April 11, and it was expected that the work would be completed in June. The position of the center point of the pier on which the telescope will rest is: Latitude 9° 00′ 15″ North; longitude, 79° 35′ 51″ West.

THE European producers of mercury, desiring new uses for the metal, have offered a prize under the following stipulations: (1) A prize will be awarded, under the conditions below, to whoever proves to a commission of the European producers to have found a new use for mercury or its salts, and to have industrially exploited it, the extent of the use being defined as in (3) below. (2) The use should be as yet unknown to the industry, and should be regularly and definitely protected by patent not before January 1, 1930, in Germany and the United States. (3) The application must be important enough to indicate a new consumption of mercury of at least 1,000 flasks during 1930, 3,000 in 1934 and 5,000 in 1935. (4) The prize will be awarded by a commission consisting of the president and vice-president of the European producers and two technicians named by the Spanish Academy of Sciences and the Academy of Italy, or their representatives. The prize will be £5,000 sterling, £1,000 to be paid immediately upon the decision of the commission; £2,000 one year after the condition in (3) above has been confirmed, and £2,000 two years after the condition in (3) has been confirmed and the consumption of the metal estimated practically and confirmed by the commission. (5) The commission may delay the award, reduce its value or prolong the period of offer without giving any reason for its action. (6) The decision of the commission is final without notification of reasons. (7) The complete account of the studies and practical experiments relating to the new application should be presented in quadruplicate, printed or typewritten either in Spanish, Italian, German, English or French, and should be sent, registered, to Mercurio Europeo, Bureau de Repartition, Plaza St., Francois 5, Lausanne, from which further information may be obtained.

TWELVE National Radium Centers have been nominated by the British Radium Commission, as being places where there are medical schools with complete clinical courses and where treatment of patients can be combined with the education in approved methods of radium therapy. The centers are: *England*—Birmingham, Bristol, Leeds, Liverpool, Manchester, Newcastle and Sheffield; *Scotland*—Aberdeen, Dundee, Edinburgh and Glasgow; *Wales*—Cardiff. Loans of radium are being restricted in each area to one hospital selected by the medical faculty of the local university. London has been treated as a separate and special problem, and steps have been taken to organize two centers to carry out special work of general and national importance. Approximately 17 grams of radium out of a possible total of about 22 have been ordered and provisionally allocated by the commission to national centers. Of this quantity, nine grams have already been received from the manufacturers, and, after being tested at the National Physical Laboratory, 6¼ have been delivered to centers and a further 3½ will be going out very shortly. In collaboration with the Medical Research Council and the British Empire Cancer Campaign, a set of "Radium National Forms" for the use of recognized centers has been prepared, in order that the clinical records of all cases treated may be kept on a uniform basis and eventually incorporated in general national statistics.

DISCUSSION

SEA-LEVEL CHANGE NEAR NEW YORK

UNDER the above title Professors A. C. Lane and W. F. Cheney, Jr., in the March 21 issue of SCIENCE call attention to what they term "an erroneous statement" in *Bulletin* of the National Research Council Number 70 entitled "Studies of Mean Sea-level." The wording of their criticism might lead the reader to infer an error in computation which affected the validity of a certain conclusion set forth in that bulletin, namely, that tidal observations at Fort Hamilton, New York, indicate no appreciable change in sea-level during the last thirty-five years. Those familiar with the bulletin in question will appreciate that Lane and Cheney disagree rather with the conclusion itself. Accepting the figures given there, they proceed to deduce mathematically a probable rise of sea-level of 0.0047 feet a year $\pm$ 0.06, or as they otherwise state it, a probable rise of about 0.6 feet