whose work bears on the scientific problems of the Pacific. This is expected to improve the work of the museum by bringing it under the supervision of the scientific men at Yale, and will strengthen the educational program of the Graduate School by making available for purposes of instruction and research materials obtained by the museum through its field study of Pacific problems.

To give effect to this purpose it has been agreed that the director of the museum shall be a member of the faculty of the Graduate School assigned to duty in Hawaii. The present director is Professor Herbert E. Gregory. Each year the museum will send to Yale a visiting professor to give instruction and direct research in the problems of the Pacific area. A standing committee of the Graduate School will undertake to supervise the research program of the museum, to correlate this with the activities of the scientific departments at Yale, and to plan and direct the work of the visiting professor. To stimulate among graduate students interest in the problems of the Pacific, fellowships of large stipend will be awarded annually to students who are qualified to engage in research under the direction of the museum.

President Angell points out that "the research activities of the Bishop Museum in the natural and social sciences have been of the highest scientific value. By reason of its central position it is strategically placed to study the cultural, geological and zoological problems of the Pacific area. This it does through scientific expeditions to the islands and bordering mainlands which gather data of great importance to the anthropologist, the social scientist and the scholars interested in different branches of the natural sciences. Hereafter these activities will be a part of the general program of the Yale Graduate School."

The Bernice P. Bishop Museum has given much attention to the native races of the Pacific. The studies entered upon by Yale and the museum have led to the discovery of ruins of great antiquity in the Mariana islands, between Hawaii and the Philippines, which indicate a vanished civilization in the Pacific comparable to that of the ancient mainland. These ruins are expected to throw light on the origin and immigration of the Pacific people. By some routes in the distant past these people left the Asiatic continent and spread over an area 8,000 miles long and 6,000 miles wide. To trace these routes and to find out who these early people were is one of the problems which the investigators at Yale and the museum are trying to solve. It was in investigating a probable route from Mongolia through Japan to the Marianas and thence to Samoa and Hawaii that these significant ruins were discovered.

FURTHER ACADEMIC DISMISSALS IN MISSISSIPPI

THERE were recorded in the issue of SCIENCE for July 18 the professors dismissed from the University of Mississippi.

On July 5, 1930, the Board of Trustees of the University and Colleges of Mississippi, without warning, giving of reasons, or preferring charges of any sort, dismissed the members of the faculty of the Mississippi College of Agriculture and the Mechanic Arts, as listed below. It is said that the board plans to take similar action at the Experiment Station.

Charles F. Briscoe, professor of bacteriology.
F.-J. Weddell, professor of English.
F. D. Mellen, professor of public discourse.
H. W. Moody, dean of the School of Engineering and professor of physics.
M. L. Freeman, professor of drawing.
J. C. C. Price, professor of horticulture.
Hal Fox, professor of mathematics.
J. R. Gulledge, librarian.
F. H. Herzer, associate professor of dairying.
A. G. Burg, associate professor of agronomy.
G. F. Barnes, associate professor of physics.
C. B. Cain, associate professor of veterinary medicine.
R. G. Dauber, assistant professor of physical education.
L. S. Lundy, assistant professor of mathematics.
G. B. Drummond, assistant professor of mathematics.
J. R. Ricks, director of experiment stations.
R. S. Wilson, director of extension.
J. W. Willis, assistant director of extension.

The president, B. M. Walker, and the vice-president, J. C. Herbert, had been displaced at an earlier meeting. Many secretaries, stenographers and others were among those dismissed.

SCIENTIFIC NOTES AND NEWS

DR. STEPHEN MOULTON BABCOCK, emeritus professor of agriculture and chemistry at the University of Wisconsin, the inventor in 1890 of the Babcock milk test which revolutionized the dairy industry, is to receive the Capper award of $5,000 and a gold medal at the annual meeting of the American Country Life Association, to be held at the University of Wisconsin from October 7 to 10.

THE University of Freiburg has conferred the honorary degree of doctor of natural philosophy upon Dr. F. W. Aston, of Cambridge, in recognition of his work on isotopes and other subjects.

THE honorary degree of Sc.D. was conferred on July 4 by the University of Dublin on Sir John Hopwood Jeans, secretary of the Royal Society.

IT is stated in *Nature* that in connection with the International Botanical Congress, which is to be held in Cambridge in August, it has been decided to confer honorary degrees on the following: John-Isaac Briquet, director of the Conservatory and Botanic Garden, Geneva; Pierre Augustin Clément Dangeard, professor of botany at the Sorbonne; Friedrich Ludwig Emil Diels, professor at the University of Berlin and director-general of the Botanic Garden and Museum at Berlin-Dahlem; Thore Gustaf Halle, professor and keeper of the Paleobotanical Department of the Swedish State Museum of Natural History, Stockholm; Lewis Ralph Jones, professor of plant pathology at the University of Wisconsin; Carl Joseph Schröter, emeritus professor of botany at the Technical University of Zurich, and Friedrich August Ferdinand Christian Went, professor of botany and director of the Botanic Garden and Laboratory of the University of Utrecht.

DR. LUDWIG A. THIELE, chemical engineer, Gowanda, N. Y., was recently awarded the degree of doctor of science by the University of Brussels.

THE Louisiana State Medical Society gave a dinner in New Orleans on July 12, in honor of Senator Joseph E. Ransdell, author of the bill to establish a National Institute of Health. The speakers were Dr. Joseph C. Bloodgood, of the Johns Hopkins University; Surgeon General Hugh S. Cumming, Washington, D. C.; Dr. Edward Starr Judd, of the Mayo Clinic; Dr. Charles H. Herty, of the Chemical Foundation, New York, and Dr. Rudolph Matas, of the School of Medicine of Tulane University.

THE new department of medical and surgical research, instituted in the Ohio State University College of Medicine, Columbus, will soon begin work. Dr. Charles A. Doan, the director, has recently arrived from the Rockefeller Institute, New York. Dr. Bruce K. Wiseman will be the assistant director. The department will be inaugurated in Hamilton Hall, where it will have access to the University Hospital.

DR. WILLIAM THORNTON READ, formerly head of the department of chemistry at the Texas Technological College, has been appointed dean of the newly organized School of Chemistry at Rutgers University. *Industrial and Engineering Chemistry* states that his work at Rutgers will include not only the training of Rutgers students of chemistry, but also the organizing of an extension program of instruction for chemists, ranging from the humblest plant man to the highly trained technical graduate.

J. E. MILLS, immediate past chairman of the division of chemistry and chemical technology of the National Research Council, formerly chief chemist of the Chemical Warfare Service, has accepted appointment as professor of chemistry in the University of South Carolina.

DR. LOUIS N. KATZ, who recently resigned his position as assistant professor of physiology in the School of Medicine of Western Reserve University, has accepted the post of physiologist and director of cardiovascular research at the Michael Reese Hospital, Chicago, and has been appointed assistant professor of physiology at the University of Chicago.

DR. H. M. LAKE is leaving the University of Texas to become instructor in psychology at Colgate University, where he will teach applied psychology.

ACCORDING to *Nature* new professors have been appointed at the University of London to chairs as follows: *Bacteriology* (University College Hospital Medical School), Mr. C. Cyril Okell; *Chemistry* (University College), Professor C. K. Ingold, now professor of organic chemistry in the University of Leeds; *Geography* (Birkbeck College), Miss E. G. R. Taylor; *Physics* (Imperial College—Royal College of Science), Professor G. P. Thomson, now professor of natural philosophy in the University of Aberdeen.

DR. LEE DE FOREST, director of the Institute of Radio Engineers, is preparing to move his entire organization to Hollywood, where he will engage in intensive work on apparatus used in motion pictures, television and ultra short-wave radio.

VICTOR T. STRINGFIELD and Charles V. Theis have been appointed assistant geologists in the Water Resources Branch of the U. S. Geological Survey.

DR. FRANCIS CARTER WOOD, director of the Crocker Cancer Research Institute of Columbia University, sailed on July 23 to attend the International Congress of Experimental Cytology at Amsterdam.

DR. D. T. MACDOUGAL, of the Carnegie Institution of Washington, has been appointed as representative of the Torrey Botanical Club to the International Conference on Plant Nomenclature.

THE New York Botanical Garden will be represented in the fifth International Botanical Congress at Cambridge, England, by Director E. D. Merrill, Dr. J. H. Barnhart, Dr. B. O. Dodge, Dr. H. A. Gleason and Dr. A. B. Stout. Messrs. Dodge, Gleason, Stout and Merrill have already left for England and Dr. Barnhart will leave early in August. They will remain in Europe until late in the fall as they are planning research work at Kew and other European institutions. Dr. Elmer D. Merrill is one

of the vice-presidents of the congress and also a vice-president of the section on taxonomy.

DR. M. O. MALTE, chief botanist of the national herbarium of the National Museum Branch of the Dominion Department of Mines, Ottawa, sailed from Montreal on July 29, to attend the International Botanical Congress. Before and after the congress Dr. Malte expected to visit the British Museum and the Kew Botanical Gardens to study collections of Arctic flora. He will also visit the Botanical Museum at Copenhagen for the same purpose.

DR. JESSE MORE GREENMAN sailed for Europe on July 30, as the delegate of the Missouri Botanical Garden to the Botanical Congress. Afterwards he will visit the great botanical centers of London, Brussels, Paris, Berlin, Vienna, Munich and Geneva for the study of types of American plants in European herbaria.

GUSTAVUS J. ESSELEN has been appointed by the National Research Council as the representative of the division of chemistry and chemical technology to attend the tenth Congress of Industrial Chemistry to be held at Liége, from September 7 to 13.

PROFESSOR CARL R. MOORE, of the department of zoology at the University of Chicago, and Professors R. G. Gustavson, F. C. Koch and Mr. T. F. Gallagher, of the department of physiological chemistry, are attending the second International Congress for Sex Research in London, which will be held from August 3 to 9.

DR. JOSEPH F. ROCK, working under the auspices of Harvard University and the U. S. Department of Agriculture, arrived at Hongkong on July 22, *en route* to the city of Lichiang where he plans to work for five years among the Nashi tribe. Dr. Rock also plans to conduct a study of medical and economic plants of the region for introduction into the United States under the supervision of the Department of Agriculture.

HAVING completed two months' lecturing and studying at the Institute of Biology at Tohoku Imperial University, Sendai, Professor Charles A. Kofoid, of the University of California, will spend the rest of his time in Japan at the institute's marine station at Asamushi, giving graduate instruction and carrying on research. In August he will read a paper before the Japanese Zoological Society on "The Neuromotor System of a Protozoa."

THE one hundred and sixty-fifth anniversary of the founding of the University of Pennsylvania's School of Medicine, the oldest on the American continent, will be celebrated on October 10 and 11. There will be a university convocation, at which honorary degrees will be conferred upon a number of men who are internationally known in the field of medicine. Included among these will be Sir Walter Fletcher, of London, executive secretary of the Research Council of Great Britain, and Professor A. V. Hill, of the institute of physiology, University College, London. Sir Walter and Professor Hill will deliver addresses during the celebration. In the afternoon there will be a series of meetings and clinics. On the following day the tentative program calls for an inspection of new buildings in the medical group. Among the recent developments to which attention will be called are the erection of the Martin Maloney Memorial Medical Clinic Building, the establishment of the Eldridge R. Johnson Foundation for Research in Medical Physics, the Edward B. Robinette Foundation for the study, treatment and prevention of diseases of the heart and circulatory system, and the reestablishment of the Pepper Laboratory for Clinical Medicine and of the John H. Musser Department of Research Medicine in the new Maloney Clinic Building.

THE formal opening took place on June 30 of the new animal breeding research department of Edinburgh University. An address, in which he made a defense of vivisection, was given by Professor Sir Edward Sharpey-Schafer. Occasion was also taken to confer the honorary degree of LL.D. upon Mr. T. B. Macaulay, president of the Sun Life Assurance Company of Canada, who some time ago endowed a lectureship in the department for the encouragement of research directed towards human physiological problems.

THE degree of bachelor of science has been abolished by the board of trustees of Princeton University. Beginning with the class of 1934 all graduates, except those in the engineering school, will receive the bachelor of arts degree.

MR. CYRUS H. K. CURTIS, of Philadelphia, has given $500,000 to Bowdoin College and $100,000 to the Maine General Hospital at Portland.

AT the recent session of the board of regents of the University of Texas, plans and specifications were authorized for the enlargement of the present laboratory building of the state medical college. The cost will be approximately $350,000.

MR. EDWARD S. HARKNESS, of New York, is reported to have offered £2,000,000 to endow social and educational work in Great Britain.

APPROPRIATIONS amounting to $410,008 were made available to the University of Wisconsin by recent action of the emergency state board, releasing funds

to that amount to the board of university regents. The largest single item is $169,508 for the construction and equipment of an agronomy wing to the horticultural building. The next largest is $100,000 for the construction of an addition to the present student infirmary. Other items include $27,500 for the purchase and installation of safety devices throughout a number of university buildings; $22,000 for moving equipment from its present location to the new mechanical engineering building in process of erection at Camp Randall; $25,000 for an electric distribution system; $15,000 for a water line to the pump house; $16,000 for the purchase of real estate, and $35,000 for the construction and equipment of a new building for animal research.

ACCORDING to the terms of a recent appropriation by Congress, the United States Department of Agriculture will establish a new field laboratory on the Pacific coast to study problems of bee-keeping in that region. The site of the new laboratory has not been selected, but a location in which most of the problems to be studied will apply is being sought. In addition to the bee-culture laboratory near Washington, D. C., the department now operates field laboratories at Laramie, Wyo., and Baton Rouge, La. The bill provides $15,000 for bee-culture investigations on the Pacific coast with the new field laboratory as headquarters.

APPROXIMATELY 14,144 acres of land were added to the Rocky Mountain National Park, Colorado, by proclamation of President Hoover dated June 25, upon recommendation of the Secretaries of the Interior and Agriculture. Authority for the addition of the land was contained in the act of Congress approved on June 21. The new addition adds to the park the headwaters of the Colorado in the vicinity of the Never Summer Mountains, picturesquely so-called by the Indians because of the everlasting snows that spatter their summits. This is a magnificently scenic area. In this region the Continental Divide makes a U-shaped loop, forming a broad valley through which the Colorado River winds. About one third of this basin was included in the national park, the remaining portion being in the adjoining national forest. Under the presidential proclamation it is all included within the park. In addition to its scenic value, the new area is of geologic interest and constitutes a natural unit of the park. Through it will be constructed a portion of the new Trail Ridge road, which, when completed, will be the highest continuous road in North America. At one point it will reach an altitude of 12,120 feet, and 9 miles of its total length of 28 miles will be located above timberline.

THE French Minister of Public Instruction has, according to the *Journal* of the American Medical Association, appointed a commission to draw up a bill to provide that, out of the profits of commercial establishments exploiting a scientific discovery, a certain proportion shall go to the benefit of the scientists who made the discovery. Such a law has been demanded for many years, and the Commission Internationale de Coopération Intellectuelle has already discussed the subject at length. It has conceded, in principle, that it is just to recognize the existence of certain rights of ownership in scientific inventions and discoveries, just as the rights of ownership in artistic productions are recognized. A French law, which dates back three years, accords to the author of a painting and to his descendants for a period of fifty years after his death a *droit de suite,* that is to say, a percentage of the price paid for the picture every time it is resold. It has been considered unjust that a work of art for which the artist who creates it usually receives a low price should enrich several merchants by successive sales and speculations whereas the artist and his family remain in misery. It is now regarded as no more than just to apply the same principle to the author of a scientific discovery which, even though it can not be patented, will, by exploitation, enrich a number of industrialists and merchants. Laboratory workers receive modest salaries in the faculties or the scientific institutes, but their research becomes for others a source of wealth in which they have no part. A small percentage will therefore be figured on the profits of industrialists exploiting a discovery that is not entitled to a regular patent, and the sums thus collected will be placed in a special fund destined to furnish indemnification to the scientists who are the authors of exploited discoveries. This fund will be a *caisse commune,* which can be used likewise to indemnify other scientists, authors of discoveries in pure science and not capable of exploitation. The fund may be used also for the creation of research laboratories and experimental hospitals. A special commission composed of scientific men acting under the ministry of public instruction and administer the fund and will see to its judicious distribution.

DISCUSSION

CONIFER INFLORESCENCE

STROBILAR structure and origin form a much more enigmatic subject than can be readily pictured. At once an utter difficulty of definition and the tangle of inequal terms is encountered. The relation between the cone and flower is tied up with the inflorescence. Inadvertently the student thinks that a flower has no semblance to the unit of structure in a cone