When the hood and diploma have reached us I will then arrange with Mr. Parshall for his formal admission to the degree.

"So far as I am aware no precedent or parallel for such an act can be found in the history of British Universities. But it is our business to make precedents as well as to follow them, and we trust that in so doing our act will be regarded as an expression of fellowship and sympathy with kindred institutions carrying on similar work, established for similar services, and bound to us by many ties."

The degree was conferred at a special "congregation" of the University of Liverpool, attended by the United States consul general and many distinguished guests. The dean of the faculty of science presented Mr. Parshall for admission to the degree, and the vice chancellor duly admitted him.

SCIENTIFIC NOTES AND NEWS

Governor Guild, of Massachusetts, has appointed a State Conservation Commission to act in cooperation with the National Conservation Commission named by President Roosevelt after the recent conference on resources. It is composed of Professor F. W. Rane, state forester, chairman; Professor George F. Swain, of the Massachusetts Institute of Technology, and President Kenyon L. Butterfield, of the Massachusetts Agricultural College, Amherst.

Professor Wm. T. Sedgwick, of the Massachusetts Institute of Technology, has been appointed one of a commission of four to investigate the causes of typhoid fever in Pittsburgh, by Mayor Guthrie, of that city. The expenses of the investigation will be paid out of $10,000 appropriated by the Russell Sage Foundation. He was also offered by Mayor Hibbard, but felt obliged to decline, one of the vacancies in the Board of Health.

Dr. L. O. Howard, chief of the Bureau of Entomology of the U. S. Department of Agriculture, and permanent secretary of the American Association for the Advancement of Science, has been made an honorary member of the Société Nationale d'Acclimatation de France.

Professor Holland, K.C., has been elected a corresponding member of the "Reale Academia delle Scienze dell'Istituto" of Bologna, as also an honorary member of the "Reale Academia di Scienze Lettere ed Arti" of Padua.

At the annual general meeting of the Faraday Society, held in London, on June 23, Sir Oliver Lodge was elected president and the following vice-presidents were chosen: G. T. Beilby, R. A. Hadfield, Professor W. Hittorf, Professor A. K. Huntington, Lord Rayleigh, Professor A. Schuster and Professor J. J. Thomson.

The council of the Royal Society of Edinburgh has awarded the Neill prize for the triennial period 1904–7 to Mr. Frank J. Cole, lecturer on zoology, University College, Reading, for his papers entitled "A Monograph on the General Morphology of the Myxinoid Fishes, based on a Study of Myxine," published in the "Transactions" of the society, regard being also paid to Mr. Cole's other valuable contributions to the anatomy and morphology of fishes.

Dr. W. J. Holland, the director of the Carnegie Museum, has returned after three months' absence in Europe during which he installed in Berlin and in Paris casts of Diplodocus Carnegiei which were presented respectively to the emperor of Germany and the president of the French Republic. The latter on June 15 conferred upon Dr. Holland the order of Officier de la Légion d'Honneur "in recognition of his services to the science of paleontology," and upon his assistant, Mr. A. S. Coggeshall, he bestowed the order of Officier de l'Instruction Publique. On the evening of the same day a banquet in honor of Dr. Holland was given by the professors of the National Museum, which was attended by many of the leading scientific men of Paris. Addresses were made by M. Paul Doumer, M. Bayet, assistant minister of public instruction, Professor Edmond Perrier, Professor Gréhant, Professor Becquerel and

others. On the evening of June 14, Dr. Holland delivered an address in the French language on the work of Mr. Andrew Carnegie on behalf of science, before an audience of fifteen hundred people assembled in the Grand Amphitheatre at the Jardin des Plantes. An abstract will shortly appear in the *Revue Scientifique.*

THE Smithsonian seat in the Zoological Station at Naples, Italy, has been assigned for a period of from four to six months between October 1, 1908, and June 1, 1909, to Harold S. Colton, Ph.D., of the University of Pennsylvania.

HERBERT PARLIN JOHNSON, Ph.D. (Chicago), associate professor of bacteriology in St. Louis University, will return to his work in October much improved in health by two years leave of absence.

PROFESSOR CHARLES JAMES, of New Hampshire College, is at present in Norway collecting a supply of the rare minerals for a continuation of his work on the rare earths. He has already secured several hundred pounds of euxenite and other minerals, which he will work up in his private laboratory at Kettering, England, and bring the crude oxides with him on his return to America. He has already about one hundred and fifty grams of lutecium and about fifty grams of thulium on hand, but is desirous of largely increasing the amount of these substances, as well as his already extensive supply of erbium compounds, in order that they may be separated in that special degree of purity which can only be secured when working with large quantities.

WE regret to record the following deaths: Professor J. V. Barbosa du Bocage, director of the Zoological Institute, at Lisbon, at the age of eighty-four; Dr. Luiz Cruls, director of the Observatory of Rio de Janeiro; Dr. Heinrich Wilhelm Struve, known for his work in chemistry, at Tiflis, at the age of eighty-five years; and Dr. Erich Ladenburg, docent for physics at Berlin, at the age of twenty-nine years.

A MOVEMENT is on foot to organize the Physical Section of the American Chemical Society as a Division of General and Physical Chemistry of that society as has been done by the industrial chemists and chemical engineers. The Physical Section at New Haven, under the chairmanship of Dr. F. K. Cameron, had an unusually extensive program consisting of some forty-eight papers. Greetings were received from Arrhenius, Emil Fischer, Roscoe, Ramsay, van't Hoff, Julius Thomsen, Lunge and von Baeyer, and papers were sent for the meeting by Svante Arrhenius on "Agglutination and Coagulation" and two papers by Emil Fischer on "Polypeptides" and on "Micropolarization."

IN the new tower that is being built in place of the old stone tower at Blue Hill Observatory, the Massachusetts Institute of Technology will install its new seismograph. The tower is being made moisture-proof as far as is possible. When the seismograph is installed, it will be under the charge of the observatory force.

PURSUANT to a recent decree of the government of Peru issued by President Pardo, the time of the seventy-fifth meridian west of Greenwich was on July 28 adopted as the national standard time for the whole of Peru. As pointed out by Professor Todd, in his address to the Geographical Society of Lima last August, the advantages of standard time would be specially marked as the proposed meridian is only a few minutes from that of Lima, and runs almost exactly through the middle of the country. Rarely is a country more favorably placed geographically for adoption of standard time, which has everywhere proved a great benefit in greater facility of commercial despatches, as well as precise regulation of internal affairs and international intercourse. All timepieces throughout Peru will now coincide with those in the United States where eastern time is kept. Peru is the first South American republic to adopt the world standard.

IN connection with the celebration of the tercentenary of the birth of Evangelista Torricelli, an exhibition will be held at Faenza

from August 15 to October 15. Included in the program, and associated with an international section for physical apparatus, in celebration of Torricelli a prize of 2,000 lire is offered for an instrument in connection with meteorology or physics of the earth. The instrument must be exhibited, and show real novelty, either in its principle or in its application of a principle already known. For further particulars application should be made to Dr. W. N. Shaw, F.R.S., Meteorological Office, 63 Victoria Street, London, S.W.

Nature says: "At the General Conference on Weights and Measures, held at Paris in October last, a resolution was unanimously passed urging the universal adoption of a metric carat of 200 milligrams as the standard of weight for diamonds and precious stones. This proposal, which received a large measure of support on the continent, especially in France, Germany, Spain and Belgium, was brought under the notice of the principal diamond dealers in this country by the Board of Trade early in the present year, but it has not met with a favorable reception from the trade, and unless the proposed new standard is generally adopted abroad it is unlikely that any further action in the matter will be taken by the government. The French Ministry is now introducing a bill to legalize the 'metric carat' of 200 milligrams in that country, and to prohibit the use of the word carat to designate any other weight. A recent resolution of the Bombay Chamber of Commerce shows that the proposal for an international standard carat is receiving favorable consideration in India."

Governor Hughes has signed a bill passed by the New York legislature declaring tuberculosis to be an infectious and communicable disease, dangerous to the public health, and providing for the reporting of all cases to the local health authorities. According to the *Journal of the American Medical Association*, it provides for the free examination of sputum by the health authorities, for the protection of the registration records from public inspection, and for the disinfection and renovation of the premises after the death of a person having tuberculosis. The occupation of premises vacated by a tuberculous person is prohibited until the directions of the health department providing for disinfection and renovation have been complied with. The bill was lengthy and some of the important sections follow: Section 8 makes it the duty of the physician to take all reasonable precautions for the protection of individuals occupying the same house with any one having tuberculosis. If there be no physician in charge of such patient, this section provides that this duty devolves on the health officer. Section 9 provides that the attending physician shall report to the health officer, on blanks to be furnished for this purpose by said officer, a complete statement of the procedure and precautions taken by him in a case of tuberculosis coming to his notice, and the physician shall receive for his services a fee of $1. If the physician does not desire to take these preventive measures and make this report, the duties therein stated shall devolve on the health officer, who shall receive said fee. The health officer is required to keep on hand and furnish suitable supplies and literature to physicians to aid in preventing the infection of others. Section 10 provides a penalty for the failure of physicians or others to execute the duties imposed by this act, or for making false reports, the penalty not to exceed $100, or six months in prison or both. Section 11 provides for the reporting by physicians of the recovery of the tuberculosis patients, and for their release thereon under the provisions of the law. Section 12 makes violation of any section of this act a misdemeanor, punishable by a fine of not less than $5 or more than $50.

A bulletin of the Forest Service calls attention to the fact that the supply of dogwood and persimmon shuttles in the southern states is nearly exhausted. This statement will not appear significant to the average man when he first hears it. But when he is told that the entire supply of shuttles, bobbins and spindles used in the cotton and woolen mills in all parts of the country is furnished by the dogwood and persimmon growing in the

southern states, the seriousness of the situation is apparent. The textile mills of the country represent a capitalization of nearly a billion dollars, and bobbins, shuttles and spindles are just as necessary parts of these mills as the throttle is to the locomotive. Fortunately the shuttle manufacturers have found another source of supply in the dogwood stands in the far northwest part of the country. Two large companies manufacturing spindles, shuttles and bobbins have erected plants in the Cascades in Oregon, whose dogwood forests are the greatest in the world, the tree often attaining a height of 75 feet and a diameter of one to two feet. The southern dogwood is rarely more than 6 inches in diameter. Extensive stands of dogwood are also found in California and Washington. Up to the present time, lumber users in the Pacific northwest have found dogwood valueless except for fuel, and its utilization for the manufacture of shuttles will bring about a considerable increase in stumpage values of this tree. These companies, at their Oregon plants, will not only manufacture the articles named, but will utilize every part of the tree, turning to account the waste wood and producing such by-products as pyroligneous acid, acetic acid, protacetate of iron, acetate of lime, methylated spirits, solvent naphtha, wood tar, wood pitch, and various forms of charcoal. Dogwood is indispensable in the manufacture of shuttles, bobbins and spindles, because it is the only wood which takes a high polish and wears perfectly smooth by friction under water. The discovery of the adaptability of the Pacific dogwood, however, has not aided the eastern manufacturers, and they have been obliged to look for substitutes nearer home. The most promising of these are mesquite and tupelo gum. The wood of the mesquite is heavy and very hard, close grained, and has a compact structure. It is probable that it would be eminently adapted for the manufacture of shuttle blocks, as it appears to have all the requisite qualities of weight, hardness, and susceptibility to a high smooth polish. Already it has proved well fitted for the manufacture of spools and bobbins for which white birch is now so largely used. The tupelo gum is medium hard and heavy, and has a compact fibrous structure. It has not yet been utilized to much extent in the textile industries, though it is quite probable it will play an important part in the future, since it combines with several necessary qualities the exacting property of wearing smooth by friction.

UNIVERSITY AND EDUCATIONAL NEWS

THE University of Illinois, on July 3, let a contract for the erection of the physics building, for which the last legislature made an appropriation of $250,000. The building is to be of brick with Bedford stone trimmings, and is to be fireproof. Its length is 178 feet and depth 125 feet. The first floor is rectangular, and the three upper floors are U-shaped. The space between the wings on the first floor is used for the large lecture rooms, in which overhead lighting is used. In addition to the large laboratories and class-rooms for the regular undergraduate courses, the building contains twenty-four small laboratories specially arranged for research students. The university was fortunate in letting its contract at a time of lower prices, so that funds are available for satisfactory furnishing and equipment of the building. The building is to be completed in the summer of 1909. A contract has also been let for an addition to the natural history building, for which the last legislature appropriated $150,000.

A SCHOOL of journalism has been organized in the University of Missouri, with Professor Walter Williams as dean. As a laboratory feature it has the *University Missourian,* a small but well-balanced daily newspaper, upon which the work will be done, under the direction of experienced newspapermen, by the students of the school. Courses will be given in the history and principles of journalism, in newspaper administration, in illustration, in the libel law, in news-gathering, in reporting, in editorial writing, in office equipment, and in other purely professional branches. In addition, courses will be given in English