

fibers, and tissues under the express condition that the Union des Syndicats Patronaux de l'Industrie Textile contributes the same amount. (2) Ecole Nationale Supérieure des Mines. Ten thousand francs to this school for completing the laboratory installation, especially as regards motive power. (3) Institut Catholique de Paris. Two thousand francs to Henri Colin for the purchase of apparatus not usually found in botanical laboratories, to be used in his researches on the conditions of destruction of various bacilli. Two thousand francs to Jules Hamonet for purchasing apparatus for determining the physical constants, particularly refractive indices, of the new substances he has discovered in the glycol group.

*Various Direct Requests for Grants.*—Ten thousand francs to Jules Garçon for the preparation of a bibliography of bibliographers, a part to be used in making an inventory of the scientific periodicals contained in the libraries of Paris. Three thousand francs to Guillaume Bigourdan for the construction of an angle comparator for measuring the variation which the angular distance of two stars may show in a short interval of time. Three thousand francs to Henri Bourget for his researches on astronomical photometry. Two thousand francs to A. Colson for continuing his researches on solutions. Seven thousand francs to Augustin Mesnager for improving the equipment of the laboratory for testing materials under his direction at the Ecole des Ponts et Chaussées. Two thousand francs to Jules Glover for continuing his researches on telephony. Seven thousand francs to Louis Joblin to complete the publication of his studies relating to the material collected in the second Antarctic voyage of Jean Charcot. Five thousand francs to the Société de Documentation Paléontologique. Two thousand francs to J. M. R. Surcouf for assisting the publication of his work on horse-flies.

The total amount in grants is 115,200 francs.

#### SCIENTIFIC NOTES AND NEWS

DR. VERNON M. SLIPHER, for many years chief assistant at the Lowell Observatory, known for his spectroscopic researches, has

been appointed director of the Lowell Observatory in succession to the late Percival Lowell.

PROFESSOR GEORGE S. MOLER, of the department of physics of Cornell University, will retire from active service at the end of the academic year.

At a meeting of the Rumford Committee of the American Academy of Arts and Sciences, held on February 14, 1917, the following grants for researches in light or heat were made: To Professor F. K. Richtmyer, of Cornell University, five hundred dollars in aid of his researches on the optical properties of thin films; to Professor Norton A. Kent, of Boston University, four hundred dollars additional to previous appropriations in aid of his research on spectral lines; to Mr. Ancel St. John, of the Worcester Polytechnic Institute, two hundred dollars in aid of his research on the spectra of X-rays.

At the New York meeting of the Botanical Society of America officers for 1917 were announced as follows: *President*, F. C. Newcombe, University of Michigan; *Vice-president*, E. W. Olive, Brooklyn Botanic Garden; *Treasurer*, E. W. Sinnott, Connecticut Agricultural College at Storrs. R. A. Harper, Columbia University, became a member of the council, and also of the editorial committee of the *American Journal of Botany*. The representative of the American Phytopathological Society on the journal committee is Professor Aaron G. Johnson, University of Wisconsin.

PROFESSOR GEORGE HAYEM has been elected president of the Paris Academy of Medicine for 1918.

THE Janssen prize of the Paris Academy of Sciences has been awarded to MM. Ch. Fabry, Henri Buisson and Henry Bourget, for their researches on the determination of the temperature and evaluation of the atomic weights of the unknown gases in the nebula of Orion.

WE learn from *Nature* that the president of the British Board of Agriculture and Fisheries has appointed a committee of representative agriculturists to advise him on questions arising in connection with the increased production of food. The committee is constituted as

follows: The Right Hon. R. E. Prothero (chairman), the Right Hon. Sir Ailwyn E. Fellowes (vice-chairman), the Right Hon. F. D. Acland, the Right Hon. Henry Hobhouse, the Hon. Edward G. Strutt, Sir Sydney Olivier (board of agriculture), Mr. W. W. Berry (Development Commissioner), Mr. S. W. Farmer, Mr. F. L. C. Floud (board of agriculture), Mr. A. D. Hall (Development Commissioner), Mr. S. Kidner, Mr. T. H. Middleton (board of agriculture), Mr. A. Moscrop, Mr. H. Padwick (National Farmers' Union), Mr. R. G. Paterson, Mr. G. G. Rea, Mr. E. Savill, Mr. Leslie Scott and Professor W. Somerville. Mr. E. M. Konstam (who has joined the department for the duration of the war) is the secretary of the committee.

THE 1916 volume of the *Annals* of the Association of American Geographers, which has just appeared, contains a long descriptive article by Professor N. M. Fenneman on "The Physiographic Divisions of the United States." This is accompanied by a map, the work of a committee of the association consisting of Professors Fenneman, Blackwelder and D. W. Johnson and Messrs. Campbell and Matthes, of the U. S. Geological Survey. Separates and copies of the map may be obtained on application to Richard E. Dodge, secretary, Washington, Conn.

PROFESSOR LAFAYETTE B. MENDEL, of Yale University, addressed the Sigma Xi Society of the University of Chicago on February 2, and also spoke to the students of the university on the subject of "Nutrition."

DR. HARRY N. HOLMES, head of the department of chemistry at Oberlin College, lectured recently on "The Formation of Crystals" at the Mellon Institute of the University of Pittsburgh; Franklin Institute, Philadelphia, and the Johns Hopkins University.

SURGEON-GENERAL SIR G. H. MAKINS, delivered the Hunterian oration before the Royal College of Surgeons of England on Wednesday, February 14, his subject being the influence exerted by the military experience of John Hunter on himself and on the military surgeon of to-day.

ON February 28 the Geological Society of London will again have the opportunity of discussing the Piltown man. The late Charles Dawson had discovered further remains about a mile away from the original locality, but in gravel of the same age. These, which consist of a molar from the lower jaw, a fragment of the occiput, and a part of a frontal including some of the orbital margin, will be laid before the meeting by Dr. A. Smith Woodward.

A MOVEMENT has recently been initiated to institute, at the Finsbury Technical College, a reference library of chemical books in memory of the late Professor Raphael Meldola, F.R.S., who formerly presided over this school of applied chemistry.

CHARLES J. WHITE, professor emeritus of Mathematics at Harvard University, died suddenly on February 12.

MR. JOHN TEBBUTT, of Windsor, New South Wales, where he conducted an observatory, has died at the age of eighty-two years.

THE death in Rio Janeiro is announced of Dr. Oswaldo Cruz, director of the Oswaldo Cruz Institute of Pathology and Bacteriology, Dr. Cruz was formerly director of the Brazilian sanitary service.

THE spring meeting of the American Chemical Society will be held in Kansas City, April 10-14. The program will be arranged as follows:

Tuesday night, April 10—council meeting.  
 Wednesday morning, April 11—opening session.  
 Wednesday afternoon, April 11—opening session, continued, or section meetings.  
 Wednesday night, April 11—smoker.  
 Thursday morning, April 12—section meetings.  
 Thursday afternoon, April 12—section meetings.  
 Thursday night, April 12—banquet, or open.  
 Friday morning, April 13—section meetings.  
 Friday afternoon, April 13—excursions.  
 Friday night, April 13—banquet, or open.  
 Saturday morning, April 14—excursions.

THE Geological Department of the British Museum has recently received, through Sir John Eaglerome, K.C.M.G., an interesting series of vertebrate remains from early Tertiary beds in southern Nigeria. These include a huge carinate bird (*Gigantornis eagleromei*

Andrews, 1916) remains of leathery turtles, and jaws of a primitive Zeuglodont, showing approximation to a creodont dentition.

DR. HENRY J. BERKLEY, clinical professor of psychiatry in the Johns Hopkins University, has presented the library with a number of rare and valuable medical books, dating from the sixteenth, seventeenth and eighteenth centuries.

In connection with the presentation on January 20 of a loving cup to Mr. Thomas A. Forsyth, one of the founders of the Forsyth Dental Infirmary for Children, Boston, the institution was open for public inspection, both forenoon and afternoon, as it is to be known as "Forsyth Day." Routine work as well as special features were shown in all departments. In the orthodontia department special cases were shown, and in the surgical department, special operations were conducted by Dr. William E. Chenery. Fifteen-minute lectures by John D. Adams, M.D., and Isadore Coriat, M.D., were given on subjects of interest to dentists at 11:30. A research laboratory exhibit was given from 2 to 4 P.M.

Two skeletons of the duck bill dinosaur were lost to science with the sinking recently by a German raider of the ship *Mont Temple*, according to Charles H. Sternberg, of Lawrence, Kans., who found the bones in the red deer country in Alberta, Canada. The prehistoric specimens were thirty-two feet long and were being sent to the British Museum. They filled twenty-two boxes and weighed 20,000 pounds. When the shipments failed to arrive in England, an inquiry was made by Mr. Sternberg and he received word from the Canadian railroad officials of the fate of the shipment.

THE United States Department of the Interior has designated Minnesota as one of the three states where mining experiment stations are to be established within a year. The government will appropriate \$25,000 annually for the support of such a station and the state must supply the building. The regents have asked for \$175,000 for this purpose. There are to be ten such stations established eventually. Minnesota's importance as a mining

state has caused her to be selected as one of the first group.

THE University of Toronto, through the Antitoxin Laboratory in the Department of Hygiene, has recently been the recipient of a gift from Colonel A. E. Gooderham, Toronto, of a farm of fifty acres on which have been erected model stables and laboratories for the work of the laboratory. The value of the gift exceeds \$60,000, and the farm is situated within twenty miles of Toronto. It prepares all the public health biologic products supplied free by the Ontario government, through its board of health, including diphtheria and tetanus antitoxin, anti-meningitis serum, the Pasteur Treatment and smallpox vaccine. The laboratory also prepares all the tetanus antitoxin used by the Canadian Expeditionary Forces. The director of the laboratory is Dr. J. G. Fitzgerald, associate professor of hygiene, University of Toronto.

THE HON. ALBERT JOHNSON writes from the United States House of Representatives:

I tried, immediately on the opening of the session, to obtain a hearing for House Bill 528, for the discontinuance of the Fahrenheit thermometer. With only 52 working days between January 1 and March 4, it is evident that not only this bill, but many other important bills will have no chance to come up for action. The hearing before the committee would have to be repeated at the next session, when the composition of the committee may be very different. The new committee might be influenced to some extent by the report of its predecessor, but such reinforcement of the argument is hardly needed, and would at best be of little weight. It seems to me that any advantage thus to be gained would hardly justify the labor of getting the committee together at a time when its members, like myself, are overwhelmed with other pressing work. In the new Congress, the bill will have to be reintroduced, either at the special session, which now seems a probability, or at the regular session. I shall then make an effort to obtain a hearing with the least possible delay.

THE chemical industry in Russia has received great impetus from the war, and, according to *Commerce Reports*, quoted by the *Journal* of the American Medical Association, a number of works have already been erected

and many others are projected. Among them is a formaldehyde factory at Vetluga, and a technical laboratory for the production of lanolin, naphthalene, etc., at Rostov. A large company has been formed at Moscow for the production of coke-benzol products and at Tomsk a chemical factory is projected for the making of medical chemicals. Several new works for making sulphuric acid have been erected in the Volga region, in the Donets basin, in the Caucasus and in the Urals. Mirrors, lenses and other optical instruments, thermometer tubing and chemical glass, formerly imported, are now being made. There is a large demand for microscopes and other scientific apparatus, as well as for articles for medical and surgical use.

At a meeting of the board of managers of the Cold Spring Harbor Biological Laboratory of the Brooklyn Institute of Arts and Sciences, the completion of an endowment of \$25,000 for the laboratory was announced. The principal donors are: Mr. W. J. Matheson, estate of Colonel Robert B. Woodward, Mr. Walter Jennings, Mr. A. A. Healy, Mr. August Heckscher, Mr. Cleveland H. Dodge, Mr. Louis C. Tiffany, Mr. Howard C. Smith, Mrs. E. H. Harriman, Colonel T. S. Williams, Mr. Henry F. Noyes, Mr. Albert Strauss and Mr. Donald Scott. It is expected that the laboratory will now become one of the four fundamental departments of the institute, and will be under the special care of a governing committee of the trustees of the institute.

ALTHOUGH New York was not included among the states where a serious fungous disease of poplars was reported by the federal authorities, the State College of Agriculture at Ithaca announces that the disease has been found on Long Island. This disease is similar in appearance to that which destroys the chestnut trees and may be found on any species of poplars or cottonwoods. Trees attacked by this fungus show cankers or depressed areas in the bark, which spread rapidly and often girdling the twig, limb or trunk of the tree and killing the part above the canker; the trees become ragged in appearance and finally die. This is especially true of the

Lombardy poplars so often planted in rows along highways. The fungus which causes this disease, according to the authorities, was imported from Europe, and is especially severe on stored and transplanted nursery stock. The centers of infection appear to be, in every case, either certain nurseries known to contain diseased trees, or points where poplars from such nurseries have been planted. Residents of New York who think their trees are affected by the disease may receive exact information by sending samples to the department of plant pathology, New York State College of Agriculture, Ithaca, New York.

THE Rizzoli Orthopedic Institute of Bologna has inaugurated an exposition of orthopedic appliances, to be held at Bologna in February under the auspices of the national federation of committees engaged in welfare work for blinded, mutilated and crippled soldiers. The institute has announced a prize of 5,000 lire for the best appliance, and is urging others to collect funds for additional prizes.

PROFESSOR L. C. KARPINSKI writes that the first volume of the "*Nouvelles Tables trigonométriques fondamentales*" by Professor H. Andoyer, of Paris, mentioned in a recent review in *SCIENCE* as delayed by the war, appeared in 1915. This volume of 341 pages + lxviii pages includes the sines and cosines for each one hundredth of the quadrant to 20 decimal places, for each 9 minutes to 17 places, and for each 10 seconds to 15 decimals.

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#### UNIVERSITY AND EDUCATIONAL NEWS

A GIFT of \$20,000 from Mrs. George Putnam to Harvard University was announced at the last meeting of the president and fellows. The money will be used to establish a fund in memory of Mrs. Putnam's brother, James Jackson Lowell, and the income will be used for the purchase of books for the college library.

THIRTY-FOUR thousand guineas have been subscribed to the South Wales University College for the extension of scientific and technical education.