

known to occur in America, but is generally distributed in Europe, where in certain sections it is very destructive. It is mentioned as being abundant about Hamburg, where are located some of the largest forest tree nurseries of the world.

The writer has repeatedly examined imported white pine trees, anticipating the introduction of this disease, and, on June 8, succeeded in finding it. This is its first reported occurrence on white pine in America. Continued investigations now show that *Peridermium Strobi* is present on imported stock in the states of New York, Vermont, Massachusetts and Connecticut. The stock was imported from the nurseries of J. Heins Söhne, near Hamburg, Germany. All of the stock found infected thus far is three years old, that is, the seed was sown in 1906. There can be no doubt that it was infected in the German nurseries, as (1) the disease was not known to occur in America on the pine previous to this date, and in no form whatever except as mentioned below; (2) fruiting pustules have been found on three-year-old trees which were imported this spring; (3) fruiting pustules have also been found on trees which were imported in the spring of 1908 and placed in transplant beds in this country.

It is a well-known fact that a fungus disease introduced into a new climate is usually much more virulent in its attacks than in its native country. This fungus prevents the cultivation of *Pinus Strobus* in certain sections of Europe where the fungus is indigenous. We can hardly doubt that it will be even more destructive should it once obtain a foothold in America. The white pine is the tree upon which depends the entire reforestation movement which has been developed in the northeastern states. *Peridermium Strobi* threatens the profitable use of this species and thus directly concerns all who are connected with the reforestation question in this section. At the present stage in this movement it would be a national calamity to allow this fungus to become established in America.

*Peridermium Strobi* has an alternate stage on various species of *Ribes*, which is known as *Cronartium ribicola* Fisch. de Waldh. The

fungus probably will not transfer from white pine to white pine, but must pass from white pine to *Ribes*, and vice versa. The *Cronartium* stage was found established in New York in 1906 by Stewart,<sup>1</sup> who apparently was entirely successful in eradicating it. The *Peridermium* stage has never been previously found in this country, so far as now known. The best available method of treatment is (1) to immediately burn the diseased white pine trees; (2) to inspect all neighboring currant and gooseberry bushes in August and September, and to burn any affected plant; (3) to inspect the pine trees again in April or May of next spring (1910) and burn all that are found diseased. It may be also necessary to repeat the inspection of the currant bushes in 1910.

On June 28 a meeting was held in New York City of the representatives of the forest commissions of the states of New Hampshire, Vermont, Massachusetts, Connecticut, New York and New Jersey, the Pennsylvania and the Delaware and Hudson Railroads, the New York State Department of Agriculture, the Geneva Agricultural Experiment Station, the Yale Forest School, the Forest Service and the Bureau of Plant Industry of the United States Department of Agriculture. Concerted action along the lines recommended above was pledged by all concerned, and measures for preventing the further importation of diseased trees were taken under consideration.

PERLEY SPAULDING

BUREAU OF PLANT INDUSTRY

#### SCIENTIFIC NOTES AND NEWS

It is scarcely necessary to remind readers of SCIENCE that the Winnipeg meeting of the British Association for the Advancement of Science opens on August 25, and that the council of the association has invited members of the American Association for the Advancement of Science to become members for the meeting. Abstracts of papers intended for presentation should be forwarded to the local secretaries, University of Manitoba.

<sup>1</sup>Stewart, F. C., Tech. Bull. N. Y. (Geneva) Agr. Expt. Station, 2: 60-74, 1906.

THE French Association for the Advancement of Science will meet this year at Lille on August 2-7, under the presidency of Professor Landouzy, dean of the faculty of medicine in the University of Paris. The gold medal of the association, which was instituted last year, is to be awarded to Professor H. Poincaré, who will deliver a lecture during the course of the meeting.

THE sixth International Congress of Psychology met at Geneva last week. Among the Americans whose names appear on the program are Professor J. Mark Baldwin, Professor Jacques Loeb, of the University of California; Professor H. S. Jennings, of the Johns Hopkins University; Professor Lightner Witmer, of the University of Pennsylvania; Professor James H. Leuba, of Bryn Mawr College; Professor Max Meyer, of the University of Missouri; Dr. R. M. Ogden, of the University of Tennessee; Professor J. W. Riley, of Vassar College, and Professor R. M. Yerkes, of Harvard University. According to a cablegram to the daily papers the seventh International Congress will meet at Boston, with Professor William James, of Harvard University, as honorary president; Professor J. Mark Baldwin, as president, and Professor E. B. Titchener, of Cornell University, and Professor J. McKeen Cattell, of Columbia University, as vice-presidents.

IN recognition of services rendered to the cause of aerial navigation, the French government has conferred the decoration of the Legion of Honor upon Mr. Wilbur Wright, Mr. Orville Wright and M. Farman, and the Officer's Cross of the same order upon Mr. Hart O. Berg and M. Santos Dumont.

THE Italian government has decorated Dr. Louis Borsch, an American physician in Paris, with the royal medal of the Ministry of Public Instruction on the recommendation of the committee of the International Congress of Ophthalmology.

DR. C. LLOYD MORGAN, F.R.S., has resigned the office of vice chancellor of the University of Bristol. In accepting the same the council has placed on record its sense of the distin-

guished services rendered by him to the cause of university education during the twenty-two years of his tenure of office.

SURGEON-GENERAL W. L. GUBBINS, C.B., M.V.O., deputy director-general of the British Army Medical Service, has been appointed director-general in succession to Surgeon-General Sir A. Keogh, K.C.B.

THE State Board of Health of South Carolina has opened a laboratory at Columbia under the direction of Dr. Francis A. Coward.

THE New York State Department of Agriculture has been notified that two of its veterinarians, Drs. George R. Martin and John T. Hart, of Goshen, have contracted anthrax, while endeavoring to stamp out the disease among cattle in Orange County.

PROFESSOR F. W. WOLL, in charge of the department of feed and fertilizer inspection of the College of Agriculture, University of Wisconsin, has left for the west to attend the meeting of the American Association of Agricultural Chemists at Denver from August 26 to 28, and the American Association of Agricultural Colleges and Experiment Stations at Seattle.

DR. ANDREW M. SOULE, dean of the Agricultural College of the University of Georgia, and Dr. T. H. McHatton, professor of horticulture, will represent the University of Georgia at the Portland meeting of the Society for the Promotion of Agricultural Science and at the other scientific meetings to be held on the Pacific coast.

DEAN H. L. RUSSELL, of the College of Agriculture of the University of Wisconsin, is making a tour of several western states to visit colleges of agriculture and important farming sections, as well as to attend the scientific meetings to be held in connection with the Alaskan-Yukon Exposition. He will address the American Association of Farmers' Institute Workers at Seattle on "The Advisability of holding Demonstration Institutes in the Summer."

PROFESSOR LEWIS M. HAUPT, A.M., Sc.D., addressed the International Congress of Women held at Toronto, Canada, on June 29,

1909, on "Relief Measures in Industrial Crises."

THE following doctorates are reported by *Nature* to have been conferred by the University of London upon internal and external students for the theses mentioned and other papers: Mr. P. Hartley, "On the Nature of the Fat contained in the Liver, Kidney and Heart"; Mr. E. T. Mellor, "The Geology of the Neighborhood of Middelburg, etc."; Mr. J. Stephenson, "Studies on the Aquatic Oligochaeta of the Punjab"; Mr. W. Makower, "On the Active Deposit of Radium"; and Mr. H. Stansfield, "The Echelon Spectroscope, its Secondary Action and the Structure of the Green Mercury Line."

It is stated in the *Nation* that the publication of the complete works of Alessandro Volta is now assured by the action of the Italian government in contributing \$3,000 towards the necessary expenses. A committee appointed jointly by the Reale Istituto Lombardo delle Scienze and the Reale Accademia dei Lincei will have charge of this edition, which, it is expected, will consist of five volumes, and be finished within two years.

We learn from the *Journal* of the American Medical Association that the dedication of the monument in the court of honor of the College of Medicine of Paris to Professor Brouardel, the lamented dean of the college, took place on July 20. The monument, by the sculptor Denys Puech, consists of a stela on which is the marble bust of Brouardel, wearing the insignia of his office. At the foot are two allegorical figures representing hygiene and legal medicine.

DR. ROBERT EDWARD CARTER STEARNS, known for his work on the geographical distribution and variation of mollusca and for other work in natural science, honorary associate in zoology of the U. S. National Museum, has died at Los Angeles, in his eighty-third year.

DR. JOSEPH FREDERICK WHITEAVES, paleontologist and zoologist of the Canadian Geological Survey, died at Ottawa, on August 8, in his seventy-fourth year.

CAPTAIN ENGELSTAD, of the Norwegian Navy, was taking meteorological observations during

a thunderstorm, on July 24, when he happened to touch the winch holding the copper wire attached to the kite, which was a thousand yards high, and was struck dead.

THE death was also announced of Professor G. Arth, professor of industrial chemistry in the University of Nancy, and of Dr. Eugen von Gothard, the Hungarian astronomer.

It is proposed to invite the British Association to meet in Australia in 1913. The University of Melbourne is communicating with the different Australian universities with a view to formulating definite proposals. It is suggested that the invitation should proceed from the commonwealth.

THE trustees of the fund of \$1,250,000 left by Henry Barnato to found a hospital in memory of his brother Barney Barnato and his cousin, Woolf Joel, have decided to devote the sum to the building and endowing of a cancer hospital in London.

THE sum of £6,500 will be appropriated by the British government to the Royal Society for the expenses of the aeronautical section of the National Physical Laboratory.

THE daily papers report that a reflecting telescope with a mirror of forty inches has been shipped from Cambridge to Flagstaff Observatory for Mr. Percival Lowell's Observatory. It is designed especially for planetary photography and will first be used in photographing Mars when the planet will be nearest the earth next month.

THE Field Museum of Natural History has secured, for its botanical department, the private herbarium of Dr. J. T. Rothrock, of Pennsylvania. This is the last private herbarium covering the exploration period of North America and contains very full and valuable series of the early collections of the great west, Mexico and Florida. Dr. Rothrock having been the botanist of the survey of the territories and an intimate of Dr. Asa Gray, Dr. Torrey, Dr. Thurber and other early botanists, he was able to secure a large amount of material covering the period dating from 1840 to 1880. The herbarium is especially rich in types and co-types of the plants of western North America.

THE twelfth International Congress on Alcoholism, held in London last month, was attended by about 1,400 members, including 400 delegates from abroad.

THE Kappa Chapter of the Alpha Chi Sigma Chemical Fraternity was installed at the University of Kansas on May 29. The chapter was installed by Dr. J. H. Mathews, of the University of Wisconsin, and Mr. L. S. Palmer, of the University of Missouri. The following men constitute the charter members of the new chapter: F. P. Brock, A. N. Budd, F. W. Bruckmiller, M. L. Breidenthal, H. N. Calderwood, P. V. Faragher, B. C. Frichot, Chas. Hoffman, H. A. Kohman, P. R. Parmelee, F. W. Padgett, E. R. Weidlein, G. S. Weith and A. J. Weith.

THE expedition which is carrying relief supplies to Commander Robert E. Peary left St. John's on August 3. The 88-ton schooner *Jeanie* will take fifty tons of coal and the same amount of stores, which she will land at Etah, Greenland, to supplement the supplies on Peary's steamer *Roosevelt*. The schooner will return as soon as she has discharged her cargo, bringing any despatches Peary may have left.

THE first section of the electric funicular railway from Le Fayet to the summit of Mont Blanc was opened to the public on July 25 as far as the Col de Voza (5,495 feet in height). In the morning the first train carried the local French authorities and engineers to the Col, covering the  $7\frac{1}{2}$  kilometers in 56 minutes. The whole of the line is constructed in the open. Work will shortly be commenced on the second and most difficult section, about eight kilometers long, to Tête Rousse (10,300 feet).

THE Black Hills of South Dakota contain deposits of ores of the rare metals tin, tungsten and tantalum, which have been examined by Frank L. Hess, geologist, of the United States Geological Survey, whose report forms a paper in the Survey's Bulletin 380. The lack of commercially valuable tin deposits in the United States gave especial interest to the discovery of tin ores in the Black Hills. The deposits occur in the northern part of the hills

at Tinton and in the southern part near Hill City, Keystone, Oreville and Custer. Mr. Hess sketches the geology of the tin deposits as exposed at the various mines and claims and gives brief accounts of their commercial development. Tungsten deposits occur in the Black Hills at several places, but have been exploited commercially only at Lead, in the central hills. The valuable ore is wolframite. Tungsten is of especial interest and value in connection with its use in tool steel and as a filament in incandescent electric lamps. The tantalum of the Black Hills occurs in the mineral columbite. The known deposits of columbite in the region are described in detail by Mr. Hess. Tantalum is also used in making filaments for incandescent electric lamps.

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#### UNIVERSITY AND EDUCATIONAL NEWS

KENYON COLLEGE has recently received \$100,000 from Samuel Mather, of Cleveland, the income of which is to be devoted to the increase of salaries of the faculty.

It is announced that the George Peabody College for Teachers will be erected in close proximity to Vanderbilt University and will be affiliated with it.

DEAN HARRY B. HUTCHINS has been appointed acting president of the University of Michigan, and will assume his office when President Angell's resignation takes effect on October 1.

PROFESSOR F. B. MUMFORD has been elected dean of the agricultural college in the University of Missouri to succeed Dean J. H. Waters, who has become president of the Kansas Agricultural College.

DR. JOHN B. POWERS has been elected dean of the medical department of Wake Forest University, *vice* Dr. Watson S. Pankin, who resigned to become secretary of the state Board of Health.

THE chair of plant pathology recently established in the University of Wisconsin College of Agriculture by legislative action has just been filled by the appointment by the regents of Dr. L. R. Jones, of the University