reasonably certain that this influential organization will request the Board of Agriculture to establish such a service under the direction of some competent entomologist like Mr. Cecil Warburton, at Cambridge, or Mr. F. V. Theobald, of Wye.

THE FIVE HUNDREDTH ANNIVERSARY OF THE UNIVERSITY OF LEIPZIG

The committee which took up the task of preparing a suitable memorial address to the University of Leipzig at its five hundredth anniversary has completed its work far enough to send through Professor Williston Walker an illuminated address. This was done in illuminated Caxton letters which belong to the period of the establishment of the university, on three sheets of vellum. The whole was bound in a case of dark green crushed levant lined with white silk. The address which appeared on the first page was as follows:

Almæ Matris Lipsiensis Alumni quondam Americani Rectori Magnificentissimo Illustrique Senatui Inclitæ Universitatis Lipsiensis S.D.P.

Iucundum profecto et honorificum nobis accidit quod participes esse possumus lætitæ Vestræ et interesse sacris sæcularibus quibus natalem quingentesimum celebratura est inclita Universitas Lipsiensis, et optimarum artium studiorumque severorum cultrix et iuvenum erecta indole ad veræ laudis palmam tendentium fida magistra. Et enim fieri non potest quin memores simus eorum qui semina sapientiæ severint quæ insequentibus sæculis prosint, sic non minore laude ei digni videntur esse qui quæ a maioribus acceperunt diligenter tutati auxerunt.

Nos autem, quamvis alieno sub cælo nati simus, haud alieni hic venimus, immo domum redire videmur, quibus et magistri et doctores, quin etiam locus ipse mutus hic ubi liberalibus artibus imbuti et docti simus cum grata recordatione in mente versetur. Quæ cum ita sint, non tam officio quam pietate adducimur ut meritam Almæ Matri Lipsiensi gratiam iustis honoribus et memori mente persolvamus, Deumque Optimum Maximum comprecamur ut ductam a maximis laboribus plurimaque virtute stabilitatam Musarum huius sedis gloriam servet et sospitet.

On this first page the capital "I" and the capital "N" at the beginnings of the two paragraphs were elaborately illuminated initials with borders extending upward and down-

ward, enclosing the rest of the matter on the page.

On the second and third pages were the names of the doctors from Leipzig done in Roman capitals, preceded by a brief introduction of the delegate. These pages were also decorated with a border and illumination of the first initials. Photographs of the various pages of the address can be obtained by writing to A. B. Corbin, Chapel Street, New Haven, Conn.

In addition to this memorial a fund of about \$350 is being utilized in sending to the library certain back numbers of American scholarly journals for which the library made special request to the committee, and also in presenting to the library subscriptions to a number of American scholarly journals which the library mentioned in its correspondence with the committee as omitted in the regular list.

The Smithsonian Institution has generously consented to allow the use of its International Exchange service for the shipment of all of this material, so that the journals can be obtained at the regular American rate and back numbers can be forwarded without expense other than that necessary to take them to Washington.

The committee has acknowledged personally to each of the subscribers the receipt of checks and other remittances. If any member of the association cares for a detailed account of the shipments to the library this can be secured by writing to the secretary.

The committee consisted of: Professor J. McK. Cattell, of Columbia University; Professor E. B. Titchener, of Cornell University; Professor Hugo Münsterberg, of Harvard University; Dr. Cushing, principal of the New Haven High School, New Haven, Conn.; Professor Williston Walker, who acted as the delegate and took the memorial to Leipzig; and the secretary.

CHARLES H. JUDD, Secretary

SCIENTIFIC NOTES AND NEWS

As has already been announced, the presidential address at the Winnipeg meeting of the British Association will be given by Pro-

fessor J. J. Thomson, of Cambridge. The addresses before the sections will be given by the presidents as follows: Mathematical and Physical Science—Professor E. Rutherford; Chemistry—Professor H. E. Armstrong; Geology—Dr. H. Smith Woodward; Zoology—Dr. A. E. Shipley; Geography—Sir Duncan Johnston; Economic Science and Statistics—Professor S. J. Chapman; Engineering—Sir W. H. White; Anthropology—Professor J. L. Myres; Physiology—Professor E. H. Starling; Botany—Lieutenant-Colonel D. Prain; Educational Science—Dr. A. P. Gray.

THE seventh annual meeting of the South African Association for the Advancement of Science will be held at Bloemfontein during the week ending on Saturday, October 2, under the presidency of Sir H. Goold Adams.

The Swiss Society of Natural Sciences holds its ninety-second annual meeting this year at Lausanne from the fifth to the eighth of September, under the presidency of Dr. H. Blanc. Among the public addresses are "The Jura," by M. Emmanuel de Majorie; "The Aerodynamic Basis of Aeronautics," by Dr. Bastien Finsterwalder, and "Comparative Psychology," by Professor August Forel.

The eleventh International Geological Congress will open at Stockholm about the eighteenth of August, 1910. Professor G. De Geer, of the University of Stockholm, is president of the executive committee. The secretary from whom information may be obtained is Professor J. V. Andersson, director of the Swedish Geological Survey.

Mr. Henry Balfour, curator of the Pitt and Rivers Museum at Oxford, made the presidential address at the twentieth annual conference of the Museums Association which opened at Maidstone, on July 13. Mr. E. Haworth has resigned the secretaryship of the association and the editorship of the Museums Journal. Mr. E. E. Rowe succeeds him as secretary and Mr. F. R. Rowlee as editor.

THE Association of Economic Biologists met at Oxford from July 13 to 15, under the presidency of Dr. E. A. Shipley.

Professor W. K. Hatt, of Purdue University, will represent the Forest Service at the Congress of the International Association for Testing Materials at Copenhagen, September 7 to 11, and will also report on certain problems in Wood Preservation in Germany.

Dr. A. W. Morrill, in charge of Citrus white-fly investigations of the Bureau of Entomology, U. S. Department of Agriculture, has accepted the position of entomologist of the Arizona Horticultural Commission and of the Arizona Experiment Station.

A PORTRAIT of Professor W. Stroud (who, after twenty-four years' service in the chair of physics at Leeds, has resigned the post on his removal to Glasgow), has been presented to the University of Leeds. The portrait, which has been painted by Mr. W. Llewellyn, of London, is the gift of friends and past students.

Dr. Karl Runge, of Göttingen, Kaiser Wilhelm professor at Columbia University next year, will give an extended course, "Graphical Methods in Physics and Applied Mathematics."

Mr. Percy Wilson, administrative assistant in the New York Botanical Garden, has returned from the Bahamas after a survey of the islands of the Salt Key Bank. Mr. W. W. Eggleston has completed a four weeks' collecting trip in the Cumberland-Tennessee River region of western Kentucky.

It is reported in *Nature* that the committee nominated by the Paris Academy of Sciences for the distribution of the Bonaparte fund (25,000 francs) for 1909 has received thirtyfive applications, only nine of which are considered to conform with the regulations laid down by the committee of 1908. It is proposed to allocate the fund as follows: 4,000 francs to M. Cayeux, to enable him to pursue his researches on the fossils of the Oolitic iron deposits in the United States; 4,000 francs to M. Chevalier, to assist him in carrying on his geographical and ethnographical researches in the French colonies in tropical Africa; 4,000 francs to M. Pérez, to assist in the publication of his memoir entitled "Recherches histologiques sur les Métamorphoses des Muscides"; 3,000 francs to M. Houard, to enable him to proceed to Corsica, Algeria and Tunis, to collect material for his anatomical and physiological studies; 2,000 francs to M. Berget, for the construction of an apparatus for the study of the distribution and intensity of gravity; 2,000 francs to M. Bernard, to continue his studies of the variation of the solar radiation and the illumination of the sky in the immediate neighborhood of the sun; 2,000 francs to M. Blaringhem, for the continuation of his experimental researches on the variation of species; 2,000 francs to M. Estanave, for the continuation of his researches on stereoscopic projection by direct vision, stereoradiography and autostereoscopy; 2,000 francs to M. Mathias, to enable him to continue in the cryogenic laboratory of Leyden his researches on liquids and on the law of corresponding states at low temperatures.

THE death is announced of Mrs. Jane L. Gray, the widow of Asa Gray, who since her husband's death, has lived in the curator's house of the Harvard Botanical Garden.

DR. WILLIAM HUNTER, government bacteriologist in Hong Kong, known for his valuable studies on the diseases of the Chinese, died on June 9, at the age of twenty-four years.

Dr. A. Herzog, professor of mechanics at the Zurich Polytechnicum, has died at the age of fifty-seven years.

The death is also announced of M. Henri de Parville, an engineer, but known as a writer on popular science and formerly as the editor of *La Nature*.

SIR FRANCIS GALTON has made a further donation of £500 to the maintenance of the Laboratory for National Eugenics under the direction of Professor Karl Pearson, of the University of London.

A NUMBER of public bequests are made by the will of Miss Emma Sarah Wolfe, including £1,000 each to the Royal Anthropological Institute, the Royal Geographical Society and the Royal Archeological Society.

MR. Andrew Carnegue has made an additional gift of £19,000 to Liverpool for two branch libraries.

The sixth annual meeting of the American Breeders' Association is called for December 8, 9 and 10, at Omaha, Nebraska, in association with the National Corn Show held at that place December 6 to 18. A program of addresses by breeders of livestock, breeders of plants and scientific men engaged in the study of the heredity of plants, animals and men is being prepared. Arrangements are being made to have many of the addresses illustrated with stereopticon views and moving pictures.

A MEETING of the Italian Congress of the History of Medicine and Natural Science will be held at Venice towards the end of September.

We learn from the British Medical Journal that the fourth series of lectures on scientific microscopy at the Institute for Microscopy of the Jena University, will be held from October 11 to 16. In addition to the lectures, practical demonstrations will be given on the Abbé refraction apparatus test plate and apertometer, and on photomicrography with ultra-violet light, with monochromatic visible light and with incident light (for metallography), and on ultramicroscopy of firm colloids of colloidal solutions and of the cells and fibers. Further particulars can be obtained from Dr. Ehlers, Beethovenstrasse 14, Jena. The first of these courses was held in Jena in 1907, the second in Vienna in 1908 and the third in Berlin in March last. The fifth course will be given at Leipzig in March, 1910.

The movement of the population of the German Empire is now for the first time, with the figures for 1907, made the subject of a separate volume in the publications of the Imperial Statistical Office. According to an abstract in the London *Times* there is a marked decline in the birth rate, which fell to 33.2 per 1,000 inhabitants, as compared with 34.08 in 1906. The death rate fell to 18.98 as compared with 19.20 in 1906. The excess of births over deaths was 882,624 as compared with 910,275 in 1906. The excess, however, of births over deaths (natural in-

crease of population) was greater in 1907 than in any previous year except 1906 and 1902 (902,243). The decline in the birth-rate, which stood at 41.64 in 1877, 38.33 in 1887 and 37.17 in 1897, as compared with 33.2 in 1907. is now attributable to a falling off in the number of births in every part of the empire except Westphalia, and in Westphalia the number of births is not quite keeping pace with the total growth of population. The decrease in number of births in the whole empire in 1907 was 23,766 or 1.1 per cent. In Saxony the decrease was 3 per cent., and East Prussia, West Prussia and Pomerania show about the same percentage. As regards the death-rate, which stood at 28.05 in 1877, 25.62 in 1887 and 22.52 in 1897, as compared with 18.98 in 1907, there is a steady decline in the infant mortality rate in all parts of the empire, but especially in large towns.

ALL the Alaskan field parties of the Geological Survey are now at work or on their way to the interior. The surveys and investigations of 1909 include fourteen parties, which are widely distributed over Alaska. parties comprise twelve geologists, seven topographers and three engineers. Two parties will be at work in southeastern Alaska, one in the Copper River region, two in the Matanuska coal region, one in the eastern part of the Kenai Peninsula, two in the Iliamna Lake region, two in the Yukon-Tanana region, one in the Koyukuk and Chandalar districts, one in the Norton Bay region, and one in Seward These surveys and investigations Peninsula. are carried on under the direction of Alfred H. Brooks, who left Seattle for Cordova on the first of July. From Cordova he will proceed up Copper River and make a brief visit to the Nizina district. Circumstances permitting, he will then go by overland trail to Fairbanks and later will pay a visit to the Berners Bay and Eagle River districts, in southeastern Alaska.

How long will timber remain commercially valuable after it has been swept over by a forest fire? Timber land owners as well as the federal government are much interested in obtaining this information, and the govern-

ment has just begun an investigation of a large number of fire areas in Oregon and Washington in order to determine, if possible, the length of time which will elapse after a forest fire before the timber deteriorates to such a condition as to decrease its commercial value. The agencies which cause timber to decay and encourage the attack of wood borers are undoubtedly influenced to a greater or less degree by the intensity of the original fire and the climatic conditions and altitude of the burned areas. All the information in connection with this investigation will be obtained first hand by the Forest Service, either from government timber land, or from private holdings where logging operations are under way. In this connection the Forest Service has also undertaken an investigation to determine the relative strength of green and fire-killed timber. The material which is to be tested is being sawed at the mill of the Eastern and Western Lumber Company of Portland, Oregon, where it will be surfaced to exact sizes and then transported to Seattle, where tests will be made in connection with the Forest Service exhibit at the exposition. The firekilled trees which are to yield material for these tests were selected by representatives of the Forest Service on the holdings of the Clarke County Timber Company of Portland, Oregon, near Yacolt, Washington. This timber was burned over seven years ago and represents fairly well the average of burned timber found in the Pacific northwest. The logs which vary from three to four feet in diameter. were sawed into thirty-two foot lengths. These are being manufactured into sixteen-foot floor joists and bridge stringers. The results of these tests are expected to disapprove the opinion generally held regarding the strength of fire-killed timber.

Tropical Life announces a prize of fifty pounds sterling for an essay embodying research work directed towards ascertaining exactly what changes (together with their causes and whether these changes occur during the fermentation process only or while being dried) take place in the cacao bean between the time that it leaves the pod until it is shoveled into the bag for export. For further information those interested may address the editor of *Tropical Life*, 112 Fenchurch street, E. C. London.

UNIVERSITY AND EDUCATIONAL NEWS

THE College of Agriculture of the University of the Philippines, situated at Los Banos, opened on June 14, with about sixty students. E. B. Copeland is dean and professor in botany; Harold Cuzner, professor of agronomy; Edgar M. Ledyard, professor of zoology, and S. B. Durham, professor of animal husbandry. The university opened a school of fine arts in Manila at the same time; it has no entrance requirements, and its registration is above 400. A college of veterinary science, for high school graduates was announced to open at the same time but there was only one applicant for admission. The secretary of public instruction, Judge Newton W. Gilbert, is acting president of the university.

Professor K. E. Guthe, of the University of Iowa, has accepted a call as professor of physics to the University of Michigan.

Dr. Burton E. Livingston, staff member, Department of Botanical Research of the Carnegie Institution of Washington, has accepted an appointment as professor of plant physiology in the Johns Hopkins University. He will assume his new duties with the opening of the next academic year.

It is stated in the daily papers that Professor W. J. V. Osterhout, of the department of botany of the University of California, has accepted a call to Harvard University.

MR. WILLIAM T. HORNE has resigned his position as plant pathologist of the Cuban Agricultural Experiment Station to become assistant professor of plant pathology in the University of California.

Mrs. Ella Flagg Young, principal of the Chicago Normal School since 1905 and previously professor of education in the University of Chicago, has been elected superintendent of Chicago's public school system.

JOSEPH S. CHAMBERTAIN, Ph.D. (Johns Hopkins), chief of the laboratory of Cattle Food

and Grain Investigations of the Bureau of Chemistry, U. S. Department of Agriculture, has been appointed associate professor of chemistry in the Massachusetts Agricultural College.

Mr. A. G. Christie, formerly in the steamturbine departments of the Westinghouse and Allis-Chalmers companies, has been appointed assistant professor of steam engineering at the University of Wisconsin.

Professor L. P. Dickinson, of the electrical engineering department of Lafayette College, has been appointed professor of electrical engineering at Rhode Island State College to succeed Professor Gilbert Tolman, who recently resigned to accept a chair at Colby College.

Dr. Robert F. Sheehan has been appointed professor of hygiene at the University of Buffalo to succeed Dr. Henry R. Hopkins, who has been appointed emeritus professor of hygiene. Dr. Herbert Hill has resigned as professor of chemistry, toxicology and physics.

DISCUSSION AND CORRESPONDENCE THE DUTY OF PUBLISHING

THE reason for all scientific investigation, that which not only justifies but even demands it, is the help its results, when known, will be to the human race through the fuller knowledge men will then have of the laws of the universe in which they are placed and from which they can not escape.

From this it follows that no investigation need be made—the labor and the expense of it are to no purpose—unless the results are to be published, that is, brought to the attention of those, preferably as many as possible, who are most likely to use this information in a manner helpful to themselves and to the rest of the world.

How much better it would have been if Willard Gibbs, for instance, instead of printing accounts of his investigations in a journal of most limited circulation, had published where the whole scientific world could have seen them. For nearly a generation his remarkable discoveries were of no honor either to himself or to the institution with which here