

observatory department. Bushey-house, in spite of its aristocratic history, would make an admirable laboratory. The building was very solid and substantial, and there was a good basement under the main central block with a roof of brick groining which afforded a very steady support for the floors above. The lecturer illustrated its plan with a number of slides, and compared it with the Reichsanstalt, which had an available space seven or eight times greater. But size alone was not an unmixed advantage, and personally he would prefer to begin in a small way if only he was in a position to do the work thoroughly. But there was a danger of starvation. Even with all the help the committee got in freedom from rent and taxes, outside repairs, and maintenance, the sum at its disposal was too small; £14,000 would not build and equip the laboratory, and £4,000 a year would not maintain it as it ought to be maintained. In America the Bill for the establishment of a laboratory which had just been passed authorized an outlay of £60,000 on buildings and site and an annual expenditure of £9,000. Was there no one who, realizing the importance of the alliance between science and industry, would come forward with more ample funds to start the laboratory with a fair prospect of success? Was there no statesman who could grasp the position and see that with double the income the chances of doing a great work would increase a hundred-fold? Give the institution means to employ the best men and it would answer the difficult problems it had to solve; starve it, and then quote its failure showing the usefulness of science applied to industry. In the concluding part of his lecture Mr. Glazebrook gave an account first of some problems of industry which had already been solved by the application of science, *e. g.*, glass for optical purposes, and then of some others which still remained unsolved and which the laboratory hoped to attack, *e. g.*, alloys, wind-pressure on bridges and similar structures, the exact determination of the relations between the scales of the mercury, hydrogen, and electrical resistance thermometers, and the magnetic testing of specimens of iron and steel, besides the standardization and calibration of various scientific instruments.

SCIENTIFIC NOTES AND NEWS.

AT the convocation exercises of the University of Chicago last week, a departure was made, in celebration of the tenth anniversary of the University, from the usual custom of not conferring honorary degrees. The LL.D. degree was conferred on ten men of eminence, including in the sciences, J. H. van't Hoff, professor of physical chemistry in the University of Berlin; Dr. A. Kovalevski, professor of zoology in the University of St. Petersburg; Dr. E. C. Pickering, director of the Harvard College Observatory; Dr. Charles D. Walcott, director of the U. S. Geological Survey, and Dr. E. B. Wilson, professor of zoology in Columbia University.

PROFESSOR A. S. PACKARD, who has held since 1878 the chair of zoology and geology at Brown University, has been elected a foreign member of the Linnean Society of London. The other American members of the society are: Alexander Agassiz, emeritus director of the Museum of Comparative Zoology, Harvard University; W. G. Farlow, professor of cryptogamic botany, Harvard University; D. H. Campbell, professor of botany, Stanford University, and C. O. Whitman, professor of zoology, University of Chicago.

AT its recent commencement Cornell College, Iowa, conferred the degree of LL.D. upon Mr. W. J. McGee, ethnologist in charge of the Bureau of American Ethnology, Washington. Dr. McGee is of Iowa birth and education, and one of his most important works, a classic in glacial geology, is 'The Pleistocene History of Northeastern Iowa.' The honor thus comes with special propriety from an Iowa school.

M. BERTHELOT (Paris) was elected an honorary member of the Vienna Academy of Sciences on June 1, and the following corresponding members were at the same time elected: Professors Schlegel (Leyden), Oppert (Paris), Linde (Munich), Retzius (Stockholm) and Kovalevski (St. Petersburg).

AT the recent meeting of the Royal Society of Canada, Professor A. B. Macallum, of the University of Toronto, and Mr. Lawrence M. Lamb, of the Geological Survey of Canada,

were elected fellows of Section IV. (Biological and Geological Division).

SIR ROBERT STAWELL BALL, Lowndean professor of astronomy at Cambridge University, will present an address from the University at the bicentennial of Yale University.

DR. HENRY S. PRITCHETT, president of the Massachusetts Institute of Technology, has been invited to serve as superintendent of awards at the Pan-American Exposition.

PROFESSORS CHARLES O. TOWNSEND and H. P. Gould have resigned from the Maryland Agricultural College, to accept positions in the Bureau of Plant Industry, Department of Agriculture.

PROFESSOR E. F. EMERY has been appointed special agent of the Bureau of Animal Industry to study the dairy interests in China, Japan and the Philippines.

DR. P. A. RYDBERG, assistant curator at the New York Botanical Gardens, has been given a short leave of absence for a trip in Europe. He will visit the herbaria at Kew, British Museum, Christiania and elsewhere for the purpose of completing some critical studies of the genera in which he is interested, and of arranging for exchanges.

DR. E. S. RIGGS, of the Field Columbian Museum, is now engaged in exploring the fossil beds of Wyoming.

WE regret to learn that Professor B. O. Peirce, professor of mathematics and natural philosophy at Harvard University, is still suffering from ill-health, and will probably be unable to resume his university work next year.

DR. N. S. SHALER, professor of geology at Harvard University and dean of the Lawrence Scientific School, gave the annual address at the commencement exercises of the Worcester Polytechnic Institute.

THE Pharmaceutical Society of Great Britain has presented its gold medal to Dr. George Watt, reporter on economic products for the Government of India.

THE New York State Pharmaceutical Association has passed a resolution favoring the building of a State laboratory of pharmacy in

memory of William Proctor, formerly professor in the Philadelphia College of Pharmacy.

A TABLET in memory of Dr. Jesse William Lazear, who lost his life in the study of yellow fever in Cuba, was unveiled at Trinity Hall Military School, Washington, Pa., at its commencement exercises last week.

THE Paris correspondent of the London *Times* telegraphs as follows: I have to announce with profound regret the death of one of the most eminent professors of the University of Nancy, M. Bleicher, who has been for six months at the head of the school of pharmacy in that city, after 20 years' service as professor of natural history at the same school. He was murdered by M. Raymond Four, a chemist, a sample of whose cinchona had been seized for analysis at the school, and who, dreading the results of prosecution for fraud, decided to hold the director of the school responsible for his humiliation and mischance. He called yesterday upon M. Bleicher and after a long interview shot him dead and then committed suicide. This monstrous crime has deprived France of one of the scholars who have done most to reveal to the world the geological interest of the frontier provinces of France. M. Bleicher's '*Les Vosges, Le Sol et ses habitants*' is a classical treatise which every traveller in Alsace-Lorraine should always carry with him. Every year Professor Bleicher spent his holidays on one or other of the slopes of the Vosges studying the stratifications, the rocks, the glacial marks, all the features, in a word, of this interesting region, upon which he had published a large number of memoirs. He had begun life as Médecin-Major in the French-African army, but left his work there in 1877 to become professor at Nancy, where he was very popular, often conducting students' scientific expeditions. No one so learned was ever more unassuming.

WE regret to record the death of T. C. Clarke, which occurred in New York on June 15. Born in 1827, he graduated from Harvard University in 1848, and has been one of the most eminent American engineers, having designed and constructed many American bridges. He had been president of the American Society of

Civil Engineers and had received the Telford Medal of the London Institute of Civil Engineers.

THE death is announced of Mr. William Walton, formerly lecturer in mathematics in Cambridge University and the author of various text-books, at the age of seventy-seven years.

THE first award of the Mackinnon Research Studentship will be made by the Royal Society soon after the first of July. The value of the studentship is £150, and it will this year be awarded in one of the biological sciences.

THE position of aid in the Coast and Geodetic Survey, at a salary of \$720 per annum, will be filled by civil service examination on July 23.

AN assistant in entomology in the State Museum at Albany will be selected by civil service examination on or about July 13. The salary, after October 1, will be \$720 per annum.

THE New York City Board of Estimate and Apportionment has awarded the contract for completing the New York Public Library building to Norcross Brothers at a cost of \$2,865,705.

A SOCIETY has been established in Germany for the study of medicine and the natural sciences, and will hold its first annual meeting at the close of the approaching meeting of German Men of Science and Physicians.

THE Royal Meteorological Society has collected a fund amounting to over £700 as a memorial to the late Mr. G. J. Symons. With this fund a gold medal will be established to be awarded once in two years for distinguished work in meteorology, irrespective of nationality.

THE Peary Arctic Club will send the steamer *Erik* to the North about the middle of July. Mr. Herbert L. Bridgeman will be in charge and Dr. F. A. Cook has accepted the post of surgeon.

PLANS are being made for the establishment of an institute of colonial medicine in Paris, for which about 250,000 francs have been subscribed.

THE Austrian Fishery Association will hold an international fishery exhibition at Vienna during the latter part of September, 1902, a subsidy for this purpose having been granted by the Imperial Department of Agriculture.

AN International Exposition of Hygiene Maritime Security and Fishery will be held at Ostende, Belgium, during August and September. An international congress will be organized in connection with the exposition for the discussion of questions of maritime hygiene and maritime and colonial security.

UNIVERSITY AND EDUCATIONAL NEWS.

MR. JOHN D. ROCKEFELLER has given \$250,000 to Cornell University, on condition that an equal amount be contributed by others.

PRESIDENT HENRY MORTON, of the Stevens Institute of Technology, at Hoboken, N. J., has made a further gift of \$50,000 for the new chemical building of the institute.

DR. D. K. PEARSONS has made the following conditional gifts: Illinois College, Jacksonville, \$50,000; Fargo College, Fargo, N. D., \$50,000; Whitman College, Walla Walla, Wash., \$50,000; McKendree College, Lebanon Ill., \$50,000; Bethany College, Lindsborg, Kans., \$25,000; Fairmount College, Wichita, Kans., \$25,000; Drury College, Springfield, Mo., \$25,000.

AT the recent commencement at Smith College, President Seelye announced a conditional gift of \$100,000, one-half for endowment and one-half for the building fund. The condition is that an equal sum must be raised within a year.

MR. J. V. THOMPSON, of Uniontown, Pa., has given \$100,000 for the endowment of the president's chair of Washington and Jefferson College.

THE *Experiment Station Record* summarizes the appropriations made recently by State legislatures, according to which it appears that of the exceptionally large appropriations made by Missouri—\$467,400 for two years—\$40,000 is provided for a horticultural building and the same amount for a dairy and live-stock building. Kansas has appropriated over \$200,000 for the biennial period for its agricultural college and station, including \$70,000 for a new physics and chemistry building. Minnesota has appropriated \$25,000 for a new chemical building and the same amount for a new veterinary building. Washington has appropriated \$25,000 for a chemical laboratory. New Hamp-