

achieved even more permanent results if used in some other way?

In looking over the reports of various museums it becomes evident that too much stress must not be laid on mere number of visitors. Three great institutions show a drop in 1903 or 1904 of from 70,000 to 50,000, while the United States National Museum exhibits a large increase, following a large decrease. None of the museums in which the attendance has declined has fallen off in the quantity or quality of their displays; on the contrary, they have made very great progress, and yet the public for some unexplained reason seems temporarily to have lost interest. How much the frequent expositions of the last ten years may have had to do with this it is impossible to say, but it probably has had its effect in decreasing attendance.

F. A. L.

#### SCIENTIFIC NOTES AND NEWS.

PROFESSOR L. HERMANN, Königsberg, Professor H. A. Lorentz, Leyden; Professor Henri Moissan, Paris, and Professor Hugo de Vries, Amsterdam, have been elected foreign members of the Royal Society.

DR. FRIEDRICH KOHLRAUSCH, who recently resigned the directorship of the Reichsanstalt, and has changed his residence, has been made an honorary member of the Berlin Academy of Sciences instead of a resident member as hitherto.

M. LOUIS HENRY has been elected a corresponding member of the Paris Academy of Sciences, in the section of chemistry.

CAMBRIDGE UNIVERSITY has conferred the honorary degree of Sc.D. upon Commander R. F. Scott and Sir Francis E. Younghusband, K.C.I.E., LL.D.

THE Broca prize of the Paris Anthropological Society has been awarded to MM. Lanois and Roy for their biological study of gigantism.

PROFESSOR GEORGE T. LADD, who has resigned from the chair of philosophy at Yale University, has arranged to pass the latter half of next year as professor of philosophy at Western Reserve University. At the close

of the war in the east he expects to go to Japan to lecture on educational methods under the auspices of the Japanese Imperial Education Society.

DR. B. F. CLARKE, professor of mechanical engineering at Brown University, retires at the end of this year, in accordance with the pension regulations recently adopted by the corporation.

DR. G. F. HULL, Appleton professor of physics at Dartmouth College, will spend next year abroad, working in the laboratory of Professor J. J. Thomson, at Cambridge.

PROFESSOR OLIN F. TOWER, of Western Reserve University, has a six months' leave of absence, which he is spending at the University of Berlin.

DR. W. J. HUMPHREYS, Ph.D. (Johns Hopkins, '97) has been appointed chief physicist of the United States Weather Bureau, in charge of the new physical laboratory in the mountains of West Virginia, near Gap Mills. Before assuming his new duties, Dr. Humphreys will go abroad to study foreign laboratories.

MR. I. B. POLE EVANS, B.Sc. (Wales), has been appointed assistant for plant diseases under Mr. J. Burt-Davy, government agrostologist and botanist of the Transvaal Department of Agriculture. Since October, 1903, Mr. Pole Evans has been working for his research degree at Cambridge under Professor Marshall Ward, being engaged principally in an investigation of the rusts of cereals. During this time he has been acting as demonstrator in elementary biology for Mr. Seward, and last term had charge of the practical work of Professor Marshall Ward's advanced course on fungi. The cereals of the Transvaal are greatly affected by parasitic fungi, and its flora presents a new and practically untouched field for the mycologist.

PROFESSOR BERNHARD PROSKAUER has been appointed head of the chemical department of the Institute for Infectious Diseases at Berlin.

THE courses that Professor Wilhelm Ostwald, of the University of Leipzig, will offer at Harvard University during the first half

of the approaching academic year are: 'The Philosophy of Natural Science,' three lectures a week, and 'The Fundamental Conceptions of Chemistry' and 'Catalysis,' each one hour a week.

SIR FRANCIS YOUNGHUSBAND gave the Rede lecture at Cambridge University on June 10, his subject being 'Our True Relationship with India.'

For the purpose of scientifically exploring the atmosphere, Comte de Castillon de Saint-Victor made an ascent on June 7, in his balloon *Centaure*, taking with him M. Joseph Jaubert, director of the municipal observatories of Paris, and Dr. Jolly. Other aerostatic ascents were made on the same day from Berlin, Strasburg, Barman, Munich, Vienna, Zurich, Rome and Trappes.

THE statue of Sir Thomas Browne, which is being executed by Mr. Henry Pegram, A.R.A., is now well advanced, and it is intended that it shall be erected and unveiled in its position in the Haymarket, Norwich, on October 19, the tercentenary of Sir Thomas Browne's birth.

THE class of 1904 of the University of Pennsylvania is collecting funds to erect a statue of Benjamin Franklin, the founder of the university. The class of 1905 has voted to erect a statue of William Smith, the first provost of the university.

PART of the old Speedwell iron works, near Morristown, N. J., in which Professor S. F. B. Morse and Stephen Vail perfected their first telegraph instrument, was destroyed by fire on May 22.

DR. ERNST KÜSTER, professor of surgery at the University of Marburg, will deliver the principal address at the unveiling of the memorial to von Esmarch, at Tönning, his birthplace, which will take place on August 6.

DR. ALBERT HILGER, professor of applied chemistry at the University of Munich, died on May 18, at the age of sixty-six years.

THERE will be a civil service examination on July 5 for the position of aid in the Bureau of Plant Industry, Department of Agriculture, at a salary of \$600 a year.

A COLLECTION of birds' eggs, consisting of complete sets, representing more than five hundred different species of birds, made by Mr. Gordon Plummer, has been presented to the biological department of Dartmouth College by his son.

MR. J. PIERPONT MORGAN has presented to the American Museum of Natural History the George F. Kunz collection of meteorites, which has been on exhibition for some years as a loan. The collection comprises some rare specimens, including two which are unique and have never been described, and the largest mass (1,038 pounds) of Cañon Diablo which has been found. The department of conchology has received from Mr. F. A. Constable a gift of the last instalment of the celebrated Hirase collection of the land shells of Japan, and the series is now on its way to the museum. This instalment comprises about 1,000 specimens of shells belonging to 220 species, bringing the total of the Hirase collection in the possession of the museum up to about 4,000 specimens of 800 species. The series is fully representative of the land molluscan fauna of Japan, and while the specimens are not strikingly beautiful, they are of high scientific interest.

THE sittings of the delegates appointed to consider the establishment of an International Agricultural Institute began at Rome on May 30. The London *Times* states that the conference has appointed three committees. The first, which will consider the organization of an international institute, has appointed as its chairman the French ambassador and as members the other ambassadors and some of the delegates to the conference, including Sir Thomas Elliott and Sir Edward Buck. The aims which the institute is to attain will form the subject of the second committee's attention. This committee will be divided into two sections, of one of which Lord Minto has been appointed president, while Sir Thomas Elliott is among the members. The task of the third committee is to examine the methods of defraying the expenses of the institute. Signor Rava, minister of agricul-

ture, will preside over it, and Lord Jersey and Mr. Gill will be among its members.

It is announced that the *Proceedings of the Royal Society* is henceforth to be brought out in a new form. It will assume royal octavo size, and be printed in larger type than is the case at present. Also two series will appear in future, one embracing mathematical and physical papers, the other biological papers, and each part will be on sale to the public separately.

At a meeting of the Zoological Society of London on April 18, Dr. W. J. Holland, F.Z.S., director of the Carnegie Museum and Institute, Pittsburg, U.S.A., gave an account, illustrated by stereopticon slides, of the discovery of the skeleton of *Diplodocus carnegii* Hatcher, a reproduction of which he was installing in the Gallery of Reptiles at the British Museum (Natural History), South Kensington. After paying tribute to the generosity of Mr. Andrew Carnegie, who had supplied the funds necessary for the extensive explorations which were being carried on by the Carnegie Institute, under the direction of the speaker, he went on to speak of the geology of Wyoming and of the immediate locality, where the specimen was obtained. He incidentally described the methods employed by American collectors to secure vertebrate fossils in fine condition. He then discussed the osteology of *Diplodocus*, briefly pointing out some of the more interesting structural features of the skeleton, and in this connection animadverted upon certain so-called 'restorations' made public in popular magazines and emanating from artists whose artistic ability was quite in excess of their scientific knowledge. Dr. Holland concluded his account by exhibiting in rapid succession pictures of a few of the more remarkable skeletons which had been recovered by the paleontological staff of the Carnegie Museum from various localities in the region of the Rocky Mountains. At the same meeting Dr. Smith Woodward, F.R.S., read a paper on a unique specimen of *Cetiosaurus leedsi*, a Sauropodous Dinosaur from the Oxford Clay of Peterborough. He described the fore and hind limbs and the tail,

and confirmed the observation of the late Professor O. C. Marsh, that *Cetiosaurus* was one of the more generalized Sauropoda.

MR. EDWIN C. ECKEL, of the United States Geological Survey has just completed a report on the cement materials and industry of the United States. In view of the phenomenally rapid growth of the cement industry within recent years, the publication of this report is exceptionally timely. In collecting data for it, Mr. Eckel visited every district in which cement is produced and examined nearly every plant in operation. Information relating to undeveloped deposits of cement materials was obtained by personal examination and from the published and unpublished work of other geologists. The discussion is in four parts, the first relating to the materials and manufacture of Portland cement, the second to Portland cement resources of the United States, the third to natural cement resources of the United States, and the fourth to the materials and manufacture of Puzzolan or slag cement. Few people realize how manifold are the uses of cement. In its importance to our present civilization it is surpassed among mineral products only by iron, coal and oil. In rate of increase in annual production during the last decade even these three products can not be compared with it. In 1890 the total production of Portland cement in the United States was 335,500 barrels, valued at \$439,050; in 1903 it exceeded 22,000,000 barrels, while the value was over \$27,000,000.

#### UNIVERSITY AND EDUCATIONAL NEWS.

THE proposed affiliation or alliance of the Massachusetts Institute of Technology with Harvard University was approved at a meeting of the corporation of the institute on June 9. Thirty-two of the forty-seven members of the corporation were present, and by a vote of 20 to 12 it was agreed to accept the terms of the agreement recently drawn up by the committee of the two institutions. Before the agreement can become effective the corporation and overseers of Harvard University must take action and several legal questions must be passed upon by the courts. It will