through donations from individuals, 317 donors having presented some 6,000 specimens. and the attendance speak well for the popularity of the Museum. The government did, however, provide \$67,500 for an addition to the Museum building which was already a much finer structure than the National Museum of the United States. The most important accessions were an oar-fish, Regalecus gesne, the third of the species known, and an oil-fish, or 'palu,' Ruvettus pretiosus; the remainder of the important additions were ethnological. exhibition series special attention seems to be given to groups of birds, and fifteen new 'nest groups' were added, besides an additional example of the interesting nest of the bower bird, Chlamydodera maculata; this was elaborately decorated at both ends with bones of mammals and birds, shells, pebbles, bits of glass and other objects. It is announced that the manuscript and illustrations for the 'Catalog of the Nests and Eggs of Birds found breeding in Australia' is well advanced. The work will comprise some three hundred pages of text, about one hundred text figures, thirty plates of eggs and forty of nests, and its publication will extend over a period of three years.

The Manchester Museum, Owens College, in its Reports for the year 1900-1901 also makes a good showing for a small expenditure. The principal increase in the collections has been in lepidoptera, plants and mollusks, among the last being an example of the very rare Pleurotomaria adansoniana. A specialty of this Museum appears to be the preparation of exhibits of an educational value, and among them is a series of moths selected to represent the families given in the Cambridge Natural History, dissections of Mollusca to illustrate the system of classification based on the gills, and a series of skulls to illustrate dental anatomy and arranged and labeled for the advantage of students.

A series of excellent lectures, addresses and demonstrations was, as usual, given during the year by members of the Museum staff and, as in the past, one is a little surprised at the small attendance on some of these in a city of half a million inhabitants. For example, an address by Boyd Dawkins on 'Our Neolithic Ancestors'

drew an audience of only ninety-five. The Sunday lectures, however, were better attended, the most popular being 'The Arrival of Man.' An attractive series is announced for the coming fall and winter.

F. A. L.

SCIENTIFIC NOTES AND NEWS.

THE fourth Glasgow meeting of the British Association opened its sessions on September 11. The address of the president, Professor A. W. Rücker, printed in the last issue of Science from a copy sent in advance of its delivery, was given at the inaugural meeting in the evening. Professor Rücker was introduced by the retiring president, Sir William Turner, and the usual vote of thanks was proposed by the Lord Provost of Glasgow and seconded by Lord Kelvin. The general committee held its first meeting on the 11th, when on the proposal of Sir Michael Foster, a cablegram with expressions of sympathy was sent to President McKinley. At the second meeting of the general committee Professor James Dewar was elected president for next year's meeting at Belfast, and the date of the opening of the meeting was set for Wednesday, September 10. It was decided to hold the meeting of 1903 in Southport, where the Association met twenty years previously. Sir W. Roberts-Austen and Dr. D. H. Scott were reappointed as general secretaries, Mr. G. Griffith as assistant general secretary and Professor Carev Foster as general treasurer. following were appointed vice-presidents for the Belfast meeting: The Marquis of Dufferin, the Marquis of Londonderry, the Earl of Shaftesbury, Sir F. Macnaghten, and the Earl of Rosse, Lord Mayor of Belfast, the president of Queen's College and Professor Ray Lankester.

THE University of Adelaide, Australia, will be represented at the Yale bi-centennial by Dr. Edward C. Stirling, professor of surgery.

MR. F. J. V. SRIFF, director of the Field Columbian Museum, has been appointed director of exhibits for the St. Louis Exposition. Mr. Skiff was deputy director-general of the Columbian Exposition, and was director in chief of the United States Commission to the Paris Exposition.

THE gold medal of the Italian Science Society has been presented to Mr. Marconi for his services in the invention of wireless telegraphy.

THE Röntgen Society has awarded a gold medal to Mr. C. H. F. Müller, of Germany, for the most practical X-ray tube for general purposes. There were in all twenty-eight entries.

DR. WILLIAM PATTEN, professor of zoology at Dartmouth College, has leave of absence for the present term and is engaged in zoological work in Russia.

Mr. John A. Fleming, of the U.S. Coast and Geodetic Survey, has arrived in Honolulu for the purpose of erecting and conducting a station for the study of terrestrial magnetism.

DR. CARL LUMHOLTZ, of the American Museum of Natural History, lectured on the Indians of Mexico before the Royal Geographical Society on September 14.

On the occasion of the seventieth birthday of the great zoologist Leuckart, a portrait-bust was made by the sculptor, Seffner. He has undertaken to supply Professor Charles L. Edwards, of Trinity College, with a plaster cast. If others wish to secure copies of the bust, Professor Edwards is willing to forward the orders. The cost in Leipzig would be from 40 to 50 Marks.

THE death is announced of Dr. Philip S. Baker, who for many years held the chair of chemisty in the medical department of De Pauw University.

THE death is announced at the age of seventythree years of Dr. Ferdinand Arnold, a German botanist, known for his researches on lichens.

DR. J. L. W. THUDICHUM died in London on September 7. He was born in Germany and graduated from the University of Giessen about fifty years ago, but soon came to London and engaged in medical practice. He conducted researches on physiological chemistry and was also the author of a volume on the 'Chemistry of Wine Production.'

THE Tufts College laboratory of biology, at South Harpswell, Maine, was closed for the

year on September 6. During the summer every table was occupied. Among those who availed themselves of its facilities for varying lengths of time were Professor Alvin Davison, of Lafayette College, Dr. Emily Ray Gregory, of Wells College, Professor Albert F. Matthews, of the University of Chicago, Professor M. A. Wilcox, of Wellesley College, Dr. C. B. Wilson, of the Westfield Normal School and Dr. F. A. Woods, of Harvard University. During the winter the laboratory will be enlarged, providing a number of private rooms for investigators.

An International Office of Weights and Measures is to be established in Sèvres for the preservation of standards and the supplying of copies.

An annex to the Astronomical Observatory, at Cambridge, England, is being constructed on the north side of the dome to be used as a laboratory.

The daily papers report that Mr. S. J. Holsinger, a special agent of the Department of the Interior, has presented a report stating that pottery and other remains have been taken in an unauthorized manner from the ruins in Arizona and New Mexico, and that the government may claim the collections deposited in several museums.

THE Vallauri Prize, of the value of about \$6,000, will be awarded in 1903 for the most important scientific work accomplished whether by a foreigner or an Italian during the preceding four years.

WE learn from the London Times that, following their acceptance of the proposal of the British Association for an ethnographic survey of India, Lord Curzon's Government has adopted the suggestion of the Royal Society for the carrying out of a magnetic survey. Sun spots are believed to be closely connected with the perturbations of the magnetic needle, and, as Sir Norman Lockyer's inquiries are held by him to establish some association between sun spots and Indian droughts, the survey, besides subserving the cause of science, may prove to be of some practical utility from the admin-The existing magnetic istrative standpoint. observatories at Bombay and Calcutta being

inadequate as base stations for the vast area the survey will cover, similar observatories are in course of construction at Dehra Dun, below the Himalayas, at Kodaikanal, in the Madras Presidency, and at Rangoon. The Dehra Dun observatory will be under the supervision of Colonel Gore, R.E., the Surveyor General of the Indian Survey (whose headquarters are located there); but the other four will be in charge of Mr. John Eliot, the meteorological reporter to the Government. The Survey and Meteorological Departments will, in fact, be jointly responsible for the investigations. The field observations will be carried out by six or seven detachments of the Survey Department. and these will be controlled by Captain Fraser, R.E., who has recently been arranging in England for the purchase of the necessary instruments. Sind and the Punjab will first be taken in hand; and, as the country is now intersected with railways in all directions, enabling field detachments to quickly cover the distances from one observing station to another, it is anticipated that five years will suffice to complete the field work of the preliminary magnetic survev.

The representatives of the newly-established Australasian confederation have appointed a commission to consider the adoption of the metric system, and it is reported that with the approval of the authorities in Great Britain, the system will be adopted in Australasia.

A NEW steamship for the U. S. Coast and Geodetic Survey, being constructed by the Townsend and Bowney Shipbuilding Company, was launched in Newark Bay on September 21. The steamship, which has been called *The Bache* in honor of the former eminent superintendent of the Coast Survey, is 136 feet in length, with a steel frame, and is to be fitted with engines developing 125 horse power.

A COMMITTEE of the Chemical Section of the British Association has been appointed to urge upon the Government the desirability of remitting the duty on alcohol used for chemical research.

It is officially estimated that the deaths from the plague in India during the past five years exceed 600,000. Unfortunately there is no abatement. For the last week for which details are at hand there were 2,816 deaths as compared with 2,003 in the preceding week, and only 285 in the corresponding week of last year. The Bombay districts are at present suffering the most severely.

The correspondent of the Lancet in India reports that bacteriological work is being started at several new places. The Port Commissioners at Rangoon propose building and equipping a laboratory chiefly at first for the examination of suspected plague. The Government of the Malay States has recently established a Research Institute open to all workers irrespective of nationality. Pathological work and chemical research, as well as bacteriological investigations, will be open to all.

THE corporation of the City of Hull has made itself responsible for the conduct of the museum of the Literary and Historical Society.

The executive committee of the National Educational Association will meet early in October to determine the place of meeting of the next convention.

THE International Congress of Physiology opened its sessions at Turin on September 17.

An International Congress of Archeologists will be held in Greece in April, 1903. Meetings will be held at Athens, Olympia, Delphi and other points of interest.

The International Engineering Congress, the general program of which we have already published, opened in Glasgow on September 3, with about 3,000 members in attendance.

The eighty-first meeting of the American Institute of Mining Engineers will be held in Mexico in the first week of November. Sessions will be held in the cities of Mexico, Pachuca and Monterey, and stops will be made at various points of interest. Two special trains have been chartered, one of which will leave New York on November 1, by the Pennsylvania Railroad, and the other will be run as a second section, starting from Chicago at 10 p. m., on November 2, by the Atchison, Topeka & Santa

Fe Railway. The cost of the trip from Chicago, lasting about thirty days, including berth and meals will be \$250.

THE Dutch Society of Sciences at Harlem announces a series of subjects for the prizes to be conferred during the next three years, the details of which can be obtained from the Secretary, Professor J. Bosscha, Harlem. The prize in each case is a gold medal or 500 florins at the option of the author and the papers may be written in English.

The British Medical Journal gave in a recent issue the prizes offered by the Paris Academy of Medicine, about thirty of which are open to The François-Joseph Audiffred foreigners. Prize is of the value of £1,000, and is offered to any person who is adjudged to have discovered a preventive or cure of tuberculosis. The following are also among the more important offered for the year ending with the end of February, 1902; the sum specified in each case does not necessarily go to one candidate, but may be The Academy Prize, awarded annually, worth about £40, is this year for a research on the rôle of toxins in pathology; the Baillarger Prize of about £80 (biennial) is for the best work on the treatment of mental diseases and the organization of asylums; and the Charles Boullard Prize, also biennial, of £50, is for a similar subject. The Barbier Prize of £80 (biennial), is for the discovery of a cure for such 'incurable' maladies as hydrophobia, cancer, epilepsy, typhoid and cholera. Mathieu Bourceret Prize of £50 (annual) is for work on the circulation of the blood. Campbell Dupierris Prize (biennial), of the value of £96, is for the best work on anæsthesia or the diseases of the urinary passages. The Chevillon Prize (annual) of £65, is for the best work on the treatment of cancer. The Desportes Prize of £55 (annual), will be awarded for the best work on practical medical therapeutics. The Herpin (of Metz) Prize (quadrennial) of £50, is offered for a research on the abortive treatment of tetanus. The Theodore Herpin (of Geneva) Prize of £125 (annual), is for a research on epilepsy and nervous diseases. The Laborie Prize of £210 (annual), is given for the greatest advancement in surgical science during

the year. The Lefèvre prize (triennial) of £75, is for a research on melancholia. The Meynot Prize (annual), of £108 is for the best work on ear disease; and the Saintour Prize (biennial) of £166, for the best work on any subject in medicine.

WE learn from the Astronomical Journal that the council of the Astronomische Gesellschaft has undertaken the preparation of a new Catalogue of Variable Stars and has delegated the conduct of the work to a committee consisting of Professors Dunér, Hartwig, Müller and Oudemans. The committee request observers of variable stars who have considerable unprinted series of observations, which would be useful in the correction of elements, either to publish them soon or to communicate them to the member of the committee in charge, Professor G. Müller, Potsdam Observatory. The Committee also announces that it will from the present time undertake the definitive notation of newly discovered variables as soon as their light-fluctuations are certainly ascertained. A list will shortly be published of the names of variables found, in recent years which have heretofore remained unnamed.

THE New York Sun, whose astronomical news is unusually full and accurate, notes that the foreign associates of the Royal Astronomical Society are distributed as follows: Argentine Republic, 1; Austria, 1; France, 9; Germany, 8; Holland, 3; Italy, 2; Russia, 4; Sweden, 1; United States, 14. 'It is to be noted that the associate from the Argentine is himself an American. The American members are: Dr. E. E. Barnard, Yerkes Observatory, Chicago; Professor L. Boss, Dudley Observatory, Albany; Professor S. W. Burnham, Yerkes Observatory, Chicago; Dr. S. C. Chandler, Cambridge; Dr. W. L. Elkin, Yale University; Professor G. E. Hale, Yerkes Observatory, Chicago; Professor A. Hall, U. S. N., retired; Dr. E. S. Holden, New York; Dr. S. P. Langley, Smithsonian Institution; Professor A. A. Michelson, University of Chicago; Professor S. Newcomb, Washington; Professor E. C. Pickering, Harvard College Observatory; Professor C. A. Young, Princeton University, and Dr. J. M. Thome, National Observatory, Argentine.