

The Bastian Memorial Volume contains several articles of interest to students of American ethnography; as Dr. Boas, on secret societies among the Kwakiutl Indians; Seler, on the ruins of Quiengola; Dieseldorf, on the Toltecs; Ehrenreich, on the Botocudo language, etc. D. G. BRINTON.

UNIVERSITY OF PENNSYLVANIA.

SCIENTIFIC NOTES AND NEWS.

IN the issue of this JOURNAL for June 19th, will be found full details regarding the present meeting of the American Association for the Advancement of Science at Buffalo. It will be remembered that the first meeting of the Council will be at noon on Saturday, August 22d, and the first general meeting will be on Monday, August 24th. The work of the sessions has been made continuous, not being interrupted by Sunday or by a day for excursions. The affiliated societies, however, meet on the 21st and the 22d, and all who are able should be present at Buffalo on those days.

PROF. HUBERT A. NEWTON, of Yale University, died in New Haven on the night of August 12th. We hope to give in a future number some details regarding Prof. Newton's life and his important contributions to astronomy and mathematics. Yale University and American science have recently suffered most severe losses in the deaths of Professors Whitney, Dana, Eaton and Newton.

ADVICES by cablegram regarding the eclipse expeditions state that Prof. Schaeberle and Prof. Todd in northern Japan were unsuccessful or only partially successful in their observations, but that the weather was clear and fine in Norway.

CABLEGRAMS to the daily papers report that Dr. Nansen has arrived at Vardo Island, Norway, on board the steamer Windward, which recently went to Franz Josef Land in order to bring back the Jackson-Harmsworth expedition. It is stated that with Lieutenant Hansen he left the steamer Fram, in which he had hoped to be carried to the pole, in March, 1895, in Lat. 84, Long. 10.27, to explore north of the

Franz Josef route. The party journeyed through an unknown polar sea, and explored north of Franz Josef Land to Lat. 86.14. No land was seen to the north of Lat. 82; only ice. They wintered on Franz Josef Land, living on whale meat and bear meat. The Fram was reported to be a good ice ship, and will arrive later this year. There was no sickness on board. Although the expedition failed to reach the object of its search, it got four degrees farther north than did any previous expedition.

THE second International Congress of Applied Chemistry was opened at the Sorbonne, Paris, on July 27th, about 1,600 delegates being present. The admirable address of the President, M. Berthelot, is published in the *Revue Scientifique* of August 1.

THE sixty-fourth annual meeting of the British Medical Association was opened at Carlisle on Tuesday, July 28th, under the Presidency of Dr. Henry Barnes, physician to the Cumberland Infirmary. As compared with the meeting in London last year the attendance was not large, about 700 members being present, but the addresses by the Presidents of the sections and the proceedings of the sections contain much that is of interest, not only to the medical profession, but also to those engaged in advancing medicine as a science. Following the British Association for the Advancement of Science, the Medical Association will meet next year in Canada, having accepted the invitation of the Montreal branch. Prof. T. G. Roderick, professor of surgery in McGill University, will be President. The Association will probably meet in Edinburgh in 1898.

THE sixty-eighth meeting of the German naturalists and physicians will be held at Frankfort from the 21st to the 26th of September under the Presidency of Prof. H. von Ziemssen. Lectures before the general sessions will be given by Drs. Hans Buchner, Richard Lepsius, Max Verworn, Ernst Below and Karl Weigert. Before the medical sections there will be a discussion of the results of recent investigations of the brain led by Professors Paul Flechsig, Ludwig Edinger and E. von Bergmann. American men of science will be welcomed at the meeting. Membership cards can be ob-

tained from the Secretary, Dr. Hugo Metzler, Frankfort, on payment of M. 15.

SECTION C., Chemistry, of the A. A. A. S., has printed in advance a provisional program, which shows that as usual the papers presented before this section will be numerous and important. Physical, inorganic and organic chemistry will be taken up on August 25th; didactic, analytical and technical chemistry on August 26th; technical and sanitary chemistry on August 27th; agricultural and biological chemistry on August 28th. More than sixty papers have been already promised.

THE admirable leadership of the department of natural science instruction of the National Educational Association is shown by the addresses given before the recent meeting and published in this JOURNAL. We learn from the President, Prof. Charles S. Palmer, of the University of Colorado, that it is proposed to secure a committee at the approaching meeting of the American Association for the Advancement of Science, and also from the several college associations which will cooperate with the committee from the National Educational Association in discussing the position of natural science in the schools and the establishment of natural science requirements for admission to college.

IT seems probable that owing to contrary winds M. Andrée has not undertaken to launch his balloon. Reports that the balloon has been seen in the Arctic regions are not likely to be very reliable, as the natives have been promised rewards for bringing news of the explorers.

HERR OTTO LILLIENTHAL, while experimenting with his flying mechanism on August 11th, met with an accident which resulted in his death. It is reported by cablegram that he started from a hilltop at Rhinow, near Berlin, and after floating for some distance the apparatus got out of order, causing him to fall to the ground. Herr Lillienthal was 46 years of age.

A PARTY under the charge of Mr. W. G. Miller, of the School of Mining, Kingston, Ont., will leave that place on September 1st to explore the chief mineral localities of the Kingston district. Though primarily intended for students of the school, we understand that others would be admitted to the party. Travel-

ling will be done by canoes, and it is estimated that the expense of the trip will not exceed \$20 for three weeks.

ON the afternoon of July 26th there was a heavy hail storm in Paris which did great harm to the conservatories, trees and plants of the *Jardin des Plantes*. M. Milne-Edwards has reported to the Paris Academy that it will be many years before the damage can be repaired.

ACCORDING to the *Botanical Gazette*, Dr. V. F. Brotherus, of Helsingfors, left about the middle of April upon a botanical journey in central Asia. He will explore the high mountain flora of Issikul, giving particular attention to the mosses.

THE London *Times* states that Captain H. H. P. Deasy has left England for a journey across Tibet from west to east. He intends on the way to throw away soldered-up tins containing parchment notices in English and French into the tributaries of the Tsanpo and into the other large rivers which he may meet with, in the hope that some of them may be picked up far down stream, possibly in the Brahmaputra, Salween, and Mekong, and thus help to solve the vexed problem of the origin and connections of these rivers. The notices will be consecutively numbered and the tins in which they will be enclosed will have a brass label soldered on the outside, bearing the words, 'Please open this' in English and French, and Captain Deasy's name. The parchment inside bears the request that it be forwarded without delay to the Royal Geographical Society, London, with as accurate a statement as possible as to where it was picked up.

ON the occasion of Prof. Bastian's seventieth birthday, which occurred on the 28th of June, his bust in marble was given to the Museum of Ethnology in Berlin. A *Festschrift* containing papers by 32 leading German anthropologists was also presented to him. Prof. Bastian is, as we have recently stated, now absent on an expedition through Central Asia.

PROF. VICTOR HORSLEY has been presented, on the occasion of his retirement from the chair of pathology, University College, London, with a testimonial including an album which contains photographs of fifty-one of the subscri-

bers to the testimonial, together with a record of the work which each of them has done either in conjunction with Prof. Horsley or in the Brown Institute and in the Pathological Department of University College during the time these laboratories were under his direction.

DR. L. H. BAUER, editor of *Terrestrial Magnetism*, is making a magnetic survey of Maryland under the auspices of the State Geological Survey, now being conducted by Prof. Clark, State Geologist.

GEORGE WHITEFIELD SAMSON, D. D., LL. D., formerly President of Columbian University, Washington, died in New York city on August 8th, aged 77 years.

THE deaths are announced of Prof. August Kanitz, Director of the Botanical Gardens at Klausenburg, and of Prof. F. R. Simony, the Alpine explorer, who died on July 20th, at the age of 83.

THE 'Leopoldinisch-Carolinische Academie,' of Halle, is about to publish Cuvier's first composition, which is on the edible crabs of the French coast, and dates from the year 1788. The Academy has in its possession a number of letters of Cuvier, which it is also intended to publish.

THE Observatory of the School of Technology at Karlsruhe will be removed to Heidelberg. Its director, Prof. Valentiner, has been made professor in the University of Heidelberg.

AN observatory for terrestrial magnetism has been established in connection with the astronomical observatory in Munich and Dr. Franz von Schwarz has been made director.

THE Vienna Academy of Science proposes as the subject of the Baumgartner Prize (\$5000), to be awarded in 1899, 'The extension of our knowledge of ultra violet rays.'

WE learn from *Natural Science* that a new zoological garden has been opened at Königsberg, in Prussia, under the directorship of Dr. J. Müller, formerly of the Garden in Berlin; also that a State Entomological Experiment Station, for which the money has been voted by both Chambers, is to be built near Stockholm.

THE first number of the twenty-second volume of the *Botanical Gazette* is published from the press of the University of Chicago, and, like the other journals of the University, is admirably printed on fine paper with wide margins. Profs. George F. Atkinson, of Cornell University, Volney H. Spalding, of the University of Michigan, Roland Thaxter, of Harvard, and William Trelease, of the Missouri Botanical Garden, will hereafter act as associate editors.

PROF. W. NERNST, of the University of Göttingen, has become the scientific editor of the *Zeitschrift für Elektrochemie*.

GAUTHIER-VILLARS ET FILS announce an atlas containing fifteen large plates from photographs taken with the Röntgen rays by J. M. Eder and E. Valenta. The work on the same subject by E. E. Guillaume, also published by Gauthier-Villars, has reached a second edition.

IT appears that a new and very objectionable manner of advertising has been devised in Great Britain. In the bedrooms of some of the leading hotels, not only toilet articles, but also patent medicines are placed, in the hopes that guests will use and pay for these.

THE Paris Municipal Council authorized on July 10th the establishment of stands for automobile cabs. It is also considering the use of auto-mobile omnibuses, which, if adopted, will throw 27,000 horses out of employment! France seems to be distinctly in advance of England, Germany or America in the use of horseless carriages.

THE volume of *Biological Lectures* of the Marine Biological Laboratory, of Woods Holl, for 1895, is announced by Ginn & Co. as nearly ready. The volume will contain the following lectures: 'Infection and Intoxication,' Simon Flexner; 'Immunity,' George M. Sternberg; 'A Student's Reminiscences of Huxley,' Henry Fairfield Osborn; 'Paleontology as a Morphological Discipline,' W. B. Scott; 'Explanations or How Phenomena are Interpreted,' A. E. Dolbear; 'Known Relations between Mind and Matter,' A. E. Dolbear; 'On the Physical Basis of Animal Phosphorescence,' S. Watasé; 'Segmentation of the Vertebrate Head,' William A.

Locy; 'Segmentation of the Head,' J. S. Kingsley; 'Bibliography: A Study of Resources,' Charles Sedgwick Minot; 'The Transformation of Sporophyllary to Vegetative Organs,' George F. Atkinson.

WE learn from *Nature* that the observatory at Athens will hereafter publish a daily weather report containing twenty-five stations in Greece, and about double that number of exterior stations. The report is accompanied by two charts, one showing the isobars and general meteorological conditions over a large part of Europe, and one showing wind and temperature over Greece and adjacent islands.

THE New York *Medical Record* states that Rabies has broken out among the cows, dogs, sheep and hogs in Path Valley, Centre County, Pa., and it is feared that the disease will become general throughout the county.

ACCORDING to *Natural Science* a party of four, under the direction of Mr. T. A. Mobley, will start from Lacomb, Alberta, to explore northern Canada from Edmonton to the Arctic sea. The trip is to occupy two years.

ACCORDING to *Nature* the Russian Geographical Society has awarded this year its Constantine medal to M. A. Rykacheff, for his work in the domain of physical geography. Beginning in the year 1874 with a work on the distribution of atmospheric pressure in Russia, he continued to publish a series of researches on the diurnal variations of pressure, the prevailing winds of the Caspian and the White Seas, the tides in the atmosphere, the freezing and thawing of the Russian rivers, the variations of the levels of rivers in Middle Russia, in connection with variations in the amounts of rain and snow, the diurnal variations of temperature over the tropical oceans, etc. The Count Lütke medal has been awarded to Admiral Makaroff, for his work on the temperature and density of water in the northern Pacific, based on the measurements made in 1886-89 on board the *Vityaz*. His maps of the distribution of surface temperature in August, and of temperature at a depth of 400 meters, are especially worthy of notice. The Prjevalsky prize was awarded to M. Bere-zovsky, for his explorations of the northern borderlands of Tibet. A Prjevalsky medal was

awarded to J. A. Schmidt, for his twelve geodetical expeditions to different parts of Central Asia and Siberia; and one to Dr. H. A. Fritsche, for his magnetic measurements in China, Mongolia, Siberia and Russia. Two small gold medals were awarded to F. F. Müller, for his magnetic work in East Siberia, and to A. A. Lebedintseff, for his researches into the chemical composition of water in the Black and Azov Seas. Eighteen silver medals were awarded for various works of lesser importance.

A PART of the collection of butterflies of the late Prof. A. M. Butljerov has been presented to the Academy of Sciences of the University of Moscow. The collection of Mexican insects made by the late Julius Flohr has been bequeathed by him to the Museum of Natural History, Berlin; the same institution will also receive in event of the death of Herr Hans Fruhstorcher his valuable collection of butterflies.

ACCORDING to the *London Times*, some important alterations are now being carried out at Kew Gardens. The temperate house projected by the late Prince Consort was originally designed to comprise a central structure, two octagons and two wings. The wings were not added; but the government has now granted the necessary funds, and already such progress has been made that the south wing is nearly completed, and the north wing will be constructed at the earliest possible date. When finished, the temperate house will be one of the most striking, and probably the largest of the kind in existence. Its central avenue will be 600 ft. long, and there will be a clear view from end to end. This, it may be added, will be just double the length of the present largest house—the palm house—in the gardens. The building will be used especially for the accommodation of succulent plants, agaves, the taller cactuses, and the like, from such sub-tropical countries as the Cape, the highlands of Mexico and the Canary Islands. Limited in the area of their growth, the plants have hitherto been necessarily confined in tubs, but in their new quarters they will be planted out in beds, where they may be expected to flower and add a new

attraction to the Royal Gardens. There has just been established near what is known as the rhododendron dell in the arboretum a small bamboo garden. The species are mostly Japanese, Chinese and Himalayan and are probably the finest collection now in Great Britain. The naturalized bamboos have already created a great deal of interest, which may be followed by their more general cultivation. Two interesting official publications may also be mentioned—one in course of being issued and the other projected by the staff at Kew. The former is a complete list of the plants cultivated in the gardens, which it is hoped will fix a standard nomenclature, thus doing away with the confusion of identical plants known under two or more names. The other book will be a guide to the economic plants, and will include a summary of their qualities and uses.

THE London *Times* states that a Pasteur filter on a large scale has been exhibited by Messrs. J. Defries and Sons on their premises in Houndsditch. It has been constructed by them for the municipal authorities of Darjiling, with the sanction of the Indian government, and will be sent out there immediately. The filter consists of a series of iron 'cells,' or circular vessels, each of which contains 250 Pasteur porcelain tubes. These tubes resemble hollow candles and stand upright in the floor of the cell. The water filters through them from the outside to the inside under pressure or by gravity, and all impurities are arrested on the surface of the porcelain, which is formed of a special clay or mixture of clays. The filter is cleaned periodically, or as often as may be necessary, by scraping off the deposit from the surface of the tubes and by passing through them dilute hydrochloric acid, which dissolves and carries away the earthy salts deposited in the interstices of the porcelain. The principal of this filter and its successful application to domestic purposes have been well known for several years and have gradually overcome the distrust with which sanitary science is inclined to regard all filters. Its efficiency seems to be well established not only by laboratory experiments, but—far more convincingly—by the practical results in the reduction of water-borne disease obtained by its use in the French army.

The interest of the present exhibit lies in the size of the installation. It consists of 38 cells and 9,500 tubes, which will deliver 150,000 gallons per day.

As we are going to press with the present number of SCIENCE we have received provisional programs of the several sections of the approaching meeting of the American Association for the advancement of science. The number of papers entered at a date considerably in advance of the meeting is as follows: Section A. Mathematics and Astronomy, 8; Section B. Physics, 19; Section C. Chemistry, 60; Section D. Mechanical Science and Engineering, 23; Section E. Geology and Geography, 17; Section F. Zoology, 17; Section G. Botany, 35; Section I. Social and Economic Science, 9. In each of the sections other papers will doubtless be offered, which will be entered on the daily programs published during the meeting. It is a great advantage to have the programs in advance of the meeting and we regret that it is now too late to print them in full in this issue of SCIENCE. We hope to publish full reports of the sectional meetings, but no one who is able to be present at Buffalo should neglect to attend a meeting which promises to be of especial interest.

UNIVERSITY AND EDUCATIONAL NEWS.

THE HULL BIOLOGICAL LABORATORIES.

THE Chicago *University Record* gives an account of the exercises held on the occasion of the laying of the corner stone of the Hull Biological Laboratories on July 3d. The address in the convocation tent was given by Prof. G. L. Goodale, of Harvard University, who spoke on 'Some of the Relations of Natural History to Thought and Modern Life.' President Harper made a statement regarding the importance of Miss Culver's gift for the development of science, in the course of which he made the following important announcement regarding the place of investigation in the medical school: "In laying these corner stones to-day we are laying the foundations of a school of medicine, for aside from the distinct work outlined in each department there is that great and important