

from a bed known to be contaminated or suspected of typhoid.

We have shown also the frequent occurrence, in various shell-fish from the shops, of anaërobic spore-bearing bacilli giving the characteristics of the *B. enteritidis sporogenes* recently described by Klein.

As the result of our work, we make certain recommendations as to the sanitary regulation and registration of the oyster beds, and as to quarantine for oysters imported from abroad.

CURRENT NOTES ON ANTHROPOLOGY.

ETHNOGRAPHY OF LIBERIA.

IN *L'Anthropologie*, for August, the French Consular Agent at Monrovia, M. Delafosse, gives a sketch of the present ethnography of Liberia. The colored immigrants from the United States, usually with more or less white blood in their veins, have mixed indiscriminately and largely 'de la main gauche' with the native inhabitants. They form a part-colored population, not of a promising character. The indigenous languages belong to four stocks, the Mande, the Kru, the Gola and the Guele, the last mentioned being that of the cannibal tribes on the southeast. The original people of this part of the coast were the Dé, who were related to the Kru tribes and those of the Ivory Coast. The Vei belong to the Mande (or Mandingo) stocks, and are interesting as using a peculiar syllabic alphabet, first observed by Lieutenant Forbes, U. S. N. M. Delafosse says that it was not their invention, as has been stated, but was borrowed by them from some tribe near the source of the Niger.

THE SIGNIFICANCE OF SKULL-MASKS.

THE use of skulls, or imitations of them, as masks, was not uncommon in America, and is quite frequent in Polynesia. Their symbolism and signification are examined by L. Frobenius in the *Internat. Archiv für Ethnographie* (1898, Heft IV.). Rejecting former and incomplete suggestions, he finds this custom arose from that of the adoration of skulls themselves. It is well known that in primitive religion the skulls of men and animals are conspicuous objects of worship, as representing the spirits of the departed. This was connected with the religious

homage to ancestors, to deceased chieftains and to the brute eponymous forefathers of the totem. Sometimes the symbolism of the skull in the mask was reduced merely to the insertion of teeth or some such single feature.

THE SVASTIKA IN AMERICA.

THAT a simple figure, like the Svastika, may arise independently, representing quite different objects, is again illustrated by Mr. Wm. W. Tooker in an article in the *American Antiquarian* for December. Among the marks which were tattooed on the backs of the Virginian Indians as totemic designs we find the Svastika, as Mr. Tooker says, 'in full bloom.' In this instance, from other figures given, the design seems to represent four tomahawks crossed in pairs, the blades in opposite directions. But, as Mr. Tooker remarks, "It is a simple figure which, when compared with others of aboriginal origin, might be evolved from an Indian's brain," without evoking the hypothesis of a foreign immigration. As a 'symbol' it has no constant and universal meaning, and the mystical importance which has been attached to it by some imaginative writers has no foundation in facts.

D. G. BRINTON.

UNIVERSITY OF PENNSYLVANIA.

SCIENTIFIC NOTES AND NEWS.

DR. P. L. SHERMAN, formerly instructor in general chemistry in the University of Michigan, has gone with Professor Worcester to the Philippines as his secretary.

DR. I. BORNMÜLLER has gone to northern Persia on a botanical expedition.

THE Berlin Academy of Sciences has made a grant of 2,400 Marks toward the expenses of a botanical expedition to Java by Dr. Paul Knuth.

THE herbarium of Professor Chodat, of the University of Geneva, has been destroyed by fire.

REPRESENTATIVE SAMUEL J. BARROWS, of Massachusetts, will be appointed Librarian of the National Library. This is regarded as an excellent appointment, that will insure the conduct of the Library without reference to politi-

cal considerations. The position was first offered to Mr. Herbert Putnam, head of the Boston Public Library.

PROFESSOR WILLIAM OSLER, F.R.S., of the Johns Hopkins University, Baltimore, has accepted an invitation to deliver the Cavendish lecture for 1899, before the West London Medico-Chirurgical Society.

THE report is circulated that the remains of Andrée and his companions and the car of the balloon have been found between Kemo and Pit, in the province of Yeniseisk, Siberia.

DR. R. F. CLAUS, the eminent zoologist professor in the University of Vienna, has died at the age of 63 years.

THE London *Times* announces the death of the Rev. Thomas Hincks, F.R.S., at Clifton, on January 26th. He was the son of the late Rev. William Hincks, F.L.S., and was born at Exeter in 1818. He was for many years a Unitarian minister, but had a wide reputation as an authority in several departments of marine zoology, being the author of a history of the British Hydroid Zoophytes, published in 1868, and a history of the British Marine Polyzoa, published in 1889. Both these books are largely the results of his own investigations. He was elected into the Royal Society in 1872, and continued to be an active worker in science until very lately.

WE regret also to record the death of Dr. Hampe, professor of chemistry in the School of Mines at Clausthal, aged 57 years.

THE House Committee on Appropriations has recommended an increase of \$4,200 in the annual appropriation for scientific work of the United States Fish Commission; the entire amount now available for the Department of Scientific Inquiry being \$15,000. This increase is the more gratifying since it is made after an examination of the practical results that have attended the lines of scientific research carried on during the past year.

A BILL has been introduced into the New York Assembly appropriating \$30,000 to continue the promotion of the sugar beet industry, of which \$2,500 is devoted to making experiments by the Commissioner of Agriculture.

THE American Mathematical Society will hold a regular meeting in Room 301 of Fayerweather Hall, Columbia University, on Saturday, February 25th. The two sessions begin at 10:30 a. m. and 2:30 p. m.

At the annual meeting of the Washington Academy of Sciences recently held, the following officers were elected for the ensuing year: President, Chas. D. Walcott; Vice-Presidents: Anthropological Society, W J McGee; Biological Society, F. V. Coville; Chemical Society, H. N. Stokes; Entomological Society, Dr. H. G. Dyar; Geographic Society, G. K. Gilbert; Historical Society, A. R. Spofford; Medical Society, Dr. S. C. Busey; Philosophical Society, O. H. Tittmann; Secretary, Frank Baker; Treasurer, Bernard R. Green; Managers: Class of 1902: L. O. Howard, J. W. Powell, Carroll D. Wright; Class of 1901: Marcus Baker, Henry S. Pritchett, Geo. M. Sternberg; Class of 1900: F. W. Clarke, C. Hart Merriam, Lester F. Ward. The Academy has arranged for a course of popular lectures on scientific subjects to be given during the months of March and April. A number of demonstrations will also be given on topics of special interest. The first of these was held on the evening of January 31st, and related to Developments in the Art of Recording and Reproducing Sounds, with an exhibition of the new graphophone recently perfected in the Volta Bureau of Mr. Alex. Graham Bell. A welcome donation to the Academy was recently made by Mrs. Gardiner Hubbard, who in view of the life-long interest in science shown by her deceased husband, presented the sum of \$1,000 as a token of her desire to aid in the advancement of science and the union of the scientific interests in Washington. The Academy showed its appreciation of her generosity by at once electing her a patron. Arrangements have been made for the publication of the Proceedings of the Academy. The 'brochure' plan will be adopted, each separate to have its own pagination as well as that of the volume, and to be dated with the actual date of delivery to members. Several papers have already been presented for publication, and it is evident that more funds than are at present available could advantageously be spent for this purpose.

THE Anthropological Society of Washington and the Woman's Anthropological Society have recently united for scientific work, the latter discontinuing separate scientific meetings, and the former modifying its by-laws in such manner as to combine the functions hitherto performed by the two organizations. The union was definitely completed at the annual meeting of the Anthropological Society of Washington on January 17, 1899, at which the modified by-laws were adopted, and at which representatives of both societies were recognized in the ensuing election of officers. The officers for the year are as follows: President, W J McGee; Vice-Presidents—Section A, Somatology, Dr. Frank Baker; Section B, Psychology, Lester F. Ward; Section C, Esthetology, W. H. Holmes; Section D, Technology, Frank Hamilton Cushing; Section E, Sociology, Dr. George M. Kober; Section F, Philology, Major J. W. Powell; Section E, Sophiology, Alice C. Fletcher; General Secretary, Jessie Moore Holton; Treasurer, Perry B. Pierce; Curator, Mariana P. Seaman; Secretary of the Board of Managers, Dr. J. H. McCormick; Councilors, J. Walter Fewkes, Weston Flint, F. W. Hodge, George R. Stetson, Edith C. Westcott, Thomas Wilson; Ex-Officio Members of the Board (as Ex-Presidents), Robert Fletcher, Otis T. Mason.

THE National Geographic Society offers two prizes for the best essays on Norse discoveries in America—a first prize of \$150 and a second prize of \$75. Essays submitted in competition for these prizes should be typewritten in the English language and should not exceed 6,000 words in length. They should be signed by a pseudonym and must be received on December 31, 1899. The judges are: Henry Gannett, Geographer of the U.S. Geological Survey, etc.; Albert Bushnell Hart, professor of history in Harvard University; Anita Newcomb McGee, M. D., Acting Assistant Surgeon, U. S. A.; John Bach McMaster, LL. D., professor of history in the University of Pennsylvania, and Henry S. Pritchett, Superintendent of the U. S. Coast and Geodetic Survey.

A PROVISIONAL committee for the German Empire, in connection with the Thirteenth International Medical Congress, which is to be held

in Paris in 1900, has been formed, with Professor Rudolph Virchow as President.

As we have already announced, the eighth session of the International Geological Congress will be held in Paris from August 16 to 28, 1900, in connection with the great Exposition. The *American Geologist* states that the Committee of Organization, of which M. Albert Gaudry is President, MM. Michel-Lévy and Marcel Bertram, Vice-Presidents, and M. Charles Barrois, General Secretary, has already held several meetings. The Congress will meet in a special pavilion, and the length of its sessions will permit its members to visit the Exposition and the geological museums of Paris. Three general excursions have been arranged in addition to nineteen excursions intended for specialists, in which the number of members who can attend is limited to twenty. A circular describing the plans for these excursions will be sent out in 1899, and a guide book written by the directors of the excursions will be placed on sale at the beginning of 1900.

DR. CHARLES MOHR, of Mobile, Ala., Special Agent of the Forestry Division of the United States Department of Agriculture, has recently presented to the Museum of Pharmacognosy of the University of Michigan some interesting and valuable specimens. They consist of a section of a pine-tree trunk, showing the American method of boxing and bleeding long-leaved pines for turpentine; and of samples of the twenty different turpentine products manufactured in the South. The various stages of the manufacture of turpentine are well illustrated by these specimens.

CONSUL AYERS, of Rosario, under date of December 9, 1898, writes the Department of State that by reason of the continuous onslaught made on the locusts through the efforts of the commissions, aided by a lately developed natural enemy—the Champi beetle—the injury to the crops so far has been very slight. The consul incloses a letter by an American—Maj. O. C. James—describing the beetle, which, it appears, feeds upon the eggs of the locust. The letter reads, in part: "The 'Champi' is the most effective locust-egg destroyer we have in Argentina. He is a dirty blackish beetle, the

larger species being a little more than 1 inch long by half an inch broad, and must be looked for closely where locusts are laying their eggs or his presence may not be discovered. Both the mature insect and its larvæ feed upon the eggs of the acridian in large numbers. These beetles belong to the genus *Trox* of the family *Scarabæidæ*. Ordinarily they feed upon dead animals and animal matter more or less desiccated. How they have developed the habit of feeding upon locusts' eggs is a mystery. Still, it might be imagined that the steps from a carion-feeding habit could develop that which the insects now possess. In a country where hundreds of dead animals are left scattered over the pampa to decay, these insects have become plentiful. The eggs of the locusts are covered with a frothy exudation that soon becomes strong smelling and attracts the beetles, who devour them." Under date of December 6th, Consul Ruffin, of Asuncion, writes that among the worst pests with which Paraguay is infested are the grasshoppers, which are almost as large as small birds. The name of locust is given them, but they are more like what we call grasshoppers. A government commission to study the question of their extermination has been appointed, and in the last few days a law compelling everybody to help kill the grasshoppers or pay a fine of \$20 paper (equal to about \$2.75 gold) has been passed. The young ones, unable to fly, are killed, the method being to drive them into a long trench and cover them up. The grasshoppers, sometimes for a whole day, obscure the brilliant tropical sun in their flight and make it appear as though the weather were cloudy; they also impede railroad trains.

THE Weather Bureau office in New York City was moved on October 15, 1898, from the Manhattan Building, No. 66 Broadway, to the American Surety Building, No. 100 Broadway, about two blocks farther north. The monthly *Weather Review* gives some details in regard to the old and the new offices. The office quarters in the Manhattan Building consisted of four circular rooms, one immediately above the other, in the tower that rises to an altitude of about 88 feet above the main roof and 355 feet above the curbstone on Broadway. Communication between the four rooms was by means of a central

spiral scaircase. The barometer was in the first or lower room. Owing to the presence of the tower and the general configuration of the roof it was necessary to give the anemometer, wind vane and thermometers a much greater elevation than would be afforded by the ordinary supports. The thermometer shelter support consisted of a skeleton framework of iron, high enough to give the thermometers an elevation of 54 feet above the main roof. Access to the shelter was secured by means of a spiral staircase, the iron newel of which extended upward about 34 feet above the top of the framework as a support for the wind vane and anemometer. The last-named instruments were thus placed at an elevation of 326 feet above the curb, but still some distance below the top of the main portion of the tower. This station was thus occupied from March 15, 1895, to October 15, 1898. The office quarters secured in the American Surety Building consist of five rooms *en suite* on the twentieth floor, the next but one to the top of the building. The roof of the building on which the instruments are exposed is almost flat and there are no projecting towers or chimneys on the building itself or surrounding structures to obstruct the free sweep of the wind. The barometer is at the same elevation as in the Manhattan Building. The heights of the instruments above the Pine street curb and the roof are now as follows:

| Instruments. | Above curb. Above roof. | |
|----------------------|-------------------------|--------------|
| | <i>Feet.</i> | <i>Feet.</i> |
| Barometer..... | 276 | |
| Thermometer..... | 313 | 11.0 |
| Anemometer cups..... | 345 | 43.5 |
| Wind vane..... | 322 | 19.8 |
| Rain gauge..... | 305 | 3.2 |

THE Boston Society of Natural History, in order to meet a considerable loss of income due to the lower rate of interest now paid upon conservative investments, and also that the efforts of the Society may keep abreast of the new demands arising from the growth of the metropolitan district of Boston, needs additional members. From the statement sent with this appeal we take the following facts regarding the Society: The Boston Society of Natural History was founded April 28, 1830, for 'the en-

couragement and promotion of the science of natural history.' It was incorporated February 25, 1831, and has long been one of the eminent and essentially public institutions of the community. The Society contributes at present to the promotion of science and of public education by the following means: (1) Meetings held on the evenings of the first and third Wednesdays of each month from November to May. These meetings are devoted to the presentation of the results of scientific investigations and to the popular expositions of such studies as are of general public interest. (2) Publication of Memoirs, Proceedings and Occasional Papers, which all record the discoveries of members and others. These publications are widely distributed in all parts of the world, more than four hundred copies being sent to academies, learned societies and other correspondents, as well as to such members of the Society as express a wish to receive them. (3) The Library, which contains upwards of 25,000 volumes and 12,000 pamphlets, includes numerous extensive sets and rare works, many of them not accessible elsewhere in this vicinity. Members are allowed eight volumes at a time for home use, and each volume may be retained a month without renewal. The library privileges are granted without reference to residence. Books are sent by express at the borrower's expense. (4) The Museum contains the collections of the Society and is open to the public on two days of each week. The number of visitors is large on those days. The Museum is open to members on other days. Special efforts have been made to display the fauna, flora and geology of New England. To increase the educational value of the collections, printed guides have been placed on sale. (5) Lectures to teachers and others, which at present are largely maintained by the Trustees of the Lowell Institute.

UNIVERSITY AND EDUCATIONAL NEWS.

It is announced that a donor, whose name is withheld, has endowed in Harvard University a chair of hygiene.

MAXEY HALL, Brown University, has been injured by fire, the damage being estimated at \$25,000.

DR. JAMES MONROE TAYLOR has been elected President of Brown University. Dr. Taylor has been, since 1886, President of Vassar College, where his administration has been very successful.

DR. THOMAS J. SEE, well known for his important researches in astronomy, has been nominated for a professorship of mathematics at the Naval Academy, Annapolis.

MR. W. L. CASCART has been appointed adjunct professor of mechanical engineering in Columbia University. At the same meeting of the Trustees the title of Professor R. S. Woodward was changed from professor of mechanics to professor of mechanics and mathematical physics.

PROFESSOR FRITZ REGEL, of Jena, and Dr. Erich v. Drygalski, of Berlin, have been appointed to professorships of geography in the Universities at Würzburg and Tübingen respectively.

DR. ROBERT OTTO, professor of chemistry in the Institute of Technology at Braunschweig, has retired. Dr. Voswinkel has qualified as docent in chemistry in the Institute of Technology at Berlin.

ACCORDING to the new catalogue of Brown University 925 students are enrolled, an increase of 65 over last year. The increase of the Freshman class, from 168 last year to 216 this, is especially noticeable. There are 99 graduate students.

In a recent number of the *Harvard Graduates' Magazine*, Professor A. B. Hart publishes a comparative statement of the attendance at the leading American universities. According to his figures the institutions rank in numbers as follows:

Undergraduates in arts and sciences: Harvard, 2,260; Yale, 1,755; Michigan, 1,429; Wisconsin, 1,097; Columbia, 802; Chicago, 783; Pennsylvania, 653; Johns Hopkins, 187.

Graduate students: Chicago, 370; Harvard, 319; Columbia, 313; Yale, 270; Johns Hopkins, 192; Pennsylvania, 151; Wisconsin, 87; Michigan, 73.

The medical department: Pennsylvania, 793; Columbia, 695; Harvard, 546; Michigan, 408; Johns Hopkins, 201; Yale, 112.

The law department: Michigan, 720; Harvard, 543; Columbia, 341; Pennsylvania, 312; Yale, 195.