

subject being 'The Attitude of the State towards Scientific Research,' and the speakers being Professor H. F. Osborn, Dr. L. O. Howard, Professor W. B. Clark, Dr. B. T. Galloway and Professor William T. Sedgwick.

The business transacted by the Society included an appropriation of \$50 toward the support of the university table at the Naples Zoological Station, and \$50 to support a table at the Marine Biological Laboratory at Woods Holl. It was also voted that a committee of five be appointed by the incoming executive committee to select appointments to the university table at Naples, and to raise, if possible, additional funds for its support. A resolution was passed protesting against the duty on wax and other models intended for scientific research in educational institutions.

The most important business transacted by the Society was the consideration of its relations to the Naturalists meeting simultaneously at Chicago. The action taken was as follows: (1) Section 1, of Article IV, which limited the territory for holding meetings, was stricken out of the Constitution and was transferred to the By-Laws. (2) This By-Law was temporarily set aside for the purpose of providing for the meeting of the Society in Chicago in 1901. (3) The Executive Committee was empowered to confer with those interested in the formation of a Western Branch of the Society.

Officers for the ensuing year were elected as follows:

President, Wm. T. Sedgwick; *Vice-Presidents*, L. O. Howard, L. M. Underwood, J. Walter Fewkes; *Secretary*, A. D. Mead; *Treasurer*, M. M. Metcalf; *Executive Committee from Society at Large*, G. H. Parker, J. McK. Cattell.

THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

A MEETING of the Council of the American Association for the Advancement of Science was held at Johns Hopkins University, Baltimore, at one o'clock on December 28th, with the president of the Association, Professor R. S. Woodward, in the chair. Professor C. S. Minot, the president-elect, was also in attendance.

The permanent secretary, Dr. L. O. Howard,

made a report on the affairs of the Association, including the preparations for the meeting next August at Denver. Professor L. G. Carpenter has been in charge of the local arrangements, and has visited the officers of the Association and the leading scientific centers of the Eastern States in the interest of the meeting.

Local committees were appointed in a large number of places throughout the country to forward the interests of the Association in different regions.

A committee was appointed to inquire whether universities and other scientific institutions would set aside a week during the winter for the meetings of scientific and learned societies.

Miss Watson presented her resignation as assistant secretary of the Association, and was elected a life member in recognition of her long and efficient services.

247 new members were elected, which makes the total membership of the Association over 2,000.

The contract made by the Association with The Macmillan Company was presented. It carries out the arrangements made at the New York meeting, in accordance with which SCIENCE is sent free of charge to all members of the Association.

SCIENTIFIC NOTES AND NEWS.

WE expect to publish in early issues accounts of the scientific proceedings of the societies that met during Christmas week. In the meanwhile it may be stated that Professor W. T. Sedgwick, of the Massachusetts Institute of Technology, has been elected president of the American Society of Naturalists; Professor J. S. Kingsley, of Tufts College, president of the American Morphological Society; Professor W. H. Welch, of the Johns Hopkins University, president of the American Society of Bacteriologists; Dr. Erwin F. Smith, U. S. Department of Agriculture, president of the Society of Plant Morphology and Physiology; Dr. Frank Russell, of Harvard University, president of the Folklore Society; Professor Josiah Royce, of Harvard University, president of the American Psychological Association; Professor E. H. Moore, of the University of Chicago, president of the

American Mathematical Society, and Professor W. F. Clarke, of the U. S. Geological Survey, D. C., president of the American Chemical Society.

THE Presidents of sections for the meeting of the British Association for the Advancement of Science, which will be held in 1901, at Glasgow, commencing on September 11th, will be as follows :

Section A.—Mathematical and Physical Science, Professor Percy A. MacMahon, F.R.S.

Section B.—Chemistry, Professor Percy Frankland, F.R.S.

Section C.—Geology, Mr. John Horne, F.R.S.

Section D.—Zoology, Professor Cossar Ewart, F.R.S.

Section E.—Geography, Dr. H. R. Mill, F.R.G.S.

Section F.—Statistics and Economic Science, Sir Robert Giffen, F.R.S.

Section G.—Engineering, Mr. R. E. Crompton.

Section H.—Anthropology, Professor D. J. Cunningham, F.R.S.

Section I.—Physiology, Professor J. G. McKendrick, F.R.S.

Section J.—Botany, Professor I. Bayley Balfour, F.R.S.

At the annual election of the New York Academy of Medicine on December 20th, the following officers were chosen: *President*, Dr. Robert F. Weir; *Vice-President*, Dr. Charles M. Dana; *Recording Secretary*, Dr. John H. Huddleston; *Corresponding Secretary*, Dr. Louis F. Bishop.

At the meeting of the Royal Statistical Society, on December 18th, a Guy medal was awarded to Mr. J. A. Baines, for his services to statistical science and a Howard medal and a prize of one hundred dollars to Dr. J. F. J. Sykes for his essay on 'The Results of State, Municipal and organized Private Action on the Housing of the Working Class in London and other Large Cities in the United Kingdom.'

PROFESSOR W J MCGEE, of the Bureau of American Ethnology, has returned to Washington from a field trip through parts of Arizona, Sonora and Lower California. Outfitting at Phoenix about the middle of October, he traversed the sparsely settled plains southward to the International boundary at Santo Domingo, and thence to the village of Carborca. From this point the party worked down the sandwash of

Rio San Ignacio (or Rio Altar) to the coast of the Gulf of California, where the Tepoka Indians lived until recently. Finding this tribe extinct, the expedition returned by a new route to Santo Domingo, and took the historical Yuma trail—now completely abandoned—to Rio Colorado. Here the territory of the Cocopa Indians was visited, and fairly extensive collections were for the first time made among them. Mr. DeLancey Gill, artist of the expedition, secured numerous photographs and sketches of the tribes and their territory.

DR. L. A. BAUER, in charge of the magnetic work of the United States Coast and Geodetic Survey, returned to Washington on December 15th, after having determined the sites of the base stations for the magnetic surveys in Alaska and in the Hawaiian Islands.

COLONEL FIVE, who was in 1896 sent by the Belgian Government on a scientific expedition to the far East, has returned home.

A MEMORIAL is being formed to commemorate the service to learning and letters of the late Professor Max Müller. The necessary steps are being taken to raise a fund, which, after providing for some personal memorial, such as a bust, relief or portrait, should be handed over to the University of Oxford, and held in trust for the promotion of learning and research in all matters relating to the history and archeology, the languages, literature, and religions of ancient India.

DR. P. H. KIRSCH died recently at Las Cruces, New Mexico. Dr. Kirsch received his doctor's degree from Indiana University about 1888. He was a teacher and naturalist of high rank, and was superintendent of schools in Franklin and other towns in Indiana and also in New Mexico. He is the author of several papers on fishes, one on the fishes of the Gila River, and another on the sturgeons.

For the purposes of the National Physical Laboratory, Queen Victoria has granted to the Royal Society, Bushey-house, Bushey-park.

THE annual report of the Superintendent of Disbursements shows an increased demand on the part of the public for Government publications and recommends that the issue of the monthly catalogue be enlarged, that permission

be granted to reprint documents of public interest and that a library be established, where not only national, but also State, municipal and foreign official documents may be preserved.

A TELEGRAM has been received at the Harvard College Observatory from Professor Kreutz at Kiel Observatory, stating that a comet was discovered by Giacobini at Nice, Dec. 20^d, 313 Greenwich mean time in R. A. 22^h 32^m 0^s and Dec. — 22° 0' 0". Its daily motion in R. A. is + 6^m and in Dec. — 8'. The discovery has been confirmed at the Lick Observatory, the comet having been observed by Professor Aitken on December 24th, 26th and 28th.

THE American Medical Association has appropriated \$500 for researches. Applications for grants may be made during the present month to Dr. H. C. Wood, chairman of the Committee on Scientific Research, 1925 Chestnut street, Philadelphia.

THE Council of the American Chemical Society has authorized the establishment of a local section with headquarters in Kansas City.

At a meeting of the Society of Arts, on December 12th, Professor Frank Clowes, chemical adviser to the London County Council, read a paper on 'The Treatment of London Sewage.' According to the *London Times* Professor Clowes said the present system of treatment consisted in straining or 'screening' off the larger solid matters and then mixing the sewage with solutions of lime and sulphate of iron; the chemical precipitate thus produced was then allowed to settle, together with the finer particles in the sewage, by sending the sewage slowly through parallel channels on its way to the river. The screenings or 'filth' were disposed of by being dug into the ground; the settled matter, or 'sludge' was sent in tank-steamers to be discharged out at sea; and the fairly clear 'effluent' passed constantly into the river at Beckton, Barking or Crossness. Although the condition of the river had been improved it had to be remembered that the effluent of the sewage after it had been freed from visible foul matter, still contained in invisible solution a large amount of putrescible substance, which might

under suitable conditions lead to serious foulness in the stream. In 1893 the Main Drainage Committee of the London County Council started a large scale experiment on the bacterial purification of sewage. This experimental treatment had been considerably extended in its scope and the results pointed to a general conclusion that the settled sewage might be purified to a far greater degree by encouraging the spontaneous purifying action of the bacteria which were present in the sewage itself. The effluent thus produced, without the intervention of chemicals, remained free from foul putrefaction, and was able to support the life of fish. Professor Clowes proceeded to describe the bacterial treatment by means of coke beds filled three or four times per 24 hours. The maintenance of the purifying action was due to the presence of bacteria upon the coke surface and to the adequate aëration of these surfaces by frequently exposing them to the oxygen of the air. The chairman expressed the opinion that the lecturer had rightly emphasized the extreme importance of the subject as a question of sanitation. The late Professor Faraday once called attention to the foul condition of the river as evidenced by the fact that a piece of card which he threw into the water disappeared when it became immersed to the extent of only one inch. Professor Poore told them that they were altogether on the wrong track, that they ought to restore the fertilizing materials, now permitted to go to waste, to the land, without the intervention of water, but for the present, at all events, he was crying in a wilderness. The only practicable method for the present generation seemed to be to minimize the inevitable nuisance as far as possible. He wished that Professor Clowes had given them some information with regard to the cost of the processes he recommended as compared with the cheapness of letting it alone. He desired to know how much land and what sized tanks would be required for the bacteriological treatment of the whole of the London sewage. He should have been glad if the lecturer had told them whether there were not other methods of applying the activity of bacteria to the purpose in hand. It was desirable to know whether the admixture of the

salt tidal water had an injurious effect on the bacteria contained in the effluent.

UNIVERSITY AND EDUCATIONAL NEWS.

By the will of Henry Villard, Harvard University and Columbia University each receive \$50,000. Among other public bequests is one of \$5,000 to the American Museum of Natural History.

RIPON COLLEGE dedicated its new science building, Ingram Hall, on December 18th. The keys of the building were presented to the trustees by the principal donor, Mr. O. H. Ingram, of Eau Claire, and received, with a fitting response by President Flagg. The principal address of the occasion was by Professor John M. Coulter, of the University of Chicago, on 'Some College Fallacies.' The building, which has been completed this fall, cost about \$33,000, of which sum Mr. Ingram gave nearly \$18,000 and Dr. Pearsons \$5,000. The pleasant feature of the dedication exercises was a special gift by Mr. Ingram which wiped out a small debt remaining upon the building and allowed about \$1,300 to be applied to the equipment. The building is three stories high and modern in all details of its construction.

THE new building of the Medical College of Cornell University was formally opened on December 29th. Addresses were made in the afternoon by President Schurman, Dr. Stimpson, professor of surgery in the College, and Governor Roosevelt. In the evening, the new building was open to invited visitors.

DR. D. K. PEARSONS has given Colorado College the \$50,000 promised some time since, and it is reported that he has given Northwestern University \$30,000 for the erection of a woman's dormitory and \$200,000 to an educational institution, the name of which is not to be made public during his life time. A press dispatch from Chicago accounts for about two and a half million dollars given by Dr. Pearson mostly to educational institutions, and it is estimated that the sum of about five hundred thousand dollars has been given anonymously. The details of the gifts are as follows:

Beloit College.....	\$295,000
Chicago Theological Seminary	280,000

Colorado College, Colorado Springs.....	150,000
Mount Holyoke College, Massachusetts.....	150,000
Berea College, Kentucky.....	150,000
Lake Forest University	125,000
Whitman College, Oregon.....	120,000
Knox College.....	100,000
Drury College, Springfield, Mo.....	100,000
Yankton College, South Dakota.....	100,000
Presbyterian Hospital, Chicago	70,000
Pacific University, Oregon.....	60,000
Carleton College, Northfield, Minn.	50,000
Fargo College, North Dakota	50,000
Pomona College, California.....	50,000
Fairmount College, Kansas.....	50,000
McCormick Theological Sem., Chicago.....	50,000
Chicago Young Men's Christian Assoc.....	40,000
Olivet College, Michigan.....	25,000
Marietta College, Ohio.....	25,000
Sheridan College, Wyoming.....	25,000
McKendree College.....	25,000
Presbyterian Board of Missions	20,000
Grand Prairie Seminary, Onarga, Ill.....	20,000
Anatolia College, Turkey	20,000
Woman's Board of Foreign Missions.....	20,000
Chicago Art Institute.....	15,000
Unknown College.....	200,000
Northwestern University.....	30,000
Colorado College	50,000
Grand total.....	\$2,465,000

It is generally believed that Dr. Pearsons' anonymous gifts will bring the total close to \$3,000,000.

MR. W. J. THOMPSON, of Pittsburg, has given Washington and Jefferson College \$50,000 for a library building and \$10,000 for equipment.

THE Hon. Roger Wolcott, formerly governor of Massachusetts, who during his life time gave liberally to Harvard University, has by his will bequeathed \$20,000 to the institution.

THE daily papers report that Mr. Alfred Vanderbilt has given \$30,000 to the bi-centennial fund of Yale University.

At the meeting of the trustees of Ripon College, December 19th, President Flagg tendered his resignation. The administrative work of the college will continue in the hands of the dean of the faculty, Professor Marsh, as it has during the fall term.

PROFESSOR ARTHUR THOMPSON, of Oxford, has been elected Professor of Anatomy in the Royal Academy, London.