

for those Fellows who may wish to visit the Establishment during the noon recess. The president of the University, Dr. Rush Rhees, and the Trustees will tender a reception to the Fellows of the Society at the president's house on Thursday evening, January 2. The customary dinner will be arranged, probably for Wednesday evening.

No special reduction of railroad fare can be secured for the meeting, but during the holiday season reduced rates can usually be obtained from important railroad centers.

*PROGRAM OF AMERICAN SOCIETY OF
NATURALISTS.*

Tuesday, December 31, 1901.

8.00 P. M., Kent Theater, University of Chicago.—Address of welcome, by President W. R. Harper. Lecture by Dr. Leland O. Howard. Subject: 'International Work with Beneficial Insects.'

9.30 P. M., the President's House.—A Reception to all the Societies, by President Harper.

Wednesday, January 1, 1902.

2.00 P. M., Kent Theater.—Business meeting.

3.00 P. M., Kent Theater.—Discussion. Subject: 'The Relation of the American Society of Naturalists to other Scientific Societies.' Charles Sedgwick Minot, Harvard Medical School; C. B. Davenport, University of Chicago; W J McGee, Washington; William Trelease, Washington University, St. Louis; E. A. Birge, University of Wisconsin; J. McKeen Cattell, Columbia University.

6.45 P. M., Auditorium Hotel.—Business meeting.

7.00 P. M., Auditorium Hotel.—Annual dinner. Address of the President, Professor William T. Sedgwick, 'The Modern Subjection of Science and Education to Propaganda.'

LOCAL COMMITTEES.

Executive.—C. B. Davenport, Chairman; E. O. Jordan, Secretary; W. A. Locy, Treasurer; L. F. Barker, C. R. Barnes, John M. Coulter, John Dewey, H. H. Donaldson, G. A. Dorsey, F. R. Lillie, Jacques Loeb, E. P. Lyon, C. O. Whitman.

Reception.—H. H. Donaldson, Chairman; C. W. Andrews, Miss Helen Culver, W. R. Harper, Mrs. Martin A. Ryerson, G. C. Walker, Mrs. Coonly-Ward, C. O. Whitman.

Transportation.—Frederick J. V. Skiff, Chairman; G. A. Dorsey, F. R. Lillie, Willard A. Smith.

General.—C. M. Child, C. B. Davenport, George Dreyer, John Dewey, H. H. Donaldson, G. A. Dorsey, W. S. Hall, L. Hektoen, E. O. Jordan, F. R. Lillie, W. A. Locy, Jacques Loeb, A. P. Matthews, A. R. Reynolds, C. O. Whitman.

RAILROADS.

The New England Passenger Association, the Trunk Line, the Central and the Western Passenger Associations have granted the usual reduction (one and one third fares for the round trip) to those attending the meeting and provided with 'certificates.' The certificates, not transferable, must be obtained from the ticket agent at the starting-point (or, if the starting-point is not an important station, at the nearest station issuing certificates) to the place of meeting, at least thirty minutes before the train leaves. The going ticket may be purchased not earlier than December 26 or later than December 31. The certificate must state that the object of making the journey is to attend the meeting of the Affiliated Scientific Societies at Chicago, and they must be signed on December 31, January 1 or January 2, by Dr. L. W. Williams and by the special railway agent in attendance at the meetings on these three days.

SCIENTIFIC NOTES AND NEWS.

It is announced by cablegram from Stockholm that the Nobel prize in medicine has been awarded to Professor Behring, the prize in physics to Professor Röntgen and the prize in chemistry to Professor Van't Hoff. The value of each of the prizes is about \$40,000. The prize for the promotion of peace has been divided between Dr. Dumant and M. Passy, and the prize in literature has been awarded to M. Prudhomme.

THE Symons gold medal of the Royal Meteorological Society has been awarded to Dr. Alexander Buchan, F.R.S.

PROFESSOR ALFRED C. HADDON, of Cambridge University, lectured before the New York Academy of Sciences and the American Ethnological Society on December 11, his subject being 'The Ethnography of British New Guinea.' Professor Haddon sailed for England on December 14.

THE Academy of Natural Sciences of Philadelphia, has nominated Professor E. G. Conklin, of the Biological Department of the University of Pennsylvania, for vice-president; and Dr. J. P. Moore, of the same department, for corresponding secretary.

SIR WILLIAM ROBERTS-AUSTEN, K.C.B., F.R.S., will deliver the tenth 'James Forrest' lecture at the Institution of Civil Engineers on April 17, 1902, the subject being 'Metallurgy in Relation to Engineering.'

DR. N. SIEBER-SCHUMOW, a woman, has been temporarily appointed to fill the place of the late Professor Nencki as head of the Department of Biological Chemistry in the Imperial Institute of Experimental Medicine, St. Petersburg.

THE Board of Overseers of Harvard College has voted that 'a joint committee of the corporation and this board be appointed to confer with Mr. Alexander Agassiz and request him to sit for a portrait to be placed in the museum as a gift from friends of his and of the university, there to remain a memorial of the great service rendered by Professor Agassiz to that department.'

AN oil painting of Professor John Johnson, LL.D., who was professor of natural science at Wesleyan University from 1837 to 1879, has been presented to the library.

As a memorial of the late Professor Dickson, there have been presented to the Glasgow University library 388 volumes of Migne's 'Pathology,' a work which Dr. Dickson long desired to acquire for the library.

A PORTRAIT of Mr. G. D. Liveing, professor of chemistry at Cambridge University, was presented to St. John's College on December 7, as a testimonial in recognition of his valuable services to science, to the university and to the town. The portrait, which is by Sir George Reid, is of three quarters length. Arrange-

ments have also been made for a bronze bust of Professor Liveing, by Miss Edith Bateson, which will be placed in the chemical laboratory during next year.

DR. CHARLES J. ESSIG, professor in the dental department of the University of Pennsylvania, has died at the age of seventy-four years. In 1878 he organized the dental department of the University of Pennsylvania, and was for many years its dean and secretary. He was the editor of 'The American Text-Book of Prosthetic Dentistry,' and the author of a well-known treatise on dental metallurgy.

MR. WILLIAM RICH HUTTON, a well-known civil engineer, died on December 11 at the age of seventy-five. He was a member of the American Society of Civil Engineers, the Institution of Civil Engineers of London and of the Société des Ingénieurs Civils de France.

MISS H. M. GOULD has given \$5,000 to New York University for the establishment of a museum of pedagogy, with the understanding that this should be applied in the first place to an exhibit of the work done for education by New York University, and that this should form an exhibit at the World's Fair at St. Louis in 1903, and afterwards become the property of the School of Pedagogy.

THE Association of American Universities will hold its annual meeting at Chicago, during the last week of February next.

AN election for officers of the Botanical Section of the Academy of Natural Sciences of Philadelphia, December 9, 1901, resulted in the choice of the following persons: *Director*, Benj. H. Smith; *Vice-Director*, Joseph Crawford; *Corresponding Secretary*, John T. Pennypacker; *Recorder*, John W. Harshberger; *Treasurer and Curator*, Stewardson Brown; *Directors*, Benj. H. Smith, Joseph Crawford, Stewardson Brown, Ida A. Keller, John T. Pennypacker.

MR. FREDERIC A. LUGAS, curator of the Division of Comparative Anatomy at the U. S. National Museum, lectured before the Woman's College of Baltimore, December 3, on 'Dinosauria.' Sir Robert Ball, of the University of Cambridge, Eng., lectured on December 6, his subject being 'Other Worlds than Ours.'

AMONG the lecturers before the Technology Club of the Massachusetts Institute are Dr. Ira Remsen, president of the Johns Hopkins University (Dec. 12); Professor George E. Hale, director of the Yerkes Observatory (Jan. 3); Professor Arthur A. Noyse (Feb. 18); Mr. William Barclay Parsons, chief engineer of the New York subway (Feb. 26); Mr. F. H. Newell, chief hydrographer, United States Geological Survey (Mar. 3).

THREE additional lectures on archeology have been arranged for December at the University of Pennsylvania. The first one will be on 'The Archeology of Michigan,' by Mr. Harlan I. Smith, of the American Museum of Natural History, New York. The second by Stewart Culin on 'Archeological Notes on the John Wanamaker Expedition of 1901.' The last lecture before the holidays will be on 'The Cliff Dwellers and their Relations,' by Dr. J. Walter Fewkes, of the United States Bureau of Ethnology, Washington, D. C.

It is announced that Boothia Felix has been chosen as the headquarters for Professor Amundsen's three-year magnetic pole expedition. Boothia Felix is a peninsula, and is the most northern part of the mainland of North America, having east, Boothia Gulf; north, Bellot Strait, and west, Franklin Channel. The magnetic pole is in this peninsula, the northern point of which is in about latitude 72 degrees north.

AN assistant is wanted for the respiration calorimeter experiments and other nutrition investigations in the chemical laboratory of Wesleyan University and for work in the collating of results of foreign inquiry and preparing reports for publication. A chemist or physiologist, or better, a physiological chemist, of university training, preferably a Ph.D. or M.D., is desired. Scholarly spirit, ability for independent research, familiarity with German, French and other chemical and physiological literature, or, at least, the capability of becoming familiar with such literature are important. A man capable of becoming a university professor or director of a scientific establishment is desired. The salary at the outset will be from \$1,000 to \$1,500, according to the qualifications, with the

chance of increase to that of an associate professorship or professorship. There may also be a second position for a man of similar abilities and academic training but with less experience and correspondingly smaller salary, very probably the equivalent of a fellowship, with opportunities for study and advancement. The work is connected with the inquiries regarding the food and nutrition of man which is being carried on under the auspices of the U. S. Government in universities, colleges and experiment stations in all parts of the country and has its headquarters at Wesleyan University. The association with a number of trained specialists, the atmosphere of research, unusual library facilities and opportunity for experimental inquiry, study and advancement make the positions very desirable for young and ambitious men. Applications for either of the above positions may be made to Professor W. O. Atwater, Wesleyan University, Middletown, Conn.

THE United States Geological Survey has in press a work entitled 'Bibliography and Catalogue of the Fossil Vertebrates of North America,' by O. P. Hay. It contains a list of about 4,100 papers which bear on the fossil vertebrates of North America and a systematic list of all the species that have been described. Furthermore, there goes with each species citations of all the works in which it has been described and discussed. An estimate shows that there are altogether about 40,000 citations. The book forms bulletin No. 179 of the Survey, and will be issued probably early in the coming year.

HENRY S. CARHART, professor of physics in the University of Michigan, and Horatio N. Chute, instructor in physics in the Ann Arbor high school, are writing a new work on physics, which will be completed in about two months. The work will be called 'High School Physics.'

THE London *Times* states that Dr. Charles Balfour Stewart has proceeded to Sierra Leone under the auspices of the Liverpool School of Tropical Medicine to study the methods successfully utilized by Dr. Logan Taylor in dealing with malaria. Dr. Balfour Stewart has had considerable experience in India, and the knowledge he there acquired proved very ser-

viceable on the recent appearance of plague in Liverpool. Now he intends to commence his attack on malaria at Cape Coast Castle, where there is great mortality among Europeans. Under Major Ross he will have the general direction of operations for improving the drainage and general sanitary conditions of Cape Coast Castle, clearing away the stagnant pools which are breeding-places for the *Anopheles* mosquito. Though Dr. Balfour Stewart has been engaged for a year by the Liverpool School of Tropical Medicine, he will, it is expected, remain on the West Coast while his help is needed to place the sanitary conditions of the colony on a satisfactory basis. He also contemplates operations in the mining districts, but will be guided by the advice of the Governor of the Gold Coast. Thus the sanitary crusade against malaria will shortly be in operation on the whole coast from the Gambia to Lagos.

MR. A. MONTEFIORE PRICE writes to the *London Times* as follows: "Now that the more serious work of the British Association is over it may perhaps interest your readers if I draw attention to some curious examples of science adapted to heraldry. I derive them from the banners and bannerets which have been hanging up in the reception room of the British Association at Glasgow during the past week. The banner, for example, of Sir William Huggins, who was president at the Cardiff meeting, 1891, shows the solar spectrum for a crest and the constellation of Orion for a coat of arms. That of Sir William Crookes presents a radiometer and three prisms, together with the quaint motto 'Ubi crux ibi lux.' Herschel was president of the meeting at Cambridge so long ago as 1845, and on his arms there appropriately appear the sun in the chief and a telescope in the base. Sir William Turner, who presided last year at Bradford, bears as a charge a wheel; Siemens blazons what is apparently a beetroot—he was interested, I believe, in sugar produced from that source, and Sir Roderick Murchison, who was president at Southampton so long ago as 1848, a pecten shell—suitably enough for so a great geologist. Sir William Flower's banner shows a coat bearing a cinquefoil and the punning motto 'Et flores et fruchus.' Lord Lister (Liverpool, 1895) blazons the staff

and serpent or *Æsculapius*; Dawson, who presided at Birmingham in 1886, has three daws on his coat; and Sir George Airy (Ipswich, 1851), Sir Henry Roscoe (Manchester), and Sir Michael Foster (Dover) display the arms of those towns and presumably did not possess personal arms."

WE learn from the *London Times* that the business and finance committee of the general council of Edinburgh University has prepared a report on the subject of the Carnegie Trust. It says that chairs in the University founded long ago embrace nominally many subjects which, if they are to be followed beyond* their elementary stages cannot profitably be now taught by one man. It may be possible for a professor to give systematic instruction over the whole subject to ordinary students, but for the purpose of higher study and research by the professor and the advanced students there is now great urgency, if not for splitting up the subject, at least for the creation of junior associate professorships to relieve the pressure and to enable more personal practical instruction to be given to the students. Any such professorships instituted by the Carnegie Trust might, therefore, with great advantage be attached to the four universities in common, subject to some new arrangement. Many benefits, besides the obvious one of economy, would accrue from the introduction of community and reciprocity as working ideas into Scottish university life. One of the foremost claims upon the trustees will be to strengthen the modern language departments in each of the universities. Traveling scholarships would be a great incentive and benefit to students. Research in medicine and science demands a large portion of the immediately available income in the hands of the Carnegie trustees. What have been required for long are special research laboratories in which higher students would in the first instance be trained in the methods and apparatus of research. Mr. Carnegie's position as a founder of libraries is a guarantee that the University libraries will receive adequate consideration at the hands of the trustees. With regard to the payment of University class fees the report says that the scheme should give a great impetus to education throughout the country. Some such

stimulus has been needed, as of late the number of university students has tended to decrease. The committee further presents an interim report on the decrease of students pending a fuller investigation which is to include the other Scottish universities and English and foreign schools. In Edinburgh the number of students continuously decreased from 3,576 in 1889-90 to 2,825 in 1895-96, above and below which figure they have fluctuated but slightly.

THE Royal British Commission on Tuberculosis is now sitting in London. The experimental part of its work will be carried out near Stansted, in Essex, on two farms that have been placed at the disposal of the commission by Sir James Blyth.

UNIVERSITY AND EDUCATIONAL NEWS.

MR. JOHN D. ROCKEFELLER, has made a further gift of \$1,250,000 to the University of Chicago, making the total amount given by him \$10,251,000.

BY the recent death of Mrs. Anne Wentworth, of Lowell, Mass., Dartmouth College will, it is said, come into the possession of an estate worth about \$500,000, bequeathed to it by Tappan Wentworth.

WESLEYAN UNIVERSITY has secured \$100,000 which will be used for an administration building, and \$25,000 toward a fund for the building of an observatory and scientific laboratories.

It is reported that Mr. Carnegie will liberally endow the Carnegie Laboratory of Engineering of the Stevens Institute on the occasion of the dedication on February 6.

DR. PURDIE, professor of chemistry in St. Andrews University, has offered the University a gift of £5,000 for the purpose of building and equipping a small chemical research department at St. Andrews. In his letter to Principal Donaldson intimating the gift, Professor Purdie says that their universities are very poorly provided for research when compared with those of foreign countries, and that scientific industries suffer in consequence.

THE physical laboratory of the University of Michigan will be enlarged next year by taking in the third floor of the building, which has

hitherto been devoted to bacteriology, and possibly by the addition of a large lecture room to seat 300 persons. The present capacity of the building is insufficient to accommodate the 500 students who are taking courses in physics.

FIRE of unknown origin destroyed the main building of the University of Wooster. The loss is estimated at \$250,000, with insurance of about \$70,000. It is supposed that an explosion of chemicals in one of the laboratories was the cause.

THE registration at the Sheffield Scientific School of Yale University this year and last is as follows:

	1900-1901	1901-1902
Graduate Students	105	133
Seniors	134	128
Juniors	143	143
Freshmen	199	245
Special Students	29	26
	610	675

There is thus an increase of 65 students, especially noticeable being the increase in the number of graduate students and of the Freshman class.

The number of dental students in America from foreign countries is increasing every year. In the dental department of the University of Pennsylvania this year 80 of the 364 registered students are foreigners, representing a large number of nationalities.

MR. JOHN A. BRASHEAR has been elected Chancellor of the University of Western Pennsylvania. Mr. Brashear was last year vice-president of the American Association for the Advancement of Science and chairman of the Section of Mechanical Science and Engineering.

DR. HENRY LEFAVOUR, professor of physics at Williams College, and dean of the faculty, has been elected president of the newly-organized Simmons College for Women at Boston.

PROFESSOR E. G. HARRIS, of the Missouri School of Mines, has been elected professor of civil engineering in the University of Pennsylvania.

DR. THEODORE W. RICHARDS has been elected full professor of chemistry at Harvard University. It will be remembered that Professor Richards was recently called to a chair of chemistry at Göttingen.