An impressive architectural plan for the whole campus has been prepared by the distinguished New York architect, Mr. Bertram G. Goodhue, and all the new construction is being carried out in accordance with this plan.

There have recently become associated with the faculty of the institute a number of well known investigators. Dr. Arthur A. Noyes has resigned his position at the Massachusetts Institute of Technology to become director of chemical research at the California Institute. Dr. Robert A. Millikan, of the University of Chicago, has arranged to spend one term of each year at the institute, and will have general supervision of the research and instruction in physics. Professor Albert A. Michelson, of the University of Chicago, will also spend much of his time there for the purpose of carrying on researches on the fundamental problem of earth tides, for which the necessary equipment is now being installed. Dr. Harry Bateman, formerly of Cambridge University and Johns Hopkins University, had previously joined the faculty as professor of aeronautical research and mathematical physics.

In the development of the institute special emphasis is being placed upon research, not only because every institution of higher education should contribute to the advancement of science, but also and particularly because a prominent feature of the work of instruction is to be the training of engineers of the research or creative type. While the institute will continue to offer four-year undergraduate courses which fit its students directly for the positions of operating and constructing engineers, two new courses of instruction, to be known as the courses in physics and engineering and in chemistry and engineering, will soon be announced by the faculty, in which special stress will be laid on an unusually thorough grounding in the three fundamental sciences of physics, chemistry and mathematics; and in the last two years of which much time will be assigned to research in physics and chemistry; the time required for these purposes being secured by omitting

some of the more technical engineering subjects included in the other engineering courses.

The faculty has also been strengthened on the side of humanistic studies by renewal of the arrangement with Alfred Noyes, the English poet, which was in effect before the war, under which he will during the next year give courses of lectures on English literature; and by the appointment of Paul Perigord as professor of economics.

THE ANNUAL MEETING OF THE BOARD OF TRUSTEES OF THE AMERICAN MUSEUM OF NATURAL HISTORY

ANNOUNCEMENT of the nature and scope of the activities of the American Museum of Natural History during the past year and of a prospectus for the coming fifty years was made on February 2 by President Henry Fairfield Osborn, at the annual meeting of the board of trustees, held at the home of Arthur Curtiss James, 39 East 69th Street, who acted at host.

Due to its urgency, the matter of maintenance and building funds was given prominence. It was reported that the Museum is now facing the most critical time of its history.

While progress is being made in many directions, President Osborn said, it is not symmetrical, and in order to secure a harmonious educational treatment and to truthfully arrange our present collections, the museum needs double the space which it now occupies. It is fifteen years since the building has been enlarged, and during this time the collections have nearly doubled. President Osborn ascribes this marking time of progress not to lack of cooperation on the part of the board of estimate and apportionment of the city, which has recently manifested its confidence in the institution by increasing the annual maintenance fund fifty per cent.; nor to lack of interest on the part of the trustees, who have been signally generous, contributing the sum of over \$100,000 in 1919 alone to meet deficiencies in the budget: nor to lack of friendliness on the part of the Board of Education, which has also given its cooperation. He gave three very sufficient reasons in the following: the unprecedented growth of the collections; the actual shortage of funds in the city treasury; and the interruption by the war of building extension through personal subscription of the trustees which was planned in 1913.

He went on to point out that the whole educational system of New York city and state has suffered from the same causes; that conditions have arisen where we are compelled to take a very large and constructive view of the future. The need of the hour as felt in every one's mind is Americanization, which can be accomplished only through the thorough training of our youth according to American ideals. The free schools, colleges, libraries, museums, scientifically arranged parks and aquaria, free lectures and free concerts designed for instruction and inspiration form the structure on which Americanization rests. In this structure, the American Museum has won a vital place. In its school educational work, the museum holds a strong position. In the last five years it has reached 5,650,595 children directly and indirectly through its lecture system and traveling museums; it has expended \$89,126.08 of its own funds directly on public education, in addition to the \$1,538,057 expended on explorations, collections and researches, the results of which ultimately find their way into the school mind. The scope and efficiency of its public educational work is such as to have called forth the enthusiastic admiration of the British Educational Mission on its recent visit, and to be taken as a model for educational development in Great Britain.

With all this obvious advance, the museum has in certain ways come to a full stop in its educational activities. This is particularly true of exhibition work. In hall after hall the arrangement is less truthful and more misleading than it was twenty years ago, for the collections are jumbled together out of their natural order, giving, in cases entirely erroneous impressions. It is therefore, not a civic luxury, but a *paramount educational necessity* which demands the enlargement of the museum buildings and the provision of the necessary equipment. The most important thing for the museum to-day is immediate building space and equipment. And the next most important thing is the immediate increase of its general endowment by not less than \$2,000,000 in addition to the munificent bequest of Mrs. Russell Sage.

In exploration and field work but little more activity was possible than in 1918. Roy C. Andrews continued his work in northern China and Mongolia, and has been eminently successful in securing valuable series of goral, serow and mountain sheep. Paul D. Ruthling and Karl P. Schmidt have collected reptiles and amphibians in Mexico and Porto Rico. Henry E. Crampton has continued his work in the Society Islands; George K Cherrie and Harry Watkins have secured collections of small mammals and birds in Venezuela and Peru; and Herbert J. Spinden has made archeological collections in Peru. Colombia, Dutch Guiana and Central America. In the United States, valuable and unique archeological and ethnological material was secured in Arizona and New Mexico by Leslie Speir and Earl H. Morris, and a collection of Miocene fossils including a slab containing a number of skeletons of the twohorned Rhinoceros Diceratherium were obtained by Albert Thomas in Nebraska.

During the year over 600 accessions to the collections were recorded. Some of the more important gifts were: the painting of the eclipse of the sun in 1918 by H. R. Sutler, presented by Edward D. Adams; a Chinese painting on silk of the last dynastic period, 1761, presented by Ogden Mills; a lacquered dog-house from a Chinese imperial palace, from Miss Theodora Wilbour; skin of an albino deer, from Archibald Harrison; a series of bronze objects from Sumatra from Arthur S. Walcott; and a collection of ethnological specimens from Zuni, from Mrs. Elsie Clews Parsons.

Nearly 900,000 people visited the museum in 1919, exceeding by 175,000 the attendance of 1918. The net gain in membership was 615, the total membership now being 5,183. Childa Frick was elected a trustee.

Those present at the annual meeting were: Thomas DeWitt Cuyler, Cleveland H. Dodge, Walter Douglas, Madison Grant, William Averell Harriman; Archer M. Huntington, Adrian Iselin, Arthur Curtis James, J. P. Morgan, Henry Fairfield Osborn, Percy R. Pyne, Theodore Roosevelt, John B. Trevor and Francis D. Gallatin.

NEW YORK MEETING OF THE AMERICAN IN-STITUTE OF MINING AND METALLURGICAL ENGINEERS

THE American Institute of Mining and Metallurgical Engineers under the presidency of Mr. Hoover, met in New York City this week. Three sessions of the annual meeting were devoted to the subject of coal. In the first of these facts were brought out on some of the questions around which controversies raged during the recent strike, including: Why is production intermittent? How and when do the irregularities occur? How many days a year do the men actually work? What are the actual wages received by men during each season and in what way can the wage basis be changed? How and where can coal be stored at the mine, at industrial plants or elsewhere?

The fundamentals of the problem were presented in a series of papers by authorities. Van H. Manning, director of the U. S. Bureau of Mines, outlined conditions in a paper on "The problems of the coal industry." George Otis Smith, director, U. S. Geological Survey, presented a statistical analysis of the rate of output over a period of years, showing the relative effect of shortage of transportation and of labor and lack of market and other factors in the production of coal. H. H. Stoek, of the University of Illinois, discussed the storage of bituminous coal at the point of production, at centers of distribution and by the consumer. S. L. Yerkes discussed transportation as a factor in irregularity of coal-mine operation.

The business side was presented by Eugene McAuliffe, president of the Union Colliery Company, in a paper on stabilizing the market. Edwin Ludlow, of the Lehigh Coal and Navigation Co., discussed conservation as applied to mining methods, by-products and consumption.

Unpaid taxes on mines amounting to \$200,-000,000 were involved in a discussion at an open forum held on the subject of mine taxation. The views both of the government and the mine owners were presented, the discussion being led by Ralph Arnold, valuation expert of the Petroleum Division of the Internal Revenue Department; J. R. Finlay, who evaluated the mines of the state of Michigan; J. Parke Channing, of New York, and R. C. Allen, vicepresident of the Lake Superior Ore Association.

In the evening of February 17 more than one thousand delegates and their friends attended a banquet at the Waldorf-Astoria at which Lawrence Addicks was toastmaster. President Herbert Hoover, retiring President Horace V. Winchell and Professor James F. Kemp, of Columbia University, were the speakers.

Besides Mr. Hoover as president, the following officers were elected: Frederick Laist, Anaconda, Mont., and Seeley W. Mudd, Los Angeles, vice-presidents. W. R. Walker, New York; A. S. Dwight, New York; R. M. Catlin, Franklin Furnace, N. J.; G. H. Clevenger, Washington, D. C., and W. A. Carlyle, Ottawa, Canada, directors.

RESOLUTIONS ON THE DEATH OF SIR WILLIAM OSLER

ON motion of the executive committee of the Federation of American Societies for Experimental Biology in Cincinnati December 30, 1919, the following minute was drafted:

In the death of Dr. Osler, the medical profession has suffered an immeasurable loss. Belonging to no cult, or age, or clime, but descended in direct line from Hippocrates, he was master of the art of medicine in its purest form. As a teacher, he was again master, painting with broad strokes pictures of disease never to be forgotten by the student. An investigator and an inspirer of investigation, a worthy counsellor of brother physicians, a delver in the history of medicine, and an ornament to its letters; and withal so human and of such rare personal charm as to be beloved of all who came in contact with him. Such was the man we mourn.

We grieve not only at loss of leader and friend,