## THE MUSEUM OF SCIENCE AND INDUSTRY AND THE CENTURY OF PROGRESS EXPOSITION

THE Museum of Science and Industry at Chicago, according to the Museum News, will receive many important exhibits from the Century of Progress Exposition, which closed on October 31. From the Hall of Science at least 170 separate exhibits in the fields of physics, chemistry, biology, geology, medicine, engineering and astronomy will be transferred to the museum. Historical material in the sciences includes a diorama of Benjamin Franklin's kite experiment; replicas furnished by the Government of Italy of instruments used by Marconi in early transatlantic wireless experiments, of one of Galileo's telescopes, of the first alternating current generator designed by Pacinotti in 1865 and of Nobili's galvanometer, and a large group of exhibits furnished by the Government of Denmark.

In the field of chemistry probably the most important exhibit obtained is the periodic table of the elements from the Hall of Science. All the ninety-two elements are shown in this exhibit, to which six universities, Ward's Natural Science Establishment, the Memorial Hospital in New York and more than thirty commercial organizations contributed. The chemistry of petroleum is shown in a group of exhibits contributed by the industry. Other exhibits in chemistry are a diorama of the mining of sulphur and demonstrations of the chemistry of coal tar, chemical changes and processes and colloid chemistry.

In physics the museum obtains demonstrations in molecular motion, in sound and speech, in electromagnetism and in light. A group of exhibits on color and rays demonstrates the three primary colors, the photoelectric cell, helium and radium rays and the principles of television.

In biology models of generalized plant cells show cell division, a group of models illustrates roots and root characteristics and another group shows the origin of beeswax, spermaceti and whale wax, lanolin, paraffin wax, vegetable waxes and the uses of wax.

In geology two groups of exhibits illustrate methods of prospecting and drilling for oil; a generalized model shows an Artesian basin, a source of ground water and a diorama of Indiana sand dunes, with a small moving dune in the foreground, demonstrates how the dunes are shifted by the wind.

The Government of Italy contributes groups of exhibits on engineering and medicine, and the Government of Denmark groups on astronomy, physics and chemistry.

From other buildings, material is contributed by the U. S. Government and several of the states. Also exhibits, largely of commercial origin, are promised from the Electrical Building, Agriculture Building, Home Planning Hall, Social Science Hall, Colonial Village, Southern Cypress House and the buildings of Sears-Roebuck, T. & T., General Motors, Common Brick Association, American Radiator, Ford, General Houses, Lumber Association and Wings of a Century. Altogether the museum will receive more than 230 exhibits and groups of exhibits from the fair.

## THE PITTSBURGH MEETING OF MATHEMATICIANS

THE nineteenth annual meeting of the Mathematical Association of America will be held under the presidency of Professor Arnold Dresden, of Swarthmore College, at Pittsburgh, Pennsylvania, on Saturday, Monday and Tuesday, December 29 and 31, 1934, and January 1, 1935, in affiliation with the American Mathematical Society and the American Association for the Advancement of Science. The meetings will be held in the Administration Building of the Carnegie Institute of Technology.

At a joint session of the three organizations on Monday morning Professor C. N. Moore as retiring chairman of Section A will deliver an address on "Mathematics and Science" and Professor Arnold Dresden as retiring president of the Mathematical Association will speak on "A Program for Mathematics."

A significant feature of the week will be a joint session of the association with the National Council of Teachers of Mathematics on Saturday afternoon at which Professor W. L. Hart, representing the association, and Professor P. W. Hutson and Dr. M. L. Hartung, representing the National Council, will discuss "The Need for a Reorientation of Mathematics in the Secondary Schools." Separate sessions of the National Council will also be held on Friday evening and Saturday morning.

Sessions of the Mathematical Association will be held on Monday afternoon and Tuesday morning. The Monday session will be devoted to a symposium (of non-advanced character) on "Equipotential Loci of Green's Function," led by Professor J. L. Walsh, with the assistance of Professors Morris Marden and J. J. Gergen. At the Tuesday session Professor A. A. Bennett will speak on "The Cubic Equation and the Geometry of the Triangle"; Professor T. R. Hollcroft on "Linear Systems of Algebraic Surfaces," and Professor R. L. Jeffery on "Productive Scholarship in the Undergraduate College." The annual business meeting and election of officers will be held at the close of the session Monday afternoon. The complete program will be mailed to members early in December, as usual.

The Mathematical Society will hold regular sessions on Thursday, Friday and Saturday in the Administration Building. Professor A. B. Coble will deliver his