

EXHIBITION OF THE ROYAL METEOROLOGICAL SOCIETY

AN exhibition arranged by the Royal Meteorological Society in the Science Museum, South Kensington, was opened on January 11 by Sir Napier Shaw, formerly director of the Meteorological Office, who spoke on the progress of meteorology during the last twenty years.

According to the *London Times*, the exhibition, which was on the second floor of the museum, was especially remarkable for the display of photographs of cloud-formations taken by members of the society. While these were chosen for the scientific information which they contain, many of the effects shown being rarely observed, the technical and esthetic quality of the prints is equally noteworthy. Among the observers whose work was illustrated are Mr. E. G. Bilham, Captain C. J. P. Cave, Mr. G. A. Clarke, Mr. F. W. Baker and Mr. A. V. V. Clayden. Sir Gilbert Walker showed photographs of natural cloud-formations, with parallel photographs of the same phenomena illustrated on a smaller scale in liquids such as evaporating spirit and oil. Diagrams of typical cloud-formations were also illustrated from the new International Cloud Atlas.

A display of historical instruments was lent by the Meteorological Office, while modern instruments were illustrated through a trade exhibit by British firms and by several official exhibits on a large scale. One stand contained the constituents of a typical Air Ministry meteorological station, including a Stevenson screen with its maximum and minimum and dry and wet-bulb thermometers, a Fortin barometer with magnifying eyepieces, an Owens air-filter for measuring impurities, a stream-line wind-vane, and a range-gauge designed for mountain use, with special precautions against bursting under frost. Opposite this is to be seen a gigantic anemometer of the type used by the Air Ministry to measure the velocity of air-currents, but with its normal height of 40 ft. or 50 ft. reduced to 12 ft. to get it in the gallery.

The developments of the Campbell-Stokes sunshine recorder during the half century since its invention was also demonstrated through comparative exhibits, while lightning conductors were shown in a special case, the examples including one installed by Benjamin Franklin on St. Paul's. There were also screens displaying the changes in the distribution of rainfall averages over the British Isles by week, month, year and decade. The heaviness of the annual rainfall appears to vary in a roughly triennial cycle, but it is seen that the remarkable rainfall of 1872 has not since been paralleled.

Public lectures on meteorology were given at the museum during the exhibition. The first, by Mr. D.

Brunt, described the part played by meteorology in history. Dr. G. C. Simpson, director of the Meteorological Office, explained modern weather forecasting, and Captain C. J. P. Cave and Colonel Sir Henry Lyons (director of the Science Museum), spoke respectively on clouds and on historic meteorological instruments. The exhibition remained open for one month.

THE WESTCHESTER INSTITUTE OF SCIENCES

THE committee of five, appointed at the first meeting of the Westchester Institute of Sciences on December 16, last, met on January 7 to formulate a temporary organization for the institute. The meeting was held at the Boyce Thompson Institute for Plant Research in Yonkers at the invitation of Dr. William Crocker, its director.

The committee consisted of Dr. Crocker, Professor Roy J. Colony, of Columbia University, Mr. George P. Engelhardt, entomologist and museum expert, Mr. Albert Brand, ornithologist, and Mrs. Mary Welleck Garretson, formerly supervisor of the Nature Lore Workshop, as chairman.

As a result of this meeting, it was decided to form a temporary organization until fall, with temporary officers in charge. The names of those nominated are as follows:

Chairman: Dr. H. H. Sheldon, physicist, or Dr. For-man T. MacLean, botanist.

Vice-chairmen or Advisers: Dr. William Crocker, botanist, and Professor Roy J. Colony, geologist.

Secretary: Mrs. Mary Welleck Garretson, geologist.

There are to be five program meetings on the evenings of the third Thursdays of each month beginning in January. Three of the programs are planned and will be held in various parts of the county rather than in one place.

The first meeting will be in the Eastview Avenue Junior High School, White Plains, and after a short business session and the admission of members, there will be a first showing of the motion pictures of the Graves-Thorne expedition to Alaska and northern Siberia for the Field Museum of Chicago. The talk with the pictures will be given by Mr. John Jonas, explorer-naturalist of the expedition.

The second meeting, by the kindness of Dr. Crocker, will be held at the Boyce Thompson Institute and will consist of a series of short talks illustrated by pictures or demonstrations by the research scientists of the institution. It will be a meeting of especial interest to science teachers.

The third meeting, in March, will have for its program an illustrated talk on "The Geology of West-

chester" by Professor R. J. Colony, of Columbia University.

Any one interested in becoming a member of the Westchester Institute of Sciences should apply to the secretary, Westchester Institute of Sciences, of the Westchester County Conservation Association, 8 Martine Avenue, White Plains. Scientific men, science teachers, nature science workers and all persons interested in science or nature are invited to attend the meetings and to join the institute. Nominal dues of one dollar for this season cover membership.

THE FIELD MUSEUM OF NATURAL HISTORY

FINAL statistics on the activities of the Field Museum in 1931 indicate that more than 2,240,000 persons benefited directly from the work of the institution during the year. This figure includes the number of visitors to the museum—1,515,540, a total which exceeds by far any previous year's record in the history of the institution—and also more than 727,000 children reached by extra-mural activities of the museum.

The year was the fifth in which the attendance exceeded one million. The increase over the 1930 total of 1,332,799 visitors is 182,741 or approximately 13.5 per cent., and compares with a gain of 164,369 made in 1930 over 1929.

While the total attendance increased so notably, all the gain was in free admissions, the paid admissions decreasing from 160,924 in 1930 to 126,209 in 1931, a development which undoubtedly may be largely attributed to the economic conditions which have prevailed during the past year. The attendance on free days plus the free admissions on pay days granted to members, children, teachers, students, etc., amounted to 1,389,331, or considerably more than the total of free and paid admissions together in 1930. It is estimated that more than one third of the total number of visitors were children.

The additional 727,000 children coming under the influence of the museum's educational work are accounted for as follows: The James Nelson and Anna Louise Raymond Foundation, in addition to providing programs at the museum itself for thousands of children, reached 227,351 school pupils through lecturers sent out to address them in their classrooms and assembly halls. (The total number reached by all Raymond Foundation activities, including both those inside and outside the museum was 303,693.) In addition, approximately 500,000 children were reached over and over again during the year by means of traveling exhibition cases displayed in all the public and many other schools (with changes of subjects every two weeks) through the Department of the N. W. Harris Public School Extension.

Less directly the museum reached probably millions of other persons by such various means as the circulation of its publications, reports in the newspapers, radio broadcasting, motion picture news reels, etc.

The highest attendance for any single day during 1931 was on May 21, when 51,917 visitors were received in the building. This was exceeded on only two previous days in the museum's history—June 20, 1926, with 54,024 visitors, and May 24, 1929, with 59,843 visitors.

The total attendance for the first ten years of occupancy of the present building (May 2, 1921, to May 1, 1931) was 8,597,409, as compared with a total of 5,839,579 for the more than twenty-five years during which the museum was located in its first building in Jackson Park.

At the annual meeting of the Board of Trustees of the museum, held on January 18, Messrs. John P. Wilson and Sewell L. Avery were elected as trustees to fill the vacancies left on the board by the death of R. T. Crane, Jr., and the resignation of William Wrigley, Jr.

For the twenty-fourth time Mr. Stanley Field was reelected President of the Museum. Mr. Field has held this office since January, 1909. All the other officers who served during 1931 were re-elected for 1932.

THE ENGINEERING SOCIETIES LIBRARY

THE year 1931 was the most active in the history of the Engineering Societies Library, according to the annual report of the director, Mr. Harrison W. Craver. Surpassing all previous records, the library responded to 42,659 requests for technical information, an increase of 2,577 over 1930. Its service extended to practically every country in the world.

A total of 27,943 visitors, 10 per cent. more than in 1930, taxed the seating capacity of the library, indicating that the time is approaching when additional space will be needed. Valuable book collections were acquired, and more than \$50,000 was expended during the year.

The book collection has been inventoried and only 1,267 books and pamphlets could not be found, a remarkably low number to have been lost in fifteen years, Mr. Craver says. While such losses are extremely annoying, they are inevitable when readers have free access to books. Fortunately, none of the missing works is of great value and almost all can be readily replaced. The general condition of the library is reported to be excellent. Through the Professional Engineers Committee on Unemployment, it has been possible to accomplish a large amount of work for which the staff could not spare time from regular duties.