Goehring-Schmidt charts have been drawn from first-hand information because all details with regard to plantations, to natives and to the preparation of plant products are true to nature and not made from imagination. The entire series is one of the most attractive sets of charts that has ever been produced.

Recently a number of geological and paleontological charts have come to the writer's attention. Very useful for the teaching of historical geology are Lindner's Wandtafel zur Erdgeschichte. The chart summarizes the principal facts of earth history and can be used not only for an introductory lecture but would also be valuable for permanent use during such courses in zoology and botany where constant reference to geologic epochs must be made. It is a chart which the students should carefully study provided that they know enough German to understand a limited number of geologic terms. The chart is divided in columns which deal with the different epochs and their subdivisions, with the distribution of sedimentary and igneous rocks in geologic time, with the history of structural changes, climates and organic developments, and with the varying distributions of land and water during the earth's history.

An attractive set of charts on paleontology is Fraas' Die Entwicklung der Erde und ihrer Bewohner, in seven colored charts, representing the most important epochs in the history of the earth. Each chart contains in its upper part a reconstruction of the principal animal and plant types arranged in an ideal landscape picture, with a legend in the left-hand upper corner, while the lower half of the chart shows the geologic profile of the rock formation on the right side, and a plate with index fossils of the respective period on the left side. The ideal landscape represents merely life at a given moment during the formation in question, but the profile generalizes the geologic sections through all important horizons of the entire period. Therefore the profiles of the different charts, taken together, give a continuous sequence of the geologic deposits through the earth's crust. It is obvious that this series would prove not only useful in introductory courses in the earth's history but would be very profitable for a short series of historical lectures connected with courses in evolution.

Physiography is a subject which leads from geology into geography. It is well represented in a series of charts by Fraas, Die Naturerscheinungen der Erde. The charts deal with the phenomena and the effects of volcanic action, the mechanical forces of water and air, the rôle which ice is playing to-day on the surface of the earth and with such physiographic character types as the prairie, the coral reef, and the desert.

There are numerous charts devoted to the teaching of geography, especially human ecology. Let us select as a representative series for this discussion Wünsche's Land und Leben. In forty beautifully executed pictures, scenes from cities, harbors, rivers, primitive forests, jungles, prairies, all over the world are shown, with groups of people in their peculiar activities. There is an immense geographic information accumulated in these pictures which seem to have all been prepared by artists on the basis of first hand knowledge. They all look so real and are in no way a product of imagination or second-hand information.

With the exception of one set which is American, and two sets which are French, the charts mentioned in this article are all "made in Germany." They are well executed in colors, in high type of German graphic workmanship. Each set is accompanied by a manual written in Germany and only in very few instances this manual contains an English and French translation. The fact that the manual is written in a foreign language is unquestionably a disadvantage, but it also reminds the American scientist that he can get only the full benefit of the world's treasure of information if he is able to read German with sufficient fluency. There seems to be no escape from this fact in spite of the idea which sprang up during the Great War that the German language can be counted out of the necessary equipment of a scientist. At least it won't be true as long as the Germans continue to publish information of general usefulness.

A. C. Noé

UNIVERSITY OF CHICAGO

SCIENTIFIC EVENTS

AN INTERNATIONAL COMMITTEE FOR RESEARCH ON INFANTILE PARALYSIS

AN international committee for the study of infantile paralysis has recently been formed under the chairmanship of Dr. W. H. Park, director of the bureau of laboratories of the New York City Health Department. Arrangements have been made for a concerted three-year attack on the difficult problems of prevention and therapy presented by this formidable and crippling disease. To enable research to be conducted at a number of centers in the United States and in Europe, a sum of $250,000 has been contributed by Mr. Jeremiah Milbank, a New York financier, who takes an active personal interest in hospitals and charities. The following centers have been chosen for the proposed researches: Bureau of Laboratories, New York City Health Department; the pathological laboratories of Columbia, Harvard and Chicago Universities; the Pasteur Institute, Brussels, and the Lister

Institute, London. These various institutes are represented on the international committee by their respective heads. The personnel of the committee is as follows: *Chairman,* Dr. W. H. Park; *vice-chairman,* Dr. Joseph A. Blake, of Tarrytown, N. Y.; Drs. E. O. Jordan and Ludvig Hektoen, of the University of Chicago; Drs. F. P. Gay and Frederick Tilney, of the College of Physicians and Surgeons, Columbia University; Drs. Milton J. Rosenau and Hans Zinsser, of Harvard University; Dr. Lee K. Frankel, of the Metropolitan Life Insurance Company; Sir Charles J. Martin, of the Lister Institute, London, and Dr. Jules Bordet, of the Pasteur Institute, Brussels. Mr. Samuel M. Greer and Dr. Josephine N. Neal will act, respectively, as treasurer and secretary, and the committee's headquarters will be Dr. Park's office at the Bureau of Laboratories, East 16th Street, New York, N. Y. Directors of research at each selected center will be free to initiate such investigations as seem to them desirable and within the compass of their respective institutions. The results of such researches will, however, be studied and coordinated by the international committee, and will thus constitute a joint piece of work. At the Lister Institute special arrangements are being made for research on poliomyelitis under the direction of Professor J. C. G. Ledingham.

DEDICATION OF THE SANTA CATALINA NATURAL AREA

ON May 12, 1928, the Santa Catalina Natural Area, near Summerhaven in the Santa Catalina Mountains of southern Arizona, was dedicated by the Tucson Natural History Society and representatives of the United States Department of Agriculture.

The area lies at an elevation range of from 4,800 to 9,150 feet and includes 4,464 acres. It embraces the summit of Mount Lemmon, Marshall Gulch (where the Desert Laboratory of the Carnegie Institution of Washington has several experimental plots), the Wilderness of Rocks and a considerable part of the headwaters of Lemmon Creek. It contains samples of nearly all the ecologic communities represented in the higher parts of the mountains.

The dedication is the result of a movement initiated several years ago by the Tucson Natural History Society. After a period of investigation by the society's committee on preservation of natural areas and by officials of the Forest Service, the matter was taken up with the forester and the Secretary of Agriculture in Washington. On March 3, 1927, favorable decision was made by the secretary.

Administration and management of the area is to be by the Forest Service. Regulations applying to the tract have been worked up jointly by the society and the service.

The dedicatory program was opened by Dr. Chas. T. Vorhies, of the University of Arizona. Assistant District Forester John D. Jones, of Albuquerque, New Mexico, explained the Forest Service policy, adopted by the forester on December 30, 1926, providing for five categories of tracts: (1) Wilderness areas, more than 500,000 acres; (2) semi-wilderness areas, 25,000 to 250,000 or 300,000 acres; (3) natural areas, 320 to 4,000 or 5,000 acres; (4) scenic areas, of varying size; (5) scenic strips, along selected highways. These areas are planned to care for different phases of the scientific and recreational needs of the people.

Other speakers on the program included G. A. Pearson, director of the Southwestern Forest Experiment Station, Flagstaff, Arizona, and Dr. Walter P. Taylor, of the U. S. Biological Survey.

The dedicatory program was concluded by the exhibition, in the lobby of La Mariposa Hotel, Summerhaven, of five reels of motion pictures, through the courtesy of the Forest Service and Mr. J. D. Jones. These were "Forest and Waters," "Horses and Men" and "Trees of Righteousness."

The committee in charge of the dedication was A. A. Nichol, secretary of the Tucson Natural History Society, *chairman;* Chas. T. Vorhies, of the University of Arizona, and Fred Winn, supervisor, Coronado National Forest.

RESEARCHES AND PUBLICATIONS OF THE PRINCETON UNIVERSITY EXPEDITIONS TO PATAGONIA—1896–1899

AT the recent meeting of the American Philosophical Society, Professor William Berryman Scott reported on the imminent completion of a very great scientific undertaking begun in 1896. The publication of reports of Professor Scott's work in Patagonia between the years 1896 and 1899 was originally rendered possible through the interest and generous donations of the late J. Pierpont Morgan, supplemented by gifts from the Carnegie Institution and Princeton University. In recognition of the high scientific value of this work, Professor Scott has been awarded the Wollaston medal by the Geological Society of London. Professor Scott's informal statement of the progress of work is as follows (*H. F. O.*):

> Like everything else in connection with the Princeton Patagonian expeditions, the plan of the series of reports was due to Mr. J. B. Hatcher, the leader of the explorations. So great were the collections in all departments of natural history, that he felt it would be a great misfortune to have the results scattered through many publications—journals and transactions and proceedings of learned societies; and he therefore proposed to me that I should endeavor to finance the independent publication