and at the present time these are being installed in a series of habitat groups in a building, recently completed. During his régime at the academy there were published twenty-five volumes of scientific reports. Expeditions were sent far and wide; to the Gulf of California, Pacific Islands, Galapagos Islands, South America, Australia, Alaska, British Columbia, Hawaii, and many places in the United States and Mexico. His interest in such activity was very great and the enthusiasm with which he greeted the younger members of the staff on their return was most encouraging. One of his last acts, dictated from a hospital cot, was the preparation of a skeleton outline for the publication of a series of comprehensive reports upon the results of the Templeton Crocker Expedition of the academy in 1932.

He established the department of fishes in the academy and secured for a nucleus the great collection of South American forms from Indiana University; this is estimated to contain more than 100,000 specimens.

He left plans for several projects but practically no unfinished work. One important manuscript dealing with fishes of west Mexican waters is completed and awaiting publication and the same is true of his annual report of the academy and aquarium for 1931. Otherwise his work was done.

G. DALLAS HANNA

SCIENTIFIC EVENTS

THE PAINTED DESERT AND THE PETRIFIED FOREST NATIONAL MONUMENT

THE "Painted Desert" area, which includes some colorful "bad lands" and a Black Forest of petrified wood, was added to the Petrified Forest National Monument in Arizona when President Hoover signed a proclamation on September 23, according to an announcement made by the Department of the Interior.

The proclamation concerns approximately 53,300 acres, of which 23,832 acres were already government owned land and approximately 29,468 acres were privately owned. The territory added is a few miles north of the present monument and a strip a mile wide connects the two areas. The newly-constructed bridge over the Rio Puerco, which was dedicated in July, makes this area easily accessible to visitors from the Petrified Forest.

The addition of the "Painted Desert" to the Petrified Forest Monument makes of this a unique reservation, beginning with colorful marl dunes, spotted with great black petrified trees—some perhaps lying where they fell with stumps and roots undisturbed—then proceeding south over a level cactus and sage-dotted plain, crossing the Santa Fé Trail, and ending in another petrified forest region, where giant trees that were carried in millions of years ago by flood waters gleam in the sunlight. The "Painted Desert" region was first discovered by Coronado in 1540, and was named by him "El Pintado Desierto."

The memorandum from the Department of the Interior says: "Great scientific interest lies in this region because of the nature of the trees which have been fossilized in the Black Forest. They belong to a different age and are a different variety from those in the petrified forest region previously included in the monument. Stratified sections of cliffs and buttes show many contrasting colors, which, combined with the striking hues of the soil surfaces, make it a gorgeous spectacle, presenting in form, color and grouping of topographical features a surprising and fascinating variety. This region is one of the most spectacular bits of color in the entire Southwest. The fantastic formations, together with the shifting lights and shadows which vary the colorings from the most delicate lavender to deepest purple, and run the gamut of the various shades of red, green, brown, orange and blue, present an ever-changing picture of breath-taking beauty."

THE MELLON INSTITUTE TECHNOCHEMICAL LECTURES

Two series of lectures on subjects in industrial chemistry and chemical engineering will be presented by technologic specialists of the Mellon Institute of Industrial Research from October 3 to December 12, 1932, and from January 9 to May 22, 1933. The lectures will be open to all students of industrial chemistry and chemical engineering in the University of Pittsburgh, as well as to the institute's members. The program is as follows:

Introductory Lecture

Dr. E. R. Weidlein: "The Status and Work of the Chemical Engineer."

First Series: Lectures on Some Basically Important Chemical Engineering Materials, their Production, Properties, Uses and Evaluation

Mr. O. O. Malleis: "Solid Fuels."

Mr. E. B. Read: "The Manufacture of Refractories."

Mr. S. M. Phelps: "The Properties and Uses of Refractories."

Mr. Tracy Bartholomew: "The Manufacture, Properties and Uses of Portland Cement."

Dr. A. P. Thompson: "Electric Furnace Products."

Dr. S. A. Braley: "Steel and Its Treatment."

Dr. A. W. Coffman: "Corrosion-Resistant Materials."

Dr. W. W. Duecker: "Sulfur."

Dr. W. B. Burnett: "Rubber."
Mr. Foster Robertson: "Synthetic Resins."

Second Series: Lectures on Professional Opportunities in Various Industries—What the Chemist and Chemical Engineer Have Done, Are Doing, and Can Probably Accomplish in These Fields

Dr. H. E. Foote: "Industrial Gases."
Mr. E. J. Casselman: "Glass."
Dr. H. A. Ambrose: "Petroleum Production."
Dr. D. R. Stevens: "Petroleum Refining."
Dr. E. W. Reid: "Solvents."
Dr. P. B. Davidson: "Paper."
Mr. C. F. Goldthwait: "Textiles."
Dr. R. N. Wenzel: "Fatty Oils and Soaps."
Dr. T. M. Andrews: "Cottonseed Products."
Dr. G. J. Cox: "Sugar."
Dr. M. W. Mead: "Zymochemistry."
Mr. E. R. Harding: "Foods."
Dr. H. K. Salzberg: "Dairy Products."
Dr. R. F. Beard: "Carbonated Beverages."
Dr. J. J. Enright: "Bacteriology, Chemistry and Public Health."
Dr. G. D. Beal: "Pharmaceuticals."
Dr. L. H. Cretcher: "Synthetic Medicinals."

W. A. HAMOR,
Assistant Director

SEPTEMBER 21, 1932

A COURSE IN ANIMAL SOCIOLOGY AT HARVARD UNIVERSITY

A NEW course at Harvard University, tracing the development of animal sociology from fish and insect groups to modern human societies, has been announced. The first course of its type to be given at the university, it covers the wide field of social behavior in every range of the animal kingdom.

The course has been arranged by the Department of Sociology, and will be conducted under the direction of Dr. Pitirim A. Sorokin, professor of sociology, and Professor William Morton Wheeler, professor of entomology, and associate curator of insects at the Museum of Comparative Zoology. Lectures will also be given by a distinguished group of specialists who have recently completed important investigations on the subject of animal sociology.

The object of the new course is to acquaint students with the wide range of social and collective behavior in the animal kingdom, and to examine the more significant types of this behavior. The large amount of recent investigation of the communal behavior of insects, birds and especially of the monkeys and anthropoids has yielded results of much theoretical interest to the student of anthropology and human sociology. Owing to the vast extent of the field, the lectures in the course have been apportioned among several specialists. Dr. Roderick Macdonald will present the material on aggregations in the lower invertebrates and fishes, and Dr. Wheeler on the aggregations and communities of insects. Accounts of the family life of amphibia and reptiles will be presented by Mr. Arthur Loveridge. Flocks of birds and herds of lower mammals will be treated by Dr. Glover M. Allen, and the primitive communities of monkeys and apes by Dr. Earnest A. Hooton and Mr. H. J. Coolidge, Jr. A final lecture, comparing human and animal sociology, will be given by Professor Sorokin.

A considerable amount of illustrative material for the lectures has been accumulated. The Harvard Film Foundation has collected films to illustrate the social life of insects, birds and other forms of animal life. Also, by special arrangement and through the courtesy of Mr. Martin Johnson, some of his recent animal and ape films have been loaned for use in the course.

THE CENTURY OF PROGRESS EXPOSITION AND THE AMERICAN CERAMIC SOCIETY

THE American Ceramic Society will join the engineering societies of America in a week's program which the authorities of the Century of Progress Exposition have designated as "Engineers' Week." The proposed program has two objectives: (1) to provide arrangements so that the visiting engineers may see the exhibits of special interest to them under favorable circumstances, and (2) to provide means for bringing before ceramists, and thus before the public, through addresses and demonstrations, some of the contributions of ceramics to man's progress.

On Wednesday, June 28, 1933, the several societies will have a joint program tentatively arranged as follows: Members will meet at 9:30 A. M., in a suitable locality, such as the court of the Hall of Science, to receive the coat lapel decoration (to identify the delegates throughout the day) and to form in groups to be taken to the various exhibits as selected; a description of the exhibits to be visited will either be available at this point or will have been received by the members earlier. A suitable number of properly qualified guides will be on hand to take the groups to the points desired.

Each of the exhibits to be visited will put on special programs relating to the exhibitor's work. It is suggested that at the exhibits, in addition to any machinery or equipment demonstration the exhibitor may put on, the officials and scientific men whose work relates to the subject of the exhibit be present and perhaps make brief addresses.

At 12:30 there will be luncheon at the place or places which will later be determined when the restaurant plans are fully developed by the exposition. Afterwards short speeches and science demonstrations are proposed. At 2:30 or 3:00 o'clock trips to the