

doubt that the general principle of the uniformity of nature applies here and that the stars of non-galactic nebulae are the same sort of bodies with which we are familiar in our local system. But the most important feature is in the background of the paper, the uncovering of targets for the heavy artillery of methods for stellar investigation.

The author's abstract of the paper presented at the meeting is as follows: "On photographs made with the 100-inch and 60-inch reflectors of the Mount Wilson Observatory, the outer regions of the two spirals M 31 and M 33 are resolved into dense swarms of actual stars. Many of these stars are variable and of the variables a large percentage are Cepheids. Normal curves, periods and photographic magnitudes have been determined for 22 Cepheids in M 33 and 12 in M 31. The magnitudes at maximum run from 18.1 to 19.1 and the periods from 18 to 50 days. The period-luminosity relation is conspicuously present. The distances, as derived from Shapley's period-luminosity curve, are the same for both nebulae—about 285,000 parsecs. Variables have also been found in M 81, M 101 and N. G. C. 2403, but nothing is known as yet of their periods."—B. E. L.

SCIENTIFIC EVENTS

INTERNATIONAL ANNUAL TABLES

DR. CHARLES MARIE, general secretary of the International Commission charged with the compilation and publication of "International Annual Tables of Constants and Numerical Data, Physical, Chemical and Technological," announces the publication of Volume 5, Part 1. This volume gives all numerical data which characterize any substance, material or system which are to be found in the world's literature for the period of 1917–1922, inclusive, and covers the sciences of physics, chemistry, mineralogy, biology and the various branches of technology. Owing to the large volume of modern scientific literature, these volumes will be of great value to scientific men having occasion to use numerical data. The volumes give not only the data as they appear in the original literature, but also the corresponding literature reference for every value recorded.

This international undertaking is carried on without profit and is made possible by the financial support of governments, scientific societies and educational institutions which contribute to the international fund. Members of scientific organizations and of the faculties of universities which help in this way to make possible the compilation of annual tables are accorded a special discount on purchases of these volumes. The volumes are distributed in the United States through the University of Chicago

Press. The following is a list of American contributors to the international fund:

1. *Scientific Organizations:*

American Association for the Advancement of Science
National Academy of Sciences
National Research Council
American Philosophical Society
American Academy of Arts and Sciences
Philosophical Society of Washington
American Institute of Chemical Engineers
American Institute of Electrical Engineers
American Electrochemical Society
American Chemical Society
American Ceramic Society
American Society of Civil Engineers
American Society of Mechanical Engineers
American Society for Testing Materials
American Institute of Mining and Metallurgical Engineers
American Medical Association
American Physical Society

2. *Educational Institutions:*

Stanford University
University of California
University of Minnesota
Ohio State University
Cornell University
University of Buffalo
Columbia University
Johns Hopkins University

3. *Industrial Organizations:*

New Jersey Zinc Company

E. W. WASHBURN,
American Commissioner

THE THIRD ASIATIC EXPEDITION OF THE AMERICAN MUSEUM OF NATURAL HISTORY

THE members of the Third Asiatic Expedition of the American Museum of Natural History, New York, sailed from San Francisco on the *President Lincoln* on March 7 for China. This is the largest scientific expedition ever sent out by the museum. The party sails to meet Roy Chapman Andrews, leader of the Third Asiatic Expedition, to commence its third year's work in China and Mongolia. The personnel of the party is as follows:

Walter Granger, paleontologist and second in command.

Dr. Charles P. Berkey, geologist, professor of geology at Columbia University.

Frederick Morris, assistant geologist, previously of Columbia University and Peking University in Tientsin.

Major L. B. Roberts, topographer, member of United States aerial mapping force in France during the war, Resident of Kansas City.

Dr. Ralph W. Chaney, botanist and paleobotanist of Carnegie Institution of Washington.

J. B. Shackelford, cinematographer of New York City.
Dr. N. C. Nelson, archeologist of the American Museum of Natural History.

George Olsen, assistant in paleontology, American Museum of Natural History.

J. McKenzie Young, in charge of motor transportation, formerly of the U. S. Marine Corps.

Norman Lovell, assistant in motor transportation, an American resident of Peking.

Dr. Skinner, surgeon, resident of Hankow.

Lieut. Butler, assistant topographer, on staff of commander of American military force in China.

Lieut. Robinson, assistant topographer of British army stationed at Peking.

Another member of the party, Mr. Clifford H. Pope, assistant zoologist of the American Museum of Natural History, who will work in South China has just arrived in Peking.

The party expects to reach Peking about April 2 and will leave for Mongolia on April 15, proceeding from Peking to Kalgan. On April 17 they will start out from Kalgan with motor cars equipped with two weeks' provisions for the 900 mile trip to Tsagan Nor.

Mr. Andrews, who left the museum in May after six months in New York, arrived in Peking early in July. He immediately commenced arrangements for the field season of 1925 by visiting Urga in August and carrying on negotiations with the Mongol government to continue explorations in outer Mongolia.

Passports for all of the party have been secured and they will be able to carry on the work as planned without interruption. For the summer's work a caravan of 150 camels has been assembled at Kalgan, the gateway to Mongolia, and a large amount of equipment and provisions necessary for the expedition has been brought together at the expedition's headquarters in Peking.

As in previous years, the transportation of the party will be by motor cars, five Dodge cars and two Fulton trucks. The same route for the 900 miles to Tsagan Nor will be followed as was used on previous trips, but beyond that the party will again do pioneering work by motor into the great Gobi Desert.

From Tsagan Nor, the western-most point previously reached by the expedition, the party will proceed northwest into a new country with no special objective in view beyond the exploration of the strip of desert which extends along the north base of the Altai Mountains and the general study of the topography of the region. The geologists of the party will make various side trips and the topographers will also be away from the main party at various times in order to map as much of the surrounding country as possible. The archeologists will search particularly for evidences of the earliest inhabitants of the region, the Pre-Mongolian races. The zoologists will

fill the time collecting the birds, mammals and other forms of life there at the present time.

As before, the principal efforts of the party will be directed along paleontological lines. The two years' work already done in Mongolia yielded valuable results in this field, giving an insight into the animal life of this hitherto unknown region at nine different stages of its history. These stages cover the period of many millions of years and extend well back in the Age of Reptiles and well down to the advent of man. It is hoped that the expedition of the coming season will result in the discovery of new fossil-bearing formations and thus give added links in the chain of the evolution of life in this part of the world.

All the work of the Third Asiatic Expedition has been made possible through the generosity of the friends of the museum who have liberally contributed to its support, and with the cooperation of the magazine *Asia*.

PLANS OF THE NEW YORK ACADEMY OF MEDICINE

PLANS for the expansion in the activities of the New York Academy of Medicine during the next three years were announced at the academy's annual meeting recently, when Dr. George David Stewart retired as president and Dr. Samuel A. Brown took the chair.

During that time their new building will be constructed at 103d Street and Fifth Avenue. The plans were considered as far back as 1910. Under the direction of the Building Committee, Messrs. York and Sawyer were selected as architects to prepare plans for a building to be situated at Sixtieth Street and Park Avenue. It was estimated at the time that the plans for the building at Sixtieth Street would have cost \$2,200,000. The Carnegie Corporation had already given the academy \$1,000,000 to be used to partially defray the cost of a new building, but its officers made it clear that it would not be possible for them to appropriate the additional \$1,200,000. It was therefore decided to construct a building to cost about \$1,500,000 and to sell the site at Sixtieth Street and Park Avenue.

Plans for the building have been approved with the exception of the facade. The auditorium will be 56 feet by 74 feet and will seat on its main floor 528 persons. There will also be a gallery which will seat 171 persons, making a total of 699. There will be a platform at the east end of the auditorium with ample space for guests, a speaker's desk, reading desk and secretary's desk.

The main building will contain the necessary machinery for heating and ventilation in the basement