THE NEW PERUVIAN EXPEDITION UNDER THE AUSPICES OF YALE UNIVERSITY AND THE NATIONAL GEOGRAPHIC SOCIETY

LAST Saturday there sailed for Peru the topographical division of a new expedition. The chief engineer, E. C. Erdis, of the 1912 expedition, had sailed the week before. In a short time two more members of the expedition will sail, and as soon as the maps have been completed and are ready for use, the scientific members of the party will leave for the field. This will probably not be until early in 1915.

As in 1912 the expedition is under the joint auspices of Yale University and the National Geographic Society. Unlike former expeditions, it will cover a period of two years, instead of being confined to one field season. Three members of the expedition, the chief engineer, the chief assistant, and the assistant topographer, will be in the field for a year and a half, or more.

It is our plan to make a geographical reconnaissance of a portion of southern Peru, including the Cordillera Vilcabamba and portion of the Apurimac and Urubamba watersheds.

This region is a part of the eastern edge of the great Andean plateau. The Cordillera Vilcabamba is a chain of dissected mountains rising 16,000 to 20,000 feet above sea-level, situated between south latitudes 12 and 14. Their bases are clothed with tropical jungles, while their summits are mantled with snow and glaciers. In the main they are unexplored. As one of the most inaccessible parts of the Andes, they have been occupied from time to time by the ancient peoples of Peru. In this region are the ruins of Machu Picchu, Palcay and Choqquequirau.

The reported presence of other ruins and the actual existence of some that have been seen, but not studied or mapped, make the region a particularly attractive area in which to study the problem of man's origin and distribution in South America.

The character of the land formations in the neighborhood of the ruins should enable something to be said in regard to the number of people formerly occupying the region, the causes of the location of the cities, buildings and forts, and the reasons for their final abandonment.

An examination of the ruins, studies of the styles of architecture, and of the artifacts and other remains that may be found fairly near the surface of the ground, should eventually enable a classification to be made, which, in connection with biological, physiographic, linguistic and historical studies, ought to result finally in unravelling the puzzle of the ancient civilization of South America. From the standpoint of biology, this area is believed to contain a large number of species new to science. From the standpoint of anthropology it is one of the least known and most fruitful areas in the Andes.

The plan of work will include the making of a topographical map of the region northwest of Cuzco between the Apurimac and Urubamba Rivers; a detailed geographical reconnaissance of the more lofty portions of the mountains, including a study of the large undescribed glaciated region; the establishment of two meteorological stations at different elevations for the taking of systematic records for two years; a study of the distribution and history of food plants of this region; the collection of data respecting the forms and distribution of vertebrates, particularly mammals and reptiles; a survey of the present Indians inhabiting this region, including a study of their dialects, the collection of anthropometric data, and the collection and study of the skeletal remains; an archeological reconnaissance of the entire area, and a continuation of the studies begun by the first expedition, looking toward a geographical interpretation of the Spanish chronicles of the era of discovery and exploration, with particular reference to the identification of ancient place names, the story of Machu Picchu and its connection with the history of the Incas.

The staff of the expedition consists of: Ellwood C. Erdis, chief engineer; Herbert E. Gregory, geologist (Silliman professor of geology in Yale University); George F. Eaton,

osteologist (curator of osteology in the Peabody Museum of Yale University); Albert H. Hardy, chief assistant; C. F. Westerberg, assistant topographer; H. S. Arnold, M.D., medical adviser; Philip A. Means, assistant in archeology; L. M. Kirkpatrick, secretary. The surgeon has not yet been named.

HIRAM BINGHAM,
Director

THE COMMITTEE OF ONE HUNDRED ON SCIENTIFIC RESEARCH OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

THIS committee, authorized by the council of the association and appointed at and after the Atlanta meeting by President Wilson and President Eliot with the advice of the committee of policy, met at the Cosmos Club, Washington, on the afternoon of April 20, 1914. Mr. Pickering was in the chair, and the following members were present:

Messrs. C. L. Alsberg, E. W. Brown, J. McK. Cattell, C. B. Davenport, K. E. Guthe, George E. Hale, Ross G. Harrison, L. O. Howard, C. S. Howe, William H. Howell, W. J. Humphreys, William W. Keen, C. Kenneth Mees, George A. Miller, E. L. Nichols, Arthur A. Noyes, Henry F. Osborn, E. C. Pickering, Ira Remsen, Frank Schlesinger, Elihu Thomson, O. H. Tittmann, Thomas L. Watson, Arthur G. Webster, William M. Wheeler and R. S. Woodward.

The membership of the committee was completed by election, and there was a long and important discussion on scientific research in America and the means by which it can be advanced by the committee. Among the questions fully discussed were (1) the use of research funds and the establishment of a central bureau under the auspices of the association, the National Academy or the Smithsonian Institution; (2) research work in educational institutions, the extent to which it is supported and should be regarded as the function of the institution and its professors and instructors; (3) the research work of industrial laboratories and its relation to the universities; (4) the selection of men in universities competent to undertake research work and the preparation that should be given to them, and (5) the fuller recognition and better opportunities that should be given to those who have unusual qualifications for scientific research. It was agreed that the principal work of the committee should be entrusted to sub-committees. The whole committee will meet at Philadelphia on the afternoon of Monday, December 28, 1914, at the hotel headquarters of the American Association.

Sub-committees were authorized in each of the five directions above noted. The three last-mentioned topics were emphasized, respectively, by Mr. C. Kenneth Mees, Mr. Ernest W. Brown and Mr. Theodore W. Richards, and a sub-committee on each of the subjects will be formed with their advice. The committees named are:

Executive Committee: E. C. Pickering, *Chairman,* Charles D. Walcott, William H. Welch, Edmund B. Wilson, J. McKeen Cattell, *Secretary.*

Sub-committee on Research Funds: Charles S. Minot, *Chairman,* Simon Flexner, E. C. Pickering, R. S. Woodward, Charles R. Cross, *Secretary.*

Sub-committee on Research in Educational Institutions: Edward L. Nichols, *Chairman,* Edwin G. Conklin, Arthur A. Noyes, John M. Coulter, J. McKeen Cattell, *Secretary.*

The full membership of the Committee of One Hundred is as follows:

Eliot, Charles W., president of the association, president emeritus of Harvard University, *Chairman.*

Pickering, E. C., director of the Harvard College Observatory, *Chairman of the Executive Committee.*

Adams, Frank D., professor of geology, McGill University.

Alsberg, C. L., chief of the Bureau of Chemistry, U. S. Department of Agriculture.

Ames, J. S., professor of physics, Johns Hopkins University.

Angell, J. R., professor of psychology, University of Chicago.

Baldwin, S. E., professor of law in Yale University and governor of Connecticut.

Bancroft, W. D., professor of physical chemistry, Cornell University.

Bessey, Charles E., professor of botany, University of Nebraska.