culture. The two former are four-year courses, leading to a baccalaureate degree. The last is a two-year course, the entrance requirements for which are the same as those of the regular long course, certificates being awarded at the close, instead of degrees. There has also been organized, within the college of letters and science, a new course for the training of teachers. Within the past year a new central heating plant has been built, as well as an addition to the administration building. A woman's building and a new animal husbandry building are in process of construction.

The increase in Yale University's grand total is one of 31, while that for the fall only amounts to 149, the discrepancy being due to the withdrawal of the summer school of this institution; the 48 students mentioned under summer session attended the summer school of forestry. Gains in the fall attendance have been registered by every department with the exception of the academic, which shows a loss of 41 students, whereas the Sheffield scientific school has gained six. To the enrollment of the latter should be added 154 graduate students who are members of the graduate school or the school of forestry. The law school reports a gain of 92, the graduate school one of 51, divinity 26, art 10, forestry 9, music 8, and medicine 5.

RUDOLF TOMBO, JR.

COLUMBIA UNIVERSITY

## THE NATIONAL GEOGRAPHIC SOCIETY

THE arrangements for lectures for the current season are as follows:

December 11—"The Redemption of Ireland," by Mr. William E. Curtis. No longer does the Irishman in Ireland live on potatoes and peat. Illustrated.

December 18—"Present Conditions in Turkey," by Dr. Howard S. Bliss, president of the Syrian Protestant College, Beirut. January 4—"The Sierra Nevada," by Dr. Grove Karl Gilbert.

January 8—"A Digger's Work in Palestine," by Dr. Frederick J. Bliss, author of "A Mound of Many Cities," "Excavations in Palestine," etc.

January 15—"The Non-Christian Tribes of the Philippine Islands," by Dr. Frederick Starr, of the University of Chicago.

January 22—"The Panama Canal and the Spanish Main," by Mrs. Harriet Chalmers Adams.

January 29—"Abraham Lincoln—Boy and Man," by Mr. W. W. Ellsworth, of the Century Company.

February 5—Major General A. W. Greely, U. S. Army, will address the society.

February 12—"The Bird Islands of Our Atlantic Coast," by Mr. Frank M. Chapman, of the American Museum of Natural History. Illustrated with lantern slides and moving pictures of the pelicans and fish hawks.

February 19—" Java—The Garden of the East," by Mr. Henry G. Bryant.

February 26—"Aerial Locomotion," by Mr. Wilbur Wright or Mr. Orville Wright.

March 12—"The Hunting Fields of Central Africa," by Mr. Gardiner F. Williams, for twenty years general manager of the De Beers diamond mines at Kimberley.

March 19—"Ruwenzori, the Snow-crowned Mountain of the Equator," by Professor Edwin A. Fay, of Tufts College, president of the American Alpine Club.

March 25—"Brittany—The Land of the Sardine," by Dr. Hugh M. Smith, deputy commissioner of the U. S. Bureau of Fisheries.

April 2—"Homes for Millions—Reclaiming the Desert," by Mr. C. J. Blanchard, of the U. S. Reclamation Service.

## A BIBLIOGRAPHY ON SCIENCE TEACHING

At a meeting of the executive committee of the American Federation of Teachers of the Mathematical and Natural Sciences held April 28, 1908, it was voted to appoint a committee on bibliography of which Professor Richard E. Dodge, of Teachers College, New York, is chairman.

This committee was requested to prepare, at an early date, a selected and annotated bibliography on science teaching for publication by the federation. The field to be covered includes teaching in elementary, secondary and normal schools and colleges. The list is to "include books, articles in periodicals, scientific journals or association reports, including foreign contributions, if any." The object is to prepare a bibliography of contributions to science teaching in the last decade "that will be a working basis for any teacher of science and especially for any in an institution with limited library facilities." Since reviews of recent publications on science teaching are valuable in making up programs of study or for meetings, this bibliography should be an aid in this way, and should thus encourage the study of the literature of the subject.

For convenience and effectiveness in covering the whole field of science teaching, specialists were appointed to undertake the work in each of six subdivisions. The cooperators and the work for which each will be responsible are given below:

Mathematics—Professor J. W. A. Young, University of Chicago.

Biology—Professor O. W. Caldwell, University of Chicago.

Physics—Professor John F. Woodhull, Teachers College, Columbia University, and ex-president of New York Physics Club.

Nature-Study—Professor M. A. Bigelow, Teachers College, and secretary of the American Nature-Study Society.

Chemistry—Special Committee of the New England Association of Chemistry Teachers.

Geography and Geology—R. H. Whitbeck, State Model School, Trenton, N. J.

It is anticipated that the special reports will be in the hands of the chaiman before January 1, 1909, and that the bibliography can be printed and distributed early in the next calendar year.

## SCIENTIFIC NOTES AND NEWS

The convocation week meetings of the American Association for the Advancement of Science, and the twenty-five national scientific societies meeting this year in affiliation with it, have begun at the Johns Hopkins University, Baltimore, as we go to press with the present issue of Science. We publish above the address of the retiring president of the association, Professor Edw. L. Nichols, of Cornell University, and we hope

to publish next week a general account of the meeting, to be followed in subsequent issues by the addresses and proceedings of the association and the affiliated societies.

The recently created Royal Society of South Africa has elected Sir David Gill, K.C.B., F.R.S., its first honorary fellow.

Dr. William Evans Hoyle, director of the Manchester Museum, has been appointed director of the Welsh National Museum.

Dr. F. Walker Mott, F.R.S., has been elected Fullerian professor of physiology in the Royal Institution.

CERTAIN friends of the chancellor of Cambridge University desire the establishment of some award to be associated with Lord Rayleigh's name, in order to commemorate the unanimous election of a scientific investigator to the office of chancellor of the university. With this object they have deposited a sum of money, the interest of which may be used for the purpose of awarding from time to time a prize to be called the Rayleigh prize.

Professor Sir James Dewar has been elected an honorary member of the German Chemical Society.

The president of the Cambridge Philosophical Society, Professor Adam Sedgwick, has been appointed to represent the society at the Darwin Centenary celebrations in June, 1909.

The Broca prize for 1908 has been awarded by the Anthropological Society of Paris, to Dr. Paul Rivet.

The Godard prize of 1,000 francs has been awarded by the Paris Academy of Medicine, to Dr. F. W. Pavy, F.R.S., consulting physician to Guy's Hospital, London, for his works on carbohydrates and diabetes.

MR. GEORGE H. LOCKE, for the past two years professor of the history and principles of education and dean of the School for Teachers of Macdonald College, McGill University, Quebec, Canada, has resigned to become chief librarian of the Municipal Libraries of the city of Toronto.

JEROME J. GREEN, professor of physics and electrical engineering at the University of