others have taken a prominent part in the initial work. The South African Association for the Advancement of Science is cordially cooperating in the local organization, and will join with the British Association in attending the meeting.

The aim of the council has been to secure the attendance of a representative body of British men of science, including specialists in various lines of investigation; and that, along with the generous support of the people and authorities in South Africa, should go far to insure the success of the meeting and to stimulate local scientific interest and research.

JOINT ANNOUNCEMENT OF SUMMER FIELD COURSES IN GEOLOGY.

A PAMPHLET has lately been issued containing a brief account of the field courses in geology offered for the summer of 1905 by several universities in various parts of the United States. The number of courses offered and the professors, from whom information about them may be obtained, are as follows:

Intercollegiate Appalachian Course, Professor W. B. Clark.

University of Chicago, five courses, Professor R. D. Salisbury.

Columbia University, one course, Professor A. W. Grabau.

Harvard University, three courses, Professor J. B. Woodworth.

Johns Hopkins University, one course, Professor W. B. Clark.

University of Kansas, one course, Professor E. Haworth.

University of Minnesota, two courses, Professor C. W. Hall.

University of North Carolina, one course, Professor C. Cobb.

Ohio State University, one course, Professor C. S. Prosser.

Stanford University, two courses, Professor J. C. Branner.

University of Wisconsin, one course, Professor W. H. Hobbs.

In order to encourage the taking of summer field courses, the following colleges and universities have agreed to give credit, under certain conditions, to any of their students, who thus spent part of the vacation in scientific study: Amherst College, University of Missouri, Beloit College, University of North Carolina, University of Chicago, Northwestern University, Colgate University, Oberlin College, Columbia University, Ohio Wesleyan University, Hamilton College, University of Rochester, Harvard University, Syracuse University, Johns Hopkins University, University of Toronto, University of Kansas, Vanderbilt University, Massachusetts Institute of Technology, Wesleyan University, McGill University, Western Reserve University, University of Michigan, Williams College, University of Wisconsin, University of Minnesota, Yale University.

SCIENTIFIC NOTES AND NEWS.

Professor Simon Newcomb celebrated his seventieth birthday on March 12. Professor Newcomb is at present engaged in an important investigation, under the auspices of the Carnegie Institution, for determining the elements of the moon's motion and for testing the law of gravity.

Professor Henri Moissan, of Paris, and Professor Wilhelm Ostwald, of Leipzig, have been elected corresponding members of the Berlin Academy of Sciences.

The following candidates have been selected by the council of the Royal Society to be recommended for election into the society: John George Adami, William Arthur Bone, John Edward Campbell, William Henry Dines, Arthur Mostyn Field, R.N., Martin Onslow Forster, Edwin S. Goodrich, Frederick Gowland Hopkins, George William Lamplugh, Ernest William MacBride, Francis Wall Oliver, David Prain, George F. C. Searle, Robert John Strutt and Edmund Taylor Whittaker.

CAMBRIDGE UNIVERSITY will confer its doctorate of science on Dr. E. B. Taylor, F.R.S., professor of anthropology at Oxford.

On the occasion of the opening of the new public health laboratory of the Victoria University, Manchester, honorary degrees were conferred upon Professor Calmette, Lille University; Professor Perroncito, Turin University; Professor Salomonsen, Copenhagen University, and Captain R. F. Scott, R.N.

Professor K. Möbius has retired from the directorship of the Berlin Museum of Natural History. The position has been offered to

Professor H. H. Schauinsland, director of the museum at Bremen.

Dr. D. T. MacDougal, of the New York Botanical Garden, started on March 9 for Mellen, Arizona, and plans to make an examination of the deserts contiguous to that stream and the Gulf of California, and to obtain living material for the New York Botanical Garden. Mr. E. A. Goldman, of the Biological Survey of the Department of Agriculture, will accompany the expedition for the purpose of extending the field surveys of the department, and of obtaining material for the study of the fauna of the region.

Professor T. A. Jacqar, of Harvard University, will lead a geological expedition to Iceland during the summer. On or about May 25 the party will leave Boston for Liverpool. On June 10 it will leave Leith, Scotland, by steamer and will make a circuit of the island, stopping at places of interest on the coast, and finally landing at Reykjavik, whence a trip will be made northward over the island on foot or horseback. The party will return by steamer to Reykjavik and then to Leith after an absence of about forty days.

Mr. J. Maxwell Miller, Rhinehart scholar of the Peabody Institute, has modeled a bust in plaster of President Ira Remsen and presented it to the Johns Hopkins University.

A BUST of Dr. William Osler, to be executed in marble by Mr. Hans Schuler, has been presented to the Johns Hopkins University. It is said that Dr. Osler will leave for England on about May 17.

Dr. Victor Hensen, professor of histology and embryology at Kiel, celebrated his seventieth birthday on February 10.

Mr. W. H. Maw has been elected president of the British Astronomical Association.

The Isaac Newton studentship of £250 for encouragement of study and research in astronomy has been conferred upon Mr. F. J. M. Stratton, B.A., scholar of Gonville and Caius College, Cambridge University.

The Prix Lacaze, of the value of 10,000 francs, awarded every four years by the Paris Faculté de Médecine to the author of the best

work concerning tuberculosis, has been given to Dr. André Jousset.

Dr. ALEXANDER MACFARLANE will give at Lehigh University a course of lectures on British mathematicians of the nineteenth century as follows:

April 7, 11:30 A.M.—'Sir George Biddel Airy (1801-1892).'

April 8, 11:30 A.M.—'John Couch Adams (1819-1892).'

April 11, 5:00 p.m.—'Sir John Frederick William Herschel (1792-1871).'

April 13, 5:00 p.m.—'Isaac Todhunter (1820-1884).'

April 14, 11:30 A.M.—'Duncan Farquharson Gregory (1813-1844),' 'George Green (1793-1841).'

April 17, 5:00 P.M.—'George Salmon (1819-).'Conclusion.

The secretary of war, the Hon. Wm. H. Taft, has accepted the invitation of the National Geographic Society at Washington to address the society on the Philippines. The address will be given during the first week of May and is the last of ten addresses on the far east which the National Geographic Society arranged for 1905. The other addresses are: 'China,' by Hon. John W. Foster, ex-Secretary of State; 'Japan,' by Baron Kentaro Kaneko, of the House of Peers of Japan; 'Russia,' by Hon. Charles Emory Smith, formerly minister to Russia and ex-Postmaster General; 'Manchuria,' by Col. W. S. Schuyler, who has recently returned after eight months with the Russian armies in Manchuria; 'The Evolution of the Russian Government,' by Dr. Edwin A. Grosvenor, of Amherst College; 'Recent Observations on the Russo-Japanese War, in Japan and Manchuria,' by Dr. Louis Livingston Seaman; 'The Japanese Side of the War,' by William E. Curtis; 'The Panama Canal,' by Rear Admiral Colby M. Chester, U. S. N., superintendent of the U.S. Naval Observatory; 'The Commercial Prize of the Orient and its Relation to the Commerce of the United States,' by Hon. O. P. Austin, chief of the Bureau of These addresses are published in the journal of the society, The National Geographic Magazine.

MR. MALCOLM MORRIS was expected to deliver the Harveian lecture before the Harveian Society of London on March 9, the subject being some modern therapeutic methods in dermatology, with exhibition of cases treated by the X and Finsen rays.

Dr. David Murray, professor of mathematics and astronomy at Rutgers College from 1863 to 1873 and subsequently adviser to the imperial minister of education at Japan and secretary of the board of regents of the University of the State of New York, died on March 2, aged seventy-five years.

Dr. August Bornträger, associate professor of chemistry at Heidelberg, has died at the age of eighty-five years.

HARVARD UNIVERSITY and New York University again unite with the Bermuda Natural History Society in inviting zoologists and botanists to spend six weeks in the temporary biological station located, as during the past two years, at the Flatts, Bermuda. It is expected that the date of sailing from New York will be July 1. Those who desire to take advantage of the opportunities offered by the station should send applications as early as possible, and not later than May 1, either to Professor E. L. Mark, 109 Irving Street, Cambridge, Mass., or to Professor C. L. Bristol, New York University, University Heights, New York City.

The Albatross, of the Bureau of Fisheries, has returned to California after four months of deep sea explorations of the South Pacific, under the direction of Mr. Alexander Agassiz.

The forestry department of the University of Michigan, through the kindness of Dean C. Worcester, secretary of the interior, Philippine Islands, who was a graduate of the university in 1889, has received a collection of herbarium specimens of the forest flora of the islands, which will form study material and assist in preparing some of the students of the forestry department for the Philippine Service.

An expedition from Indiana University, in charge of John A. Miller, professor of mechanics and astronomy, and W. A. Cogshall,

assistant professor of astronomy, will go to Spain to observe the total solar eclipse that occurs on August 30. At some point in northeastern Spain, on a favorable site chosen by Professor A. F. Kuersteiner, of the department of romance languages, who is now in Spain, they will install their instruments. This temporary observatory will include a horizontal photographic telescope about seventy-five feet long, having an aperture of eight inches. Into this telescope the sun's rays will be reflected by a mirror moving at such a rate that it will reflect rays in a con-This telescope, with one exstant direction. ception, will have greater photographic efficiency than any telescope that has hitherto been used to photograph the sun during a total solar eclipse, and is designed to secure photographs of the corona on a very large scale.

FIELD COLUMBIAN MUSEUM, Chicago, has arranged a course of nine lectures upon science and travel, on Saturday afternoons in March and April, at three o'clock, as follows:

March 4.—'The Explanation of Indian Ceremonies,' Dr. G. A. Dorsey, curator, department of anthropology, Field Columbian Museum.

March 11.—'Giant Reptiles of North America,' Mr. E. S. Riggs, assistant curator, division of paleontology, Field Columbian Museum.

March 18.—'Extinct Mammals of North America,' Mr. E. S. Riggs, assistant curator, division of paleontology, Field Columbian Mu-

March 25.—'Aims and Methods of Bird Study,' Dr. N. Dearborn, assistant curator, department of ornithology, Field Columbian Museum.

April 1.—'Hawaiian Cruise of the *Albatross*,' Professor C. C. Nutting, professor of zoology, University of Iowa.

April 8.—'The Fertilization of Flowers by Insects,' Dr. F. H. Snow, professor of systematic entomology, University of Kansas.

April 15.—'Geographic Factors Involved in the Rise of Chicago,' Dr. J. Paul Goode, assistant professor of geography, University of Chicago.

April 22.—'How Rivers and Lakes became Stocked with Fishes,' Dr. S. E. Meek, assistant curator, department of zoology, Field Columbian Museum.

April 29.—'The Basketry of California,' Dr. J. W. Hudson, assistant in the department of anthropology, Field Columbian Museum.