"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

Notre Dame, has taken up his work after a year's leave of absence, which was spent traveling in Europe, visiting the principal educational institutions. He attended lectures at the University of Paris and at the Technische Hochschule in Berlin.

PROFESSOR HUGO MÜNSTERBERG has returned to Harvard University from a trip to Chicago, Toronto and Ithaca. He spoke in Chicago before the Chicago Club on "Psychotherapy," before the Germanic Society on "Books and Readers in Germany and America," and before the Commercial Club on "Psychology in Commerce and Industry." In Toronto he addressed the Canadian Club on "Right and Wrong in the Prohibition Movement." At Cornell University he spoke on "New Developments in the Psychological Laboratory" and "Psychology and Law."

ON January 13, at 4 o'clock, Professor Cassius J. Keyser, of Columbia University, will deliver a lecture before the departments of mathematics and philosophy of the Brooklyn Institute of Arts and Sciences on "The Message of Modern Mathematics to Natural Theology."

THE Chicago Chapter of the Sigma Xi Society held its fall meeting on December 9. Dr. Chas. H. Judd, professor of psychology of Yale University and director-elect of the School of Education of Chicago University, gave an address on "Visual Perception and Eye Movements." Fourteen members joined the society at this meeting.

DR. J. B. LEATHES, of the Lister Institute, London, will deliver six lectures on the subject "The Metabolism of the Non-nitrogenous Substances in the Animal Body" in the Carnegie Laboratory of the University and Bellevue Hospital Medical College, New York City, beginning on Monday, January 4, 1909, and continuing daily throughout the week, at four o'clock in the afternoon. Those interested are cordially invited to attend the course.

THE Friday evening meetings of the Royal Institution, London, will begin on January 22, when Dr. Alfred Russel Wallace, O.M., will deliver a discourse on "The World of Life: as visualized and interpreted by Darwinism."

THE Wilde lecture of the Manchester Literary and Philosophical Society will be delivered on March 9, by Dr. H. Brereton Baker, F.R.S., reader in chemistry in the University of Oxford, the subject being "The Influence of Moisture on the Combination of Gases."

As this year is the jubilee of Speke's discovery of the Victoria Nyanza, the long-sought-for source of the Nile, the Royal Geographical Society commemorated the event by a special meeting on December 14, when Sir William Garstin gave an address on "Fifty Years of Nile Exploration and some of its Results." There was an exhibition of portraits, Speke's original map of his discoveries, and other maps, instruments, photographs, etc.

PROFESSOR THOMAS GRAY, professor of dynamics and engineering at the Rose Polytechnic Institute, eminent for his researches in these subjects, died on December 19 at the age of fifty-eight years.

THOMAS M. WILSON, B.Sc. (Toronto), M.D. (Rush), about to receive the degree of doctor of philosophy at the University of Chicago where he had been assistant in physiology, instructor in pathology in the Chicago Veterinary College, died on November 19 from glanders contracted in the laboratories of the McCormick Memorial Institute in an attempt to produce a serum to counteract the effects of the bacillus of the disease.

PROFESSOR EDUARD G. VON RINDFLEISCH, the eminent pathologist, died at Würzburg on December 5, at the age of seventy-two years.

THE death is also announced of Dr. Giuseppe Ciscato, professor of theoretical geodesy in the University of Padua, at the age of fifty-one years.

ACTING under instructions from President Roosevelt, the Secretary of the Interior has withdrawn from entry, selection and location all public lands in Wyoming, Idaho and Utah believed to contain phosphate rock, pending action by congress.

DR. ARTHUR J. EVANS, F.R.S., has given to the Ashmolean Museum of Oxford University

the collection of Anglo-Saxon jewelry and other relics bequeathed to him by his father, the late Sir John Evans. With it is also a comparative series illustrating the early Teutonic art of the continent, including specimens of Scandinavian, Frankish, Lombard and Gothic work.

It is announced that the collection of implements of the bronze age, formed by Canon William Greenwell, of Durham, will be presented to the British Museum. This collection of implements of the bronze age is regarded as the most extensive of its kind in private hands, and is said to compare well in many respects with that already in the British Museum. It includes specimens from nearly all parts of Great Britain and other countries of Europe, and also from Asia.

The Royal Society has given to Cambridge University the stellar spectroscopic equipment which has been in the care of Sir William Huggins since 1871. It consists of the following instruments: A refracting telescope with an object glass 15 in. in diameter and 15 ft. in focal length, to which is attached a spectroscope arranged for both visual and photographic work; and a Cassegrain reflecting telescope with a mirror made of speculum metal 18 in. in diameter and about 7 ft. in focal length, to which a spectroscope is attached with optical parts made of Iceland spar and quartz for photographing the ultra-violet spectrum of stars. These two telescopes are mounted equatorially on a single polar axis, in such a way that they can be moved independently in declination. They are at present installed in a dome about 20 ft. in diameter in Sir William Huggins's garden at Tulse-hill. The telescopes and the equatorial mounting were made by Sir Howard Grubb in Dublin, and the spectroscopes by Messrs. Troughton and Simms. The instruments are described as being in excellent working order, and would only require such insignificant changes as are usually needed in passing from one series of observations to another in the ordinary work of an observatory, but a suitable dome will have to be provided for the proper installation of the telescopes.

A plan for a new exhibition room on the second floor of Peabody Museum of Yale University has been given up and the restored mastodon is being set up in an exhibition room on the third story. The museum has become so overcrowded that future plans for exhibition have to be restricted. An increasing amount of the space in the building is demanded for scientific laboratories and classroom work.

The Rev. Joseph Beech, missionary in West China, has presented to the museum of Wesleyan University a collection of ethnological specimens from China and Tibet, which includes about 800 coins and about 300 other specimens. Among these are idols and other objects used in worship, domestic utensils, carvings in jade, ivory and other materials, pictures and books. From the widow of the Rev. Merrill Hitchcock the museum has received Mr. Hitchcock's herbarium.

Mr. James Gordon Bennett has offered the Aero Club of France a new international prize. A cup of the value of £500 is to be competed for next year in France under the auspices of the International Aeronautic Federation and the French Society for the Encouragement of Aerial Locomotion. Besides this cup Mr. Gordon Bennett offers three sums of £1,000 each to be given to the winner of each of the first three annual competitions.

At the monthly meeting of the British Astronomical Association, on November 25, by the permission of the astronomer-royal, the long series of photographs of comet 1908*c* Morehouse taken with the 30 in. reflector of the Royal Observatory were shown on the screen and described by Mr. Melotte.

As already announced, the Australasian Association for the Advancement of Science will meet in Brisbane on January 11. According to *Nature*, the association will come of age next year, and the meeting will inaugurate the jubilee year of Queensland, the history of which as a separate state dates from 1859. The new president of the association is Professor W. H. Bragg, of Adelaide, while the sectional presidents are Professor Pollock, of Sydney (astronomy, mathematics, and

physics); Professor Easterfield, of Wellington, N. Z. (chemistry); Professor Skeats, of Melbourne (geology and mineralogy); Mr. Charles Hedley, of Sydney (biology); Mr. A. H. S. Lucas, of Sydney (geography); Mr. A. G. Hamilton, of Wellington, N. Z. (ethnology and anthropology); Mr. G. H. Knibbs, of Melbourne (social and statistical science); Mr. H. W. Potts, of the Hawkesbury College (agriculture); Professor R. W. Chapman, of Adelaide (engineering and architecture); Dr. J. Mason, of Wellington, N. Z. (sanitary science and hygiene); Mr. Peter Board, of Sydney (mental science and education). The acting permanent secretary, Mr. J. H. Maiden, can be addressed at the office of the association, Royal Society's House, Sydney, and will be glad to give further particulars and to enroll members for New South Wales.

Nature states that a movement, supported by the Linnean Society of New South Wales, is on foot to approach the Australian government with the object of having Barrow Island, sixty miles off the northwest coast, set apart as a fauna reserve. The island, which is remarkable for its kangaroo, bandicoot, rat, and wren, none of which occurs on the mainland, is likely to be leased for sheep-farming, to the detriment of the fauna. The policy of the Crown's retention of islands as sanctuaries for wild life is being amply justified by the experiences of New Zealand and the United States, and the Barrow Island fauna is worth effort to save.

THE MORLEY CHEMICAL LABORATORY OF WESTERN RESERVE UNIVERSITY

THE open weather of the fall and winter has made it possible to push more rapidly the construction of the new Morley Chemical Laboratory of Western Reserve University. This building, which will house the departments of chemistry and geology of both undergraduate departments of the university, is situated upon the Adelbert College campus. It will provide accommodations sufficient for three hundred students in chemistry and one hundred and fifty students in geology.

The building is collegiate gothic in style, is built of brick and concrete, with Indiana limestone trimmings, and is of fire-proof construction. It is three stories in height. The first floor will contain two large laboratory rooms, recitation rooms, offices, small research laboratory, dark rooms, a workshop and storeroom. On the second floor there will be two large laboratories, the main lecture room, with preparation room adjoining, a storage room, a small laboratory, balance room and offices. The third floor will be largely devoted to the department of geology, which department will occupy a large lecture room, a laboratory for students, a private laboratory, offices and a storeroom. This floor will provide, also, additional recitation rooms, library and reading room and a small laboratory for electrochemistry for the department of chemistry. The laboratory building will cost one hundred and twenty thousand dollars and will be ready for occupancy in September, 1909.

The library of the department of chemistry will include the Morley collection of books on chemistry. These books were assembled by Professor Morley during his years of active association with Western Reserve and were given by him to the university. These books are now being reclassified and recatalogued.

UNIVERSITY AND EDUCATIONAL NEWS

THE regents of the University of Wisconsin, in accordance with the recommendation of the State Timber Land Owners' Association and the Wisconsin Conservation Commission, proposed to the United States government to provide a suitable building on the university campus for the use of the U. S. Forestry Service as a laboratory for the investigation of problems connected with the utilization of forest products. The proposed building will cost $30,000, and will be furnished with heat, light, and power by the university. The U. S. Forest Service desires to concentrate at some engineering college in the west all of its present laboratories. The purpose is to carry on an elaborate series of investigations upon all kinds of timber, with reference to adapting each to its best use, and to utilizing timber, stumps and refuse now wasted. The utilization of the by-products of the logging