(if its antecedents be traced backward) in the Kew Observatory, which was maintained by the British Association from 1842 to 1872, in which period the association spent some £12,000 on its upkeep.

THE WORK OF THE NATIONAL COMMITTEE ON MATHEMATICAL REQUIREMENTS

A PRELIMINARY report of "The Reorganization of the First Courses in Secondary School Mathematics" prepared by the subcommittee, which was authorized to publish it was issued on November 25. It is being made the basis of discussion by organizations, committees, local groups, etc., throughout the country. Over 30 such organizations are at present at work on this report.

The whole of the meeting of the Association of Teachers of Mathematics in the Middle States and Maryland in Philadelphia on November 29 was devoted to the discussion of this report; it had a prominent place on the program of the Central Association of Science and Mathematics Teachers in Chicago on November 28 and 29 and at the meeting of the Association of Teachers of Mathematics in New England in Boston on December 6.

Committees representing organizations in the following states are actively cooperating with the National Committee: Massachusetts, Rhode Island, New York, New Jersey, Pennsylvania, West Virginia, Ohio, Indiana, Illinois, Wisconsin, Iowa, North Dakota, Missouri and Texas.

Local groups or clubs are studying the report in Boston, Springfield (Mass.), Providence, New Haven, New York City, Washington, Baltimore, Cincinnati, Columbus (Ohio), Terre Haute, Chicago, St. Louis, St. Paul, Minneapolis and in several smaller cities.

Meetings in addition to those previously announced at which the work of the National Committee will be discussed are as follows: Mathematical Association of America in St. Louis, December 29 and in New York, January 2; Ohio State Teachers' Association, Columbus, December 30; Pennsylvania State Educational Association, Philadelphia, December 30; Association of Teachers of Mathematics in the Middle States and Maryland, Southern Section, Baltimore, December 13, Syracuse Section, Syracuse, New York, December 30.

The next meeting of the national committee will occur in New York City on December 30. The principal items on the program for this meeting are the consideration of the report on "The Reorganization of the First Courses in Secondary School Mathematics," the report on "The Valid Aims and Purposes of the Study of Mathematics" and the proposed revision of college entrance requirements.

The United States Bureau of Education has offered to publish the reports of the National Committee in the form of leaflets or bulletins.

A Mathematics Section of the West Virginia State Teachers' Association was organized in Fairmont on November 28. Professor John Eiesland, of the University of West Virginia, was elected chairman of the newly formed Section. Professor C. N. Moore spoke in behalf of the work of the National Committee.

CHEMICAL LECTURES AT WEST POINT AND ANNAPOLIS

THE American Chemical Society has arranged a series of lectures on the relations of chemistry to problems of interest in cadets of the United States Military and Naval Academies. The lectures to be given at West Point are as follows:

Dr. Wm. H. Nichols, New York City. Sulfuric acid, the pig iron of chemistry. January 10, 1920.

Dr. Wm. H. Walker, Massachusetts Institute of Technology, Cambridge, Mass. Manufacturing problems of gas warfare. January 17, 1920.

Dr. Chas. L. Parsons, 1709 G St., N.W., Washington, D. C. Nitrogen fixation and its relation to warfare. January 24, 1920.

Dr. Henry Fay, Massachusetts Institute of Technology, Cambridge, Mass. The amorphous state in metals. January 31, 1920.

Dr. Chas. L. Reese, E. I. du Pont de Nemours & Co., Wilmington, Del. Explosives. February 7, 1920.

The lectures at Annapolis are:

Dr. Henry Fay, Massachusetts Institute of Technology, Cambridge, Mass. Iron and steel. November 15, 1919, to post-graduate student officers.

Dr. John Johnston, Yale University, New

Haven, Conn. The utilization of research. December 13, 1919, to post-graduate student officers.

Dr. Arthur D. Little, Charles River Road, Cambridge, Mass. Natural resources in their relation to military supplies. January 17, 1920, to post-graduate student officers.

Dr. Wm. H. Nichols, 25 Broad St., New York City. Sulfuric acid, the pig iron of chemistry. February 6, 1920, to midshipmen.

Dr. Willis R. Whitney, General Electric Co., Schenectady, N. Y. Industrial research. February 7, 1920, to post-graduate student officers.

Dr. W. Lee Lewis, Northwestern University, Evanston, Ill. Organic research in toxic gases. March 6, 1920, to post-graduate student officers.

Dr. Chas. L. Reese, E. I. du Pont de Nemours & Co., Wilmington, Del. Explosives. April 2, 1920, to midshipmen, April 3, 1920, to post-graduate student officers.

Dr. Wilder D. Bancroft, Cornell University, Ithaca, N. Y. Organized research. April 30, 1920, to midshipmen, May 1, 1920, to post-graduate student officers.

Dr. Wm. H. Walker, Massachusetts Institute of Technology, Cambridge, Mass. Manufacturing problems of gas warfare. May 15, 1920.

SCIENTIFIC NOTES AND NEWS

A SECTION of engineering has been established in the National Academy of Sciences and is now constituted as follows: Messrs. H. L. Abbot, J. J. Carty, W. F. Durand, J. R. Freeman, H. M. Howe, F. B, Jewett, G. O. Squier, D. W. Taylor. All members of the sections of physics and chemistry were given an opportunity to remain with the section with which they had been affiliated or to be placed in the section of engineering.

AT a recent meeting of the corporation of Yale University it was voted "to extend the sincere congratulations of the corporation to Professor Ernest Brown on the completion of his monumental work on the "Tables of the Motion of the Moon," and to assure him that the university considers the work that he has done on these volumes as among the most important scientific contributions ever made by an officer of Yale University."

WE regret to learn that Sir William Osler, regius professor of medicine in Oxford University, who passed his seventieth birthday anniversary last July, was stricken with pneumonia in November.

SIR HENRY A. MIERS, vice-chancellor of the University of Manchester, and formerly professor of mineralogy at the University of Oxford, has been elected president of the Manchester Literary and Philosophical Society.

THE Royal Meteorological Society has awarded the Symons memorial gold medal for 1920 to Professor H. H. Hildebrandsson for distinguished work in connection with meteorological science.

DR. A. PIRELLI has been elected president of an Italian Society of Chemical Industry which has been organized at Milan.

DR. J. C. MCLENNAN, professor of physics in the University of Toronto, who has since 1917 been engaged in work for the British Admiralty, will shortly return to Toronto.

DR. NELSON W. JANNEY, New York City, has been appointed director of the new Memorial Laboratory of the Santa Barbara Hospital, founded by the late Dr. Nathaniel Bowditch Potter, for research on metabolistic diseases.

DR. RALPH B. SEEM, Baltimore, assistant superintendent of the Johns Hopkins Hospital, has accepted the position of superintendent of the Billings Memorial Hospital, Chicago.

MR. CHESTER G. GILBERT has resigned from the Smithsonian Institution to accept a position on the staff of Arthur D. Little, Inc., of Cambridge, Massachusetts, which has opened a Washington office in the Munsey Building, with Mr. Gilbert in charge.

DR. E. MILLER, associate in chemistry at the Johns Hopkins University, has resigned to take a position with the DuPont Powder Company.

MR. W. J. COTTON has resigned from the color laboratory of the Bureau of Chemistry to accept a position with the National Aniline and Chemical Company, of Buffalo, New York.

WE learn from *Nature* that Captain P. R. Lowe has been appointed assistant in charge of