industrial development. The lectures are very suggestive to American geographers and historians.

Later, Professor Blanchard will give a series of lectures on the geography of the French Alps, and, if time permits, will speak on the geographic factors which have influenced the European war. These lectures are given under the auspices of the department of geography, and members of the profession are welcome as guests.

Professor Blanchard is giving the following lectures in the Lowell Institute series at 5 p.M., in Huntington Hall, Boston:

March 13. "Battle of Charleroi and Morhange."

March 16. "Battle of the Marne."

March 20. "Fixation of the Front: Aisne, Yser, Ypres, Artois, Champagne."

March 23. "Battle of Verdun."

March 27. "Battle of the Somme."

March 30. "Evolution of the Tactics and Armaments from August, 1914, to December, 1916."

## THE HAYDEN MEMORIAL AWARD

At the last meeting of the Academy of Natural Sciences of Philadelphia the gold Hayden Memorial Geological Medal was, on the recommendation of the council and the special committee on the award, of which Dr. R. A. F. Penrose, Jr., is chairman, voted to William Morris Davis, Ph.D., emeritus professor of geology in Harvard University, in recognition of his distinguished work in the science of geology. The medal is awarded every third year "for the best publication, exploration, discovery or research in the sciences of geology and paleontology, or in such particular branches thereof as may be designated."

The award as first defined in 1888 took the form of an annual bronze medal and the balance of the income of the fund. The deed of gift was modified in 1900 so as to provide for a gold medal every third year.

The awards so far made are as follows:

James Hall, of Albany, N. Y., 1890.

Edward D. Cope, of Philadelphia, 1891.

Edward Suess, of Vienna, 1892.

Thomas Henry Huxley, of London, 1893.

Gabriel August Daubree, of Paris, 1894.

Karl A. von Zittel, of Munich, 1895.

Giovanni Capellini, of Bologna, 1896.

A. Karpinski, of Petrograd, 1897.

- Otto Martin Torell, of Stockholm, 1898.
- Gilles Joseph Gustave Dewalque, of Liege, 1899.
- Archibald Geikie, of Edinburgh, 1902.
- Charles Doolittle Walcott, of Washington, 1905.
- John Mason Clarke, of Albany, 1908.
- John Casper Branner, of Stanford University, 1911.

Henry Fairfield Osborn, of New York, 1914.

William Morris Davis, of Cambridge, 1917.

## COMMITTEES OF THE NATIONAL RESEARCH COUNCIL

THE following committees have been arranged:

Military Committee: Charles D. Walcott, chairman. From the Army: William C. Gorgas, William Crozier, George O. Squier. From the Navy: David W. Taylor, Robert S. Griffin, James D. Gatewood, and Howard E. Coffin, Van H. Manning, Charles F. Marvin, S. W. Stratton.

Research in Educational Institutions: George E. Hale, chairman.

Promotion of Industrial Research: J. J. Carty, chairman.

Nitrate Supply: Arthur A. Noyes, chairman.

Census of Research: S. W. Stratton, chairman. Chemistry: Marston T. Bogert, chairman. C. L. Alsberg, L. H. Backeland, A. A. Noyes, W. A. Noyes, T. W. Richards, Julius Stieglitz, W. R.

Whitney. *Physics*: R. H. Millikan, chairman. J. S. Ames,
F. B. Jewett, J. Langmuir, Theodore Lyman, C. E. Mendenhall, Ernest Merritt, M. I. Pupin, S. W. Stratton, Arthur G. Webster.

Astronomy: E. C. Pickering, chairman.

Botany: J. M. Coulter, chairman.

Zoology and Animal Morphology: E. G. Conklin, chairman.

Medicine and Hygiene: V. C. Vaughan, chairman. Frank Billings, Chas. F. Craig, David L. Edsall, Simon Flexner, Frederick P. Gay, John Howland, Reid Hunt, Theodore Janeway, W. W. Keen, Wm. J. Mayo, George W. McCoy, Richard M.