tury will be applied again, and the prizes of industrial and commercial leadership will fall to the nation which organizes its scientific forces most effectively.

MAXIME BOCHER[1]

MAXIME BÔCHER was born in Boston on August 28, 1867. His father, Ferdinand Bôcher, came to this country from France at the age of fifteen. His mother was Caroline Little, of Boston, a descendant of Thomas Little, who came to Plymouth in the early days of the colony and in 1633 married Anne Warren, the daughter of Richard Warren, who came in the *Mayflower*. Ferdinand Bôcher was the first professor of modern languages at the Massachusetts Institute of Technology; he was called to Harvard shortly after Mr. Eliot became president. Thus Maxime grew up under the shadow of the college, attending various schools in Boston and Cambridge; but it was chiefly by the stimulating influence of his parents, he tells us in the vita of his dissertation, that his interest in science was awakened.

He graduated at the Cambridge Latin School in 1883 and took the bachelor's degree at Harvard in 1888. Then followed three years of study at Göttingen, where he received the degree of doctor of philosophy in 1891, and at the same time the prize offered in mathematics by the philosophical faculty of the university. From 1891 till his death, which occurred at his home on September 12, he was a member of the department of mathematics. He married Miss Marie Niemann, of Göttingen in 1891. His wife and three children, Helen, Esther and Frederick, survive him.

He came to Göttingen at a time when Felix Klein was probably the most inspiring teacher of mathematics in the whole world. Breadth and accuracy of scientific knowledge and a true sense of proportion, combined with extraordinary powers of presentation, were characteristics of this great leader, whose scientific

[1] Minute on the life and services of Professor Bôcher placed upon the records of the faculty of arts and sciences, Harvard University, at the meeting of October 22, 1918.

productivity had already secured for him high standing among mathematicians.

It was from this environment that Bôcher came to Harvard to take up the profession of mathematics. His skill as an expositor in the classroom, before a scientific audience, and on the printed page shone out from the beginning of his career, but the originality of his mind saved him from ever becoming a mere expositor. As a lecturer he was preeminent among American mathematicians.

It is not difficult in science to find important problems which can not be solved, or unimportant ones which can be. Bôcher was successful in discovering subjects on which the advanced student could work with a reasonable prospect of securing results of value. He did not foster research by excessive praise, and his pupils sometimes felt that he was unappreciative. But a scientific contribution of real merit never failed to secure his attention, and he had infinite patience in helping the student who was really making progress to develop his ideas, to see that which was new in its true perspective, and to put his results into clear and accurate language.

As a scientist Bôcher was highly critical. It was, however, the constructive work called for when criticism has exposed errors or disclosed deficiencies, not the destruction with which an unimaginative mind is content, that to him was the important thing. He had extraordinary powers of judgment, both within the domain of pure science, and in things relating to the policies of institutions. His judgment of men, too, was accurate. For these reasons he was unusually well qualified to take a leading part in the affairs of the American Mathematical Society, which came into existence at the beginning of his scientific career. He became its president, and he served with marked success on the editorial board of its *Transactions*. He also contributed in no small measure toward helping the university to build up a strong department of mathematics.

The decade in which Bôcher's career as a university teacher began was marked by an awakening of the science of mathematics in this country. His scientific contributions were

of a distinctly high order, and their volume was not small. He early took a stand among the foremost investigators of the country, and his work met with generous appreciation abroad. On invitation, he delivered an address at the St. Louis Congress in 1904 and a lecture at the Fifth International Congress of Mathematicians at Cambridge, England, in 1912, and he was exchange professor at Paris in 1913–14.

His life was lived within the academic walls, and while he took keen interest in current events of the world about him, his contact with men outside of university circles was not broad, and his judgment of them was sometimes severe. But when opportunity presented itself to help in time of trouble, he was quick to respond. He sought relaxation from scientific labor in literature, philosophy and music, rather than in social gatherings.

Those who stood nearest him will remember him best for the singleness of his purpose, the constancy of his effort, and the greatness of his ideals.

THE BALTIMORE MEETING OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

The American Association for the Advancement of Science will hold its seventy-first meeting in Baltimore from December 23 to 28, 1918. This will be the seventeenth of the Convocation Week meetings. The presence of war students at Johns Hopkins University and the necessary return to their home institutions of those taking part in the program has compelled a change from the normal dates.

The opening general session will be held on Thursday evening, December 26, in McCoy Hall, located at 311 West Monument Street. After a short address of welcome by Dr. Goodnow, president of the Johns Hopkins University, followed by general announcements concerning the meetings, the retiring president of the association, Dr. Theodore W. Richards, of Harvard, will deliver his address on "The conservation of the world's resources."

Regular meetings of the Sections of the Association will be held from Thursday morn-

ing to Saturday afternoon. The addresses of the retiring vice-presidents, to be delivered on those days, are as follows:

Section A.—Henry Norris Russell. "Variable stars."

Section B.—William J. Humphreys. "Some recent contributions to the physics of the air."

Section C.—William A. Noyes. "Valence."

Section D.—Henry Sturgis Drinker. "The need of conservation of our vital and natural resources as emphasized by the lessons of the war."

Section E.—George Henry Perkins. "Vermont physiography."

Section F.—Herbert Osborn. "Zoological aims and opportunities."

Section G.—Burton E. Livingston. "Some responsibilities of botanical science."

Section H.—Edward L. Thorndike. "Scientific personnel work in the United States army."

Section I.—George Walbridge Perkins. (No address—in France.)

Section K.—C.-E. A. Winslow. (No address—section not meeting.)

Section L.—Edward Franklin Buchner. "Scientific contributions of the educational survey."

Section M.—Henry Jackson Waters. "The farmers' gain from the war."

The registration headquarters will be in the lobby at the main entrance of Gilman Hall and will open on Thursday, December 26, and succeeding days at 9 A.M. Arrangements will probably be made to attend to the registration of those who call after 4 P.M. on Wednesday at the Assistant Secretary's office in the Southern Hotel. All of the meetings will be held in the new buildings of the Johns Hopkins University at Homewood. The Baltimore City College, downtown, may be used by one of the sections. The council will meet on Friday and Saturday mornings at 9 o'clock at Gilman Hall. The meeting of the general committee for the election of officers for next year and for the selection of the time and place of the next meeting will be held at the Southern