

It is possible that Professor Nutting excluded from his consideration all museums which were wholly or partly supported by public funds, but the inference drawn from the paragraph quoted above is that there are no museums in the central states which are following along the lines indicated in his paper. There are at least two museums which should be classed as provincial museums which are now doing (and have been for some time past) the work outlined in Professor Nutting's paper, viz., the Public Museum of Milwaukee and the Chicago Academy of Sciences.

Both of the institutions mentioned are making extensive local collections, the exhibits are arranged and labeled with special reference to the education of the public, loans of material are made to the schools and large study collections are being acquired for research work. Free public lectures are maintained in the latter institution.

This statement is made with no desire to criticize Professor Nutting's very excellent paper, but simply to rectify a manifestly misleading statement, the inaccuracy of which doubtless escaped the notice of the author.

FRANK C. BAKER

#### MILK PROTEINS

TO THE EDITOR OF SCIENCE: The October number of the *Journal of Biological Chemistry* contained an article entitled "Milk Proteins," by Geo. A. Olson, and written as a "Contribution from the Agricultural Chemical Laboratory of the University of Wisconsin." It is generally assumed that when articles appear under the above caption they have received the sanction of those in charge of the laboratory from which they emanate. I desire to state that in this case Mr. Olson is entirely responsible for the material of his article and that those in charge of the laboratory assume no responsibility whatever for the deductions therein stated. I trust you will find a place in an early issue of SCIENCE for this note.

E. B. HART

UNIVERSITY OF WISCONSIN,  
November 2, 1908

#### QUOTATIONS

##### THE RETIREMENT OF PRESIDENT ELIOT

THE announcement that President Eliot is to retire next March will come as a shock to thousands of persons who have never even seen University Hall. The country has come to look upon him as a great natural force, like the Gulf Stream, unwearied by the flight of time, unworn by incessant activity. Yet at the age of seventy-five even the strongest man is entitled to throw off some of his burdens. This is not the occasion, however, to review President Eliot's career as a whole; for he has, we trust, years of beneficent toil still ahead of him; our purpose is merely to touch on a few of the aspects of his administration at Harvard, and the causes which have made his the most notable career in the history of American education.

President Eliot would be the first to point out that he was fortunate in both the place and time of his labors. Harvard was the oldest college in the United States; it had the longest tradition of culture; it was at the center of the most highly educated and thoroughly civilized part of the union. Then, too, he assumed the presidency in 1869, just at the beginning of that period of enormous agricultural and industrial expansion which followed the civil war. America was growing rich rapidly, and Harvard has shared this prosperity. Other colleges have also had their part in this general advancement: why has Harvard taken the lead? Why is it the foremost university in America to-day? There can be but one answer: Because President Eliot has displayed in extraordinary measure the qualities of a great leader. When the graduates of Harvard addressed him in a formal letter on his seventieth birthday, they said: "With prophetic insight you anticipated the movements of thought and life; your face was toward the coming day." This is perhaps the best definition of a leader—that he is a man who sees in the long march of events the coming of the inevitable, and sets himself to hasten it.

President Eliot foresaw the coming of the elective system. It had, indeed, already come, here and there, in a limited way. Many edu-

cators, however, were not aware of the fact; others caught half-glimpses of the movement and stubbornly—shall we say blindly?—resisted it. He perceived the impending revolution and unhesitatingly cast his influence on the side of the new régime. It was evident that, with the development of scientific research in many branches, with the quickening interest in historical studies and economics, in the fine arts, and in modern languages—that under these circumstances the old hard and fast curriculum was bound to break down; that it had broken down. No college could pretend to minister to the intellectual needs of mankind which confined its students to the narrow round of the classics, mathematics, cut-and-dried philosophy, and a smattering of physics and chemistry. The new wine was bursting the old bottles. President Eliot dared greatly. Under a storm of criticism he boldly converted Harvard into an experimental laboratory for the application of the elective system. That experiment has not yet ended. We may not have mastered all the principles involved; we are still overwhelmed by the mass of details to be coordinated and subordinated. But whatever final results the centuries may bring, we can say now that President Eliot achieved a success which astonished his supporters and confounded his opponents.

The elective system is based on the theory that the best educational product is to be obtained only when student and teacher enjoy the widest intellectual freedom; and to this theory President Eliot has adhered with unswerving consistency. Indeed, he is often accused of pushing it to extremes. The student is allowed unrestricted range in the choice of courses; the professor's academic freedom has, as President Eliot himself once expressed it, been subject to only two limitations, "those of courtesy and honor." The president, too, has followed a liberal principle in picking his faculty. He has never shown that suspicion or dread of unusual intelligence, that predilection for mediocrity, which marks some of our heads of universities. He has selected the ablest men he could find, whether graduates of Harvard or not, and Harvard has thus escaped the blight of inbreeding which two or

three decades ago afflicted Yale so severely. And all these policies have been carried out with wonderful executive skill—with unexampled grasp of detail, with foresight, patience, steadiness and tolerance.

To find a man who can fill his place is, of course, impossible. His attention to public questions and his utterances on such subjects as labor and its rights have made him the foremost private citizen of the United States. But it will take a long time for the next president of Harvard to establish such a reputation. Even the administrative work will have to be rearranged; for the giants who can lift the load to which his shoulders have grown accustomed are few. Nor are Harvard's problems all solved. The practical application of the elective system is full of difficulties. The system has been abused at Harvard and elsewhere. Small institutions of limited resources, ambitious to present an imposing list of courses in the catalogue, have sacrificed the instruction in the old studies with well developed disciplines, in order to spread the teaching thin over a broad field. If Harvard has been able to avoid this form of enfeeblement and demoralization, it has had other forms to contend with. Committees of the faculty are still trying to devise means by which students shall not divide and dissipate their energies in too many directions, or shall not slip through college on "soft" courses and practically avoid all study. These, however, are minor matters; for if Harvard can maintain a distinguished faculty, can make the conditions of life and teaching at Cambridge so attractive as to draw to its service the finest minds and characters in America, the rest will be comparatively easy. Thus President Eliot's successor can, as the letter of resignation puts it, face "the sure prospect of greater labors and satisfactions to come."—*New York Evening Post*.

#### SCIENTIFIC BOOKS

*Marine Engineering.* By Engineer-Commander A. E. TOMPKINS, Royal Navy, Late Instructor in Steam and Marine Engineering, Machine Construction, etc., at the Royal Naval College, Greenwich, and Lec-