MEMORIAL OF JACQUES LOEB[1]

IT is nearly a year since the passing of Jacques Loeb. We miss his personality, we miss the worker, but the spirit of his work still lives and dominates, for it has been impressed indelibly on the biological advances of the past thirty years.

By nature he was sensitive and timid even to the point of shyness; he avoided publicity and only infrequently appeared on our programs, so that many of us doubtless did not know him. His work, however, has touched, in a basic way, so many fields of scientific research that there are few of us indeed who are not deeply in its debt for suggestion and inspiration.

By methods as simple as they are direct and conclusive, his genius added fundamentally to so many phases of physiology and biology that it can unhesitatingly be said: "He founded 'general physiology' in America."

This is not the time nor is it the occasion to detail at length the achievements of his fearless originality or to dwell upon the biographical incidents which led to their consummation. Suffice it that he was classically schooled in youth and developed a prime interest in general philosophy and psychology. He early became impatient with the results and methods in these fields; he craved something more tangible. This he sought in the physiological laboratory of Goltz at Strasbourg. Later he also came in contact with the botanist Sachs while assistant of Fick in Würzburg.

It is in these contacts that we see foreshadowed that broad outlook on biology which led to his expositions on mammalian brain physiology, to his studies in "Comparative Physiology of the Brain and Comparative Psychology," to his contributions to the physiology of sense organs, "Forced Movements, Tropisms and Animal Conduct." We see in the philosophy which gave us his "Mechanistic Conception of Life" that he found what he sought when he entered the experimental field. His early application of physical chemistry to the analysis of life phenomena led to "Artificial Parthenogenesis" and "Salt Balance," and we see the reflection of these studies in his latest work on the chemistry of colloids and the physico-chemical properties of membranes.

The scope and fundamental nature of his work is well attested by a memorial program at one of our leading universities where papers were read on the relation of Loeb's work to botany, to zoology, to physiology, to pharmacology, to chemistry and to psychology.

[1] Read before the twelfth annual meeting of the American Societies for Experimental Biology, in affiliation with the American Association for Advancement of Science, Washington, December 29 to 31, 1924.

But a knowledge of his written word gives no index of the inspiration of personal contact of the student with Loeb, the educator; it is the constant theme of those who worked with him. What science gained when he left the academic field for that of pure research was more than offset by the limitation of his contacts with the youth who might have carried on the torch.

While all who knew him will miss the guidance of his keen mentality and straight thinking, there is a small number who have suffered a loss too great to measure—his close personal friends—who were permitted to know not only the scientist, but also the man, who saw and admired his idealism, who were cheered by his never-failing and subtle humor, who were drawn irresistibly to his simple, loving nature.

Jacques Loeb is gone; it is fitting that we honor the memory of him whose life touched so intimately our lives, whose work has so thoroughly leavened our work.

W. E. GARREY

TULANE UNIVERSITY

MEMORIAL OF THEODORE HOUGH[1]

THEODORE HOUGH was graduated from the Johns Hopkins University as a doctor of philosophy, with physiology as his principal subject, in 1893. He was the last of the group of men who received their sole training in physiology under Newell Martin. It was a school of physiology which in the period from 1876 to 1893 played an important part in the development of physiological research in this country. In point of numbers it was then contributing a larger percentage of workers in the subject than any other laboratory, and the researches published were thoroughly modern in spirit. This group of men all had a uniform training, based chiefly on a sound knowledge of the biological sciences. In this respect it resembled the Cambridge school, of which indeed it was an offshoot. Enrolled as graduate students in the philosophical faculty of the university, they acquired something of the academic spirit and scholarly attitude that characterizes devotees of the higher learning. Physiology for them was not a handmaid to therapeutical medicine, but an independent far-reaching science that touched the deepest problems of physical and spiritual existence, a science whose "waves wash the shores of the two worlds of matter and of mind." It was a congenial company of young scholars moved by an unselfish desire to promote their subject. Any new fact discovered was welcomed with

[1] Read before the twelfth annual meeting of the American Societies for Experimental Biology, in affiliation with the American Association for Advancement of Science, Washington, December 29 to 31, 1924.