

Perhaps the only note of disappointment that may be voiced concerns the title of the symposium. It may mislead prospective readers as it did this reviewer. A modern symposium on molecular bioenergetics cannot ignore energy-transducing mechanisms in mitochondria, chloroplasts, and bacteria without being challenged. Finally, more careful proofreading would have avoided printing errors, particularly the embarrassment of misspelling Meyerhof's name in the index. As a book containing stimulating articles in several important areas of biochemistry, this volume is highly recommended. The price is much too high for the size of the book.

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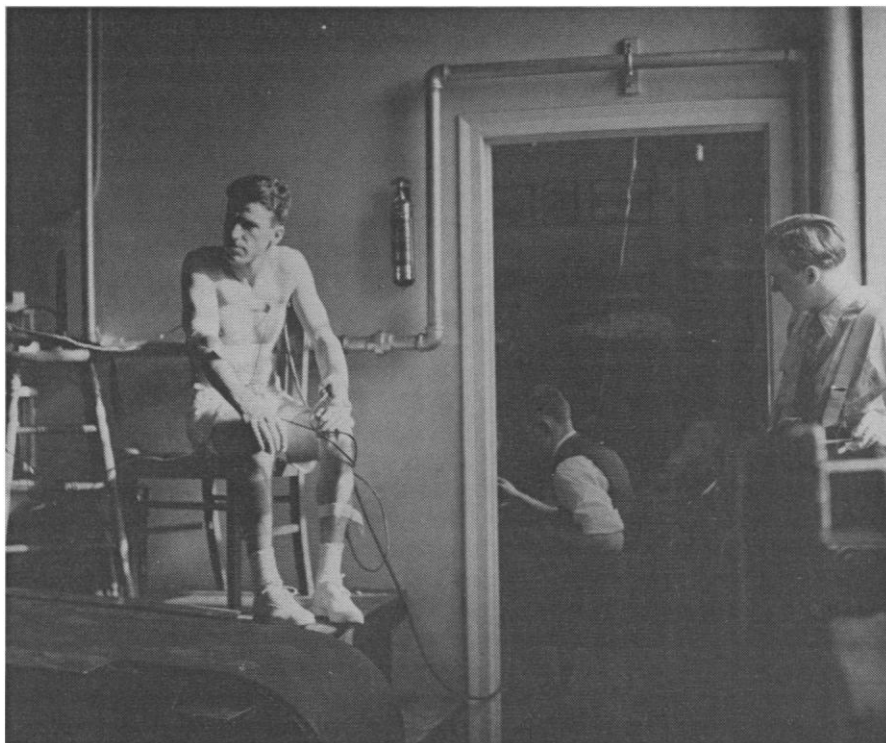
Henderson's Lab

The Harvard Fatigue Laboratory. Its History and Contributions. STEVEN M. HORVATH and ELIZABETH C. HORVATH. Prentice-Hall, Englewood Cliffs, N.J., 1973. x, 182 pp., illus. \$9.95. International Research Monograph Series in Physical Education.

This book recounts the history of the Harvard Fatigue Laboratory, a remarkable organization that existed from 1927 to 1947. Although it grew (in association with the Harvard Business School), flourished, and then died over a quarter of a century ago, it has had far-reaching effects since then. Many of its scientists and trainees are busy operating somewhat comparable laboratories in many parts of the world.

The original name "Henderson's Lab" recalls a person well known to all medical students from the Henderson-Hasselbalch equation, though known to his contemporaries as "Pink Whiskers." Later the work was dominated by D. B. Dill, a "scientist's scientist" who was always experimenting on himself and anyone who could be corralled.

The laboratory was involved in applied physiology in various situations. The conditions of work of people in the Mississippi delta, at the Boulder Dam, or in the South American Andes were being investigated partly from the point of view of the physiological interest, but partly to find out whether there were ways in which the workers



The first treadmill at the Harvard Fatigue Laboratory, 1938. The subject is believed to be Glen Cunningham. Observers are Ashton Graybiel and J. Yule Bogue. [From *The Harvard Fatigue Laboratory: Its History and Contributions*]

could be made to function more efficiently. Such a situation can lead to extreme suspicion, and this close association with industry clearly affected the proper functioning of the laboratory. For example, the Andean miners refused to be tested on the bicycle ergometer; thus their maximum work capacity could not be measured. However, many very important contributions were made relating to exercise physiology, climatic stress, high-altitude acclimatization, nutritional requirements, aging, and other matters.

Much secret work was done during World War II, but it is shocking to read (pp. 164-65), "We would be remiss if we did not note that many nutritional problems were investigated in the years 1941 to 1945, the results of which were not published in the open literature. They provided much valuable information on nutrition and the methods that could be utilized in large population surveys." If true, it is surely scandalous that such information obtained 30 years ago is not now available when the need for proper food and knowledge of nutrition has never been greater throughout the world.

This book can be read with interest both by historians of science who are interested in how a particular laboratory comes to be created, functions,

and finally dissolves and by those interested in exercise physiology in a variety of stressful states, because so much of the crucial experimentation came from this laboratory.

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Life of Broom

Dr. Robert Broom, F.R.S. Palaeontologist and Physician, 1866-1951. A Biography, Appreciation and Bibliography. G. H. FINLAY. Balkema, Cape Town, South Africa, 1972. xvi, 158 pp. + plates. R7.50. South African Biographical and Historical Studies, vol. 15.

In the fields of vertebrate paleontology, comparative anatomy, and physical anthropology, Robert Broom is so closely comparable in stature and influence to the monumental naturalists of the 19th century that it is hard to realize that little more than 20 years has elapsed since his death. Like many of the giants who preceded him, Broom was educated as a physician, and it was mostly as a practicing physician that he supported self, family, and scientific career for more than 60 years.