

the junction between nerve and muscle. By a simple, ingenious experiment he showed that in a curarized frog, motor nerves can still conduct and skeletal muscles still contract if stimulated directly, therefore the drug must exert its paralyzing effect at the myoneural junction. No one would have guessed that a century after Bernard had satisfied his curiosity in solving this apparently academic question, his answer would prove to be of direct service to the clinician.

This brief summary of Bernard's contributions to

physiology far from exhausts the list of his discoveries. It has been given to few experimenters to enrich their chosen science with so many important discoveries and fruitful ideas as he did. Although Bernard's work stopped three quarters of a century ago, a present day scientist, no matter what his field, can read with profit "The Introduction to Experimental Medicine." This is Bernard's own analysis of how his mind worked in making his discoveries, and won for him a seat among the Forty Immortals of the French Academy.

## BOOK REVIEW

CLAUDE BERNARD AND THE EXPERIMENTAL METHOD IN MEDICINE, by J. M. D. Olmsted and E. Harris Olmsted, \$4.00, Pp. 277, New York, Henry Schuman. 1952

Doctor and Mrs. Olmsted have collaborated in the production of this fascinating life story of the man they consider to be one of the founders of experimental medicine. It furnishes adequate evidence to justify the esteem and reverence of the authors in giving him this title.

"Why is the name of Claude Bernard associated with the experimental method as applied to medicine? The method is as old as science itself, and its application to medicine, although long delayed, was made through physiology two centuries before Bernard's time by William Harvey in England. In France, the experimental method was reinstated for medicine at the beginning of the nineteenth century by François Magendie, under whom Bernard was proud to have served his apprenticeship as a physiologist. Many of Bernard's contemporaries, especially in Germany, were using the experimental procedure with increasing success.

"In the first place, the sum of Bernard's achievements finally silenced skepticism about the power of experiment to draw from nature the secrets of the living organism. His work closed a period in the history of medicine. Considered singly, none of these discoveries was of the sort which transforms the whole scene overnight. Yet each brought to light some fundamental truth of organic function; and the whole of his accomplishment in the twenty years of his greatest ac-

tivity, 1839 to 1859, did transform the scene and make him the foremost physiologist of his time.

"In the second place, after his most intensive period of work, Bernard paused to harvest his experience in another way. He composed a description of the experimental method as applied to physiology, and illustrated it by his own researches . . ." This reference to his famous book: "Introduction to the Study of Experimental Medicine" gives an indication of its great influence, which has continued to recent times.

The article on Claude Bernard in this issue of DIABETES gives brief information regarding his life and points out specifically his achievements in relation to diabetes and associated physiological problems. The book gives interesting details concerning his early days as a French country boy and as a medical student in Paris; it describes his distinguished scientific career throughout his long adult life.

The authors are well qualified to write this book both from the standpoint of an understanding of physiology and interpretative biography. Doctor Olmsted was educated at Middlebury College and Harvard University and went to Oxford as a Rhodes scholar. He taught physiology at Harvard, Johns Hopkins, and the University of Toronto, and at present is Professor of Physiology at the University of California. Mrs. Olmsted holds degrees from Oxford University in England and the University of Toronto. She has been lecturer of classics at University College, University of Toronto. The book can be recommended not only to physicians and students of the biological sciences, but also to the general reader.