

Book Reviews

Dr. Schiller similarly illuminates Claude Bernard's thought in each chapter which describes his outlook on such problems as: structure and function; the chemistry of Bernard's times; the problem of digestion; and in particular Bernard's own discovery of hepatic glycogenesis.

In the last twenty years of his life Claude Bernard gave increasing thought to synthesizing the facts of physiology, i.e. to generalization. From this phase emerged his great concept of the 'milieu intérieur'. Claude Bernard saw life as a process of conflict between the external and internal environments; a conflict which is resolved by the creative harmony of life, as opposed to the destructive discord of death. In achieving this great synthesis of physiological phenomena Claude Bernard emerged as neither a vitalist nor a materialist. Indeed, his great generalization reveals startling appreciation of the cybernetic factor in physiology.

Dr. Schiller's scholarly and lucid presentation of Claude Bernard's place in science makes the reader realize how his thought has perfused the physiological work not only of his own nineteenth century but our own twentieth. It will be found particularly valuable as a key for those who want to approach Claude Bernard's work from the outside.

KENNETH D. KEELE

Claude Bernard and Experimental Medicine (Collected papers from a Symposium commemorating the centenary of the publication of *An Introduction to the Study of Experimental Medicine* and the first English translation of Claude Bernard's *Le Cahier Rouge.*), ed. by Francisco Grande and Maurice B. Visscher, Cambridge, Massachusetts, Schenkman Publishing Company, 1967, pp. 120, illus., \$8.98.

The richness of Claude Bernard's contribution to medicine is reflected in the many different aspects from which his work can be fruitfully viewed today. Whereas Dr. Schiller places Bernard in the context of his times and place, this symposium held in 1965 at Minnesota in commemoration of the centenary of the publication of his *Introduction to the Study of Experimental Medicine* lays greatest emphasis upon the effects of Claude Bernard's work on twentieth-century physiological research.

The Symposium opens with Reino Vistanen's brilliant paper entitled, 'Claude Bernard and the History of Ideas'. This admirably explains Bernard's conviction that, 'when physiology is sufficiently far advanced, the poet, the philosopher and the physiologist will all understand each other'. That Bernard should declare that 'the artist will find in science a more stable foundation, and the scientist will draw from art a more certain intuition', reveals in him striking similarity of outlook with that expressed by Leonardo da Vinci in his *Treatise on Painting*. Such Bernardian views will come as a surprise to many, but Vitanen shows how enthusiastically they were explored by Bernard himself and examined by contemporary artists. Claude Bernard's fertile ideas spread but fitfully outside France. E. Harris Olmsted describes how, 'Bernard's reputation in England and America at first rested almost entirely upon his factual physiological discoveries, his advocacy of the experimental method and its basic principle, determinism. Almost no attention was paid to the concept he had declared fundamental to general physiology, that of the milieu intérieur . . .' Only at the turn of the century did this concept find appreciative utilization at the

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hands of such men as Haldane and Sherrington in England, and Cannon and Henson in the United States.

The majority of the papers in the Symposium serve to illustrate how Bernard's researches have provided the background to twentieth-century progress. Owen H. Wangensteen follows the course of research on gastric juice from Claude Bernard's experiments right up to Gregory's preparation of gastrin. Alfred Fessard, who refers to Bernard as 'not a physiologist, but the personification of Physiology itself', describes Bernard's classic work on curare. He brings to this a new emphasis derived from the recently revealed *Cahier Rouge*, and *Cahier de Notes*, where Bernard actually uses the term 'terminal plaque of the motor nerve' to describe the site of action of curare. Fessard extends this motif to show its continuity with his own recent work on the post-junctional chemical receptors and acceptors.

It is a reflection of the diversity of Bernard's genius that similar histories of progress can be traced in such fields as, the use of drugs as tools in the elucidation of physiological mechanisms, recent developments in the discovery of glycogen, and the variability of the interior milieu.

The book is concluded by a translation of Claude Bernard's *Cahier Rouge*, made by Hebbel H. Hoff, Lucienne Guillemin, and Roger Guillemin. This is a particularly welcome item, comprising a complete edition of the manuscript, not merely a selection of excerpts. It succeeds in conveying to the reader a fascinating sense of intimacy with the man who wrote the observations and reflections jotted down between 1850 and 1860, a personal impression much more vivid than that obtained by reading Bernard's formal works. This valuable contribution provides a striking finale to a fine set of variations on the theme of Claude Bernard.

KENNETH D. KEELE

Short-title Catalogue of Books Printed before 1851 in the Library of the Royal College of Obstetricians and Gynaecologists, 2nd ed., London, Royal College of Obstetricians and Gynaecologists, 1968, pp. vi, 85, illus., 30s. 0d.

This slim volume lists no fewer than 1,200 titles under the names of some 600 different authors. It replaces an earlier catalogue published in 1956, which included only about half this number of items. In the preface to this new edition Sir John Peel refers to the help given to the College by the Wellcome Trustees in augmenting this historical section of the library, and to bequests from the late Sir Eardley Holland and the late Miles Phillips, both of whom were keen students of the history of their chosen specialty.

Amongst the new additions to the library may be noted the *Fasciculus Medicinae* of Johannes Ketham, 1513, which includes the anatomy of Mondino da Luzzi; a copy of the 1532 Augsburg edition of Eucharius Roesslerin's *Der schwangeren Frawen und Hebammen Rosengarte*; and Jakob Rueff's *De conceptu et generatione hominis* dated 1554. The oldest book in the library is Albertus Magnus' *De secretis mulierum* printed in Venice in 1478. Other important acquisitions include Sir Richard Manningham's *Artis obstetricariae* in two editions from Miles Phillips' collection; Solayrés de Renhac's *Elementorum artis obstetriciae compendium*, 1765; and J.-R. Sigault's account of his operation of symphysiotomy, published in 1776. As might be expected, the College's collection of works by British authors such as Thomas Denman, William