Outstanding among the many fine chapters is that by Henderson et al. entitled “The Adrenal Cortex and Osmoregulation in Teleosts.” This chapter does not introduce new concepts; it summarizes the relevant data on adrenocortical hormones in teleosts and the effects of these steroid hormones on composition and distribution of body fluids, renal function, branchial and gastrointestinal function, and the vascular system. The chapter by William Etkin on the endocrine mechanism of amphibian metamorphosis is superb. Dr. Etkin emphasizes that the adaptation of the animal determines which hormones are pressed into service and it is tissue responsiveness, not endocrine messengers, which changes in evolution. “Environmental Stimuli and the Mammary Gland” by Tindal and Knaggs, is an exquisite analysis of the suckling reflex. They review the neural background operative in the suckling stimulus and the ascending pathways for tactile information, nontactile stimuli such as body heat, and the additional facilitatory effects of auditory, thermal and other sensory modalities.

The chapter by J. Maetz, “Mechanisms of Salt and Water Transfer Across Membranes in Teleosts in Relation to the Aquatic Environment,” discusses osmoregulation at the cellular and subcellular levels. He reviews the functional differences observed when teleosts living in hypotonic and hypertonic media are compared and the functional changes which the effector-organs of osmoregulation undergo at the cellular and molecular levels when transferred to media of various salinities.

This book is highly recommended for those interested in comparative aspects of the evolution of endocrine organs and endocrine mechanisms and their relation to the resolution of adaptational challenges presented by a changing environment.

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Modern Methods in the History of Medicine. Edited by Edwin Clarke. New York, Oxford University Press, 1971. xiv, 389 pp. $22.50.

New approaches for historians, are explored by 19 eminent writers, in 21 chapters of timely information. The chapter on historiography of ideas in medicine, for example, notes that the historian of science is concerned with the thoughts that refer to facts and theories, be they true or not; whereas the scientist is concerned with facts and theories, asking whether they are true or not.

Most of the methods and techniques described have been introduced into the history of medicine recently. The investigation of disease, the rise of automation,
statistical methods, diagrams, maps, oral history, practical history, and copying machines are considered. Attempts to complement and supplement more traditional methods are discussed. Objectives of this volume include enhanced accuracy, the production of good history, and the creation of a more precise form. Clarity of expression in this carefully assembled volume is only one of its virtues, others being its valuable notes and references and useful index.

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BASIC HUMAN ANATOMY AS SEEN IN THE FETUS. By Hans Elias. St. Louis, Missouri, Warren H. Green, Inc., 1971. xiii, 159 pp. $16.50.

This short book is described by the author as “anatomy in a nut-shell.” A student using it is supposed to derive a more comprehensive view of anatomy of the human body than he would by studying an adult cadaver.

There is a so-called text portion followed by an atlas. Actually, the book consists almost entirely of black and white photographs of sections of body parts from human fetuses. In the atlas portion the labels of the photographs are the names of the structures, whereas in the text portion the text consists merely of labels of photographs in the form of explanatory paragraphs. Many of the same photographs are used in both the text and atlas portions. The photographs are quite good but as with all photographs they can’t begin to match the clarity of an artist’s drawing for teaching purposes. Secondly, it is extremely difficult to teach beginning students anatomy by using only sections of body parts. The text aims at a very elementary level: “The bones alone could not even support the body. They must be kept together by ligaments and muscles as a tall television antenna or the mast of a sailing vessel are kept in position by guy wires.”

Nothing is stated at the beginning of the book as to what age the fetuses were from which sections were excised for the photographs. It isn’t until the reader gets to photograph number 63 that he finds one described as the cranial extremity of a 5-month fetus. Later on a brain is labeled as from a 3-month fetus. Still later on the respiratory system is labeled as being from a 4.5 month fetus. Therefore, in the majority of photographs the reader can never be sure of the age of the fetus from which the body parts were taken.

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