

Fundamentals of the Histology of Domestic Animals. Alfred Trautmann and Josef Fiebiger; trans. and rev. from the 8th and 9th German eds. of 1949 by Robert E. Habel and Ernst L. Biberstein. Ithaca, N. Y.: Comstock Pub., Cornell Univ. Press, 1952. 426 pp. Illus. \$8.75.

In an evaluation of the English translation of Trautmann-Fiebiger, it is well to keep in mind the history and characteristics of the German text itself. This European work represents an extreme condensation of several very detailed and well-documented German texts on comparative domestic animal histology. At intervals a considerable amount of new material, with many very excellent illustrations and color plates, was added. It is natural that a book condensed to this degree to be used as a school text could not include the extensive bibliographies of the works on which it is based.

The preparation of the English text involved translation primarily, although considerable rearranging, and some substituting, adding of new material, and condensing were done.

Many excellent improvements are seen in the form and arrangement of the contents. For instance, light and boldface type in varying sizes are used to emphasize headings and subheadings. In addition, the various units of subject matter are set apart in chapter form. The use of center headings exclusively for this purpose in the German text was confusing. Readers will welcome the use of a standard type face that is uniformly readable. In the German text the reviewer often found general subject matter in addition to the minute detail buried in fine print.

Numerous excerpts summarizing recent important researches, together with references, have been added. The translation is free enough to avoid cumbersome German sentence structure, yet literal enough to preserve the original thought or meaning. In a trifling number of instances inexact translation and a poor choice of equivalent words were noted, especially in the section on basic tissues. For example, in the discussion of reticular fibers, an addition of the translator states that reticular fibers "branch as collagenous fibers are not supposed to do." In the previous paragraph of the original text and also in the translation it is stated that collagenous fibers do branch, as we well know. In another place the German text states that smooth muscle cells are enveloped in ". . . *Membranellen, die viele feine Reticulinfasern und auch elastische Fasern enthalten.* . . ." This implies that there is a predominance of reticular fibers, which is correct. The English translation reads, ". . . many elastic fibers and reticular fibers . . .," and as such neutralizes or reverses the emphasis. An example of poor choice of words is seen in the chapter on the female genital organs. It is stated that the "mucosa bears a columnar epithelium whose cells are only temporarily ciliated." The German word in question is "*zeitweise*," and it is apparent that the English equivalent would more properly be "occasionally" rather than "temporarily."

The reviewer highly recommends this text to those interested in domestic animal micromorphology, since in addition to being the only textbook in the English language in its field, this translation is a very significant achievement in its own right.

ALVIN F. WEBER

*School of Veterinary Medicine
University of Minnesota, St. Paul*

Chemical Engineering Techniques. B. E. Lauer and Russell F. Heckman. New York: Reinhold Pub., 1952. 496 pp. Illus. \$6.00.

The volume is characterized by the authors as "a new treatment of the methods used in conducting chemical manufacturing operations," in which they emphasize techniques rather than specific equipment. A well-arranged series of topics, such as "The Assembly of Materials," "The Preparation of Materials for Reaction," "The Production and Distribution of Energy," "Conditions Affecting the Chemical Reaction," "The Separation and Purification of Materials," and "Further Treatment of Products for Sale, Shipment, Storage, or Other Use," is covered in a completely descriptive, brief, and quite elementary manner. Much of the material duplicates that already covered in current works on unit operations and other engineering texts.

The book will probably have greatest use in presenting to nontechnical students or nontechnical personnel in industry the scope and approach to problems of a chemical nature by the chemical engineer. Unfortunately it leaves the reader stranded in that no references are given through which topics of interest might be further pursued. The authors have attempted to cover a tremendous field in a small volume, which leads to the characterization of "less and less about more and more" for this work. The printing, binding, and illustrations are good.

C. W. SELHEIMER

*Department of Chemical Engineering
Illinois Institute of Technology*

Ultraviolet Radiation. Lewis R. Koller. New York: Wiley; London: Chapman & Hall, 1952. 270 pp. \$6.50.

Dr. Koller's book is a useful summary of much of the literature about ultraviolet radiation and is clearly addressed to the nonspecialist. After a short introductory chapter, it discusses the various artificial and natural sources of ultraviolet radiation, and next deals with its transmission and reflection by a number of substances commonly used in scientific laboratories, as well as some tissues such as human skin, and some materials of industrial importance. The last two chapters deal with miscellaneous applications of ultraviolet radiation and with the means of detecting it, nearly all the space in the last chapter being given to photoelectric devices.

There is a good index, and the book is valuable for reference. It cannot be said to be equally valuable as