The book retains its primary value as a teaching aid for introductory courses of pharmacognosy as customarily taught in colleges of pharmacy. The inclusion of considerable reference material extends its usefulness to graduate students in the field and to workers in related fields. The writing style is good, and descriptive material is clearly presented. The characteristically excellent morphologic data, valuable in the identification and evaluation of drugs, are well supported by many drawings and photographs.

Claus has instituted timely improvements in the choice of material for inclusion in the text. Discussions of many of the crude drugs of lesser importance have been reduced or deleted, with corresponding emphasis on those more useful to current medical and technologic practice. The chapter on "Allergens and allergenic preparations" has been expanded and reflects well Claus' own experience in teaching this valuable phase of pharmacognosy. The chapter on "Pesticides" has been similarly enlarged in response to the increasing emphasis on pest control and the use of chemical agents for this purpose.

The chapters on "Antibiotics," on "Immunizing biologicals," on "Vitamins and vitamin-containing drugs," and on "Endocrine products" have been rewritten. Discussions of these subjects involve considerable overlapping and some reiteration of subject matter basic to other disciplines in the pharmaceutical curriculum. While I recognize the usefulness of their inclusion in this text, I believe that this value will vary with the treatment given these topics in courses prerequisite or subsequent to the one for which this book is designed. Minor omissions may be noted, as for example the omission of levarterenol bitartrate in the description of the adrenal medulla.

A new heading, "Prescription products," is included for many drugs, as an indication of their inclusion in current pharmaceuticals. The lists given are not complete, and the rapid changes in such categories may lessen the value of these listings in the future. The policy of stating uses and doses continues for many drugs. These follow official descriptions for drugs included in the *Pharmacopeia of the United States of America* or the *National Formulary*. For many, obsolete terms are retained; a review of these in the light of current pharmacologic thinking might well be considered in future revisions.

Appendixes are provided to continue the presentation, in convenient form, of considerable material valuable to the basic study of crude drugs. These include "Powdered drugs" and a "Key to the identification of powders," the "Cultivation of drug plants," and "A taxonomic list of important drugs."

This textbook remains a standard work in the presentation of pharmacognosy. Elements of transition are apparent in the choice and handling of subject matter, yet basic values are retained. I anticipate the continued excellence of future editions of this familiar book in the hands of the current author.

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An Atlas of Diseases of the Eye. E. S. Perkins and Peter Hansell. Little, Brown, Boston, 1957. 91 pp. Illus. $10.

This most recent and beautifully printed atlas of diseases of the eye covers the commoner external and internal diseases and disorders with superbly colored drawings and photographs and concise text, with the latest information on each subject. It is designed for general physicians and for students, to fill an urgent need. The former will find answers to questions regarding vascular and general systemic disease in which the eye participates. In addition to this, the student may differentiate the trivial from the more important.

The photography is excellent, and the drawings are incomparable. The format is modern, attractive, and very readable. By means of eight-color photolithography, the printer has achieved the best possible results with the illustrations. Roche Products, Ltd., subsidized the work, which, because of this, sells at a fraction of the cost of the printing.

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Textbook of Human Anatomy. J. D. Boyd, Wilfrid E. LeGros Clark, W. J. Hamilton, J. M. Yoffey, Solly Zuckerman, and A. B. Appleton. Macmillan, London, 1957 (order from St. Martin's Press, New York 17). 1022 pp. Illus. $16.50.

The three standard systematic anatomies in current use are tomes in the 1500- to 1700-page range—6 to 7 pounds of book. When they first appeared 55, 64, and 99 years ago, they were much smaller, but they have grown with nearly every edition until each has become a compromise between a reference compilation and a textbook. Cunningham's *Manual* and Grant's *Method,* as topographic rather than systematic approaches, have found a place in anatomic pedagogy, but, except for the now defunct *Piersol,* the "big three" among the systematic books have had no serious competitors for half a century.

This new work is a textbook designed for the beginning student who, because of curriculum changes, often has less time now for anatomy than he did a few years ago. The standard approach is notably abridged, and the resulting book has less than 1000 pages of reading matter. These changes for the benefit of the beginner will, however, give the book less value on the physician's reference shelf.

The six British anatomists who have collaborated are representatives of anatomy departments at the universities of Cambridge, Oxford, Bristol, Birmingham, and London. Hamilton and Yoffey wrote the introduction; Hamilton is author of chapters on the locomotor system (258 pp.) and on the digestive system (98 pp.). Yoffey's chapters deal with the cardiovascular system, including lymphatics (113 pp.), and with the respiratory system (33 pp.) and the spleen (4 pp.). Zuckerman has chapters on the urogenital system (100 pp.), on the ductless glands (34 pp.), and on growth (22 pp.). Clark writes on the central nervous system (129 pp.), and Boyd takes up the peripheral nervous system (143 pp.) and the sense organs, including the skin.

Two things about the plan and organization strike one immediately. First, each chapter contains a fairly large number of orientating remarks, anatomic generalities, and correlations. The authors try to present anatomy as the science of body structure rather than as a listing of topographic relationships. Depending on the topic at hand, these correlations may refer to embryologic or phylogenetic features, to the classification of information, to function, to x-ray appearances, or to aging, growth, and variation. Correlations with microscopic anatomy are more extensive in this book than in other textbooks of gross anatomy. About 15 percent of the book treats of generalities of the sort mentioned.

The second thing to be noted is that the usual detailed descriptive anatomy is markedly abridged. For instance, an artery is described simply as arising in a certain way, proceeding in front of such-and-such a structure, and supplying a certain region by means of ascending and descending branches. Details on the relations of the vessel and on the minor branches and distribution are omitted. Descriptions of individual carpal, metacarpal, and phalangeal bones, and of the minor foot and skull bones, are curtailed or omitted. The facial muscles of expression are named, but only four are described. Anatomists are bound to question the desirability and extent of the cutting that was done in various

places. On the whole, however, the surgery has been skillfully done, and the body that remains is not notably disfigured.

There is no reason why a medical or dental student, with this textbook, a good atlas, and the usual laboratory facilities, could not have a superior course. The textbook, however, will meet with different degrees of enthusiasm from teachers of anatomy. These will assess students' needs differently, and there will be questions about the advisability of this abridgment or that.

Textbook of Human Anatomy, despite the multiple authorship, is simply written; short declarative sentences predominate. Most of the illustrations are colored halftones, and these, on the whole, are diagrammatic, clear, and effective. The paper is heavy and glossy, and the format is attractive. The index seems adequate.

One may reasonably question whether an abridged account of the tracts and finer organization of the central nervous system (even one as effectively handled as Clark's chapter is) should occupy space in a gross anatomy textbook when whole books and special courses are devoted to neuroanatomy. A treatment of meninges, blood supply, external relations, and the ventricular system should suffice.

It is unfortunate, for the American user, that the authors did not delay publication of the edition long enough to permit them to incorporate the Paris revision (1955) of the Basel nomina anatomica terminology instead of the Birmingham revision, which has never been used here.

Several of the illustrations, especially those of the muscles of the back and arm, were reduced too much in size for clarity. The use of a red, or pink, halftone overlay to represent areas of muscle attachment on halftone figures of bones is often not clear. In the section on autonomic nerves, fine yellow lines in the diagrams, indicating nerves, do not show up well, especially under artificial light. The deep blue color added as an overlay to certain figures often obscures more than it clarifies. There are occasional lapses—mislabeling of figures or failures to correlate text and figures—but these are not too bothersome. The geniohyoid muscle was grouped with the scalene muscles! Sometimes, for the smaller muscles, the nerve supply was not mentioned.

No references whatever are listed. Because of the heavy, glossy paper, the book is nearly as big and as heavy as the older textbooks that have 50 percent more pages. The binding does not appear sturdy enough for the weight of the book and for student handling.

The greater part of the information in *Textbook of Human Anatomy* is of the conventional sort. Many provocative references in the British *Journal of Anatomy* and in the American and European literature of the last 25 years or more have been ignored, which could have added a notable flavor of freshness to this book.

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Lehrbuch der Tropenkrankheiten. Ernst G. Nauck. Thieme, Stuttgart, 1956 (order from Intercontinental Medical Book Corp., New York 16). 432 pp. Illus. $15.25.

Until the appearance of this volume, no German-language textbook on tropical diseases had been published since 1942. The present book has a twofold purpose—it is intended for use by students in the Institut für Schiffs- und Tropenkrankheiten, in Hamburg, and for German-speaking practitioners in tropical climates. Ernst Nauck, director of the institute, has, as associates in this undertaking, a large group of distinguished German specialists, yet the chapters have been so closely knit together that they constitute a well-integrated presentation.

The sequence of subjects is somewhat unusual, beginning with arthropods as agents and vectors of disease, followed by parasitic worms, protozoans, spirochetes, bacteria, rickettsias, tropical viruses and fungi, nutritional deficiencies, diseases of various other etiologies, and finally poisonous animals. The last 19 pages provide a comprehensive subject index.

In the beginning of the first section it is stated that tropical medicine, unlike other areas of medical science and practice, requires a fundamental understanding of biology, because of the preponderance of parasitic diseases in warm climates; such knowledge is essential for appreciating the clinical and epidemiologic implications of most tropical diseases. This emphasis is maintained throughout the volume, without sacrificing the practical goal. The material presented under each causative agent includes etiology, geographic distribution, epidemiology, pathogenesis, symptomatology, diagnosis, and clinical management and control. Although the techniques and therapeutic procedures recommended are principally those developed by German workers, important contributions by American and other investigators have not been excluded. Owing, no doubt, to space limitation, sources for most of the information presented have not been cited.

Very few errors or omissions have been noted. On page 48 (first paragraph), "Scott" instead of "Stoll" has been credited with estimation of the amount of global schistosomiasis. In discussing the intestinal amebas (pages 110, 115, 126) the German concept and terminology are followed with respect to *Entamoeba histolytica* as the tissue invader and the morphologically indistinguishable *E. hartmanni* as the lumen parasite. Figure 42 (page 115) suggests that the latter form is a "small race." Chemotherapy for eradication of these two forms is separately but satisfactorily presented. In the color illustrations for thin-film preparations of the human malaria parasites (Figs. 53 to 56) there is an inconsistency in the legends (an apparent oversight) between the designation for male and female mother sex cells—*Mikrogametozyt* and *Makrogamet.* In Table 20 (page 405) the term *solenoglyphae* is not provided for viperine snakes, as distinguished from the categories *aglyphae, opisthoglyphae,* and *proteroglyphae*; instead, the family name *Viperidae* is employed.

The text is unusually lucid; the illustrations are excellent, well chosen, and beautifully reproduced; the format is pleasing; and the binding is attractive. This book should not only serve its intended purpose for German students and practitioners of tropical medicine but, because of its concise, authoritative, up-to-date information, is recommended to readers who commonly consult English reference books.

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Pica. A survey of the historical literature as well as reports from the fields of veterinary medicine and anthropology, the present study of pica in young children, and a discussion of its pediatric and psychological implications. Marcia Cooper. Thomas, Springfield, 1957. 114 pp. $3.75.

This is an interesting and well-organized account of pica (a Latin word, meaning "magpie," that refers, in this connection, to the eating of clay, plaster, ashes, and charcoal), which has been observed in many peoples in all parts of the world, from ancient times. The hisorical summary is particularly well done, as is a survey of the current incidence of pica. This may be greater than suspected. It occurs in groups suffering from dietary deficiencies and in people on whom heavy nutritional demands are made, such as young children and childbearing women.

Laboratory studies on domestic and experimental animals show that animals seek, from dirt or other materials, that which may compensate for dietary defi-