vessel is referred to, in sections, as the *external maxillary (facial) artery*. Such imperfections, if they are considered such, are patently inherent in the form of presentation used in this book. It may be well to note at this juncture that the author does not feel bound by any single official terminology. B.N.A. terms predominate, though given in English form, but ". . . when B.R. terms are obviously better they are used, and B.N.A. terms are given in parenthesis. A few other commonly used terms are mentioned." Such a liberal attitude toward authoritative nomenclature undoubtedly has its merits, particularly in an effort to get away from the stilted, stylized phraseology of the majority of texts; however, this reviewer deplores the sanctioning of such terms of direction as "headward" and "tailward."

Rather loosely-worded sentences, often introductory in nature, occur here and there throughout the text. To cite a few examples: "Right and left pleural cavities contain their respective lungs"; "The pleura is smooth and glistening because slightly moist, to minimize friction of lung movement"; "Nerve fibers (autonomic) send no messages to consciousness"; "Vagi are largely food passage nerves. Therefore they supply air passages also"; "The fluid containing the ovum is squirted by the rupturing follicle directly into the tube which sucks it toward the uterus." Also, in a book where purposeful omission of nonessential detail is an expressed policy, it is surprising to come upon material of such dubious value as a description of Gudden's commissure, an excessively long discussion of Wolff's law, an enumeration of the constituents of tartar, and the extraordinary mnemonic which reads: " 'Sphincter' and 'sympathetic' both begin with *s*; therefore one might expect them to be linked; but they are not." While it is well recognized that the introduction of controversial material may, in selected instances, be quite justified and stimulating, it is difficult for the present writer to see the virtue of including in an anatomy text statements of debatable relevancy, some of which are dangerously dogmatic, if not misleading, and which deal with highly disputatious topics—for example: "Mental defect indicates structural defect of the brain . . ."; "In [heart] disease myocardial vessels grow into the cusps; therefore when rheumatic valvular disease is found, the physician should conclude that the myocardium is also infected . . ."; "Stimulation . . . in man shows that the motor area is not always confined to the precentral gyrus. . . ." An inconclusive discussion of the events occurring in cardiac hypertrophy and dilation, following valvular lesions, and an unconvincing dismissal of the Purkinje fibers as significant constituents of the conducting system of the human heart might be added to the above list.

Outright contradictions are rare in this book, but one might easily be led to interpret as such these sentences touching upon the mechanics of respiration: "In expiration . . . the main factor is perhaps elastic recoil of the lung . . .," and, on the next page, "Expiration results largely from weight of the thorax, spring-like qualities of costal cartilages, and some contraction of anterior abdominal wall muscles."

As is true of J. C. B. Grant's excellent *Method of anatomy*, the only text remotely similar to the book under review, attention is directed primarily toward fundamental principles and away from superfluous details. The student is properly urged to conduct his dissection in a spirit of investigation. In fostering the cultivation of independent powers of observation and in making clear immediately the value of information gained, this book goes a long way in encouraging the student beyond what Mall referred to as the first and easy step of anatomy—the dissection of the body—to a deeper, more practical, and synthetic mental impression of it. No one text can hope to satisfy all conditions demanded by all instructors in all courses, and to prognosticate the reaction of students to a new text is a task for the soothsayer, not for a mortal reviewer. Final test of any text lies, of course, not in its review, but in the crucible of the classroom; this book most certainly deserves that test and the thanks of the profession must go out to this—and indeed to any—effort to rid the teaching of anatomy of ". . . the pernicious effect of dogmatism . . . more manifest in it than in other medical sciences."

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***Your eyes have told me.*** **Louis H. Schwartz. New York: E. P. Dutton, 1945. Pp. 208. (Illustrated.) $2.75.**

This book is not for the scientist who wants precise and accurate information and has the mental discipline and intelligence to understand it. It is written in a free and easy style for the layman, and since the information it contains outweighs the misinformation, it will probably be of benefit to the lay reader. In the Preface and Epilogue the author records his intentions concisely: "The purpose of this book is to give the reader a better insight into one special branch of that vastly absorbing maze of perplexities, the human body." Between these two portions of the book lie 31 chapters of popular science writing, frequently careless, usually overdramatic, generally trite, too often gullible.

"The Siamese Twins" is a discussion of sympathetic ophthalmitis; "Cherchez la femme," of gonorrheal ophthalmitis; "Popeye Clinic," of exophthalmos; and "The Greeks had a word for it," of nystagmus. The ophthalmologist is shocked to find a visual acuity of 20/50 described as 40 per cent of normal, and the psychiatrist must be disturbed to read of hysterical blindness, usually a symptom of some deep-seated difficulty, being treated with a placebo and some strong suggestion. The discussion of cross-eyes serves only to confirm most of the layman's misconceptions regarding this condition, and in the extremely confused chapter on color-blindness the author is as gullible as any layman regarding the types, classification, diagnosis, and possibilities of curing the condition.

If we accept the proposition that the best way to fight rackets and charlatanry is by educating the public, then

more books on technical subjects written in easy language are advisable. Dr. Schwartz's Preface is an excellent piece of writing for the layman. It is unfortunate that the quality of this part of the book was not continued into the subsequent chapters.

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***Text-book on spherical astronomy.*** (4th ed.) W. M. Smart. Cambridge: at the Univ. Press; New York: Macmillan, 1945. Pp. xii + 430. $4.75.

The fact that this book comes out in the fourth edition only thirteen years after its first publication is in itself an indication of its usefulness. The popularity of Smart's text is undoubtedly due to its comprehensive scope. Crossing freely the traditional frontiers of spherical astronomy, the author leads the student from astronomical coordinates and methods of position measures to the study of planetary motions, stellar motions, and binary star orbits. Included in the book are such subjects as the application of photography to astronomical measurements, the prediction of occultations and eclipses, heliographic coordinates, etc., for which adequate treatment in textbooks has not been available.

In a clear, fluent style the problems are skillfully developed with relatively simple mathematical tools. Many excellent diagrams help the understanding, and the technique of shading used for illustrating three-dimensional relationships is most successful. Each chapter is followed by a set of exercises by which the student can test his mastery of the subject.

While complete and rigorous treatment of all problems is hardly to be expected in a textbook of this kind, it seems to the reviewer that a derivation might have been given for the principal terms of precession and nutation. This would probably have avoided a serious mistake in Section 134, where the semiannual term of Nutation is erroneously attributed to the ellipticity of the earth's orbit instead of to the change in the sun's declination.

The fourth edition differs little from the second and third except for a few corrections and changes in numerical values of constants. The use of thinner paper, however, makes the volume more compact without impairing the legibility.

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## *Scanning Science—*

Macmillan & Co. announce a work on "Social Interpretations of the Principles of Mental Development," by Prof. J. Mark Baldwin, of Princeton, and "An Outline of Psychology," by Prof. E. B. Titchener, of Cornell University.

*—7 February 1896*