BOOK REVIEWS

was not referred to in the preceding section; but "these results are true regardless of whether the domains in question are simply-connected or multiply-connected." He does at least point out here that one does have to worry about single-valued conjugate harmonic functions in multiply-connected domains. Another example appears when the Cauchy integral theorem is proved for functions with a derivative on the boundary and later, in proving the symmetry principle, is used for functions only continuous on the boundary. Also in Chapter VII, the author claims "to prove the existence of the solution of the Dirichlet problem in the case of a general domain of finite connectivity," not stating how general. In reality, he proves it for domains bounded by smooth Iordan curves. The reviewer regrets that the lucid style of the author was not utilized to give a textbook presentation of the theory of prime ends, which would have been appropriate in a book of this type and is lacking in the literature. It is also rather unfortunate that the author followed the only too prevalent custom of claiming that this work, being a textbook, need not be documented. No references to original sources or to other works are given. This is true even when, in general discussions, the author makes statements he does not prove in the book. The value of this excellent book to the graduate student would have been enhanced considerably if it had also furnished a key to further study.

G. Springer

The theory of functions of a real variable. By R. L. Jeffery. (Mathematical Expositions, No. 6.) University of Toronto Press, 1951. 13+232 pp. \$6.00.

This book consists of two distinct parts. The first part (Chapters I-V) gives a general introduction to functions of a real variable, measure, and integration, while the second part (Chapters VI and VII, with Chapter VIII as a kind of appendix) treats the problem of inverting the derivative of continuous functions, leading to the Denjoy integrals, and studies the derivates and approximate derivates of functions of a real variable on arbitrary linear sets. The author himself, who in previous papers has made some valuable contributions to these topics, considers the presentation of this second part as the main purpose of his book. In both parts only functions of one real variable are discussed.

After an introduction concerning the real number system, Chapter I deals with sets, sequences, and functions and Chapter II with metric properties of sets. Here the author considers only the outer measure of a set A, called by him the metric of A and designated by $|A|^{\circ}$. Two

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