BOOK REVIEWS

point set whose elements need not all be distinct points and talking about points of accumulation of "sets" of this kind (he regards a sequence $\{P_n\}$ as such a set). Now, a "point set" in this latter sense is in reality a function (a sequence being a function defined on the positive integers). There is no need to introduce the concept "point of accumulation" except in the sense that is customary in topology. Strict adherence to this point of view makes for clarity and for less difficulty on the part of students. All that the author wishes to accomplish can be done by suitable discussion of points of accumulation of a set and their relation to convergent sequences chosen from the set. A second criticism relates to the author's definition of a closed set as one which contains all its points of accumulation and is bounded. This departure from the usual definition spoils the duality between open and closed sets, complicates the statements of many theorems, and has no advantages apparent to the reviewer. The topological definition of connectedness is not given; the definition which is given on p. 39 (connectedness by polygonal paths) is unsatisfactory, except for open sets, and the remarks about connected regions on p. 42 puzzled the reviewer. The intermediate value theorem for continuous functions is not presented as a connectedness theorem.

Angus E. Taylor

Conformal mapping. By Z. Nehari. New York, McGraw-Hill, 1952. 8+396 pp. \$7.50.

This is a textbook that will fill two needs. The author has designed the first four chapters to serve as the basis for a one term introductory course in complex variables, while the remainder of the book can be used in a graduate course in conformal mapping. It is claimed in the preface that only a knowledge of advanced calculus is necessary to read this book. (Perhaps a slightly better knowledge of the properties of real numbers is actually assumed than is given in most courses in advanced calculus.)

In Chapter I, the properties of harmonic functions in the plane are developed. The author discusses the solutions of the boundary value problems of the first and second kinds, introducing the Green's and Neumann's functions, and the harmonic measure. The first chapter closes with a derivation of the Hadamard variation formula giving the dependence of the Green's function on the domain.

The complex number system is explained in the first part of Chapter II, culminating in a discussion of sequences and series of complex numbers. After an analytic function is defined to be one which has a derivative, the connection between analyticity, the

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