meromorphic functions are treated. But here the work is sketchy, and in some places only references to papers are made. Furthermore, the author does not indicate very clearly what role the theory of orthogonal functions plays in the study of entire and meromorphic functions. This, of course, could not very well have been accomplished in the space devoted to this topic.

In Chapter IV some further properties of the invariant metric are given, and the differential geometric properties of the Hermitian metric are described.

A companion book to this one was to be written dealing with the invariant metric. We hope that this interesting book will soon appear in this country.

This book is essentially a collection of results by the author and other people working in this field. It is to be regretted that some of the value of this book, as a book, is diminished by the lack of elaboration. In many places results are merely stated without proof. However, a fairly complete bibliography is inserted at the end, and in all instances of the text, references are made to original papers. The material of this book is new and interesting, and it appears that this field is by no means exhausted. Anyone interested in this field would find it very stimulating to read this book.

ABE GELBART

An Introduction to Differential Geometry with Use of the Tensor Calculus. By Luther Pfahler Eisenhart. Princeton, Princeton University Press; London, Humphrey Milford and Oxford University Press. 1940. 10+304 pages. $3.50.

The author's *Differential Geometry of Curves and Surfaces*, which was published in 1909, has seen extensive use. Since that time, the tensor calculus has come to play an important role in Riemannian Geometry and in the Theory of Relativity and the author has considered it desirable to rewrite the differential geometry of curves and surfaces in terms of the tensor calculus. The differential geometry treated in the present book is about equivalent to that in the first half of the 1909 book, with the addition of the concept of parallelism in the sense of Levi-Civita.

There are four chapters. The first is concerned principally with the properties of curves in euclidean 3-space, but includes a definition of the parametric equations of a surface and the envelope of a one-parameter family of surfaces, in order to include consideration of the developables associated with a curve. The material of the chapter is for the most part included in the first two chapters of the 1909 book