

curvature. A geometric interpretation of the third derivative is due to Abel Transon (1841) who introduced the notions aberrancy of a curve, and axis of aberrancy. This notion has been almost completely lost, and the author is to be commended for reviving it. Transon's term, however, was "axis of deviation," which just reverses the historical statement as given by the author in regard to these two names.

The book is carefully printed and none of the misprints noticed by the reviewer can give rise to any difficulty.

E. J. WILCZYNSKI.

*Elliptische Funktionen.* Von Professor Dr. KARL BOEHM. Erster Teil. Göschen (Sammlung Schubert XXX). Leipzig, 1909. xii + 354 pp. 8.60 Marks.

A TREATISE on any of the functions of analysis, the properties of which are well known, must rely for its usefulness upon the mode and style of presentation. The historical development may be followed, or the functions may be introduced through later discovered properties. There can be no doubt that the former is the natural and more easily comprehended introduction, especially to the higher functions. Professor Boehm has elected the latter course, in this first volume, with the understanding, however, that the reader may commence with the second volume which starts out with elliptic integrals and the inversion problem.

The present volume is occupied with the various infinite series which represent simply and doubly periodic functions, with related series and products, and with their mutual interdependence.

The beginner will probably do well to take the author's suggestion and commence with the second volume. Students who have had a good course in the calculus can easily appreciate the inversion problem and its close proximity to so-called applications, but would most likely become discouraged and cry *cui bono* if requested to assimilate the contents of this volume in order to become acquainted with elliptic functions. This is true even if the shorter course were followed which the author has carefully planned and indicated by footnotes at the proper places through the volume.

It must be said, however, that the volume contains all the necessary preparation for an understanding of the series repre-