

tures of Bernoulli polynomials and gamma functions he has listed only the most important works. The bibliography is a very useful one. It is hardly to be expected that it should be complete. In fact I have found a considerable number of omissions by checking it against the partial bibliography which I have collected in an incidental way during the past fifteen years.

It is natural to expect that an exposition of a general subject should involve an important element depending on the personal interests of the author; and this is particularly true in the case of a book which is essentially the first in its field. But in the present book this element appears to me to have played too large a role in determining the distribution of emphasis and the selection of material. Much of the work in the first two hundred pages might well have been given with less fullness and the space so gained have been utilized in the presentation of some of the important matters which are omitted.

While this book will probably stand for some time as the best book in its field, and as such is therefore of great importance, it can not be regarded as having come near to being a definitive treatise on the difference calculus, even in its present state of development. Whatever one may think of the distribution of emphasis and selection of material in this volume there is still a definite need for another book with a quite different distribution and selection — one in which the personal equation of the author does not play so large a role.

R. D. CARMICHAEL

## ENRIQUES ON ALGEBRAIC GEOMETRY

*Lezioni sulla Teoria Geometrica delle Equazioni e delle Funzioni Algebriche.* Vol. I and vol. II. By F. Enriques. Bologna, O. Chisini, 1915, 1918.

The reviewer, far from being a specialist in algebraic geometry, commences this short review with the misgiving that in the last two years of reading "at" the work of this famous author he has set his wisdom teeth into a sticky mouthful. It may however be said at the outset that the paucity, however unfair, of references to living workers in American universities,—a general reference to Osgood's *Funktionen-theorie* and particular ones to Scott (C. A. Scott) and "Angas" ("Ch. Angas Scott"(!)),—indicates that the field is one in which few of us are expert, and therefore not only that the point of view of the reviewer will be that of most of his readers, but also that the treatise itself unbars a field which some of us might well explore. The reviewer tried the experiment of lecturing from it to capable, and patient, advanced students during the past academic year.