

schools of all the world. More than ever it is incumbent upon American leaders in education to exert every effort to improve the preparation of the teachers and the status of the profession, for it is to our system of education that Europe will turn for guidance.

The recent tremendous increases in enrollment of students in our universities includes fortunately large numbers who are taking up the study of mathematics. It is somewhat significant that this increase is affecting only the universities, not the normal schools. Undoubtedly, the day is not distant when our universities and colleges will be called to train not only high school teachers, but also the "junior high school" teachers. The nature of this training for the instructors in mathematics in the secondary schools needs systematic and continued study, taking into account the changes in the world in which we live.

This study under review, while reflecting a world which has passed, will nevertheless continue for many years to be of great value to all concerned with the preparation of our teachers of mathematics.

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*Theory of Maxima and Minima.* By HARRIS HANCOCK.  
New York, Ginn and Company, 1917. v + 193 pages.  
Price \$2.50.

THE student of mathematics meets the interesting subject of maxima and minima early in his first course in calculus. The subject appears again and again in his courses in advanced calculus and functions of a real variable, each time carrying the student a little deeper into the theory, but rarely giving him opportunity to view the subject as a whole. The English reading student finds it particularly difficult to study the theory for functions of two or more variables as expounded by Scheefer, Stolz, von Dantscher, and Weierstrass. Professor Hancock's book is for this English reading student.

The opening chapter discusses functions of one variable, first taking up functions having complete derivatives throughout the interval in question (ordinary maxima and minima). This covers the usual discussion in a first course in calculus with a somewhat more mature reader in view. Then follows a discussion for functions having derivatives only for definite values of the variable, or having one-sided derivatives (ex-