

A TREATISE ON  
PLANE CO-ORDINATE GEOMETRY.



A TREATISE ON  
PLANE CO-ORDINATE GEOMETRY  
AS APPLIED TO THE STRAIGHT LINE  
AND THE  
CONIC SECTIONS.

*With Numerous Examples.*

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## PREFACE.

I HAVE endeavoured in the following Treatise to exhibit the subject in a simple manner for the benefit of beginners, and at the same time to include in one volume all that students usually require. In addition, therefore, to the propositions which have always appeared in such treatises, I have introduced the methods of *abridged notation*, which are of more recent origin; these methods which are of a less elementary character than the rest of the work, are placed in separate Chapters, and may be omitted by the student at first.

The Examples at the end of each Chapter, will, it is hoped, furnish sufficient exercise on the principles of the subject, as they have been carefully selected with the view of illustrating the most important points, and have been tested by repeated experience with pupils. At the end of the volume will be found the results of the Examples, together with hints for the solution of some which appear difficult.

The properties of the parabola, ellipse, and hyperbola, have been separately considered before the discussion of the general equation of the second degree, from the belief that the subject is thus presented in its most accessible form to students in the early stages of their progress.

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ST JOHN'S COLLEGE,  
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