# DIFFERENTIAL AND INTEGRAL CALCULUS: WITH APPLICATIONS

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Differential and Integral Calculus: With Applications by Alfred George Greenhill

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## ALFRED GEORGE GREENHILL

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WITH APPLICATIONS.

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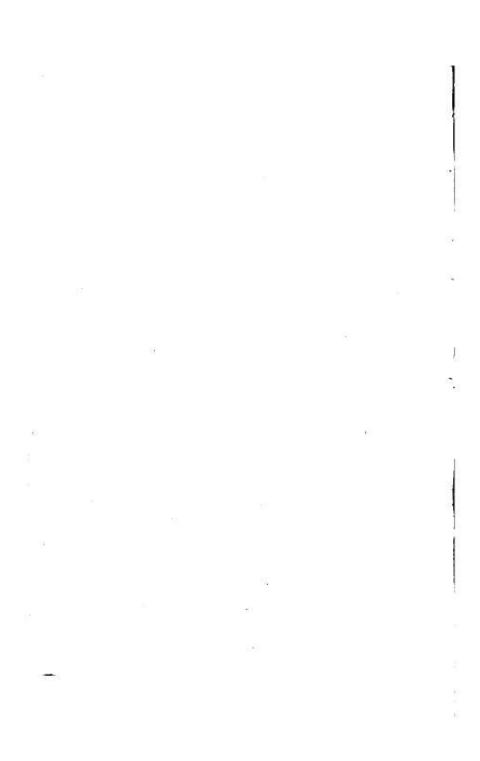
## ALFRED GEORGE GREENHILL, M.A.,

PROPERSOR OF MATERNATICS TO THE SERVICE CLASS OF ARTILLERY OFFICERS, WOOLWICE;

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## PREFACE.

THE present Treatise is intended as an introduction to the study of the Differential and Integral Calculus, but will be found to contain what is necessary to know in order to pass on to the subjects which presume a knowledge of the Calculus.

I have endeavoured to make this book suitable not only for the mathematical student, but also for men like engineers and electricians who require the subject for practical applications, to whom even a slight knowledge of the notation and methods of the Calculus is becoming more and more indispensable.

Hitherto in this country the influence of Newton, although the inventor of Fluxions, has been employed to delay the study of this subject, and make a knowledge of it the privilege of a select few; my object in writing this treatise has been mainly to present the subject in as simple a manner as possible, in order to encourage a larger number of students to cultivate it.

In order, however, to keep the size of the book within reasonable limits, it is assumed that the reader has already acquired a knowledge of the elements of the subject of Algebra, Trigonometry, and Co-ordinate

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