GEOMETRICAL DEDUCTIONS, BOOK II. CORRESPONDING TO EUCLID, BOOK II. WITH MISCELLANEOUS DEDUCTIONS FROM BOOKS I AND II; PP. 143-200

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JAMES BLAIKIE & W. THOMSON

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A TEXT-BOOK OF

GEOMETRICAL DEDUCTIONS

BOOK II.

Corresponding to Euclid, Book II.

WITH MISCELLANEOUS DEDUCTIONS FROM BOOKS I. AND II.

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PREFACE

THE object of this treatise is to afford a systematic course of training in the art of solving Geometrical Deductions or Riders. With this view it is divided into sections, each section consisting of three parts. There is first a deduction worked out in full, which is intended to serve as a model for the student. This is followed by a number of similar deductions, which are to be written out by the student, the figure being given in each case, and such hints regarding the mode of solution as experience shows are required by beginners. Lastly, each section contains some deductions to be accomplished without this aid, no figures or assistance being given except an occasional reference to the proposition on which the proof depends, or to a previous example.

As a rule, it is desirable that the proofs should depend upon propositions of Euclid, and not upon previous examples, the only exception being in the case of certain standard theorems which are indicated in the text.

For convenience of reference, especially in the case of those who have used text-books other than Euclid's, the

enunciations of Euclid's propositions are given in an Appendix.

It is not necessary, and perhaps not desirable, that on his first reading the student should work through every example in each section. He should in each case, however, write out a sufficient number to insure his mastery of the principles involved; the others will be found useful when he comes to revise.

The exercises have been gathered from all available sources, including examination papers and geometrical text-books, English and foreign.

The authors acknowledge valuable suggestions and assistance from Messrs. Butters, Clark, and Walker, Heriot's Hospital School; Mr. R. F. Davis; the Rev. W. F. Failes, Westminster School; Mr. Hayward, Harrow School; Mr. Macdonald, Daniel Stewart's College; Dr. Mackay, Edinburgh Academy; Rev. J. J. Milne; Dr. Muir, Glasgow High School; Professor Raitt, Glasgow Technical College; Mr. Robertson and Mr. Mackay, Edinburgh Ladies' College; Professor Scott Lang, University of St. Andrews; Rev. G. Style and Mr. Wynne-Edwards, Giggleswick School; Mr. Tucker, University College School; Dr. Kolbe, Cape Town, and other friends.

Additional parts, corresponding to the remaining books of Euclid, are in preparation.

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