## PREFACE.

DURING the last few years a great change has come over the teaching of Elementary Mathematics. The laborious months hitherto spent in acquiring skill in the manipulation of elaborate Algebraical and Trigonometrical transformations have often given the beginner a dislike for Mathematics and have retarded his progress.

It has been shown that it is quite possible to arrange (for the average student) a course of Mathematics which is both interesting and educational, by constantly keeping before him the practical application of the subject, and omitting as much as possible those parts of Mathematics which are purely academical. The object of this book is to give the reader such a working knowledge of elementary Trigonometry, without avoiding the difficulties or sacrificing thoroughness. Much that has hitherto been found in the text-books has been omitted, and the examples throughout will be seen to be more practical than is usually the case.

The book contains many and varied examples to be werked out by the student, but we have avoided the grouping together of batches of examples of the same type, believing that such a system is the cause of much mechanical and unintelligent work. Collections of miscellaneous examples occur frequently, so that the student may be constantly revising what he has learnt in the earlier chapters. We have avoided those artificial questions which have gradually been evolved by the