

## PREFACE.

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The main features of this Series of Arithmetics may be summed up as follows:—

1. Care has been taken to provide the greatest variety in the problems. Clerks, mechanics, accountants, teachers, engineers, etc., have been called upon to furnish illustrations; tables of statistics have been consulted; the facts of physics, chemistry, history and the like have been introduced, so that the range of work is much greater than that of any other series of texts.
2. Careful attention has been given to the gradings of problems. No problem is presented, unless at a previous stage the elementary processes involved in its solution have been mastered.
3. Much attention has been given to problems that can be solved without pencil and paper. These problems are used (1) to introduce new principles; (2) to develop the logical powers of the pupils; (3) to give facility in working with numbers. It is only when pupils are forced to calculate without pencil and paper, that they develop power to discover and apply short processes.
4. Reviews have been placed at frequent intervals to test the thoroughness of the knowledge and power of the pupils.
5. The book will be a time saver to the teacher who has been accustomed to writing drill exercises and problems on the board.

In using the book, it is important for teachers to remember that the aims sought include (1) training pupils to perform the fundamental operations with rapidity and accuracy; (2) developing the power of