AN INTRODUCTORY ARITHMETIC

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An introductory arithmetic by David M. Sensenig & Robert F. Anderson

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DAVID M. SENSENIG & ROBERT F. ANDERSON

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INTRODUCTORY ARITHMETIC

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SILVER, BURDETT AND COMPANY NEW YORK BOSTON CHICAGO an visil Anarotilkā QA 103 S4

The Bensenig-Anderson Beries of Arithmetics

By DAVID M. SENSENIG, M.S., and ROBERT F. ANDERSON, A.M., Instructors in Mathematics, State Normal School, West Chester, Pennsylvania.

AN INTRODUCTORY ARITHMETIC. A first book in arithmetic, inductive in method and carefully graded, developing the subjects by natural steps. It gives the pupil an intelligent understanding of processes and abundant practice in operations. 262 pp.

ESSENTIALS OF ARITHMETIC. A comprehensive and practical book for grammar grades, giving thorough instruction and drill in fundamental processes and much information that is useful in business transactions. The treatment of mensuration leads up to algebra and geometry. 343 pp. 60 cents.

THE NEW COMPLETE ARITHMETIC for High Schools, Academies, and Normal Schools. A practical text-book in which, besides the usual topics, special attention is given to business papers, with photographic reproductions of business forms, to property and life assurance, and mensuration. 437 pp. 90 cents.

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BOSTON

CHICAGO

EDUCATION DEPT.

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PREFACE.

In this volume the authors assume that the pupil can read easy sentences and that he has had at least one year of number work.

The aim of Chapter I. is to develop easily and naturally the idea of number without making use of elaborate pictures; to provide numerous exercises, both oral and written, by means of which the pupil may become proficient in forming, writing, and reading numbers, and in the fundamental operations; to furnish him with such suggestions and solutions as will make each step in his progress intelligible to him.

Other important features of the book are:

- The inductive methods employed in leading the pupil by logical questions to the fundamental conceptions of every subject.
- The use of simple diagrams, easily constructed by the pupil himself, for purposes of illustration.
- 3. Carefully graded concrete problems, involving only such terms as the pupil is supposed to be familiar with. In other words, the authors have endeavored to keep within the field of the pupil's experience.

- 4. The separation of the process of finding one of the equal parts of a number, Division, and of finding how many times one number contains another as a unit of measure, Mensuration. Division as usually treated involves two cases so obviously different in their nature that they ought to be considered separate processes under appropriate names. The process of separating a number into a number of equal parts to determine one of these parts is properly named Division. The process of determining how many times one number contains another as a unit of measure, which is generally called division, is primarily finding the relation which one number bears to another taken as a unit of measure; this is simply measuring one number by another, and is properly named Mensuration.
- A simple treatment of Percentage, Interest, and Business Forms, introduced to meet the demands of such pupils as are compelled to leave school at an early age.

DAVID M. SENSENIG. ROBERT F. ANDERSON.

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LIMIV. OF CALIFORNIA

An Introductory Arithmetic.

CHAPTER I.

WHOLE NUMBERS AND FRACTIONAL PARTS
OF WHOLE NUMBERS.

Forming, Writing, and Reading Numbers to 10;
Addition and Subtraction.

1. Oral Exercise.

How many dots are there in this square?

•

The figure I stands for one.

How many are 1 and 1?

..

The figure 2 stands for two.

How many are 2 and 1? I and 2?

:

The figure 3 stands for three.

How many are 3 and 1? 1 and 3?

•••

How many are 2 and 2?

**

The figure 4 stands for four.