Monographs on Topics of Modern Mathematics Relevant to the Elementary Field. Edited by J. W. A. YOUNG. New York, Longmans, Green and Co., 1911. viii + 416 pp.

THIS book contains nine monographs by as many authors, as follows:

1. The Foundations of Geometry, by Oswald Veblen. Pages 1-51.

2. Modern Pure Geometry, by Thomas F. Holgate. Pages 53-89.

3. Non-Euclidean Geometry, by Frederick S. Woods. Pages 91-147.

4. The Fundamental Propositions of Algebra, by Edward V. Huntington. Pages 149-207.

5. The Algebraic Equation, by G. A. Miller. Pages 209-260.

6. The Function Concept and the Fundamental Notions of the Calculus, by Gilbert Ames Bliss. Pages 261-304.

7. The Theory of Numbers, by J. W. A. Young. Pages 305-349.

8. Constructions with Ruler and Compasses; Regular Polygons, by L. E. Dickson. Pages 351-386.

9. The History and Transcendence of π , by David Eugene Smith. Pages 387-416.

The authors of these monographs were of the opinion that there is room for a serious effort to bring within the reach of secondary teachers, college students, and others of a like stage of mathematical advancement, a scientific treatment of some of the regions of advanced mathematics that have points of contact with the elementary field. They felt that a great need of our secondary instruction in mathematics is the enlargement of the mathematical horizon of the teachers themselves; and they believed that there is a large body of earnest teachers and students that are eager to extend their mathematical knowledge if the path can be made plain and feasible for them.

The object of these monographs is to make a contribution toward meeting this need. That the topics are well selected for this purpose may be seen from the foregoing list. The aim of each monograph is to bring the reader into touch with some characteristic results and viewpoints of the topic considered, and several of them point out the bearing of these matters on elementary mathematics.