

**ELEMENTS OF  
TRIGONOMETRY,  
WITH TABLES**

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Elements of Trigonometry, with Tables by Herbert C. Whitaker

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**HERBERT C. WHITAKER**

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WITH TABLES

BY

HERBERT C. WHITAKER, Ph.D.

CENTRAL MANUAL TRAINING SCHOOL  
PHILADELPHIA, PENNSYLVANIA

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## PREFACE.



THE introduction and first five chapters of this book have been prepared for the use of beginners in the subject. The second appendix has been added for those intending to take up work in higher departments of Mathematics.

The subject of logarithms is usually considered in treatises on algebra; but for the convenience of those not familiar with the theory of this subject, the first appendix has been added.

To aid in a clear understanding of each process in the various investigations, the aim has been to closely associate with every equation a definite meaning with reference to a diagram.

The tables used are in general as precise as the data usually obtained by students in engineering, physics, or chemistry. It is assumed that a few seven-place tables are accessible to a class; and it is recommended that some classroom work be done with seven-place tables, especially in the solution of spherical triangles.

It is hoped that the answers are free from error. The numerical computations were made with care by the author, but the results have not been verified by any one else.

Any corrections or suggestions relating to the book will be thankfully received.

H. C. WHITAKER.

PHILADELPHIA, May, 1898.

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