AN ELEMENTARY TREATISE ON GEOMETRY: SIMPLIFIED FOR BEGINNERS NOT VERSED IN ALGEBRA, PART I

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An Elementary Treatise on Geometry: Simplified for Beginners Not Versed in Algebra, Part I
by Francis J. Grund

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FRANCIS J. GRUND

AN ELEMENTARY TREATISE ON GEOMETRY: SIMPLIFIED FOR BEGINNERS NOT VERSED IN ALGEBRA, PART I

Trieste

AN

ELEMENTARY TREATISE

ON

GEOMETRY,

SIMPLIFIED FOR

BEGINNERS NOT VERSED IN ALGEBRA.

PART I,

CONTAINING

PLANE GEOMETRY,

WITH ITS APPLICATION TO THE SOLUTION OF PROBLEMS.

BY FRANCIS J. GRUND.

New Edition, stereotyped.

BOSTON:
CARTER, HENDEE & CO.
1834.

RECOMMENDATIONS.

From John Farrar, Professor of Mathematics and Natural Philosophy at Harvard University.

Mr. Grund's Elementary Treatise on Geometry contains much useful matter, not generally to be found in English works of this description. There is considerable novelty, also, in the style and arrangement. The subject appears to be developed in a manner well suited to the younger class of learners, and to such an extent, and with such illustrations, as renders it a valuable introduction to the more extended works on Geometry.

JOHN FARRAR.

FEBRUARY 18th, 1830.

From G. B. Emerson, Principal of the English Classical School, Boston.

Mr. Grund's Geometry unites, in an unusual degree, strictness of demonstration with clearness and simplicity. It is thus very well suited to form habits of exact reasoning in young beginners, and to give them favorable impressions of the science. I have adopted it as a text book in my own school.

GEO. B. EMERSON.

FEBRUARY 18th, 1830.

From E. Bailey, Principal of the Young Ladies' High School, Boston.

DEAR SIR—From the specimens of your work on Geometry which I have seen, and especially from the sheets I have used in my school since it went to the press, I have formed a high opinion of its merits. The general plan of the work appears to be very judicious, and you have executed it with great ability. Simplicity has been carefully studied, yet not at the expense of rigid demonstration. In this respect, it seems admirably fitted for the use of common schools. Believing your work cal-

culated and destined to do much good, in a department of science which has been too long neglected, I hope it may soon become generally known.

Very respectfully, yours, &c.

E. BAILEY.

FEBRUARY 17th, 1830.

From F. P. Leverett, Principal of the Latin School, Boston.

DECEMBER 7th, 1830.

DEAR SIR—I have looked with much satisfaction over the sheets of the second edition of your 'First Lessons in Plane Geometry.' It is a more simple and intelligible treatise on Geometry than any other with which I am acquainted, and seems to me well adapted to the understandings of young scholars.

I am, dear sir, respectfully yours,

F. P. LEVERETT.

From William B. Fowle, Principal of the Monitorial School, Boston.

BOSTON, FEBRUARY 17th, 1830.

MR. GRUND—DEAR SIR—I have examined every page of your 'First Lessons in Plane Geometry.' Its reception every where augurs well for the success of your book, which is an extension and practical application of Franceour's. It has fulfilled my wishes, and I shall immediately introduce it into my school.

Yours, very respectfully,

WILLIAM B. FOWLE.

From Walter R. Johnson, Principal of the Philadelphia High School.

PHILADELPHIA, NOV. 27th, 1830.

DEAR SIR—The First Lessons in Plane Geometry, with a perusal of which I have been favored, appears to me eminently calculated to lay the foundation of a clear and comprehensive knowledge of the demonstrative parts of that important science.

As it has obviously been the result of actual experience in *teaching*, it commends itself to the attention of the profession, by the assurance that it is really adapted to the comprehension and attainments of those for whom it was designed. Permit me to express the hope that it may meet its full share of that encouragement which works in this department are beginning to receive in every part of our country.

I remain, dear sir, very respectfully yours,

WALTER R. JOHNSON.

PREFACE.

POPULAR EDUCATION, and the increased study of Mathematics, as the proper foundation of all useful knowledge, seem to call especially for Elementary Treatises on Geometry, as has been evinced in the favorable reception of the first edition of this work within a few months of the date of its publication. A few changes have been made in the present edition, which, it is hoped, will contribute to the usefulness of the work as a book for elementary instruction.

The author acknowledges with pleasure the valuable aid he has received from some of the most experienced and distinguished instructers; and is, in this respect, particularly indebted to the kindness of Messrs. E. BAILEY, GEORGE B. EMERSON, and Miss ELIZABETH P. PEABODY, of Boston, at whose suggestion several demonstrations have been simplified, in order to adapt the work to the capacity of early beginners.

As regards the use of it in schools and seminaries, the teacher will find sufficient directions in the remarks inserted in the body of the work.

The Problems, of which the third and fourth parts are principally selected from those of MEIER HIRSCH, form a section by themselves, in order to be more easily referred to.

The teacher may, according to his own judgment, use as many of them at the end of each section, as may be solved by the principles the pupils have become acquainted with.

BOSTON, *September* 30, 1830.

PREFACE TO THE STEREOTYPE EDITION.

THE present stereotype edition differs from the previous ones only in the typographical arrangement, to meet the view of the publishers, whose intention it is to reduce its price, in order to bring it within the reach of common schools throughout the Union.

F. J. G.

BOSTON, *March* 27, 1832.

TABLE OF CONTENTS.

INTRODUCTION 9

DEFINITIONS 11

Questions on Definitions 15

Notation and Significations 18

Axioms 20

SECTION I.

OF STRAIGHT LINES AND ANGLES 22

Recapitulation of the Truths contained in the First Section 34

SECTION II.

PART I.

Of the Equality of Triangles 37

PART II.

Of Geometrical Proportions and Similarity of Triangles ... 53

Theory of Geometrical Proportions 53

Similarity of Triangles 67

Recapitulation of the Truths contained in Section II., Part I. 76

Recapitulation of the Truths contained in Part II. 79

Questions on Proportions 79

Questions on Similarity of Triangles 81

SECTION III.

Of the Measurement of Surfaces 83
Recapitulation of the Truths contained in the Third Section 99

SECTION IV.

Of the Properties of the Circle 102
What is meant by Squaring a Circle 128
Recapitulation of the Truths contained in the Fourth Section 134

SECTION V.

Application of the foregoing Principles to the Solution of Problems. 141

PART I.

Problems relative to the Drawing and Division of Lines and Angles 141

PART II.

Transformation of Geometrical Figures 159

PART III.

Partition of Figures by Drawing 171

PART IV.

Construction of Triangles 182
Appendix, containing Exercises for the Slate 189