6. *Mensuration.*—The mensuration of a simple rectangular area as far as possible from actual measurements. The rood, the square chain, and the square pole to be known as fractional parts of the acre. Areas of land to be expressed in acres, roods, and square poles. The relative values of the cubic foot and the cubic inch, and of the cubic yard and cubic foot to be demonstrated by models.

(NOTE.—Problems in carpeting and papering rooms are excluded.)

7. *Practical Geometry.*—To be taught in association with practical mensuration, instrumental drawing, and other subjects—*e.g.*, geography.

(*a*) Measurement of angles, such as the altitude of the sun and the angle travelled by the hand of a clock. Right angle. Circle.

(*b*) Drawing a post and its shadow to scale of 1 in. = 1 ft. or $\frac{1}{2}$ in. = 1 ft.

(*c*) Simple exercises in construction and measurement of lines to tenths of an inch, and angles to degrees, including obtuse and acute angles.

(*d*) Areas of squares, rectangles, right-angled triangles, and the square-measure table demonstrated from drawings either to scale or actual size.

(*e*) Geometrical method of bisecting a line and an angle, of drawing a perpendicular to a given straight line, and of constructing an angle equal to a given angle, and of drawing a straight line parallel to another.

8. *Symbolical Expression.*—Such elementary notions of the equational forms and their application and of the correct use of signs as may be necessary to or developed from the arithmetic already done, especially the ability to set out correctly in equation form data and inferences derived therefrom—*e.g.*, in the statement of equivalents as in tables $7 \times 5 = 35$, and exercises in fractions $1\frac{3}{4} + 2\frac{7}{8} = 4\frac{5}{8}$, in stating the area or perimeter of a rectangle, $A = lb$; $P = 2(l + b)$; where l = length and b = breadth, and in the unitary method.

OPTIONAL ADDITIONAL MATHEMATICS FOR ADVANCED STANDARD V PUPILS.

1. *Algebra.*—

(*a*) The compulsory prescription for Standard VI under the heading of "Symbolical Expression,"—viz., meaning of equations, use of algebraic signs, substitutions.

(*b*) Very easy exercises in the four rules.

2. *Practical Geometry.*—The compulsory prescription for Standard VI in practical geometry.

STANDARD VI (FORM II).

Prominence should be given to practical and mental arithmetic, the former to include individual practice in weighing and measuring and in the solving of problems based on the practical work. In no part of the subject should operations be introduced that have no counterpart in the actual affairs of life. Cumbersome computations and involved problems are not to be given. Short methods of calculations to be used wherever possible. All girls who are taught needlework may be exempted from the prescription in symbolical expression and practical geometry. An optional additional section on elementary mathematics has been added for the benefit of the more advanced pupils.

1. *Decimals.*—The four operations to three places of decimals. Extension beyond three places is permissible only when some practical situation demands it—*e.g.*, finding the area of a field the measurements of which are given in chains and links. The reduction of one quantity to the decimal of another quantity, as well as the conversion of a decimalized quantity into the ordinary denominations or measures. The use of decimals should be encouraged, and the pupils trained, in making his calculations, to decimalize quantities rather than to use cumbrous vulgar fractions.

2. *Vulgar Fractions.*—Somewhat harder operations of the same type as for Standard V, excluding cumbrous fractions and complex expressions, but including those of the form $\frac{1\frac{1}{2}}{1\frac{1}{3}}$. The fraction one quantity is of another to be freely used in solving problems, particularly as a short substitute for the unitary method.