

them. We may lay down the general rule that symbols that are signs of operations are objectionable.

Hamblin Smith in his edition of Euclid gives the following list of abbreviations, etc., admissible in the examinations at Cambridge and Oxford :

∴ for because.	equilat. for equilateral.
∴ " therefore.	ext'r " exterior.
= " is (or are) equal to.	int'r " interior.
∠ " angle.	pt. " point.
Δ " triangle.	rectil. " rectilinear.
○ " circle.	rt. " right.
Oco " circumference.	sq. " square.
" parallel.	sq. " squares.
▭ " parallelogram.	st. " straight.
" perpendicular.	

Other contractions may be devised by the teacher or student, but he must be careful to contract only words of very common occurrence, to make the contractions of such a kind as to be at once understood, and above all to use symbols that are *signs of words and not of operations*.

It is, perhaps, hardly necessary to say anything of the desirableness of maintaining Pure Geometry in its purity, of keeping it free from Arithmetical or Algebraic notions. Certainly it has the effect of conveying to the student clearer ideas of the functions that numbers perform in mathematical investigations, and will enable him to keep constantly in mind the distinction between numbers and the magnitudes they represent. Moreover, when we remember the vague notions about concrete quantities and the operations of which they admit, which the constant use of numbers, and the treatment of such quantities by means of numbers, almost invariably produce, we see the desirableness of sometimes dealing with them without the intervention of numbers.

It has sometimes been a matter of doubt whether proofs not given in the text of Euclid as generally used, would be received at Examinations. For example, the proof of the first part of Prop. 5, of Prop. 6, and of the first part of Prop. 26, by the method of superposition; the proof of Prop. 8, by applying one base to the other with vertices on opposite sides of the base; the including of the first two cases of Prop. 13, Book II. in one; the proof of Prop. 23, Book III., by taking three points in the segment, joining them, and drawing lines bisecting them at right angles, &c. In reference to such it is to be noted that the methods are Euclid's, and that the proofs are frequently shorter than and therefore superior to those commonly given. It is difficult to predic the fancies of individual examiners, and may be a matter of policy to determine them, when possible, and govern one's self accordingly; but we are sure that any reasonable examiner will accept such proofs. Alterations, however, may be made that are not improvements. Thus Prop. 21, Book I., may be proved by dropping a perpendicular from the vertex on the base, and thence shewing that the sum of the sides is greater than the base. But the complete proof will necessitate three cases, and the ordinary proof where one case suffices, is superior to this.

We hope we may be pardoned for reminding some of our readers that the terms Euclid and Geometry are not synonymous. Geometry comprehends the entire science that has for its object the measurement of extension. It divides itself into Analytic and Synthetic Geometry, or General and Special, as Comte prefers calling them. Euclid forms a part of the latter division.

—The Victoria Standard thinks that the Province might train its own teachers, and urges the utilization of the High School for that purpose in absence of a Provincial Normal School.

Correspondence.

EDUCATIONAL DEPARTMENT, ONTARIO,
Toronto, May 25, 1877.

Editor Canada School Journal.

SIR: I am directed by the Hon. the Minister of Education to state that, by the following section of the Public School Act of 1874, 37 Vic., cap. 28, it is declared that, "143. No Teacher, Trustee, Inspector, or other person officially connected with the Education Department, the Normal, Model, Public or High Schools or Collegiate Institutes, shall become or act as agent for any person or persons, for the sale of any school, library, prize or text-book, map, chart, school apparatus, furniture or stationery, or to receive compensation or other remuneration or equivalent for such sale, or for the promotion of sale in any way whatsoever."

"144. No person shall use any foreign books in the English branches of Education, in any model or public school, without the express permission of the Council of Public Instruction." [Education Department.]

"(a) No portion of the Legislative School grant shall be applied in aid of any school in which any book is used that has been disapproved of by the [Council of Public Instruction], and public notice given of such disapproval."

The 112th section, subsection (3) provides that no portion of the School Fund shall be paid to any school section which has not been conducted according to law, and the regulations provided under its authority."

The duty of the Minister is shown by section 129, sub-section 4, which declares that he shall "see that all moneys apportioned by him are applied to the objects for which they are granted, namely, for the payment of salaries of teachers in those sections where the law and regulations are duly observed."

I have the honour to be,

Your obedient servant,

ALEX. MARLING,
Secretary.

Editor Canada School Journal.

SIR: In order that the following clause ("As we prepared the manuscript for the work on Bookkeeping for use in Schools, we offer superior facilities for instruction," etc.) in the advertisement of Ontario Business College, published in your last issue, may not mislead the public, I beg to say that it refers to "The Canadian Accountant," and not to Beatty & Clare's Bookkeeping, which is the joint production of Mr. S. Clare and myself.

I am, sir, yours truly,

S. G. BEATTY.

Notes and News.

ONTARIO.

Woodville is to have a new \$3500 High school building.

Two London boys were recently fined \$5 and costs each for throwing stones and using bad language.

The subscriptions for the proposed Western University are said to amount to over \$30,000.

The five dollar prize to successful intermediate candidates has been adopted in Whitby.

The President of the West Middlesex teachers' association is Mr. J. T. Wood and the Secretary Mr. C. Tanner.

The President and Secretary of the North Hastings teachers' association are Mr. W. Mackintosh, P. S. Inspector, and Mr. I. D. Bissonnette.

Mr. Whitney head master of the Iroquois High School has been restored to his former status as a person eligible to a county examinership.

The teachers of Kingston and Frontenac have formed themselves into an association with Prof. Dupuis of Queen's College as President, and Mr. Renton as corresponding secretary.

The Hamilton Times, one of the few daily papers that pay much attention to educational matters, spoke favourably in a recent issue of shorter hours in school.

The Whitby Chronicle thinks the introduction of military drill has had a good effect on the High School pupils. This opinion is probably correct and other schools would be benefitted by its introduction no less than Whitby.