

**CRUCIAN, A SYMPOSIUM**, By C. F. Gillingham, M.D., Los Angeles, U. S. This little work is a discussion, from the points of view of a number of intelligent representatives of various phases of American and English life and thought, of some of the great political and moral questions of the day. The style is fairly sprightly and the dialogue on the whole very well sustained. A. L. Bancroft & Company, San Francisco.

We have great pleasure in introducing to our readers a new translation of Pestalozzi's famous work, "LAONARD AND GERTRUDE." It is in some respects improved for English readers by being much abridged, although the story is thus necessarily more unconnected than in the original. We would recommend this book to all who take an interest in moral education:—Let it be first read as a story from which it will be possible to comprehend more clearly many of the peculiar ideas and springs of action of this great Educational Reformer, than can be done from a more scientific treatise. Then let it be perused more carefully as an allegorical picture of the good that can be wrought by one earnest worker even in an obscure village; when doubtless the reader will see many opportunities, even in these modern days, of putting in practice some of the lessons taught, although the plans themselves must necessarily be very different. It will also give the student of life much information in regard to a system of social life now almost extinct, even in Europe, and certainly not to be found on this continent, but which was a real life, existing just a century ago, and described by our Author as he saw it going on around him. LAONARD AND GERTRUDE by Pestalozzi. Translated and abridged by Eva Charming. Published by Messrs. Ginn, Heath & Co., New York.

The North American Review concludes its seventieth year with its June number. It never had so large a circulation, nor greater influence, nor a more brilliant staff of contributors. This number discusses seven topics of vital public interest by no less than fourteen eminent writers, not including the short contributions in "Comments." "Shall Silver be Demonetized?" is answered, pro and con, by three distinguished economists. Sumner, Laughlin and Walker, representing Yale and Harvard Colleges, and the Massachusetts Institute of Technology. "The Tariffness of Justice" is discussed by Judge W. L. Learned, and "Prohibition in Politics" by Gail Hamilton; "The Swearing Habit" by E. P. Whipple, and "French Spoilation Claims" by Edward Everett. The policy of the Roman Catholic hierarchy toward our Public Schools is assailed in a learned essay by a new polemic, Mr. M. C. O'Byrne, of North Carolina, and defended by Bishop Krane, of Virginia, with equal erudition. It is a most interesting double presentation of an impending issue. "How Shall Women Dress?" is answered by Charles Dudley Warner, Elizabeth Stuart Phelps, Dr. W. A. Hammond, Dr. Kate J. Jackson, and Mrs. E. M. King, the English leader of the dress reform movement.

**Question Drawer.**

**ANOTHER DISCOVERY.**

Suppose we have a scalene triangle whose sides may be 7.10 13; the area is a surd; a new triangle having the same perimeter (30) can be formed that shall have its 3 sides rational, and the area not only rational but greater than the given area. The discovery is practically useful. JOHN IRELAND, Fergua.

Can you inform me where I could get a list of the "Teachers in Ontario." Is there such a thing published? W. H. E.

1. What biographies and works of fiction are best to read in connection with the Tudor and Stuart Period?

Can a set of pictures and maps be obtained in some connection, or for earlier history,—maps large enough to place before a class, e. g., a map by which the Hundred Years' War could be illustrated?

In connection with the pictures, if large ones are to be had, I would like information concerning portraits, pictures of buildings, and historical scenes.

Can you give any idea as to cost of obtaining these? M. M.

1. Are there Model Schools in Ontario for the special training of Separate School teachers, and if so, where?

2. Can Provincial certificates be obtained at such schools?

W. D.

Will Canadian History be required at July Entrance Examinations? J. T.

Can a teacher who agreed with trustees for four week's holidays at the beginning of the year, now take those authorized by the Minister of Education? S. N.

**ANSWERS.**

Seeing that you leave all practical questions to be answered by correspondents, I offer the following in reply to teacher's question, "How is the underlined word in the following sentence parsed? I lost that book of mine."

Such forms as these are to be considered idiomatic. The regular construction would be, "I lost that book of mine." Some say that "mine" is put for my books; but this explanation will certainly not apply to "That big mouth of his (mouths!)"

"Of me" used possessively would be intolerably harsh; and therefore for the sake of euphony we employ the illogical form "of mine." "Mine" is a personal pronoun, a possessive used for an objective. ANOTHER TEACHER.

W. H. E.—You will no doubt find what you want in the Annual Report of the Minister of Education. Apply to the Secretary of the Education Department.

S. N.—Yes. The amended Act of course over-rides all such arrangements. But as a matter of honor we should say that under such circumstances the teacher should at least get the consent of Trustees to the cancelling of agreement.

W. D.—The Provincial and County Normal and Model Schools are for the training of Public and Separate school teachers alike. Separate school teachers have to pass the same non-professional and professional examinations as other teachers, in order to obtain certificates.

J. T.—The last sentence of the following extract from the Instructions issued by the Department will be the official answer to your question:—

"History.—The outlines of English and of Canadian history: how England, Canada and Ontario are governed; the municipal institutions of Ontario—all as contained in a History Primer, to be authorized by the Education Department about August, 1885.

Until then, the examination on this subject will be confined, as heretofore, to the outlines of English History."

**SOLUTION.**

In the CANADA SCHOOL JOURNAL of the 19th March is my problem on the right-angled triangle; no correspondence on the subject has been received by me nor have I seen a JOURNAL since; hence, I offer a synopsis of the solution taken from my register of original problems:—

Let  $x-2$  represent the quantity to be added to or taken from the base 2 and perpendicular 1 of the right-angled triangle, so that the two new hypotenuses shall be rational.

Then  $(2+x-2)^2 + (1+x-2)^2 = 2x^2 - 2x + 1$ , equate with  $(q-1)^2$ , whence  $x = \frac{2q-2}{q^2-2}$ .  $\therefore x-2 = \frac{2q+2-2q^2}{q^2-2}$  the quantity represented.

$$\left\{ 2 - \frac{2(q+1-q^2)}{q^2-2} \right\}^2 + \left\{ 1 - \frac{2(q+1-q^2)}{q^2-2} \right\}^2$$

which must be made a square, equate it with  $(5q^2 - 78q - 5)^2$ . The equation stands thus:—

$$(4q^2 - 6 - 2q)^2 + (3q^2 - 4 - 2q)^2 = 25q^4 - 28q^2 + 12q^2 - 10q^2 + \frac{288q}{5} + 25. \text{ Assume } -64 = \frac{12q}{5} - 10q, s = \frac{12q}{5}.$$

$$40q + 52 = 2q^2 \times \frac{12q}{5} + \frac{12q}{5}, \text{ whence, } q = \frac{177}{5}.$$

$$\frac{2}{5} \times \frac{177}{5} + 2 - 2 \times \frac{177}{5} = \frac{(177-2)}{5} = -\frac{175}{5} = \text{quantity sought.}$$

$$\left\{ 2 + \left(-\frac{175}{5}\right) \right\}^2 + \left\{ 1 + \left(-\frac{175}{5}\right) \right\}^2 = \text{square;}$$

or  $11716^2 + 6837^2 = 13565^2$ , rejecting square of the denominator.

Also  $(2 + \frac{12q}{5})^2 + (1 + \frac{12q}{5})^2 = \frac{12q}{5}$ , the first hypotenuse is  $\frac{12q}{5}$ ; second,  $\frac{12q}{5}$ ; bases are,  $\frac{12q}{5}, \frac{12q}{5}$ ; perpendiculars are,  $\frac{12q}{5}, \frac{12q}{5}$ .

The process is greatly abridged and possibly it will not be clear to every one. JOHN IRELAND, Fergua.