PRACTICAL EDUCATION IN RURAL SCHOOLS.

Mr. EDITOR, --- In teaching Goography, do we not descend too much to a detailed and particular knowledge of the names of places. I once met a teacher who told me that his scholars could tell all the principal towns of Europe and their distance from the Metropolis, meaning the City of London. Another, that his scholars knew all the bays and capes around that little crooked peninsula down at Halifax, and perhaps one could be found whose scholars could enumerate all the townships in the Province of Ontario. Is it not enough for a pupil to have a general knowledge of the Dominion at large, and a minute knowledge of his own Province, including the county and county towns, and the townships of his own county ? Some teachers teach the counties of Quebec, New Brunswick and Nova Scotia, and even of Great Britain and Ireland. Is this necessary ? is it desirable ?

Again, I would ask are we practical enough in the teaching of Arithmetic ? I think we are not. Indeed, it is difficult to be so under the present state of things. Look at our authorized Elementary Arithmetic; fractions almost from the beginning to the end. Who does not know what a practical and elementary exorcise the 52nd is? How a book like this can be called an Elementary Arithmetic, is a matter of astonishment. I suppose that it was considered that all our young Canadians were going to be bankers, stock-brokers or philosophers; and that their elementary training should commence upon these things. The fault is not in keeping up such a high standard of Arithmetic for those who have the time and ability, but in forcing this unpractical work into our Public Schools, to the detriment of many of our pupils who will never have the time nor the opportunity to make use of it. Our great aim should be especially in schools in the rural districts, to teach what is likely to be practically useful to the great bulk of our schools. Now the fact is, in rural schools the teacher who wishes to fit his scholars for the ordinary business of life has to leave the book and invent such questions as the price of a load of grain, or a pile of lumber, or a stick of timber, or a patch of land.

We are set to teach and to train all our scholars as if they were designed for the High School, the College, or the University ; aping at fitting them for College and high life, while we are in a measure unfitting them for the ordinary walks of life, that most of them will inevitably have to follow.

Our Public School education should be finished and complete in itself. The higher schools and professions have their curriculum; doctors, lawyers, and teachers all have a standard by which to judge whether or not they are fit for the business of hic. But the farmer's son, where is his curriculum? He may stumble out of school at any moment without his diploma. He may not be fitted even to discharge the ordinary duties of a citizen.

I may here make a remark about the much talked of compulsory If the Government would lay a disability upon every man clause. who did not know how to read and write, by not allowing him to vote at any election, there would not be many in one year who would not know how to do both. If the young men and wom -n were not allowed to marry until they could sign their own names and read the Government proclamations, such a disability would be better than all the compulsory clauses on the statute book.

Yours truly, R. LEGATE.

COLLECTION OF SCHOOL RATES UNDER THE NEW ACT.

To the Editor of the Canada School Journal.

SIR,-Since 1850 Rural School Trustees have had the right to collect school rates by warrant under their own hand and seal, or, at their option, to apply to a Township Council to do so for them.

As a general rule they performed this duty themselves. From 1850 to 1871, the only resuriction imposed upon trustees (as to the collection of school moneys) was, that at the annual school meeting they had formally to submit the question to the election, as to how the necessary moneys for "current expenses" of the year should be raised—whether by "rate bill" upon parents or by "school rate" upon property. The same question had also to be proposed by them in regard to all expenditures on "capital account." This was usually done at a special school meeting call-This was usually done at a special school meeting called for that purpose; but the question submitted was generally varied from that proposed in regard to "current expenses." it was as to whether the money required for expenditure on "capital

account" should be raised by loan, or by rate upon property. The rate bill plan was rarely proposed for such expenditure, as it would either prove very burdensome upon parents, or be entirely inadequate. In case a loan was decided upon, the trustees were required to apply to the Township Council for authority to effect the loan upon the credit of township debentures issued by the Council. When a rate on property was authorized by the school meeting the trustees generally placed its collection in the hands of the Council.

In 1871, Free Schools were established ; compulsory education in a restricted form was authorized, and the trustees were in consequence required "to provide suitable accommodation" for the school children in their section or division. The whole subject of raising monovs for all purposes, moreover, was left in their hands, as the elected school representatives of the ratepayers, so that they could have no excuse for neglecting to see that facilities were duly provided for the education of all the children of school age under their jurisdiction.

I have in a late publication * pointed out all of the recent changes in the "Revised School Law." In it I have also fully explained, among other things, the effect of the altoration in the law relating to the collection of school rates in the rural sections. In this communication, these changes may be briefly summarized as follows :

1. -- IN REGARD TO RURAL SCHOOLS.

1. Current Expenses.-All rates for the current expenses of a school section must now be raised b. the Township Council alone, upon the estimate and requisition of the trustees. The assent of a school meeting is not recessary to this levy.

2. Capital decount. - All expenditure on capital account (and the nature of it) must 1 authorized by the ratepayers. Having obtained that assent, the Township Council can be compelled to levy the necessary rate, upon the requisition of the trustees.

11 --- SCHOOLS IN CITIES, TOWNS, AND VILLAGES.

From 1850 to 1879, Municipal Councils in cities, towns, and villages were required to raise rates for all school purposes upon the estimate and requisition of the trustees. The law is unaltered in regard to rates for "current expenditure;" but, under the Act of 1879, the Council can, by a two-thirds vote, decune to levy rates for expenditure on "capital account." In such a case, however, the Council can be compelled by the trustees to submit a by-law on the subject for the concurrence of the ratepayers, and be governed accordingly.

Toronto, May, 1879.

J. GEORGE HONGINS.

*Explanatory Notes on the Changes in the "Rovised School I aw," caused by the Supplementary School Act of 1879, by J. George Hodgius, "L.D. Price 25 cents. Copp, Clark & Co. and Adam Miller & Co., Toronto.

Mathematical Department.

Communications intended for this part of the JOUNNAL should be on separ-ate sheets, written on only one side, and properly paged to prevent mistakes. They must be received on or before the 20th of the month to secare notice in the succeeding issue. ALFRED BAKER, M.A., EDITOR.

1.
$$a + b = -\frac{q}{p}, ab = \frac{r}{p}$$
. Equation is $\left(x - \frac{1}{a}\right) \left(x - \frac{1}{b}\right) = 0$,
or $x^2 - \frac{a+b}{ab}x + \frac{1}{ab} = 0$,

or
$$x^2 - \frac{q}{p} x + \frac{1}{r} = 0$$
, or $rx^2 + qx + p = 0$.
2. $a + b = -\frac{1}{m}$, $ab = \frac{n}{m}$; $\therefore \left(1 + \frac{a}{b}\right) \left(1 + \frac{b}{a}\right) = 1 + \frac{a^2 + b^2}{ab}$
 $+ 1 = 2 + \frac{(a + b)^2 - 2ab}{ab} = \frac{(a + b)^2}{ab} = \frac{\frac{1}{m^2}}{\frac{n}{m}} = \frac{1}{mn}$.
3. $a + b = -\frac{q}{p}$, $ab = \frac{r}{p}$. Equation is $\left(x - \frac{a^3}{b^2}\right) \left(x - \frac{b^3}{a^2}\right)$