

Please solve question 5, Sec. III., p. 217, Hamblin Smith's arithmetic: A person buys 6 per cent City of Toronto bonds, the interest on which is paid yearly, and which are to be paid off at par 3 years after the time of purchase. If money be worth 5 per cent, what price should he give for the bonds?

SOLUTION.

\$100 bond produces \$6 int. each year for 3 years.

Since money is worth 5 per cent,

∴ \$6 int. for 1st year put out at comp. int.

for the remaining two years = \$6.615

and \$6 int. for 2nd year put out at comp.

int. for the remaining one year = 6.30

and \$6 int. for 3rd year = 6

or the interest on the bond during the three years amounts to \$18.915

So that at the end of three years the purchaser has received his bond and \$18.915,

i. e. $\$100 + \$18.915 = \$118.915$.

If the \$100 had simply been put out at int. (comp.)

at 5 per cent, it would have amounted to

\$105 at the end of 1st year.

110.25 " " 2nd "

115.7625 " " 3rd "

∴ $\$115.7625 : \$118.915 :: \$100 : x$

$\frac{\$118.915 \times 100}{115.7625} = \102.723 Ans.

EUCLID I. 47.

We give below an original demonstration of the 47th Proposition, I. Book, Euclid, worked by Norman Osborne, of the Berwick, N. S., school. The reader can easily supply the figure:

Let the triangle ABC be right-angled at A. On BC towards A describe a square BDEC. Join AD and AE. Draw DG at right angles to BA, or BA produced, and EF at right angles to AC or AC produced. Then because sum of angles EOF and FCB = sum of angles ABC and ACB, therefore angle ECF = angle ABC; and because BC = EC, therefore EF = AC (I. 26). Therefore EF is the altitude of the square described on AC, and of the triangle AEC, and the square on AC is double of the triangle AEC. Similarly it may be shown that the square on BA is double of the triangle DBA; but the square on BC is double of the triangles BDA and AEC; therefore the square on BC is equal to the squares on BA and AC.

People—including teachers—mispronounce words a lifetime, because of indolence. The reader has chronic misgivings as to the pronunciation of certain words; the dictionary is hard by, but he is too lazy to consult its pages. The time to look for definitions and pronunciations is now. Let teachers remember that fact and impress it on the minds of their pupils.—*Western School Journal*.

SCHOOL AND COLLEGE.

Miss H. D. Gregg, of the Victoria school, St. John, passed recently the intermediate examination in the Tonic Sol-fa College, London. Miss Gregg is a very successful teacher of the Tonic Sol-fa system, and intends preparing for and undergoing the other examinations necessary for a teacher's certificate in the above named college.

George L. Edgett, a school-teacher at Humphrey's Mills, Westmorland County, N. B., was instantly killed by a mail train near Moncton recently. It is supposed he did not hear the train because of the severe storm raging at the time. Deceased was forty-two years of age and unmarried.

The boys of Amherst academy have a fife and drum band. They believe that they are the first in the Maritime Provinces, if not in the Dominion, to introduce such music into their school course. There are many pieces, costing about \$75. They are fortunate in having the free tuition of a band-master.

Hon. G. W. Ross, Minister of Education, has returned from an exhaustive examination into the public school systems of England and Germany, and says: "From anything I have seen there is no reason for making any radical change in our system. We have an outline of as good an organization as they have in Germany. They have nowhere a system of secondary or high school education equal to what we have in Canada, and they have nowhere a systematized training of teachers any better than we have in Ontario. Both in England and Germany the people are models of liberality in support of their systems of education, from their elementary schools up to the university. I wish we had more of it here."

Miss Patience Doughty is the teacher at Fair Haven, Deer Island, N.B. The register shows an enrolment of thirty-one, and as they were all present last Thursday we noticed with pleasure the hoisting of the flag.—*Cor. St. Croix Courier*.

[This suggestion of raising the school flag to show a perfect registered attendance was made by Mr. J. Vroom in his recommendations for the use of the school flag.—*ED. REVIEW*.]

At Cow Bay, Cape Breton, twelve pupils attending the schools passed the examination for the Junior Tonic Sol-fa certificate. The following passed the examination for the elementary certificate: Janie L. McAskill, John McDonald, Minnie E. McDonald, Edith J. McVicar, Minnie K. Smith, E. J. Archibald, Annie M. Peters, Maggie F. Nicolson, Rose E. McKay, Emma Crosby. Janie E. McAskill also passed the examinations for the Intermediate certificate and for the Elementary Theory certificate.

The announcement is made of the marriage of Dr. J. A. McIntyre to Miss Bertie Gunter, of Springfield, Kings Co. Dr. McIntyre was one of our most successful high school teachers. The REVIEW extends its congratulations.

Mr. J. B. Sutherland, A.B., is teaching a very successful night school in Milltown.