(3) The true discount on a sum of money for 1 year at 6% is $2.50 greater than the sum of the true discount (for the same time) of half of it at 8% and the other half at 4%. Find the sum.

The discount on $106 for 1 yr. at 6% = $6

"   "   53   "   "   8% = $\frac{5300}{108}$

"   "   53   "   "   4% = $\frac{5300}{104}$

$\frac{5300}{108} + \$\frac{5300}{104} - \$6 = \$\frac{25}{702}$

$\frac{25}{702}$: $2.50 :: $106 : $7441·20

∴ $7441·20 = sum required.

(4) I invest in Toronto 6% debentures selling at 6% discount, and $500 less in Toronto Bank stock, selling at 5% premium and paying yearly dividends of 10%. The income from Bank stock is $100 more than from the debentures. Find the amount of Bank stock.

$94 gives $6. That is

Income from $1 of 6% stock = $\$\frac{3}{47}$

And   "   " $1 of 10% " = $\$\frac{2}{21}$

"   " $500 of 10% " = $\$\frac{1000}{21}$

If the same amount had been invested in both kinds of stock the difference of income would have been

$$\$100 + \$\frac{1000}{21} = \frac{\$3100}{21}$$

The difference of income from $1 in each kind of stock is

$$\$\frac{2}{21} - \$\frac{3}{47} = \$\frac{63}{987}$$

If a difference of $\$\frac{63}{987}$ arises from $1 $\$\frac{3100}{21}$ will arise

from $4700 = debentures.

$4700 − $500 = $4200 Bank stock.

A Constant Subscriber. — Please translate the mottoes given below, which were on some cards sent me some time ago :

(1) Herzlechen Gluckwunsch.
(2) Votos sinceros par el ano nuevo.
(3) Viel Gluck zum neuem Jahr (or Jahre).
(4) Frohliche Weihnachten.
(5) Sirsnigs sweizinajums ufeeswehtischanas seenu !
(6) Die hand unseres Gottes ist zum Besten uber Alle, die ihn suchen.

(1) Hearty congratulations.
(2) Good wishes for the new year.
(3) May the new year bring you much happiness.
(4) A merry Christmas.
(5) ....
(6) The hand of our God is upon all them for good that seek Him. Ezra. viii. 22.

C. E. L. questions the propriety of the expression (in May Review): "2 parts × 3 months = 6 months," etc., as being a violation of the arithmetical axiom — *the multiplier is an abstract number*. He is partly correct. The expression was used as a contraction for the expression: "Two parts lent for three months would be equivalent to one part lent for six months," and only in such cases, if at all, is it justifiable.

J. F. — Would you do me the kindness to secure in the columns of the Educational Review an article upon the backward and forward motions of the planets? I should like much to read a minute explanation showing why the times of apparent backward and forward motions are so unequal in duration.

SCHOOL AND COLLEGE.

The school house at Dawson Settlement, Albert County, recently built, adds one to the list of good houses in that County. The main room has the approved seating for sixty-five pupils. There is also a large class-room.

The stock of apparatus in the Hammond Vale school has lately been increased from the proceeds of a concert. Miss Annie McAfee is the teacher. New furniture has lately been procured by the schools in the following districts of Kings County, N. B.: Jordan, Mount Gibbon, Perry Settlement, Jeffries' Corner, Lisson, Springfield No. 8, and Cornhill East, No. 13. The house in Cumberland Bay, No. 5, Queen's County, has been thoroughly repaired inside and out, and now has the appearance of a new house.

Inspector Steeves has spent most of the month of June in Albert County.

In the report of the proceedings of one of Inspector Roscoe's school board meetings, we find the following: The three R's are receiving their full share of time, and much more attention is being given to calisthenics, music and Nature lessons. The advantage to the schools from the last three subjects is being felt and appreciated in many schools. The question of enlarged school sections, so as to include several schools under the management of one board of trustees, was referred to again, and commended to the attention of the Board. This system will secure one central school, superior to the rest, within a radius of a few miles, to which all the high school pupils can come and receive instruction near enough to board at their own homes—the other schools in the group to be devoted to the pupils of the common school grades.

The supply of teachers for the coming term will probably exceed the demand in New Brunswick.