rate in each case; find the face value of each note.

$\left(\frac{8}{103}+\frac{8}{110}\times\frac{3}{8}\right)-\left(\frac{8}{110}+\frac{8}{103}\times\frac{3}{8}\right)=$ \$0.381 gives the face value of first note, viz., \$800.

XV. In the *Mail* of May 20th, Quebec 5 per cent. stock is quoted at 110, and Montreal Bank stock at 206¼. What dividends should the latter stock pay so that investments in the two kinds quoted would be equally good? $9\frac{3}{8}$ per cent.

XVI. If 5 per cent. stocks are at 110, what fraction of a sum of money would represent the true discount on that sum?

$\frac{1}{23}$ or $4\frac{8}{23}$ per cent.

XVII. A man got an insurance on his property at 2 per cent. for such a sum that in case of loss he would recover the value of the property, the premium paid for insurance and \$500 in addition. The property was burned, but the company, suspecting fraud, would pay only 75 cents on the \$ of the claim; this amounted to \$500 less than the actual value of the property burned; what was the value of the property, also the sum entered in the "Policy?"

\$3760.87, and \$4347·755.

Soln. $\frac{3}{4}\times\frac{100}{98}$ (value + 500) = (value − 500).

XVIII. In the last problem take the answer and prove that it is approximately correct.

XIX. A merchant bought goods, and paid a certain import duty on them. He marked his goods so as to gain 20 per cent. on total cost, but was obliged to throw off 10 per cent. of this marked price, he then gained 10 per cent. on the first cost of the goods, what percentage duty did he pay?

25 per cent.

Soln. $\frac{120}{100}$ (cost + duty) − $\frac{10}{100}\times\frac{120}{100}$ (cost + duty) = $\frac{110}{100}$ cost *i.e.* $\frac{108}{100}$ (cost + duty) = $\frac{110}{100}$ cost or 8 per cent. of cost + duty = 10 per cent. of cost, ∴ duty = 25 per cent.

XX. A dealer spent \$400 buying cows, sheep and geese. He bought the cows at \$20 each, the sheep at \$4 each, and the geese at 50 cents apiece. When the money was spent he had 100 animals. How many of each kind did he buy? Had the price of geese been 20 cents, what would then be the answer?

1st answer, 14 cows, 22 sheep, 64 geese,
or 7 cows, 61 sheep, 32 geese.
2nd answer, 19 cows, 1 sheep, 80 geese.

We are sorry to see, from advertisements in the daily papers, such a strong disposition manifested, in several places, to cut down teachers' salaries. We feel satisfied that the effects of this parsimony will, like chickens and curses, "come home to roost."

The London *Times* commenting on the prosecution of Dr. Buchanan, in Philadelphia, for forging medical diplomas, says: "Our ancient universities have sinned quite as much as he in making degrees a mere matter of money. Many thousands of men add M.A., D.D., or D.C.L. to their names without having answered a question, or shewn any scholarship or knowledge over and above what is implied in a B.A. degree."—*Ex.*

An English writer remarks that in late years improved educational maxims in the schools have been followed by improved methods in the kennels, and that dogs have been trained better through kindness than through terror.—*New. Eng. Journal of Ed.*

Board schoolmaster (desiring to explain the word 'conceited,' which had occurred in the course of the reading-lesson): "Now, boys, suppose that I was always boasting of my learning; that I knew a good deal of Latin, for instance, or that my personal appearance was—that I was good-looking, y' know; what should you say I was?" Straightforward boy (who had "caught the speaker's eye"), "I sh'd say you was a liar!"—*Punch.*