the other precluded by the shortness of our intercourse, and the triviality of the subjects. The difference will be impressed and felt though the conversation should be confined to the state of the weather or the pavement."

"Hail adamantine steel! magnetic Lord! King of the prow, the plowshare, and the sword! True to the pole, by thee the pilot guides— His steady helm amid the struggling tides; Braves with broad sail th' immeasurable sea, Cleaves the dark air, and asks no star but thee."

## MODEL SCHOOL AND ACADEMY DIPLOMAS.

Arithmetic.— $1\frac{1}{2}$  hours.

1. Simplify 
$$\frac{5\frac{9}{4} - \frac{9}{7} \text{ of } 15\frac{9}{4} + 2\frac{3}{3}\frac{2}{5} \div 1\frac{1}{2}\frac{1}{5}}{\frac{9}{4} \text{ of } 7\frac{9}{7} - 5\frac{3}{5} \div 3\frac{1}{4}\frac{1}{5}}$$

2. For every eight sheep a farmer has, he plows one acre of land, and he also keeps one acre of pasture for every 5 sheep; how many sheep does he keep on 325 acres?

3. One twelfth of the weight of a gold coin is alloy of no value. If some dollars were coined of pure gold, how many of our present gold dollars would be equal in value to 143 of the new ones?

- 4. A tree stands exactly opposite the front door of my house, which looks towards the north-east, but the distance cannot be directly measured on account of a small pond lying between them; I therefore measure 60 yards due north from the front door, and then 120 yards due east, when I find I am exactly 40 yards north of the tree; what is the distance from the front door to the tree?
- 5. How many cannon balls, 6 inches in diameter, can be put into a cubical vessel whose side measures 2 ft., and how many gallons of water will the vessel hold after it is filled with the balls?

N.B.-A gallon contains 231 cubic inches.

6. I sell £3200 out of a 3 per cent. stock at  $86\frac{3}{8}$  and invest the proceeds in 4 per cent. stock at  $114\frac{7}{8}$ , brokerage being  $\frac{1}{8}$  in each case. What alteration was made in my income?

7. The Frankfort florin is divided into 60 kreutzers. When the pound sterling is worth 25.50 francs in Paris, and 11 fl. 54 kr. in Frankfort, what is the worth of the napoleon in florins and kreutzers?

N.B.—20 francs = 1 napoleon.

8. Of two casks, one contains 12 gals. of wine and 18 gals. of water; the other contains 9 gals. of wine and 3 gals. of water. How many gallons must be drawn from each cask so as to produce by their mixture 7 gals. of wine and 7 gals. of water?

—The operations of the youthful mind are often illustrated by items such as these. There is a great deal more to be had out of such anecdotes than the laugh which they naturally excite; and the