2. A merchant bought 974 yds. cloth, and sold it all for \$847.38, gaining \$301.94; what was the cost per yard?

3. *A* and *B* own together 120 acres, *A* having 24 acres more than *B*. *A* sells his share for \$84 per acre. *B* sells his share for the same amount as *A*; how much does *B* get per acre?

4. If potatoes be bought at \$20.35 and sold at \$21.32 per load, how much will be made on a sale amounting to \$6332.04?

5. A merchant sold 45980 bushels of grain that cost him 98 cents at a gain of 29 cents per bushel, and with the money bought 2299 head of cattle; how much did he pay for each?

6. If a milkman use a false measure containing ·93 of a pint instead of a pint, out of how much will he have cheated his customers when he has really sold 23 gallons 2 pints?

PAPER VI.

1. Find the length of a street in which the wheel of a barrow revolves exactly 150 times, the diameter of the wheel being $1\frac{1}{2}$ ft., and the ratio of the circumference to the diameter, 3·14159:1.

2. France is 128 millions of English acres, and the Pyrenees spread over it would cover it to the depth of 115 feet; find the bulk of the Pyrenees in cubic feet.

3. What is the height of a closet 8 ft. 4 in., by 6 ft. 8 in., which will exactly contain 12 boxes 4 ft. 6 in. long, 3 ft. 4 in. wide, 2 ft. 6 in. deep?

4. What sum of money must be left, in order that after a reduction of ten per cent. has been made, the remainder being invested in the 5 per cents. at $91\frac{1}{8}$, may give a yearly income of \$100?

5. A ship worth \$6000 is entirely wrecked. \$3000 belonged to *A*, \$2000 to *B*, and the rest to *C*. What are the respective losses to *A*, *B* and *C*, supposing the ship to have been insured only to the amount of \$4500.

6. *A* can do a piece of work in 27 days, and *B* in 15 days.