

On Wednesday morning one wants 10 minutes to 11 when the other strikes 11. How much must the slower be put on that they may strike 9 together in the evening?

6. A person bought 43 shares in a coal mine at  $35\frac{1}{2}$ , and kept them till they declined to  $11\frac{1}{2}$ , when he sold out and bought with the proceeds 6 per cent. bank stock at 28 premium; find his annual income from the latter investment.

## PAPER IV.

1. Define a fraction, and shew from your definition that  $\frac{1}{2} = \frac{2}{4}$ . (1) Add together  $\frac{1}{2}$ ,  $\frac{2}{3}$ ,  $\frac{3}{4}$ , and  $\frac{4}{5}$ ; and find what fraction the sum is of  $1\frac{1}{2}$  of  $\frac{4}{27}$ . (2) How many times can .027 be taken from 3.33? What fraction is the remainder of the former?

2. A person left a sum of money which was divided equally amongst 43 poor people, such that, after a deduction of 6d. in the pound, each received £3. 3s. 4½d. What sum did he leave?

3. (1) If the carriage of 13 cwt., 2 qrs., 19 lbs. for 35 miles cost £4. 17s. 6d., what must be paid for the conveyance of 41 cwt., 1 lb. for 49 miles? (A cwt. = 112 lbs.) (2) A bankrupt owes \$2085, of which \$235 is due to A, \$325 to B, \$525 to C, and the rest to D. How much must he pay in the \$ so that D may receive as much as is due to C?

4. A merchant buys 2 butts of wine, one for £120, and one for £110, he also buys a third, and after mixing the three, retails the wine at 45s. per dozen, making 12½ per cent. on his outlay: supposing the number of dozens in a butt to be 52, find the price of the third butt.

5. The price of 2 turkeys and 9 fowls is £2. 18s. 6d. and the price of 5 turkeys and 2 fowls is £4. 8s. 2d.; find the price of a turkey and a fowl.

6. How long will it take to walk round a square field containing 13 ac., 81 yds. at the rate of  $3\frac{1}{4}$  miles an hour?

## PAPER V.

1. Find the product of the following numbers:—  
 (1)  $3916 \times 769$ . (2)  $98367 \times 9876$ . (3)  $60706 \times 7095$ .  
 (4)  $968175 \times 39078$ . (5)  $9487918 \times 7982$ .