Solution:-Value of 348 bushel oats=\$174.

- ∴ Value of 145 bushel wheat=\$174.
   ∴ " " 1 bushel wheat=\$1.20.

. Value of 1 pound of wheat=\$1.20÷60=2c. Ans. 2 ets. 7. If 9 pigs be given for a piece of cloth measuring 18g yds., and valued at \$33 per yd. Find the value of a pig.

- Solution:—Total value of  $18\frac{1}{2}$  yds. cloth @  $$3\frac{1}{2} = $58$ .  $\therefore$  " 9 pigs=\$58.  $\therefore$  Value of a pig is  $$58 \div 9 = $6\frac{1}{2}$ . Ans.  $$6\frac{1}{2}$ .

8. A grocer gave a man \$33 change, which he afterwards found out was  $S_{20}^{0}$  too much. How much should he have given him ? Solution:—He should have given him  $33_3^2 - S_{20}^{0} = S_{10}^{10}$  or  $S_{20}^{2}$ .

Ans. \$2.95. 9. The product of three numbers is 114. Two of the numbers are  $5\frac{1}{3}$  and  $7\frac{1}{3}$ . What is the third number *i* Solution :—Product of the two numbers is  $\frac{3}{6}$ .  $\therefore$  Third number is  $114 \div 3\frac{5}{5}2 = 2\frac{7}{16}$  Ans.

10. I buy 97 tons 7 cwt. of pig ion and sell 39 bars of it, each weighing 3 qrs. 11 lbs. 14 oz. How much have I remaining? Solution :- Total weight sold=1 ton 13 cwt. 3 qrs. 13 lbs. 2 oz.

. Weight remaining = 95 tons 13 cwt. 0 qrs. 11 lbs. 14 oz. Ans. 11. Make out a bill for the following account :--R. Jarvis sold to Jas. Murdie 18 yds. Muslin at 91c ; 13 yds. Black Cashmere, at 43c.; 10 yds. Calico at 12 jc.: 16 yds. Silk at \$1.55 ; 28 yds. flannel nt 27c. Supply dates.

Solution :-

Jas. Murdie, Dr.

## To R. Jarvis.

To 18 yds. Muslin @ 94c         " 13 yds. Black Cashmer @ 43c         " 10 yds. Calico @ 124c         " 16 yds. Silk @ \$1.55         " 28 yds. Flannel @ 27c	$ \begin{array}{c c} \$ 1 \\ 5 \\ 1 \\ 24 \\ 7 \end{array} $	71 59 25 80 56
	1 \$40	91. Ans.

12. A farmer sold § of the number of his sheep and had 35 remaining. How many had he at first?

Solution :—Sold  $\ddagger$ . ... he had  $\frac{2}{3}$  of No. remaining  $\frac{2}{3}$  of No. =35.  $\therefore$  No =45. Ans. 45 sheep.

13. The Divisor is 16 days 4 hrs. 17 min.; the Dividend is 339 

339 dys. 17 hrs. 57 min.=489,237 min.

∴ Quotient=489,237 min. --23,297 min=.21 Ans.

14. A man pursued a deer for four successive days; the first day he travelled 193 miles; the second  $24_{11}^{5}$  miles; the third  $17_{22}^{5}$ miles; and the fourth 2118 miles. How far did he travel altogether?

Solution :=  $193 + 24_{15} + 17_{25} + 21_{16}$ =  $19 + 24 + 17 + 21 + 3 + 45_{15} + 16_{15}$ = 81 + 122 = 8223, Ans. 8223 miles.

15. Find the value of a pile of wood 171 ft. long, 63 ft. high, • and 31 ft. wide, worth \$4.80 per cord.

Solution :- No. of C. ft. is  $17\frac{1}{2} \times 6\frac{2}{5} \times 3\frac{1}{4} = 352$ .

... No. of cords= $\frac{3}{2}\frac{3}{5}$ . ... Cort= $\frac{3}{2}\frac{3}{5}\times$ \$4.80=\$13.20 Ans.

16. How often is the G C M of 41,745, and 96,404 contained in the L C M of 3, 21, 35, 11, 56, 64, and 88? Solution :-G C M of 41,745, and 96,401=11

L C M of 3, 21, 35, 11, 56, 64, 88=73,920.

11 is contained 6,720 times in 73,920. Ans. 6,720. 17. How many times will a vessel holding 91 gallons, fill a vessel holding 5 of 15 quarts?

Solution :- 1st vessel holds 94 gallons, or 36 4 quarts.

2nd vessel holds 14 quarts. ∴ 1st vessel will fill 2nd vessel (364÷14) times,

=254 × §=32 times. Ans. 32 times.

18. What number must you subtract from  $830\frac{3}{10}$  to leave a remainder equal to the sum of  $532\frac{5}{2}$  and  $126\frac{3}{4}$ 

Solution :- Sum of 5323 and 1263 = 65911.

 $830_{137}^3 - 659_{35}^{11} = 170_{137}^{127}$ . Ans.

19. A man who is hired for \$225 a year, comes to his place on the 3rd March, and leaves on the 28th July. What wages ought he to receive?

Solution :—Man worked 146 days or ⅔ of a year. ∴he should receive ⅔ of \$225=\$90. Ans.

20. A block of land 21 miles long, and 2 miles wide, is divided into farms containing 80 acres each. How many such farms will there be i

Solution :-- No. of square miles= $2\frac{1}{2} \times 2 = 5$ .

: No. of acres=:5 × 640=3,200.

 $\therefore$  No. of farms of 80 acres each=3,200÷80=40.

Ans. 40 farms.

21. When hay is \$9 a ton, find the value of 1,260 lbs. Solution :- A ton = 2000 lbs.

 $\therefore 1260$  lbs. is worth  $\frac{1260}{2000} \times 9 = \$5.67$ . Ans.

22. A man owning  $j_{1}^{3}$  of a farm, sold  $\frac{1}{2}$  of his share. Find value of what he has left, if the whole farm is worth  $\frac{57,800}{7,800}$ Find the

Solution :- He sells & of his share .: he has § of share left

 $= \frac{5}{3} \times \frac{3}{3} = \frac{5}{39}$ , and whole farm is worth \$7,800

 $\therefore_{3_{10}}^{*}$  of farm is worth  $_{3_{10}}^{*}$  of \$7,800=\$1,000. Ans. \$1,000. 23. If 1 add 3 to both terms of the fraction  $_{10}^{*}$ , does it become

smaller or larger, and by how much (

Solution :--

 $_{14}^{6}$  and  $_{14}^{9}$  reduced to fractions having a common denomina-tor =  $_{134}^{13}$  and  $_{154}^{29}$ 

A fraction becomes greater by 15. Ans. 24. If in 15 days a man travelled 373 miles, 2 furlongs, 20 perches, travelling the same distance each day, what is the length of each days journey?

Solution :- In 15 days he goes 373 mls., 2 fur., 20 per.

∴ In 1 day he goes 373 miles, 2 fur., 20 per. ÷-15 =24 miles, 7 fur., 4 per. Ans. 25. Divide the sum of \$1,547 between George and James, giving James 3 as much as George.

Solution :--If George gets \$1, James gets \$3. .: If George gets \$4, James gets \$3. .: George gets \$4, James gets \$3.

Ceorge gets 4 of \$1,547 = \$884. and James gets 3 of \$1,547 = \$603.

## Practical Department.

## THE FOURTH LESSON.

(Continued from last week.)

GENERAL EXERCISE.

In the morning, the Busy-Work for all the classes, is the careful copying (with pencil and paper) of as many of the words gained from the story of the day before, as time will permit. These -twenty-five in number (pond. dog, son, gun, shoot, trap, hungry, den, recks, hill, tree, hole, rooms, kitchen, doors, morning, yard, walk, hurry, swim, mamma, papa, baby, feet, water)-are elegantly written upon a blackboard by themselves.

The afternoon session is opened with singing, then follows a Number Thinking-game, carried on thus : the teacher says briskly,

"Think fast, and tell me two numbers that make nine." This demand sets all the mental machinery in full motion, and in a second the room bristles with upraised hands.

"Five and four," Seven and two," "Three and six," "Eight and one," follow in quick succession. "Four and four, and one," is the next answer.

"How many numbers did you give me, Jimmie?" is the quick question.

" Three."

" And how many did I ask for ?"

"Two."

"Then don't be a careless boy again," is the admonition, and Jimmie sits down decidedly crestfallen. After this came "Two and seven," "Four and five," "Six and three," and "Eight and one," and not a hand is left.

Number of the second se

The teacher's next domand, "What numbers make eight ?" start them all to fluttering again.