as it issues from the rock to supply the spring and the stream below.

See how its meanderings through the plains, and its torrents over the cliffs, add to the richness and the beauty of the landscape. Look into a factory standing by a waterfall, in which every drop is faithfull to perform its part, and hear the groaning and rustling of the wheels, the clattering of shuttles, and the buzz of spindles, which under the direction of their fair attendants, are supplying myriads of fair purchasers with fabrics from the cotton-plant, the sheep and the silkworm.

Is any one so stupid as not to admire the splendor of the rainbow, or so ignorant as not to know that it is produced by drops of water, as they break away from the clouds which had confined them and are making a quick visit to our earth to renew its verdure and increase its animation? How useful is the gentle dew in its nightly visits, to allay the searching heat of summer's sun!

ARITHMÉTIQUE.

I. On a acheté 840 lbs de liège râpé; combien devra-t-on débourser si le prix de la livre est égal aux $\frac{3}{7}$ des $\frac{3}{5}$ de \$1.20?

Rep. \$259.20.

Solution:

$\frac{3}{7}$ de $\frac{3}{5}$ de \$1.20 = $\frac{216}{7}$ = 30$\frac{6}{7}$ cents

840 lbs @ 30$\frac{6}{7}$ cents = \$259.20.

II. Un marchand vend du drap à \$5 la verge qui lui a coûté \$3.75. Quel est son profit pour cent?

Rép. 33$\frac{1}{3}$ %.

Solution:

\$5—\$3.75 = \$1.25 profit.

\$1.25 × 100 ÷ \$3.65 = 33$\frac{1}{3}$.

ALGÈBRE.

Il y a deux nombres dont la somme est 49. Si l'on soustrait $\frac{1}{7}$ du plus petit et $\frac{1}{5}$ du plus grand le reste sera égal à 5. Quels sont ces deux nombres?

Rép. 35 *et* 14.

Solution:

x = plus petit

49—x = plus grand

$$\frac{49-x}{5}-\frac{x}{7}=5$$

$$343-7x-5x=175$$

$$-7x-5x=175-343$$

$$-12x=-168$$

$$x=14$$

$$49-x=35$$

Une personne après avoir dépassé $\frac{1}{5}$ de son revenu plus \$10 possédait encore $\frac{1}{2}$ de son revenu plus \$35.

Quel était le montant de son revenu?

Rép. \$150

Solution:

x = revenu

$$x-\left(\frac{x}{5}+10\right)=\frac{x}{2}+35$$

$$x-\frac{x}{5}-10=\frac{x}{2}+35$$

$$10x-2x-100=5x+350$$

$$10x-2x-5x=350+100$$

$$3x=450$$

$$x=150$$

MESURAGE.

I. Quelle est la surface d'un triangle dont les trois côtés sont de 15, 15 et 20 pieds?

Rép: 111.803.

Solution:

20
15
15
$\frac{1}{2}\overline{)50}$
25

25 25 25
20 15 15
× 5 × 10 × 10

5
125
10
1250
10
12500

$\sqrt{12500} = 111.803.$