MENTAL ARITHMETIC.

8a. An agent receives \$225 for selling goods to the value of \$5,000: find his rate per cent, of commission.

Sol.—\$5,000 gives \$225 com.: \$1 gives ${}^{225}_{6006}$ = ${}^{2}_{2}{}^{9}_{0}$, and \$100 gives ${}^{2}_{2}{}^{9}_{0} \times 100 = {}^{2}_{2} = 4{}^{1}_{2}$. Or 50×100 (=5,000), gives 225: 100 gives 225 \div 50=4 ${}^{1}_{2}$.

8. An agent received \$117 for selling 800 barrels of flour, at \$6.50: find his rate of commission.

9. A tax collector receives 1¹/₂ per cent. for all sums paid within 30 days, and 3 per cent. for all paid after that time: the taxes are \$45,000, of which \$25,000 is paid within 30 days: find the whole amount of the collector's fees.

10. A druggist sends his agent \$630 with which to buy goods, after deducting his commission, 5 per cent. on the price paid for the goods : find the agent's commission.

Sol.—For every \$105 sent, the agent receives \$5. he receives $\frac{1}{2^{1}}$ of whole amount sent= $\frac{1}{2^{1}}$ of \$630=\$30.

11. A manufacturer sent \$2,601 to a wool dea... with which to purchase wool, allowing him 2 per cent. for the money paid out : how much would be invested in wool \$

12a. An agent sold flour on a commission of 3 per cent., and with the proceeds, minus his commission for both transactions, purchased tea on a commission of 2 per cent. on the price paid for it; his entire commission was \$200: find amount received for the tea.