1. A man rowed up a river 10 miles in 5 hours and back in $\mathbf{2} 1 / 2$ hours. Find the rate of the current and the rate rowing in still water.
2. A steamer goes downstream $\mathbf{6 0}$ miles in four hours. The return trip takes two hours longer. What is the rate of the current and the rate of the boat in still water?
3. Flying with the wind a bird was able to make 150 miles an hour, but flying against the wind of only half as great velocity it could make only 30 miles per hour. Find the velocity of the wind and the rate the bird when flying in no wind.
4. If the velocity of a cannon report with the wind is 350 yards per second and 330 a second against the wind, what is the velocity of the wind?
5. Flying against the wind an airplane takes $\mathbf{4}$ hours to travel $\mathbf{4 8 0}$ miles but returns with the wind in 3 hours. Find the velocity of the wind and the speed of the plane in still air.
