7. A carpenter is building a doorframe using a nail gun. The nail gun of mass 5·0 kg fires a nail of mass 4·0 g.

The nail gun and nail are initially at rest.

The speed of the nail immediately after firing is 150 m s^{-1}.

The recoil speed of the nail gun immediately after firing is

A   0·005 m s^{-1}

B   0·05 m s^{-1}

C   0·12 m s^{-1}

D   1·2 m s^{-1}

E   120 m s^{-1}.