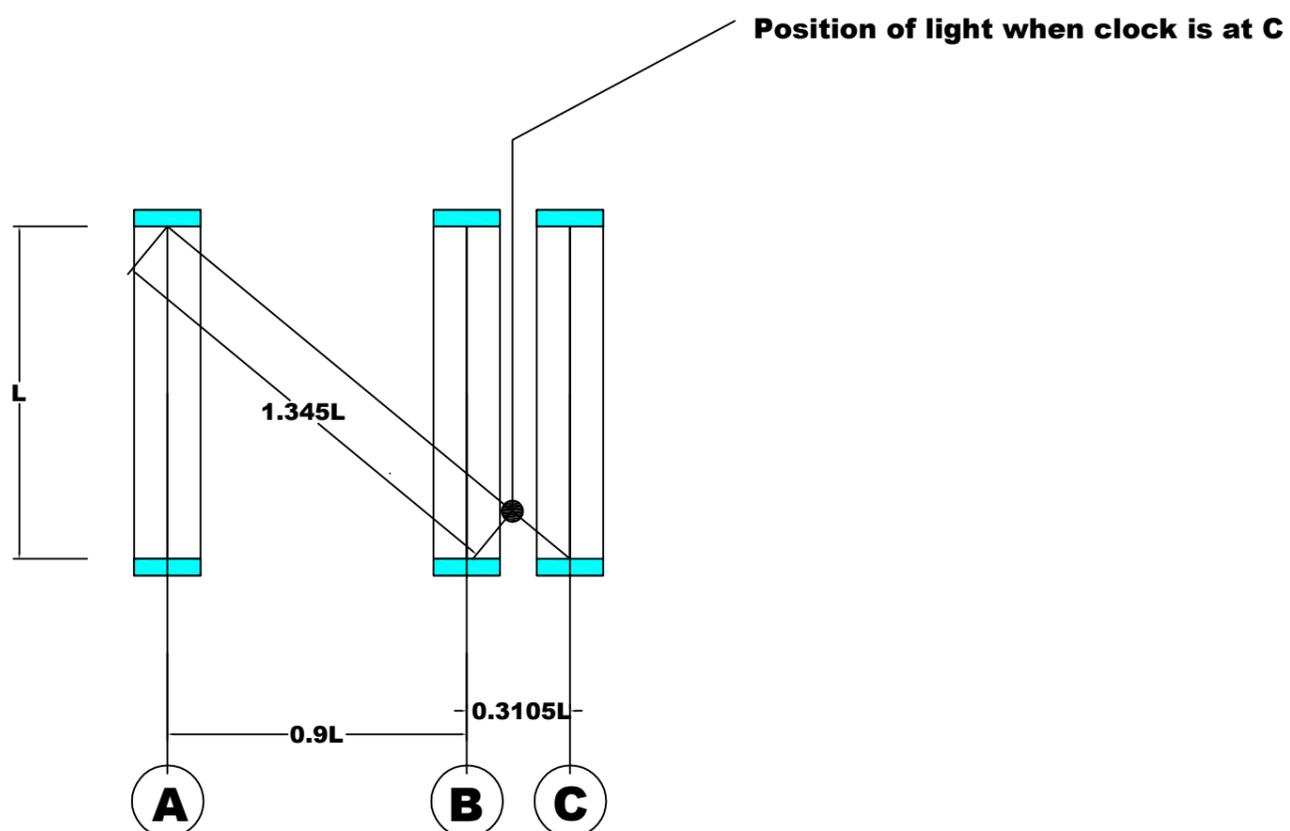


NOTES :

The clock is moving with a velocity of $0.9c$

The figure above shows the position of the light beam when the clock has travelled $0.9L$
 Now light has to travel a distance of $0.345L$ to reach the mirror. (using pythagoras theorem)

It is obvious that clock will not stop for the light to reach there. the clock will move a distance of $0.345L \times 0.9 = 0.3105L$ and will be in a new position C as shown below.



This process will continue for ever and the light will never reach the mirror on opposite side. This can only be avoided and light can reach the mirror only if light is having a relative speed with the source