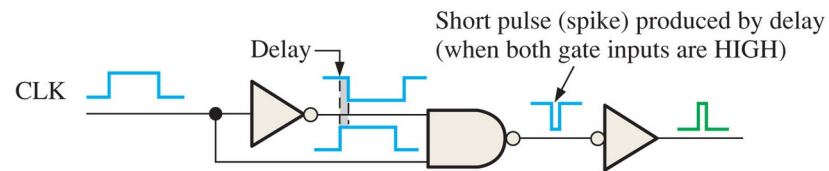(a) A simplified logic diagram for a positive edge-triggered D flip-flop

(b) A type of pulse transition detector