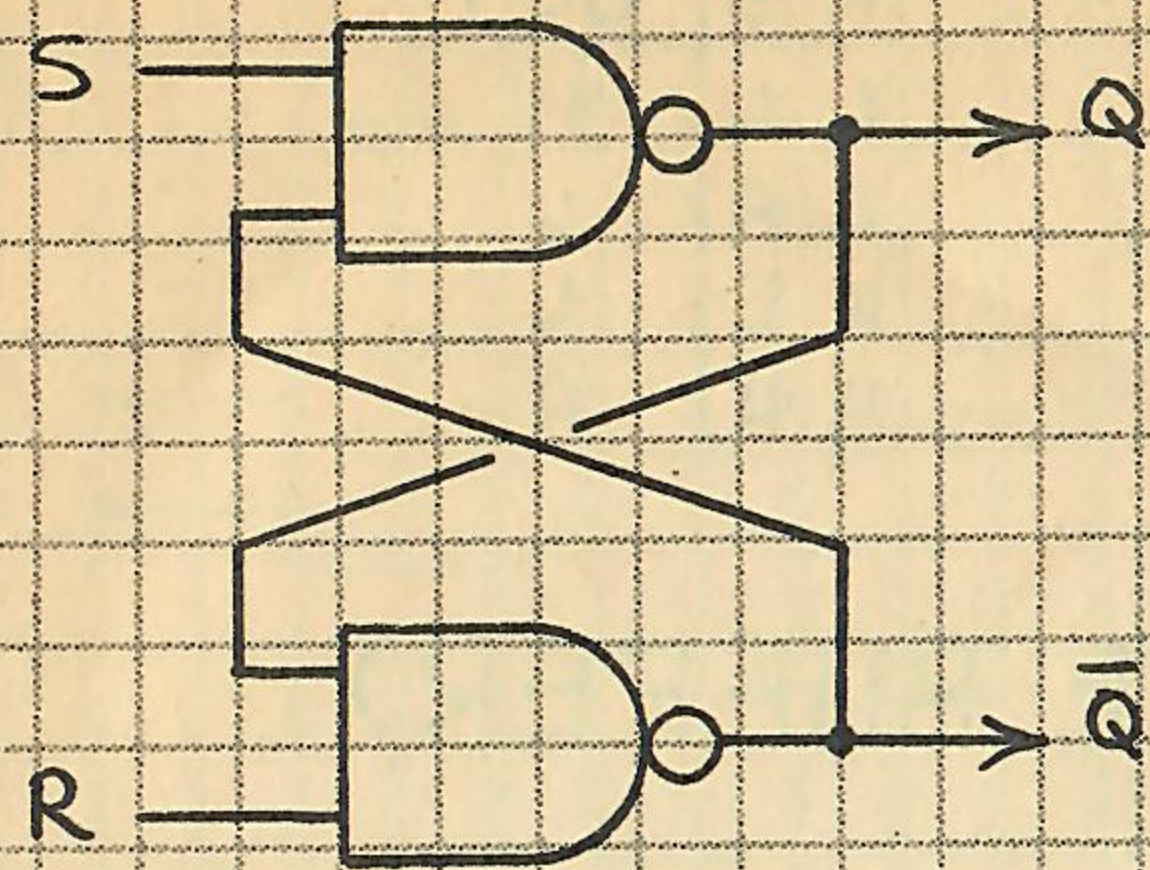


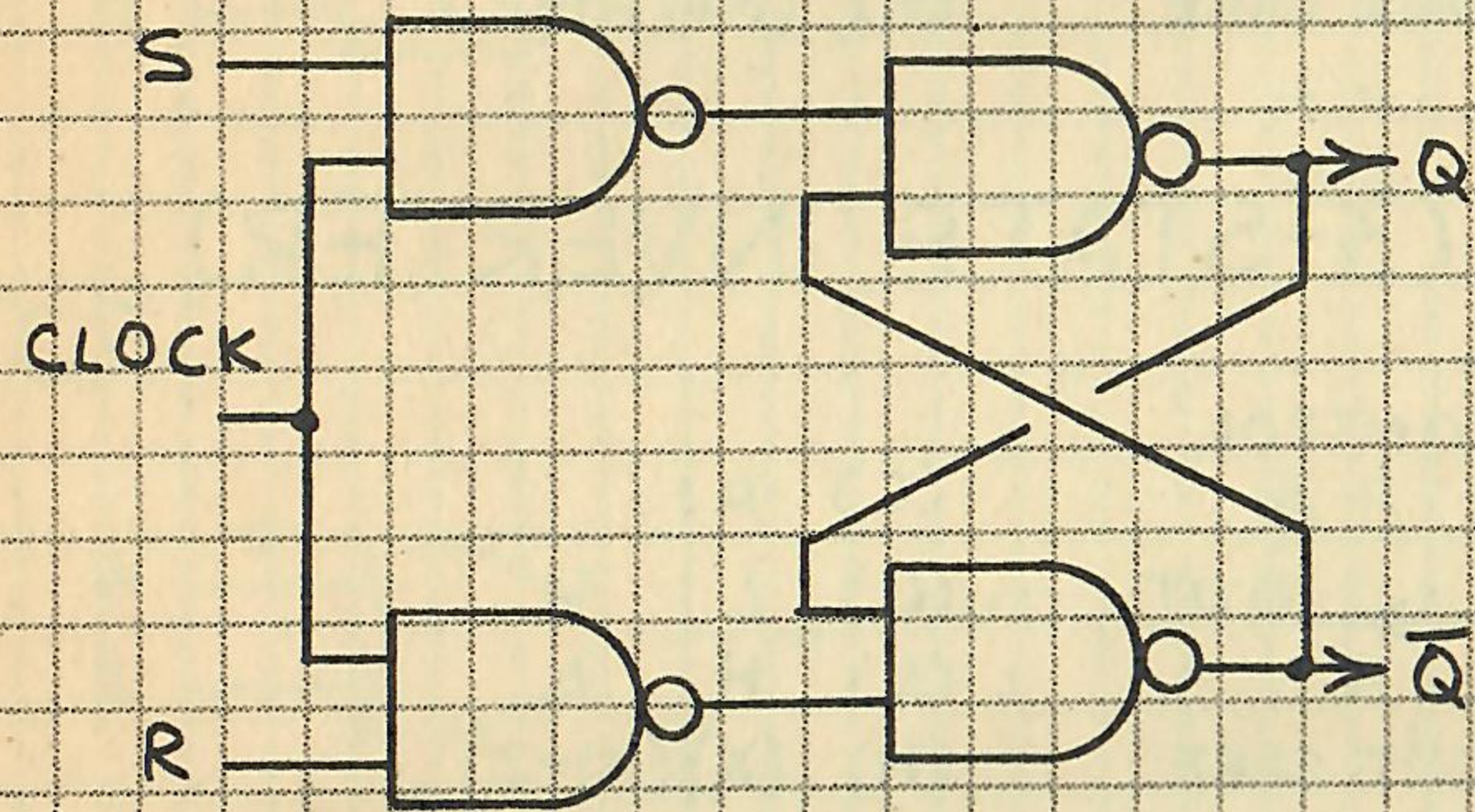
RS FLIP-FLOP (LATCH)



S	R	Q	\bar{Q}
L	L	(DISALLOWED)	
L	H	H	L
H	L	L	H
H	H	NO CHANGE	

\bar{Q} = NOT Q

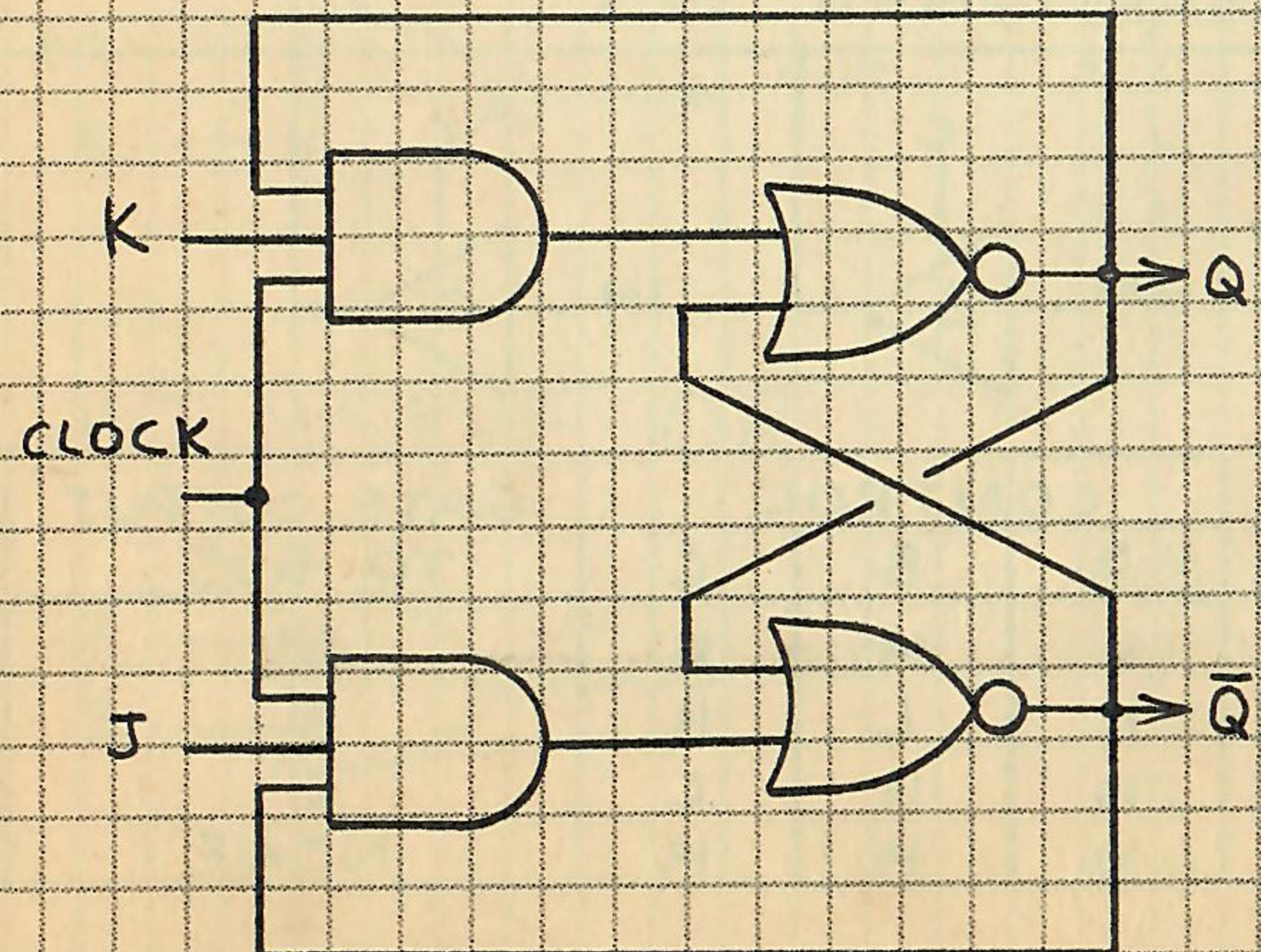
CLOCKED RS FLIP-FLOP



AFTER CLOCK PULSE ARRIVES:

S	R	Q	\bar{Q}
L	L	NO CHANGE	
L	H	L	H
H	L	H	L
H	H	(DISALLOWED)	

JK FLIP-FLOP



AFTER CLOCK PULSE ARRIVES:

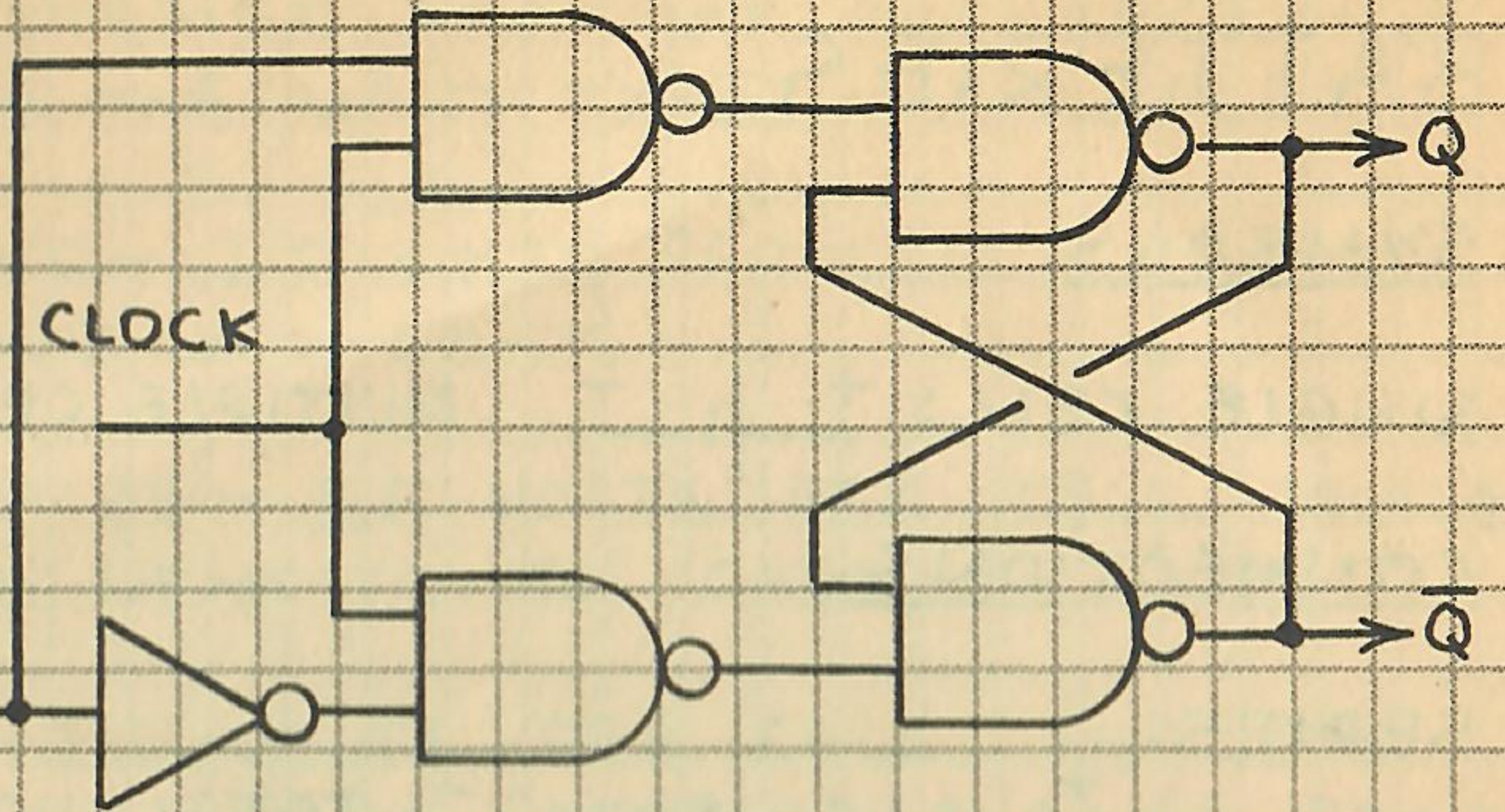
J	K	Q	\bar{Q}
L	L	NO CHANGE	
L	H	L	H
H	L	H	L
H	H	TOGGLE*	

*SEE FACING PAGE.

D (DATA OR DELAY) FLIP-FLOP

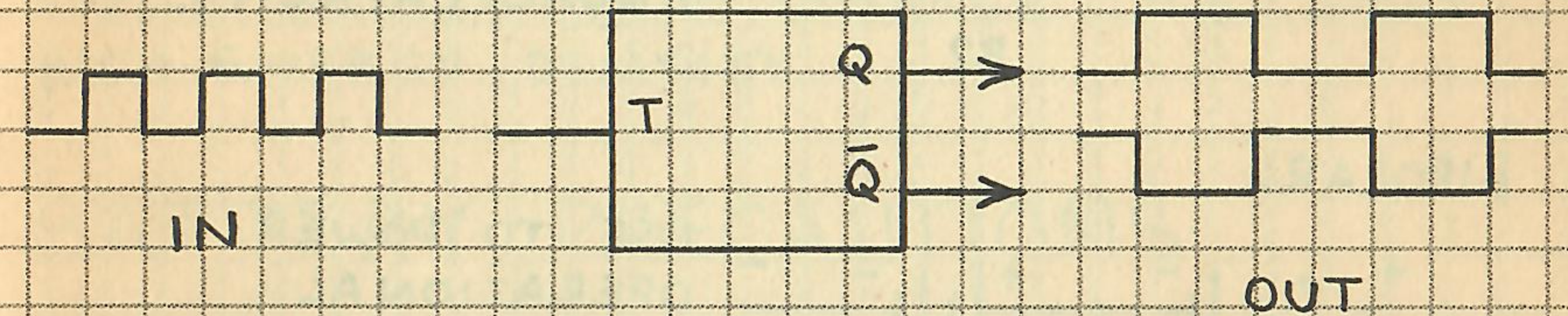
AFTER CLOCK PULSE ARRIVES:

D	Q	\bar{Q}
L	L	H
H	H	L

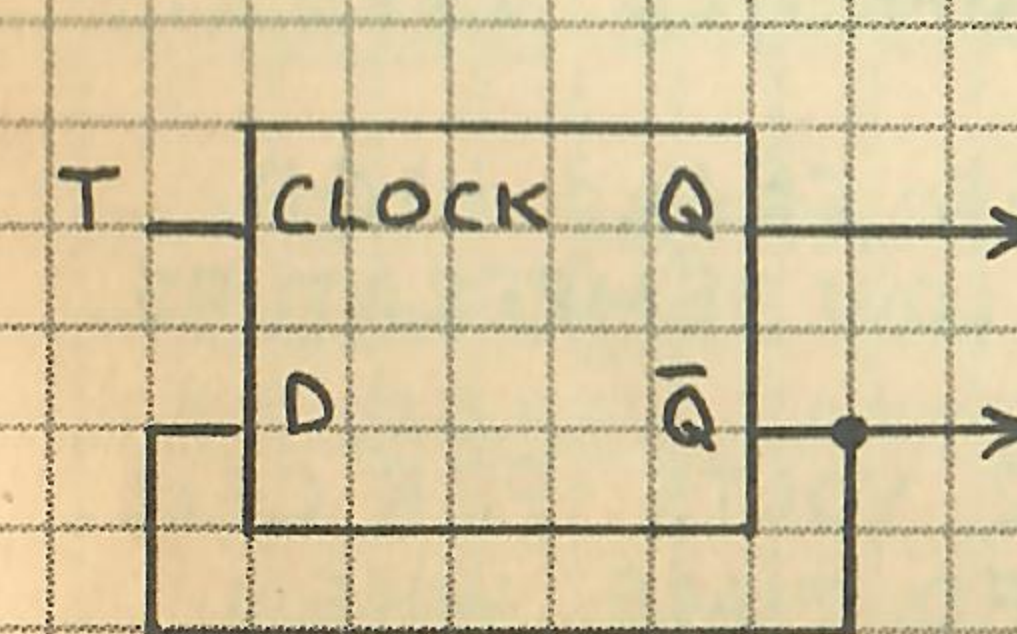


T (TOGGLE) FLIP-FLOPS

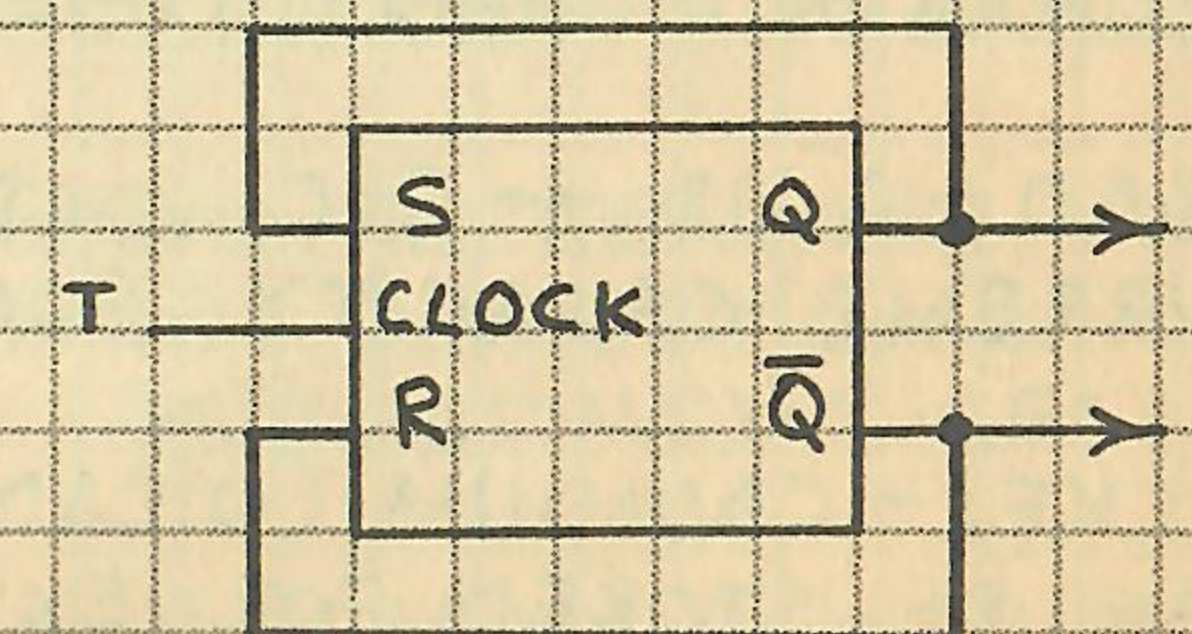
THE Q (OR \bar{Q}) OUTPUT IS L (OR H) FOR EVERY OTHER INPUT PULSE. THEREFORE THE OUTPUT IS THE INPUT $\div 2$:



CHAINS OF T FLIP-FLOPS ARE USED TO MAKE BINARY COUNTERS. THE JK FLIP-FLOP (FACING PAGE) FUNCTIONS AS A T FLIP-FLOP WHEN BOTH THE J AND K INPUTS ARE KEPT HIGH AND INPUT PULSES ARE APPLIED TO THE CLOCK INPUT. OTHER T FLIP-FLOPS:



D FLIP-FLOP



CLOCKED RS FLIP-FLOP