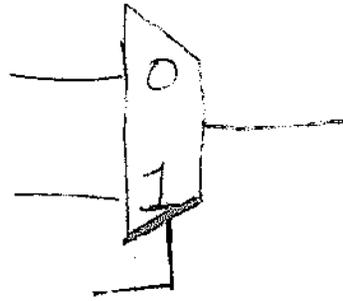
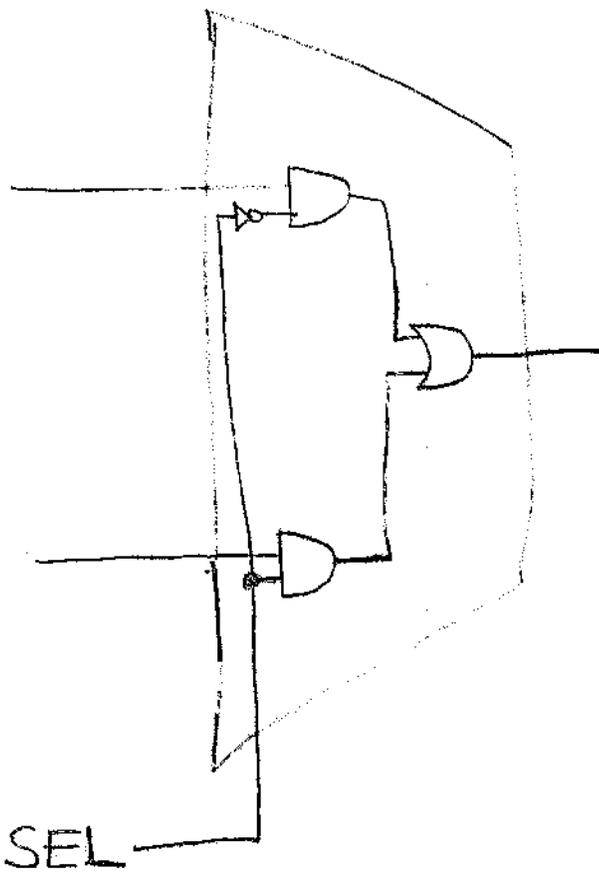


A reminder about muxes

Schematic:

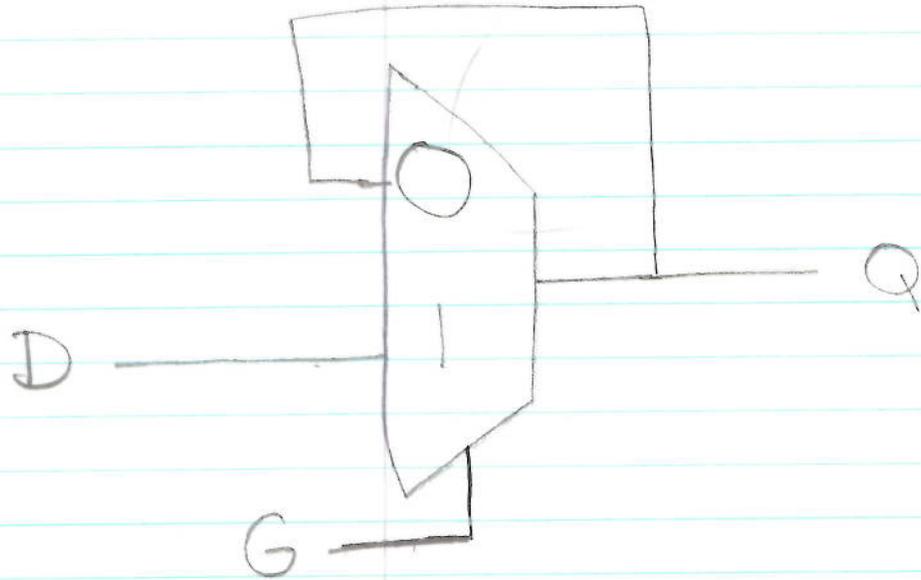


Internals:



- When SEL is low, output follows zero-port.
- When SEL is high, output follows one-port.

A reminder about latches:



$\frac{G}{0}$ Mode Stay the output independant of D.

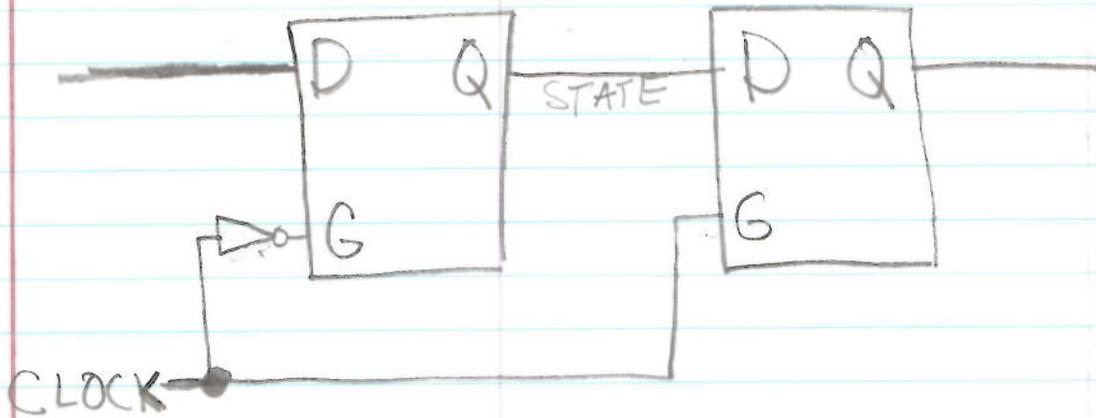
$\frac{G}{1}$ Set the output according to D.

In other words

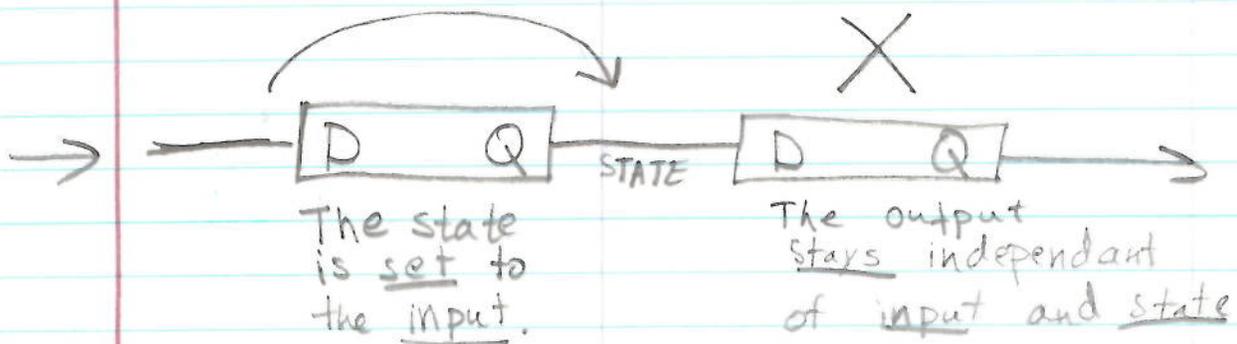
If $G=1$, Q follows D.

If $G=0$, Q follows Q, independant of D.

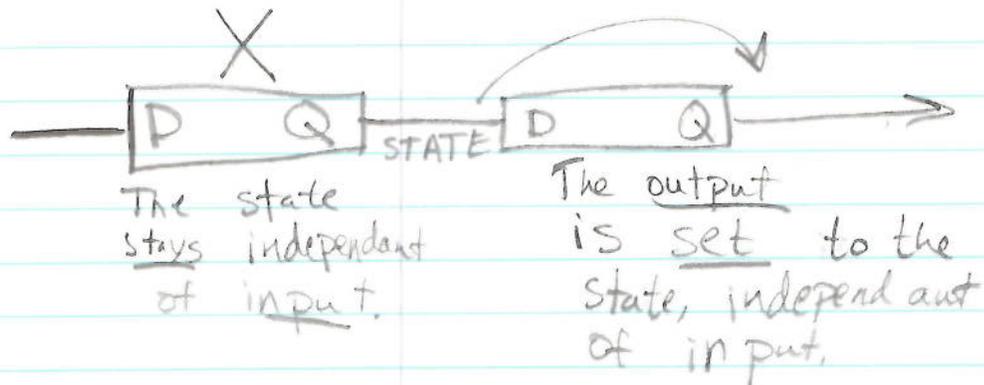
Flip Flops Example



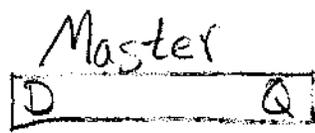
When G is LOW:



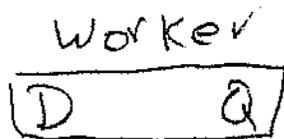
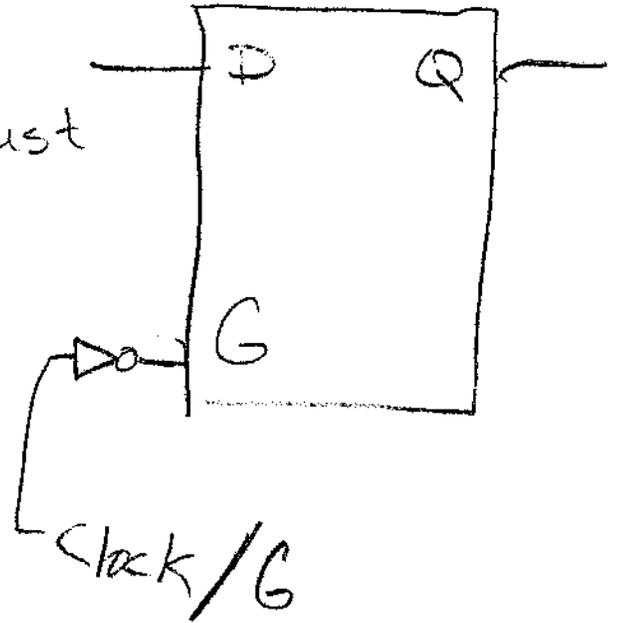
When G is HIGH:



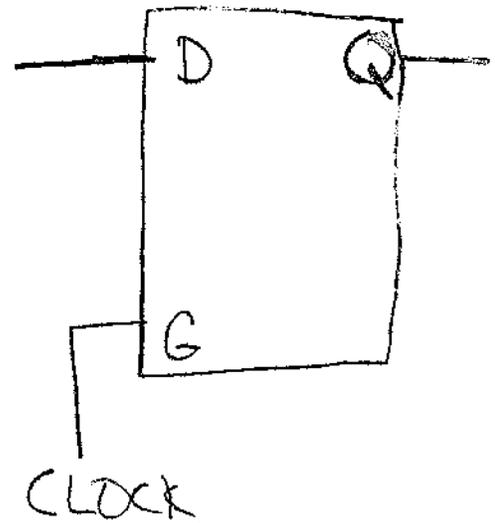
On the next page:



is just



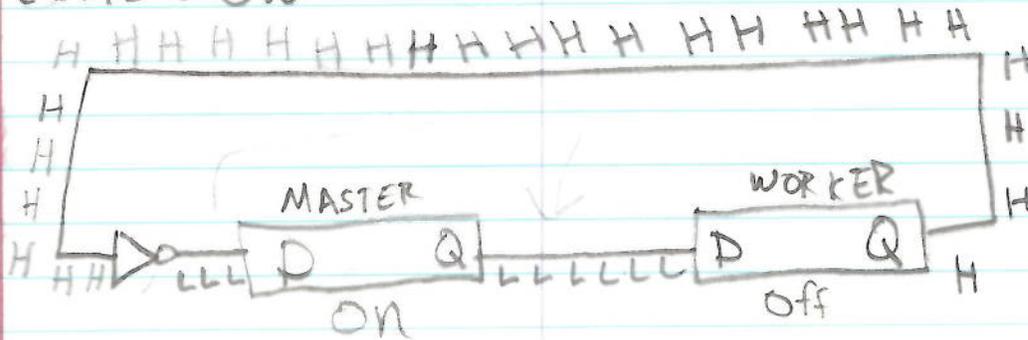
is just



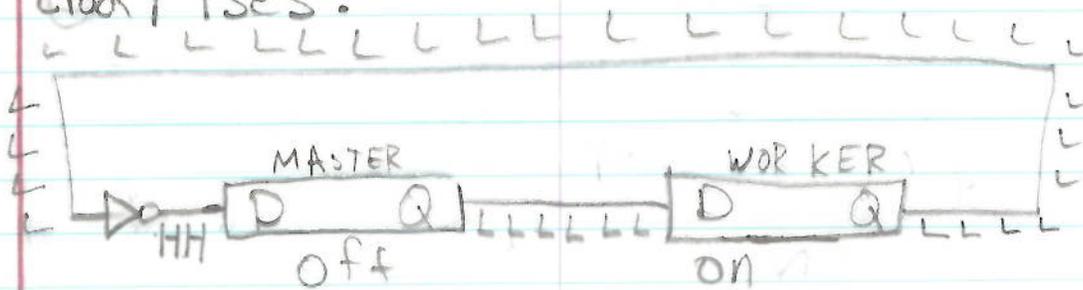
Clock can just be the output from a button!

Flip Flops with inverter.

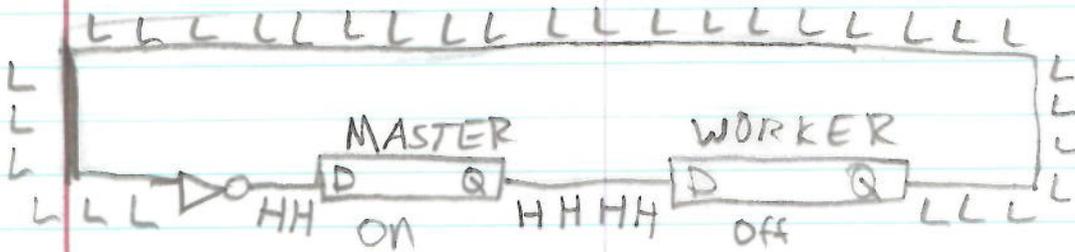
"clock" is LOW:



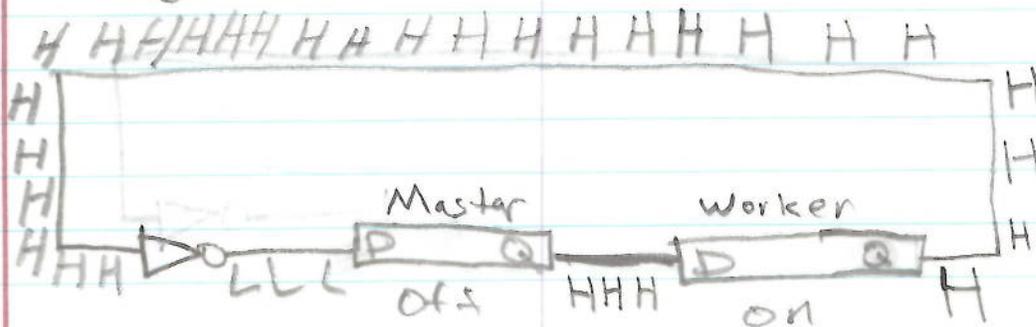
"clock" rises:



"clock" goes back down:



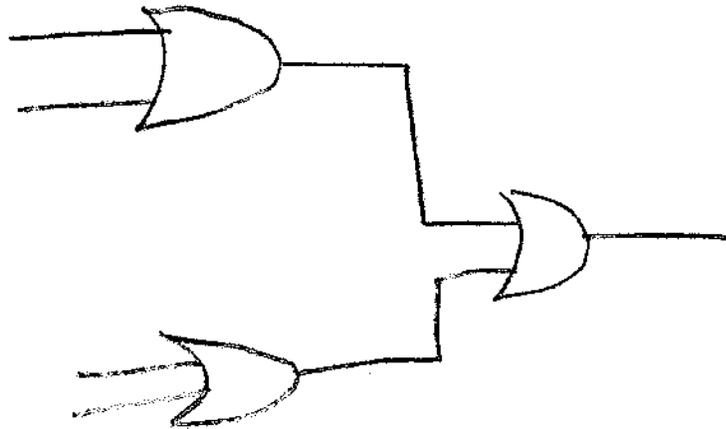
"clock" goes up again:



If "clock" goes back up, we get the first diagram 😊

A many input "OR" gate

Tree:



Or build it with MOS-FETS!

