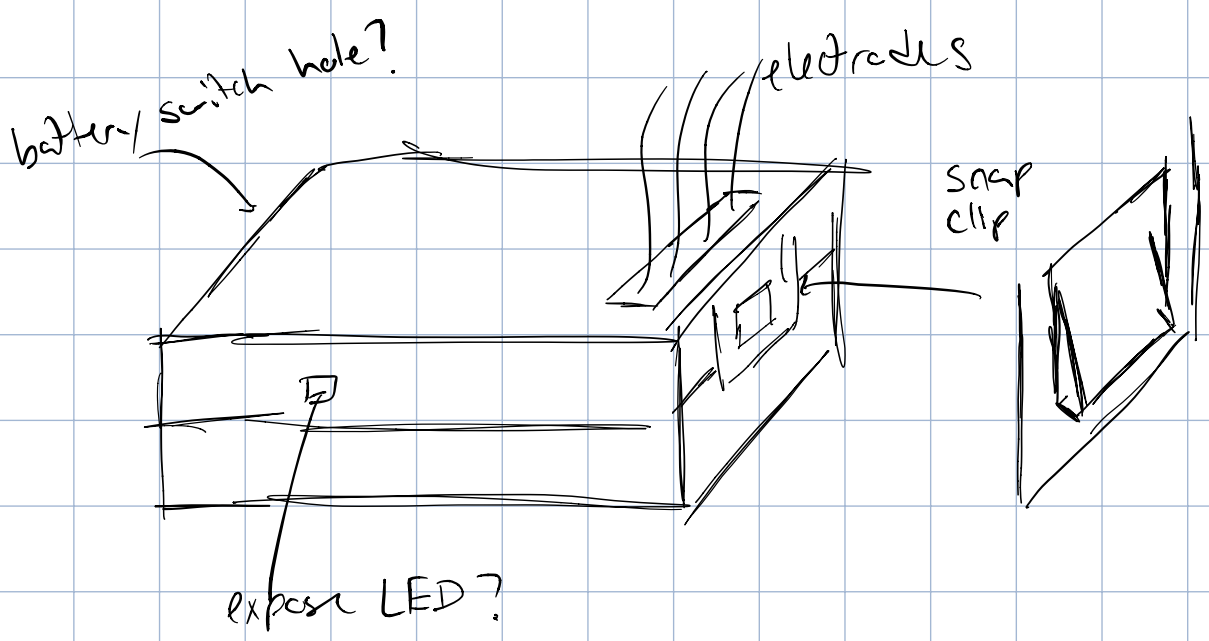
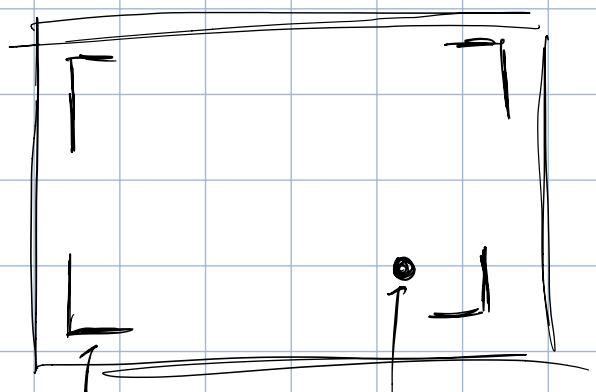
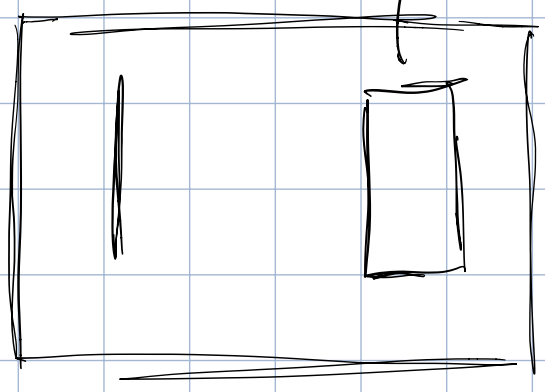

battery switch hole?
electrodes
snap clip
expose LED?

BOTTOM


walls to secure PCB
knob or screw hole to mount PCB

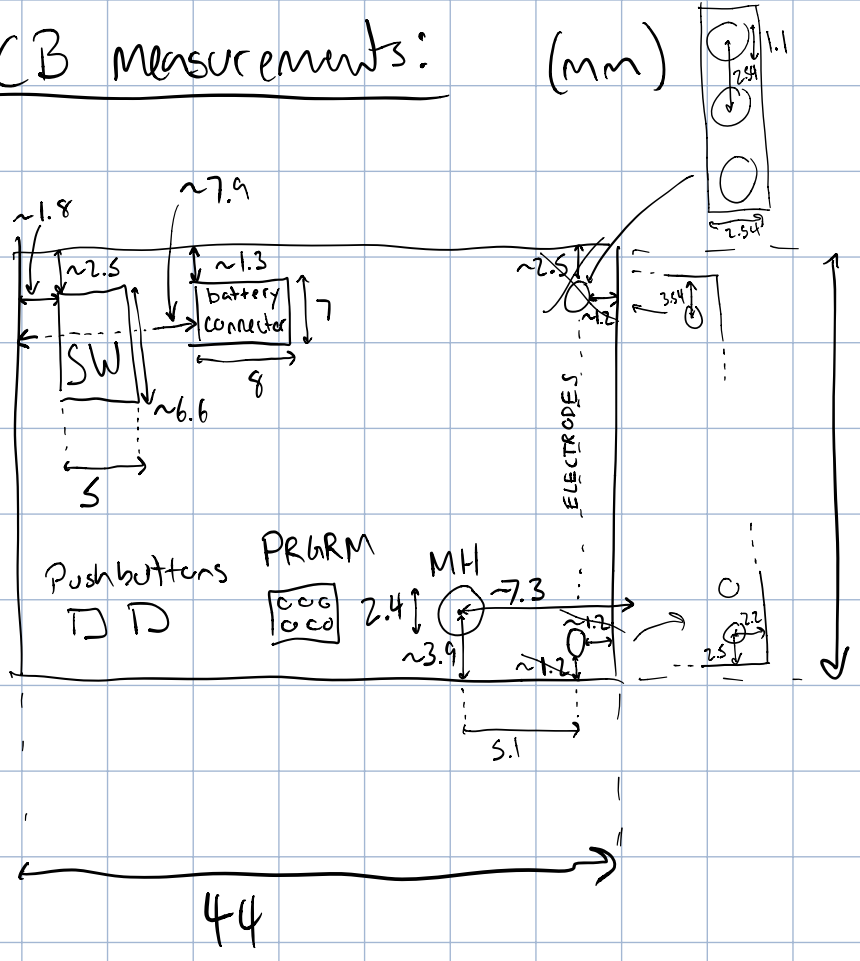
TOP


slat to hold battery

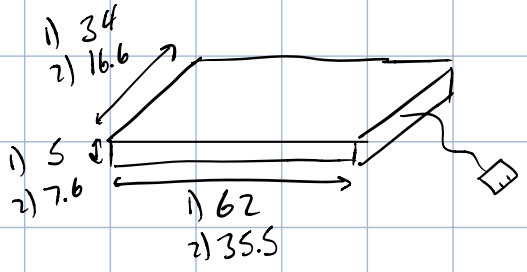
Concerns/requirements

- snug fitted PCB
- head band to stay on (if device is on head)
- minimize electrode wiring movement
- on/off sw access
- water/sweat resistant
- accessibility → swap battery, swap SD, etc.

PCB measurements: (mm)



Battery:



PCB thickness ≈ 1.6mm (standard size)

Topside heights:

tallest → headers = 6 + 2.54 = 8.54

battery connector = 6.6

push buttons = 2.5

battery SW = 1.4

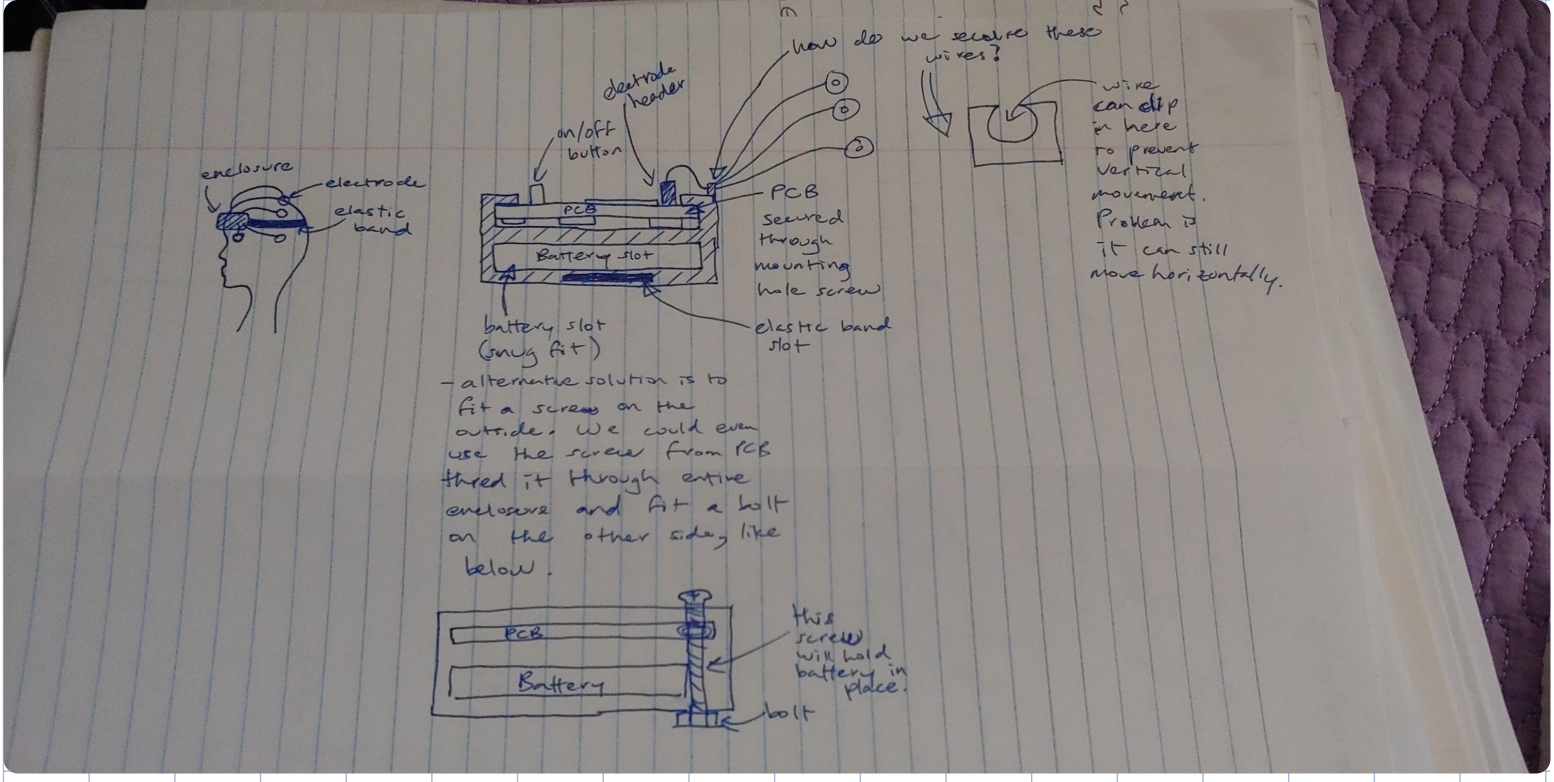
bottomside heights:

headers = 3 - PCB height

≈ 1.4

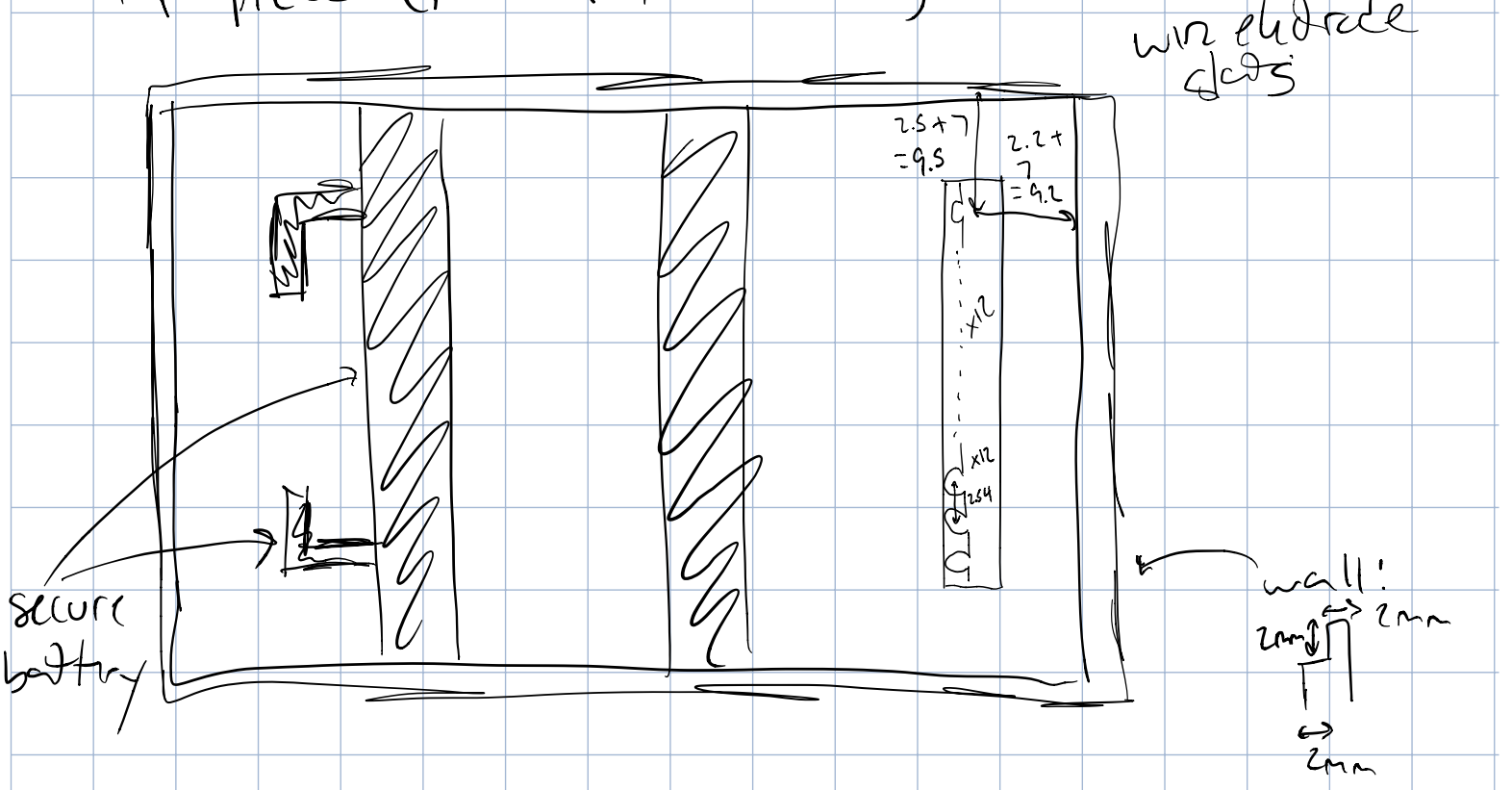
SD holder = 1.8

~12mm height of PCB

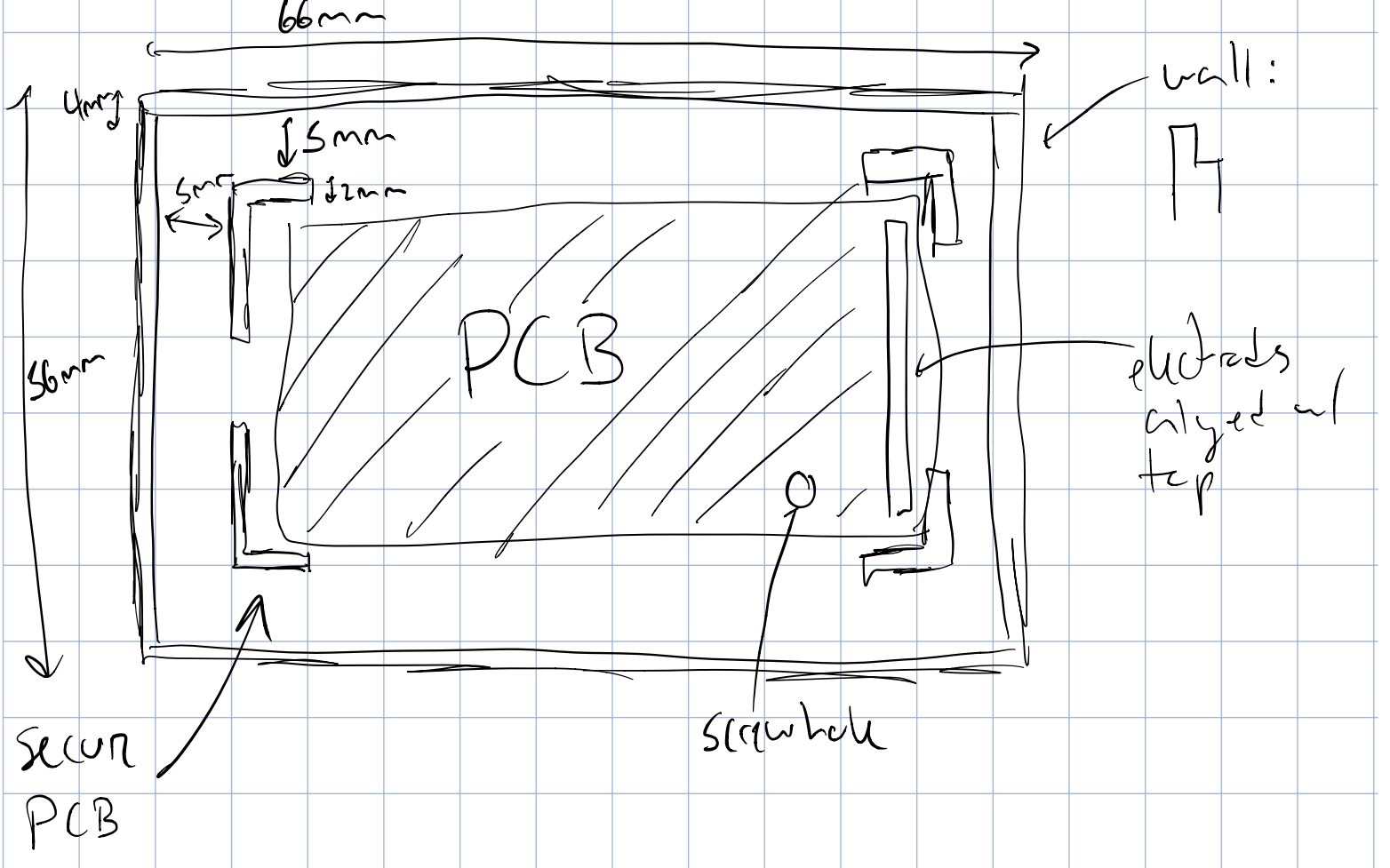

how do we secure these wires?
wire can clip in here to prevent vertical movement. Problem is it can still move horizontally.
electrode header
on/off button
enclosure
electrode
elastic band
PCB
Battery slot
PCB secured through mounting hole screw
battery slot (snug fit)
elastic band slot
- alternative solution is to fit a screw on the outside. We could even use the screw from PCB thread it through entire enclosure and fit a bolt on the other side, like below.
PCB
Battery
this screw will hold battery in place.
bolt


living hinge
latches
hooks

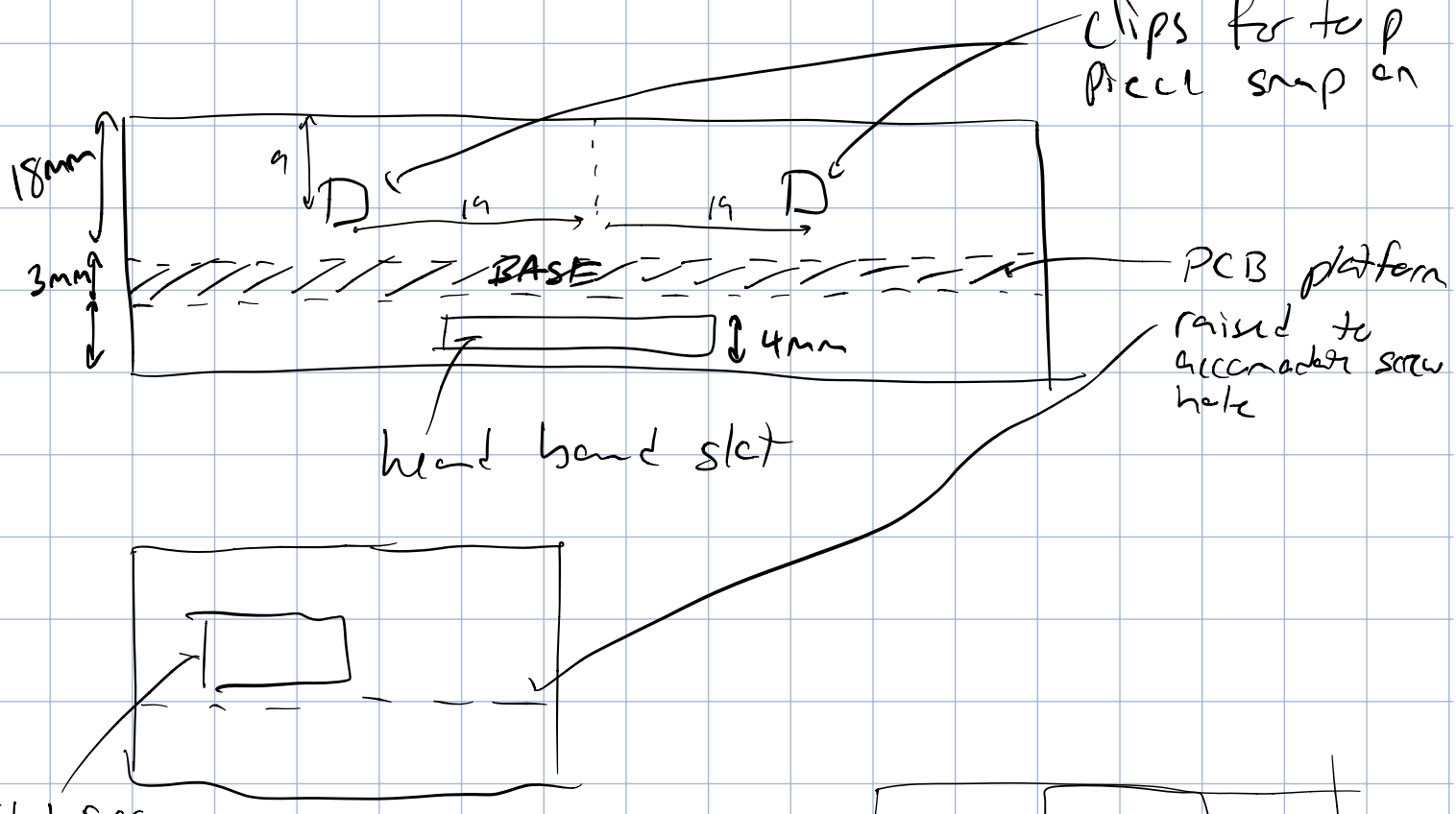
Top piece (flat on table view)

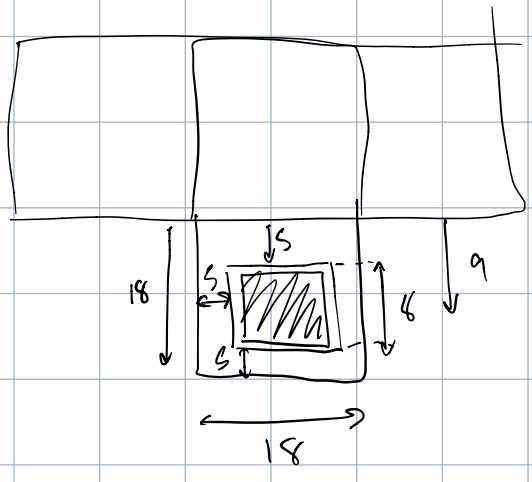


bottom piece (flat on table view)



bottom piece side view





Notes: designed for small battery
- obviously cannot test (no printer access)