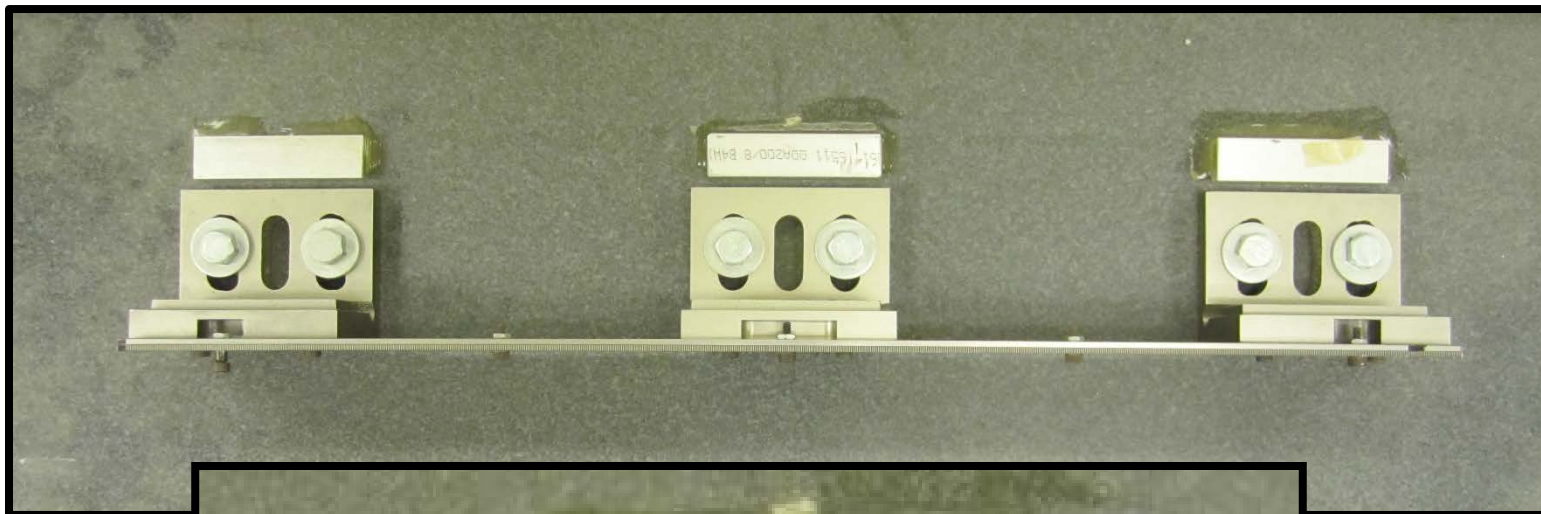


Detail: Comb, straight edge and mount



??what is this??
Epoxyed to
table ??

**Mounting
block
(or "Angle
Plate")**

**Straight
Edge**

Comb

Teeth on the comb



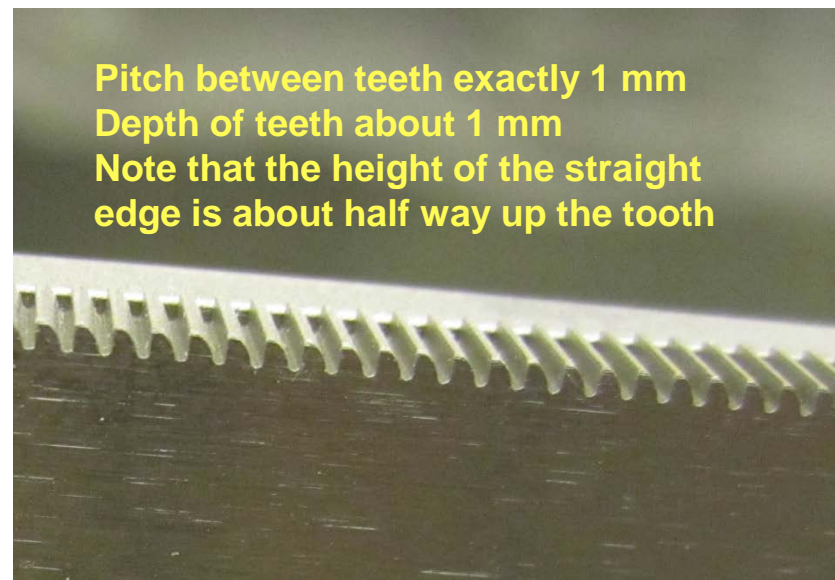
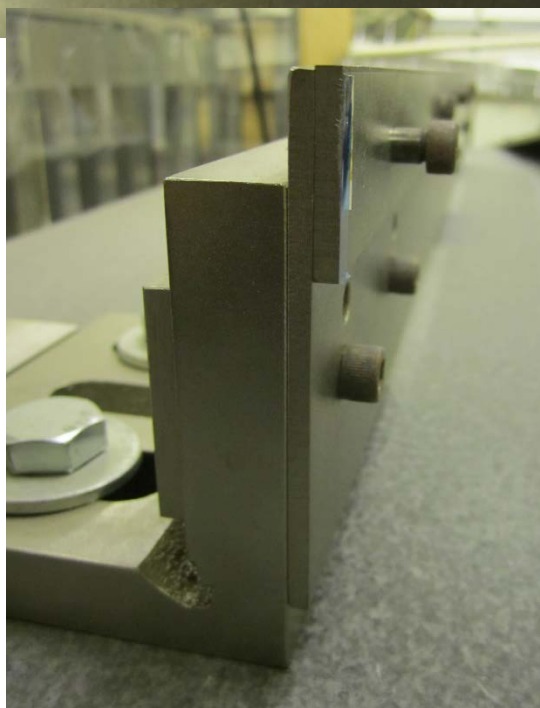
Comb plate and top of straight edge plate shown at left. “Bottom” of comb is below the level of the straight edge.

Teeth on the comb have an asymmetrical shape – one edge is vertical but the other is well-rounded.

Wires will rest on the top surface of the straight edge

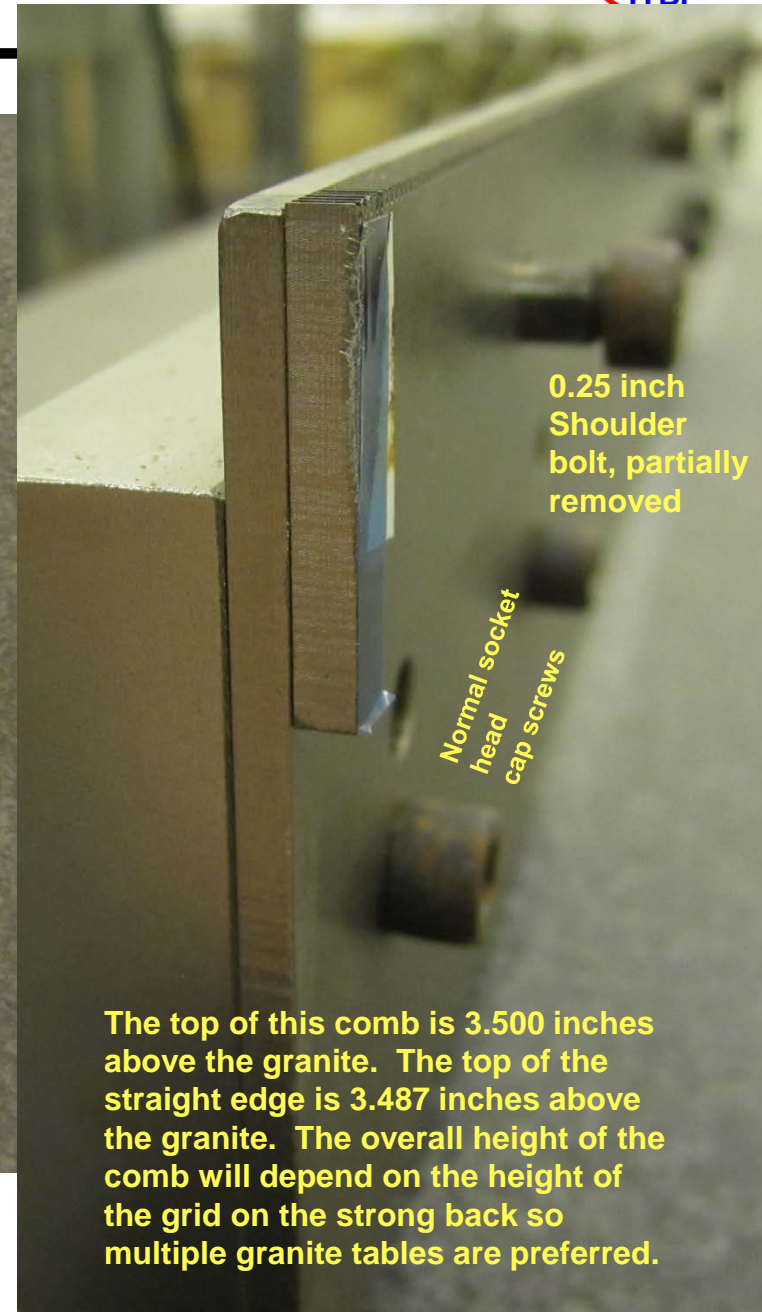
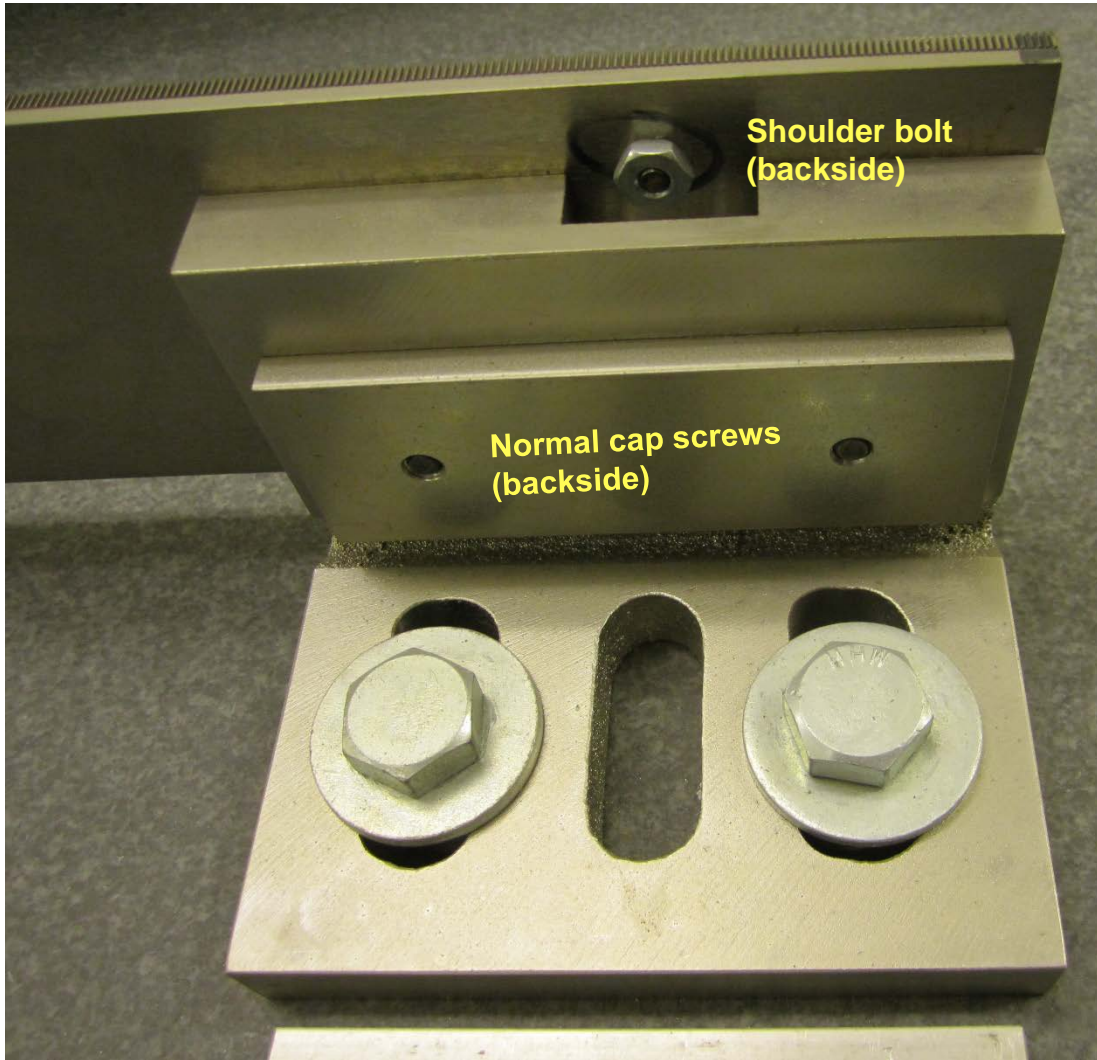
Wires are laid on the straight edge then “slid” to contact the vertical sides of comb

Loose wires are pushed into contact with the comb using a brush

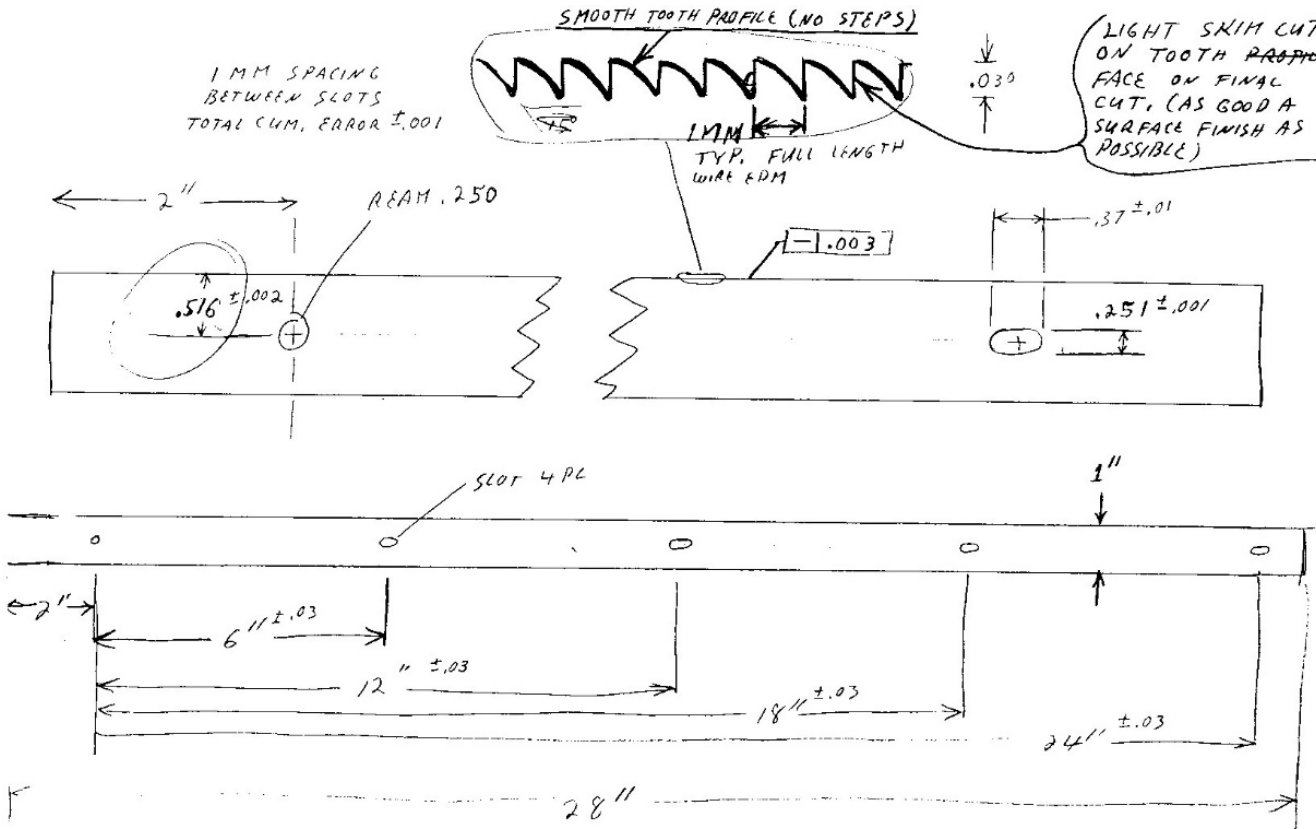


Pitch between teeth exactly 1 mm
Depth of teeth about 1 mm
Note that the height of the straight edge is about half way up the tooth

Comb, Straight Edge & Mounts

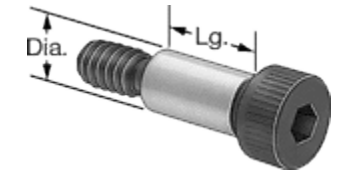


Fabrication of the Comb (1 mm pitch, 0.030 inch deep)



- (from Jon Wirth) The comb is made from oil hardening flat stock, 1/8 inch thick, 1 inch wide and 28 inches long. Five mounting holes were drilled under-size before hardening. After hardening, the comb blank went to the wire EDM to cut the teeth and finish cut the mounting holes to accept 1/4" shoulder bolts.

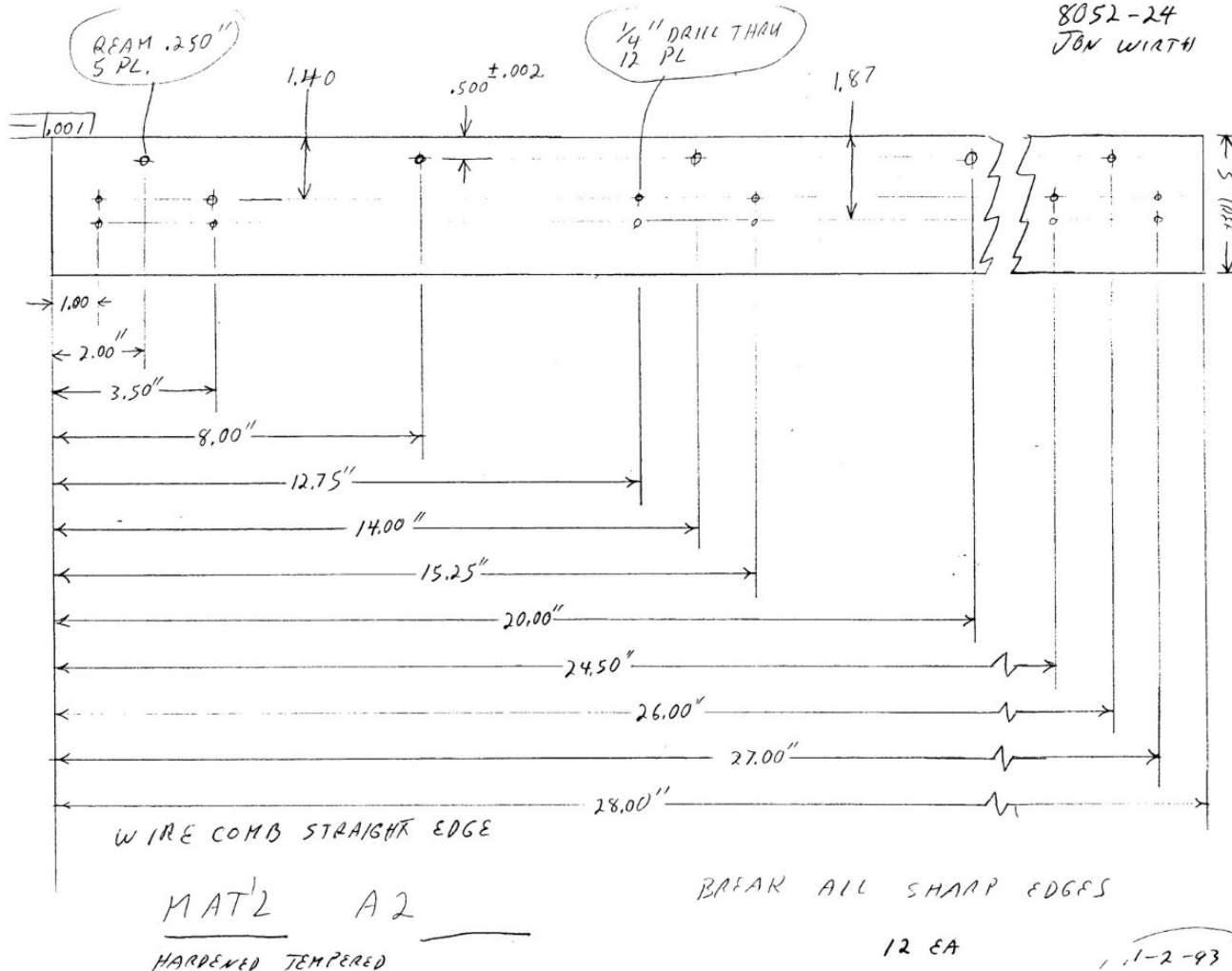
- The comb was nickel plated after fabrication to prevent rusting of the comb
- Use a shoulder bolt to align and fasten the comb to the straight edge. See McMaster [91259A171](#)



WIRE COMB
 JON WIRTH
 8052-74
 A2 HARDENED-TEMPERED
 1/8" X 1" X 28"
 12 EA
 11-2-93

- All dimensions are in inches

Fabrication of the Straight Edge



- (from Jon Wirth) The straight edge was fabricated from ground flat stock. 1/8 inch thick, 3 inches high and 28 inches long. Twelve holes (two sets of six) were drilled for 1/4-20 bolts to mount it to the angle plate on the granite table.
- Five holes are drilled and reamed for 0.250 inch shoulder bolts. Actually, four of the holes can be horizontal slots since one datum hole (on end) plus the horizontal slots is enough to constrain the position of the comb in both the horizontal and vertical directions.
- The straight edge was nickel plated after fabrication to prevent rusting of the parts