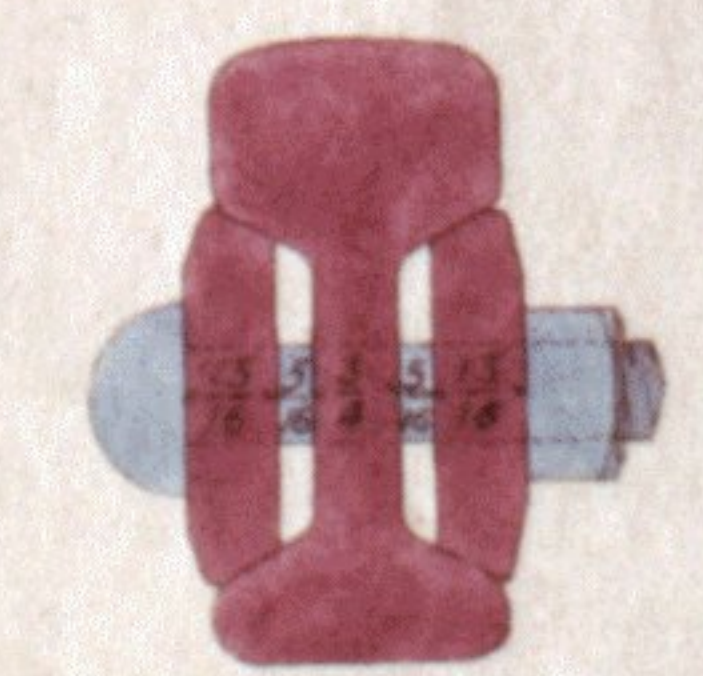
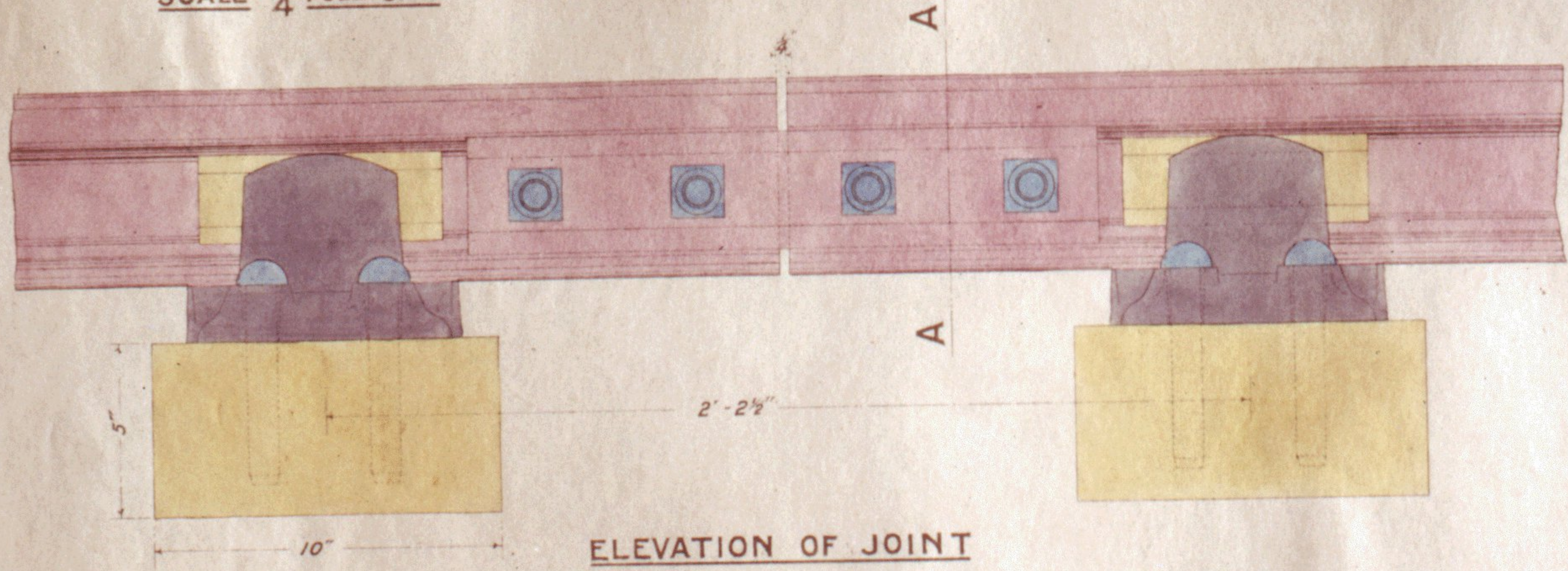


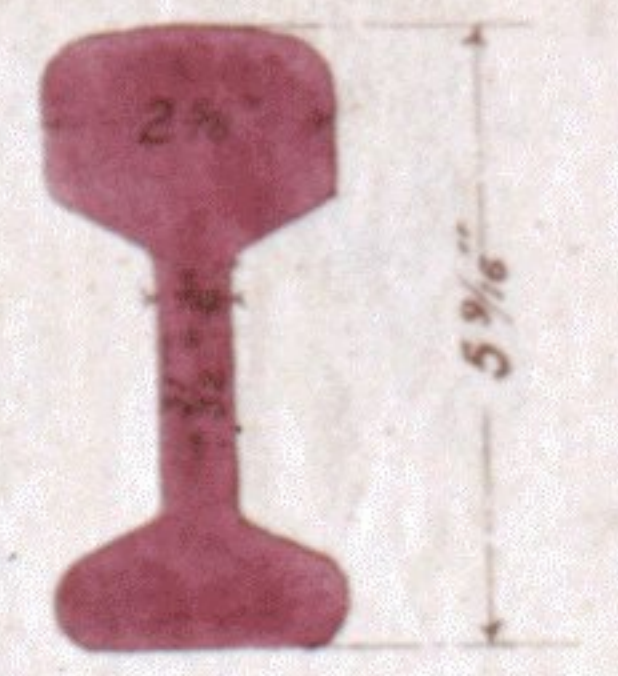
CALEDONIAN RAILWAY PERMANENT WAY

STANDARD JOINT FOR 90 LB. RAIL

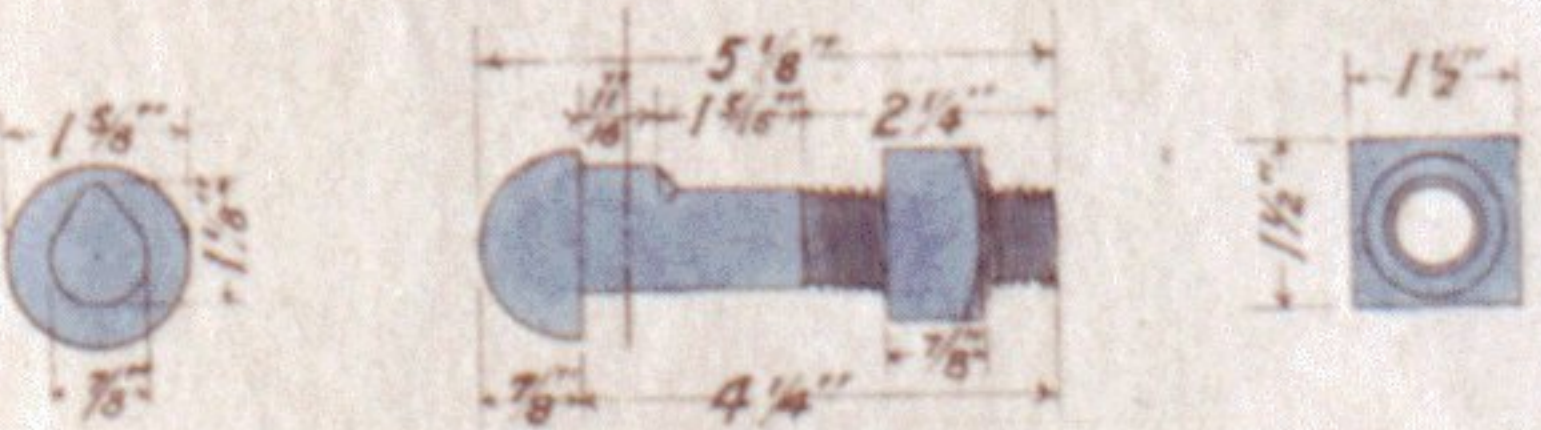
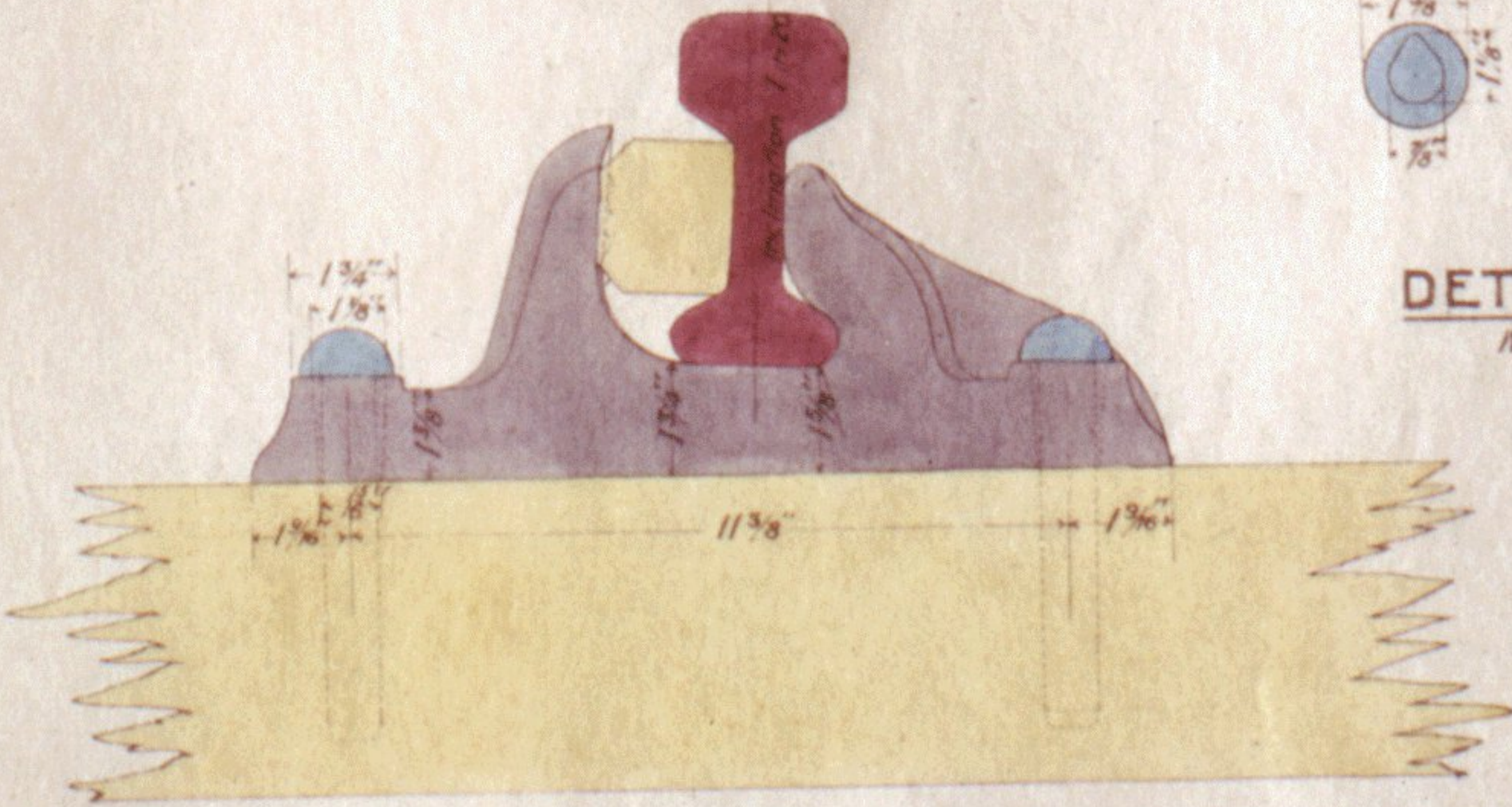
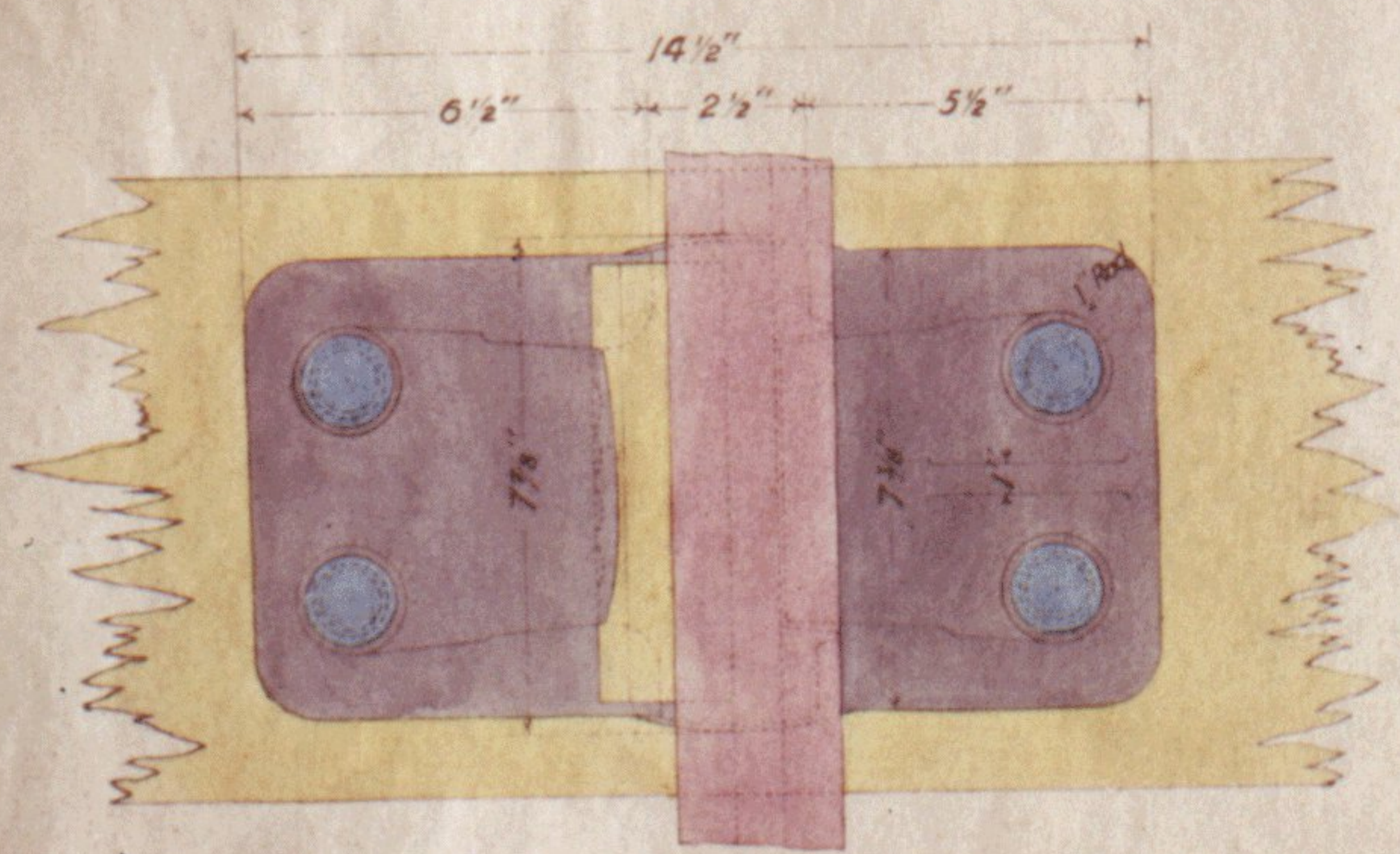
SCALE 1/4 FULL SIZE



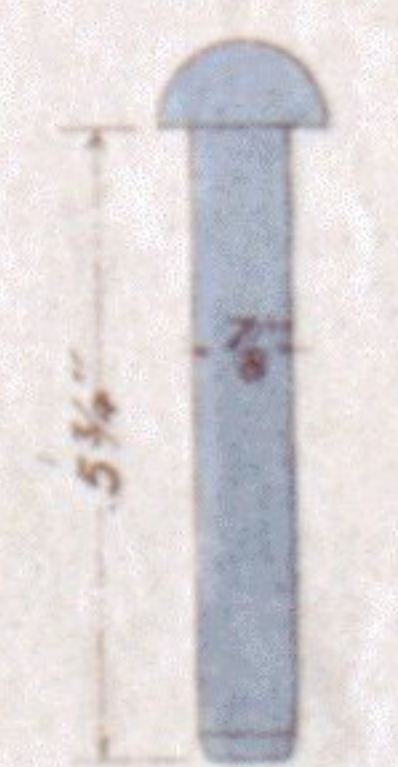
SECTION AA



SECTION OF RAIL
Weight of rail 90 lbs per lineal yard

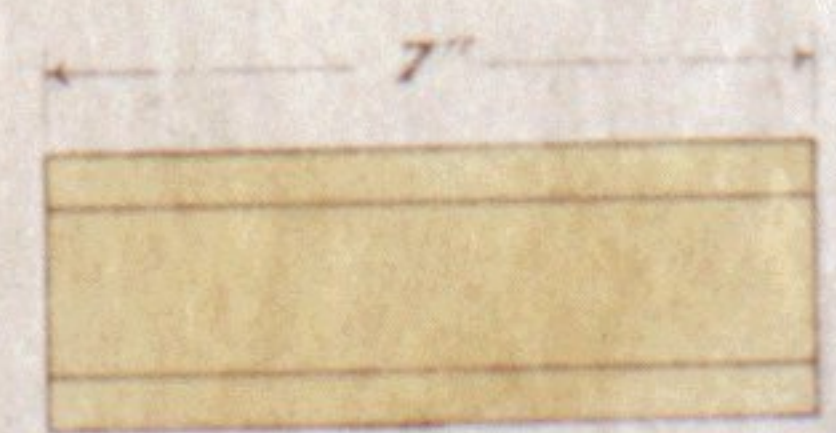


DETAIL OF BOLT AND NUT
Weight of Bolt and Nut 1 3/4 lbs.



CHAIR SPIKE
Weight of Spike 1 1/4 lbs.

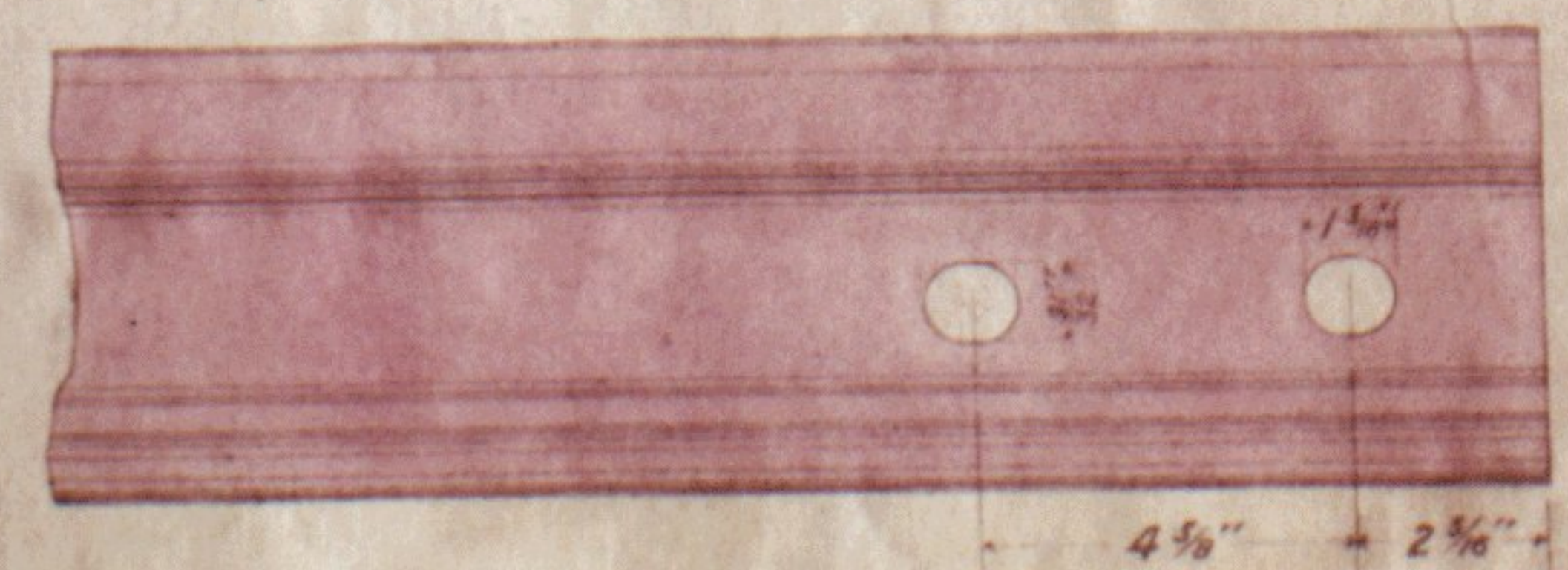
OAK KEY
Weight of Oak Key 1 3/4 lbs.



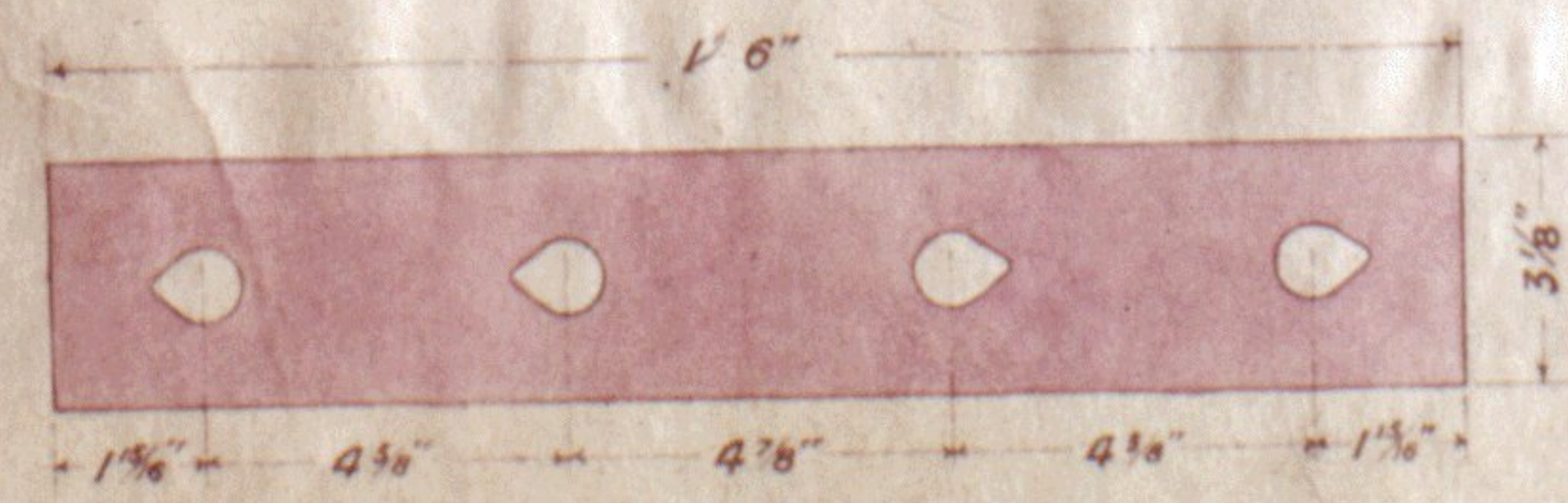
ELEVATION



SECTION



ELEVATION OF END OF RAIL



ELEVATION OF FISH PLATE
Weight of Fish Plates 22 lbs. per pair

Engineers Office
Buchanan Street Station
Glasgow.