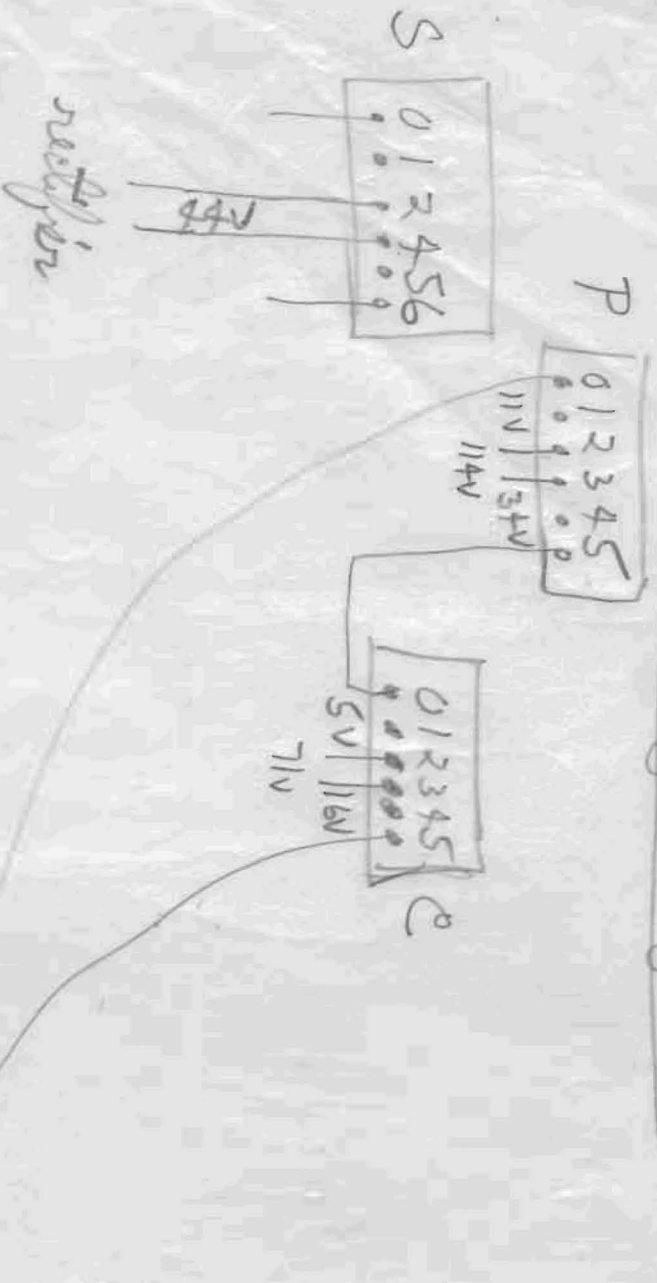


Battery Charger

20/12/62



$$\begin{array}{r}
 11 \\
 11 \\
 114 \\
 34 \\
 71 \\
 16 \\
 \hline
 251 \text{ Volts Total} \\
 \text{main}
 \end{array}$$

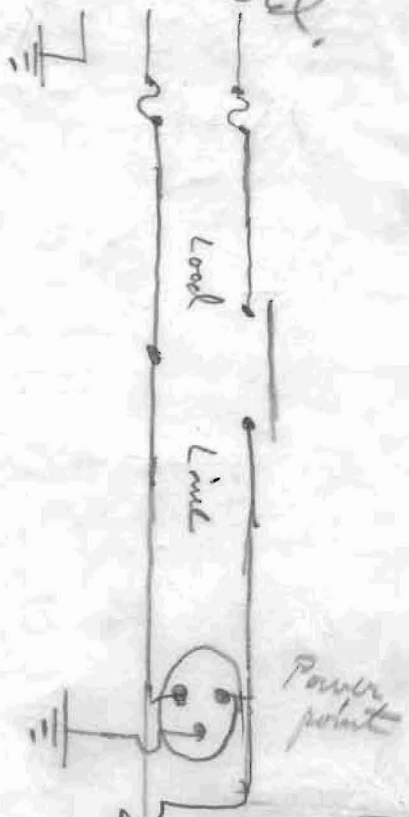
Reversal Connection

34V DC from rectifier
Open circuits

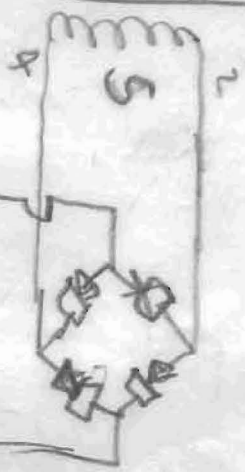
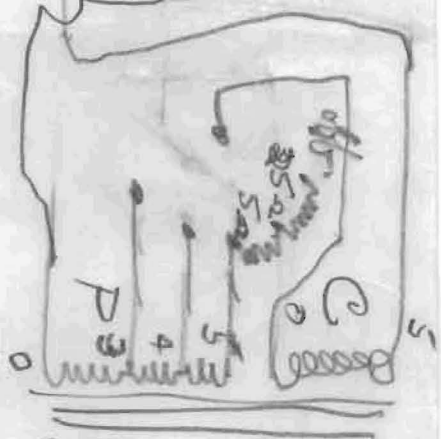
Now it is two bridges in parallel.
Each leg of each bridge has 3 plates in series

main
223V actual.

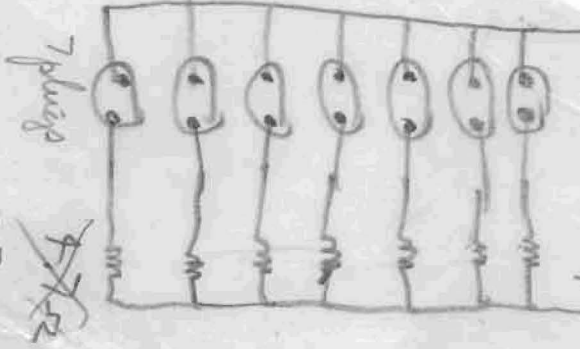
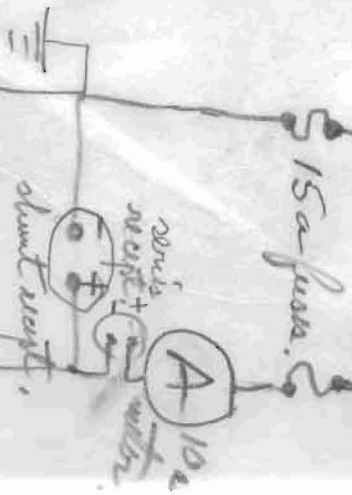
line cord.



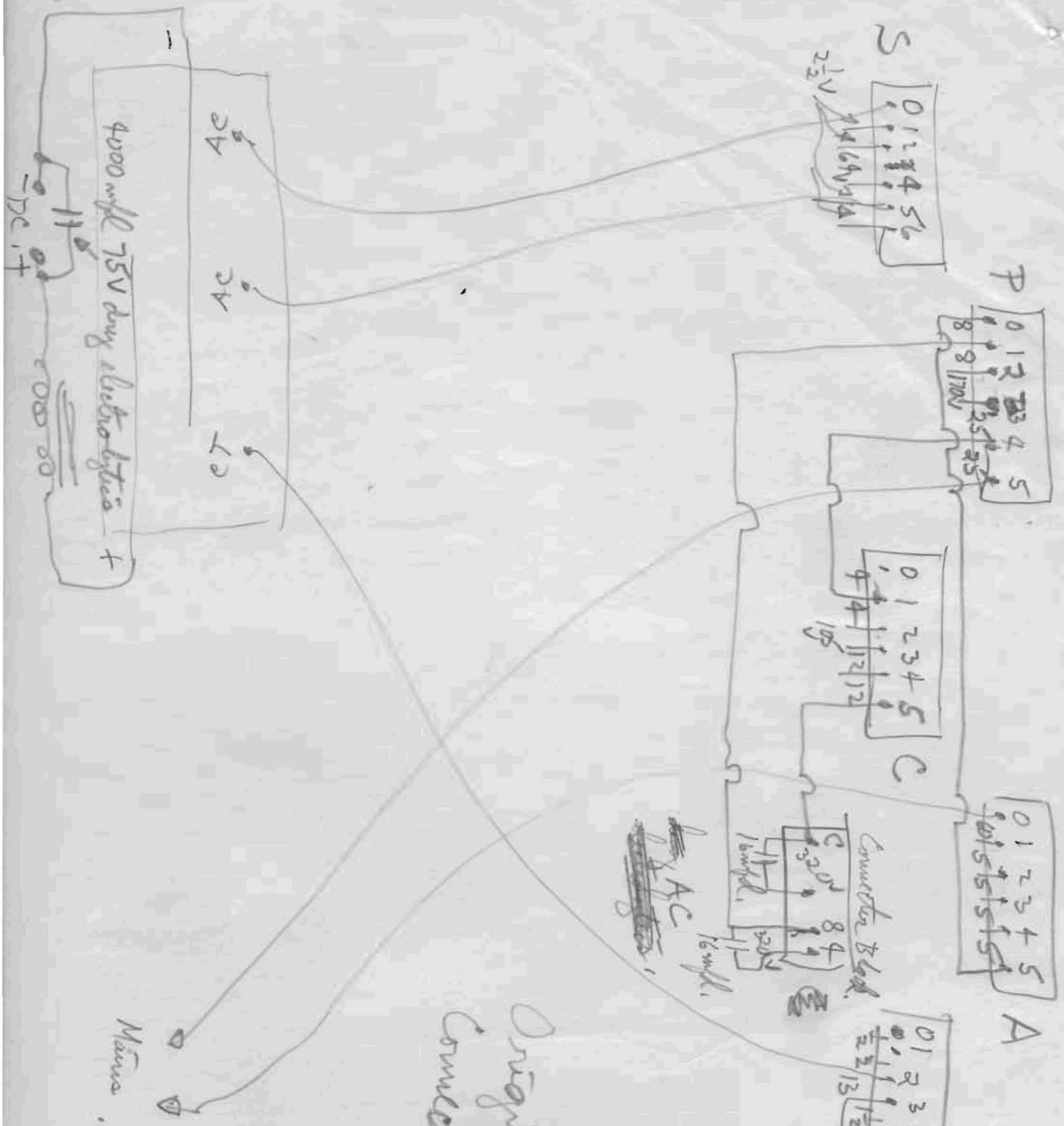
Battery charger



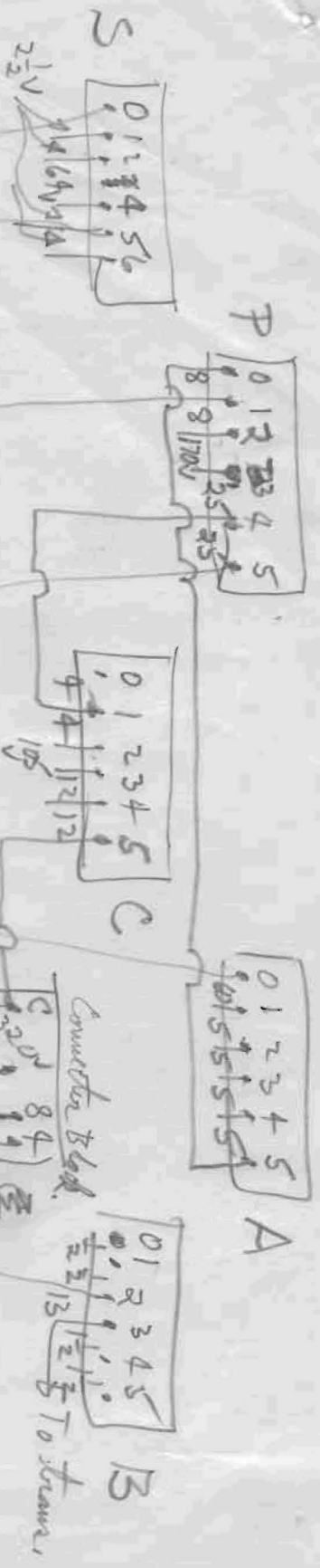
7/2/63



2.25v



Original
Connections



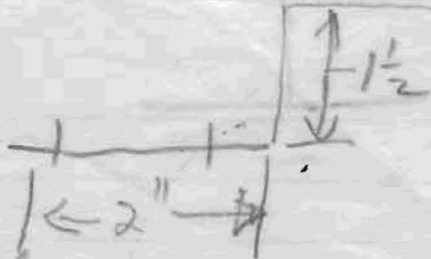
12/2/63

Brackets for dial lights

$\frac{1}{16} \times \frac{3}{4}$ " brass strips



Join



Solder to clamp on lamp
so light points down
at about 45°



Extend cable 2 feet + attach thick flat legs.

Weston meter 10 ohms $\frac{1}{2}$ ma

$$\text{Drop} = 10 \times .0005 = .005 \text{ volts}$$

$$10 \text{ ampere shunt resistance} = \frac{.005}{10} = .0005 \text{ ohms.}$$

= feet of wire.

$$\left(\frac{204.3}{191.5}\right)^2 \times .2485 = .2833 \text{ ohms} / 1000 \text{ ft.}$$

$$\left(\frac{181.9}{191.5}\right)^2 \times .3133 = .2833 \text{ ohms} / 1000 \text{ ft.}$$

$$\frac{.0005}{.0002833} = 1.765 \text{ ft} = 21.2''$$

With this shunt the meter indicates 5.4 amps when 7.9 amps flow. Need $\frac{7.9}{5.4} \times 21.2 = 31.0''$ of $\frac{191.5}{191.5}$ wire

Or need $\left(\frac{.128}{.1915}\right)^2 \times 31.0 = 13.8''$ of $.128''$ wire

Made up new shunt of $14\frac{3}{4}''$ of $.128''$ wire

Now 6.6 a ^{current} shows 8.4 indicated

$$\text{Need } \frac{6.6}{8.4} \times 14\frac{3}{4} = 11.6'', \text{ say } 11\frac{5}{8}''$$

Meter now indicates about $2\frac{1}{2}\%$ low.

8.2a shows for 8.4a current.