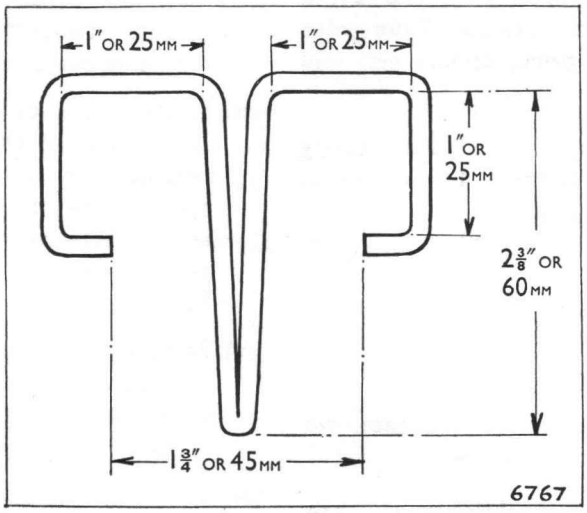

Fig. 16. *The compression tool*

COMPRESSION TOOL (Fig. 16)

The compression tool, necessary to compress the output piston, is made from a 12 in. (30 cm.) length of $\frac{1}{8}$ in. (3 mm.) diameter iron wire.

Bend the wire back on itself in the centre to make the middle "leg" of the tool. Follow with the six other bends as shown in the illustration, finally cutting the two ends so there is $1\frac{3}{4}$ in. (45 mm.) between them.

The centre "leg" is inserted into the output cylinder bore and pressed down until the two ends can be sprung apart and clipped under the mounting flange of the body. The tool is then pushed aside to allow room to insert the circlip pliers.

THE SERVO

To dismantle

1. Grip the servo unit in a vice by the two lower lugs on the cast body.
2. Remove the air filter, see "Air filter—To renew".
3. Remove the end cover (1) and withdraw the vacuum piston and spring. To do this remove seven nuts and bolts whilst controlling spring pressure on the end cover.
4. Remove the vacuum cylinder (17) and gasket from the body (27). Do this by withdrawing three bolts, washers and clamping plate, also ease the grommet in the flange of the cylinder from the transfer pipe (16).
5. Remove the combined cover and transfer pipe and cork gasket from the valve chest by withdrawing four screws and washers.
6. Remove the valve retainer (26) and flat horseshoe spring (29) from inside the valve chest by withdrawing two screws.
7. Withdraw the valves (20 and 30) and "T" lever (11) complete from inside the valve chest. To do this apply light pressure to the plug (8).
8. Take the body from the vice and remove the control piston assembly from the top bore, by tapping the mounting flange of the body on a wood block.
9. Dismantle the control piston assembly, by compressing the piston spring, easing off the circlip and removing the spring and retainers.
10. Remove the two seals from the control piston and one from the plug. To remove seals use a lint free cloth to grasp the seal and to draw up some slack at one side then roll the seal off. **Tools must not be used to pry seals out of grooves** as this will lead to damaged surfaces.
11. Withdraw the piston rod bearing bush (21) from the output piston bore by carefully twisting out with pliers. Then using a hooked tool remove the gland seal (22) followed by the nylon spacer (23).
12. Mount the body vertically in the vice by one of the mounting lugs and fit the compression tool to hold the output piston down the bore. For the compression tool details see Fig. 16.