

“electrons” or minute negative electric charges; second, the *anode* which is kept positively charged by the H.T. battery and thus attracts the negative electrons; third the *grid* which is located

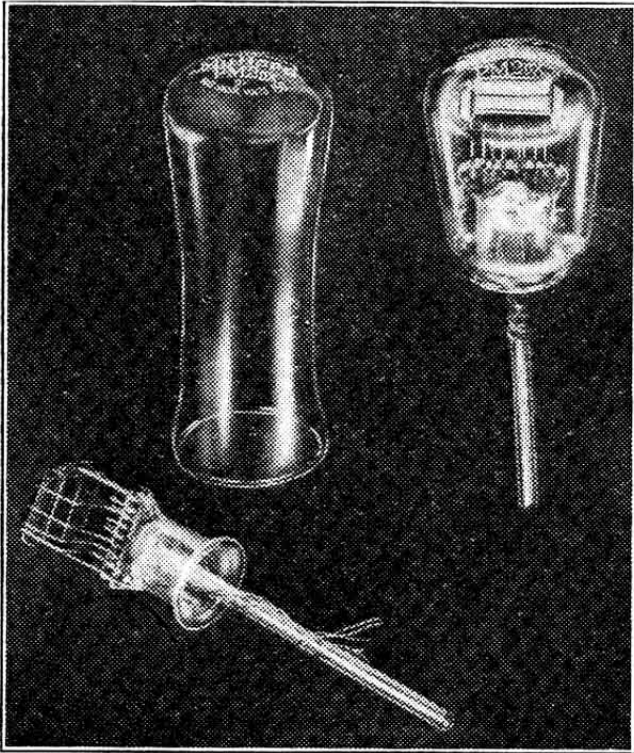


Fig. 4

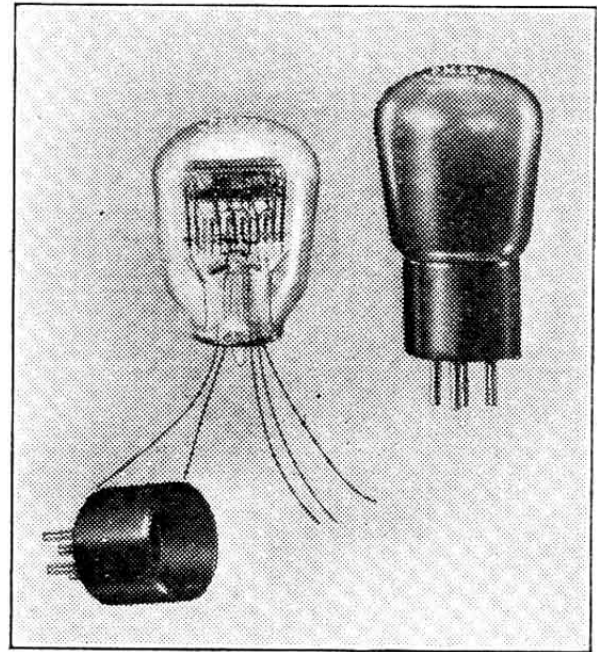


Fig. 5

between the filament and anode. Incoming signals, applied to the grid, control the stream of electrons passing from the filament to the anode. It is due to this control that the valve can be used to amplify or to detect radio signals.

Other types of valve possess additional electrodes—thus a screened-grid valve has an extra grid between the control grid and anode, while a pentode has three grids in all.

THROUGH THE MULLARD FACTORY

FIG. 2. shows the parts which go to make the “foot” of a valve. The support wires with their leads are sealed into a glass foot by the machines illustrated in Fig. 6. The glass “stem” is a tube through which the air is ultimately withdrawn from the bulb. When the foot has been completed the supports are bent to shape as indicated at Fig. 3. A factory view of this process is shown in Fig. 1. Grids for Mullard valves (Fig. 7) are produced by automatic machines. Anodes are stamped out by power presses.