

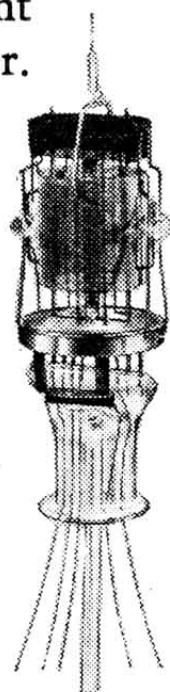
THE CONSTRUCTION OF MULLARD A.C. MAINS VALVES

The processes in the manufacture of Mullard indirectly-heated A.C. mains valves are very similar to those involved in making Mullard battery valves as described on pages 2 to 4. There are, however, minor differences occasioned by the fact that in these valves the filament does not also function as the cathode, but is used solely to heat an independent cathode enclosing the heater.

The actual construction of Mullard indirectly-heated A.C. valves is, however, very different from that of the battery valves, partly for the reason mentioned above, and partly because a specially robust mechanical design is necessary in order that the valves may with-

stand the stresses imposed by working conditions.

In the first place, on account of the compact form of the cathode—a thin cylinder, approximately 1.5 millimetres in diameter, the grid can also be of small diameter and the inter-electrode spacings reduced to a minimum. While this makes for increased efficiency in the valve, it necessitates a rigid system of supports to avoid the risk of electrodes becoming displaced and touching each other.



In addition, A.C. mains valves are often employed in receivers incorporating powerful moving coil speakers which may be situated very close to the highly sensitive H.F. and detector valves. The mechanical vibration produced by this class of