## CURES.

It has been found by experience that the following methods may be relied upon to stop "parasitic" H.F. oscillation and should be adopted as precautionary measures when designing power amplifiers:

- (1). Insertion of a wire-wound resistance of 80 to 100 ohms in the anode circuit as close as possible to the anode terminal of the valve holder.
- (2). The inclusion of a 5,000 ohms resistance in the grid circuit close to the grid terminal is useful, but greater values of resistance should not be employed.
- (3). A Neon "gas-gap" discharge tube may be connected across the input terminals of the amplifier (without including the grid bias voltage in cases where this is high enough to discharge through the tube). To any signal of normal strength the neon tube will offer almost infinite impedance, but transients of abnormal strength, which would tend to set the amplifier into oscillation, discharge through the tube and are short-circuited thereby. Gas-gap neon tubes can be obtained having breakdown voltages from 90 volts upwards.
- (4). In extreme cases similar neon tubes (of higher breakdown voltages) may be connected across impedance in the anode circuits.
- (5). In the case of valves connected in pairs, either in "push-pull," "parallel" or both, it should be remembered that symmetrical arrangements of the wiring are favourable to generation of very short waves.