

**SECTION
E
DETECTOR UNITS.**

SUB SECTION EA DETECTORS.

DETECTOR UNIT E (VALVE BOARD) PAGE EA2.

SUB SECTION EB HETERODYNE DETECTORS.

HETERODYNE DETECTOR UNIT E25X *PAGE EB2*

HETERODYNE DETECTOR UNIT E26X *PAGE EB4*

DETECTOR UNIT E (VALVE BOARD)

Date of design - 1934.

Frequency range - All waves.

Where fitted - Receiver Outfits Bb, Cb and CI when fitted in destroyers.

Valves used - NE24 Cumulative grid detector (1).

Board E is supplied as a standby for the amplifier in various receiver-outfits. It consists of an ebony base board with valve holder, grid insulating condenser (4) and leak (5), and a filament rheostat (6).

The valve (1) acts as a simple detector and amplifier for I.C.W. signals and may be used for receiving C.W. by fitting a reaction coil (14) coupled to the input tuned circuit (15).

The reaction coil (14) should consist of 50 to 100 turns of 28 gauge wire wound on the ordinary three-inch aerial spooler, the number of turns depending on the frequency range on which the board E is to be used. (The higher the frequency the fewer the turns.)

The reaction coil should be placed in the vicinity of the input tuned circuit with a pair of flexible leads to connect the winding in series with the telephone transformer primary (14).

It should be noted that this circuit will cause interference by re-radiation in the aerial.

When Board E is supplied with a tuned amplifier and no separate tuner unit, it is necessary to construct one locally. It is under consideration to supply suitable plug-in coils in the above case.

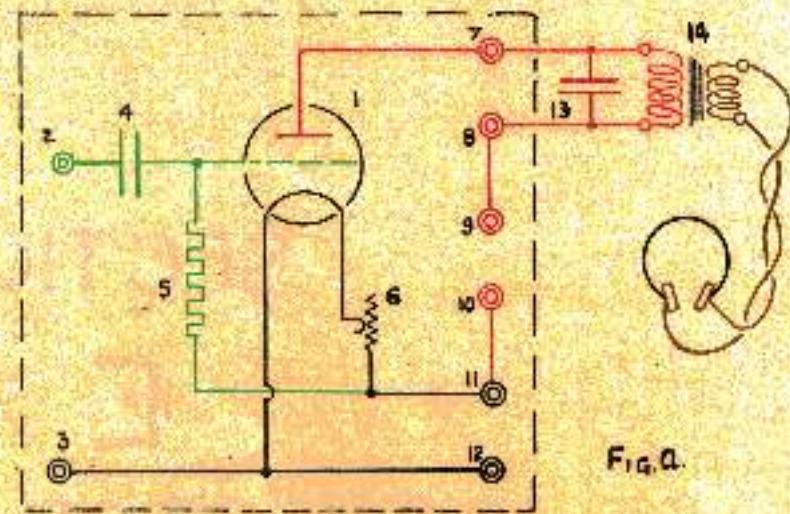


Fig. A.

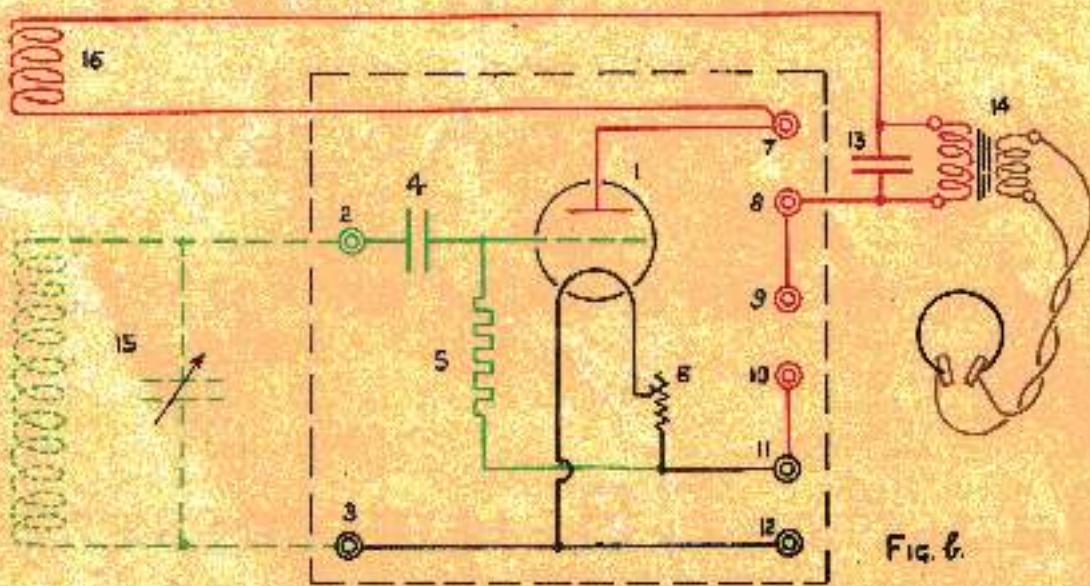


Fig. B.

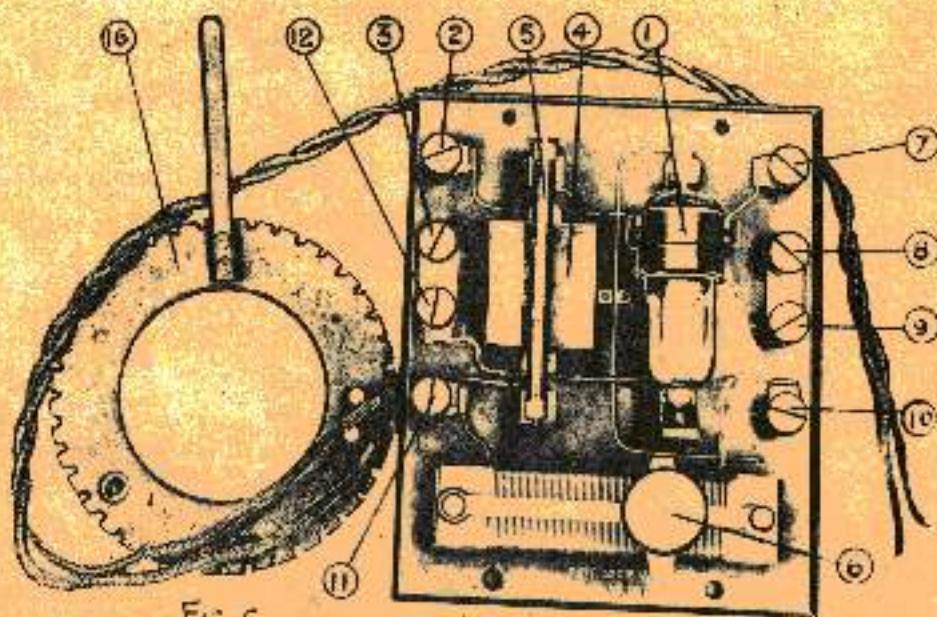


Fig. C.