A rather different twin-triode mixer arrangement that has been used in several recent designs is shown in Fig. 4.15. The first triode section forms a cathode follower, feeding the signal into the cathode of the mixer section, with the oscillator signal fed to the grid. The mutual conductance of the cathode-follower section must be higher than that of the mixer section; this can be achieved with identical twin triodes by reducing the voltage on the anode of the mixer section by feeding it through a resistor of the order of 33 K ohms or by a potentiometer network as shown.

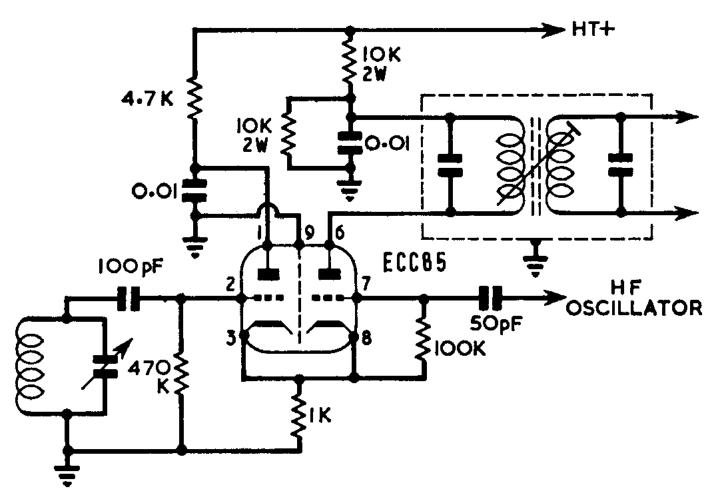


Fig. 4.15. Twin triode mixer in which the mutual conductance of the second section is reduced by a low h.t. supply. A relatively low injection voltage (1-2 volts) is required. The common cathode resistor may be optimized between 100 and 1000 ohms.