basic operation of an HF amplifier but is enough to stop any 'funnies' when used in the correct place.

The other method of constructing small chokes is to use ferrite beads. These are normally used in lower power applications such as the return path of a 2 metre RF amplifier as shown in **Fig. 2**, or for

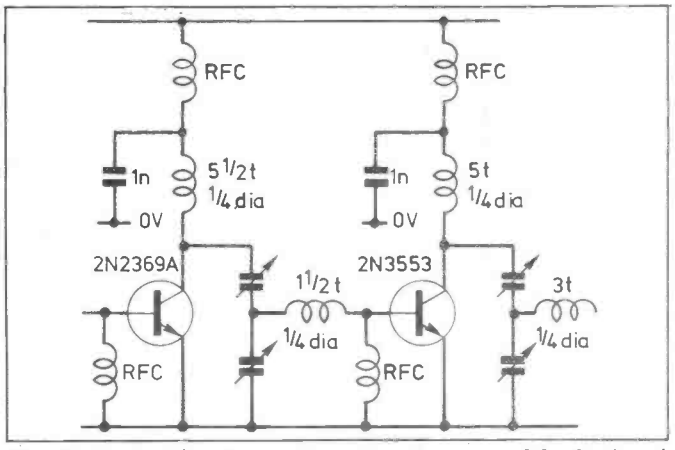

Fig. 2. Part of 2m transmitter showing use of ferrite bead chokes
N.B. all chokes labelled RFC are wound on ferrite beads as described

protecting the input of an audio amplifier from RF. The chokes are very easily made up by winding three turns (normally) of enamelled copper wire on a ferrite bead as shown in **Fig. 3**. The type of bead which is probably most often used is the FX1115, but most other types available from component stockists will

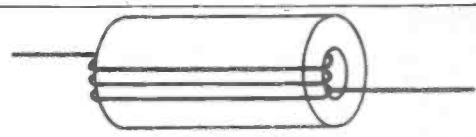

Fig. 3.
Diagram showing construction of ferrite bead choke

perform just as well, because the specification required for most applications is not tight. The inductance of these chokes is not only increased by the fact that they have a ferrite core but the fact that the core is toroidal. Because of this it is not possible to use the formulae. I have just given to calculate the inductance. These beads can also be used to supply a small amount of inductance to suppress parasitic oscillations in circuits such as that shown in **Fig. 4**. The bead can simply be slipped over the gate lead which overcomes the problem of adding extra components onto an otherwise untouched board. I have in fact used this method in a VHF FM tuner which I built, and it very successfully suppressed the unwanted oscillation.

Fig. 4. Method of placing a ferrite bead over a transistor or FET lead to prevent parasitic oscillations