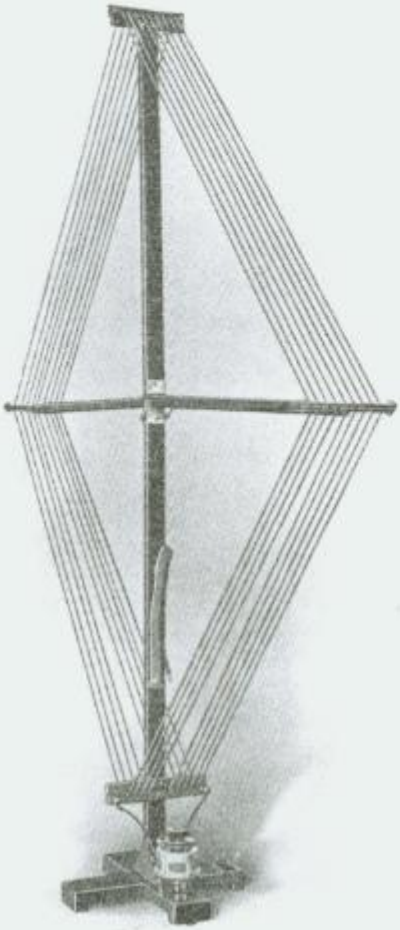
# COLLAPSIBLE LOOP ANTENNA MODEL HG-1380

(For Indoor Reception).



IN general, loop antenna reception is found advisable for use in congested areas where interference from a number of transmitting stations operating at the same time, is experienced. The reason for this is that the loop antenna responds only to signals from stations in the direction in which the loop points.

One of the difficulties experienced in loop reception, is that the distance over which signals may be heard is considerably reduced, unless suitable amplifiers are employed.

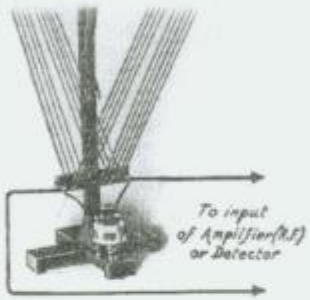
Loop reception, however, in the highly perfected state it is found in to-day, is so simple of operation that it is merely necessary to point the loop in the direction of the desired transmitting station, turn on the current and control the reception by a single adjustment. This adjustment is performed by a condenser generally mounted on the base of the loop as shown in the accompanying illustration.

The frame of the loop illustrated is artistically finished in mahogany and is entirely collapsible. The arms are rotated into position on hinges and the assembly is held rigidly in place by two metal hooks. The wire used for the winding of the loop is passed through bakelite cross arms fitted with milled slots. This wire is flexible and rubber covered. An outer covering of woven material is provided to resist wear when the loop is assembled, taken down, or carried about.

This loop has been designed for radio broadcasting reception and when used in conjunction with the UC-1820 variable condenser and any of the detector-amplifier units described in this book with the necessary batteries, forms a complete short distance receiving station for broadcasting use, which marks a distinct advance in the radio art.

While it is possible that loud speaking results may be realized over short distances with such combinations, it is not always to be expected when only audio-frequency amplification (as supplied by all the amplifying units listed elsewhere) is employed. Such results, however, are common where the energy of the incoming signal is built up by means of radio frequency amplification before it is passed on to the detector tube to be rectified and thence amplified by audio frequency units. The construction of radio frequency amplification circuits from component parts is fully described on pages which follow.

Interference from static is greatly decreased by the use of the loop antenna for reception.




Upper figure shows loop in action.

Figure at left shows method of connection to receiving instruments.

Figure at right shows loop folded when not in use for reception.

**COLLAPSIBLE LOOP ANTENNA, MODEL HG-1380, less variable condenser . . . . . $25.00**

**Dimensions:** Height opened, 4 ft. 10½ in.; closed 2 ft. 9 in.; base, 12 x 12 in.

**Weights:** Net, 4 lbs.; shipping, 10 lbs.