

Fig. 3—Main circuit board is built on 8 x 5 1/4-in. piece of cardboard. Put rubber cement on board and foil then put foil on board and smooth out. Using full-size template (or freehand) remove foil from white areas. Lay a 5 1/4 x 5-in. piece of acetate sheet over area indicated with broken lines and staple to cardboard at top edges. The acetate sheet acts as the C1 dielectric. Punch holes for the eyelets, install clips, solder lugs and other parts where shown. Mount rotor (Fig. 2) over stator with paper fastener.

NOTES:

1. - INDICATES EYELET
2. FOIL CIRCUIT ON 8 X 5 1/4 X 1/16-IN. CORRUGATED CARDBOARD
3. ALL DIMENSIONS IN INCHES

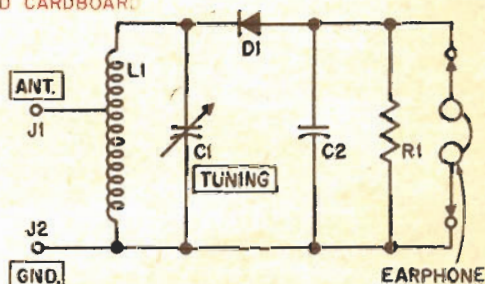
the first page of this article and cut L1's leads to size. Run the leads under the board, through the holes and solder them to the solder lugs. Cement the board to the greeting card and cement L1's form inside of the double-page, if your card has one. Slit the page so that the coil leads will emerge to the circuit board.

Operation

The greeting-card radio requires a good outdoor antenna and ground. An inside antenna may work for local high-power stations. To tune the radio slowly turn C1 with your finger in the finger hole, keeping your hand away from the board-foil rotor circuit.

In a receiver of this type, antenna loading may affect the tuning range of C1/L1 over the broadcast band. Try increasing or decreasing the number of turns on L1 to get best tuning range and reception.

Fig. 4—Radio's circuit below. Signals are picked up by antenna and tuned by C1. D1 is detector diode, C2 bypasses RF to ground, R1 is load. Phone must be high-impedance crystal.



PARTS LIST	
C1—Tuning capacitor (aluminum foil and cardboard, see text)	\$.00
C2—.001 μ f ceramic disc capacitor	.15
Card—(at least 6 x 9 in.)	.35
Crystal earphone—(Lafayette 99 T 2515)	1.09
D1—Germanium diode (1N34 or equiv., Lafayette 19 T 1505)	.08
Eyelets and paper fastener	.05
J1, J2—Fahnestock clips (Lafayette 33 T 7102)	.04
L1—Coil wound with No. 28 enameled wire; approx. 50 ft.	.09
R1—180,000 ohm, 1/2 watt, 10% resistor	.12
	\$1.97