directly across the tank for set-ups which require a fairly high r.f. voltage. Provision also is made for link output.

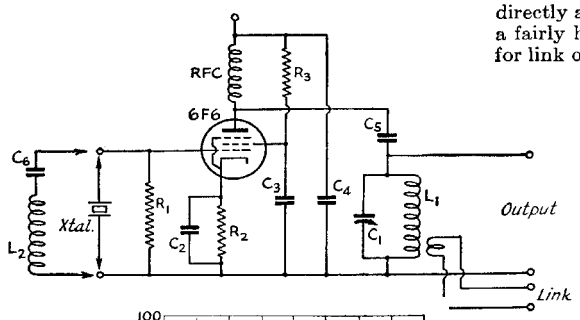
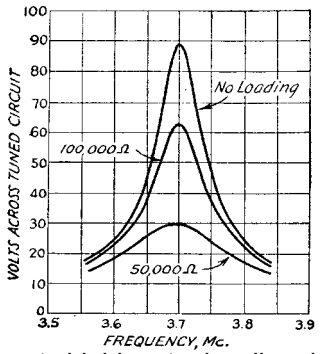


Fig. 2 — **Oscillator circuit.**
C_1 — 100-$\mu\mu$fd. variable.
C_2, C_3, C_4 — 0.01-μfd. paper.
C_5 — 0.002-μfd. mica.
C_6 — 500-$\mu\mu$fd. mica.
R_1 — 0.1 megohm, 1 watt.
R_2 — 400 ohms, 1 watt.
R_3 — 10,000 ohms, 10 watts.
L_1 — 30 turns No. 20 enameled, close-wound on 1½-inch diameter form.
L_2 — 45 turns No. 30 enameled, close-wound on 1½-inch diameter form.
RFC — 2.5-mh.r.f. choke.

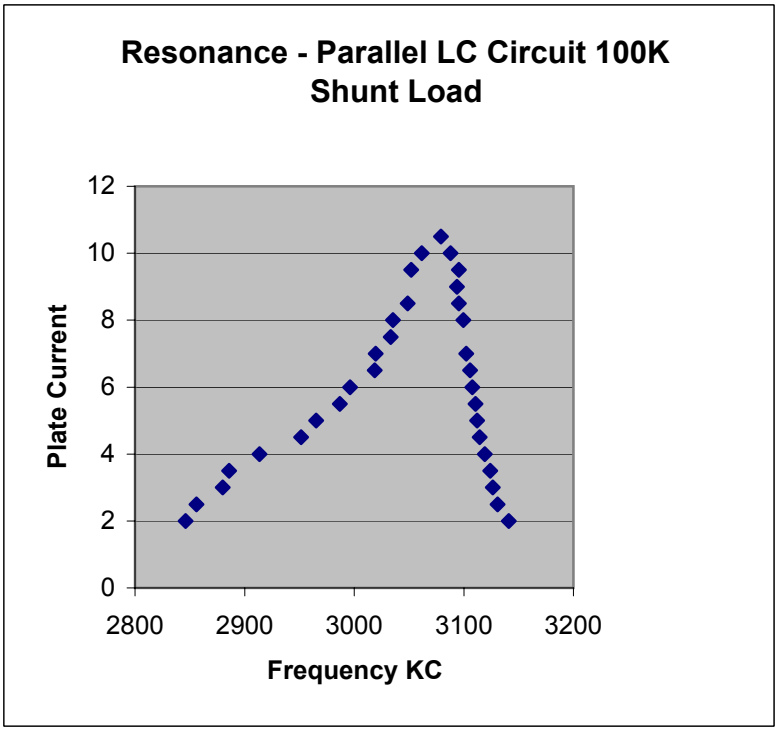


This is what the curves are supposed to look like

1 Without shield on tank coil and using 100 K resistor in parallel.

Actual measured R = 98.3K ohm

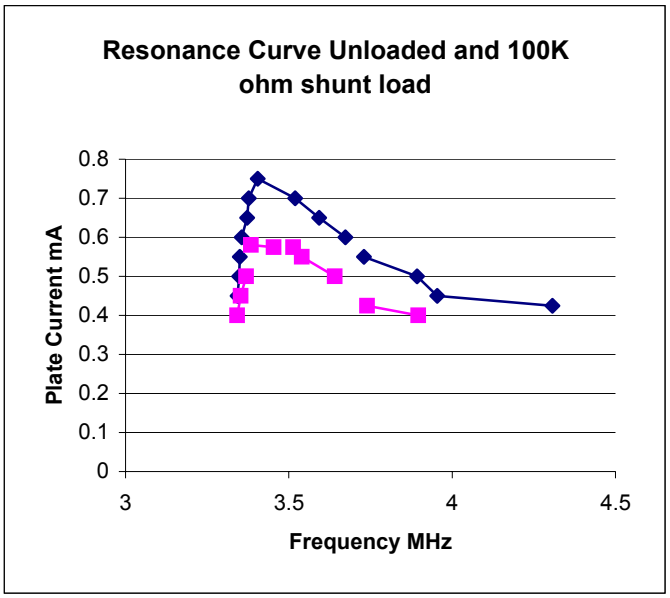
f KHz	Plate Current
2846	2
2856	2.5
2880	3
2885.9	3.5
2913.6	4
2951.4	4.5
2965.2	5
2986.8	5.5
2996.3	6
3018.6	6.5
3019.5	7
3033.3	7.5
3035.3	8
3048.8	8.5
3052.1	9.5
3061.6	10
3079.2	10.5
3087.9	10
3095.5	9.5
3093.6	9
3095.6	8.5
3099.6	8
3102.3	7
3105.6	6.5
3107.8	6
3110.7	5.5
3112.2	5
3114.4	4.5



3119.1	4	
3124	3.5	
3126.4	3	
3130.8	2.5	
3141	2	

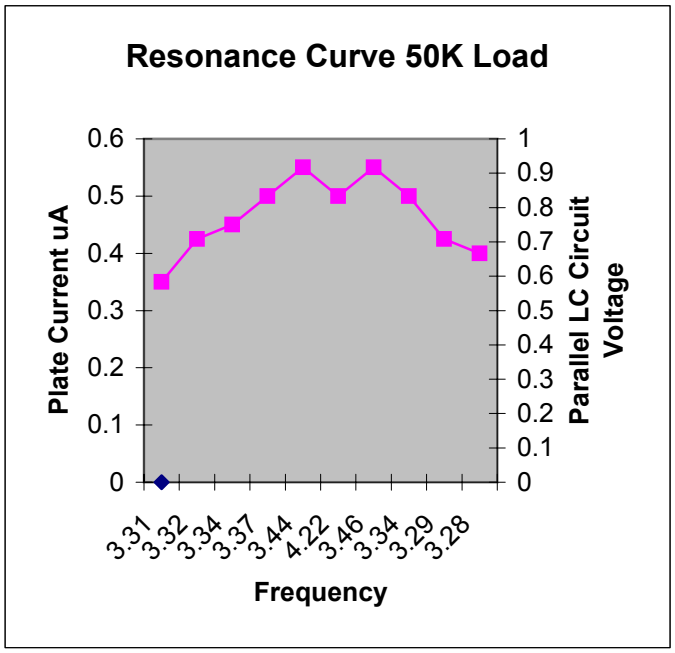
2 Similar setup except now secondary output measured first unloaded and then loaded with 100 Kohm shunt

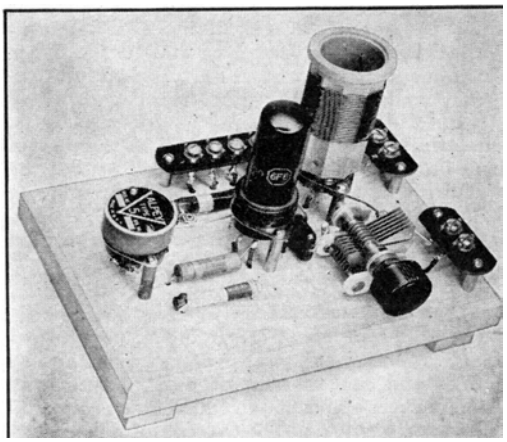
0.4		3.896
0.425	4.307	3.74
0.45	3.954	
0.5	3.893	3.641
0.55	3.73	3.54
0.575		3.513
0.6	3.673	
0.65	3.593	
0.7	3.519	
0.75	3.405	
0.7	3.377	
0.65	3.372	
0.6	3.356	
0.58		3.384
0.575		3.454
0.55	3.35	
0.5	3.348	3.369
0.45	3.343	3.353
0.4	3.338	3.342



3 Similar setup. This was not meant to show the bandpass characteristic but was actually supposed to be similar but of lower value and wider wider that the other two curves

0.35	3.31	5
0.425	3.32	8
0.45	3.34	10.5
0.5	3.37	11.2
0.55	3.44	12.2
0.5	4.22	10
0.55	3.46	12.4
0.5	3.34	12
0.425	3.29	7.5
0.4	3.28	6





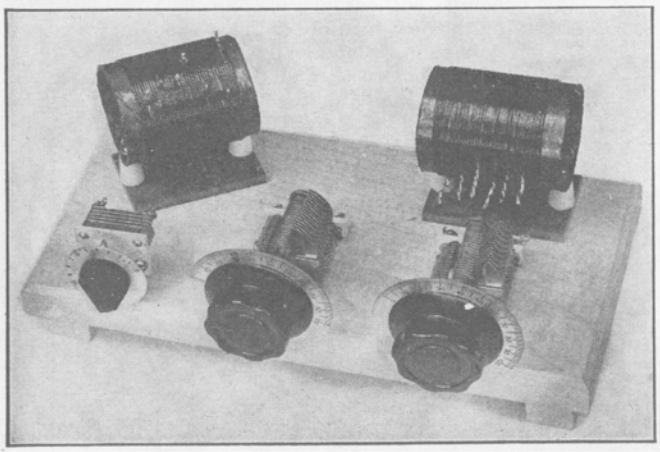


Fig. 8 — A circuit board such as this is convenient for making up various types of resonant circuits. The tuning condensers are 250-$\mu\mu$fd. units; any condensers having this or higher capacity will be satisfactory. The coils, wound on mailing tubes of 2¼-inch outside diameter, have 35 turns each, tapped every 5 turns, with turns spaced to occupy a total length of 2 inches. The wire is No. 18. The small condenser at the left is for coupling purposes and may have a maximum capacity from 25 to 50 $\mu\mu$fd.