Transformer Couple to R1

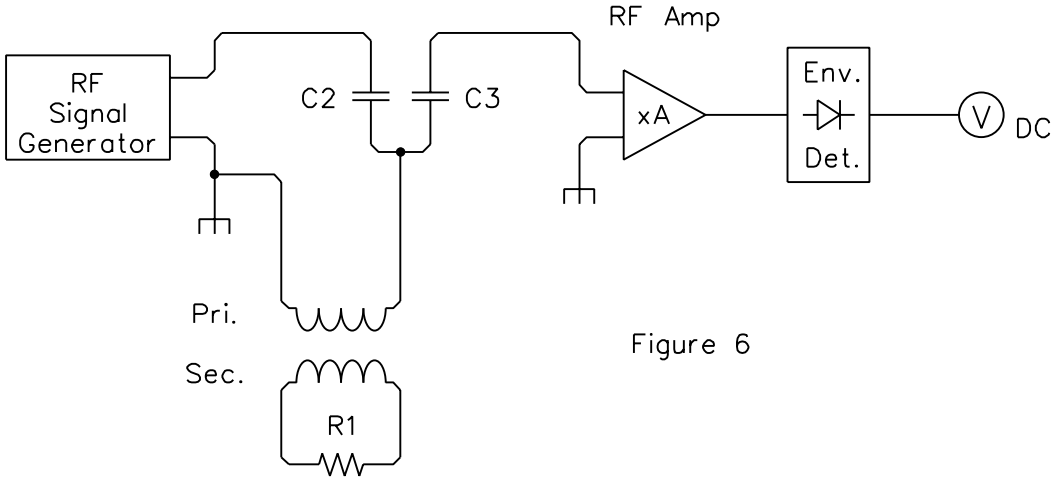

Figure 6

Figure 6 is the same as Figure 4 except that now we have transformer coupled R1 to the rest of the circuit. We can still predictably sense even small changes in the value of R1.

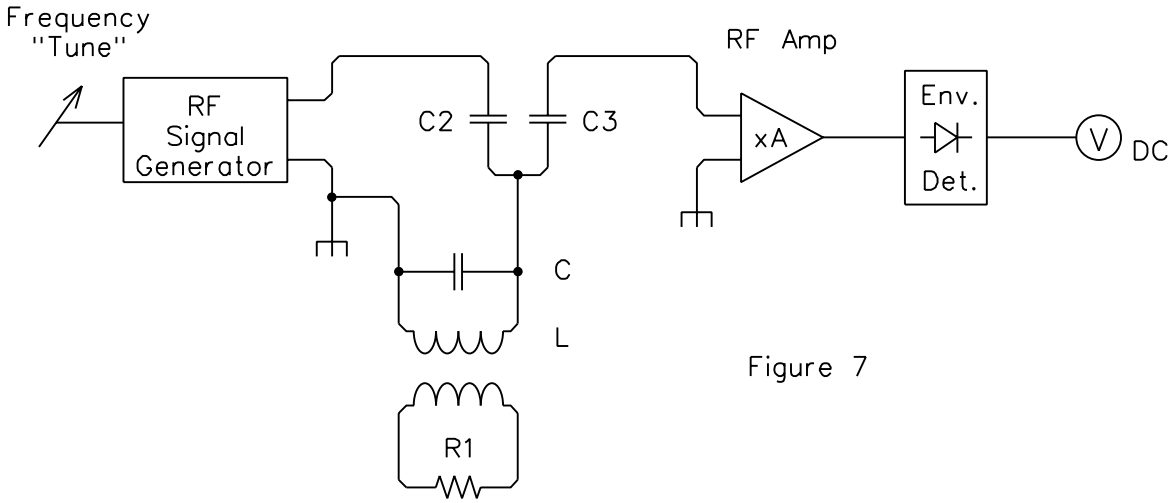

Figure 7

Figure 7 is the same as Figure 6 except that now we have made the primary of the transformer a parallel resonant LC circuit.

The frequency of the RF Generator is adjustable to match this LC resonant frequency. We do it this way because L and C may be in a cold place and hard to adjust.

An advantage of including this resonant LC circuit is that it limits the bandwidth of the noise that gets into the input of the RF Amplifier ---> a better S/N ratio for the system.