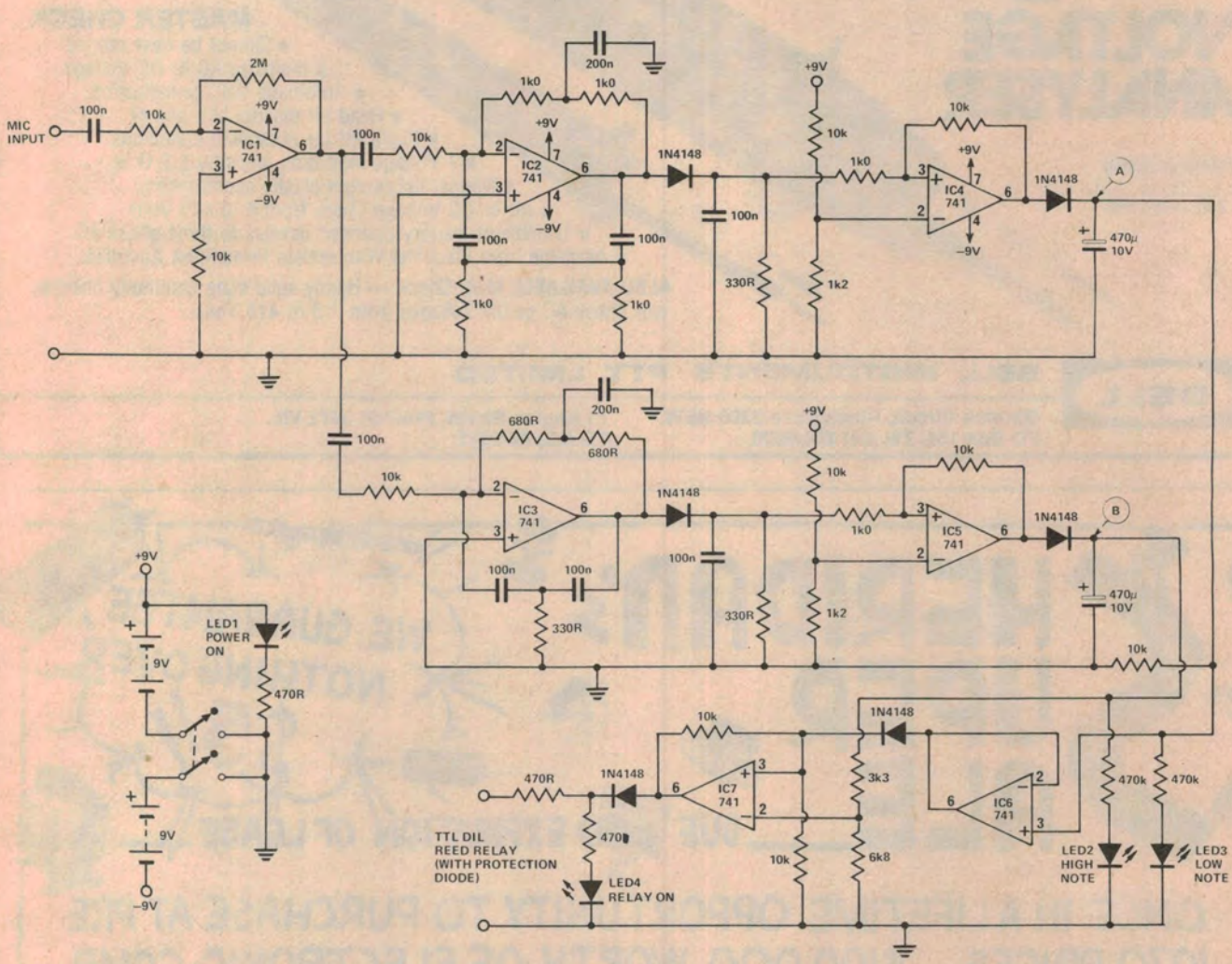

"Whistle-up" switch

There are many applications – both 'novel' and useful – where one could use a switch that is activated by whistling. This circuit operates a relay when a high-pitched note is whistled, the relay latching on until a low-pitched note is whistled. The circuit comes from **R.C.W. Gate of the UK.**

A concealed microphone picks up the note whistled. The mic output is amplified by a 741 op-amp (IC1), the output of which is filtered by two active peak filters. IC2 is the 'high' note filter and IC3 is the 'low' note filter. The output of each filter is rectified and smoothed then each is passed to the input of a Schmitt trigger – consisting of IC6 and IC7.

The Schmitt trigger is 'set', activating the relay, when the high note is whistled and reset when the low note is whistled, the relay then dropping out.

Points A and B can be used to drive other logic functions. However, if high impedance (i.e: CMOS) logic is used a 10k resistor should be placed across the 470 u capacitor on the outputs of IC4 and IC5.