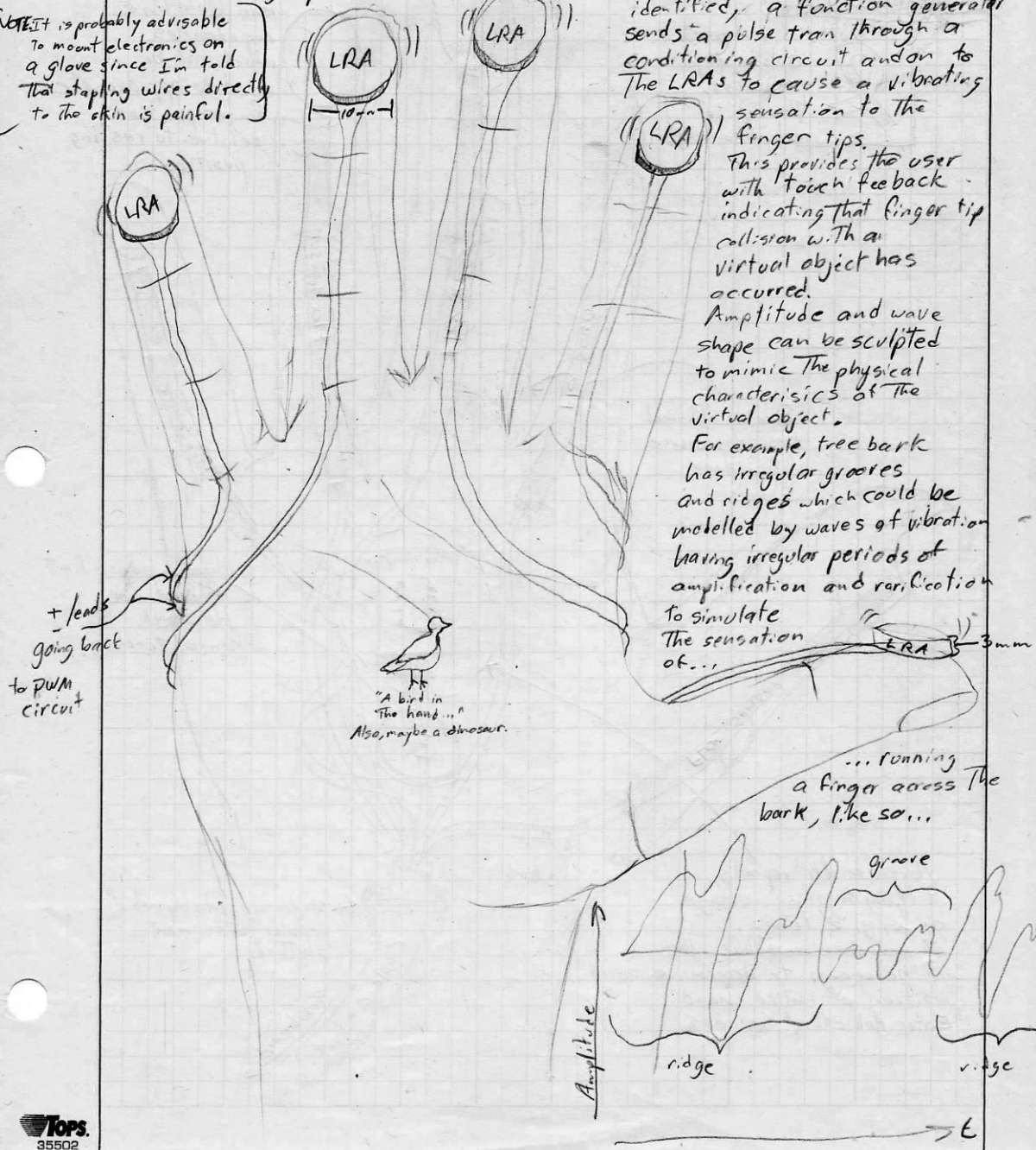


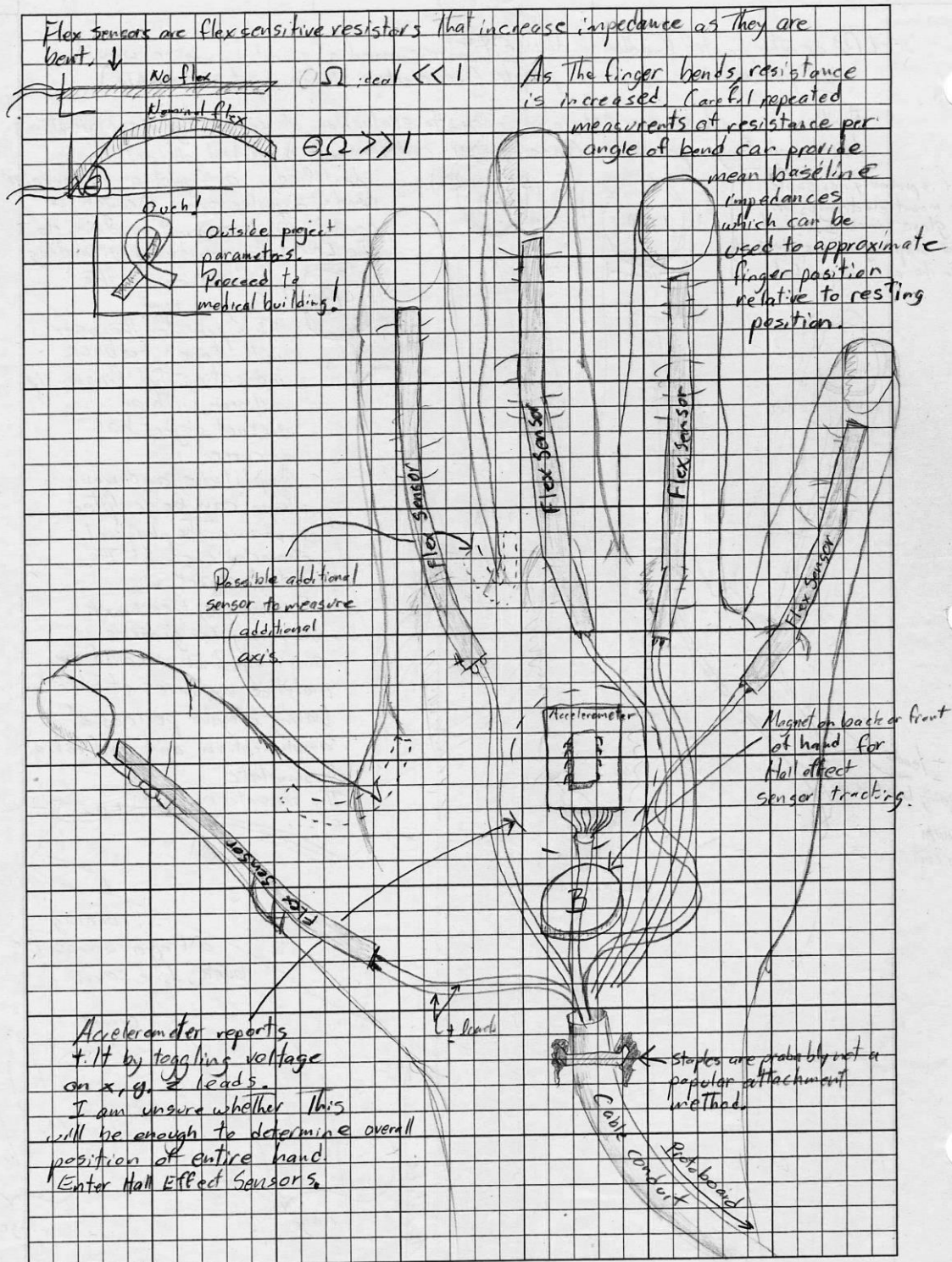
LRA or other haptic feedback device. (I assumed a vibrating motor would be preferable since most people find electric shock uncomfortable.)

Feedback would be provided in response to evaluation of sensor signals indicating hand and finger position. Once finger collision with a virtual object is identified, a function generator sends a pulse train through a conditioning circuit and on to the LRAs to cause a vibrating sensation to the finger tips.

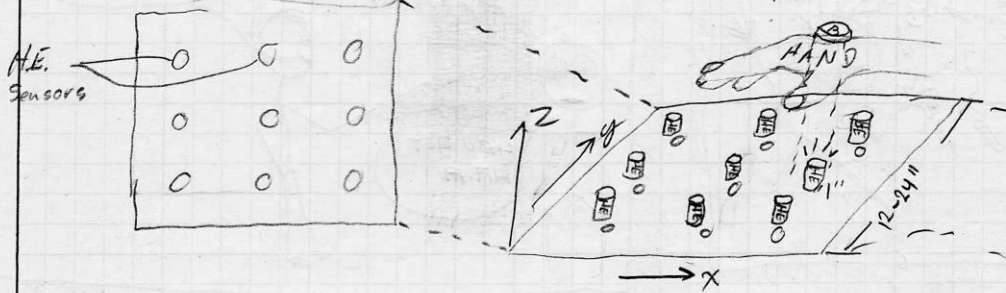
NOTE: it is probably advisable to mount electronics on a glove since I'm told that stapling wires directly to the skin is painful.



WARNING: OBJECTS IN SKETCH ARE OLDER THAN THEY APPEAR



Hall Effect Sensor array for detecting hand x,y position



As hand passes over H.E. sensor array the sensors detect the magnet attached to the hand (again, staples are bad!). Only sensors over which the magnet passes will detect the hand. When the magnet is detected the H.E. sends '1'. The result is a matrix representing the x,y position of the hand,

$$\begin{matrix}
 y \uparrow & \begin{bmatrix} 0 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 0 & 0 \end{bmatrix} \\
 x \rightarrow &
 \end{matrix}$$

High level system over view

LED BAR GRAPHS (or oscilloscope or micro controller w/ bluetooth → PC)

