



Fig. 3. The initial form of the Mark I detector.

#### H. DISCOVERY OF THE TAU IN THE MARK I EXPERIMENT: 1974-1976

##### SPEAR and the Mark I Detector

The SPEAR  $e^+e^-$  collider began operation in 1973. Eventually SPEAR obtained a total energy of about 8 GeV, but in the first few years the maximum energy with useful luminosity was 4.8 GeV.

We also began operating the Mark I experiment in 1973 in the form shown in Fig. 3. The Mark I was one of the first large-solid-angle, general purpose detectors built for colliding beams. The use of large-solid-angle particle tracking and the use of large-solid-angle particle