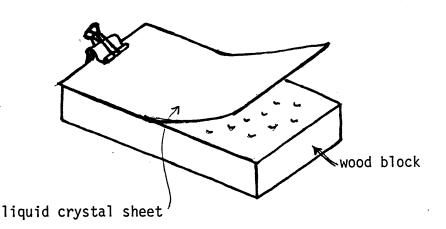
Mechanical Equivalent of Heat

Conservation of Energy

Heat generated by inelastic collisions M-2, S-4

ball peen hammer - 2076



Remove the liquid crystal sheet from the apparatus, hold it up for the class to see, and touch the back of it with your fingertips to show that it changes color with the application of neat. (The order of colors is roughly that of the spectrum.)

Replace the sheet under the clip provided, lift the free end of the sheet away from the blocks, and hit the blocks <u>hard</u> in two or three places with the ball end of a ball peen hammer. Let the sheet fall back into place and raise one end of the apparatus so it can be seen by the class. The sheet will change color over the spots where the hammer hit, showing that much of the energy lost by the hammer has been transformed into heat.

HC-1