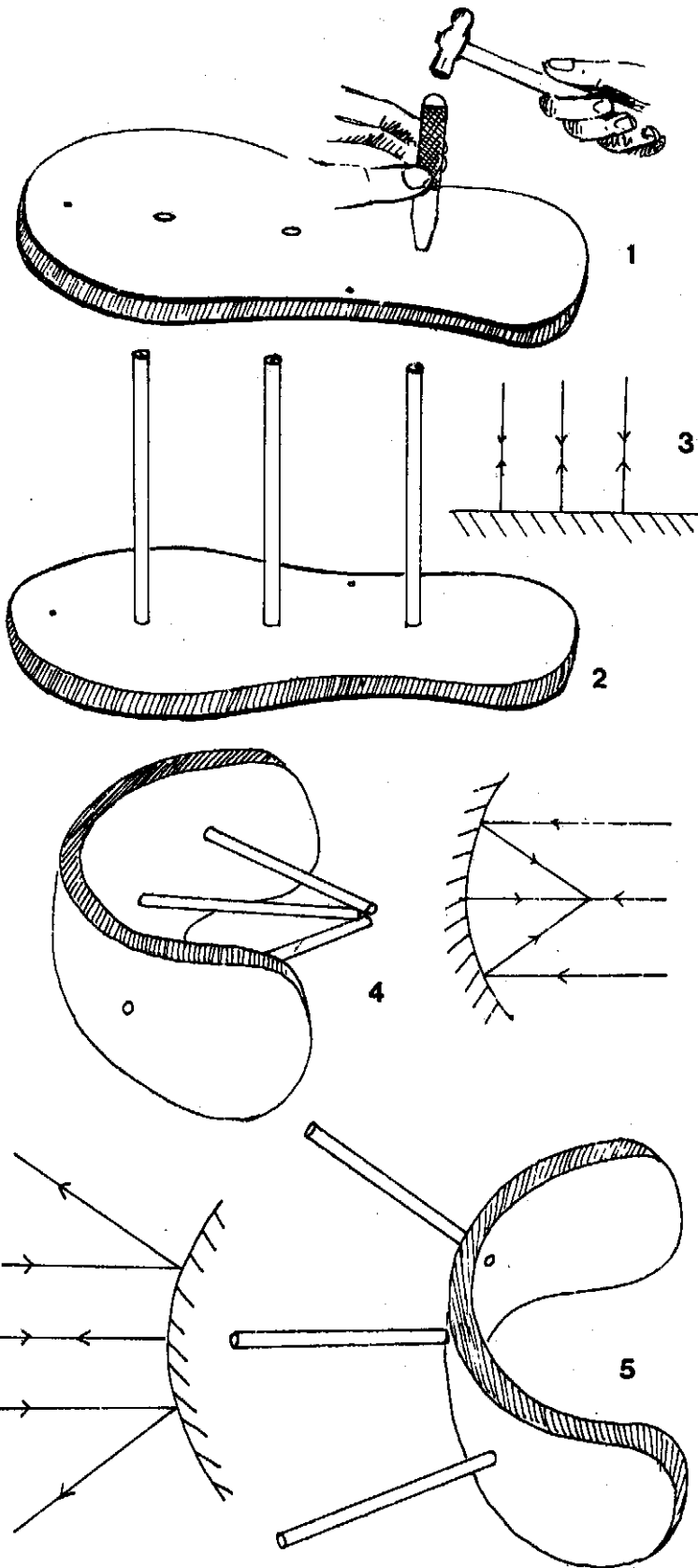


RAY MODEL

Punch out three holes 5-cm apart on an old rubber slipper Fig (1). Press fit 20-cm long broomstick *phool jhadu* sticks (or pencils) in these holes.



When the slipper is lying flat, the sticks stand upright Fig (2). Suppose the rubber slipper was a plain mirror strip. Then the light rays striking it at right angles will retrace their path as in ray diagram Fig (3).

What would happen if instead of a plain mirror you had a concave mirror? Just bend the rubber slipper inwards and see. The three sticks now converge at a point called the focus Fig (4). What would happen if instead of a plain mirror you had a convex mirror? Just bend the slipper the other way and you'll see the sticks diverging Fig (5).

As glass cannot be flexed and rays are invisible, this model will be of some help in concretizing the concept of ray diagrams through curved mirrors.