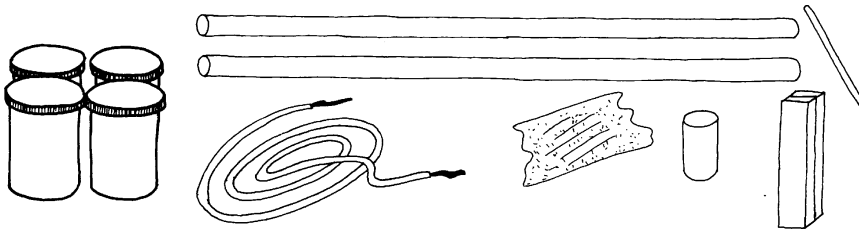
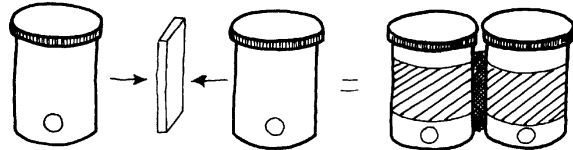


MAGNETIC RAIL

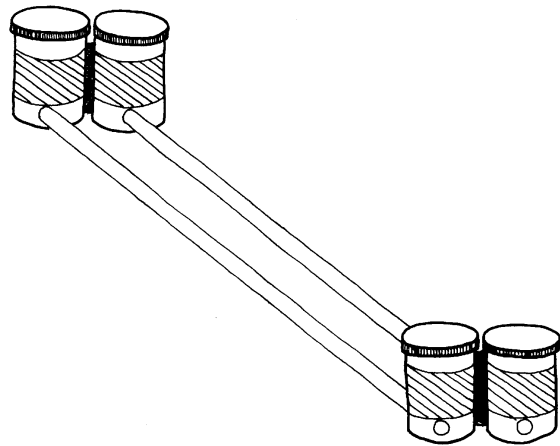
In this magnetic rail a copper rod rests on two aluminum rails through which current flows.
As you bring a strong magnet behind the copper rod it starts to move!



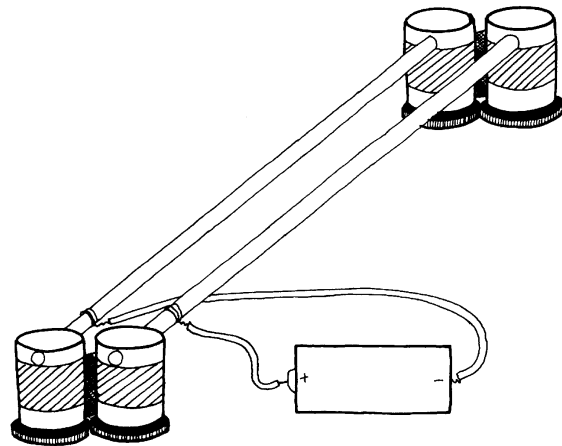
1. You will need 4 film roll bottles, two aluminum rods (30-cm long, 8-mm diameter), one 5-mm copper rod (6-cm long), electric wire, 1.5-volt battery, thin rubber, adhesive, sandpaper and some hand tools.



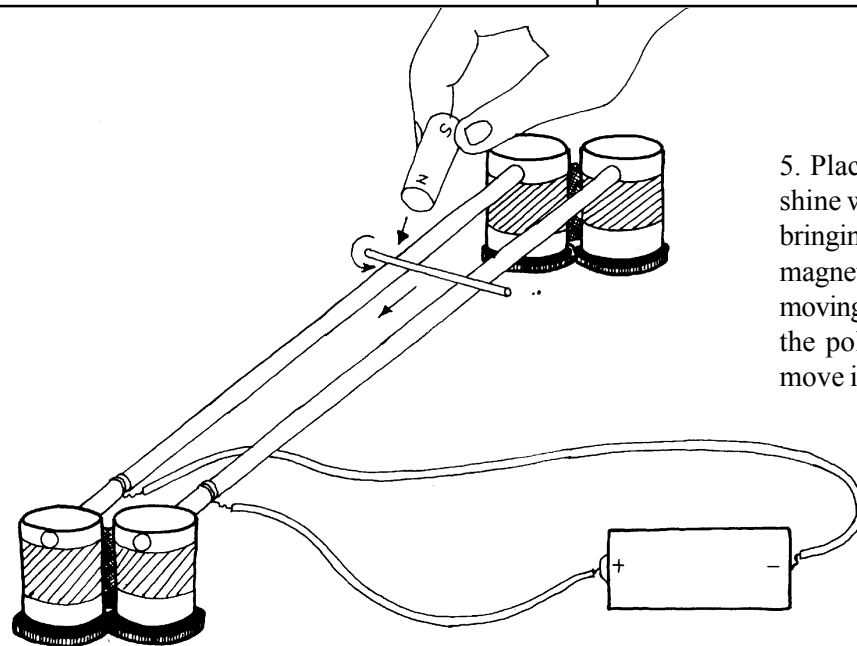
2. Make 8-mm holes in the four film roll bottles. Join two bottles with adhesive and a thin rubber in between. Make two such pairs.



3. Press fit the aluminum rods in the film bottles to make the rail track.



4. Sandpaper the ends of the electric wire and connect the two aluminum rods with a 1.5-volt battery cell as shown.



5. Place the Copper rod after making it shine with the sandpaper on the rails. On bringing a strong Neodymium (rare earth) magnet behind the Copper rod it will start moving on the aluminum rail! On changing the polarity of the magnet the rod will move in the opposite direction.