HYDRAULIC TRUCK

This amazing hydraulic truck was designed by Mr. V. C. Kandkur of Hubli, Karnataka, India. Mr. Kandkur is a driver by profession with a penchant for mechanical things.

1. You will need several old 10-ml plastic syringes, old plastic drip tubes, pieces of wood, screws, 10-mm aluminium square section, aluminium foil and ordinary hand tools.

2. The movements of this truck - its swivel from left to right, the up-down motion of its jib, and the scooping action of the bucket is based on the principle of hydraulics. It can be understood by filling two plastic syringes with water and attaching them with a plastic drip tube. On pushing the plunger of the first syringe the plunger of the second syringe will move out. Thus the motion is transmitted through water pressure from the first to the second syringe. The motion of the second plunger is transformed into the swivel, or up-down movement of the truck.

3. Make holes in a piece of wood and fix the syringes as shown. Make the boom and jib of the truck using aluminium square sections. For relative movement of the long arms they should be hinged using a screw and nut. Ensure that all joints move freely. Attach wheels made of plastic lids to give the hydraulic truck a more realistic look.