

Chapter 12

Pressure

Points to be studied :

- 12.1 Pressure dependence on force
- 12.2 Pressure dependence on area
- 12.3 Air-pressure
- 12.4 Liquid pressure and its effects
- 12.5 Buoyant force

Camel can walk easily on sand but a person feels difficulty in walking on sand. The wall of a dam is built narrower at top and wider towards the bottom. As we walk towards higher altitude, we feel difficulty in breathing. The tin-sheds or 'khaps' of weak houses fly away during a storm. The water tank is built at a very great height for water distribution. To know the cause of all these, the knowledge about the pressure is essential. What is Pressure? Let's know about it.

12.1 Dependence of Pressure on Force

Activity 1

Place two books on your palm. What do you feel ? Now, remove one book. What difference do you feel now than in the previous position? Why do you feel more comfortable in second situation than previous one? We feel more pressure due to more weight (force) in the first situation.

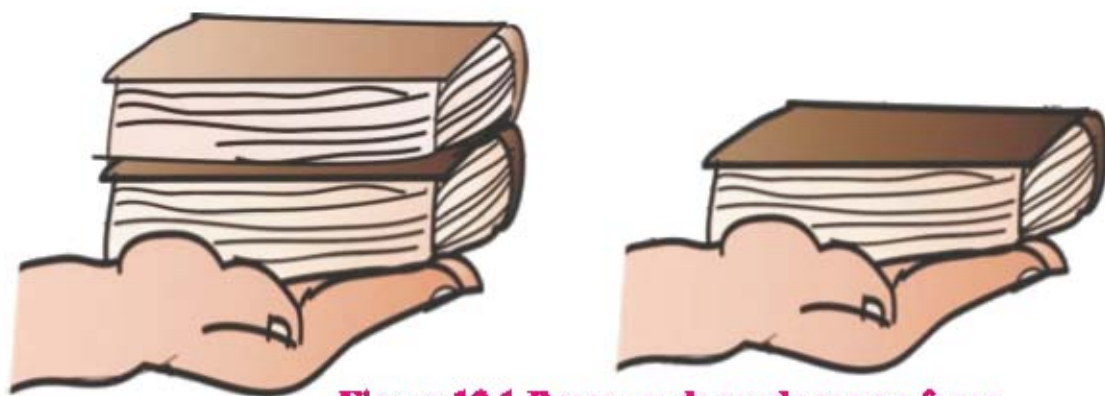


Figure 12.1 Pressure dependence on force.