

Exercise 14.5

Do all plant parts produce carbon dioxide?

1 Prepare several sets of the apparatus shown in Fig. 14.13. To make sure each plastic bag is airtight, tie it tightly once a little below the opening, then bend the top part over and tie again. To keep each bag upright, tie it with a loop of thread to a drawing pin pinned to a shelf as shown.

2 Put a different plant in each bag except for one. This is the control, and should show that no carbon dioxide is given off when no plant is present. Suitable plant parts to use are flower buds, young leaves, a yam tuber, an onion bulb, the roots of seedlings, and a young fruit. Plant parts which are normally underground should be kept moist by being placed on damp blotting paper, and green parts should be kept in the dark to stop photosynthesis.

3 Inspect the lime water from time to time for signs of milkiness.

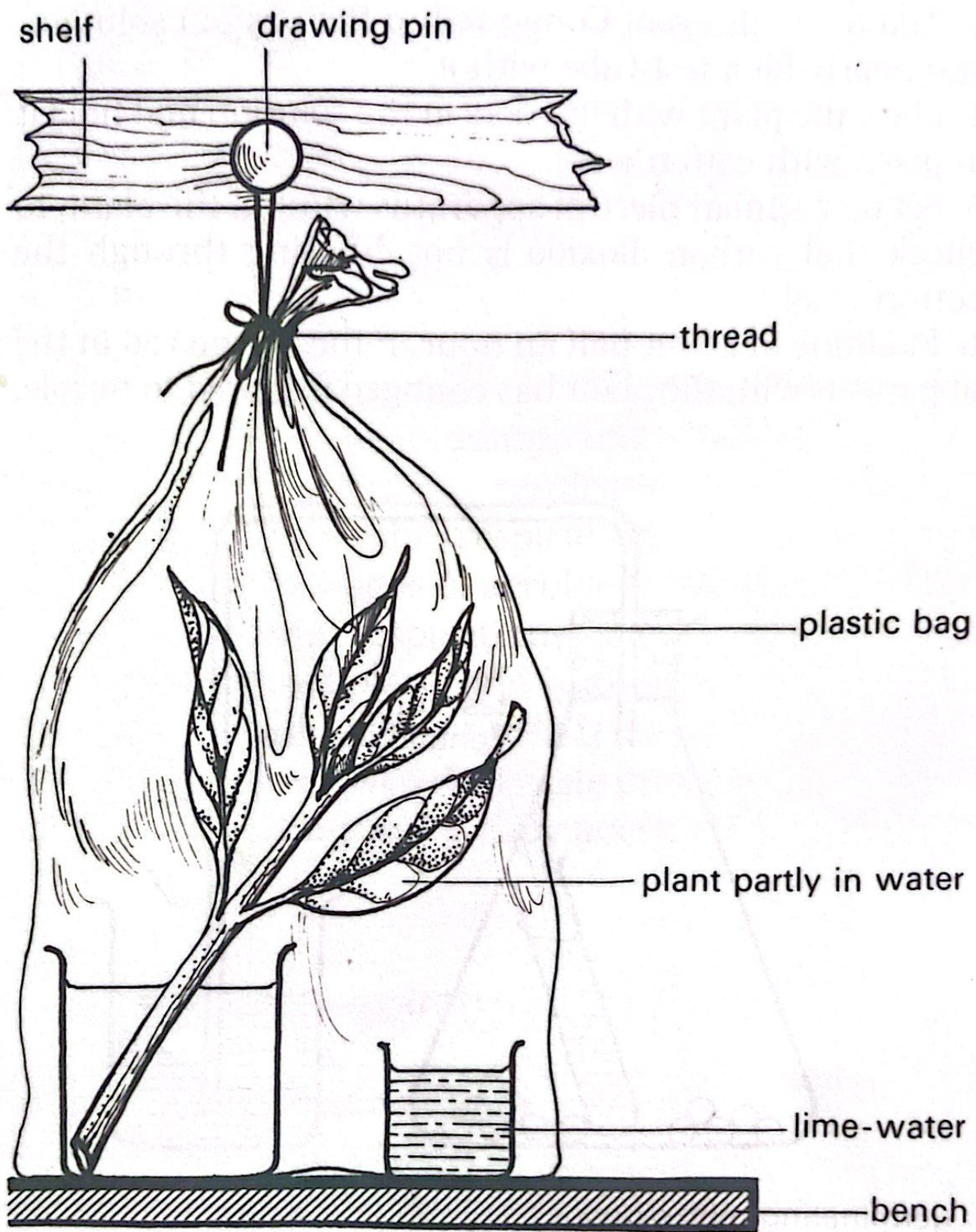


Fig. 14.13