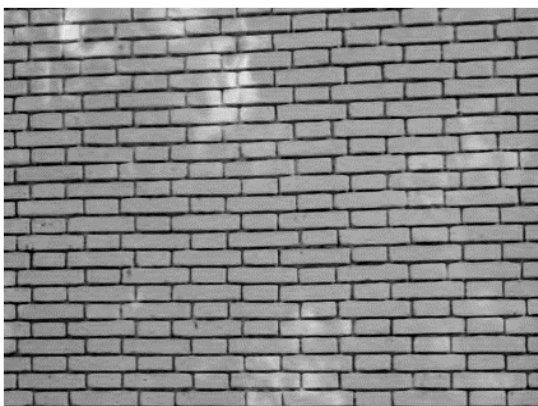


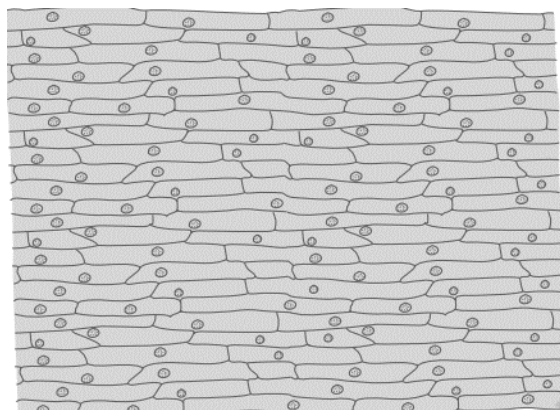
SCIENCE**THE CELL AND ITS HISTORY****The Cell**

Both, bricks in a building and cells in the living organisms, are basic structural units. The buildings, though built of similar bricks, have different designs, shapes and sizes. Similarly, in the living world, organisms differ from one another but all are made up of cells. Cells in the living organisms are complex living structures unlike non-living bricks.

The egg of a hen represents a single cell and is big enough to be seen by the unaided eye.



(a) Brick wall



(b) Onion peel

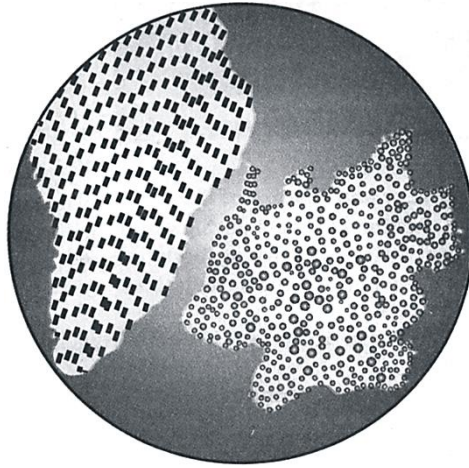
Discovery of the Cell

Robert Hooke in **1665** observed slices of cork under a simple magnifying device. Cork is a part of the bark of a tree. He took thin slices of cork and observed them under a microscope. He noticed partitioned boxes or compartments in the cork slice

These boxes appeared like a honeycomb. He also noticed that one box was separated from the other by a wall or partition. Hooke coined the term 'cell' for each box. What Hooke observed as boxes or cells in the cork were actually dead cells.

Cells of living organisms could be observed only after the discovery of improved microscopes. Very little was known about the cell for the next 150 years after Robert Hooke's observations. Today, we

know a lot about cell structure and its functions because of improved microscopes having high magnification.



Cork section shown in
Robert Hooke's Microscope