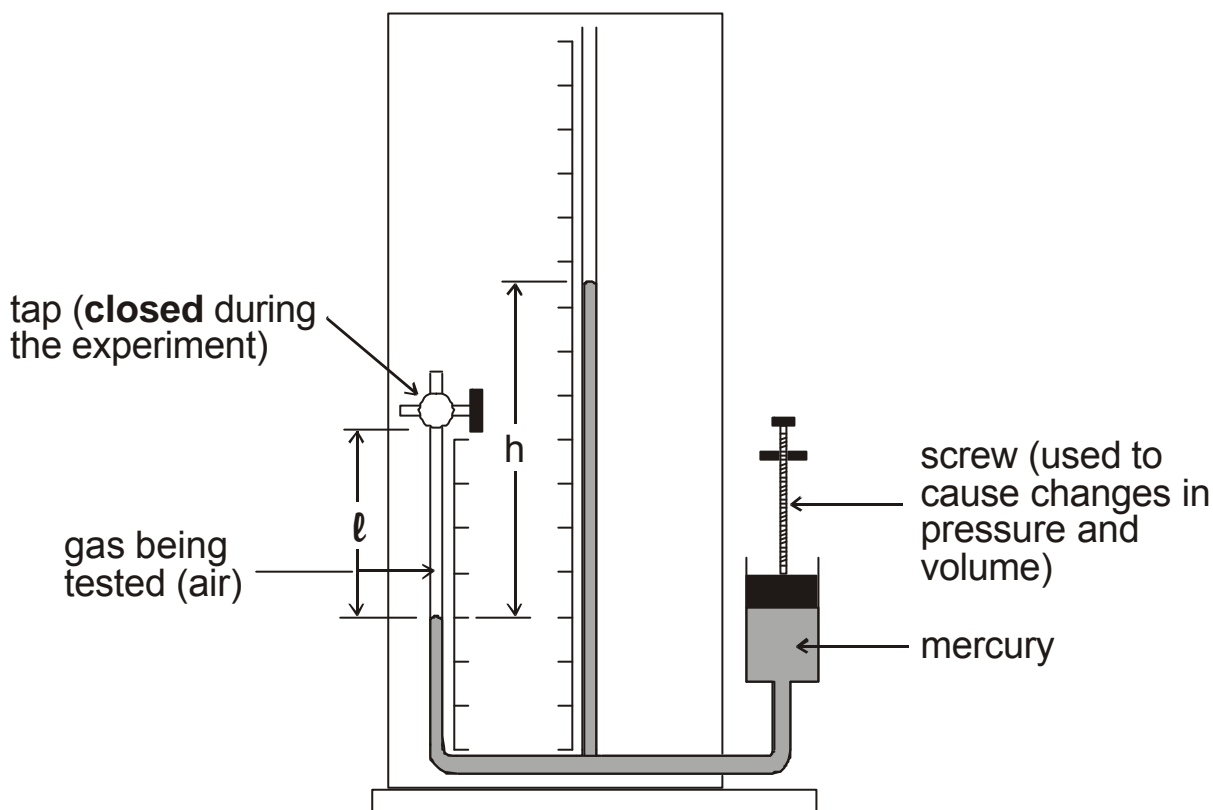


Experiment to Verify the Boyle/Mariotte Law

- Preparation:**
 - Learn the law.
 - See part 3 below.
- The diagram below represents a piece of apparatus specially made for this experiment.

DO NOT OPEN THE TAP AT ANY TIME !



The pressure of the gas (in cm Hg) = atmospheric pressure + h
 Unless you have a barometer, assume that atmospheric pressure = 76 cm Hg.
 The volume of the gas can *not* easily be measured but you can assume that the tube containing the gas is of *uniform* cross-section. Therefore, readings of h and l can be used to verify the law.

Changes of pressure and volume should be made slowly. Why?

- To verify the law, a graph will be plotted. The graph must be a straight line passing through the origin. Before starting the experiment, decide what quantities will be plotted on the graph.

© David Hoult 2001