

**Badische Landesbibliothek Karlsruhe**

**Digitale Sammlung der Badischen Landesbibliothek Karlsruhe**

**The young man's book of amusement**

**Halifax, 1848**

To Fill a Bladder with Hydrogen Gas

[urn:nbn:de:bsz:31-100120](https://nbn-resolving.org/urn:nbn:de:bsz:31-100120)

a few pieces of zinc, or small iron nails; on this pour a mixture, of equal parts of sulphuric acid, (oil of vitriol), and water, previously mixed in a tea-cup, to prevent accidents. Replace the cork stopper, with the piece of tobacco-pipe in it; the hydrogen gas will then be liberated through the pipe into a small stream. Apply the flame of a candle or taper to this stream, and it will immediately take fire, and burn with a clear flame until the hydrogen in the phial be exhausted. In the experiment, the zinc or iron, by the action of the acid becomes oxygenised, and is dissolved, thus taking the oxygen from the sulphuric acid and water; the hydrogen (the other constituent part of the water) is therefore liberated and ascends.

---

*To Fill a Bladder with Hydrogen Gas.*

Apply a bladder, previously wetted and compressed, in order to squeeze out all the common air, to the piece of tobacco-pipe inserted in the cork stopper of the phial, (as described in the experiment above). The bladder will thus be filled with hydrogen gas.

---

*Pure Flame.*

Hydrogen gas furnishes the purest flame that can be exhibited; for the flame of bodies that emit much light derive that power from solid bodies intensely