

Badische Landesbibliothek Karlsruhe

Digitale Sammlung der Badischen Landesbibliothek Karlsruhe

The young man's book of amusement

Halifax, 1848

The Self-moving Wheel

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

of the stick. When the air is again let into the receiver, it falls on the surface of the mercury, and forces it into the pores of the wood to possess the place of air.

When the rod is taken out, it will be found considerably heavier than before, and that it has changed its colour, being now all over of a blueish hue. If cut transversely, the quicksilver will be seen to glitter in every part of it.

Feathers heavier than Lead.

At one end of a fine balance, hang a piece of lead, and at the other as many feathers as will poise it; then place the balance in the receiver. As the air is exhausted, the feathers will appear to overweigh the lead, and when all the air is drawn off, the feathers will preponderate, and the lead ascend.

The Self-moving Wheel.

Take a circle of tin, about ten inches in diameter, or of any other size that will go into the receiver, and to its circumference fix a number of tin vanes, each about an inch square. Let this wheel be placed between two upright pieces on an axis, whose extremities are quite small, so that the wheel may turn in a vertical position with the least possible force. Place the wheel and axis in the receiver, and ex-

haust the air. Let there be a small pipe with a cock ; one end of the pipe to be outside the top of the receiver, and the other to come directly over the vanes of the wheel.

When the air is exhausted, turn the cock, and a current will rush against the vanes of the wheel, and set it in motion, which will increase, till the receiver is filled with air.

The Artificial Halo.

Place a candle on one side of a receiver, and let the spectator place himself at a distance from the other side. Directly the air begins to be exhausted, the light of the candle will be refracted in circles of various colours.

Vegetable Air Bubbles.

Put a small branch of a tree with its leaves, or part of a small plant, in a vessel of water, and placing the vessel in the receiver exhaust the air. When the pressure of the external air is taken off, the spring of that contained in the air vessels of the plant, by expanding the particles, will make them rise from the orifices of all the vessels for a long time together, and produce a most beautiful appearance.

A Four

To produ
sary to exh
pump, and
end of the
be driven
the air. T

Effect

Half fill
ter or bary
few minute
tube, air fro
become tur
bottom of t

Take a g
which tie
place it on
presses the
even and str
the bladder
yield to the in