

Badische Landesbibliothek Karlsruhe

Digitale Sammlung der Badischen Landesbibliothek Karlsruhe

The young man's book of amusement

Halifax, 1848

The Wheel Barometer in the form of a Syphon

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

indifferent resemblance of the four elements, earth, fire, water, and air: the powdered glass (which should be of some dark colour) representing the earth; the oil of tartar, water; the tincture, air: and the rock oil, fire.

The Æolipiles.

The æolipile is a small hollow globe of brass, or other metal, in which a slender neck or pipe is inserted. This ball, when made red hot, is cast into a vessel of water, which will rush into its cavity, then almost void of air. The ball being then set on the fire, the water, by the rarefaction of the internal air, will be forced out in steam by fits, with great violence, and with a strange noise.

If to the necks of two or more of these balls, there be fitted those balls that are used by fowlers and hunters, and the balls placed on the fire, the steam rushing from them will make such a horrible noise, that it will astonish any person who is ignorant of the contrivance.

The Wheel Barometer in the form of a Syphon.

A small float of iron or glass rests on the exterior surface of the mercury, suspended by a slender thread, passed round a small wheel, or cylindrical axis, that carries the index. By this construction, the varia-

tion of the
to half the
traversed by

I was sur
Darwin,) w
a paper ab
with a pen
middle of i
ting with n
minute exa
middle of t
ing them s
distinctly se
blue field;
lowish wall
name of BA
golden chara

If a glass
several small
ped in, what
over the brim
It is the no

tion of the height of the mercurial column is reduced to half the ordinary measure, yet the circumference traversed by the needle is greatly augmented.

Ideal Spectrum.

I was surprised, and agreeably amused, (says Dr. Darwin,) with the following experiment. I covered a paper about four inches square with yellow, and with a pen filled with a blue colour wrote upon the middle of it the word BANKS in capitals, and sitting with my back to the sun, fixed my eyes for a minute exactly on the centre of the letter N in the middle of the word; after closing my eyes, and shading them somewhat with my hand, the word was distinctly seen in the spectrum in yellow letters on a blue field; and then, on opening my eyes on a yellowish wall at twenty feet distance, the magnified name of BANKS appeared written on the wall in golden characters.

Cohesion of Water.

If a glass be filled to the brim with water, and several small articles, as counters for instance, dropped in, what is the reason the water does not run over the brim of the glass?

It is the natural quality of all dry substances to