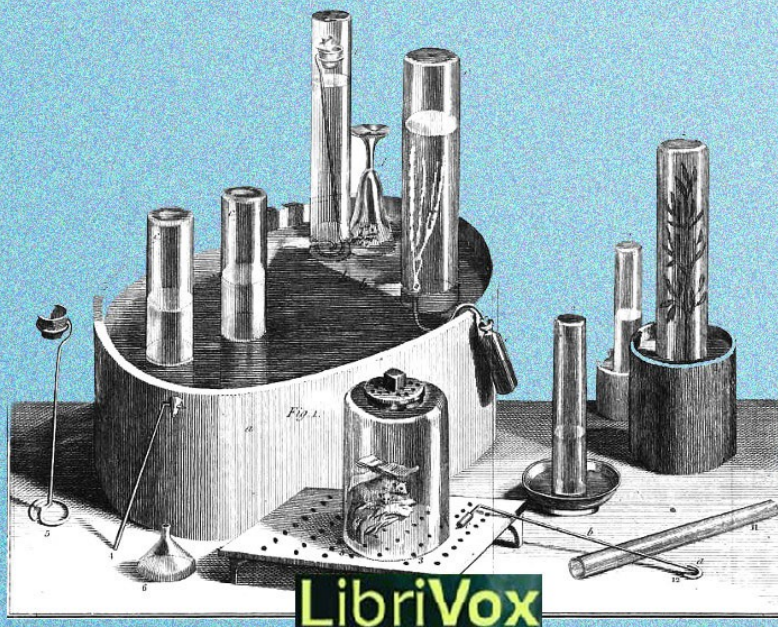


Experiments and Observations on Different Kinds of Air by Joseph Priestley



Experiments & Observations on Different Kinds of Air

Joseph Priestley, FRS (13 March 1733 (O.S.) – 6 February 1804) was an 18th-century English theologian, Dissenting clergyman, natural philosopher, chemist, educator, and political theorist who published over 150 works. In “Experiments and Observations on Different Kinds of Air,” he reviews experiments with gases. A common theme in this work is measuring the volumes of gases held in glass tubes, and their increase or decrease when exposed to other substances. He also tests the effects of gases on mice, plants and insects.

Priestley demonstrated that fixed air (now known as CO₂) can be produced from several reactions including alcoholic fermentation, combustion and a mixture of oil of vitriol and chalk (sulfuric acid and calcium oxide). He also showed that it is soluble in water, and that its toxic effects can be reduced when agitated in water. In other experiments, he showed that combinations of gases can mix to form a smaller volume than the sum of both separate gases, as when he combined common air (atmospheric air) with nitrous air (nitric oxide, NO).

Read by Lively Hive. Total running time: 8:05:06

This recording is in the public domain and may be reproduced, distributed, or modified without permission. For more information or to volunteer, visit librivox.org.
Cover picture from book. Copyright expired in U.S., Canada, EU. and all countries with author's life +70 yrs laws. Cover design by Annise. This design is in the public domain.

Experiments & Observations on Different Kinds of Air