

ments, that Cavendish is justly entitled to the honor of this discovery, which in his own time was never contested. The publication of his *Journals of Experiments*¹¹ shows that he succeeded in establishing the point in question in July, 1781. His experiments are referred to in an abstract of a paper of Priestley's, made by Dr. Maty, the secretary of the Royal Society, in June, 1783. In June, 1783, also, Dr. Blagden communicated the result of Cavendish's experiments to Lavoisier, at Paris. Watt's letter, containing his hypothesis that "water is composed of dephlogisticated air and phlogiston deprived of part of their latent or elementary heat; and that phlogisticated or pure air is composed of water deprived of its phlogiston and united to elementary heat and light," was not read till Nov. 1783; and even if it could have suggested such an experiment as Cavendish's (which does not appear likely), is proved, by the dates, to have had no share in doing so.

Mr. Cavendish's experiment was suggested by an experiment in which Warltire, a lecturer on chemistry at Birmingham, exploded a mixture of hydrogen and common air in a close vessel, in order to determine whether heat were ponderable.]

CHAPTER VI.

EPOCH OF THE THEORY OF OXYGEN.—LAVOISIER.

Sect. I.—Prelude to the Theory.—Its Publication.

WE arrive now at a great epoch in the history of Chemistry. Few revolutions in science have immediately excited so much general notice as the introduction of the theory of oxygen. The simplicity and symmetry of the modes of combination which it assumed; and, above all, the construction and universal adoption of a nomenclature which applied to all substances, and which seemed to reveal their inmost constitution by their name, naturally gave it an almost irresistible sway over men's minds. We must, however, dispassionately trace the course of its introduction.

¹¹ *Appendix to Mr. V. Harcourt's Address.*