all that was discovered concerning the composition of alcohol, oil, animal and vegetable substances, and many other bodies.

It is not necessary for us to consider any further the evidence for this theory, but we must record a few circumstances respecting its earlier history. Rey, a French physician, had in 1630, published a book, in which he inquires into the grounds of the increase of the weight of metals by calcination.[3] He says, "To this question, then, supported on the grounds already mentioned, I answer, and maintain with confidence, that the increase of weight arises from the air, which is condensed, rendered heavy and adhesive, by the heat of the furnace." Hooke and Mayow had entertained the opinion that the air contains a "nitrous spirit," which is the supporter of combustion. But Lavoisier disclaimed the charge of having derived anything from these sources; nor is it difficult to understand how the received generalizations of the phlogistic theory had thrown all such narrower explanations into obscurity. The merit of Lavoisier consisted in his combining the generality of Stahl with the verified conjectures of Rey and Mayow.

No one could have a better claim, by his early enthusiasm for science, his extensive knowledge, and his zealous labors, to hope that a great discovery might fall to his share, than Lavoisier. His father,[4] a man of considerable fortune, had allowed him to make science his only profession; and the zealous philosopher collected about him a number of the most active physical inquirers of his time, who met and experimented at his house one day in the week. In this school, the new chemistry was gradually formed. A few years after the publication of Priestley's first experiments, Lavoisier was struck with the presentiment of the theory which he was afterwards to produce. In 1772, he deposited[5] with the secretary of the Academy, a note which contained the germ of his future doctrines. "At that time," he says, in explaining this step, "there was a kind of rivalry between France and England in science, which gave importance to new experiments, and which sometimes was the cause that the writers of the one or other of the nations disputed the discovery with the real author." In 1777, the editor of the Memoirs of the Academy speaks of his theory as overturning that of Stahl; but the general acceptance of the new opinion did not take place till later.

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[3] Thomson, *Hist. Chem.* ii. 95.

[4] *Biogr. Univ.* (Cuvier.)

[5] Thomson, ii. 99.