

He says,⁸ that though, in Davy's celebrated Memoir of 1806, the points established are of the utmost value, the mode of action by which the effects take place is stated very generally; so generally, indeed, that probably a dozen precise schemes of electro-chemical action might be drawn up, differing essentially from each other, yet all agreeing with the statement there given." And at a period a little later, being reproached by Davy's brother with injustice in this expression, he substantiated his assertion by an enumeration of twelve such schemes which had been published.

But yet we cannot look upon this Memoir of 1806, otherwise than as a great event, perhaps the most important event of the epoch now under review. And as such it was recognized at once all over Europe. In particular, it received the distinguished honor of being crowned by the Institute of France, although that country and England were then engaged in fierce hostility. Buonaparte had proposed a prize of sixty thousand francs "to the person who by his experiments and discoveries should advance the knowledge of electricity and galvanism, as much as Franklin and Volta did;" and "of three thousand francs for the best experiment which should be made in the course of each year on the galvanic fluid;" the latter prize was, by the First Class of the Institute, awarded to Davy.

From this period he rose rapidly to honors and distinctions, and reached a height of scientific fame as great as has ever fallen to the lot of a discoverer in so short a time. I shall not, however, dwell on such circumstances, but confine myself to the progress of my subject.

Sect. 2.—Establishment of the Electro-chemical Theory by Faraday.

THE defects of Davy's theoretical views will be seen most clearly by explaining what Faraday added to them. Michael Faraday was in every way fitted and led to become Davy's successor in his great career of discovery. In 1812, being then a bookseller's apprentice, he attended the lectures of Davy, which at that period excited the highest admiration.⁹ "My desire to escape from trade," Mr. Faraday says, "which I thought vicious and selfish, and to enter into the service of science, which I imagined made its pursuers amiable and liberal, induced me at last to take the bold and simple step of writing to Sir H. Davy." He was favorably received, and, in the next year, became

⁸ *Researches*, 482.

⁹ Paris, ii. 3.