

sion referred rather to the discoveries of Galvani than to those of Volta: the latter were, indeed, hardly known in France till the conquest of Italy by Bonaparte, in 1801. France was, at the period of these discoveries, separated from all other countries by war, and especially from England,³ where Volta's Memoirs were published.

The political revolutions of Italy affected, in very different manners, the two discoverers of whom we speak. Galvani refused to take an oath of allegiance to the Cisalpine republic, which the French conqueror established; he was consequently stripped of all his offices; and deprived, by the calamities of the times, of most of his relations, he sank into poverty, melancholy, and debility. At last his scientific reputation induced the republican rulers to decree his restoration to his professorial chair; but his claims were recognised too late, and he died without profiting by this intended favor, in 1798.

Volta, on the other hand, was called to Paris by Bonaparte as a man of science, and invested with honors, emoluments, and titles. The conqueror himself, indeed, was strongly interested by this train of research.⁴ He himself founded valuable prizes, expressly with a view to promote its prosecution. At this period, there was something in this subject peculiarly attractive to his Italian mind; for the first glimpses of discoveries of great promise have always excited an enthusiastic activity of speculation in the philosophers of Italy, though generally accompanied with a want of precise thought. It is narrated⁵ of Bonaparte, that after seeing the decomposition of the salts by means of the voltaic pile, he turned to Corvisart, his physician, and said, "Here, doctor, is the image of life; the vertebral column is the pile, the liver is the negative, the bladder the positive, pole." The importance of voltaic researches is not less than it was estimated by Bonaparte; but the results to which it was to lead were of a kind altogether different from those which thus suggested themselves to his mind. The connexion of mechanical and chemical action was the first great point to be dealt with; and for this purpose the laws of the mechanical action of voltaic electricity were to be studied.

It will readily be supposed that the voltaic researches, thus begun, opened a number of interesting topics of examination and discussion. These, however, it does not belong to our place to dwell upon at present; since they formed parts of the theory of the subject, which

³ *Biog. Univ.*, art. *Volta*, (by Biot.) ⁴ Becquerel, *Traité d'Electr.* t. i. p. 107.

⁵ *Ib.* t. i. p. 108.