Similarly the aged Gauss, twenty-four years later, listened with emotion when Riemann, in his celebrated dissertation, touched a string that had been vibrating in the master's soul for fifty years, unheard or unheeded by any other thinker.1 We can best understand the two ways of reasoning in natural objects, which found an expression in the controversy between Cuvier and Saint-Hilaire, if we read the account which Goethe himself subsequently published in a Berlin periodical: "Cuvier labours untiringly as a distinguisher, describing accurately what lies before him, and thus attains a command over a great breadth of facts. Geoffroy Saint-Hilaire, on the contrary, is silently exercised about the analogies of living creatures and their mysterious relations." 2 two men had worked as colleagues for thirty-eight years, Cuvier continuing and defining more clearly the classifying work of Linnæus, who, for example, had thrown all non-vertebrate animals into one class. This led him

to pass in the Academy between Cuvier and Geoffroy Saint-Hilaire, and which is of such importance to science.' This utterance of Goethe was so unexpected to me that I did not know what to say, and that for some minutes I experienced a complete cessation of my thoughts. 'The matter is of the greatest importance,' continued Goethe, 'and you have no idea what I feel concerning the news of the 19th July. We now have a mighty ally permanently in Geoffroy. But I also see from it how great is the interest of the scientific world in France in this matter, as, in spite of the frightful political excitement, the meeting took place in a crowded house. What is best is, that the synthetic treatment of nature, introduced by

Geoffroy in France, cannot again go back. . . . I have for fifty years laboured in this cause; first alone, then supported, and at last, to my great delight, excelled by congenial minds. . . . This event is for me of incredible value, and I rejoice rightly over the ultimate general victory of the cause to which I have dedicated my life, and which also is essentially my own."

¹ On this incident see the prefatory notice in Riemann's 'Mathematische Werke,' ed. Weber, Leipzig, 1875, p. 517; also the 13th chapter of this volume.

² Goethe in the 'Berliner Jahrbücher für Wissenschaftliche Kritik,' vol. ii., 1830, September, reprinted in Werke II. vol. vii. p. 167 sqq.