

istry, the consideration of chemical as related to other physical forces, such as gravitation, heat, or electricity, though it very greatly occupied the pioneers of chemical science in the early years of the century,—notably Berthollet and Gay-Lussac in France, Dalton and Davy in England, Berzelius in Sweden,—fell gradually into popular disfavour, so much so that even Faraday's electrolytic law had hardly any influence on the development of chemistry.<sup>1</sup> This one-sided direction of chemical reasoning and observation was still further promoted by the great practical and technical results which followed from the atomic conception, the ease with which processes worked out in the laboratory could be imitated on a large scale in the factory and the workshop. It was the increased power over matter and its manifold transformations which followed immediately in the wake of atomic chemistry that gave it its interest, notably when through the study of the carbon compounds—incorrectly termed organic chemistry—new industries of undreamt-of magnitude and importance were created, and when through chemical knowledge the older methods of metallurgy were rapidly superseded. To the popular mind the result is always more interesting than the process of research or of reasoning which leads up to it; the possession of the product than the knowledge of the procedure. The

viz., energy. That the correct idea contained in the phlogistic conception was not at once given up, but only gradually lost sight of, is seen from the fact that Lavoisier's first table of elements contained 'caloric' as one of the simple bodies. See

Kopp, 'Entwicklung der Chemie,' p. 209.

<sup>1</sup> On the causes of this see Helmholtz's Faraday Lecture ('Wissenschaftliche Abhandlungen,' vol. iii.) and Ostwald, 'Allgemeine Chemie,' 2nd ed., vol. ii. part 1, p. 530.