

sciences, in which all scientific researches are—without regard to nationality—reviewed, classified, and arranged in the most complete manner, according to the place which they occupy in the general development. Invaluable service has also been done in England by special Reports or Addresses, prepared by men of the greatest eminence—frequently at the request of the British Association—in which the position of special branches of science is explained, the work of the past summed up, the leading principles clearly brought out, and the unsolved problems placed prominently before the minds of young and aspiring workers.

In Germany during the first half of the century a reaction set in against the metaphysical treatment of scientific subjects, which had been exaggerated in the schools of Schelling and Hegel. Experimental research, following mainly the great French and English models, was next favoured, and through the establishment of laboratories and observatories, through voyages of discovery and the application of science to the industries, an enormous amount of detailed and minute knowledge was accumulated.¹ For a time—even within the limits

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continued to issue regularly since 1845 annual Reports under the title 'Fortschritte der Physik.' But it was only in 1868 that a similar annual was started in Berlin having reference to mathematics, under the title 'Fortschritte der Mathematik.' A 'Jahresbericht' on Zoology has appeared ever since 1879, and one on Botany since 1873.

¹ It was the age which compiled the great repositories of chemical knowledge. Such were Gmelin's 'Handbuch der Chemie' (1st ed., 1817. Translated into English by

the Cavendish Society, 1848), and the 'Handwörterbuch der reinen und angewandten Chemie' (edited by Liebig jointly with Poggendorf and Wöhler, 1837). The same age also set going and filled the volumes of Liebig's 'Annalen' (started by Hänle in 1823 under the title 'Magazin der Pharmacie,' it finally assumed the title of 'Annalen der Chemie und Pharmacie' under Liebig's editorship), of Poggendorf's 'Annalen der Physik und Chemie' (1824), and the 'Annales de Chimie et de Physique.'