

since Bacon and Newton had followed their own independent line of research, had to discover in the second decade of the century that Newton's great name was not a guarantee for the efficiency of his methods, which had been greatly developed and improved in the hands of Continental mathematicians. These improved methods were imported into England by three Cambridge graduates, Herschel, Babbage, and Peacock, who translated Lacroix's Treatise, and by doing so gave a great impetus to mathematical research in this country. Fifteen years later, students from all parts of the world flocked to the small University town of Giessen in Germany, thence to take home with them a knowledge of the new science and methods of Chemistry, taught in the laboratory of Liebig—methods previously used only in the private and inaccessible laboratories of learned investigators.¹ It will be in the memory of many how the philosophy of Auguste Comte, published between the years 1830 and 1840, remained without much influence in his own country, whereas, mainly through the writings of J. S. Mill and

32.
Continental
mathematical
methods
introduced
into Eng-
land by
Babbage,
Herschel,
and Pea-
cock.

33.
Liebig's
Laboratory.

34.
Comte's
philosophy
shown to his
own country
by an Eng-
lishman.

of the eighteenth century the metropolis of the exact sciences. Lalande, in writing to von Zach on January 26, 1798, remarks: 'The love of mathematica is daily on the increase, not only with us but in the army. The result of this was unmistakably apparent in our last campaigns. Bonaparte himself has a mathematical head, and though all who study this science may not become geometricians like Laplace and Lagrange, or heroes like Bonaparte, there is yet left an influence upon the mind which enables them to accomplish more than they could possibly have achieved without this training. Our mathematical schools

are good, and successfully accomplish their main object in the diffusion of mathematical knowledge.'" Compare also vol. i. p. 342, referring to 1804. Also vol. ii. p. 92, referring to the period 1820 to 1830. "Humboldt continued to regard Paris as the true metropolis of Science" (p. 70), and many other passages. See also Steffens, "Was ich erlebte," vol. x. p. 233, and what Goethe said to Eckermann on the contrast of Germany and Paris in the year 1827.

¹ See A. W. Hoffmann, 'The Life - Work of Liebig,' Faraday Lecture for 1875, p. 8.