

Goethe;¹ but they could hardly be encouraged and developed sufficiently without that strict training which is acquired through the routine of the class-room, or under the eye of a recognised authority.

14.
Scientific
periodicals.

The want of academic union and organisation, and the scattered situation of the many small centres of learning and culture in Germany, led, however, to the early development of those scientific periodicals which form such a characteristic feature in German literature. They were the medium for the exchange of ideas, and the collecting-ground for researches, in an age when exact science was not systematically taught at the Universities, and when such researches otherwise would have run the risk of being lost in obscurity or oblivion.

At the end of the eighteenth century Germany,

and almost the best of that valuable class of writers who have made science and art familiar by representing them in their essential spirit, unencumbered with technical details" ('Ency. Brit.,' vol. ix. p. 419). Forster lived in the period of transition from the thought of the eighteenth century to that of the nineteenth, and a study of his Life, Works, and Correspondence is a very good introduction to nearly all the great problems which then, especially on the Continent, troubled the minds of the greatest men. If he may be accused of want of patriotism, he is certainly to be admired for his freedom from national narrow-mindedness.

¹ It has taken nearly a century before the real value of Goethe's scientific ideas has been correctly gauged. His non-academic surroundings, his unscientific style, his antagonism to Newton, his mission as a poet—supposed in those days to be less realistic than we have

since become accustomed to consider it—all these circumstances contributed to the result that Goethe's scientific writings were not taken *au sérieux* by the naturalists of his age. Then came a period when men of science began to sift the wheat from the chaff; but even they have only tardily recognised that, more than in special discoveries or suggestions, his greatness lies in that general conception of Nature which was so foreign to his age, and which nevertheless is becoming more and more familiar and necessary to ours. See especially Helmholtz's valuable essays on Goethe as naturalist from the years 1853 and 1892 ('Vorträge,' vol. i., and address delivered at the meeting of the Goethe Society at Weimar, 1892), and the remarkable progress of his own views on this subject contained therein. We shall have ample opportunity of reverting to this subject.