8. English replies to Babbage,&c.

The answers to the challenges of Babbage and the Edinburgh Reviewer given by English writers themselves cannot on the whole be said to be very reassuring. One of them counts the scientific periodicals in England and in France, but omits to weigh the merit of their respective contributions. Another points to the 'Ladies' Diary,' in which many curious mathematical problems, far beyond the mere elements of science, are often to be met with. A third, whilst in general admitting the correctness of Babbage's strictures, draws attention to the 'Penny Magazine' and the 'Cabinet Cyclopædia' as counterparts in England of the Reports of Cuvier and Berzelius abroad. The true position was probably recognised by the founders of the British Association for the Advancement of Science about 1830, who saw that, be-

Foundation of the British Association.

most useful applications, is far less diffused in France than in England" (p. 12). "The principle of the division of labour [in science] is more acted upon in France than in England" (p. 14).

The movement, which originated in the circle to which Babbage belonged, was—as stated above, p. 42—to some extent copied from the German Association founded by Oken in 1822. The latter acquired a kind of European renown through the exertions of Humboldt in 1828, who succeeded in attracting a considerable number of celebrities—such as Gauss, Berzelius, Oerstedt, - who for themselves preferred a solitary to a "gregarious" mode of science. Babbage was a guest at this meeting at Berlin, and gave an account of it in an appendix to the 'Decline of Science.' A good account of the character and gradually declining influence of these German meetings will be found in Bruhns' 'Life of Hum-

boldt' (vol. ii. p. 127, &c., translation). They "degenerated after the usual German fashion into the unintellectual form of feasting." The British Association for the Advancement of Science, founded shortly afterwards on the 27th September 1831 at York, was the immediate outcome of a suggestion thrown out by Brewster at the end of a review in the 'Quarterly' of Babbage's 'Decline of Science.' He fully endorsed the latter's opinion, and was even more severe upon the universities, maintaining "that the great inventions and discoveries which have been made in England during the last century have been made without the precincts of our universities. In proof of this we have only to recall the labours of Bradley, Dollond, Priestley, Cavendish, Maskelyne, Rumford, Watt, Wollaston, Young, Davy, and Chevenix; and among the living to mention the names of Dalton, Ivory, Brown, Hatchett, Pond, Herschel,