

specially with the actual fact and the function of variation in the domain of living beings. He pushed the problem of variation and variability into the foreground, and discussed one of its main features—viz., its possible effect and results. Since his time the eye of every botanist, every zoologist, and every embryologist has been directed towards the variability, transition; and genesis of forms, to their history rather than to their portraiture, whereas before him it was mostly attracted by their seeming fixity and recurrence. Variations have been studied on the large and on the minute scale in geological strata at home and abroad, and the vexed question has been raised as to their causes and laws,—Darwin having been mainly occupied with their existence and operation, the results which they brought about, the gradual alterations of the forms of living things. On this side he tells us that he found an important clue through reading a book which had appeared at the very end of the eighteenth century, Malthus's 'Essay on the Principle of Population.'<sup>1</sup>

31.  
"Variation."

arose as simple varieties, and that the species of each genus were all descended from a common ancestor; but none of them gave a clue as to the law or the method by which the change had been effected. This was still 'the great mystery' (p. 6). "Darwin, by his discovery of the law of natural selection and his demonstration of the great principle of the preservation of useful variations in the struggle for life, has not only thrown a flood of light on the process of development of the whole organic world, but also established a firm foundation for all future study of nature" (p. 9).

<sup>1</sup> This essay appeared first in

1798, and in the enlarged and much improved form in which it is now known in 1803. Darwin seems to have come upon it accidentally. In his Autobiography ('Life,' vol. i. p. 83) he writes: "In October 1838—that is, fifteen months after I had begun my systematic inquiry—I happened to read for amusement 'Malthus on Population,' and being well prepared to appreciate the struggle for existence which everywhere goes on, from long-continued observation of the habits of animals and plants, it at once struck me that under these circumstances favourable variations would tend to be preserved, and unfavourable