

late Mr. Kirby, have always agreed to regard as mere varieties of the same species.

Mr. T. V. Wollaston, in treating of the variation of insects in maritime situations and small islands, has shown how the colour, growth of the wings, and many other characters, undergo modification under the influence of local conditions, continued for long periods of time; * and Mr. Brown has lately called our attention to the fact, that the insects of the Shetland Isles present slight deviations from the corresponding types occurring in Great Britain, but far less marked than those which distinguish the American from the European varieties.† In the case of Shetland, Mr. Brown remarks, a land communication may well be supposed to have prevailed with Scotland at a more modern era than that between Europe and America. In fact, we have seen that Shetland can hardly fail to have been united with Scotland after the commencement of the glacial period (see map, p. 279); whereas a communication between the north of Europe by Iceland and Greenland (which, as before stated, once enjoyed a genial climate), must have been anterior to the glacial epoch. A much larger isolation, and the impossibility of varieties formed in the two separated areas crossing with each other, would account, according to Mr. Darwin's theory, for the much wider divergence observed in the specific types of the two regions.

The reader will remember that at the commencement of the Glacial period there was scarcely any appreciable difference between the molluscous fauna and that now living. When therefore the events of the Glacial period, as described in the earlier part of this volume, are duly pondered on, and when we reflect that in the Upper Miocene period the living species of mollusca constitute only one third of the whole fauna, we see

* Wollaston, *On the Variation of Species, &c.* London, Van Voorst, 1856.

† Transactions of Northern Entomological Society, 1862.