

and the pasturage of the district. For example, what a difference in this respect one may perceive to exist between the bees of the Lüneburg heath and those of this country!" "Removing an old queen and substituting a young one of the current year is here an infallible mode of keeping the strongest stock from swarming and preventing drone-breeding; whilst the same means if adopted in Hanover would certainly be of no avail." I procured a hive full of dead bees from Jamaica, where they have long been naturalised, and, on carefully comparing them under the microscope with my own bees, I could detect not a trace of difference.

This remarkable uniformity in the hive-bee, wherever kept, may probably be accounted for by the great difficulty, or rather impossibility, of bringing selection into play by pairing particular queens and drones, for these insects unite only during flight. Nor is there any record, with a single partial exception, of any person having separated and bred from a hive in which the workers presented some appreciable difference. In order to form a new breed, seclusion from other bees would, as we now know, be indispensable; for since the introduction of the Ligurian bee into Germany and England, it has been found that the drones wander at least two miles from their own hives, and often cross with the queens of the common bee.⁶² The Ligurian bee, although perfectly fertile when crossed with the common kind, is ranked by most naturalists as a distinct species, whilst by others it is ranked as a variety: but this form need not here be noticed, as there is no reason to believe that it is the product of domestication. The Egyptian and some other bees are likewise ranked by Dr. Gerstäcker,⁶³ but not by other highly competent judges, as geographical races; he grounds his conclusion in chief part on the fact that in certain districts, as in the Crimea and Rhodes, they vary so much in colour, that the several geographical races can be closely connected by intermediate forms.

I have alluded to a single instance of the separation and

⁶² Mr. Woodbury has published several such accounts in 'Journal of Horticulture,' 1861 and 1862.

⁶³ 'Annals and Mag. of Nat. Hist., 3rd series, vol. xi. p. 339.