

*Crassatella*, *Corbis*, *Perna*, and *Plicatula*. Other forms are limited to one region of the sea, as the *Trigonia* to parts of Australia, and the *Concholepas* to the western coast of South America, where the shells differ almost entirely from those on the eastern coast of the same continent. Such being the case, it is not wonderful that we find an entire difference between the South American shells and those of the Indian archipelago in the same latitude. On the shores of many of the islands of the South Pacific peculiar species have been obtained. Péron and Lesueur remark, that the *Haliotis gigantea* of Van Diemen's Land, and the *Phasianella*, diminish in size as they follow the coasts of New Holland, northwards to King George's Sound, and entirely disappear beyond them.\* But we are as yet by no means able to sketch out the submarine provinces of shells, as the botanist has done those of the terrestrial, and even of the subaqueous plants. There can be little doubt, however, that the boundaries in this case, both of latitude and longitude, will be found in general well defined. The continuous lines of continents, stretching from north to south, prevent a particular species from belting the globe, and following the direction of the isothermal lines. The inhabitants of the West Indian seas, for example, cannot enter the Pacific, without passing round through the inclement climate of Cape Horn.

Currents also flowing permanently in certain directions, and the influx at certain points of great bodies of fresh water, limit the extension of many species. Those which love deep water are arrested by shoals; others, fitted for shallow seas, cannot migrate across unfathomable abysses. The nature also of the ground has an important influence on the testaceous fauna, both on the land and beneath the waters. Certain species prefer a sandy, others a gravelly, and some a muddy sea-bottom. On the land, limestone is of all rocks the most favourable to the number and propagation of species of the genera *Helix*, *Clausilia*, *Bulimus*, and others. Professor E. Forbes has shown as the result of his labours in dredging in the Ægean Sea, that there are eight well-marked regions of depth, each characterized by its peculiar testaceous fauna. The first of these, called the littoral zone, extends to a depth of two fathoms only; but this narrow belt is inhabited by more than one hundred species. The second region, of which ten fathoms is the inferior limit, is almost equally populous; and a copious list of species is given as characteristic of each region down to the seventh, which lies between the depths of 80 and 105 fathoms, all the inhabited space below this being included in the eighth province, where no less than 65 species of Testacea have been taken. The majority of the shells in this lowest zone are white or transparent. Only two species of Mollusca are common to all the eight regions, namely, *Arca lactea* and *Cerithium lima*.†

*Great range of some species.*—Some few species of shells have an

\* Ann. du Mus. d'Hist. Nat., tom. xv.

† Report to the Brit. Assoc. 1843, p. 130.