

the northernmost station in comparatively shallow water (Station 120, 675 fathoms); this specimen is, however, distinctly smaller than any of those obtained in deeper water at Stations 146 and 147.

It must be remembered, of course, that Gerstaecker's statements as well as mine depend after all upon very few facts; it would be extremely rash at present to insist upon any such generalisation as has been put forward by Gerstaecker in the work already quoted, but it seems worth while to call the attention of naturalists to the facts such as they are.

The remaining deep-sea species were dredged close to the east coast of South America; *Serolis gracilis* from a single Station (Station 120), off Pernambuco, in 675 fathoms, and *Serolis neæra* from two Stations close together and a little farther to the south, off Buenos Ayres, at Stations 320 and 318, in 600 and 2040 fathoms respectively; 2040 fathoms is the greatest depth which the genus is known to inhabit.

It appears therefore that the deep-sea forms of the genus, although not absolutely confined to the neighbourhood of the great continents, attain to their greatest development both in number of species and individuals in this situation, and are never found at any distance from some land—continent or oceanic island.

The genus *Serolis* has evidently originated in the southern hemisphere, probably round the shores of the south polar continent, and has thence spread northwards, its range being apparently limited by temperature; accordingly we find that in every case those species which occur near the equator (*Serolis gracilis*, *Serolis antarctica*, *Serolis neæra*) occur there in deep water where the conditions, as far as temperature is concerned, are not so different from the conditions which must obtain on the shores of Kerguelen and Patagonia; the one fact, however, which seems to militate against such an hypothesis is the occurrence of *Serolis carinata* in shallow water as far north as San Diego in California. It must be remembered, however, that the temperature of that portion of the Pacific is not so high as might be expected from its latitude; a cold current from the Antarctic area sweeps along the western shores of South America, and the existence of this current has perhaps rendered it possible for *Serolis carinata* (or its ancestors) to migrate farther to the north than would be possible, for example, on the eastern shores of the same continent; moreover, a glance at the map of the world will show that here alone is there any direct land communication between the area occupied by the shallow-water species of the genus *Serolis* in the southern hemisphere and the more northern regions; elsewhere tracts of deep water have possibly aided in preventing their access to the equatorial regions and the northern hemisphere, though it seems more probable, from what has already been said, that the distribution of the group has been more restrained by conditions of temperature than by any other cause.

Comparing the deep-sea with the shallow-water species of *Serolis*, it appears (1) that the genus is pre-eminently a shallow-water genus, the number of deep-sea forms being