

quite definite characters; on the other hand, it is quite impossible to detect any such differences between the species of the genus which range from Patagonia through Kerguelen to New Zealand, and in some cases, as already pointed out, there is an absolute identity. It would be rather premature to draw any wide conclusions from the distribution of a single genus, but the facts recorded here seem to favour the division of the southern hemisphere into two regions—(1) an Australian, (2) an Antarctic extending from Patagonia to New Zealand. Other observers have commented on the close relationship that subsists between the littoral faunas of Patagonia and New Zealand.

“The most interesting species of the genus *Serolis* that were dredged by the Challenger are four from deep water, all of which are new to science. The genus was not known to range into deep water until the publication of Dr. v. Willemoes Suhm's notes on the Crustacea observed during the voyage.<sup>1</sup>

“It is a remarkable fact that none of these deep-sea species were dredged north of the Equator; it will be interesting to note whether further dredgings show that, in common with the majority of deep-sea animals, they are comparatively unrestricted in their range.

“*Serolis bromleyana*, the largest of the deep-sea species, is figured, natural size, in the accompanying woodcut (fig. 325); the drawing represents the male specimen dredged at Station 156, near the Antarctic Ice Barrier, in 1975 fathoms. This species was met with again considerably to the north, off the east and west coasts of New Zealand, in 400, 700, and 1100 fathoms; it has already been pointed out by Dr. Gerstaecker<sup>2</sup> that this species, as well as *Serolis antarctica*, which ranges from off the coast of South America just under the Equator (400 fathoms) to the neighbourhood of the Crozets (1600 fathoms) appears to inhabit deeper water in the more southern latitudes; and there are other instances adduced to show that certain species which are widely distributed are found in shallower water towards the Equator, and in deeper water towards the poles.

“It is worthy of note that in the two instances just mentioned the examples from deeper water and more southern latitudes are larger than those from shallower water and nearer the Equator.

“The third deep-sea species, *Serolis neara*, was dredged at Stations 320 and 318; at the latter from a depth of 2040 fathoms, the greatest which the genus is known to inhabit. The remaining deep-sea species, *Serolis gracilis*, was dredged at Station 120 in 675 fathoms. None of the deep-sea species were found to inhabit shallow water also, nor do any of the shallow-water species of the genus pass the 300 fathom limit; the *Serolis*-faunas of deep and shallow water are quite distinct, but it is impossible to distinguish the former by any definite characters which would serve to unite them into

<sup>1</sup> Suhm, *Proc. Roy. Soc. Lond.*, vol. xxiv. p. 590, 1870.

<sup>2</sup> Gerstaecker, *Bronn's Klassen u. Ord. d. Thierreichs*, Bd. v. Abth. 2, p. 247, 1883.