

the area is much more restricted. For instance, large hauls were obtained at Station 246 in the North Pacific, and at many stations in the North Atlantic explored by the "Porcupine," "Valorous," "Triton," and "Knight Errant." The greater number of animals on the sea-floor in the Southern Ocean, the North Atlantic and Pacific, may, however, be connected with migrations of Benthos animals equatorwards from polar regions.

It is usual to assume that there is a universal and peculiar fauna of great antiquity in the deep sea. An examination of the statistics given in the foregoing pages does not seem to confirm this opinion. Let us further compare some of the results of deep-sea trawlings in different regions of the ocean.

COMPARISON OF  
THE SPECIES CAP-  
TURED AT SEVERAL  
DEEP-SEA STA-  
TIONS, IN VARIOUS  
REGIONS OF THE  
OCEAN.

In 1850 fathoms in mid-equatorial Atlantic (Station 106), and in 2425 fathoms mid-equatorial Pacific (Station 271), both on Globigerina Ooze, 66 species were obtained, 38 species in the first and 29 in the second Station, but only one species—the little *Discina atlantica*—was common to the two localities. The genus *Discina* ranges from the Cambrian to the present time.

In 1875 fathoms in the Northern Pacific (Station 237), and in 2050 fathoms (Station 246) also in the North Pacific, and in nearly the same latitude (35° N.), but separated from each other by about 1790 miles, 100 species were obtained, 57 species in the first and 48 in the second Station, and of these only five species were common to the two stations.

In 1375 fathoms in the Southern Ocean (Station 146), and in 1600 fathoms (Station 147) also in the Southern Ocean, and in nearly the same latitude (46° S.), but separated by only 122 miles, 145 species were obtained, 78 species in the first and 89 in the second Station, 22 of which were common to the two stations.

There is not one species common to the six above-mentioned stations. If we take the above two tropical stations as one group, the two Northern Pacific stations as a second, and the two Southern Ocean stations as a third group, then of the 290 species recorded from all three groups only two species—*Macrurus armatus* and *Eucopia australis*—or 0·7 per cent., are common to all the three groups. In the Northern Pacific and equatorial groups 160 species were obtained, of which only 6 species, or 3·7 per cent., were common to these northern and tropical Stations. In the Southern Ocean and equatorial groups 208 species were obtained, of which only 4 species, or 1·9 per cent., were common to these southern and tropical Stations. In the Northern Pacific and Southern Ocean groups 235 species were obtained, of which 10 species, or 4·2 per cent., were common to these Stations from high northern and high southern latitudes. *Discina atlantica*, *Hyocrinus bethellianus*, *Hyalonema (Stylocalyx) depressum*, *Bugula reticulata*, *Liponema multiporum*, which live attached to the bottom, are among the species common to two or more of the above Stations, but the majority of the species common to two or more Stations belong to Fishes and Crustaceans which move freely over the