

of 28° ; but in the vicinity of the continents it varies greatly from this, as explained beyond in the course of remarks on the geographical distribution of reefs. It is to be observed that the temperature of 68° F. is a temporary extreme—not that under which the polyps will flourish. Except for a short period, the waters near the limits of the coral seas are much warmer; the mean for the year is about $73\frac{1}{2}^{\circ}$ F. in the North Pacific, and 70° F. in the South; from which it may be inferred that the summer mean would be as high at least as 78° and 74° F.

Over the sea thus limited coral reefs grow luxuriantly, yet in greatest profusion and widest variety through its hotter portions. Drawing the isocryme of 74° F. (that is, the isotherm for 74° F. as the mean for the coldest month) around the globe, the coral-reef seas are divided, both north and south of the equator, into two regions, a *torrid*, and a *subtorrid*, as they are named by the author (see Chart beyond, from the Author's Report on Crustacea); and these correspond, as seen below, to a marked difference in the corals which they grow.

Further, the torrid region should be divided, as the distribution of corals show, into a *warmer* and a *cooler* torrid, the isocryme separating the two being probably that of 78° .

But, before considering the facts connected with the geographical distribution of existing coral-reef species, it is important to have a correct apprehension of what are these reef species as distinct from those of colder and deeper seas.

The coral-reef species of corals are the following:—

1. In the *Astræa* tribe (*Astræacea*), all the many known species.

2. In the *Fungia* tribe (*Fungacea*), almost all known species, the only exceptions at present known being two free species found much below coral-reef depths, in the Florida seas, by C. F. de Pourtales, one of them, at a depth of 450 fathoms.

3. In the *Oculina* tribe (*Oculinacea*), all of the *Orbicellids*; part of the *Oculinids* and *Stylasterids*; some of the *Caryophyllids*, *Astrangids* and *Stylophorids*; all of the *Pocilloporids*.