

The oldest fauna is found in the band *b*. It is littoral, and its deep-sea equivalent is not known, but its crustaceans differ from those of the next band. The connecting link between the fauna of this band and that of the band *c* above it, is found chiefly in the brachiopods and pteropods. In the fauna of *b* are two new types of bivalve crustaceans. The solitary trilobite known, *Agraulos* (?), is notable for the great development of the axial lobe of the cephalic shield and thorax, and of the close approximation of the eyes to the glabella. In this feature it resembles *Conocoryphe lyellii* of the Welsh Cambrian strata. Two species of the pteropods display the remarkable feature, in this class, of a camerated shell, and were apparently adapted to resist the accidents of life on a sandy sea-shore. As for the brachiopods, we find among them only the most primitive types—*Linnarssonina*, *Lingulella*, *Acrothele* and *Acrotreta*.

On passing to the beds of band *c* a host of new forms present themselves, among which are two types of sponges, *Protospongia* (?) and an undescribed genus. The cystidian, *Eocystites*, also appears at this horizon. To the genera of brachiopods referred to as found in band *b* are now added three species of the genus *Orthis*, and another *Lingulella* takes the place of that found in band *b*. Among the gasteropods are several genera: *Stenotheca*, *Scenella*, *Harttia*, etc. The pteropods are well represented in hyalithoid species of three different types. The bivalve crustaceans have a fair representation; those of the underlying band are not found but new species appear, including those of the genera *Primitia*, *Leperditia*, etc. The trilobites are represented by the most ancient, genera:—*Agnostus* has four species, *Microdiscus* two, *Ptychoparia* five or more, *Conocoryphe* three, an ancient type of *Ctenocephalus* one, and *Paradoxides* four; all four of this last genus have continuous eyelobes.

Passing to the beds of the new band, viz., *d*, a change in the fauna is at once apparent, though a connection with the preceding fauna is maintained by the presence of the undescribed sponge, all of the pteropods, and two familiar forms of brachiopods—*Linnarssonina* and *Acrothele*; there are also varieties of the *Agnosti*, the *Ptychopariæ*, and of *Protospongia* (?) of band *c*. On the other hand, quite a number of new species appear at this horizon, among which may be named a *Dendrograpsus* (?), another *Lin-*