

Astarte (Crassina, Lam.); species common to upper and lower crag. Astarte Omalii, Lajonkairo; Syn. A. bipartila, Sow. Min. Con. T. 521, f. 3; a very variable species, most characteristic of the Coralline Crag, Suffolk.

volutes of the torrid zone, and may, like the living Voluta Magellanica, have been fitted for an extra-tropical climate.



Fig. 157.



Fig. 158.



Voluta Lamberil, young individ., Cor. and Red Crag.

Pyrula reticulata, Lam.; Coralline Crag, Ramsholt. Temnechinus excavatus, Forbos; Temnopleurus excavatus, Wood; Cor. Crag, Ramsholt.

The occurrence of a species of Lingula at Sutton (see fig. 160) is worthy of remark, as these Brachiopoda seem now confined to more equatorial latitudes; and the same may be said still more decidedly of a species of Pyrula, supposed by Mr. Wood to be identical with *P. reticulata* (fig. 157), now living in the Indian Ocean. A genus also of echinoderms, called by Professor Forbes Temnechinus (fig. 158), is peculiar to the Red and Coralline Crag of Suffolk. The only species now living occur in the Indian Ocean. Whether, therefore, we may incline to the behef that the mean annual temperature was higher or lower than now, we may at least infer that the climate and geographical conditions were by no means the same at the period of the Suffolk Crag as those which now prevail in the same region.

One of the most interesting conclusions deduced from a careful comparison of the shells of these British Older Pliocene strata and the fauna of our present seas, has been pointed out by Prof. E. Forbes. It appears that, during the glacial period, a period intermediate, as we have seen, between that of the crag and our own time, many shells, previously established in the temperate zone, retreated southwards to avoid an uncongenial climate. The Professor has given a list of fifty shells which inhabited the British seas while the Coralline and Red Crag were forming,