Palæozoic time, present on the whole a great contrast to these in their comparatively diminished numbers, and in the final disappearance of some of the ancient genera. Thus Athyris and Retzia, which survived from Upper Silurian into Triassic time, then disappeared; Cyrtina, which began in the Devonian period, likewise died out in the Triassic seas, while its contemporary Spiriferina continued to flourish until the time of the Lias. Although species of Spiriferina, Athyris, and Retzia are common, the two most conspicuous genera of brachiopods are Terebratula and Rhynchonella, and they continued to hold this position during the whole of the Mesozoic ages.

While the brachiopods were waning, the lamellibranchs were taking a more prominent place in the molluscan fauna, and in the Triassic seas they had already established the predominance which they have maintained down to the present day. One of the most distinctively Triassic genera is Myophoria, of which there is a great abundance and variety of species. Pecten, Daonella, Hinnites, Monotis, Lima, Gervillia, Anoplophora, Avicula, Cardium, Cardita, Megalodon, Nucula, Cassianella, Pullastra (Fig. 379, c), likewise occur throughout the system. Among gasteropods we find representatives of some Palæozoic types (Naticopsis, Loxonema, Macrocheilus, Murchisonia), together with genera characteristic of Secondary time, and some of which even continue to live now (Turritella, Cerithium, Chemnitzia, Solarium).

In no feature is the contrast between the palæontological poverty of the German and the richness of the Alpine Trias so marked as in the development of cephalopods in the respective regions. In the former area the nautili are represented chiefly by a few species of Nautilus (N. bidorsatus,