

Fusulina with Carboniferous brachiopods (*Productus cora*, *P. semireticulatus*, *P. lineatus*, *Athyris Royssii*, *Spirifer striatus*). The cephalopods are numerous and include the ammonoid types (*Cyclolobus Arcestes*, *Medlicottia*, *Popanoceras*, *Xenodiscus*), as well as many Nautili, *Orthoceratites*, and *Gyroceratites*. The gasteropods include forms of *Bellerophon*, *Euomphalus*, *Holopella*, *Phasianella*, and *Pleurotomaria*. Lamellibranchs are abundantly represented by such genera as *Allorisma*, *Schizodus*, *Avicula*, *Aviculopecten*, and *Pecten*, but also with others of a distinctly Mesozoic character, as *Lima*, *Lucina*, *Loripes*, *Cardinia*, *Astarta*, and *Myophoria*. Yet with these evidences of a newer facies of molluscan life it is interesting to notice the extraordinary variety and abundance of the brachiopods, including ancient genera such as *Productus* (20 species), *Chonetes*, *Athyris*, *Orthis*, *Leptæna*, and *Streptorhynchus*, mingled with a number of new genera first met with here (*Hemiptychina*, *Notothyris*, *Lyttonia*, *Oldhamia*, etc.). Though the general aspect of this fauna is so unlike that of the Permian rocks of central Europe, the appearance of a number of Zechstein species links the limestones of northern India with the European tract. Among these are *Camarophoria humbletonensis*, *Strophalosia excavata*, *S. horrescens*, *Spiriferina cristata*.

This oceanic type of deposit, however, does not seem to extend southward across the Indian peninsula. South of the line of the Narbada River a totally different series of sedimentary formations occurs. In that southern region the lower and middle Mesozoic marine rocks of other countries, and probably also the upper part of the Palæozoic series, are represented by a vast thickness of strata, chiefly sandstones and shales, which are probably almost entirely of fluvial origin. To this great fresh-water accumulation the name of Gondwana system has been given by the Geological Survey of India. The lower parts of the system (Talchir and Damuda series) may perhaps be paralleled with the Permian rocks of Europe. The exceedingly coarse Talchir conglomerates contain blocks which sometimes show smoothed and striated faces, and have been compared with those of the boulder-clay as evidences of ancient glacial action in India. Among the overlying sandstones and carbonaceous layers ferns (*Gangamopteris*, *Glossopteris*, *Neuropteris*) and *Voltzia* are found. The Damuda series, estimated to be 10,000 feet thick, contains *Glossopteris*, *Gangamopteris*, *Schizoneura*, *Vertebraria*, and *Archegosaurus*. The Panchet series