

29. MARINE AND FRESH-WATER SHELLS OF THE TERTIARY STRATA. — So numerous are the shells of the tertiary epoch, already determined by naturalists, that they exceed one-half of the known living species, amounting to nearly three thousand. We have already seen that some of the strata are almost entirely composed of these remains in a broken and compressed state: at Newhaven, in Sussex, many seams in the argillaceous beds wholly consist of shell-dust. In other localities the shells occur in the most perfect state; and Grignon, a few leagues from Paris, has long been celebrated for its beautiful fossils, hundreds of species of shells peculiar to the older tertiary strata having been collected in one spot alone: these belong to the *Calcaire grossier*, and many of the species occur in the London and Hampshire basins, and Bognor rocks. I have selected a few specimens, from those in my possession, to convey an idea of their usual characters and appearance. (Tab. 38.)

Although, in mentioning the names of these shells, I do not expect that any but the scientific inquirer will endeavour to fix them on the memory, yet it is useful to point out to you the characters which prevail in these tertiary beds; for, as I have already stated, certain fossils are peculiar to certain strata, and the experienced geologist can often, at a glance, determine the relative antiquity of a deposit by an examination of a few species of shells. The whole of these forms must be familiar to you,