

CHAPTER XI.

MARKINGS, FOOTPRINTS AND FUCOIDS.

I BELIEVE my attention was first directed to the markings made by animals on the surfaces of rocks, when travelling with the late Sir Charles Lyell in Nova Scotia, in 1842. He noticed with the greatest interest the trails of worms, insects, and various other creatures, and the footprints of birds on the surface of the soft red tidal mud of the Bay of Fundy, and subsequently published his notes on the various markings in these deposits in his "Travels in North America," and in a paper presented to the Geological Society of London. I well remember how, in walking along the edge of the muddy shore, he stopped to watch the efforts of a grasshopper that had leaped into the soft ooze, and was painfully making a most complicated trail in his effort to escape. Sir Charles remarked that if it had been so fortunate as to make these strange and complicated tracks on some old formation now hardened into stone and buried in the earth, it might have given occasion to much learned discussion.

At a later period I found myself perplexed in the study of fossil plants by the evident errors of many palæobotanists unacquainted with modern markings on shores, in referring all kinds of mere markings to the vegetable kingdom, and especially to the group of fucoids or seaweeds, which had become a refuge for destitute objects not referable to other kinds of fossils. It thus became necessary to collect and study these objects, as they existed in rocks of different ages, and to com-