

vasion. Their lower tiers of trunk bear the mark of the Roman axe, and, in some instances, the sorely wasted axe itself—a narrow, oblong tool, somewhat resembling that of the American backwoodsman—has been found sticking in the buried stump. Some of our other mosses are of still more modern origin: there exist Scottish mosses that seem to have been formed when Robert the Bruce felled the woods and wasted the country of John of Lorn. But of the others, not a few have palpably owed their origin to violent hurricanes, such as the one which on this occasion ravaged the Hill of Cromarty. The trees which form their lower stratum are broken across, or torn up by the roots, *and their trunks all lie one way*. Much of the interest of a science such as geology must consist in the ability of making dead deposits represent living scenes; and from this hurricane I was enabled to conceive, pictorially, if I may so express myself, of the origin of those comparatively recent deposits of Scotland which, formed almost exclusively of vegetable matter, contain, with rude works of art, and occasional remains of the early human inhabitants of the country, skeletons of the wolf, the bear, and the beaver, with horns of the *bos primigenius* and *bos longifrons*, and of a gigantic variety of red deer, unequalled in size by animals of the same species in these later ages.

Occasionally I was enabled to vivify in this way even the ancient deposits of the Lias, with their vast abundance of cephalopodous mollusca,—belemnites, ammonites, and nautili. My friend of the Cave had become parish schoolmaster of Nigg; and his hospitable dwelling furnished me with an excellent centre for exploring the geology of the parish, especially its Liasic deposits at Shandwick, with their huge gryphites and their numerous belemnites, of at least two species, comparatively rare at Eathie,—the *belemnite abbreviatus* and *belemnite elongatus*. I had learned that these curious shells once formed part of the internal framework of a mollusc more nearly akin to the cuttle-fishes of the present day than aught else that now exists; and the cuttle-fishes—not rare in at least one of their species (*loligo vulgare*) in the Frith of Cromarty