

into rich brown loam. Hence they present a curious blending of bright green-sward with bare lichen-crustcd or brown crag. The numerous parallel joints in these rocks afford pathways for rain, springs, and frosts. The texture of the masses, too, varies indefinitely ; sometimes it is so firm and compact, that on the bare weather-beaten surface, the black titaniferous iron crystals glance in the sun, while in other places it is decayed into a mere loose yellow or brown sand. Between these two extremes, every variety of hardness may be seen, and hence probably the hummocky aspect of the ground over which these rocks prevail. The diabases and other eruptive rocks intruded into the Carboniferous sandstones and shales protrude in steep-fronted crags, such as Stirling Rock, Binny Craig, Salisbury Crags, or the rock on which Edinburgh Castle stands. The soft surrounding and overlying strata have been worn away, and the hard igneous rock now towers above the low grounds. Among the solitary eminences of this kind, two of the most striking are sea-girt crags—Ailsa Craig, which rises so majestically in the midst of the Firth of Clyde, and the Bass Rock (Fig. 81), which guards the entrance of the Firth of Forth. It is to the effects of denudation that the well-known form of hill called 'crag and tail' is due. The worn edge of the eruptive mass projects as a 'crag,' and the strata which rest upon it, though swept off the top of the eminence, are often preserved on the declivity behind, and form in this way a 'tail' (Fig. 82).

Around Edinburgh, where these features were first noticed, the crag usually faces the west, as in Salisbury Crags, Calton Hill, and Castle Rock, because the escarpment or outcrop of the rocks is in that direction, and consequently any rock which stood out above the others would naturally give rise to an eminence, steep on the west