

run into one another, as the toes approach the point of convergence: but they also sometimes stop short of that point, as if the animal had not sunk deep enough to allow the heel to make an impression. Nay; at that point the stone is in some cases irregularly raised, as if the weight of the animal had caused the sand or mud to crowd upwards in the rear of the step. In a few instances, also, behind this slight elevation, there is a depression as if a knobbed heel had sunk slightly into the yielding mass.

In a large number of instances, also, there is a remarkable appendage to the hind part of the impression. There radiates from it in the rear, in the larger tracks to the distance of several inches, the apparent impression of stiff hairs, or bristles. The drawings appended, will convey as good an idea of this appearance, as I can give.

In all cases where there are three toes pointing forward, the middle toe is the longest; sometimes very much so. In a majority of cases, the toes gradually taper, more or less to a point: but in some most remarkable varieties they are thick and somewhat knobbed, and terminate abruptly.

In the narrow toed impressions, distinct claws are not often seen, although sometimes discoverable. But in the thick toed varieties, they are often very obvious. Much, however, in respect to this appendage, depends upon the nature of the rock. If it be composed of fine clay, the claws are usually well marked. And then again, if we chance to cleave the rock a little above, or a little below the layer, on which the animal originally made the impression, the claws will be very likely not to be visible; as I shall show more clearly farther on.

If we lift out of its bed a portion of the rock, several inches thick, on which one of these impressions exists, and break it so that the fracture shall pass across the toes, we shall see on the edge, the successive layers of the rock bent downward, often two, three, or even four inches in thickness. If we carefully cleave open the specimen thus raised, on one face we shall have a ternary depression, as has been described; and on the other face, a correspondent figure, projecting more or less, sometimes in high relief. And these specimens *in alto relievo* often give us a better idea of the structure of the foot that made the impressions, than those that are depressed. For often it is difficult to cleave a specimen so perfectly, that the portions of the rock which fills the depression, shall all be got out; and in do-