

on the contrary, it has a very peculiar roughness which adapts it to feeling. A provision for friction, as opposed to smoothness, is a necessary quality of some parts of the skin; thus the roughness of the cuticle has the advantage of giving us a firmer grasp, and a steadier footing. Nothing is so little apt to slip as the thickened cuticle of the hand or foot. In the hoofs of animals, as might be expected, this structure is further developed. The chamois, ibex, or goat, steps securely on the ledges of rocks and at great heights, where it would seem impossible to cling. On the pads or cushions of the cat, the cuticle is rough and granular; and in the foot of the squirrel, indeed of all animals which climb, those pads covered with the peculiar texture of the cuticle, give security in descending, as their claws enable them to grasp and cling.

In concluding this section, we perceive that the organ of touch consists of nerves appropriated to receive the impressions of bodies which are capable of offering resistance. Fine filaments of those nerves, wrapt up in delicate membrane with their accompanying arteries and veins, project from the true skin into corresponding grooves or foramina of the cuticle. They are not absolutely in contact with the cuticle, but are surrounded with a semi-fluid matter. By this fluid and by the cuticle they are protected, at the same time that they are sensible