

agent appears in both instances to be an acid, which here is probably the oxalic, acting upon the carbonate of lime, and producing the gradual excavation of the rock. This view is confirmed by the observation that the same species of lichen, when attached to rocks which are not calcareous, remains always at the surface, and does not penetrate below it.

A caustic liquor is sometimes collected in vesicles, situated at the base of slender hairs, having a canal which conducts the fluid to the point. This is the case with the *Nettle*. The slightest pressure made by the hand on the hairs growing on the leaves of this plant, causes the fluid in their vesicles to pass out from their points, so as to be instilled into the skin, and occasion the well known irritation which ensues. M. De Candolle, junior, has ascertained, by chemical tests, that the stinging fluid of the nettle is of an alkaline nature. In some species of this genus of plants, the hairs are so large that the whole mechanism above described is visible to the naked eye. This apparatus bears a striking resemblance to that which exists in the poisonous teeth of serpents, and which is hereafter to be described.

As the resinous secretions resist the action of water, we find them often employed by nature as a means of effectually defending the young buds from the injurious effects of moisture; and for a similar purpose we find the surface of many plants covered with a varnish of wax, which is another secretion belonging to the same class: thus, the *Ceroxylon*, and the *Iriartea* have a thick coating of wax, covering the whole of their stems. Sometimes the plant is strewed over with a bluish powder, possessing the same property of repelling water: the leaves of the *Mesembryanthemum*, or Fig-marigold, of the *Atriplex*, or Orache, and of the *Brassica*, or Cabbage, may be given as examples of this curious provision. Such plants, if completely immersed in water, may be taken out without being wetted in the slightest degree; thus presenting us with an analogy to the plumage of the cygnet, and other aquatic birds, which are rendered completely water-proof by an oily secretion spread over their