

it. The hair, growing by depositions from the inside of the capsule, which forms the outer part, *o*, of the shaft, and from the outside of the pulp, which forms its inner or central part, *i*, is forced upwards till it has pierced the skin; in the course of its passage a canal is formed for it in the skin itself, and continuous with that which encloses the bulb; and the course of this canal is generally oblique. In the elephant, where the thickness and density of the hide, present considerable obstacles to the passage of the hairs through it, we may discover, on minute examination, many hairs which have only penetrated a certain way, as shown at *b*, without ever succeeding in reaching the surface.

An opinion has been very commonly entertained that each hair, on its protruding from underneath the cuticle, *e*, at the point *q*, carries up along with it a portion of this outward integument, which, stretching as the hair increases in length, forms over it a very fine external tunic. But later observations have shown that this is not the case, and that there is simply an adhesion of the edge of the cuticle to the origin of the hair, without any accompanying prolongation; so that if the whole bulb be destroyed, and its pulp absorbed, the hair may be detached by the slightest force.

From this account it will be seen that a hair is, in its origin, tubular; the inner part being occupied by the pulp. But as the pulp extends only to that portion of the hair which is in a state of growth, it never rises above the surface of the skin; and the cavity in the axis of the hair is either gradually obliterated, or is filled with a dry pith, or light spongy substance, probably containing air. After a certain period, the bulb diminishes in size, from the collapse of the vessels, whose powers of supplying nutriment become exhausted. The first deficiency in its nourishment appears in the cessation of the deposite of colouring matter, and the hair in consequence becomes gray. After a time, the vessels becoming quite impervious, the bulb shrivels, the hair is detached, and the canal which its root occupied in the skin becomes obliterated.