

last remnant of the bulb is seen in the slender ligament which passes through the lower orifice, and preserves the attachment of the feather to the skin. In process of time, this also decays, and the whole feather is cast off, preparatory to the formation of another, which, in due season, is to replace it. All the feathers, are in general, moulted annually, or even at shorter periods; and the same complicated process is again begun and completed by a new matrix produced for the occasion, every time a new feather is to be formed.

It is impossible, on reviewing these curious facts, not to be struck with the admirable art and foresight which are implied in all this long and complicated series of operations. While the bird was thus nourished by the fluids of the egg, the ground had already been prepared for its future plumage, and for the formation of instruments of flight. A temporary investment of down is in readiness to shelter the tender chicken from the rude impressions of the air, and an apparatus is preparing for the construction of the most refined instruments for clothing and for motion: first, the scaffolding, as it may be called, is erected, by the help of which each portion is built up in succession, and in proper order. Nature's next care is to construct the vane, which is the part of the feather most essential to its office; and then to form the shaft to which the vane is to be affixed, and from which it receives its support: lastly, she forms the barrel of the quill, which is prolonged for the purpose of converting it into a lever of sufficient length for the mechanical office it has to perform. In proportion as each structure is finished, she neglects not to remove the scaffolding which had been set up as a temporary structure; the membranes, with all their partitions, are carried away, the vascular pulp of the bulb is absorbed, and its place supplied by air, thus securing the utmost lightness, without any diminution of strength. Is it possible for any rational mind, after meditating upon these facts, to arrive at the persuasion that they are all the mere results of chance!