must require a union of strength and flexibility in the parts intended for extensive motion, and for being acted upon by powerful moving forces.

The animal as well as the vegetable fabric is necessarily composed of a union of solid and fluid parts. Every animal texture appears to be formed from matter that was originally in a fluid state; the particles of which they are composed having been brought together and afterwards concreting by a process, which may, by a metaphor borrowed from physical science, be termed animal crystallization. Many of those animals, indeed, which occupy the lowest rank in the series, such as *Medusæ*, approach nearly to the fluid state; appearing like a soft and transparent jelly, which, by spontaneous decomposition after death, or by the application of heat, is resolved almost wholly into a limpid watery fluid.* More accurate examination, however, will show that it is in reality not homogeneous, but that it consists of a large proportion of water, retained in a kind of spongy texture, the individual fibres of which, from their extreme fineness and uniformity of distribution, can with difficulty be detected. Thus, even those animal fabrics which on a superficial view appear most simple, are in reality formed by an extremely artificial and complex arrangement of parts. The progress of development is continually tending to solidify the structure of the body. In this respect the lower orders of the animal kingdom, even when arrived at maturity, resemble the conditions of the higher classes at the earliest stages of their existence. As we rise in the scale of animals, we approximate to the condition of the more advanced states of development which are exhibited in the highest class.

Great efforts have been made by physiologists to discover the particular structure which might be considered as the simplest element of all the animal textures; the raw material, as it were, with which the whole fabric is wrought:

* Thus a Medusa, weighing twenty or thirty pounds, will, by this sort of general liquefaction, be found reduced to only a few grains of solid matter. Péron, Annales du Musée, tom. XV. p. 43. See also a memoir by *Quoy* and *Gaimard*, Annales des Sciences Naturelles, tom. I. p. 245.