

proper place, this little spherical body, scarcely larger than a pea, is composed of upwards of five millions of fibres, which lock into one another by means of more than sixty-two thousand five hundred millions of teeth. If such be the complication of a portion only of the eye of that animal, how intricate must be the structure of the other parts of the same organ, having equally important offices! What exquisite elaboration must those textures have received whose functions are still more refined! What marvellous workmanship must have been exercised in the organization of the nerves and of the brain, those subtle instruments of the higher animal faculties, and of which even the modes of action are to us not merely inscrutable, but surpassing all our powers of conception!

It is from the energies of life alone that organic forms are produced. No fabric achieved by human power ever approached in refinement the simplest of nature's works. The utmost efforts of the ingenuity or skill of man in the construction of the most delicate machinery is infinitely surpassed by the most ordinary of the mechanisms which are presented to our view in living bodies. However successful may be human artists in their attempts to contrive automata, which shall exactly imitate different animal movements, there will always be wanting that internal principle of action derived from a higher source than mechanism can supply, and without which these highly wrought works of man, like the unvivified statues of Prometheus, must remain for ever mere masses of insentient and inert materials.

As the living functions imply the mechanical action and reaction of parts which cohere in some definite order of arrangement so as to preserve that determinate form to which they constantly tend to return on being displaced, it is impossible to conceive that a mere fluid can exercise these functions; because the particles of a fluid, being equally moveable in every direction, have no determinate relative situations, and possess no character of permanence. All organic and living structures, therefore, must be composed of solid as well as fluid parts; although the proportion between