

afford safety in the natural exercises of the body. To these exercises there is an intuitive impulse, ordered with a relation to the frame of the body; whilst, on the other hand, we are deterred from the excessive or dangerous use of the limbs by the admonitions of pain. Without such considerations, the reader would fall into the mistake that weakness and liability to fracture implied imperfection in the frame of the body: whereas a deeper contemplation of the subject will convince him of the incomparable perfection both of the plan and of the execution. The body is intended to be subject to derangement and accident; and to become, in the course of life, more and more fragile, until by some failure in the frame-work or vital actions, life terminates.

The bones of the extremities are called hollow cylinders. Now, after having convinced ourselves of the necessity of this formation, which combines strength with lightness, we may find, upon a more particular examination, that these bones are extremely varied in their shapes: and we are, at least, prone to believe that there is much of chance or irregularity in their forms. But such a conception is quite inconsistent with a correct knowledge of the skeleton. As this notion, however, is very commonly entertained and leads to further mistakes, we shall take pains to show,—first, why the bones are hollow