

pose of sustaining a membranous web, and to form a wing.

Contemplating this extraordinary application of the bones of the upper extremity, and comparing it with the wing of a bird, we might say, that in the bat, it is an awkward attempt—"a failure." But before giving expression to such an opinion, we must understand the objects required in this construction. It is not a wing intended merely for flight that the bat possesses, but one which, while it raises the animal, is capable of receiving a new sensation, or sensations in that exquisite degree so as almost to constitute a new sense. On the fine web of the bat's wing nerves are distributed, which enable it during the obscurity of night, when both eyes and ears fail, to avoid objects in its flight. Could the wing of a bird, covered with feathers, do this? Here then we have another example of the necessity of taking every circumstance into consideration before we presume to criticise the ways of nature. It is a lesson of humility.*

In the next page we have a sketch of the arm

* Besides the adaptation of the bat for flight, through a new adjustment of the bones of the arm, this animal has cells under its skin; but I know not how far I am authorized to say that they are analogous to the air-cells of birds, or that they are for the purpose of making the bat specifically lighter. They extend over the breast, and under the axillæ in some bats; and they are filled by an orifice which communicates with the pharynx.