

of every individual, we should find that, in every case, the figure and connexion, and substance of the scales, was ruled by them. A proof of this may be seen in those fishes whose integument consists of hard scales, united together so as to form a tessellated coat of mail. I allude to the *Ostracions*, whose organs of locomotion seem not calculated to effect their escape when pursued; the want of speed, however, is compensated by a covering that the teeth of few of their enemies can penetrate: the same remark applies to those fishes that can inflate themselves into a globe,* in some of which the fins are so minute as to be scarcely discoverable. In these the scaly spines, when erected, assist in preventing the attack of enemies.

I have given a detailed account of the *fins* of fishes on a former occasion.† I shall therefore here only consider the motions of which they are the organs, and their theatre.

Though the *birds*—if we consider the whole atmosphere of the globe, whether expanded over earth or sea, as their domain—may perhaps have a wider range than the *fishes*, yet when we further consider that, besides the whole extent of the ocean, and the seas in connection with it, with all its unfathomable depths and abysses, and all the rivers that flow into it—all the innumerable lakes also, and other stagnant waters, on mountains, and at every other elevation, that the earth's surface contains, belong to the fishes, and compare at the same time the greatest depth to which they descend with the greatest height to which birds ascend, we may conclude that, with regard to its *extent*, their habitable world may be nearly commensurate with that of their rivals or analogues.

As to their *motions*, in their element, birds of the most rapid and unwearied wing must yield the palm to them; the eagle to the shark, and the swallow to the herring and

* Roget, B. T. i. 433.

† See above, p. 100.