

birds, however, this distinction does not appear to obtain at all: in quadrupeds the giant *Megatherium*, the *Armadillo*, the *Chlamyphorus*, and the *Manis*, are distinguished from the other Mammalians by the armour that protects them.

NOTE 21, p. 173.—*The first plants and the first animals are scarcely more than animated molecules, and appear analogues of each other; and those above them in each kingdom represent jointed fibrils.* A discovery may here be noticed of one of the most scientific botanists of the present age, and whose keen eye and philosophic spirit have penetrated into depths and mysteries before unexplored, belonging to the science of which he is so great an ornament. In the investigation of some of these, he discovered that not only vegetable, but even mineral molecules, when placed in a fluid medium, would move about in various directions, but by what cause these motions were generated he offers no conjecture. He very kindly showed me this singular phenomenon, if my memory does not deceive me, with respect to some *mineral* substances. Mr. Brown has observed that the motions in question, he was satisfied, arose neither from currents in the fluid, nor from its gradual evaporation, but belonged to the particle itself;* and of the spherical molecules mixed with the other oblong particles obtained from *Clarkia pulchella*, that they were in rapid oscillatory motion:† in both mineral,‡ vegetable,§ and animal substances,|| along with the molecules, he found other corpuscles, like short fibres somewhat moniliform, or having transverse contractions, corresponding in number, as he conjectured, with that of the molecules composing them: and these fibrils, when not consisting of a greater number than four or five molecules, exhibited motion resembling that of the mineral fibrils, while longer ones of the same

* Brief Account of Microscopical Observations, &c. 4.

† Ibid. 5, 6.

‡ Ibid. 10.

§ Ibid. 11.

|| Ibid.