

alluded, if it can be shown, that there is any thing in plants at all analogous to the instincts of animals, for if there be, one can scarcely suppose that they are produced by a different cause. Let us, therefore, now, leaving the animal kingdom,—which to us perhaps appears the sole theatre in which instincts manifest themselves,—and turning our attention to the vegetable, inquire whether any thing analogous to these springs of action is discoverable there.

One remarkable distinction between the animal and the vegetable, is in the difference of the principles that form their pabulum. The former does not become the nutriment of the latter till it is chemically decomposed; whereas the latter becomes the food of the former, either in its green or ripe state, and is not decomposed and turned to nutriment, till it is passed into its stomach, and is subject to various actions of various organs, or their products; so that, though the food of both is decomposed in order to be assimilated, yet with regard to the vegetable this happens before it enters it, but to the animal after it enters it, the decomposing powers being without the plant and within the animal. In the former case, it is the action of the atmosphere, unassisted by the organization of the plant; in the latter, it is the same action assisted by the organization of the animal.

Another thing may be here observed: that as the most remarkable instincts of animals are those connected with the propagation of the species, so the analogue of these instincts in plants is the development of these parts peculiarly connected with the production of the seed; so that the expanded flower, and the operations going on in it, is the analogue of the reproductive instinct of the animal: this is all produced by physical action upon the organization of the plant. Now, if we consider the infinite variety of plants, and the wonderful diversity of their parts of fructification,