

of the immortal Cuvier first taught us how to acquire. And here it will be necessary to enter upon the consideration of those beautiful principles of the co-relation of structure in organized beings, which were first announced by that illustrious philosopher.

11. ADAPTATION OF STRUCTURE IN ANIMALS.—The organs of every animal, observes M. Cuvier, may be considered as forming a machine, the parts of which are mutually dependent on each other, and exquisitely adapted for the functions they are destined to perform; and such is the intimate relation of the several organs, that any variation in one part, is constantly accompanied by a corresponding modification in another. This mutual adaptation of the several parts of the animal fabric is a law of organic structure, which, like every other induction of physical truth, has only been established by patient and laborious investigation. It is by the knowledge of this law that we are enabled to re-assemble, as it were, the scattered remains of the beings of a former state of the globe,—to determine their place in the scale of animated nature,—and to reason on their structure, habits, and economy, with as much clearness and certainty, as if they were still living and before us. I will demonstrate this proposition by a few examples. Of all the solid parts of the animal structure the most obviously mechanical are the jaws and teeth; and as we know in each instance the operations they are intended to