

CHAPTER V.

INSECTS.

§ 1. *Aptera.*

APTEROUS, or wingless insects, form the next term in the series of articulated animals. Closely allied in their organization to many of the preceding families, they differ from them in being essentially formed for a terrestrial instead of an aquatic life. Most of the lower tribes of this order are parasitic, that is, derive their nourishment from the juices of other animals, the skin of which they infest and penetrate, and into which they insert tubes for suction. The various tribes of *Acari*, or mites, of *Pediculi*, or lice, of *Ricini*, or ticks, of *Pulices*, or fleas; together with the *Podura*, or spring-tail; the *Lepisma*, and the family of *Myriopoda*, or millepedes, are comprehended in this order. I shall be obliged to pass over these tribes very cursorily, noticing only a few of the more remarkable circumstances attending their mechanical conformation.

The *Pulex* is the only apterous insect which undergoes complete metamorphoses in the course of its development. In the first stage of its existence, it has the form of a long worm, without feet, frequently rolling itself into a spiral coil. It consists of thirteen segments, having tufts of hair growing upon each. In its mature state, it has six articulated legs, the hindmost of which are of great size, for the purpose of enabling the insect to take those prodigious leaps which astonish us in beings of so diminutive a size, and afford a striking proof of the exquisite mechanism pervading even the lowest orders of the animal creation.

The *Podura* leaps into the air by a mechanical contrivance of another kind; employing for this purpose the tail, which is very long, and forked at the end. In its ordinary