

FOSSIL INSECTS AND SPIDERS.

From the Crustaceans we pass by a natural transition to the Insects, those *Articulata*, in which, as Professor Owen emphatically remarks, "the highest problem of animal mechanics is solved, and the body and its appendages can be lifted from the ground and propelled through the air."* The skeleton in these animals, as in the Crustaceans, is chiefly external, and consists of a hard shell, or case, (composed of a peculiar substance, termed *chitine*,) divided into segments, and furnished with articulated, or jointed hollow extremities. The head is distinct, and has a pair of compound eyes, and of jointed antennæ. To the segments that form the thorax the legs are attached, and these consist of three pieces in the hexapods, (insects with six feet,) each supporting a pair of feet. The wings in the flying insects are attached to the middle and third thoracic segments. The legs, or articulated appendages, are hollow, as in the Crustaceans, and contain the muscles and other soft parts. The generic and other distinctions adopted by naturalists, to facilitate the study of this most numerous division of the animal kingdom, are founded on the structure and

* Hunterian Lectures, p. 192.