

firmness and union of the various component parts of the body while it admits of their easy motion. Without it, we should be rigid, notwithstanding the proper organs for motion ; and the cavities could not be distended or contracted, nor could the vessels pulsate.

But the cellular texture is not sufficient on all occasions, either for giving strength or protection : nor does it serve to sustain the weight, unless the animal lives suspended in water, or creeps upon the ground. We see, therefore, the necessity for some harder and more resisting material being added, if the weight is to rest on points or extremities ; or if the muscular activity is to be concentrated.

Nature has other means of supplying the fulcrum and lever, besides the bones, or true skeleton, which we have been examining in the first part of this volume : and perhaps we shall find that there may be a system of solid parts superior to what we have been studying in the *vertebrata*.

The larvæ of proper insects and the annelides have no exterior members for walking or flying : but to enable them to creep, they must have points of resistance, or their muscles would be useless. Their skins suffice ; and they are hardened by a deposit within them, for this purpose. But if this skin were not further provided, it would be rigid and unyielding, and be no sub-