

hold in corporeal structures, namely, that the parts which differ most in allied species, are apt also to vary most in the same species. Another Bee, the *Megachile maritima*, as I am informed by Mr. Smith, near the sea makes its burrows in the sand-banks, whilst in wooded districts it bores holes in posts.*

I have now discussed several of the most extraordinary classes of instincts; but I have still a few miscellaneous remarks which seem to me worth making. First for a few cases of variation which have struck me: a spider which had been crippled and could not spin its web, changed its habits from compulsion into hunting—which is the regular habit of one large group of spiders.† Some insects have two very different instincts under different circumstances, or at different times of life; and one of the two might through natural selection be retained, and so cause an apparently abrupt difference in instinct in relation to the insects' nearest allies: thus the larva of a beetle (the *Cionus scrophulariæ*), when bred on the scrophularia, exudes a viscid substance, which makes a transparent bladder, within which it undergoes its metamorphosis; but the larva when naturally bred, or transported by man, on to a verbascum, becomes a burrower, and undergoes its metamorphosis within a leaf.‡ In the caterpillars of certain moths there are two great classes, those which burrow in the parenchyma of leaves, and those which roll up leaves with consummate skill: some few caterpillars in their early age are burrowers, and then become leaf-rollers; and this change was justly considered so great, that it was only lately discovered that the caterpillars belonged to the same species.§ The Angoumois moth usually has two broods: the first are hatched in the spring from eggs laid in the autumn on grains of corn stored in granaries, and then immediately take flight to the fields and lay their eggs on the standing corn, instead of on the naked grains stored all round them: the moths of the second brood (produced from the eggs laid on the standing corn) are hatched in the granaries, and then do not leave the granaries, but deposit their eggs on the grains around them; and from these eggs proceed the vernal brood which have the

* [Here follows a section on the instincts of Parasitism, Slave-making, and Cell-making, which is published in the *Origin of Species*.—G. J. R.]

† Quoted on authority of Sir J. Banks in *Journal Linn. Soc.*

‡ P. Huber in *Mém. Soc. Phys. de Genève*, tome x, p. 33.

§ Westwood, in *Gardeners' Chronicle*, 1852, p. 261.