be dead, Vesalius obtained leave to open him to explore the true cause of his illneſs ; but when he opened the breaſt, he perceived ſymptoms of life, and ſaw the heart beat. The parents, not ſatisfied with prosecuting him for murder, accuſed him of impiety to the inquiſition, in hopes that tribunal would puniſh him with greater rigour: but the king interpoſing, ſaved him on condition of his making a pilgrimage to the Holy Land. He was ſhipwrecked on his return, and thrown upon the iſland of Zante, where he periſhed, in 1504. He was the author of ſeveral works, the principal of which is *De humani corporis fabrica.*

VESICATORIUM, a Blister ; an application of an acrid nature made to any part of the body, in order to draw a flux of humours to that part, and thus elevate the ſcarf- ſkin into a bliſter.

VESPA, the wasp ; a genus of insects belonging to the order of hymenoptera. The mouth conſiſts of two jaws without any proboſcis ; the ſuperior wings are plaited ; the eyes are lunar; and there is a ſharp ſting in the tail. There are 159 ſpecies ; only 3 of which are natives of Bri­tain, the *crabro,* the *vulgaris,* and the *coarctata.*

1. *Crabro,* the hornet. It has tawny antennae; the ſegments of the abdomen are black on the anterior part and yellow on the poſterior, with two black ſpots on each. Its length is an inch ; it builds in hollow trees. Its cakes or combs are compoſed of a ſubſtance like coarſe paper, or ruſty parchment. It is very voracious, devouring other insects, and even bees.

2. V*ulgaris,* the common waſp. The male has ſeven yel­low ſegments of the abdomen, with a black triangle on each: The head is yellow, and the antennæ long. The upper lip of the female is yellow, the antennæ ſhort ; there are six ſeg­ments of the abdomen with two lateral black ſpots on each. Μ. Reaumur and Dr Derham agree in diſtinguihing three sorts of waſps; *viz.* the queens or females, the males, and the common labouring waſps, called *mules,* which, according to Reaumur, are neither males nor females, and conſequently barren. The queens, of which there is a great number, are much longer in the body, and larger than any other waſp : they have a large heavy belly, correſponding in ſize to the prodigious quantity of eggs with which they are charged. The males are leſs than the queens, but longer and larger than the common waſps, which are the ſmalleſt of the ſpecies : they have no ſtings, with which both the queens and common waſps are furniſhed. There are in one neſt two or three hundred males, and as many females : but their number depends on the ſize of the neſt ; and Dr Derham obſerved, that the males were bred, or at leaſt moſtly reſided, in the two cells or partings, between the combs, next to the uppermoſt cell. The antennæ or horns of the male waſps are longer and larger than thoſe of either of the other sorts : but the chief difference, ſays Dr Derham, con­ſiſts in their parts of generation, which are altogether dif­ferent from thoſe of other waſps.

The mules are the labourers belonging to a neſt, and are employed in procuring materials for the neſts and in conſtructing them, and alſo in furniſhing the other waſps, and the young, with proviſions.

At the beginning of winter, the waſps deſtroy all the eggs, and all the young ones without exception : all the mules and males, which have been employed in this work, being unfurniſhed with proviſions, periſh ; and none ſurvive except ſome few females, which, according to Reaumur, were fecundated in October, and raiſe a new colony in the beginning of ſpring.

In ſpring a new commonwealth is founded by a ſingle female impregnated during the autumn, and that has weathered out the ſeverity of the winter. It digs a hole in a dry ſoil, contrives itſelf a sinuous inlet, or else it takes up with the dwelling place of a mole, where it haſtily builds a few cells and depoſits its eggs. Within the ſpace of 20 days, they have gone through the different ſtates of larvae, ehryſalids, and turned to waſps. Nature all wiſe provides for every thing. The mule-waſps are the only ones that labour at laying the foundation of the republic. The firſt eggs that are hatched prove to be neuter waſps. No ſooner are they come into exiſtence, but they fall to work, en­large the hole, and go about upon wood, lattice-work, and window ſaſhes, in ſearch of materials for building. With their teeth they cut, hack, and tear off ſmall fibres of wood, which they moiſten with a liquor they diſgorge, and then convey them to the work-ſhop. Other labourers are in waiting for them, who with thoſe materials let about the conſtruction of the waſp-neſt, which is commonly round, and made of materials reſembling fine paper. The common covering of it, which is formed of ſeveral leaves or layers, with in­termediate ſpaces, is pierced by two holes at a diſtance from one another, one of which is uſed for the entrance of the waſps, and the other only for their exit. The ſpace within this covering is cut by a number of horizontal planes, with intervals between them of the ſize of about half an inch ; they are ſuſpended ſrom one another by ligaments, and attached to the covering by their edges : they all have hexagonal cells in their lower ſurface.

The eggs of the waſp are of an oblong form, and re­ferable thoſe of a common fly, but they are larger; they are always faſtened to the angles of a cell, never to the ſides of it. They are uſually placed ſingle ; it is very rare to find two in one cell ; and, if they are laid ſo, it ſeems that only one ſuccceds ; for there is never found more than one worm in a cell.

The heads of all the nymphs are turned toward the cen­tre of the comb, and their tails go obliquely downward to­ward the baſe of the cell. They are continually ſeen open­ing their mouths, and moving their forcipes, ſeeming ever hungry, and impatiently waiting for food from their parents. The cells are left open till the nymph is at its full growth ; then the waſps cover it over with a thin lid, under which the worm undergoes its transformation ; and as ſoon as it is arrived at the waſp-ſtate, it eats its way through this thin cover, and comes to work with the rest. The elder brothers, or firſt-hatched infects, take amazing care of thoſe born after them, by proportioning their food to the delicacy of their ſtomach. First, it conſiſts of the juice of fruits and meats ; afterwards it is the carcaſes of insects. The ca­terers provide for the labourers. Each one takes his own portion ; there is no diſpute, no fighting. The republic grows daily more numerous, living in profound peace. Every individual, as ſoon as he has acquired ſufficient ſtrength, flies away to the fields. They then become a gang of banditti ; they pillage our wall-trees, break into out fruit before its maturity, dart with the fierceneſs of hawks upon our bees, cut their throats to posseſs themſelves of their honey, plunder and lay waſte their commonwealth, riot on the fruits of their labour, and oblige them to remove. During the period of plenty, the waſps bring all the booty to the neſt, and ſhare it amongſt them. There is nothing then goes forwards but feaſting, rioting, and good fellow- ſhip ; but concord cannot be laſting among robbers. To­wards the month of October proviſions begin to run ſhort : The neuters and males tear from their cradles the eggs, the larvæ, the chryſalids, and the new-born infects, without ſhowing mercy to any. They next fight againſt one ano­ther. Froſts and rains throw the citizens into a ſtate of