

doubt, arrive at some conclusion regarding the correct dates of the appearance of the sexes which are said to occur towards the autumn. Reaumer states that there are two sizes among the males. It would be interesting to know if they are permanent kinds. Kirby, and other writers on Insects (see Westwood's Int. to the Modern Class. of Insects) state that the neuters, or what are now termed undeveloped females, "massacre the later brood of larvae which are not able to undergo their transformation before the setting in of the winter." This may, no doubt, be the end of the later larvae of the two species here spoken of, but it is not the case with the pupae which occupy the cells of *V. maculata* in the autumn, as I procured living specimens from nests brought home in October. The second nest of *V. germanica* contains two tiers of cells, which are generally enveloped with six or more partitions. During the warm season in which it is occupied, proper ventilation is necessary to insure the health and increase of the colony; therefore the wasps never neglect this important mode by which the interior is kept at an equal temperature. The innermost partition encircles the double tier of cells, but its aperture is larger than the next outermost, and the aperture of each decreases towards the exterior one until it is only of sufficient size to admit one or two insects. In order that pure air be properly obtained, and that the circulation should be sufficient to force foul air from the interior, we find other apertures on the exterior partition, which lead in zigzag passages from one partition to another until they reach the interior. This mode of ventilation is beautifully illustrated in the large autumnal nests, and for a good reason, we generally find them containing from four to five tiers of cells and a numerous colony, which obtains its full strength in this nest. In a nest lately examined the latter number of tiers was found; the two uppermost consisted of small cells, and those of the two central were of larger dimension, and had been evidently occupied by males and females, while the fifth or lowermost tier does not appear to have been occupied; but it is nevertheless curious that it agrees in size, number and form of cells to that found in the parent nest in spring.

Notwithstanding the powerful sting with which some of them are provided, wasps are liable to the attacks of other insects, and their nests are entered by parasites belonging to the orders of Coleoptera, Hymenoptera and Diptera, for the purpose of depositing their eggs in the cells containing the larvæ. Nests of the second and third colonies which I took from branches about fourteen feet from the ground, at the end of October, 1868, are infested with a Hymenopterous parasite. One of these species issued from a cell of *maculata* about six days after it was in my possession. Five came from one cell. I sent this Hymenopter to Mr. Cresson, of Philadelphia, and he has since described it as a new species, *Euceros burrus* (*Canadian Entomologist*, i., p. 104). This parasite occupied a longitudinal position in the cell of the wasp, and its cocoons were slightly made, and stood side by side. I also remarked that they issued from a cell which was covered with the cap which is generally spun by the