similar structure to the Mutilla, which Lord Avebury thinks "not it unreasonable to conclude may produce sounds even though we cannot nat hear them." He figures a section of the junction of the second and third abdominal segments in the worker of rer-Lasius flavus (the common vellow any ant), the outline of which is not ade unlike that of the organ under m. consideration. It is, however, chitinthat ous and finely ribbed, and occurs log. between all the segments of the over abdomen. ("Ants, Bees and Wasps," 1 to page 230.) 01

with Turning now to undoubted scente of producing organs in the abdomens of , an insects, we find that they are comenie monly developed, and for a variety of r ex purposes. The scents may be divided have not two classes: those that are intended to allure and those that are n ii e reintended to repel. Certain sphingids whale a distinct odour, which was se d naced by Fritz Muller to a tuft of rative mir-like scales at the base of the eclan domen, which fits into a groove in hear emel e first segment, and is ordinarily visible. Peculiar white threads are vibra rust out of the narrow openings men ar the tip of the abdomen of certain derin oths. Smith found a peculiar brush modu hair-like scales in a groove between nothe dorsal and ventral parts of the rodu al two segments of the abdomen chalin Schinia marginata, a moth belongmight to the family Noctuze. H. Garman r (11 nd in a species of locust orga adenœcus subterraneus) "a pair of dom te fleshy appendages protruding nknow slits between the terga of the Int metal h and tenth abdominal somites, nature of which was not clear," as t they were thought to be scent xpan ds. ing of

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OUT APIARIES.

(Fourth Article.)

G. A. Deadman, Brussels.

There is another way besides those previously mentioned to prevent swarming, but it applies only to an apiary run for extracted honey. The tiering up system, provided plenty of room is given, and the supers put on before the bees get the swarming fever, will largely deter but will not altogether prevent swarms issuing as the heat increases and the season ad-If however one adops the vances "long idea " hive, and extracts from the brood chamber, one can quickly put them out of the notion of swarming for a time at least. In my early days of bee-keeping this was what we did, but the objections were a quantity of inferior honey to be extracted. and an empty hive to be filled with the best clover for the use of the bees. If we had a good fall flow it would have mitigated things somewhat but too frequently the honey flow would suddenly cease and we would not only have to feed for immediate use Then again it but for winter also. was so much more work getting them ready for winter, such a contrast to that of never disturbing the brood nest as when working on the tieringup plan. It has the advantage, however, of not only doing away with swarming but one can see the condition of each colony when taking the honey. I could not be induced to return to it though. I simply cut the 30-inch hives in two, placing one part above the other, and all is lovely, any surplus from fruit bloom, etc. is left in the brood chamber for present or Not only this but the future use. bees are much better natured. Dear me, I don't wonder at them getting cross when their home is completely upset as it is when extracting from the brood chamber. There is one thing that I have not mentioned in

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few days later I was fumigating with burning one some wet combs to destroy some larvæ of x-moth that had got into them, and I was red to find that robber-bees could smell the quite well through the dense sulphur fumes. nder the above experiment was not successful.