

queen has nothing to do with the gathering of the food, building the comb or care of the brood.

The so-called Fungoid-shaped Bodies, in which the chords from all parts of the brain meet, are decidedly larger in the workers than in the queen. If it be held that Fungoid-shaped Bodies are the seat of the intellect of insects, it is appreciable that the worker-bee, which shows the greatest thinking power, possesses this organ in well developed form.

But it is no less certain that these fungoid-shaped bodies are not merely the seat of thought, but also the centre of highly complicated instincts. This follows also from a consideration of the drones, in which the fungoid-shaped bodies are larger than in the queen and almost as large as in the workers. Even though there are differences in the structure which bespeak a relatively higher development of these important centres in the workers, we must draw the conclusion that the fungoid-shaped bodies are not exclusively the organs of intellect, but that instincts are the real basis, or they would not be so highly developed in the stupid drones.

Similar results have been secured from the study of the brains of ants, conducted first by Marion Sweet and then (after his death) by H. Pietschker.

Forel has held that the fungoid-shaped bodies were altogether lacking in the males, but Pietschker found them, although smaller than in queens and workers.

The brains of the males of the ants, just as in the drones, are notable for their large seeing-flaps, but have small smelling-flaps. In the brains of female ants the seeing-flaps are not so large as in the male, but larger than in the workers. It is well known that these last have no wings, and consequently, the need for vision is of far less importance for them than for those insects which have wings.

In the worker ants the smelling-flap is especially large, for sensations of smell are most important to them for the finding of their way and for the performance of their many duties in the nest. In the worker ants the fungoid-shaped bodies are much larger and more highly developed than in the females.

It is demonstrated by the study of the brains of the bees and ants that the different instincts of the three different classes are marked in the brain construction of each class. Herein is an additional proof that instinct is absolutely dependent upon the inherited paths of the nerve system.

WOMAN'S DEPARTMENT

CONDUCTED BY

Miss Ethel Robson, Ilderton, Ont.

Early Swarms

This year my Institute work took me up into Eastern Ontario again, Peterboro and Victoria counties. Sunday, May 26th, I spent with Mr. W. Anderson, just out of Peterboro. The dandelion and apple blossoms were at their best and the day was ideal. In the afternoon we went out to look at the

bees, and there were two swarms hanging. It was something of a surprise to me, for I knew my bees would have no thought of swarming. Then I began to weigh some of the hives, and I understood. They were heavy, almost as heavy as mine were in the fall. They had an abundant flow of buckwheat, and the bees had packed the brood

chambers solid, needed for winter crowded for room weather was at all swarmed. Next day on supers. I had a little of honey in my light I should hardly do it, as it is rat to dispose of in the ever I went I found among the bees—bers and swarming Cambray, was trying out of his brood badly granulated, later. Most of the in good shape, and had been slight, the value of buckw

And C

The chickens are. They have had the had lice. Now, the chicken troubles, the way to reach maturity disadvantages with not turn them loose fields as you can increase in size the appetites—the grain is low. It is going to deal of expenditure full. When you are in the old-fashioned just to quietly take the granary, if you nothing about it, but odds, where you are profit, all these things oned up. I am not that part of it. But the chickens; they are interesting as bees.

PROTECT

Do not sell your crop the prices recommended by the Crop Committee.