

ndy day the hives  
d, nor after noon,  
very hot, as then  
ed to go at sight  
person who lifts

strongly object to  
f eucalyptus prok.  
They will sting  
carries my watch  
they will not worry  
eat irritates them,  
e partaken of na-  
stung. Apifuge  
o pacifying effect  
umstances, in my  
trying to the bees'  
two colonies that  
and had to be re-  
done quickly and  
hours, so that the  
interrupted, by cage-  
from, say, 9 a.m.  
acing her by the  
the same cage and  
rning, say, 9 a.m.,  
r activity is great,  
d honey-gatherers,  
y do in this arid

rtile, but are not  
ing, nor are they  
if they are only  
nd ventilation. In  
twelve or thirteen  
e swarm, and that  
ot to remove the  
give the bees the  
ne of my colonies  
more drone-comb  
l not gather less  
d did not swarm  
e drone-comb with  
t certain that the  
mb should be of

usually arranged  
o combs of honey  
ntrance, then from

four to six combs of brood, and the remainder honey.

If left without guidance, as in a box with smooth cover, they space their combs  $1\frac{1}{4}$ ". I have observed once as little as  $1\frac{1}{8}$ ". But  $1\frac{1}{4}$ " is certainly their rule, indifferently whether the combs contain all worker-brood or drone-brood as well. The thickness of sealed brood-comb varies from  $\frac{3}{4}$ " to  $\frac{7}{8}$ ", not leaving much unnecessary space between the combs, either for the queen or for ventilation.

I have never yet found them build their combs at right angles to the entrance, rarely parallel, but generally more or less in the diagonal direction.

The measurement of the worker-cells in the diameter between two opposite sides I found to vary between 0.188" and 0.192". We may thus assume 0.19" as their normal diameter, against the 0.22" of "Weed" foundation. The small diameter harmonizes with the slender shape of the bee. They will, however, draw out imported foundation readily and breed in it; but if you give them half a sheet, they will, beneath it, continue in their own smaller measurement, after drawing out the foundation in the larger.

It would be an interesting experiment to see if, by giving the bees for several years full sheets of foundation and spacing them  $1\frac{7}{16}$ ", the size of the Nyasa bee would become larger. I wonder if experiments in that direction with other small bees have been made.

There are 65.6 worker-cells per square inch of comb on both sides together, or about 6,030 cells per frame of 8"x12" internal measurement.

The drone-cells, of which there are hardly more than one-tenth, measure from side to side 0.256", one-third more than the worker-cells. There are 49.2 per square inch of comb on both sides, or about 4,730 per frame of 8"x12" internal measure. But such a frame as

had drone brood only I have not yet come across, except in the honey-combs beyond the brood-nest.

The honey-comb is beautifully white, as they do not quite fill the cells as long as they are not cramped for space, but leave a very small layer of air between the honey and the capping. In this the Nyasa bee compares favorably with the Italian, which seals its cells hard on the honey, and therefore cannot make white combs, and is less suitable for section production. On the other hand, if for any reason these native bees are cramped, be it narrow spacing of frames or that pollen is at the bottom of the cells, they often lay the capping right on the honey, thus making it look dark.

(To be Continued)

#### SHORT COURSE AT O.A.C., GUELPH

Beginning on January 7th, and ending January 18th, a course of practical lectures and demonstrations in bee-keeping will be given by the regular college staff and other specialists from various parts of Ontario. The following are some of the subjects to be considered: Method of Management Throughout the Whole Season's Work; Diseases of Bees and Their Treatment; Queen Rearing, etc.

Those who purpose attending this course are recommended to read "Langstroth on the Honey Bee," and also, if possible, "The A B C and X Y Z of Bee Culture," before coming. Either of these books can be obtained from the Apiculture Club of the College.

For the benefit of those who cannot attend the whole course, arrangements are being made to hold a two days' convention sometime during the course.

Information regarding the particulars and program of this course may be secured by writing to Morley Pettit, Provincial Apiarist, O. A. College, Guelph.