

The Apiary.

Queens and Queen Cells by the Wholesale.

I AM tempted to relate an occurrence of to-day, thinking it may interest your bee-keeping readers. On the 4th inst. we removed an Italian queen from a full colony and shipped her to a customer, giving the stock a young fertile queen on the 7th inst. Being very much hurried we neglected to make a final examination, but supposed the young queen was accepted. This morning the colony threw a large swarm. On opening the hive the peculiar "piping" of an imprisoned queen was plainly heard, and an investigation resulted in the capture of ten beautiful young Italians, all of whom had their full colour and were able to fly; but after cutting, the cap of their cells had been resealed by the bees, and fed through an opening in the lid, as so correctly described by Huber. The colony having started queen cells as soon as their queen was removed, had refused the young queen given them on the 7th, and an enumeration of the cells showed that they had finished *twenty-five*, one of which contained an immature drone swimming in "royal jelly." (This attempting to convert drone eggs into queens is, by the way, a common occurrence.) Several had been opened and their inmates murdered; others had hatched, and two we cut out and placed in a box, leaving one in the hive. Our next onslaught was on the swarm which had clustered on a small tree. We hired it, getting five more young queens which had accompanied it, and on returning to the queen cells which we had cut out, found one hatched and the other just hatching, thus securing *seventeen* young queens and a queen cell for the old hive! I think this a pretty good haul from "a buckwheat swarm." Although I know of no buckwheat nearer than a mile and a half from our apiary, we are having swarms from our Italians almost daily, and they are rolling in the honey famously.

The amateurs who have examined the Italian bees closely, have noticed in every hive many workers whose yellow bands were of the most brilliant hue, while their abdomens were of a jet black—rivalling Day and Martin's blacking. We have had numerous inquiries in regard to this, some thinking that these fellows were the pure bees, and that the presence of others was a mark of impurity in the queen producing them. This is what might be called a *posteriori* reasoning. The fact is that there are *old* bees whose bodies have been worn smooth by hard labour, and any one doubting has only to catch a worker, and with a wet finger rub its back gently for a few moments to polish him up to the African type.

We have just received some queens direct from the district in Italy, where, according to the last German Bee-Keepers' Convention, these bees are found in their highest purity, and expect to be able by their possession to solve some questions yet in dispute by apiarists.—JAMES T. LANGSTROTH, in *Country Gentleman*.

Among the Honey-Makers.

The August number of the *Atlantic Monthly*, has an interesting article on Bees, by Miss H. E. Prescott, from which we make the following extracts:

A NEW QUEEN.

"The queen is dead: It is lamentable, but nothing is so easy as to make another. There is only to tear down some dozen cells, to set the youngest embryo afloat in the royal jelly, and a queen appears, who if not in the legitimate line, is capable of performing perfectly all the office of a sovereign. There is a moment of intense despair, great riot and agitation; work is suspended; the temperature of the hive mounts many degrees. All at once the old art is remembered—the administration of that delicious medicament, of so astonishingly affluent nature that it can make a queen out of a commoner, the enlargement of the narrower cradle to that ampler space which forbids the atrophy of a single fibre of the body. The preparations are made, and with tranquillity restored the people await the event. One

day there comes a single piping sound—it is the cry of the royal babe—the hive is filled with rejoicing—there is no longer any interregnum of the purple—the queen is born! Perhaps the queen-makers have been too much in earnest, and at nearly the same moment the inmates of two royal cells issue together. Then is the time to try one's mettle—no shrinking, no bias, nothing but pure patriotism. Let a ring be formed, and she who proves herself victor is worthy of homage. Is one of the two a coward? The impartial circle bring her back to the encounter, bite her, tease her, tumble her, worry her, tell her plainly that life is possible to her on no terms but those of conquest. At length the matter decides itself; the brilliant and victorious Amazon bends her long, slender body, and with her royal poignard creces the abject pretender through and through. Then these satisfied subjects surround her, load her with endearments, cleanse her, brush her, lick her, offer her honey on the ends of their proboscides, and if there are yet remaining other royal apartments whose tenants give notice of timely appearance, they conduct her on an Elizabethan progress, in which, filled with instinctive dismay, she pauses at every cell, and stabs her young rival to death with her sting. As the story runs there are still other conditions to be fulfilled by the aspiring princess—she must give her people the assurance of a populous empire. Should she fail in this, they have recourse to their old manœuvres, becoming manifestly insubordinate and unruly. If, however, they at any time wax unbearable in their insolence, the young monarch has it in her power, by assuming a singular attitude, standing erect at a little distance her wings crossed upon her back and slightly fluttering, while she utters a shrill, slender sound, to strike them dumb, so that they hang their heads for shame."

It is quite distressing, after reading this pretty story, to be told that "the later apiarists deem it a tissue of fiction and fallacy. If, when a hive is deprived of its queen, there happen to be a royal egg remaining in it, they say, it will shortly produce a queen, as, if it had been a common egg, it would have produced a common bee. They insist that the organism of the creature to be produced is inherent in the egg, and do not believe it in the power of a bee to alter a law of nature; they deny the statements of Schirach, Huber, Dunbar, Rennie, and others to this effect, and scout the idea of the existence of such a thing as royal jelly at all, with the supposed aristocracy of its compounders." Another story is told which proves the sagacity of the bee. In the latter part of last century there appeared in Europe a strange, big, ugly insect, called the *Sphinx Atropos*, which invaded the bee-hives and destroyed the honey. The attention of the apiarist Huber was directed to the matter:

A PROBLEM SOLVED.

"Huber took counsel with himself for some means of protecting his bees from this daring robber. Should he make gratings? Should he make doors? And how? That was his doubt. The best imagined closure possible had the inconvenience of hindering the great movement of exit and entrance always going on at the sill of the hive. Their impatience rendered these barriers, in which they would entangle themselves and break their wings, intolerable to the bees.

"One morning, the faithful servant who aided him in all his experiments, informed him that the bees had already solved the problem for themselves. They had in various hives conceived and carried out divers systems of defence and fortification. Here they had constructed a waxen wall, with narrow windows, through which the huge enemy could not pass; and there, by a more ingenious invention, without stirring anything, they had placed at their gates intersecting arcades or little partitions, one behind another, but alternating, so that opposite the empty spaces between these of the first row stood the partitions of the second row. Thus were contrived numerous openings for the impatient crowd of bees, who could go out and come in as usual, and without any other obstacle than the slight one of going a little zigzag; but limits, absolute obstructions, for the great, clumsy enemy, who could not enter with his unfolded wings, nor even insinuate himself without bruises between the narrow corridors.

"This was the *coup d'etat* of the lower order: the revolution of insects, executed by the bees, not only against those that robbed them, but against those that denied their intelligence. The theorists who refuse that to them, the Mulebranches and the Buffons, must consider themselves conquered."

Sheep Husbandry.

Wool Shrinkage—Michigan Test.

WE present to our readers herewith the result of the test concerning the shrinkage of wool, afforded by the Farmers' Mechanics' and Stock Breeders' Association, of Jonesville, in the cleansing of ten Merino fleeces sheared at the sheep-shearing of the association in May last. In this test it may be safely said that the best fine-wools of the State were represented, as Hillsdale and the adjoining counties are ranked among the very best sheep districts in the West, and the sheep-shearing in question brought out what were supposed to be the very best specimens of the very best flocks in the section. The entries were made in competition for premiums offered for the "best cleansed fleeces," and from the facts in the case it is evident that the exhibitors acted in good faith, and that no fleeces were entered which in the opinion of the owner did not stand a fair chance of obtaining a premium, the owners not being aware, up to the time of this test, of the enormous shrinkage of fine wool in the operation of cleansing. Hence, the result of this test may be regarded as a fair exhibit of the average shrinkage of first-class Michigan fine wool. The association is entitled to the thanks of all interested in wool-growing for thus settling an interesting and highly important question by this practical test.

In presenting the table, as furnished us by the Secretary, Hon. W. J. Baxter, we will only premise that the fleeces were cleansed under the superintendence of Mr. L. D. Green, of the Jonesville Woollen Factory, who was chairman of the committee, the cleansing being carefully done in the usual manner of preparing wool for cloths, and that we believe the figures may be relied upon as correct:

No of entry.	Fleece of ewe or buck.	Wt of fleeco		Loss in cleansing.	Loss per cent.
		uncleansed.	cleansed.		
		lbs. oz.	lbs. oz.	lbs. oz.	cleans'g.
A	ewe	30 8	3 12½	6 14½	63.3
B	ewe	12 0	4 10½	7 6½	61.1
C	ewe	11 8	4 12½	6 11½	68.4
D	buck.	14 8	6 10½	8 13½	69.9
E	buck.	14 8	5 15½	8 8½	68.8
F	buck.	15 0	6 1½	8 14½	69.3
G	buck.	11 0	4 3½	6 12½	61.2
H	buck.	9 8	3 14½	5 9½	68.8
I	buck.	16 0	4 6½	11 10½	78.8
J	buck.	0 8	3 12½	5 11½	60.1

It is interesting to compare this table with that prepared by the committee of the New York Fair. Our Western wool-growers will learn with pleasure that the average per cent. of shrinkage is less, while the average weight of the scoured fleeces is greater, in the case of the Michigan fleeces, compared with the Merino fleeces cleansed in New York. It is but fair to state that none of the Western fleeces had so small a per cent. of shrinkage as the New York prize ewe, and that one of the fleeces cleansed at Jonesville showed a greater shrinkage than any one of the New York fleeces. For convenience we place these facts in a tabular form, viz:

	Michigan	New York.
Least per cent. of shrinkage.....	58.4	62
Greatest per cent. of shrinkage.....	72.8	71.4
Average.....	61.5	63.7
Average weight uncleaned fleeces.....	12.40 lbs.	12.63lbs
Average weight cleansed fleeces.....	4.70 lbs.	4.61lbs

The Michigan fleeces have one and two-tenths per cent in the shrinkage and nine-hundredths of a pound in the weight of the fleeces in their favour. Our Western wool-growers may well be proud of this result.

The public will understand that the names of owners of the fleeces in the Jonesville test are withheld out of deference to their feelings. The fleeces were "brag" fleeces from "brag" sheep, and the shrinkage was so much greater than was expected that the owners felt a disappointment which it would be ungenerous to aggravate by a public exposure.—*Western Rural*.

NOTE BY ED. C. F.—We give the above report in full as we recently gave that respecting the Cananda-gua trial, believing that these documents are most encouraging to our sheep-breeders. The *Rural New Yorker* says that according to the conditions of the Michigan competition, "a respectable Cotswold, or a grade sheep, if admitted to the trial, would have won the prize."