

chicks. One writer, Mr. W. H. Rudd, of the Oroco poultry farm, South Scituate, Mass., says: "Every chick ever hatched by a hen has from one to forty embryo lice on it before leaving the nest." Whether this be correct or not, certain it is that chicks hatched and raised by hens are almost sure to have some lice on them. They may be found on the back of the head and neck, very often by the dozen, and when the chick is at all inclined to be weak the lice usually survive it, but when strong and hearty, with ample range and clean quarters, they very often pull through. But prevention is much better than cure. We therefore take the hen about sundown or a little before, when the chicks are about ten or twelve days old, and sponge her all over, rubbing against the feathers, with a sponge well moistened with kerosene and then squeezed thoroughly dry, or as near so as can possibly be done with the hand. The chicks when under the hen of course nestle their heads in the feathers, and the strong smell of the coal oil kills every one of the lice on them. We have given this method repeatedly, in fact every year since the JOURNAL came before the public, but it is well worth the repetition, and no one that tries it once will be likely to neglect it afterwards.

### Color of Pekin Ducks.

EDITOR CANADIAN LIVE-STOCK AND FARM JOURNAL.

SIR,—There seems to be a difference of opinion between Mr. Cockburn and Mr. Bartlett in reference to the color of Pekin ducks. I have bred Pekin ducks for some years, and I must say that Mr. Cockburn's description is a very good one. In plumage, the Pekin are creamy white throughout, except the wings. However, he is mistaken when he states a white color is a disqualification. Mr. Bartlett claims that all competent judges give their preference for white. Who are the judges that do, Mr. B.? This assertion, I claim, is not correct, and misleading to parties buying. The standard calls for plumage downy and of a faint creamy white, and my experience is, that I have yet to see a white bird win over a creamy white when other points are equal.

AN OLD PEKIN FANCIER.

Springville, Ont.

### Pekin Ducks.

EDITOR CANADIAN LIVE-STOCK AND FARM JOURNAL.

SIR,—I notice a criticism of my article on Pekin Ducks by Mr. J. W. Bartlett, of Lambeth, Ont. He charges me with making a great mistake in reference to the color of these. As I do not wish Mr. Bartlett to leave a wrong impression on the minds of the readers of the JOURNAL, with your permission for space, I think I can convince Mr. B. that in quoting from the American standard of excellence, I made no mistake, as the disqualifications therein given plainly, and distinctly read: "Plumage, any other color than creamy white." Up to the present I have found that competent judges give the preference to creamy white if the birds are otherwise up to the standard. But as age comes on the outside ends of the feathers sometimes get white, yet, if you open the feathers they will be found a rich, creamy white, while in Aylesburys the preference is for pure white.

I have been very successful in exhibiting Pekins and in carrying off the highest honors, as have also my customers, so that I know whereof I speak.

W. B. COCKBURN.

Aberfoyle, May 8th, 1888.

### The Apiary.

#### Bees and Honey,

The May Bulletin issued by Mr. Blüch, of the Ontario Bureau of Industries, furnishes some interesting statistics in reference to bees. From returns collected from 651 persons it appears that in 1886, 19,015 hives were put into winter quarters, and 23,828 in 1887. Of the former 4,402 colonies perished in the winter. The increase by colonies last year was 10,863, making an

aggregate of 25,476 hives for this season. These gave a product of 112,477 lbs. of comb honey, 499,093 lbs. of extracted honey, and 6,686 lbs. of wax. Full returns from the Province would make it apparent that the honey industry is one of very considerable importance.

For the CANADIAN LIVE-STOCK AND FARM JOURNAL.

### June Jottings.

BY ALLAN PRINGLE, SELBY, ONT.

By the first of June the "spring dwindling" in the apiary has about spent itself, and the bee-keeper can balance up his winter and spring losses, which from all accounts received, appear to have been unusually heavy up to date. Within the area of my knowledge in this district (Lennox, Addington and Hastings) about four-fifths of the bees are dead. My own winter loss, which is on an average from 3 to 4 per cent., is the past winter and spring from 5 to 6 per cent. The great loss of bees throughout the country, though perhaps chiefly owing to mismanagement, is in part at least due to natural causes over which the most expert apiarist has but limited control. Yet while this is a fact, so much of the loss is obviously the result of incompetent management that it affords another argument against everybody going into bee-keeping.

There is perhaps no other department of agriculture that requires so much special knowledge and adaptation as this, and hence the folly of those without skill or experience going extensively into bee-keeping, either as an exclusive or main pursuit. Of course if but little is invested in it, and but little expected from it, there can be but little loss, and the disappointment will be correspondingly small.

The natural causes to which the late mortality is partly due may be traced to the excessive drought last summer and the continued severe cold of last winter, which persisted continuously for several successive weeks. The drought operated injuriously on the winter prospects of the bees in several ways. The failure of the honey flow resulted in a shortage of winter stores, and as a consequence some starved to death; while from the same cause brood rearing was checked in the fall and discontinued much earlier than usual; and as many old bees went into winter quarters, they naturally died off during the winter and spring before they could be spared from the hive. A poor quality of food, resulting in bee-diarrhoea, was another cause having its origin in the drought. Not that clover, basswood, or buckwheat honey gathered during a drought is inferior in quality, but during a scarcity the bees will gather sweets from any and every source. They thus get into their hives at such times odds and ends in the shape of sweets of various kinds, which though perhaps good enough for summer food, are quite unfit for winter.

Then, the continued cold weather lasting through several weeks in the middle of the winter operated against the bees in two ways. Bad food and low temperature are, in my opinion, the prime causes of bee-diarrhoea. The unwholesome food and the excessive cold together had their natural effect, while the latter alone had the effect of preventing the bees from reaching such stores as they had, with the result of starvation with food in the hive.

But while these primary natural causes are beyond the control of the apiarist, be he experienced or inexperienced, wise or otherwise, wisdom and experience may to a great extent obviate their pernicious effects. The brood-rearing, checked by the drought, can be kept up in the fall by judicious feeding, thus securing young bees for winter. The unwholesome stores can be extracted and good food supplied. Under proper

wintering conditions such temperature can be secured and maintained in the hive during the coldest weather as will enable the bees to reach their stores when needed, and thus avoid the risk of starvation, and also reduce the risk of disease to a minimum.

#### THE PROSPECTS.

Considering the freaks, fancies and general instability of June, it would be unsafe to prophesy, but the present prospects of a good honey season are favorable. That the surviving colonies will be in strong condition to take advantage of the harvest when it comes is more questionable. Generally they come out of winter quarters in rather poor condition, and the spring has not been overly favorable for building them up. Only, therefore, in the hands of the skilled few will the colonies be strong and ready for the harvest when it arrives. There may be an abundant yield of nectar and a comparatively small ingathering. One of the main conditions of successful bee culture is the faculty of taking full advantage of the crop or flow—that is, to "make hay while the sun shines." When the flowers are yielding, keep the bees at work—at work honey-gathering instead of brood-rearing and comb-building. How can this be done? By diminishing the size of brood nest and confining the queen thereto, and by supplying the workers with storing comb. The former can be successfully accomplished by the use of the queen-excluding perforated zinc, and the latter object attained by the judicious use of foundation and securing store combs built at leisure—I do not mean built in a factory (that can't be done), but built at the leisure of the bees in their own grand factory, the hive. There should be no artificial check put upon brood-rearing during the spring and up to the clover honey flow. On the contrary, the queen should have full swing, and any natural checks to brood-rearing should be overcome if possible. But when the flow comes her maternal operations should be so restricted as to enable the workers to devote their time to gathering outside instead of nursing inside.

Everything should now be in readiness so that no time will be lost. Put on extracting stories and section cases directly the flow begins. Give them work and room to work. With the flow comes the propensity to swarm—a propensity we often desire to check, and can check by proper means, among which giving plenty of room is foremost. But in the production of section honey this remedy is sometimes worse than the disease, for the workers will often refuse to commence in the sections at all if you lay out too large a job for them at once, especially in cool weather—the time when human bipeds feel most like tackling a big job.

#### SWARMING.

When the season is favorable June is the swarming month. In old times from the old box hive there used to be considerable swarming in May, but in these times from the improved hives and management, swarming in May is the exception. The old saw of our grandfathers was that "a swarm in May was worth a ton of hay, a swarm in June was worth a silver spoon, but a swarm in July wasn't worth a fly." In these times, however, the bulk of the swarming is done in July should the season be at all backward, but in those good old days the bees swarmed when they liked and as often as they liked; now we let them swarm once or twice or not at all. We need not have a swarm at all should we choose to keep ahead of them dividing and sub-dividing. But I am growing less and less in favor of the "artificial swarming" over which natural swarming has some important ad-