of one variety—is more effective than almost any other method.

I said in the beginning that I did not think our fruit shows were ordinarily so instructive as they ought to be. May I suggest in closing a few ways in which it seems to me they might be improved in this respect. One of the most important deficiencies is poor labelling. If a visitor takes any sort of critical interest in the show he wants to know what he is looking at. Doubtless there are many to whom an apple is an apple, and if it is big and red, that is all which is required to excite their unbounded admiration. But the man who is going to get any lasting good from the fruit show wants to know whether he is looking at Wolfe River or Alexander, or a small red pumpkin, and he may have to depend on the labels for that information; consequently, the labels should be large enough to be easily read, and there should be no question where one variety ends and another begins.

Secondly, I believe that greater prominence should be given to collections of fruits—that is, to commercial sorts. There is nothing more instructive, not only to the intending planter, but to the outsider (or insider) who is studying the fruit industry of any locality, than these collections of the "best five, eight or ten commercial varieties."

Thirdly, the commercial side in another way should be brought into prominence, by offering good prizes for "fruit packed for export" in all the various packages used for the different fruits.

And, lastly, I should like to see an opportunity given for the judge to discuss with the exhibitors his reasons for deciding as he has done. I am sure, from my experience as a judge, that if the exhibitors could go over the different plates as carefully as the judge does, they would very much oftener agree with his decisions. It so often happens that the plate of large, finely-colored apples, which at first sight would be easily entitled to first place, is found on more careful examination to have a big spot of "scab" or a wormhole, or some other defect, neatly concealed from the casual observer. F. C. SEARS.

APIARY.

Only the Bees Themselves Can Ripen Honey Properly.

Annually we are impelled to ring the changes on the unwisdom of extracting frames of combs before they are capped. Following is a sensible argument on this subject by Alpine McGregor, of Peel Co., Ont., in Gleanings in Bee Culture:

I remember very well when D. A. Jones was "King" in Canada. He practiced and advised extracting before the combs were capped, and ripening the honey in tanks holding about 375 lbs. All the beekeepers with whom I was acquainted, and I think I may say the majority in Canada, followed this plan. The result was that the honey market for years was such that it was more difficult to sell the honey than to produce it. Many went out of the business; and those who remained, the writer among the number, decreased their stock. I will mention just one case in point.

A man, less than two miles from here, about twenty years ago extracted over 200 lbs. per colony. Being short of ripening-tanks, he ran it into cans too soon; and the consequence was that every pound fermented, bulged out the cans, and forced itself out at the top. It was all sold within twelve miles from here, and I need not enlarge on the effect it had on the demand for honey in this locality.

I will not say that good, thick honey cannot be produced by artificial ripening, provided there is plenty of ripening-tank capacity and the weather is hot and dry; but take any one of the last three summers—last summer especially—when almost every second day there was rain, a damp atmosphere, cloudy and cool day and night—will anyone say that honey could be properly ripened in such an atmosphere and at such a temperature?

About twenty years ago the writer was present at a convention in the City Hall, Toronto. The Rev. L. L. Langstroth, Mr. A. I. Root, Prof. Cook, Mr. D. A. Jones, and many other prominent beekeepers from the United States and Canada were there. In the course of a discussion, Prof. Cook arose and asserted, with all the dogmatism of a fifteenth-century Calvinist, that honey extracted before it is sealed and artificially ripened is just as good as that fully ripened in the hive. He had tested it—with some of his students, I think he said—and they could not tell any difference. He further stated that we could not afford the time to let the honey ripen inside the hive. Mr. A. I. Root took the opposite view, and maintained that honey which is fully capped before extracting is superior—a position which I believe is endorsed by nine-tenths of the beekeepers throughout the United States and Canada to-day.

Right here I may say that I do not consider an extracted-honey producer fully prepared for his business unless he has three supers for each colony of drawn combs. Thus equipped we can afford the time to allow our honey to become fully ripened in the hive.

I shall not presume to question the Alexander method of extracting honey in his locality, especially buckwheat honey. I rather fancy that exposing it in large tanks for a week or so would improve it, as it might dissipate some of the aroma (?). But I do not want to see that system revived and reintroduced through the medium of Gleanings.

Wintering Bees.

It may seem a little premature to bring up at this time the matter of plenty of well-sealed stores for bees in winter, writes Grant Stanley, in American Bee Journal, but I believe that just now is the proper time to discuss it. If we wait until frost has cut off every vestige of bloom it is entirely too late to say much about it, as by this time cool weather is in evidence, and robbing will be started with a very small amount of tampering with the bees, unless great care is exercised. It is of as much importance that we look into the question of well-sealed stores for winter somewhat in advance of their needs, as it is for the householder to see that he has sufficient fuel provided for the winter, and as honey is "fuel" to bees during their winter's repose, and as many beekeepers purchase their fuel with the proceeds from the bees, is it not equally important with our bees? We would not think much of a man who would not supply fuel somewhat in advance of his needs, and yet when it comes to the wintering of our bees the matter takes on an entirely different attitude with too many beekeepers. It is a poor way of living, either with man or bees, to live "from hand to mouth."

The fall of the year is the "harvest time," in which all humanity "lay in" for the coming year, and it is just when the bees should have a good portion of what they have struggled hard to bring home. It has been the opinion of the writer that more bees perish from the rigors of winter from an insufficient quantity of well-sealed stores, than from other causes combined, even including the dreaded diseases of black and foul brood; and the sulphur pit may also be included. If we will but watch the bee papers closely each spring, we will be surprised at the vast number of colonies that "go over" on account of a scant supply of stores; and then when we take into consideration that only about one beekeeper in ten reads the papers in this country, how many hundreds of colonies perish, the reports of which never reach the press. This and other causes have led me to write thus early, in an effort to awaken an interest.

There is a large class of beekeepers who will not feed their bees in the fall, even if they know they have an insufficient supply for the winter, preferring to trust, as some men do in all business, to "luck," and the chances of a moderate winter, with occasional days sufficiently warm for inspection. If the winter in this case turns out severe, and the bees run out of stores and die, it is, of course, termed "bad luck." Such beekeepers as this would benefit the industry and themselves far more if they would stay out of it.

He is also not much of a beekeeper who will have his bees toil all summer, and then, in his greed for gain, take honey from them so close in the fall that they have an insufficient amount for winter. But there is a class of beekeepers that desire to have their bees so well supplied with stores at the approach of winter that no uneasiness need be felt until warm weather has arrived the following spring; in fact, so well supplied that he need not "jockey" his bees in spring with daily applications of syrup to get them up for the honey-flow. To tamper with bees early in spring results in far more harm than good.

I have put a great deal of thought into this subject, as I want my bees to have plenty of well-ripened stores of the same quality I take myself. With the invention of the modern hive, some of them with shallow brood-chambers, compel the bees to store all honey gathered above the frames, or in the sections, and this is just where we want it during all the honey-flow; but if the sections are allowed to remain on the hives until frost, there is sure to be a small amount of honey stored in the brood-chamber for winter—possibly an inch or two below the top-bars. I use those shallow frames, for I believe they possess many points of merit not found in other frames; but the question of such colonies having plenty of well-sealed stores at the approach of winter, and not feed them, caused me no small thought, as feeding is a mussy job, to make the best of it, and always attended with more or less risk. I would discourage it as far as possible, especially with the beginner; yet I would far sooner feed the bees than take any chance whatever on the bees not having plenty of stores. But where plenty of stores can be secured from the fall bloom, and as this fall honey is dark and not nearly as salable as light honey, yet equally good for wintering, I doubt if it will pay to take such stores from the bees, buy sugar, and take the risk and labor necessary to feed them.

The fall of 1905 I removed all supers containing sections, just seven days before the first frost, compelling the bees to store every drop of honey gathered in the brood-chambers, and I was surprised at the results. So, last fall, I removed the supers on the same date, but as we did not have our first frost so early, they certainly gathered a rich "larder." I had nothing to fear or worry about my bees running short of stores, and, more than this, they began brood-rearing last spring with a vim that was little short of marvelous.

Right here let me say that it is well to remember that bees breed only according to the amount of stores in sight. I did not disturb these bees until warm weather arrived, and when I opened the hives they were fairly boiling over with bees, with new white wax at the tops of the frames, and plenty of sealed stores in sight. I had sections sealed during apple-bloom the past spring, something I never had before.

Now, in conclusion, I want to say this: Formerly I had about an inch, or an inch and a half, of honey sealed in the tops of the frames for winter, where last fall the hives, when being raised to estimate their weight, seemed like lifting an immense stone. I suppose each hive contained 50 or 60 pounds of honey, all sealed and compactly arranged in the shallow brood-frames.

By all means, see that your bees have plenty of well-sealed stores at the approach of winter; pack them well with good, porous material, and let them alone until warm weather arrives, and when you open the hives in spring you will readily admit that it pays, and pays well. These colonies will come out ahead in spring, and be ahead all through the season.

POULTRY.

Fleshing Poultry.

If chickens should be fat before they are marketed, how should this flesh be put on? The three best methods used in the Province are: feeding in pens, feeding in crates, and the use of the crammer. Though the crammer will probably make the best product, which on a fancy market will bring a cent a pound more, it will never come into general use, owing to the additional work entailed. Of the other two methods there may be a difference of opinion as to which is better. At the Poultry Institute, held at Guelph last February, where there were probably a greater percentage of men interested in feeding poultry than have ever been brought together in Ontario before, the unanimous opinion was in favor of the crates, because it was less trouble, cost less, and produced a better quality of flesh. There is a marked difference in the quality of the flesh and appearance of the chick fed in the crate. With a little practice one can tell the crate-fed chick from the pen-fed. It has, as A. F. Hunter says, "A kid-glove feel." The flesh is finer and tenderer, the lot will be more uniformly fleshed, as the stronger ones do not drive away the weaker and take their feed; all get their share, and all they can eat. That the trouble is less will be admitted after a good trial. They are easily kept clean; the fat ones are easily selected; no chasing after and getting the others excited. According to Prof. W. R. Graham's experiments, it takes nearly 2c. worth of grain more to put a pound of flesh on a chick running in a pen than it does when fed in a crate. The individuality of the bird can be watched in the crate, and it is remarkable what a difference there is in birds. Some will stand feeding for weeks and make satisfactory gains; others will gain for a week or two and then stand still or go behind; while others, again, have not constitution enough to stand forcing at all. I remember getting some pure-bred Barred Rocks, fine, big, rangy fellows. They were "pure," because the man that sold them had taken a prize at the Toronto Fair, but that's all could be said in their favor. They were certainly big and rangy—they could almost look over a high-board fence—but they could not eat; they couldn't even stand up straight. Not 10 per cent. of them lived to be fat enough to kill; they had no constitution whatever; they had frames enough to carry ten pounds of flesh, but after a few days' feeding they would be found with their great long legs sticking down through the slats of the crate. Though a good frame is necessary to hold the flesh, as a rule the medium-sized, compact-framed bird will flesh more rapidly, and at less cost, than the over-sized bird. The good feeder learns a great deal of detail in feeding chicks. He finds out the type to select and the type to avoid: there are those that he knows he could not feed at a profit if he had them for nothing; he can tell at a glance if his birds are doing well, and he knows just what to do with those that are not. He knows when a chick is fit to kill, or when it requires another week to finish; when to change the feed, and when to leave without food for a time. These, and many other things, the observant feeder learns. An intelligent farmer can feed his own cockerels and old hens and make very satisfactory profits, but close observation of the details is especially advisable when buying and feeding quantities. If chicks are bought to feed, the very first thing is to treat them for lice: no lousy birds will fatten. Dry sulphur, well dusted into the feathers, will be found as effective as anything. Never mind if the feelings of the woman who delivers the chicks are hurt; take no chances, but sulphur every chick before it goes in-