

The writer may add that he bought (4) four of Mr. McPhadden's fattened chickens on the 1st of the present month. On their arrival they weighed 6.13, 6.12, 6.11, and 6.9, respectively. Two were killed, and after being kept for some days were eaten. The flesh was tender, of fine grain, and delicious far beyond the ordinary. There was no doubt of the very superior quality of the poultry flesh. Such poultry would simply be snapped up on the English market.

The second success was achieved by Mr. James Laidlaw, jr., a well-known farmer in the neighborhood of Guelph, Ont. He wrote on the 17th October that he had raised a large number of Barred and Buff Plymouth Rocks and Silver Laced Wyandotte cockerels. At that date, without any special fattening, they weighed 4, 5, to 7 and 8 lbs. each, the latter weight being attained by a few early ones. On the 25th October the average weight of all his Plymouth Rock and Wyandotte cockerels was 5½ lbs. Had they been penned up and specially fed the average would have been greater. Mr. Laidlaw adds to his last letter that he had sold all his spare birds to a dealer (who was sending them west) at a good deal better price than the local market paid, and without the trouble of dressing the birds. He says "he finds poultry pays him quite as well as any other line of stock."

CONCLUSIONS TO ARRIVE AT.

The conclusions for your many farmer readers to arrive at are:

FIRST.—Get the thoroughbreds which make the heavyweight chickens, such as mentioned.

SECOND.—Properly care for and feed the chicks from time of hatching.

THIRD.—Having got good chickens, see that they reach people who know what the "superior quality" of poultry is, and are willing to pay a price accordingly.

Ottawa, 20th Oct., 1899.

Preparing Dressed Poultry for Exhibition.

An exhibitor exhibits to win, and with dressed poultry, as with other show stuff, that presented in most attractive form has a great advantage over even better exhibits carelessly prepared. At the coming fat stock shows, dressed poultry will play a conspicuous part, and as "old hands" are sure to be forward, the beginners should take every precaution not to be outdone in the last stages of preparation. From a pen of well-fattened birds the cockerels should be chosen that are young and soft-meat, and those that are not spurry and hard. Full, broad breasts, legs wide apart, broad, rather short backs, and short, stout yellow legs are all desirable characteristics. Having selected the best from among the well-fattened of this type, they should be kept for twelve hours without food before killing. Kill by stabbing in the roof of the mouth, and pick dry. Not even the fine outside skin should be broken, which will require great care, especially when the pinfeathers are being cleanly picked out. Pick the wings either clean or only the first two joints; all quill feathers should be pulled. All the down or hair should be taken off, the feathers neatly removed from the thighs, and none left at the joint of the shank. Pick the neck clean to the head. Fold the wings back. After wiping the carcass thoroughly with a soft, damp cloth, hang by the legs in a cool, dark place till the animal heat is all out. They should be shipped and shown undrawn, and generally with the heads on.

In preparing for shipment, wrap each carcass separately in clean wrapping paper, without bending or bunching the neck or body, putting an extra paper around the head, to prevent bleeding or staining. Pack only a few in a box, which should hold them without bending or crowding. Stuff the empty spaces with soft paper to keep the carcasses in place. Be sure that they arrive at the show-room in good season, before all the rest are arranged, as there is something in position, especially if the space is crowded. Well-selected and well-fattened birds, prepared according to these directions, will stand a good chance of meeting favor with the judges.

DAIRY.

A Winner's System of Buttermaking.

Milk, as we all know, after being taken from the cow may be set, or creamed, by a variety of methods, and one only needs to go around among the farmers and collect a few samples of skim milk and test them in order to be convinced of the great waste of butter-fat continually going on among many of even our best farmers. We, unfortunately, like most others, had to experience this loss before we changed to better methods. Missing a crop of ice for the deep-setting cans, some years ago, led us to think seriously of a separator; but here again, like most families, we hesitated when the big price stared us in the face. However, we made the venture, got a machine, and tried it, only to come to the conclusion that the big price kept the margin of profit a long way in the distance; therefore, it was boxed up and sent back. But at the end of one week—in July—we were glad to re-order it, and it stayed in our dairy from that time on, being considered one of the most important factors in the whole dairy outfit. One thing which led us astray

in condemning the separator was no doubt right along the line where a great many other people blunder—i. e., in handling the cream. We ran the cream too thin from the machine, making trouble in ripening, time of churning, and sometimes affecting the quality of butter by having a lot of white specks or curd-like lumps in it. Experience, coupled with good dairy literature, taught us to thicken our cream until one gallon would churn 5 to 5½ lbs. butter. In summer the cream was cooled before placing in can, which consists of a cabinet creamer previously used for setting milk. In this we can use ice, and keep cream cool and sweet until 24 hours before churning, when hot water was substituted for cold, cream being heated up to about 70° to cause quick ripening; cream was cooled again before churning to 56° or 58°. In the winter the cream is usually kept in large cans in a cool place, and treated very much the same as in summer, except that a good starter is used, and cream emptied into can warm from the separator, and about 12 hours longer given to ripen. This method seldom fails to ensure a good, velvety, thick, nicely-ripened cream, which when churned at 60° to 62° gives results equal to summer; assuming, of course, that the feeding is correct. Temperature is always regulated before placing cream in churn.

Churning is done regularly, according to the amount of cream received; not often more than twice a week, nor less than once—a Daisy barrel churn being used, of 25-gallons capacity. This we find quite capable of churning as high as 65 lbs. from good separator cream. The churn having been scalded, and cream ready, a strainer is placed on churn and cream emptied through it; after rinsing cans, coloring is added according to season, sufficiently to give the June tint, and not the orange-yellow. The time spent in churning is from 30 to 40 minutes. When butter breaks, a gallon or more water, same temperature as cream, with a handful of salt thrown in, is added; in order to effect a more thorough separation of buttermilk, give the churn a few more turns and draw off buttermilk through a strainer. When this is effected, as many pails of cold water, at about 56°, is put on as were taken off in buttermilk; a few turns of churn is then given and water drawn off. Another lot of water a little colder being added, churn turned, and again drawn off, this time thoroughly, we find our butter sufficiently washed and ready for the salt—after being weighed in churn—which is always added while in churn. Care is taken to keep the granules just right size, which if too large will result in mottled butter. No rule can safely be fixed here, but the object sought is not to have the grain so fine that it will run out with the water and go through strainer, nor so large that the salt cannot penetrate evenly; about like wheat is a safe guide. We use 1½ to 1¼ ounces in churn, which requires more than salting on a worker. After adding salt with a sifter as evenly as possible, we let churn stand; then revolve a few times every few minutes while preparing for printing. When gathered in lumps of several pounds each, the butter is placed on the worker or in a bowl, and printed and wrapped in the best parchment paper, unless ordered otherwise, as is often done for winter use, and sold to private customers in Toronto. Experience has proved to us that we get a nicer grained and better flavored butter by working salt in churn, in preference to using worker.

To cater successfully to a private trade not only involves extra labor in delivering, but the utmost care and vigilance in producing; having regular delivery days, and go on that day, no matter what work is pressing at home, or how bad the roads or inclement the weather. But once a customer's confidence is gained by giving him a uniform article of good quality, the price is in most cases a secondary consideration, and if a dairyman cannot bring that to the mark where a good profit is realized, he'd better look up some other calling.

YORK CO., ONT. MARSHALL STONEHOUSE.
[EDITOR'S NOTE.—It will be remembered that Mr. Stonehouse won second prize in the non-professional buttermaker's class at the Toronto Industrial Exhibition, September, 1899.]

Does it Pay to Feed Dairy Cows Liberally.

At a Farmers' Institute meeting, Tonganoxie, Kansas, a dairyman gave in his report on producing milk for the Kansas City market from common cows picked up through the country. So far as possible these cows were fresh in the fall. During the winter they receive a ration consisting of a mixture of 14 to 16 pounds of bran and corn meal, and what clover hay and sugar cane they will eat. In summer they receive, in addition to pasture and soiling crops, 4 to 5 pounds of bran. By this system of liberal feeding, a two-years record shows an annual income per cow of \$70.99, the milk being sold at an average of 8c. per gallon.

Last year at the Agricultural College our best cow cost us \$32.80 for feed, the highest of any cow in the herd, and about \$3.50 above the average of the herd, and yet the profit from that cow, over the cost of feed, was \$24.12 above the average of the herd. Does it pay to feed liberally? With a good dairy cow it surely does. Had the herd referred to above, or the best cow at the Agricultural College been stinted in feed, it would have been an extravagant piece of economy, that would have resulted in a diseased pocketbook. The dairy cow is a hard-working animal, and should be fed accordingly.

Kansas Experimental Station. D. H. OTIS.

GARDEN AND ORCHARD.

Trial Experiments with Crude Petroleum and Other Insecticides for San Jose Scale.

As we go to press we learn that the Ontario Government have taken steps to investigate the value of the various insecticides that have been recommended for the destruction of the San Jose scale, including crude petroleum—referred to elsewhere in this issue. The other remedies to be dealt with are: Whale-oil soap and kerosene (1 to 4 of water). About the middle of December, Prof. Lochhead, of the Agricultural College, and Mr. Fisher, the San Jose Scale Inspector, will conduct a series of trial experiments at Niagara, St. Catharines, Grimsby, Hamilton, and Guilds in Kent County. This move, we take it, is a step towards the abandonment of the axe-and-fire remedy that has met so much opposition.

A Remedy for the San Jose Scale.

Now that the Ontario Department of Agriculture has stamped out the worst cases of infestation by this pernicious scale insect, and has, in the opinion of many competent judges, done a really good work, it becomes of great interest and importance to form a wise decision regarding the methods to be adopted in the future. If it is possible to keep the scale in check, and in time exterminate it without recourse to the extreme measure of cutting down and burning all infested or suspected trees, it is most desirable to know how this is to be done, what remedial treatment is likely to be successful, and what is the probable cost of its application.

Two methods of treatment are now pretty well known, and have been employed with considerable success. The first is fumigation with hydrocyanic acid gas. An act of the Ontario Legislature, passed during the last session, has made this mode of treatment compulsory in the case of nursery stock, which cannot be sold or removed without fumigation in the manner prescribed by the order-in-council, but its use in the garden or orchard is a very different matter. That it can be successfully employed has been proven by Professor Johnson, State Entomologist of Maryland, but the expense and difficulty involved are a serious consideration. It is necessary, for instance, to have air-tight tents to completely cover the infested trees and apparatus for putting up and removing them. This might be done by the Department of Agriculture, but it could not be afforded by any ordinary fruit-grower. This method, then, can hardly be considered as generally available.

The other remedy referred to is the washing the trees with "whale-oil soap." This is undoubtedly the best and safest means hitherto known for the destruction of the scale, and has been employed with great success in many places in the United States, and especially on Catawba Island, Ohio. The only drawbacks to its use are its expense (which ought not to be considered serious when its additional advantage of being a good fertilizer is borne in mind) and the great difficulty of obtaining it of a reliable and uniform strength. In spite of these drawbacks, it is a remedy that should be employed by every fruit-grower who has reason to suspect the presence of the San Jose or any other injurious scale on his trees. It cannot be applied with safety during the summer, but may be used with success in winter or early spring, which is a distinct advantage, as the hours of labor then are not so crowded with work. The ordinary mixture is two pounds of whale-oil soap to a gallon of water. The best soap for the purpose is made with potash, and not with soda.

A third remedy has lately been announced, which it is the object of the writer to bring before the readers of the FARMER'S ADVOCATE. In a recent bulletin Prof. John B. Smith, of the New Jersey Agricultural Experiment Stations, has described his experiments with *Crude Petroleum* as an insecticide. Such a material, it was naturally supposed, would be even more dangerous to vegetation than the coal oil obtained from it, and accordingly the first experiment was tried upon a tree whose vitality was so much impaired by the scale that it was sure to die if nothing was done for it. To quote Dr. Smith's account: The tree selected was a dwarf Duchesse pear fully incrustated with the pernicious scale. On January 19th, 1898, crude petroleum was put on liberally to get the maximum effect upon the tree as well as upon the scale, every twig being separately painted, and the brush being used to the surface of the ground. February 25th the tree presented a curious sight, being very dark brown in color, as if stained. The oil seemed to have penetrated the outer bark layer, water was standing in globules on the surface, and dust was beginning to settle in the crotches. The tree started normally April 4th, blossomed fully, and on May 10th seemed entirely healthy, with a full set of fruit. The discoloration caused by the oil was yet obvious, and the tree could be recognized as far as it could be seen in the orchard. About the middle of June it was one of the finest of its kind on the place, the foliage vigorous and of good color, the fruit set heavy, not a living scale could be found, and there was no trace of that general breeding going on everywhere else. Growth continued throughout the season, and on September 12th the tree was one of the best. At that time only a single fruit had any