"dairy form." What are fancy points worth? A good performer must possess the essential points—good constitution, vigor and capacity to assimilate and digest food, with the temperament to turn it into milk. Such a cow is the Holstein. For this very purpose she has been bred for years, and the result is that she "gets there" to the satisfaction of dairymen who value a cow for what she does.

In pure-bred Holsteins it is quite common for two-year-old heifers to give forty to fifty pounds of milk daily, and make ten to fifteen pounds of butter per week, with larger records for other ages, and many cows have made in official tests from twenty to twenty-four pounds of butter per week, and several have made from twenty-four to twenty-nine pounds. This is the kind of work that commends itself to dairymen. "Performance," not form, type, or such misleading and indefinite things, but actual performance, is the word which Holstein breeders swear by, and that is what breeders are working for. This is the secret of the marvellous growth in popularity of the Holstein breed, whether as pure-breds or grades. If a dairyman uses a good Holstein bull from performing ancestors, and raises the heifer calves intelligently, success is assured.

The Milking Machine.

A writer in the Farmer and Stock-breeder, of London, England, gives a glowing description of a dairy farm near Paris, France, and of the successful working there by electrical power of the well-known Scotch Laurence-Kennedy cow milker, which has been used in England with more or less success. "Milking cows mechanically," says the writer, "is by no means a new method, the question of substituting a mere machine for the rosy-cheeked dairymaid having for years occupied the minds of inventors. The introduction of electric power which makes it possible to milk as many as fifty cows with the assistance of only two human beings, one to fix the apparatus and one to remove the milk pails, is certainly a novelty." It is maintained by the manager of the farm in question that the yield is greater than from cows milked in the ordinary way, and that the milk will keep longer, owing to being drawn into air-tight covered pails. To the question will it pay, the answer given is: "The machinery is very costly, but that in this case the result has justified the expenditure, and that there can be little doubt in regard to the question of economy."

POULTRY.

Hatching Chickens.

To manage a number of sitting hens is likely to be a great deal of trouble. Not all hens, even of the breeds supposed to sit, are sure sitters. The hen should be of a quiet disposition, in fair condition. The body should feel hot underneath, and no hen should be taken that does not allow herself to be handled freely, at least after dark. Sitting hens should be provided with a room by themselves, away from laying stock. The nests should be of good size, and only just high enough in front to retain the nesting material. Care should be taken that the nests are sufficiently large, and, in the rooms where the hens are sitting, suitable provision should be made for a dust bath. If sitting in a room with a board floor, use nests with bottoms; on an earthern floor, bottomless nests are better. If a nest with bottom is used it is desirable to place some earth in the bottom, and on top of that a little fine straw or hay. It will be found most convenient to set a number of hens at one time, and the eggs should be tested after about five days, and if many are found infertile some of the hens may be reset on fresh eggs. In setting hens, it is best to move them from their accustomed nest to a new one at night, and no lantern should be used. The hen should be kept fastened in the nest for a day or two at least, and if many sitters are kept in the same room it will be safest to keep the nests closed all the time, removing the hens from the nests daily for the necessary length of time. Sitting hens should be fed on whole corn and allowed plenty of grit and fresh water. When taken from the nest they should not be allowed to remain off more than about twenty minutes, unless the weather is very warm. Chilling the eggs is less injurious during the second week of hatching than at any other period. When the chicks begin to hatch, the hens should be watched to see that they are doing well, and if a hen is inclined to kill chickens or is restless it will be necessary to remove her and give her eggs to another. If it is seen that some of the chickens are making no progress in getting out and that the membrane is becoming dry, it should be moistened with warm water, especially if it inclines to adhere to the body of the chick. It is almost always possible to place chicks hatched under hens in charge of a smaller number than are required to hatch them. The number must be varied according to the weather. Twelve is a suitable number for winter, but in summer one hen can care for about eighteen or twenty chickens after they are a day old. Those hens that make the best hatches should be given charge of the chickens. Never allow a sick hen or one with scaly legs to care for chickens. All deformed chickens, and those that are weak, had better be killed at once. Chickens with hens should be kept inside for a few days. Then, unless the weather is especially cold or stormy, they may be placed in a coop out of doors.

H. E. HANLY.

Turkey Raising.

A correspondent and constant reader has asked us to publish something on turkey-raising. The following is from an essay by a successful poultry-woman, and was published in a book called "Turkeys, and how to grow them," by Herbert Myrick:

The first requisite to successful turkey-growing is carefully selected stock for parent birds. Selections of the best for years have produced the most improved and profitable breeds of stock. After complying with the first condition, and having secured large, strong parent turkeys at least one year old, see that they are in the right condition for breeding. Breeding fowls should not be overfat, as the offspring of such fowls are less vigorous. If the hens are young (late hatched) they require more food at breeding time, as they are still growing and immature. If hens are old they should have millet and clover, where it can be grown, and less carbonaceous food in the latter part of the season. Too much corn will produce overfat turkeys, unless they have abundant exercise in insect hunting and plenty of green food. When the laying season begins, usually in April or May, a watchful lookout must be kept for the eggs. It is natural for all turkeys to hide the nest, but petting will do much toward keeping them near the house. Each egg should be gathered as soon as laid, and placed, small end down, on cotton or some soft material, and kept in a dry, cool, dark place. If not used at once, they should be turned occasionally, to prevent settling or adhering to the shell. As the eggs are removed daily from the nest, it is better to return a hen's egg, until there are five or six in the nest, as a turkey is suspicious and easily discomfited. My turkeys lay entirely in the grove near the house, and arrange their nests with skill themselves, my only task being to protect them from natural wild enemies. The nest should always be dry and large, and on the ground if possible. Fifteen eggs are sufficient for a large hen, and if small thirteen will give better results. Four weeks, and often thirty days, are required to hatch the eggs. This makes a long period of rest for active Mrs. Turkey, yet she must be compelled to do her work faithfully, consequently should have easy access to an abundance of food and pure water, that she may not be forced to remain too long a time off the nest to procure food, thus allowing the eggs to chill.

CARE OF THE YOUNG.—About the twenty-seventh day I throw a hard-boiled egg, mashed very fine, close to the nest, not into it, lest it adhere to an egg, rendering the egg air-tight exactly over the beak of the young turkey, which would prevent his escape from the shell. The mother may eat this egg, and the one given the following day or two, if it is not needed for her young, but in case she is hatching, she will use it for the little ones, and this food will often save the first-hatched birds. I have had the mother turkey refuse to leave the nest for three days after the first eggs hatched. If she leaves too soon the remaining eggs may be placed under hens, or hatched by wrapping in wool and keeping warm near the fire. Should an egg become broken in the nest, the soiled eggs should be carefully washed immediately in warm but not hot water, and dried and returned at once to the nest. The trying time in the life of turkeys is the first week, when they require constant watching, then great care until they are eight weeks old, or until the quill-feathers are well started. The producing of these feathers seems to weaken the fowl, and exhausts the system, and therefore they need especial treatment to counteract this difficulty.

For the first week, the mother and young must have a warm place, free from drafts of air, free from dampness, and where they will be undisturbed by other fowls.

The first three weeks the food should consist of sweet milk (fresh from the cow is best), very hard-boiled eggs, and fine wheat; bread crumbs for the little ones, wheat, corn and fresh water for the mother. Feed the mother first, and she will not take much of the egg and bread, which is more expensive. During this time, if the weather be warm and sunshiny, let the mother out during the middle of the day, keeping her near the coop, taking care to shut her in before sunset, as the dew is harmful to the young turks. During the first week the little ones are apt to get onto their backs, from which position they cannot rise, and will die if allowed to thus lie for any length of time. Care must be taken not to place the pens near the hills of small red or black ants, as these are enemies to young turkeys. They not only attack the head and kill the turkey, but if eaten, will almost instantly choke them to death.

The fourth week the food may consist of oatmeal, sour milk curd in small quantities, cracked wheat and scraps from the table, taking care that the scraps contain no salt. Salt, salt meat, brine or salt fish will kill them. After the eighth week, give mother and brood their freedom. Feed only in the morning, and this is not needful if they have access to grain fields.

If a turkey becomes sick, it should be isolated at once from the others, to prevent the spread of the disease. Land over which diseased fowls wander will be contaminated and infect other flocks. Turkeys require plenty of pure water, and must not be allowed to drink from stagnant pools, as this may produce bowel troubles. It is useless to doctor a very sick turkey—better to kill and bury deep at once. Prevention is better than cure, and if the following dose is given fortnightly, or even monthly, throughout the year, to either turkeys or chickens, there will be little necessity for cholera cure: Two ounces of Cayenne pepper, two ounces sulphur, two ounces alum, and two ounces copperas. Mix all together, and add two tablespoonfuls to eight quarts of corn meal, and wet the mixture with sweet milk or warm water. This will feed forty fowls.

One may profitably practice giving two broods of young turkeys to one mother when hatcheh at the same time, as one turkey can hover from twenty-five to thirty little ones during the critical period in their lives, after which they do not need much hovering. The other mother, after being closely confined out of sight and hearing of the little ones for one week, will quickly mate and lay again. This is very practicable and desirable when the first broods are hatched in May, or earlier, as the second hatchings are often the best, only a little later ready for market.

To Prevent Hens Eating Eggs.

I have tried several ways, and find this a success: Make a box twenty-six inches long, fourteen inches high, and fourteen inches wide. Put a second bottom in the whole length of the box, raising where the hen enters four inches. Line the bottom with carpet; put a board across the center high enough from the bottom to let the eggs roll down under it to the lowest end of the box. Make a little door in that end to take the eggs out. Take a white door-knob with a screw in; screw it in the center where the hens goes in to lay. This represents an egg.

Brighton, Ont. FRANCIS C. SAGER.

APIARY.

Recent Winter's Losses.

That winter losses will be abnormally heavy throughout Ontario is a fact that by this time will be admitted by the most sanguine of Bee-keepers. While the outlook with many is no doubt very discouraging, yet there is always a silver lining to the darkest cloud, if we only look in the right direction. Losses in bees are much easier recuperated than with almost any other class of stock. Hives and combs do not die, and if the season is fair, by autumn the majority of apiaries can be restored to former condition and numbers. Again, this disastrous winter may be a blessing in disguise, by awakening beekeepers to the fact that they should always prepare for a severe winter. Editor Hutchinson, of the Bee-Keepers' Review, says that our recent open winters, with consequent fair wintering without special protection, has made many beekeepers careless. To my mind, after making all due allowance for exceptionally severe weather, this condition of things is responsible for a large percentage of losses this year.

CARE OF COMBS BEES HAVE DIED ON.

As soon as colonies are known to be dead, the combs should be taken out and all dead bees shaken off them. Any bees on bottom of the hive should also be taken out; if left they soon create a nasty stench. Don't try to pick dead bees out of the cells; it is a slow job, and if left in they do no harm to the combs. These combs can be used to hive swarms on, and when so used the bees will remove their dead comrades from the cells in a more expeditious manner than we possibly can. They can also be used for surplus combs if desired, but before so using they should be sprayed full of water and then be turned in the extractor previous to allowing the bees to store honey in them. If this is not done, combs that have had brood reared in them will color the first extracting of honey. It is quite a job to preserve these combs from the ravages of the bee moth. One of the best plans I know of is to suspend the combs in a light room, keeping them quite a distance apart When in this position one can tell at a glance if anything is amiss. If left in the hives it is well-nigh impossible to keep the moths out, and in an incredibly short time the hive will be a squirming, wriggling mass of webs, grubs and filth. If chances are not good for using the combs, by all means melt them up and put through a wax press. Half a loaf is better than none.

J. L. B.

Elgin County Beekeepers' Association.

A meeting in the interests of beekeepers will be held in the Y. M. C. A. building, St. Thomas, on Saturday, April 30th; sessions commencing 10 a. m. and 1.30 p. m. A good programme is being arranged. Special attention will be given to questions from beginners, also to the subject of marketing honey. All who are interested in bees and honey are cordially invited to be present.