

The Vineyards of the Islands of Lake Erie.

THE Kelley's Island correspondent of the *Ann Arbor Courier* says:—"The whole secret of grape culture here is all explained in the peculiar mildness of the climate. The large body of water surrounding the islands becomes so heated during the summer that the frosts do not come until December, not even severe enough to injure the tomato vines. The cost of raising grapes is moderate; one man can easily cultivate five acres—one horse, a plough cultivator, and a hoe is all that is needed. The grape roots are placed in rows, six by eight feet apart, and the vines are held by three rows of wires, strung on posts. In the spring, all the wood of last year's bearing is cut away, and from two to three vines of last year's growth are allowed to grow, being cut back from three to four feet from the ground. To secure a good crop, the vineyard must be well ploughed, cultivated and hoed, keeping it free from all weeds and grass. The price of grape land is \$300 per acre, and when a vineyard is in full bearing, after a three years' growth, it is worth \$1,000 an acre. The average net profit from one acre of grapes is \$300, but as high as eight tons to the acre has been raised—which, at the low figure eight cents a pound, brings the snug little sum of \$1,280. I have visited the vineyards on Middle Bass Island, and I find a great difference in the cultivation of the grape, some neglecting and others taking the utmost pains to keep them clean, in order to secure a good crop. W. W. Wicker and Capt. Atwood have the best prospect of a good crop of any I have seen—although not much over one-half a crop is expected, owing to the rot and mildew. The Concord, Delaware, and Catawba, are the best grapes raised here. One thousand acres of grapes are now in training, mostly on North Bass, Middle Bass, or Put-in-Bay and Kelley's Island, which together contain about 6,000 acres. Immense quantities of pure native wines are also made on these islands; the amount last year was 100,000 gallons. The Catawba wine is of an excellent quality. At the Paris Exposition, where all the noted wines of Europe were on exhibition, the American wine took the premium. It is a singular fact in this wine-making, that the wine always undergoes two fermentations; one when pressed from the grape, and the other the next spring, when the leaf and blossom of the vine appear. Large wine-cellars, capable of holding from 8,000 to 80,000 gallons, are built in the solid rock, arched over with stone or brick, in which the wine is stored until fit for market."

Evergreens in August

THE latter end of August is one of the best seasons of the year to transplant evergreens. The young growth of the past season has got pretty well hardened, so as to permit of but very little evaporation—and the earth being warm, new roots push with great rapidity, and the tree becomes established in the ground before cold autumn winds begin. The chief difficulty is, that the soil is usually very dry, which prevents much speed with the operation; and the weather being usually very warm, the trees have to be set again in the ground almost as fast as they are taken up; so that it is not safe to bring them from a distance. It is as well, therefore, to make all ready in anticipation of a rain, when no time may be lost in having the work pushed through. Should a spell of dry weather ensue—which in September and October is very likely—one good watering should be given, sufficient to soak wet through the soil and about the roots. A basin should be made to keep the water from running away from the spot, and to assist its soaking in. After being well watered, the loose soil should be drawn in lightly over the watered soil, which will then aid in preventing the water from drying out soon again.

Towards the end of the month, and in September, evergreen hedges should receive their last pruning till the next summer. Last spring, and in the summer, when a strong growth required it, the hedge has been severely pruned towards the apex of the cone-like form in which it has been trained, and the base has been suffered to grow any way it pleases. Now that, in turn, has come under the shears, so far as to get it into regular shape and form. It will not be forgotten that, to be very successful with evergreen hedges, they ought to have a growth at the base of at least four feet in diameter.—*Gardener's Monthly.*

—A farmer in Oneida, N. Y., raised seven thousand quarts of strawberries on a single acre this year.

The Apiary.

Cause of Bees Robbing.

THE principal cause of bees robbing is want of forage. Bees will seldom, if ever, rob when they can find plenty of flowers to work upon; but when flowers cannot be found, and the weather permits them to fly, their great anxiety to labor causes them to seek for honey even in the neighbouring hives. Hence, in the spring and fall, or before the honey season commences, and after it closes, bees are much inclined to rob each other, and sometimes, for want of a little attention, cause the apiarian much trouble and loss. It frequently happens that a stock of bees, becoming overpowered by robbers, join in with them and assist in carrying away all their stores, and the bee-keeper very unexpectedly finds his hive minus bees and honey.

As a rule, however, stocks that are attacked by robbers are defective in some way; that is, if a stock is being robbed in "right good earnest" we may conclude that it is queenless or has a drone-laying queen, or from some other cause is very weak. Robbers may, and not unfrequently do, attack strong stocks; in such instances they are generally handled rather roughly, and soon leave.

Every bee-keeper will have noticed in the fall, after the honey harvest is over, on the lighting boards of his hives, or some of them, a single bee surrounded by others. The bee surrounded is a strange bee, or robber; they hold it a prisoner; some are biting its legs, some its wings, while another is ready to take what honey it has—for by the continual biting of the bees it is forced to give it up. If the stock is queenless, or otherwise weak, these robbers increase until they will come and go in a perfect swarm, and sometimes in a few hours carry away all the honey in a hive.

To prevent robbing, the entrances to all hives should be contracted, as soon as the honey harvest ceases, to a very small opening, especially if stocks are weak. When it is discovered that a stock is being robbed, and contracting the entrance does not stop the robbing, it must be removed to a dark cellar or out-house for a day or two,—then bring it out and examine it, and ascertain the cause, and apply the remedy. If queenless, or possessing only a drone-laying queen, give them another, or join them to another stock that has a queen. If not queenless, but very weak in bees, exchange places with some strong stock. If it is discovered that one stock in the apiary is robbing another, put the stock of the one that is being robbed in the place of the one that is robbing; in other words, exchange places with the two stocks, and the robbing will generally cease. This should not be done, however, unless it is clear that the robbers are getting the advantage. But the best preventive of all is to keep strong stocks, and be sure they are not queenless.

Swarming Extraordinary. — Queenless Stocks.

To the Editor of THE CANADA FARMER:

SIR,—On the fourth day of this month, I took an artificial swarm from one of my hives of bees, and cut out all queen cells but one. On the twenty-third that same hive cast a natural swarm, and on examination I found that same queen cell open at the lower end, but no other in the hive in any stage, and no eggs. I returned the swarm to the hive, and they are doing well.

On the twenty-third of this month, one of my hives swarmed, and the bees returned to the hive without clustering. I examined and cut out all queen cells but two. Soon after I found a queen on the ground, with one wing gone and a part of the other. I placed her on the alighting board, but the bees attacked

and killed her. She might have come from another hive, which swarmed and returned the same day. Yesterday, this hive from which I had cut the queen cells on the twenty-third swarmed again, and the swarm clustered in two separate clusters, some distance apart. On examining the hive, I found the two queen cells open at the lower end, and no other in the hive, nor any young brood or eggs. I returned both clusters to the hive, and this morning found one, and only one, queen thrown out. Both stocks were in the "Thomas" hive.

I would like Mr. Thomas or anyone else to explain these phenomena. It seems to me that we have here a way of accounting for queenlessness which I have not seen mentioned by any writer on the subject.

THOS. C. HILL.

NOTE BY ED. C. F.—A swarm issuing under the circumstances as related in the first instance is not a common occurrence; yet sometimes it is the case, and may be accounted for in this way. The excitement caused by the queen leaving the hive on her bridal tour, causes the bees to rush out after her, and cluster as in other cases.

The second instance related is a more common occurrence. It not unfrequently happens that all the queens in the hive hatch about the same time, say during a night; the result is, the next day, when the bees swarm, all the queens leave the hive, and there being no eggs, the stock is queenless and unable to raise another.

Swarms issuing under similar circumstances have been known to contain four and five queens. Sometimes the bees will all cluster together, and sometimes separately, as in the instance related by Mr. Hill. When returned to the hive, all the queens will be destroyed, except one, as in this case. The queen found, probably issued from the stock out of which Mr. Hill cut the queen cells, or it may have issued from some other, as suggested by Mr. Hill.

More stocks become queenless from all the queens swarming out than is generally supposed.

— An Ohio exchange says something is the matter with the bees this summer. They refuse to send out swarms, or make any honey.

BEES EARLY SWARMING.—Most of our writers on the honey bee say look out for swarms from nine a. m. until four p. m., and being an amateur in bee-keeping, I was surprised on Sunday morning, July 5th, at a quarter past six a. m., to see a fine swarm issue from one of my hives, and another swarm from another hive at half-past seven. I think it would be advisable for your bee-keeping readers to keep a look-out next season a little earlier than usual in the morning, and perhaps save some swarms of bees by so doing.

WM. M. H

Township of Kingston, Aug. 6, 1868.

TREATING BEES WITH COLD WATER.—Bees in swarming have been known to alight upon persons and animals, stinging them severely, and in some instances causing death. The *American Bee Journal*, in referring to an instance of the kind, where a swarm of bees recently settled upon the head of a horse standing in front of a church, and the owner, who went to its assistance, was stung senseless, says that all the difficulty could have been obviated by the use of cold water.

In such cases the *Journal* advises a prompt application of a few gallons of cold water sprinkled from a common watering pot directly on the clustering bees. It remarks that "a little knowledge, presence of mind and calmness would have been serviceable here; for nothing is more apt to rouse the ill temper of bees than to come in contact with a sweaty horse; and a horse is a most helpless animal when attacked by bees."

During the extreme hot weather of July we had several swarms come off that were extremely irritable, and we treated them to a sprinkling of cold water, after which they became quiet, were easily handled, and were hived without the least trouble.