

the management of a stock. At first we were somewhat nervous and hesitant, but a few trials inspired confidence, and now, though our actual experience only dates back a year, there is scarcely any operation among bees that we dare not undertake, and cannot perform with perfect ease and composure. A single sting has been the whole extent of our punishment thus far.

As most beginners will probably begin with a single stock, it may not be amiss to narrate the history thus far of our own little apiary. We commenced with a late swarm last season. It was put into a Thomas' hive with observing facilities in the way of glass sides and outer doors. Last season the bees filled the body of the hive, and a box containing 20 lbs., which was appropriated to family use. The stock wintered well and had honey enough and to spare this spring, so that we robbed them of a portion of their store for the table. In addition to filling the hive, they have made 16 lbs. of surplus honey which is in course of consumption in-doors. They have cast a fine, strong swarm which we hived in a Scott hive in order to give its merits a fair trial. We also purchased a swarm this spring, which in three weeks has filled the body of a Thomas hive with honey and brood, and is now at work in the surplus box.

As an illustration of the profits of bee-keeping we may instance our oldest stock. Putting down its cost at \$10, viz.: \$5 for the bees and \$5 for the first Thomas hive and right to make for our own use. Last season, the hive yielded 20 lbs. surplus of fall honey, worth 20 cents per lb., making \$4. This season it has cast a swarm worth \$5 and the 16 pounds of surplus, being the finest quality of white-clover honey was worth 25 cents per lb. Here then is a return of \$13 in one year from an investment of \$10. This is only a case of moderate average success, such as any one of ordinary common sense may hope for in the use of an improved moveable-comb hive. For our part we do not know in what branch of rural economy or mercantile business a \$10 bill can be invested to better advantage than in the purchase of a bee-hive and swarm of bees.

As we observed at the outset of this article, every farm should have its apiary. We go farther. Every family in a village, or the outskirts of a town or city might have its little collection of bee-hives. It is possible to over-populate a region with bees, but apiculture must increase a hundred-fold in Canada before this condition of things comes about.

Rural Economy of the Netherlands.

A VERY interesting Report on the rural industry of Holland, by M. Emile de Lavelege, Professor of Political Economy at the University of Liege, has recently appeared in the *Journal d'Agriculture Pratique*, to a translation of which, by Mr. Evershed, in the last part of the Royal English Society's Journal, we are indebted for the material of the present paper.

The Kingdom of the Netherlands, exclusive of the Grand Duchy of Luxemburg, comprises 8,190,000 acres, with a population 3,500,000, or a little more than 100 to 250 acres; while in Belgium it is 160, and in France only 68. Formerly Holland was distinguished for its commerce, the principal source of its wealth and prosperity. "The country was supported, not by the plough tilling the bosom of the earth, but by her navy furrowing the waves of every sea." Commerce and agriculture are by no means antagonistic interests, but rather twin sisters—the one usually flourishing and declining with the other. Our Canadian agriculture will never reach an advanced state of improvement till our manufacturing and mining resources become more fully developed. Holland, however, near a century ago, when her commerce was visibly declining, slowly began the work of agricultural improvement, which, under the peculiar physical conditions of that country, in less than half a century, assumed very striking and gigantic proportions; and for many years past the soil has been

made to produce nearly food enough for the entire population.

The country may be divided into two almost equal parts—the low clayey districts of the sea coast, and the higher sandy districts of the interior. The former are by far the most productive, either for pasture or arable purposes. In the earliest historical times, these low lands began to be gradually reclaimed from the shallow waters of the adjacent sea by the artificial means of dykes and embankments, and in 350 years, 875,000 acres of the richest land have been won from the waters. The average value of this land is put down at £48 sterling per acre. Two-thirds of it is in grass, and has the appearance of an immense pasture.

"This is the home of those famous cows which yield 900 to 1,100 quarts of milk a year. Nowhere is farming more simple in its details, and at the same time more profitable. The Province most famous for its grass land is North Holland, a low, projecting peninsula which stretches northwards from Amsterdam, with the ocean on the west, and the Zuyder Zee on the east. It would long ago have been divided by many islets if it had not been artificially protected from the waves. Holland signifies, in the native language, *hollow land*, and hollow it is, in part, for when you look over the country, you see in all directions canals above the level of the fields, and boats sailing over the heads of cows. Under such circumstances, natural drainage is impossible. To get rid of the surface water, recourse is had to wind-mills, by means of which it is pumped into the canals. Meadows occupy seven-eighths of the land, and during the summer the cows remain day and night in the pastures. Cheese is largely made, and is called by the name of the little town of Edam, where a large cheese market is held. Hard, dry and round, they will keep for a year or more in the hottest climates, which makes them particularly useful for the navy. England is a large consumer."

We saw the other day, for the first time in Toronto, a small quantity of Dutch cheese, round and hard like cannon balls, weighing from five, to eight or nine pounds each. The thing was certainly a curiosity, for the importation of Dutch cheese into Canada, where as good or better articles can be made at a much cheaper rate, can only be regarded in that light.

M. de Lavelege gives details respecting the wealth of the Dutch farmers, which would seem incredible if they were not established by all kinds of evidence. The unit by which a fortune is reckoned in the Low Countries is a "tonne" of gold, that is about £8,540 Sterling. A farm landowner who is worth one "tonne" is not esteemed rich. It is common to meet with men who are worth two or three. Our author gives the following account of a country wedding which passed here in the street:—

"Forty carriages, filled with the guests, went along at a smart pace. These vehicles are of an antique and very pretty form. They call them 'chaises.' They are, in fact, the gigs of the eighteenth century, with the bodies in the form of a shell, hung high, and covered with gilding and ornament. They are so narrow that there is hardly room for two to sit. So the young girls, with fluttering lace and ribbons, and golden frontlets glittering in the sun, were squeezed close by the side of their jovial companions, who, with their arms stretched out, drove their strong, black nags at a great rate. In the evening, the guests came to the hotel where I was to take refreshments. I asked one of these yeomen if the bride was rich. 'O, yes,' was the answer, 'not badly off, a tonne and a-half, I dare say; but,' presenting a smart lass with black eyes, 'this is my intended, who is much more comfortably provided for, she will have two.'"

The cultivators of the soil are generally, as in Canada, its owners; and it is stated that seventy-five acres well stocked represent a tonne; and most of them make investments in the public funds.

"All have their houses furnished in luxurious style, and make a great display of handsome inlaid plate. Since the opening of the English market raised the value of their products, they are not content with having silver tea services, but the goblets and large dishes of all sorts must be of the same metal, and some people, finding even silver too common, have come out with gold plate."

The drainage of the Lake of Haarlem, covering 45,000 acres, commenced in 1839, ranks among the

greatest agricultural improvements of the world. The average cost per acre of this wondrous transformation was a little under £17; and it is stated that this land, at the present time, readily sells for £32 to £40 an acre. It would thus appear that this ancient lake, formerly worthless, now yields a gross agricultural return of £160,000.

"The gardens of Holland have long been celebrated. Their headquarters are in a belt of country stretching along the sea coast, and called Westland. Although situated in the midst of the clay district, this spot is sandy. It was formerly covered with embankments, but for more than four centuries, the work of reducing them and removing the sand elsewhere has been carried on at a cost so enormous, that the value of the land seems hardly to repay it. The proximity of populous cities, affording a ready market, has enabled Westland to acquire its extraordinary fertility. It is a perfect garden, where cultivation has almost worked miracles; for, with a soil naturally poor, and with a rigorous climate, it produces exotics which do not always thrive even under the gentle skies of Nice. Near Haarlem, are to be seen large breadths of tulips, hyacinths and jonquils, whose bulbs are exported to all parts of the world. The charming village of Bloemendale, 'the valley of flowers,' sent forth bulbs to the value of nearly £200,000 sterling in 1862. Roses are here grown on a large scale for their blossoms, which are used for perfumery, besides plants used in medicine, asparagus, figs, early beans, immense nurseries of fruit trees, and of trees for ornamental planting; and lastly, magnificent grapes fit for a royal table. The gardeners of Belgium and Paris, now so skilful, were the pupils of the gardeners of Westland."

It is very clear how this remarkable culture originated. The merchants of Holland drew their wealth from traffic; all their energy was directed to navigation. They possessed little land, and preferred to invest their spare capital in the public funds, national or foreign. This explains how it was that landed property fell almost entirely into the hands of the country people. Moreover, the grass district required only a pastoral routine of the simplest kind, and did not involve the employment of much capital. The merchants were then satisfied with a country house, or a villa and garden, built upon some sandy elevation above the high level of the waters, and not far from the city; and there the men of business came for retirement. The rich capitalists spared no expense in adorning their retreat. They prided themselves in collecting the rarest flowers, and the most exquisite fruits. This taste in time became general; and the number of small country houses, kept up with the greatest care, has become immense.

(To be Continued.)

The Practical Entomologist.

A MONTHLY Bulletin, published by the Entomological Society of Philadelphia, for the dissemination of valuable knowledge among Agriculturists and Horticulturists. Issued monthly from the Hall of the Society, No. 518 South 13th Street, Philadelphia.

We have already shown our appreciation of this valuable periodical by various references to it, and extracts from it that have appeared from time to time in our Entomological columns; we think, however, that it justly merits some more special notice from us. The first number was issued on the 30th October last, and consisted of eight large octavo pages wholly devoted to the consideration and elucidation of the natural history of the different species of insects injurious to vegetation. As the Entomological Society of Philadelphia, whose enterprise it is, desired no pecuniary recompense for their praiseworthy efforts in this field of science, the paper was sent to any one applying for it, at the mere price of the postage. Before six months, however, had elapsed, its circulation increased so enormously—to about 8000 copies, we are told—that the Society found themselves compelled to make the small annual charge of fifty cents, in order to cover the cost of the paper on which it is printed. At the same time its size has been increased from eight to twelve pages.