

going remarks. Mrs. Mathieson, wife of a Toronto merchant, has a well-kept apiary at their beautiful rural home, about a mile north of Yorkville. This lady manages her bees with her own hands, and is an enthusiastic and successful apiarian. She has about a dozen stocks, most of which are housed in the hive manufactured by Mr. P. A. Scott, of Yorkville, an illustration of which appeared in Vol. I of THE CANADA FARMER. It is a moveable-comb hive, constructed somewhat on the Langstroth principle. At the date of our visit, (July 4,) none of Mrs. Mathieson's hives had swarmed, though several were showing signs of doing so. We visited on the same day, Mr. James Lesslie's apiary, about a mile north-west of the village of Eglinton, and found it to consist of 24 stocks, all in the most thorough order, and presenting as a whole, a singularly animated and beautiful appearance. Mr. Lesslie uses two descriptions of hive, the Scott hive referred to above, and the Michigan hive. The latter is a moveable-comb hive, of about the same dimensions as the Thomas hive, but not nearly so convenient, there being no moveable-bottom board in it, and the frames resting on the bottom of the hive, instead of being suspended from the top of the sides. It is not so convenient for taking apart and examining as the Thomas hive, still it secures most of the advantages of the moveable-comb principle, and is a vast improvement on the common box hive. Mr. Lesslie thoroughly understands bees, and is a most careful, enthusiastic apiarian. His success has been encouraging, and shows what a beginner may do who begins intelligently, and takes care to inform himself about bee matters. It is four years only since he began with a single hive. At first, from inexperience, he had some misfortunes, but from that small and recent beginning, he has gone on increasing his stock until he has now, as we have said, 24 hives, only two of which are this year's swarms. He has therefore, or rather had at the time of our visit, the increase of the present season from 22 hives yet to be added to his apiary. From the care and skill with which he manages bees, Mr. Lesslie's honey is already famous in the Toronto market, and commands the highest price for table purposes. He collects his surplus honey in small boxes, containing from 5 to 7 pounds, finding this a convenient size for consumers. We advise all interested in apiculture, to pay a visit to what we shall venture to call the "Eglinton Apiary."

(To be continued.)

Trees, as they affect Climate and Vegetation.

THE influence that the indiscriminate and merciless slaughter of our forests has upon the climate and vegetation of this Province, was never more apparent than during the present season. In the older settled sections, where, in many cases, the landscape has been almost stripped of its trees, the fall wheat was found in spring to have been severely winter-killed. Since then it has gathered up somewhat, but, at best, it presents a patchy and unsatisfactory appearance. In the more recently settled districts, where the process of forest extermination has only lately been inaugurated, we learn that the crop never looked better. It is perfectly clear that this marked contrast is not to be attributed to bad farming in the one case, or to rich virgin soil in the other. The reckless denudation of our country of its trees has produced a decidedly injurious influence on its climate, and its natural irrigation. By a well-known natural law, trees ameliorate the extreme cold of winter; while in summer, they modify the intense heat, and impart that humidity to the atmosphere which is so favourable to plant growth. The effect of even a few trees on the temperature of a locality, would astonish any one who had not previously observed it.

The Cape Verd islands furnish a remarkable instance of the close connection between the climate of a country and its forests. In late years, famines have been frequent there, from want of rain, in what used to be the rainy season. No rain fell in these islands from 1830 to 1833, and 30,000 people perished in consequence. And at the present time, we learn

that the inhabitants are in distress from the same cause. Scientific men agree in attributing the phenomenon to the fact that the islands have been almost completely stripped of their trees. The fact is as undoubted that forests cause a precipitation of rain from currents of air, charged with moisture, as that water is forced out of a wet sponge by the pressure of the hand. Remove the trees and the humid air-current will pass on, leaving the soil parched and dry. These facts are well understood, and should be more generally recognised by our agricultural population.

We observe that our cousins across the lines are bestirring themselves in this matter. A resolution has recently been introduced by Mr. Donnelly, of Minnesota, to the House of Representatives, directing the Commissioner of Public Lands to inquire "whether a system cannot be devised to encourage the planting of trees in regions destitute of timber." And as a step in the right direction, we are glad to notice that a bill has been submitted, by Mr. Wallbridge, to our Provincial Parliament "to encourage the planting of trees upon the Public Highways in this Province, and to give a right of property in such trees, to the owners of the soil adjacent to such highways." The chief features of Mr. Wallbridge's bill are, that the owner of land "adjacent to any highway may plant trees on a portion thereof contiguous to his land, within twelve feet if in Upper Canada, or ten feet if in Lower Canada, from such land; but no tree shall be so planted at a less distance than eight feet from any other tree, or so that the same may be or become a nuisance in the highway, or obstruct the fair and reasonable use of the same, and that "every tree so planted in any highway shall be the property of the owner from time to time of the land nearest thereto, whose owner planted the same." This is all very well so far as it goes, but it is not enough. It fails to meet the climatic requirements of the case. Provision should also be made to have a given proportion of forest trees left standing on future clearances. Unless this course is adopted, our former great staple—fall wheat—will become, in the course of a few years, a mere historical recollection. The planting of clumps of trees in the corners of fields, in districts denuded of trees, should also be encouraged. They would not only tend to ameliorate the extremes of cold and heat; but afford shade to cattle, give protection to crops, and impart beauty to the landscape. In most sections, too, the varieties of trees planted might be turned to highly profitable account. The fact is unquestioned, that the silk-producing Mulberry, and the Chesnut that yields the "ready made bread" of Italy, will, with proper cultivation, flourish luxuriantly in this Province. Why should not the Mulberry be generally planted, and the production of silk be added to our list of profitable employments?

A Sad and Disgraceful Sight.

WHILE taking a short journey recently in a certain region of Canada which we forbear to particularize, we suddenly came upon a large orchard, which presented a strange spectacle for the leafy month of June. It was almost as bare and leafless as in mid-winter, contrasting very gloomily with the luxurious verdure of the crops and woods by which it was environed. This orchard had been thus stripped of its foliage by the Tent Caterpillar, and the trees were absolutely full of abandoned tents and crawling worms. Passing on a little farther we came to another and yet another orchard in the same sad plight. They were utterly leafless, fruitless, and apparently dying, all from the same cause. There were other orchards in the vicinity of these that looked as trees ought to look in June, vigorous, well-leaved out, and full of young fruit. Whence this difference? Simply here: The owners of the stripped orchards had neglected to go round among their trees in early spring looking for and destroying the caterpillar nests.

Their neighbours had taken this precaution. Calling at the house of a farmer in the vicinity whose premises generally testified to the industry and thrift of their owner, we enquired about his neighbours, whose orchards were in such a deplorable condition. We found that most of them had let their trees "take their chance" to use a common phrase. One had been once over his orchard to search for caterpillar-nests, but his search had not been very thorough, for his trees were as badly scathed as any of his neighbours. The farmer on whom we called said, "I never saw the caterpillar-nests so thick as the present season. I went through my trees thirty or forty times, determined if possible to be wholly rid of the pests." By taking this course he succeeded in saving his orchard. He had been obliged, however, not only to fight the insects bred in his own trees, but those reared in an adjacent orchard. We were astonished to learn from him that hundreds and thousands of the full-grown caterpillars had made their appearance in his orchard, and that on examination he found they had crawled all the way from his neighbours' orchard, a distance of some sixty rods! They would perform their pilgrimage during the night, and in the morning he would find multitudes of them on his orchard fence and even making their way up the trunks of the trees! It had thus required a most assiduous and persevering fight on his part to preserve his orchard from the destruction that had overtaken the orchards of others round about him.

It is utterly inexcusable and disgraceful for any man to allow a good orchard to be destroyed in the manner above described. The precautions necessary to be taken are so simple and easy that neglect of them admits of no apology. In fact a caterpillar-stripped orchard is a public advertisement of its owners negligence, and an open proclamation of his disgrace. Before the hurry of spring work has come on, as early as during the month of March, the nests of these destructive caterpillars may be searched out and got rid of. If left longer, mischief may be averted with very little trouble. After the grubs are hatched, and before they have escaped from their tents, they may be exterminated by being rubbed down with a swab of cloth fastened on the end of a pole, or by being scorched to death with the blaze made by igniting a bit of rag saturated with coal oil. By these, and such like simple means, the evil may be averted. Prevention is far easier and better than cure. Not only self-interest, but a due regard to the rights of others ought to prompt every owner of an orchard to take effectual steps to rid it of these troublesome insects. Even if they do not crawl to adjacent orchards in the grub state, they will fly to them when they attain to wings, and deposit their eggs for next season's increase. It is too bad that those who are diligent and attentive in the management of their own orchards, should suffer in consequence of the negligence of others.

Prevention and Mitigation of Rinderpest.

THE labours of the commissioners appointed by the British Government to inquire into the origin and nature of the Cattle Plague, may be regarded as completed by the publication of their Third Report. Some additional light has been thrown on the nature of the fatal malady by their investigations; and it is to be hoped that should the disease unfortunately break out in any other district or country, that veterinary science, profiting by the lessons evolved in Britain, will be better prepared to cope with it. The Rinderpest may, as the Commissioners report, re-appear at any time, and without warning. It hence becomes necessary not only that every means should be at hand for crushing it at once, but that every precautionary step should be taken towards its prevention.

The commissioners are totally opposed to the theory of spontaneous origin. They cling to the belief that