

SILKWORM MOTH (MALE).

instead of steaming, our cocoons; but that process could hardly be considered a success, as the silk did not wind so easily and was not nearly so bright and soft as under the original method of treatment. I



believe the reason of this is, that the steam softens and dissolves the glutinous matter among the silk, while the baking hardens it. Our silk was of a pale yellow colour, and the cocoons of middling size. I have seen larger as well as smaller ones in my time, but they are all the produce of different races. We kept half a dozen cocoons unsteamed, so that there might be a few moths to lay eggs for the next year. Father said we could only judge which were the male

and which were the female ones by weight, as the latter were the heaviest, and fetched a tiny pair of scales out of the family medicine chest, so as to make sure about it. We saved three of each, and he told us to fix the three heavy ones on one sheet of brown paper with a little paste, and the others on another sheet in the same manner. The moths were hatched about twenty days after the full-grown caterpillars had first mounted into the heather to spin; and in due time plenty of eggs were laid on sheets of paper placed ready for their accommodation. These sheets were hung over a thin line of fine string up in a dry attic till spring came round again.

In after-years, when we no longer had a garden containing a mulberry-tree, baby, who had grown into big boyhood, kept a few silkworms for his own pleasure, which, not knowing the taste of mulberryleaves, grew up on a diet of lettuce; but a great many of them died, and their silk appeared to me far from superior in quality.

Tom once had some eggs of a Japanese silkworm sent him, with directions to feed the larvæ on oakleaves. They were much larger than the ordinary kind, but healthy and hardy, and of a green colour. The cocoon was also of a brightish green outside. though the silk was beautifully white within. We experienced no difficulty with them, and I believe it is thought that they may one day supersede the mulberry-feeding worms, as they are subject to fewer diseases, and oaks are plentiful and grow in large numbers much farther north than mulberry-trees, though the latter are hardy when once acclimatised, as may be seen by those that flourish in the gardens of old-fashioned houses in the East-end of London, where they were planted long years ago by the French families who found refuge on British soil after the repeal of the Edict of Nantes.

RECENT PROGRESS IN THE CHANNEL ISLANDS.



F this interesting group of islands were a thousand miles distant we should perhaps hear more about them than we do, but as they are so close to England they come to be regarded almost as an English county. Yet their fortunes and conditions are very distinct, and we find them classified by the Board of Trade as one of the British colonies. Possibly, if Messrs. Pell and

Read, of the Agricultural Commission, had visited the miniature farms of Jersey, Guernsey, and Alderney, they might have obtained some practical knowledge, as useful as any they acquired in North America; for it is a significant fact that the farmers of the Channel Islands are prosperous, while paying five times the rent usually paid in England. Another remarkable fact is this, that the population has slightly declined

(being now lower than in 1860), and yet the value of exported products has risen 72 per cent. in ten years. Meantime the number of visitors every year increases, not even the oldest inhabitant remembering such an influx as there was in the last season, Jersey alone counting 33,000 arrivals in two months.

The whole group of islands has an area of only 48,300 acres, or half the extent of the Isle of Wight, yet it supports a population of 90,000 souls, showing a ratio three or four times denser than Belgium or China. Still, the population is relatively but a handful, and it seems incredible, but is nevertheless shown by official returns, that Great Britain carries on a trade of $f_{1,500,000}$ annually with the islands, which exceeds our commerce with Mexico, Venezuela, Ecuador, or Uruguay. Such economists as believe implicitly in the "balance of trade" would argue that these islands are hastening to bankruptcy, since the aggregate of ten years' imports has been 33 per cent. over the exports, viz.: imports, £8,429,000; exports, £6,351,000;

surplus imports, £2,078,000. Notwithstanding these figures the wealth of Jersey has grown prodigiously, and Jersey holds the same ratio to the whole group as regards population, trade, &c., that England does to the United Kingdom. But whichever the islands you may visit, the inhabitants impress you with their thrifty habits and industrious character. The value of their exports, which was £5 per inhabitant ten years ago, stands now at £8 a head-a higher ratio than in the United Kingdom. These islanders are also among the best customers for English manufactures, as they consume British merchandise to the rate of £9 per head, against £7 in Australia, and £2 in Canada. Strange to say, they do not form one Government, nor possess a united Legislature. Jersey has its own Governor and Chambers, while those of Guernsey comprehend also the smaller islands. Loyalty to the English throne is the ruling passion of the people, whose attachment to England is greater than any identity of interests with the British Empire, so much so that they regard Scotchmen or Irishmen as foreigners. Courteous and hospitable to all, they have, nevertheless, a decided aversion to Frenchmen, although speaking their language; and so jealous are they of their rights (which are confirmed in numerous charters from English kings) that they will not allow an Englishman to sit in their Legislature, although, of course, a Jerseyman may sit in our House of Commons, the same as a Scotchman or a native of London. If we are to judge of their intellectual standing from their system of schools and the character of their press, the conclusion will be highly favourable. French and English are taught in most of the schools, and as the school-children form 13 per cent. of the population, it is not surprising to find that everybody can read and write. Some of the newspapers are in French, others in English, fully on a level with the papers of English provincial towns. But all classes have an unexplained repugnance to statistics, the same as in Ireland and in certain counties in England, as well as in our own colony of Hong-Kong.

At the first newspaper-office where I called and inquired for the editor, I was told that he was never visible by day or night, so I judged that he only existed in the abstract, or resembled those heavenly orbs whose light falls upon the world while themselves are beyond our reach. I then tried a second office, and found the publisher, who requested me to write to the editor, and promised to get me any information; but when I told him that I sought after statistics, he promptly replied, "They are the most expensive things in Jersey." He explained to me that even to obtain Custom-house returns cost him a round sum and much patience. Nothing daunted I went to another office, and on my telling the overseer that I was a member of the Statistical Society of London, in quest of some information from the editor, he went behind a screen to confer with his chief, to whom I heard him say that I was "a member of the Secret Society of London." The editor came out to look at me with a visible expression of dread and

mistrust upon his countenance. I hastened to assure him of the innocent nature of my business, adding that his colleague of the *Express* had referred me to him as the only likely person in St. Heliers to know about death-rate, vaccination, schools, rural products, police, and such general matters. He frankly confessed to me that he had never thought of such things, but he was kind enough to lend me some books concerning the islands.

There is, however, an air of prosperity about St. Heliers that speaks as eloquently as blue-books, and whether you walk through its bustling streets, in which the citizens seem as crowded as in Genoa or Cairo, or ascend the hills upon which the delightful suburbs are built, you feel that you are in the midst of a thriving people. There is also a degree of refinement which favourably impresses the visitor, arising mainly from the character and habits of these descendants of the Normans, and in part from the circumstance that numbers of well-bred Englishmen, especially half-pay officers, have settled with their families at St. Heliers, lending a distinctive mark to its society. It is no longer such a cheap place for living as it used to be, but it still enjoys a charming climate, which makes it as pleasant a winter residence as Algeria or the Riviera, while it is only distant eighteen hours from London. The necessaries of life are almost as dear as in England, and rent in the suburbs is about the same as at Hammersmith, but the taxes are so small as to be said not to exist. If you go inland a couple of miles, you may get a cottage or country house very cheap: at Mont l'Abbé I saw a very pretty house with a well-kept flower garden to let, for which the owner asked me the modest rent of fifteen louis-d'or per annum, explaining to me that louis-d'or was equivalent to a pound sterling.

As the agricultural question was the matter that most interested me, I walked about the island and saw much of the natives, whose homes are like those one sees in Sussex or Devonshire. Many of them spoke French fairly, but the majority used their own dialect, the veritable Langue-d'oui of the Troubadours. Their mode of farming is more properly gardening, the extent of the farms rarely exceeding ten vergees, or four and a half acres English. A farm of this size will sell for £500, one-half of the price being usually paid in cash, the rest in mortgage certificates, which latter are as much valued as Consols. The ordinary rent is from two to three pounds the vergee, say £5 to £7 per acre. Apples and potatoes are the principal crops, but there is also a good deal of land under artificial pastures. Seaweed, which the natives call "vraic," is used for manure, generally in its natural state, and less frequently in the form of ashes. The soil is fertile, yielding four or five tons of potatoes to the acre, and as these come in early they command such prices at Covent Garden Market that it is not uncommon for this crop to realise £50 an acre. Orchards are, perhaps, still more the objects of attention, the trees bending down under the weight of fruit, while the absence of high walls or formidable fences shows the respect for property that prevails.

Small as is the island, it counts 15,000 cows and horses, and exports 2,000 head of cattle yearly, for the most part to England. The animals are never allowed to go loose when grazing, and on my asking a native the reason for tethering them, he told me the pasture was so rich that cattle would burst if not tied; but I learned from another that the land was in this way able to carry four times as many animals as it would if they were not tethered. According to the Jersey blue-book the area under pasture is 9,400 acres, under grain 8,100, and orchards and kitchen gardens 8,800 acres, leaving a balance of only 2,410 acres as barren land. Most of the flowers and shrubs of English hot-houses grow in the open air, and among the climbing plants on the fronts of houses, I noticed a crimson one resembling the Santa Rita so common in Paraguay. The kitchen gardens are remarkable for a species of cabbage ten feet high, the tuft of leaves on the top giving it the appearance of a palm-tree. In no other part of Europe has the tenure of land varied so little in the past ten centuries. There are still the twelve parishes, as in the Norman epoch, each of which was originally marked out into twenty farms, which accounts for the term "vingtaine," still in use. But instead of 240 there are now about 1,000 farms, or perhaps more, the total rural population numbering 500 families. As the grain-crop seldom exceeds 300,000 bushels, it is always necessary to import some, while the exports usually consist of 100,000 bushels of potatoes, 140,000 bushels of apples and other fruit, 60,000 gallons of cider, and 250,000 lbs. of butter. The natives have such a high opinion of their breed of cattle, that any cows imported must be killed within ten days. Nevertheless, these Jersey cows have a sorry appearance, placed beside our Durham short-horns. There is at present some demand for them from the United States, and I saw a man shipping a dozen for New York, for which he told me that he received only £11 per head, but it is true they were not full-grown. The number of horses has declined one-third in ten years, which is probably a result of the increased area under kitchen-gardens.

There are no paupers or "workhouses" in the island, nor any sign of drunkenness, idleness, improvidence, or misery. The inhabitants are well-fed, well-clad, well-housed, reminding the traveller of the aspect and condition of the French colonists in Algeria. Not even in England can you find a better system of high-roads; these date from the time of General Don, who was Governor in 1810, and constructed the three "grandes routes," from which the "chemins vicinales" branch off in all directions. The maintenance of the highways forms as prominent an item in the budget of Jersey as the cost of a standing army in any of the great nations of Europe. Thus all kinds of market-

produce can be promptly forwarded to St. Heliers for shipment to England; and this at once suggests the idea that we could raise apples and potatoes as well in Kent, Surrey, or Sussex as they do in the Channel Islands.

It is the custom to praise the scenery of Jersey, and possibly an untravelled Londoner might find much to admire, but the case is different if your eye has grown familiar with the snow-peaks of the Andes, if you have wandered for months through Brazilian forests, if you have explored the lovely valleys of Mount Atlas, or gazed upon every point of beauty, from Paraguay to the Pyramids. Therefore I can only say that some of the green lanes are very pretty, and that Mont Orgueil is a noble ruin-the most interesting object in the island. From its ivy-covered battlements you can see the tower of Coutances Cathedral, in Normandy; and if you desire to evoke historical reminiscences, you have but to summon the steel-clad warriors who paid fealty to King John at the gate of the castle, or the chivalrous De Carteret, who refused to yield up this stronghold unless to his lawful sovereign, when every town and fortress in Great Britain had surrendered to Cromwell.

If time permitted, I should have liked to visit the other islands, but they do not seem to progress like Jersey. In fact, Alderney has declined one-third in population since 1860, and Guernsey is stationary in many respects, although its grapes are deservedly coming into more repute. Alderney is so small (barely 2,000 acres) that the cows are being transferred to the Isle of Wight, where numerous dairy-farms are now being established, to supply the London market. Sark has 500 inhabitants, who are considered very skilful boatmen, and Herm counts fifteen families. There are still two smaller islands, Brechou and Jethou, about forty acres area, which are each inhabited by a single family.

Although the products of the Channel Islands increase every year, the population shows a tendency to diminish, as the people are so much over-crowded. The excess of females is 25 per cent., according to the last census, or six times greater than the average in Europe, which is doubtless caused by the number of Jerseymen engaged in seafaring all over the globe. For many years, also, a good number of emigrants from these islands have settled in Brazil and the River Plate Republics as ship-chandlers and outfitters, accumulating large fortunes by their toil and thrift. Jerseymen were, moreover, the first colonists of the Falkland Islands, when annexed to Great Britain in 1832, and to them is due the great business of sheep-farming, now so prosperous in that colony. In fine, Jerseymen are wonderfully successful, at home or abroad, and the actual condition of the Channel Islands may afford much food for reflection by political economists.

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