

## CHAPTER VIII

Linen -- Shoes of Seal-leather -- Manufacture of Pyroxyle --  
Gardening -- Fishing -- Turtle-eggs -- Improvement of Master  
Jup -- The Corral -- Musmon Hunt -- New Animal and Vegetable  
Possessions -- Recollections of their Native Land.

The first week of January was devoted to the manufacture of the linen garments required by the colony. The needles found in the box were used by sturdy if not delicate fingers, and we may be sure that what was sewn was sewn firmly.

There was no lack of thread, thanks to Cyrus Harding's idea of re-employing that which had been already used in the covering of the balloon. This with admirable patience was all unpicked by Gideon Spilett and Herbert, for Pencroft had been obliged to give this work up, as it irritated him beyond measure; but he had no equal in the sewing part of the business. Indeed, everybody knows that sailors have a remarkable aptitude for tailoring.

The cloth of which the balloon-case was made was then cleaned by means of soda and potash, obtained by the incineration of plants, in such a way that the cotton, having got rid of the varnish, resumed its natural softness and elasticity; then, exposed to the action of the atmosphere, it soon became perfectly white. Some dozen shirts and socks--the latter not knitted of course, but made of cotton--were thus

manufactured. What a comfort it was to the settlers to clothe themselves again in clean linen, which was doubtless rather rough, but they were not troubled about that! and then to go to sleep between sheets, which made the couches at Granite House into quite comfortable beds!

It was about this time also that they made boots of seal-leather, which were greatly needed to replace the shoes and boots brought from America. We may be sure that these new shoes were large enough and never pinched the feet of the wearers.

With the beginning of the year 1866 the heat was very great, but the hunting in the forests did not stand still. Agoutis, peccaries, capybaras, kangaroos, game of all sorts, actually swarmed there, and Spilett and Herbert were too good marksmen ever to throw away their shot uselessly.

Cyrus Harding still recommended them to husband the ammunition, and he took measures to replace the powder and shot which had been found in the box, and which he wished to reserve for the future. How did he know where chance might one day cast his companions and himself in the event of their leaving their domain? They should, then, prepare for the unknown future by husbanding their ammunition and by substituting for it some easily renewable substance.

To replace lead, of which Harding had found no traces in the island, he employed granulated iron, which was easy to manufacture. These

bullets, not having the weight of leaden bullets, were made larger, and each charge contained less, but the skill of the sportsmen made up this deficiency. As to powder, Cyrus Harding would have been able to make that also, for he had at his disposal saltpetre, sulphur, and coal; but this preparation requires extreme care, and without special tools it is difficult to produce it of a good quality. Harding preferred, therefore, to manufacture pyroxyle, that is to say gun-cotton, a substance in which cotton is not indispensable, as the elementary tissue of vegetables may be used, and this is found in an almost pure state, not only in cotton, but in the textile fibres of hemp and flax, in paper, the pith of the elder, etc. Now, the elder abounded in the island towards the mouth of Red Creek, and the colonists had already made coffee of the berries of these shrubs, which belong to the family of the caprifoliaceæ.

The only thing to be collected, therefore, was elder-pith, for as to the other substance necessary for the manufacture of pyroxyle, it was only fuming azotic acid. Now, Harding having sulphuric acid at his disposal, had already been easily able to produce azotic acid by attacking the saltpetre with which nature supplied him. He accordingly resolved to manufacture and employ pyroxyle, although it has some inconveniences, that is to say, a great inequality of effect, an excessive inflammability, since it takes fire at one hundred and seventy degrees instead of two hundred and forty, and lastly, an instantaneous deflagration which might damage the firearms. On the other hand, the advantages of pyroxyle consist in this, that it is not injured by damp, that it does not make the gun-barrels dirty, and that

its force is four times that of ordinary powder.

To make pyroxyle, the cotton must be immersed in the fuming azotic acid for a quarter of an hour, then washed in cold water and dried.

Nothing could be more simple.

Cyrus Harding had only at his disposal the ordinary azotic acid and not the fuming or monohydrate azotic acid, that is to say, acid which emits white vapours when it comes in contact with damp air; but by substituting for the latter ordinary azotic acid, mixed, in the proportion of from three to five volumes of concentrated sulphuric acid, the engineer obtained the same result. The sportsmen of the island therefore soon had a perfectly prepared substance, which, employed discreetly, produced admirable results.

About this time the settlers cleared three acres of the plateau, and the rest was preserved in a wild state, for the benefit of the onagas. Several excursions were made into the Jacamar woods and forests of the Far West, and they brought back from thence a large collection of wild vegetables, spinage, cress, radishes, and turnips, which careful culture would soon improve, and which would temper the regimen on which the settlers had till then subsisted. Supplies of wood and coal were also carted. Each excursion was at the same time a means of improving the roads, which gradually became smoother under the wheels of the cart.

The rabbit-warren still continued to supply the larder of Granite

House. As fortunately it was situated on the other side of Creek Glycerine, its inhabitants could not reach the plateau nor ravage the newly-made plantation. The oyster-bed among the rocks was frequently renewed, and furnished excellent molluscs. Besides that, the fishing, either in the lake or the Mercy, was very profitable, for Pencroft had made some lines, armed with iron hooks, with which they frequently caught fine trout, and a species of fish whose silvery sides were speckled with yellow, and which were also extremely savoury. Master Neb, who was skilled in the culinary art, knew how to vary agreeably the bill of fare. Bread alone was wanting at the table of the settlers, and as has been said, they felt this privation greatly.

The settlers hunted too the turtles which frequented the shores of Cape Mandible. At this place the beach was covered with little mounds, concealing perfectly spherical turtles' eggs, with white hard shells, the albumen of which does not coagulate as that of birds' eggs. They were hatched by the sun, and their number was naturally considerable, as each turtle can lay annually two hundred and fifty.

"A regular egg-field," observed Gideon Spilett, "and we have nothing to do but to pick them up."

But not being contented with simply the produce, they made chase after the producers, the result of which was that they were able to bring back to Granite House a dozen of these chelonians, which were really valuable in an alimentary point of view. The turtle soup, flavoured with aromatic herbs, often gained well-merited praises for its

preparer, Neb.

We must here mention another fortunate circumstance by which new stores for the winter were laid in. Shoals of salmon entered the Mercy, and ascended the country for several miles. It was the time at which the females, going to find suitable places in which to spawn, precede the males and make a great noise through the fresh water. A thousand of these fish, which measured about two feet and a half in length, came up the river, and a large quantity were retained by fixing dams across the stream. More than a hundred were thus taken, which were salted and stored for the time when winter, freezing up the streams, would render fishing impracticable. By this time the intelligent Jup was raised to the duty of valet. He had been dressed in a jacket, white linen breeches, and an apron, the pockets of which were his delight. The clever orang had been marvellously trained by Neb, and any one would have said that the negro and the ape understood each other when they talked together. Jup had besides a real affection for Neb, and Neb returned it. When his services were not required, either for carrying wood or for climbing to the top of some tree, Jup passed the greatest part of his time in the kitchen, where he endeavoured to imitate Neb in all that he saw him do. The black showed the greatest patience and even extreme zeal in instructing his pupil, and the pupil exhibited remarkable intelligence in profiting by the lessons he received from his master.

Judge then of the pleasure Master Jup gave to the inhabitants of Granite House when, without their having had any idea of it, he

appeared one day, napkin on his arm, ready to wait at table. Quick, attentive, he acquitted himself perfectly, changing the plates, bringing dishes, pouring out water, all with a gravity which gave intense amusement to the settlers, and which enraptured Pencroft.

"Jup, some soup!"

"Jup, a little agouti!"

"Jup, a plate!"

"Jup! Good Jup! Honest Jup!"

Nothing was heard but that, and Jup without ever being disconcerted, replied to every one, watched for everything, and he shook his head in a knowing way when Pencroft, referring to his joke of the first day, said to him,--

"Decidedly, Jup, your wages must be doubled."

It is useless to say that the orang was now thoroughly domesticated at Granite House, and that he often accompanied his masters to the forest without showing any wish to leave them. It was most amusing to see him walking with a stick which Pencroft had given him, and which he carried on his shoulder like a gun. If they wished to gather some fruit from the summit of a tree, how quickly he climbed for it! If the wheel of the cart, stuck in the mud, with what energy did Jup with a

single heave of his shoulder put it right again.

"What a jolly fellow he is!" cried Pencroft often. "If he was as mischievous as he is good, there would be no doing any thing with him!"

It was towards the end of January the colonists began their labours in the centre of the island. It had been decided that a corral should be established near the sources of the Red Creek, at the foot of Mount Franklin, destined to contain the ruminants, whose presence would have been troublesome at Granite House, and especially for the musmons, who were to supply the wool for the settlers' winter garments.

Each morning, the colony, sometimes entire, but more often represented only by Harding, Herbert, and Pencroft, proceeded to the sources of the Creek, a distance of not more than five miles, by the newly beaten road to which the name of Corral Road had been given.

There a site was chosen, at the back of the southern ridge of the mountain. It was a meadow land, dotted here and there with clumps of trees, and watered by a little stream, which sprung from the slopes which closed it in on one side. The grass was fresh, and it was not too much shaded by the trees which grew about it. This meadow was to be surrounded by a palisade, high enough to prevent even the most agile animals from leaping over. This enclosure would be large enough to contain a hundred musmons and wild goats, with all the young ones they might produce.



The perimeter of the corral was then traced by the engineer, and they would then have proceeded to fell the trees necessary for the construction of the palisade, but as the opening up of the road had already necessitated the sacrifice of a considerable number, those were brought and supplied a hundred stakes, which were firmly fixed in the ground.

At the front of the palisade a large entrance was reserved, and closed with strong folding-doors.

The construction of this corral did not take less than three weeks, for besides the palisade, Cyrus Harding built large sheds, in which the animals could take shelter. These buildings had also to be made very strong, for musmons are powerful animals, and their first fury was to be feared. The stakes, sharpened at their upper end and hardened by fire, had been fixed by means of cross-bars, and at regular distances props assured the solidity of the whole.

The corral finished, a raid had to be made on the pastures frequented by the ruminants. This was done on the 7th of February, on a beautiful summer's day, and every one took part in it. The onagas, already well trained, were ridden by Spilett and Herbert, and were of great use.

The manoeuvre consisted simply in surrounding the musmons and goats, and gradually narrowing the circle around them. Cyrus Harding, Pencroft, Neb, and Jup, posted themselves in different parts of the

wood, whilst the two cavaliers and Top galloped in a radius of half a mile round the corral.

The musmons were very numerous in this part of the island. These fine animals were as large as deer; their horns were stronger than those of the ram, and their grey-coloured fleece was mixed with long hair.

This hunting day was very fatiguing. Such going and coming, and running and riding and shouting! Of a hundred musmons which had been surrounded, more than two-thirds escaped, but at last, thirty of these animals and ten wild goats were gradually driven back towards the corral, the open door of which appearing to offer a means of escape, they rushed in and were prisoners.

In short, the result was satisfactory, and the settlers had no reason to complain. There was no doubt that the flock would prosper, and that at no distant time not only wool but hides would be abundant.

That evening the hunters returned to Granite House quite exhausted. However, notwithstanding their fatigue, they returned the next day to visit the corral. The prisoners had been trying to overthrow the palisade, but of course had not succeeded, and were not long in becoming more tranquil.

During the month of February, no event of any importance occurred. The daily labours were pursued methodically, and, as well as improving the roads to the corral and to Port Balloon, a third was commenced, which,

starting from the enclosure, proceeded towards the western coast. The yet unknown portion of Lincoln Island was that of the wood-covered Serpentine Peninsula, which sheltered the wild beasts, from which Gideon Spilett was so anxious to clear their domain.

Before the cold season should appear the most assiduous care was given to the cultivation of the wild plants which had been transplanted from the forest to Prospect Heights. Herbert never returned from an excursion without bringing home some useful vegetable. One day, it was some specimens of the chicory tribe, the seeds of which by pressure yield an excellent oil; another, it was some common sorrel, whose anti-scorbutic qualities were not to be despised; then, some of those precious tubers, which have at all times been cultivated in South America, potatoes, of which more than two hundred species are now known. The kitchen garden, now well stocked and carefully defended from the birds, was divided into small beds, where grew lettuces, kidney potatoes, sorrel, turnips, radishes, and other cruciferæ. The soil on the plateau was particularly fertile, and it was hoped that the harvests would be abundant.

They had also a variety of different beverages, and so long as they did not demand wine, the most hard to please would have had no reason to complain. To the Oswego tea, and the fermented liquor extracted from the roots of the dragonnier, Harding had added a regular beer, made from the young shoots of the spruce-fir, which, after having been boiled and fermented, made that agreeable drink, called by the Anglo-Americans spring-beer.

Towards the end of the summer, the poultry-yard was possessed of a couple of fine bustards, which belonged to the houbara species, characterised by a sort of feathery mantle; a dozen shovellers, whose upper mandible was prolonged on each side by a membraneous appendage; and also some magnificent cocks, similar to the Mozambique cocks, the comb, caruncle and epidermis being black. So far, everything had succeeded, thanks to the activity of these courageous and intelligent men. Nature did much for them, doubtless; but faithful to the great precept, they made a right use of what a bountiful Providence gave them.

After the heat of these warm summer days, in the evening when their work was finished and the sea breeze began to blow, they liked to sit on the edge of Prospect Heights, in a sort of verandah, covered with creepers, which Neb had made with his own hands. There they talked, they instructed each other, they made plans, and the rough good-humour of the sailor always amused this little world, in which the most perfect harmony had never ceased to reign.

They often spoke of their country, of their dear and great America. What was the result of the War of Secession? It could not have been greatly prolonged, Richmond had doubtless soon fallen into the hands of General Grant. The taking of the capital of the Confederates must have been the last action of this terrible struggle. Now the North had triumphed in the good cause, how welcome would have been a newspaper to the exiles in Lincoln Island! For eleven months all communication

between them and the rest of their fellow-creatures had been interrupted, and in a short time the 24th of March would arrive, the anniversary of the day on which the balloon had thrown them on this unknown coast. They were then mere castaways, not even knowing how they should preserve their miserable lives from the fury of the elements! And now, thanks to the knowledge of their captain, and their own intelligence, they were regular colonists, furnished with arms, tools, and instruments; they had been able to turn to their profit the animals, plants, and minerals of the island, that is to say, the three kingdoms of Nature.

Yes; they often talked of all these things and formed still more plans for the future.

As to Cyrus Harding he was for the most part silent, and listened to his companions more often than he spoke to them. Sometimes he smiled at Herbert's ideas or Pencroft's nonsense, but always and everywhere he pondered over those inexplicable facts, that strange enigma, of which the secret still escaped him!