

THE LABRADORIANS.

The language spoken by the Labradorians of the gulf generally indicates the race from which they or their ancestors originally sprang, although it does not inform us of the place of their birth. The French language is most generally spoken between Mingan and the St. Augustine, while the residents are chiefly of Acadian or Canadian origin, with a few settled fishermen from France. From the St. Augustine to the Bay of Bradore, the English tongue is universally employed; but there are great numbers of the Labradorians who can speak both languages.

The houses of the residents are constructed of wood, brought ready prepared from Quebec, Gaspé or Newfoundland. In process of time limestone, which abounds on the Mingan Islands, and is easily accessible, will be employed by those who can afford that luxury. Writing in 1858, Mr. Bowen, who visited Labrador in that year, states that the largest collection of buildings, sixteen in number, then on the coast, was at Spar Point, the residence of Mr. S. Robertson, in the Bay of Tabatière, 900 miles from Quebec. Generally the settlers live in groups of two or three families, four or five miles apart, each of which constitutes a seal-fishing berth, or pécherie. In 1861 a great change had already taken place. At Esquimaux Point an Acadian village has sprung up, and some excellent two-storied wooden houses give the appearance of civilization to this once desolate shore. The first family went there four years ago. There are now more than fifty families at Esquimaux Point, or rather Pointe St. Paul, as it has been named by the priest who has lately come to live with the new colonists. They have already cleared and fenced some acres of land, and at the time of my visit in August, 1861, the gardens were well stocked with potatoes, cabbages and turnips. The situation of this new settlement is beautiful, and the back country well capable of sustaining a large number of cattle in the vast marshes at the foot of the hills, which rise in rugged masses a few miles from the

The houses are very neat and roomy; the I passed the night contained one large feet square, with a space partitioned off room; the upper story was divided into apartments. A stair, or rather ladder, led dormitories which the younger members of families tenanted, the parents occupying the ground floor. The old-fashioned double stove, so common throughout Rupert's Land, was placed in the middle of the room, and served both for cooking and heating purposes. The floors were neatly boarded with tongued and grooved flooring brought from Quebec, and an air of cleanliness and comfort was common to this as well as to other houses I visited. Alas! it was only an air of comfort and cleanliness, for when I lay down to sleep on an Acadian bed, white and clean externally, it was soon painfully evident that there were hundreds of other occupants, of which the less that is said the better. At this nucleus of a fishing village, which may yet rise to the dignity of a small town, they have already some pigs and sheep, and propose to bring cows from Gaspé or the Magdalen Islands. They enjoy the ministrations of a resident priest, and have a school for the young.

The spring and summer life of the Labradorians is exclusively devoted to fishing. They have no leisure at that period to attend to other occupations, so that it will not be wondered at that until 1860 the only cow on the vast extent of gulf coast east of Esquimaux Point, was at Natagamliou; the happy proprietor obtained but little profit from his charge, for the impression gained ground among the simple people that cow's milk was a cure for all imaginable maladies. From far and near, within the limits of thirty miles on either hand, they sent for a "drop of milk" when sickness was upon them; and as no charge is ever made for such items on this hospitable coast, the owner of the cow had no milk left for himself.

The Acadian colony, near Natisquhan, ninety miles from Mingan, was established in 1857; it already numbers thirty families. Natisquhan is famous for its seals, and it is chiefly for the convenience of catching these "marine wolves" in the spring of the year that the Acadians have permanently established themselves there. From the

month of April to the month of November the fishermen of Natisquhan are engaged in fishing, first seals, then salmon, cod, herring and mackerel. They own three schooners, while the more wealthy residents of Esquimaux Point boast of a round dozen. In the rear of this settlement there is abundance of timber for fuel, and a short distance from the shore the trees are sufficiently large for building purposes. Communication between the different settlements on the coast is chiefly by water during the summer, and in winter on snow-shoes or by dog trains.

Each family has generally eight or ten dogs, either of the pure Esquimaux breed or intermixed with other varieties from Newfoundland or Canada. During the summer time the dogs have nothing to do but eat, drink, sleep and quarrel; when, however, the first snow falls, their days of ease are numbered, and the working season begins. The Labrador dogs are excessively quarrelsome, and, wolf-like, always attack the weaker. All seem anxious to take part in the fray, and scarcely a season passes without the settlers losing two or three dogs during the summer from the wounds which they receive in their frequent quarrels among themselves. Confirmed bullies are generally made comparatively harmless by tying one of their forefeet to the neck, which, although it does not prevent them from joining in an extempore scuffle which may spring up, yet so hampers their movements that the younger and weaker combatants have time to escape. Peace is instantly restored among the most savage combatants, even if twenty are engaged in the affray, by the sound or even sight of the dreaded Esquimaux whip used by the Labradorians. Up to the present time, with two or three exceptions, says Abbé Ferland, no settler has succeeded in raising any domesticated animal on account of the dogs; cats, cows, pigs and sheep have all been destroyed by them. Even if a dog has been brought up in the house, his doom is sealed; at the first opportunity, when the master is away, the others pounce upon him and worry him to death. A settler had procured a fine dog of the Newfoundland breed, full of intelligence, and capable, by his extraordinary swimming powers, of rendering great service to the fishermen in the sea. The Newfoundland enjoyed the privilege of entering into his master's house and receiving the caresses of the different members of the family. This evident preference excited deep jealousy in the breasts of the Labrador dogs. They patiently waited for an occasion to avenge themselves. When their master was present, all was fair, open and peaceable; but one day a favorable opportunity occurred, and they fell on the poor Newfoundland, killed him, and dragged his body to the sea. On their return to the house, the embarrassed men of the conscious dogs led the settler to suspect that something was wrong. He soon missed the pet Newfoundland, and after a few hours discovered the mangled body of his favorite lying on the beach, where it had been left by the retiring waves. Only one pig and one goat escaped the general massacre when Abbé Ferland was on the coast in 1858.

During the winter season the Labrador dogs make a full return to their masters for all the anxiety and trouble they give them during the summer months. Harnessed to the sledge, or commetique as it is termed on the coast, they will travel fifty or sixty miles a day over the snow. They haul wood from the interior, carry supplies to the hunters in the forests far back from the rocky and desolate coasts, merrily draw their masters from house to house, and with their wonderful noses pick out the right path even in the most pitiless storm. If the traveler will only trust to the sagacity of an experienced leader, he may wrap himself up in his bear and seal-skin robes, and defying piercing winds and blinding snow drifts, these sagacious and faithful animals will draw him safely to his own door or to the nearest house. The commetique is about thirty inches broad and ten or twelve feet long; it is formed of two longitudinal runners, fastened together by means of transverse bars let into the runners and strengthened with strips of copper. The runners are shod with whalebone, which, by friction over the snow, soon becomes beautifully polished and looks like ivory. The commetique is well floored with seal skins, over which bear or seal skins are nailed all around, with an opening for the traveler to introduce his body. The harness is made of seal skin, the foremost dog, called the

guide, is placed about thirty feet in advance, the others are ranged in pairs behind the guide; sometimes three, sometimes four pairs of dogs are thus attached to one commetique in addition to the guide.

The Esquimaux dog of pure breed, with his strong-built frame, long white fur, pointed ears and bushy tail, is capable of enduring hunger to a far greater extent than the mixed breed. But the mixed breed beat him in long journeys if they are fed but once a day. An Esquimaux dog will travel for two days without food; one of the mixed breed must be fed at the close of the first day or he can do little the next. These powerful, quarrelsome, and even savage animals are kept under absolute control by the formidable Esquimaux whip. Even in the middle of summer, the first glimpse of the whip is sufficient to arrest the most bloody battle. The lash of a good whip is about thirty five feet long, attached to a handle of not more than eight or ten inches. An experienced driver can hit any part of the leader he chooses with the extremity of his formidable weapon. The best whippers are well known on the coast, and to become an experienced hand is an object of the highest ambition among the young men and the rising generation.

Uniform hospitality is the characteristic trait of the Labradorians. With a few exceptions, they are very like one another in their manners and customs. Under many circumstances property may be said to be held in common. When the stock of provisions belonging to one family is exhausted, those of a neighbor are offered as a matter of course, without any payment being exacted or even expected. When a "planter," as they are often termed on the coast, has occasion to leave his house with his family, it is the custom to leave the door on the latch, so that a passer-by or a neighbor can enter at any time. Provisions are left in accessible places, and sometimes a notice, written with charcoal or chalk, faces the stranger as he enters, informing him where he may find a supply of the necessaries of life if he should be in want of them. Father Pinet relates that he came one day to the house of a planter during the absence of the family, and not only found directions how and where to find the provisions, rudely written in chalk, for the benefit of any passing stranger, but one of his party, on opening a box, saw a purse lying quite exposed, and containing a considerable sum of money.

The vice of drunkenness is the only one of which the missionaries complain in their reports. The swarms of American fishermen who come here during the summer months bring an ample supply of whisky and rum for the purposes of trade. It would be a boon to the Labradorians if the importation, in any form, of ardent spirits, were strictly prohibited by the Canadian and Newfoundland Governments. Give these people an ample supply of tea and coffee, instead of infernal whisky, and they will become the happiest colonists on the face of the earth.—*British American Magazine.*

Cure for Nails Growing into the Flesh.

Dr. Gaillet, of Luynes, France, has published an account of the efficacy of the sesquichloride of iron for curing the growth of the toe nails into the flesh, and Dr. Billon, commenting on this subject, says:—"In 1858, Dr. Wahu, staff-physician to the army, having succeeded with this remedy in curing the painful disease in question, I resorted to the same method, and with the greatest benefit in four cases. I may here remark that ulcers about the nails are occasionally observed among our soldiers, having escaped the attention of the medical boards, or being caused by the pressure of the boot during forced marches. Under these circumstances, a prompt and painless cure may be effected by inserting the dry sesquichloride between the nail and the protruding flesh, and powdering the latter with the same substance. A large bandage should be applied over all, not impregnated with the liquid sesquichloride of iron; a precaution which may, however, be useful, as the folds of the band dry rapidly, and preserve their situation in a more exact manner. On the following day the exuberant flesh is found to have acquired the hardness of wood; suppuration speedily ceases, and a cure follows after two or three applications. This simple and mild treatment is obviously far preferable to the numerous surgical procedures hitherto recom-

mended. In the course of four or five days or in a week at the farthest, the original pain ceases, the swelling subsides and the patient is able to walk. Naught remains but the hardened protruding flesh, which falls away about a month after the application of the sesquichloride of iron. These are the results yielded by this method in four soldiers suffering from the growth of the nail into the flesh."

HOW A RIFLED MUSKET IS MADE AT THE PROVIDENCE TOOL COMPANY'S ARMORY.



When the war for the preservation of the Union first broke out, there were not wanting stout hearts and willing hands to defend our imperilled liberty. So well had the measures of the arch traitors who inaugurated the strife been taken, that when our armies were to enter the field, it was found that hardly a tithe of the required number of muskets were to be had, our usual quotas having been transported South many months previously. In this dilemma the only resource was to look abroad, and large quantities of arms were imported from Belgium, and other countries.

In the meantime the United States Army, at Springfield, Mass., was urged to its utmost capacity, but in spite of all the strenuous efforts made, the number of guns delivered fell far short of what was required. Here was an emergency wholly unlooked for, but one which the enemy had largely counted on as a means of enforcing his demands. Reduced to one armory, the splendid one at Harper's Ferry with all its costly machinery having been destroyed early in the struggle by our own officers, the only alternative was to call on the mechanical talent of the North to come to the country's rescue. The appeal was not ineffectual, and the results have been an immense number of muskets produced by machines similar to those used by Government with such improvements added as the skill and cunning of the contracting parties could devise. Let us call attention to the above fact and the suggestion it contains. The tools for making guns, or Springfield muskets, are justly celebrated as being the finest and most elaborate of their class; yet important modifications have been made in fabricating delicate parts of the weapon, and the processes themselves greatly expedited by allowing intelligent and skillful men to exercise their ingenuity upon the subject. There are at the present time a large number of private armories engaged on the Springfield arm, under Government contract. We recently visited one of them—the Providence Tool Company's Armory—in Providence, R. I. This company manufactures more of the several parts of the weapon than any other private firm in the country. Other establishments turn out finished guns complete, and up to the Government standard, but they procure, some one part and some another, from different shops and combine the whole in the musket at their particular works. The company that we have individualized makes every part of the Springfield rifled musket except the roar sight; this being a small item is not undertaken, as it can be bought ready-made from manufacturers engaged in its production. The quality of the work done in the Providence Armory is unequalled any where, and we have taken some pains to satisfy ourselves on this point—even rival firms according all praise in this respect with a candor which is highly creditable.

No person, except one who has fully and thoroughly investigated the subject, can have the slightest conception of the character and quality of the work demanded by the Government from parties making the Springfield musket. The most severe and apparently unreasonable tests are exacted, and the finished weapon will bear comparison for accuracy and general beauty of workmanship with any mathematical instrument ever made. This is a strong expression, but it is fully borne out by the facts, as the reader can see by reading our description of the Armory.

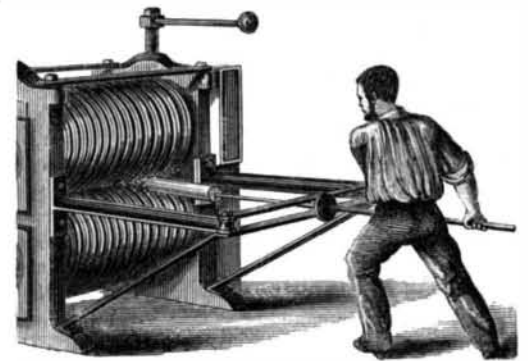
Let us premise by saying that the Providence Tool Company, like most others who embarked in the business, were entire novices in the art, and when they undertook their first contract were in a state

of complete ignorance concerning the character of the work and the requirements of the Government. This no longer exists, owing to the energy and genius given to the task by the superintendent and workmen employed there. As was remarked by a gentleman connected with the armory who kindly showed us through the establishment, "when we came to make the gages we were almost discouraged; the standards are kept at the Springfield Armory, and three separate sets were made to match them; each set being pronounced perfect at the time, but they were afterward sent back to Providence to be reconstructed." When we inform our readers that there are no less than seventy-five different gages, and from two to ten apertures in each gage, the nature of the alteration will be apparent, without further explanation. Three model muskets, or those which are considered to be perfect, and of the exact pattern required, cost the Government \$2,500, or over \$800 each, to make. From this illustration some conception can be formed of the unapproachable excellence of the Springfield musket as a weapon of war. Some economist with false ideas may here exclaim, "what folly!" and begin at once to elaborate a series of articles on waste, useless expenditure of time, &c., which we herewith affectionately advise him to restrain and listen a moment to our explanation. The excellent quality of the work demanded by the Government has this redeeming feature (if it had no other it would be defensible as authorizing the system pursued), it secures perfection so far as human skill is able to attain it. Perfect weapons conduce largely to make efficient soldiers, and lead to victories; when a soldier knows that the gun he carries will never fail him in time of need, that it will not miss fire, but will shoot with unerring precision, and not become disabled with fair usage, then he fights with a determination and energy which he would not manifest with an inferior arm. The mechanical efficiency of infantry depends almost wholly upon their guns; for the bravest men without good weapons or short of ammunition, are no better than a mob before well-armed inferiors. Not only are these moral points secured by the possession of a good arm, but the true principles of economy are embraced in the manufacture of a good weapon of any kind; not only are armies saved from panic or rout caused by worthless weapons, but the arsenals are not full of them requiring repair, and thousands, yea millions, of dollars are annually saved by producing a weapon which is the best that can possibly be made. The people will therefore understand that the Springfield musket is not "a pretty good gun;" but is, both as a weapon of war, and an article of manufacture, wholly unapproachable by any similar musket made elsewhere; not even the Enfield rifle—which is made as near like the Springfield arm as Englishmen can make it, with Yankee machinery and men to instruct them—equals it. There may be some persons ignorant of the fact that in 1855, Jefferson Davis, being the Secretary of War, gave full permission to the English Government to witness all parts of the manufacture, and to construct sets of machinery in all respects similar to our own. This machinery is now in operation at Enfield, England.

While, as has been stated previously, great improvements have been made in musket machinery, we do not desire to be understood as saying that the art has been revolutionized, but that in the essential points of expediting and cheapening the work, a great deal has been done, and much still remains to do. In the construction of a standard piece of work, such as a musket, a sewing machine, watch, &c., a complete and simple order must be observed, so that while the work goes forward with dispatch, there will be no confusion, error, or delay; the latter it is particularly necessary to avoid in making muskets, since the failure to produce certain portions in a specified time precludes the possibility of a weekly delivery. The system observed in the Providence Tool Company's Armory is a most excellent one, mutually advantageous to all concerned, the jobbers, workmen, and the company. Where all parties are pleased it is useless to comment, and we turn without further preliminaries to descend the stairs to the rolling shop, where the first operation of making a musket is going forward. With one hand upon the door knob we must premise by saying that we are

indebted to many obliging and ingenious men, foremen and others, throughout the works, for personal attention, explanations, and practical illustration of the several processes. These gentlemen voluntarily left their work (every one works by the piece, be it understood), and courteously pointed out objects of interest. Nothing would afford us more pleasure than to allude to individuals by name, but we beg they will consider the difficulties and embarrassments likely to arise from such a course, and be satisfied with this general recognition of their politeness.

IN THE ROLLING MILL.—



We have the first step toward producing that essential part of the musket—the barrel. In an adjoining storeroom there are huge piles of flat iron continually on hand; these pieces are incipient barrels, and are 12½ inches long, by 5½ wide, and ½-inch thick; they weigh ten pounds. They are the best English iron, imported especially for the work. The plate is formed up by successive operations; at first it is run through what are called the crimping rolls. These are merely cast-iron rollers, with grooves in them of a constantly increasing depth; the first groove being merely a shallow depression, through which the red hot plate is drawn; when it issues on the further side it is curved like an eaves trough; these curves are gradually augmented until the plate is no longer such, but is an irregular cylinder with a seam, or two unrolled edges, all down one side. This seam must now be closed so as to make the barrel continuous and of a solid and homogenous nature throughout. Here the true rolls come into use. These latter are larger in diameter than the crimping rolls, and are arranged one above the other. Now the gun barrel is not straight, but tapers from one end to the other, consequently the grooves in the rolls must be of a constantly increasing depth, so that the barrel will be of the right taper when finished. Very little metal is left on, barely sufficient to turn and grind to a smooth surface; therefore it will be apparent that if the workman does not always insert the barrel at the proper time and always in the same place, the thick part of the butt might be inserted in the narrow end of the groove and the work be spoiled. When the rollers once get hold of the barrel they never relax their grasp, but put the work through to the other side most speedily; there is no alteration or re-adjustment possible. To insure against loss in this respect the rollers are provided with a square jog. The barrel being heated to a white heat in the furnace behind the workman, is then thrust on a steel mandrel, and watching his chance, he pushes the butt of the barrel against the shoulder on the roll. Here is a starting point to work from, for as the barrel is drawn in, it is always in the same relative position, and consequently cannot be wrong. The operation of rolling is repeated many times by running the barrels through constantly decreasing grooves until they have attained the proper dimensions. This duty is excessively severe upon the workman. The barrel weighs ten pounds when it enters the first roll, and when it issues completed it weighs rather less than seven; the roller, therefore, handles eight and a half pounds of iron on an average all day long, as fast as he can pick it up and present it to the rolls. In the course of the day this amounts to thousands of pounds. The man at the rollers is assisted in all these labors by one helper and a fireman, and all hands have their energies tasked to the utmost. This method of producing a musket barrel is comparatively new; the old plan being to forge or weld the sheets under trip hammers. The rolling process is far superior, in