NEWFOUNDLAND CORRESPONDENCE.

St. John's, Nfld., April 5, 1872.

ALL ABOUT EELS—THEIR NATURAL HISTORY AND ECONOMIC VALUE.

It is calculated that fully a third of the surface of this island is covered with lakes and ponds. The largest lakes are Grand Lake—sixty miles in length; Red Indian Pond—thirty miles in length; Gander Bay Pond, and Jameson's Lake. The smaller "ponds," as they are called here, are almost innumerable. On the shortest walk into the country you are sure to pass several; and on mounting any considerable eminence, a score or two may often be counted. Most of them are well stocked with trout and eels. Angling is a favourite amusement in the summer season; and the number of splendid trout taken by a single angler, out of a good pond, at times seems almost fabulous. It is, however, with the other inferior inhabitant of our ponds and rivers I am at present concerned—the despised eel. Lowly and commonplace as this fish is, it has points of great interest, and its character and habits form an agreeable study.

CONSUMPTION OF EELS.

It is curious to find that in Scotland there is a strong prejudice against the eel, on account of its serpentine shape, so that it is very seldom eaten. In England, there is no such objection to its use, and "eel-pies" are there considered an article of luxury; while among the poorer classes, the consumption of the coarser and cheaper kinds is very great. On the continent of Europe, eels form no inconsiderable item in the food of large numbers of the population. In the great lagoons of Comacchio, on the Adriatic, eel breeding has been carried on, for more than three centuries, on a most extensive scale, and the capture and cure of this fish form there a most productive branch of industry. The lagoons of Comacchio were once a great unproductive swamp, one hundred and forty miles in circumference, accessible to the waves of the sea, where eels, leeches and other inhabitants of such watery regions, sported about unmolested by the hand of man. They have now been converted into a great eel-pond, by dyking out their waters from those of the Adriatic, and forming a series of canals and pools suitable for the requirements of such a peculiar fishery. A quaint population of eel-catchers now inhabit the islands of the lagoons, and the annual value of the eels taken here is estimated at £150,000 sterling. Among the Italians, the eel is esteemed a nutritious and palatable fish, highly susceptible of the arts of the cook. There is no prejudice here against the eel as an article of diet: but, owing to the abundance of other fish, little attention is given to it, and its use is but trifling in amount. It is evident that the quantity taken might be increased to any amount, so numerous are the ponds, lakes and rivers, in Newfoundland, where it abounds.

NEWFOUNDLAND VARIETIES.

We have here three well marked varieties of the eel—the *anguilla muræna*, the *conger* and the *common* or *sharp-nosed* eel. The last named species are caught in almost every stream and pond; the conger is entirely a marine species, and is abundant along many parts of our iron-bound coast. The conger is known to prefer deep water with a rough and rocky bottom. Its principal food is crustacea which its powerful jaws enable it to crush. Often it is found burrowing in the sand, and hiding in holes and crevices of the rocks. The flavour is coarse and it is little used by our population. It is no uncommon thing to see a conger-eel four or five feet in length. Off the coast of Cornwall specimens have been taken weighing more than one hundred pounds, and above ten feet in length. Such enormous fish, with their powerful jaws, often prove very formidable when assailed among the rocks or drawn by a line into a boat; and the landing of such customers is a serious operation.

MIGRATIONS OF THE EEL.

The common eel is by far the most valuable and abundant, and quite as prolific as the generality of sea fish. They are migratory; and although, strictly speaking, fresh-water fish, many remaining all the year round in ponds and breeding there, yet, when following their natural instinct, they migrate at certain seasons towards the sea, and live in brackish water, at the mouths of rivers. Their object in visiting the sea is to deposit their spawn. In this, and other respects, they are the exact opposites of the salmon, which ascend the rivers to spawn in fresh water; and it is a curious circumstance that about the period when the eels are on their way down stream, to find a suitable spawning ground in the ocean, the salmon are on their way from the sea up to the river-heads to fulfil the grand instinct of their nature—namely, reproduction. The periodical migrations of the eel, which are observed in all parts of the globe, take place, according to climate, at different periods from February to May. Here the migration begins in May, when the salmon are ascending the streams. In some rivers, the young eels may be seen going up stream, in incredible numbers. The most absurd theories were at one time prevalent regarding their mode of re-production. They were said to be "born of the mud," by some—others described them as "growing out of hairs," and others asserted that the young fish grew from particles scraped off the old ones. All these absurd notions have been dispersed by the advances of modern science; and the eel is now known to be oviporous, and to produce its young in the same way as most other fish.

CURIOUS FACTS ABOUT THE FISH.

At Langport, in Somersetshire, we are told, the young eels are taken in thousands, at certain seasons of the year, and after being placed in scalding water, are pressed into a mould. This eel-cake is pronounced most delicious eating. Generally, however, eels are either stewed or made into pies. The quantity thus consumed in London is almost incredible. The London eel-market is mainly supplied from Holland, the fish being brought over in vessels fitted up with tanks. The coarse-flavoured congers, which are taken by Cornish fishermen and sent to London, are said to be chiefly eaten by the Jews who are the best judges and cooks of fish in the world. They generally fry their fish in boiling sweet oil. Naturalists describe the air-bladder of the eel as very remarkable and much resembling the lung of a snake. The real function of the air-bladder in fish, though deeply inquired into by many physiologists, remains a mystery. A very curious circumstance is related about the effect of cold on eels, in the year 1855, in the sea opposite St. Leonards, in England: "Some few miles out at sea thousands of conger eels were found floating on the surface of the water. They could progress readily in any direction, but could not descend, and consequently fell an easy prey to the boatmen catching them by means of hooks on the end of a long stick. In this manner no less than eighty tons were captured, of all sizes, some being as much as six feet long, and of a surprising circumference. One of them was opened and the air-vessel was found distended with air to the utmost, so as to completely close the valvular opening. It was this evidently that buoyed them up. No other fish were observed in the same condition. The thermometer at this time was very low, and one night went down to 16°," (Buckland). It is evident from this that the eel is much affected by cold, the action of the frost causing the air in their swimming bladders to expand so much that the ordinary muscles cannot expel it at will. In winter, it is no uncommon circumstance to find the eels imbedded in mud and often knotted together in a large mass. In this condition they are often dug out in heaps.

METHODS OF EEL-CATCHING.

When kept in ponds, eels become comparatively tame, and when well fed grow to an immense size. Every one knows the proverb "as slippery as an eel"—one which is founded on the supple and slimy nature of their bodies, which enables them readily to glide through the hands. Their tenacity of life is also well-known, as well as their longevity. The most humane way of destroying life in them is to plunge them into water at 120°. They are taken in various modes. They will bite freely at the hook when baited with small gudgeons or minnows or sticklebacks. "Totting" is another method of capture. It is performed by cutting a hole in the weeds on a gravelly bottom, and stationing a boat there. The fisherman is provided with a short stick, with a cord at the end, to which is attached a bunch of worms, strung on worsted with a leaden plummet in the midst of them. To this curious bait, as soon as it reaches the bottom, the eels crowd and suck at the worms, when the *tot* is quickly drawn up into the boat. The eels drop off into the boat, the *tot* is plunged again and soon again comes up loaded with fish. Nets of a peculiar construction are used in mill-waters. In this island eels are mostly taken with the hook, or in baskets sunk in the brooks, at their outlets into the sea. It is remarkable that the best eels are taken near the banks of a stream where they are invariably found to swim. They are most voracious creatures, devouring greedily aquatic insects, crustacea and mollusca, the spawn of fishes and even fishes themselves. It is mentioned in Giffeth's edition of Cuvier's "Règne Animal" that the skin of eels, which has a consistency resembling parchment, forms the object of a small trade in some cities. In Tartary it is used, after being oiled, as a substitute for glass in windows, and the peasantry in some parts wear it round the arm or finger as a cure for rheumatism.

EEL FISHERY OF COMACCHIO.

The greatest eel-breeding establishment in the world is on the lagoon of Comacchio, in Italy. The entire industry of this unique place is founded on a knowledge of the natural history of the eel, especially its migratory tendencies, which admirably adapt it for cultivation. Being moreover remarkably prolific and of tolerably rapid growth, it can be speedily turned into a source of profit. The fresh waters of the lagoon are dyked out from those of the Adriatic; and by means of a series of canals the waters of the sea are admitted into the lagoon at the proper seasons, when the young fry of eels are leaving the sea for the fresh water. About the beginning of February in each year the migration commences, and then there may be seen ascending the Reno and Volano mouths of the Po, from the Adriatic, a great series of wisps, apparently composed of threads, but in reality young eels. Hundreds of thousands thus pass annually from the sea into the lagoon. At the end of April the entrance-sluices are closed. The eels are allowed to grow till the beginning of August, when the great eel-harvest begins and continues till December. The labyrinths being crowded with fish, there is comparatively little trouble in the capture; and the salter waters of the sea being let in, the migratory instinct of the fish is excited, so that it becomes an easy prey to the fishermen. The eels are not exported fresh from Comacchio, as is done in Holland, but are almost all preserved by cooking before being sent to market. In a huge kitchen they are impaled on spits and roasted before the fire. A workman seated before a block of wood, with a small hatchet in his hand, seizes the eels one by one, and with great dexterity cuts off head and tail, divides the eel into pieces of equal length and throws them into a basket at his side. They are then spitted and roasted before the fire by women—the smaller pieces being fried in olive oil. They are next placed in baskets of open work to *drain* and cool, and afterwards packed in barrels of large and small sizes, in the same manner as herring. A mixture of vinegar and salt is poured into the barrel before it is closed up. Another method of preserving the fish is by salting. This is done by spreading the eels in layers with a stratum of salt between; and when the heap is completed a heavy board, with weights on the top to press it down, crowns all, so as to compress the fish and prevent the air from penetrating the pile. After lying in salt for twelve or fifteen days, the fish are packed in barrels, but without any liquid. A third method is to immerse them in brine and then dry them. A barrel of pickled eels contains one hundred and fifty pounds weight, and costs ninety-seven francs. The fish of Comacchio are sent to all parts of Italy, and in Venice, Rome and Naples are greatly in demand. The population of the lagoon is about 7,000, and all are dependent on the eel-fishery. The profits of the immense establishment are very great, as labour is cheap. The whole government is in the hands of the farmer-general or his representative, who up till the termination of the temporal power, rented the fisheries from the Pope. The most rigid discipline prevails; and the population live in the most primitive style, their one grand idea being the fishery, of the ingenuity and productiveness of which they are very proud. Now that pisciculture is everywhere attracting so much attention, and its importance, so generally acknowledged, it may be interesting to know how much may be made by the skilful cultivation even of the humble despised eel. When the nobler salmon has been duly cared for, the eel may come in for a share of attention in British America where it thrives so well.

CANADIAN PARLIAMENT.

SENATE.

April 16.—One or two bills passed their first reading, after which an address of congratulation on the recovery of the Prince of Wales was passed, and the House adjourned out of respect to the memory of the deceased Senators Duchesnay and Bell.

April 17.—No business of any importance was transacted.

April 18.—In answer to Senator Sanborn, Hon. Mr. Campbell replied that it was the intention of the Government to introduce a bill to make more liberal the existing laws relating to patents. Hon. Mr Mitchell stated, in answer to an inquiry from Senator Miller, that measures would be taken, with the co-operation of the Home Government, for the protection of the fisheries.

April 19.—Senator Sanborn moved for papers relative to the Arbitration.

HOUSE OF COMMONS.

April 16.—After routine business, Hon. Mr. Mackenzie moved for all papers, correspondence, etc., relating to the disposition of Crown Lands in Manitoba. The Governor of that Province had refused to do anything until the lands had been secured for the half-breeds, and in consequence many immigrants had been placed in a bad position. He said no such favours ought to be shown, and equal justice should be done to all. He would like to know if Governor Archibald's illegal proceedings in the matter had received the sanction of the Government. Sir John A. Macdonald said he had no objection to bring down the papers; but as to the question put, if the hon. gentleman would give notice thereof, he would give him a full answer. Hon. Mr. Mackenzie moved for correspondence with Lieut.-Governor Archibald and Mr. McMicken regarding the Fenian invasion of Manitoba and the relations between the Governor and Riel. It had been alleged that one of Riel's associates, O'Donoghue, had organised the invasion. He would also like to know whether Governor Archibald's resignation had been of his own free will, or whether it had been pressed upon him. Sir John A. Macdonald replied that the Governor resigned last December, but his resignation had not been accepted. Since then he had pressed it so much that the Government had no alternative but to accept. The motion then passed. Hon. Mr. Mackenzie moved for papers respecting the location of the St Clair Flats Canal. He said fully fifty American captains had told him the canal was constructed on Canadian territory. The motion passed. In answer to Hon. Mr Blake, Sir John A. Macdonald said it was the intention of the Government to introduce a bill to regulate the trials of controverted elections in Manitoba and British Columbia, the provision to be temporary, and the same as those now existing in Quebec and Ontario. Sir John A. Macdonald said some of the papers relating to the Washington Treaty could only be brought down by permission of Her Majesty's Government. The House adjourned at 4:30 p.m.

April 17.—Routine business having been proceeded with, Sir John A. Macdonald stated, in reply to Hon. Mr. Holton, that, on the resignation of Governor Archibald, a commission had been made out for Judge Johnson, who had gone to Manitoba as recorder, as administrator; but as it was found there was no provision in the Union Act for an administrator, it had been resolved to appoint him Governor until the gentleman who had been chosen to take that post had made arrangements for doing so. Mr. Magill moved for a select committee to inquire into and report upon the extent and condition of the manufactures of the Dominion. He believed the resolution would be supported by the patriotism of the country, and concluded by denouncing the speech of one of the members of the Cabinet as tending to produce revolution. Sir Francis Hincks said the Government would offer no opposition to the motion. Hon. Mr. Holton taxed the ministers with attempting to shirk the duties of responsible government, as they had done last session with respect to their canal policy. He expressed his approval of the remarks of the mover on the speech of one of the ministers. The Hon. Mr. Howe replied in a stinging speech, accusing the hon. gentleman of favouring annexation, and of being a Yankee "from the tip of his nose to the tail of his coat." He denied that he himself had been wanting in loyalty and respect for the British flag, citing instances where his loyalty had been put to the test. He concluded with a sharp attack upon the member for Lambton for the remarks made by him (Mr. Mackenzie) while he himself was in the North-West. Hon. Mr. Mackenzie replied, claiming perfect freedom to criticise as he chose the words and actions of the Secretary of State. Hon. Mr. Huntington advocated the treatment of the question of protection or free-trade on a broad national basis. Mr. Jones (Leeds and Grenville) thought manufactures were already sufficiently protected; he moved an amendment for the protection of the agricultural interests. Hon Mr Blake hoped the agricultural interests would not be forgotten. With regard to the speech of the Secretary of State, he would leave it to compassionate silence. Sir John A. Macdonald regretted the language used by his colleague, but he denied that there were disloyal sentiments therein. The Secretary of State looked forward to England's abandonment of her colonies, not with pleasure, but with loyal regret. Hon. Messrs. Holton and Blake replied. Messrs. Workman, Young and Bodwell spoke to the motion, opposing protection, and finally the original motion was carried, the amendment having been withdrawn. After some unimportant business the House rose at 6.

April 18.—Hon. Mr. Blake introduced a bill for simultaneous elections, and another to secure the independence of the Senate. Sir John A. Macdonald brought down the papers relating to the Treaty of Washington, whereupon Hon. Messrs. Mackenzie and Holton charged him with having violated Parliamentary practice by communicating the substance of the correspondence to a newspaper. Sir John A. Macdonald did not deny having communicated the information, but in-