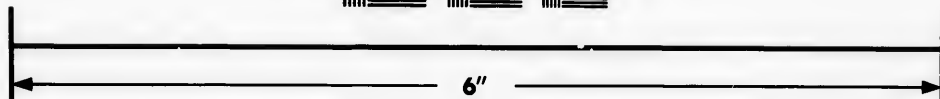
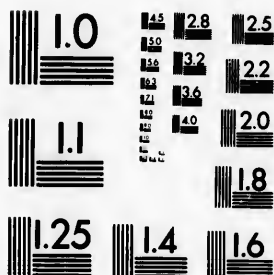


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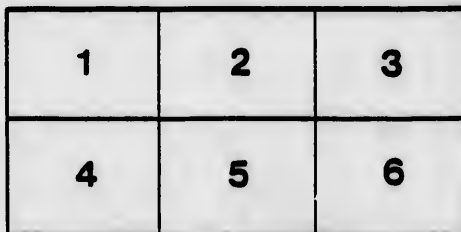
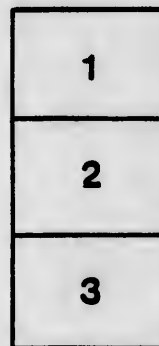
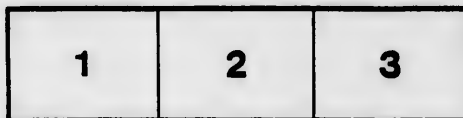
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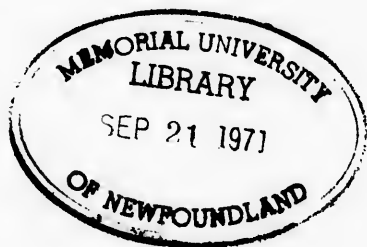
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Newfoundland.

Short paper

On the Productive
Capabilities of

By Cecil Fane. (Fane)



9126 Pump.



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Fane, Cecil.

SHORT PAPER
ON THE
Productive Capabilities¹⁵ of Newfoundland⁹,

Read at the United Empire Trade League
Conference, held in London, on the 23rd of
June, 1892.

IT is with considerable diffidence that I venture to come before you to read this short paper upon the Productions of Newfoundland, and I must commence by expressing my great regret that no abler person, and one with a larger experience of the Colony, has been found to address you and do more justice to the subject than I am capable of doing; at the same time, if I can at all dispel any of the many misapprehensions that exist as to the productive capabilities of this oldest Colonial possession of the British Crown, I shall have the satisfaction of feeling that my efforts have not been in vain.

The exports from Newfoundland in the year 1890, as shown by the statistical abstract compiled by the Board of Trade, amounted to a grand total of £1,270,768 in value, of which £537,591 (or nearly one half) is returned as having been exported to other portions of the Empire. Of these exports the principal is dried codfish, which attained a value of £809,770. This is at present the staple product of the Colony, and is chiefly consumed in those foreign countries whose population are mainly members of the Church of Rome; for instance, Portugal consumes Newfoundland codfish to the value of £201,608; Brazil, £205,156; Italy, £60,722; Spain, £92,581; while the British West Indian Islands take £90,667. A curious feature of this trade is the increased demand for dried codfish that has sprung up both in Canada and the United States of America.

There is no doubt but that were some better method devised for preserving or curing codfish, the demand for it would increase in England and other countries where the tenets of religious principles do not compel a fish diet one day in the week. At present, the fish, as soon as possible after it is caught, is split open and heavily salted, and then is placed on frames called "flakes," and dried in the sun until it is as hard as a board; it is then stacked in the merchant's stores, and shipped either in bulk or barrels. Fish preserved in this manner has

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to be soaked in many changes of water for at least 48 hours before the brine is sufficiently removed to make it at all palatable, and even then there is always a peculiar flavour attached to it, a flavour engendered during the process of sun drying, which is far from pleasant. Fortunately for Newfoundland, however, no better method of preserving cod has been adopted to any extent by other countries, and it is still almost the only class of fish that can be taken far inland in hot climates; nevertheless, it is a precarious trade, as its prosperity depends on the will of the Church of Rome, and were the fasts of that Church abolished, I am afraid that the demand for this product would immediately and rapidly decline.

When one considers that over 50,000 tons of this dried codfish is exported annually from the Colony, equal to 100,000 tons weight of fresh fish, it seems a pity that some method of cure cannot be devised which would suit the English market; and I feel convinced that in experimenting and searching for such a method of cure, the Newfoundland merchants must look for the future development of this trade. There is an ever increasing demand for fish amongst the working classes of Great Britain, the seas around our coasts cannot supply sufficient for the demand, and if means can be devised for bringing the fish either fresh or cured in an inviting and palatable manner from Newfoundland, it is amongst the teeming millions of the Mother Country that the Colony will find her best and surest market.

The next in importance of the industries of Newfoundland is the Seal Fishery. This is carried on by a fleet of some 22 steamers, varying in size from 250 to 700 tons register; they sail for the ice-fields on the north-east and west of the island on the 15th of March, and are usually all in port again within six weeks from the date of sailing; each steamer carrying a crew of from 150 to 300 men. The seals are of two kinds, the "Harp" and the "Hood," of which the latter is the larger, and the former are in the greatest quantity. They are found in large masses, called locally "patches," on the fields of drift ice, the old seals coming up on the ice to give birth to their young ones, which fall an easy prey to the men from the steamers. These young seals are killed when they are about a fortnight or three weeks old, a blow on the head from a gaff being sufficient. As soon as they are killed they are immediately "sculped," that is, the fat and skin is removed, while the carcase is left upon the ice. The fat inside the skin varies from one-and-a-half to two inches in thickness, and this, with the skin, weighs from 40 to 50 pounds. The annual catch of seals numbers from 200,000 to 250,000; the fat is made into oil, which in the year 1890 was exported to the value of £69,934, while the number of skins exported that year amounted to 221,388, of a total value of £46,101. Both skins and oil are for the most part exported to England, the skins being used for the manufacture of the finer kinds of leather. This industry is considered of great importance in the colony, as it employs some 15,000 men, who

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often earn as much as £15 to £20 a head, during the five or six weeks they are absent on the voyage.

I will now turn to the Mining Industry, which, though still in its infancy, is rapidly growing in importance, and as the exploration and opening up of the colony progresses, bids fair to be soon of almost as much importance as the Fishery. The Board of Trade returns for 1890 only give Copper Ore amongst the exports, which they state attained a value of £47,248. In addition, however, to this ore, iron pyrites, and asbestos are now being successfully worked, while in addition to these large deposits of lead, silver, iron ore, plumbago, antimony, coal, and many other minerals are known to exist, while beautiful marbles, grindstone, whetstones, and excellent building-stones have been discovered. Petroleum has also been met with in small quantities, though this has not as yet been tested as to whether it is in sufficient quantity to be worth working.

Having personally visited most of the mines at present in operation, besides, by the courtesy of their owners, having been given full particulars as to their output, I think it may be interesting to say a few words as to what is actually being done. First, I will take the Tilt Cove Copper Mine, owned by the Cape Copper Company, Limited, of London. This mine was originally owned by Mr. McKay and Mr. Bennett, the pioneers of the mining industry in the colony. It is situated in a small cove at the north of Notre Dame Bay, within a few hundred yards of the coast, and consists of an enormous mass of ore. The workings are driven straight into the side of a hill, and in whichever direction new drifts are made ore is almost always found, the supply seeming practically inexhaustible. The Secretary of the Company owning this mine wrote to me some time since as follows:—

"We are obtaining from our Tilt Cove Mine about 60,000 tons of ore yearly, containing about four per cent. of copper. The chief part of this is being smelted into 'Regulus' of about 25 per cent. of copper, and that 'Regulus' is shipped to this country, as well as the portion of the ore not so smelted, for treatment at our works in this country. The ore contains some gold, not sufficient to warrant separate treatment for its extraction as a separate commodity, except that as it becomes more concentrated in the 'Regulus,' we have lately, at our works in this country, made arrangements to extract it from that production. The 'Regulus' contains about seven pennyweights per ton, equal to about 30 pennyweights per ton of the copper contents of the 'Regulus.' I feel quite sure that when we overcome all our difficulties, which are chiefly those of finding technical managers of our smelting works at Tilt Cove, who possess, besides skill in their trade, the capacity of adapting themselves to the different conditions of Newfoundland and this country, we shall have a profitable property."

There are other copper mines in active operation, but time compels me to pass on, and turn to another important mining industry,

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that of "Iron Pyrites," which ore is one of rapidly increasing consumption, being used for the manufacture of sulphuric acid. To give an instance of the increase in the demand for this mineral, I may say that according to the statistical reports of the United States of America, the consumption in that country has risen from 8,000 tons in 1881, to 181,000 tons in 1889, and for 1892 it is calculated that 350,000 tons will be consumed.

A discovery of a very pure quality of pyrites ore was made in the colony a few years since, which is now being actively worked by an English company called the Pyrites Company, Limited, and it is to the courtesy of the Directors of that Company that I am indebted for the statistical information with regard to their property that I purpose giving you.

From the reports of this mine by Dr. R. W. Ellis, of the Government Geological Survey of Canada, and by Messrs. John Taylor and Sons, of London, dated October and July, 1890, respectively, I take the following extracts:—Dr. Ellis says—"The assays of minerals show it to be almost absolutely pure iron pyrites, the percentage of earthy matter being only the half of one per cent., with sulphur 52 per cent., and iron 46.80 per cent." A comparison with pure sulphide of iron (*i.e.*, iron 46.70 per cent., sulphur 52.30 per cent.) shows practically no difference. Messrs. John Taylor and Sons report as follows:—"The lode which is being worked is a strong and masterly one. . . . It is composed of a solid mass of iron pyrites, varying in width from 50 feet at surface, to 68 feet wide at the No. 1 level, and at No. 2 to a discovered width of 100 feet."

Each of these reports gives the measured ore in sight at the date of the examination at about half-a-million tons, with a probability of many millions of tons yet undeveloped.

I may also mention that in the pyrites mines of the United States of America, the greatest amount of sulphur contained in the ore is 46 per cent., compared with 52 per cent. of the Newfoundland mine.

This mine is situated in an excellent harbour, close to the water's edge; vessels of any size can come alongside the Company's wharf, and be loaded at the rate of 1,000 tons a day. It is 250 miles north of St. John's, and the navigation is free from ice from May to December. The product of the mine was 7,000 tons in 1889, 16,000 tons in 1890, 30,000 tons in 1891, and the estimated production for this year is from 50,000 to 60,000 tons.

The next in importance of the minerals being worked at present is Asbestos, of which there is a profitable mine in operation in St. George's Bay, on the west coast of the colony. The owner of this property is the Hon. Robert Bond, the present Colonial Secretary of the colony, who has informed me that the quality of the asbestos is unsurpassed by any in North America, being of exceptional length of staple. This mine is being worked by an American Company, on lease from Mr. Bond.

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The greatest in importance of the undeveloped minerals in the colony is, no doubt, Coal, of which two extensive fields have been discovered, one near St. George's Bay, in close proximity to huge masses of iron ore, and the other near Deer Lake, on the Humber river. Neither of these coal fields are any great distance from the coast, and must prove of immense economic importance in the near future. I take the few following extracts from the report of Mr. Howley, F.G.S., Government Geological Surveyor, of Newfoundland, on the subject of the coal fields in St. George's Bay, dated 6th March, 1890:—"The aggregate thickness of all these seams on the west side of the trough gives "between eighteen and twenty feet of coal. If we add to this the "seams on Robinson's River and the 'Northern Feeder,' we have a "total of about twenty-seven feet altogether, which is about ten feet less "than that of the North Sydney section. There are good grounds, "however, for believing that other seams not yet discovered exist in "this neighbourhood, especially in the central part of the trough. "Many fragments of loose coal were observed in the gravel overlying "the highest seam, which, judging from their character and position, "were apparently derived from a still higher seam." Of the character of the coal discovered he speaks as follows:—"The coal in "the Cleary seams closely resembles in external appearance that of the "Sydney mines, Cape Breton. It is bright, tolerably hard, and breaks "into square and oblong blocks. It is a bituminous caking coal, "burns well in an open grate, and leaves nearly a white ash. That of "the Jukes seam is entirely different. It presents a brilliant "glistening black appearance, breaks into small fragments, and is very "brittle, resembling in this respect some of the Welsh coals. It "burns freely in the open air, giving off but little smoke, and leaves a "white ash residue. Though bituminous, it does not clog the bars of "a grate, and altogether seems remarkably free from impurities."

The coal field of Deer Lake is even more promising than that described above; it was carefully examined by Mr. Howley during last summer, but his report is not yet out of the hands of the printer, so I am unable to quote from it. I think, however, that I have already given sufficient instances to shew that in the near future the minerals of Newfoundland must prove of great value to the Colony, besides being of importance to Great Britain and the Empire at large.

Another industry that has received a great impetus during the last few years is that of "lumbering," it is carried on chiefly in the valley of the Exploits river, the Gander, the Gambo, and the Humber rivers. To quote from the report of the geological survey for the year 1871—"The forest of the Exploits Valley consists of pine, spruce, balsam-fir, "tamarck, white birch, and poplar." There are large timber mills at the mouth of the Exploits river, owned by an English company, who at the time of my visit there last summer were sawing up about 1,000 logs a day, some of these logs having a diameter of 48 inches at the butt. The company has lumbering rights over several hundred square

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miles of land, and employ a large number of men. The timber from these mills mostly comes to England, and is considered to be of a very good quality.

As to agriculture, very little has, up to the present, been attempted, the unfounded prejudices that exist in the Mother Country as to the climate and soil of the Colony, having prevented emigrants from choosing it as their home. As to the suitability of the soil of Newfoundland for agricultural productions, I cannot do better than quote from a paper published by Mr. Howley, the geological surveyor, in June, 1889. He says:—"The valleys of the Gander and Exploits rivers contain large areas of fine land. A dense forest which covers the entire country has added, and is continuously adding, its decomposed woods, leaves, etc., to the surface. When we take into consideration the advantages these tracts possess in point of climate and situation, together with their undoubted superiority of soil, there can hardly be any question as to their future agricultural development." Speaking of the lands in the Codroy valley, he says, "In some places they are naturally so fertile as to need no manure." Again, he says, "I believe the land to be richer than that of Prince Edward's Island."

There are many thousand square miles of country eminently suitable for all classes of farming; I have seen excellent samples of wheat, oats, and barley, grown upon the Island, while potatoes and root crops do as well as those at home. Sheep and cattle raising will, I feel sure, be one of the future industries of the Colony, the experiments already made in this direction having proved more than satisfactory. Natural grasses abound, and the barrens of the interior are eminently suited for the purpose. The climate is not so severe as that of Canada, the winters are shorter, and the cold is not so intense, while the distance to England is but 1,750 miles, and some day I fully expect to see a large supply of beef and mutton shipped to the Mother Country.

In conclusion, I would merely state that if the finances of the Colony are able to bear the strain of the extensions of the railway system now in progress, then I am convinced that the large and undoubted natural resources of the Island will make it one of the most valuable possessions of the British Crown, and open up a field for large emigration from this country. Newfoundland has suffered in the past from misrepresentation, but in these days of general knowledge and enlightenment the clouds that have hung over her for so long are sure to be dispelled, and the people of England will recognise that in their oldest Colony they have a possession second to none in the Empire.

CECIL FANE.

