

carbonate of soda more cheaply from other sources. As a source from which iodine is obtained, however, it might be possible to utilise in future the enormous product of *Fucus vesiculosus* on the shores of the Maritime Provinces.

Of the Laminariæ there seem to be, so far as observed, only three species on the shores of New Brunswick. Their great variety of form and size renders the identification of species a matter of some difficulty to the student. The most generally diffused form, especially in the Gulf of St. Lawrence, is *Laminaria longicurvis*. This, with species parasitical upon it, formed the great mass of marine vegetation observed in the long lines of seaweed cast up by the waves on the southern shores of Shippegan and Miscou. The length of one specimen of this plant, measured from hold-fast to end of blade, was 28 feet; and the stipe of another, which was all that could be obtained from the mass of debris in which it was imbedded, was 16 feet in length. Judging from the large size of this stipe, it must have belonged to a plant fully 30 feet long. Scattered in endless profusion along this shore, and thrown up from the deep water, were the beautiful forms of the bright red *Delesseria sinuosa* and *D. alata*, var. *angustissima*, the latter not having been yet observed on the southern coast of the province.¹

The other species of Laminariæ, *L. saccharina* and *L. digitata* with the related species, *Chorda filum*, *Agarum Turneri*, *Alaria esculenta*, are found to a much more limited extent on the shores of the Gulf of St. Lawrence than *L. longicurvis*. The size of the latter among the islands at the mouth of the Bay of Fundy was much less than what was observed in the Gulf of St. Lawrence, and here it was replaced to a great extent by the other species of Laminariæ just mentioned.

The Laminariæ are valuable as fertilisers, although I am not aware that farmers in this province make any use of them. The stems of *Laminaria digitata* seem to be used for a variety of purposes, amongst others, for the manufacture of sponge-tents.

The only sea-plant that has a commercial value with us is *Rhodomenia palmata*, or dulse. During the season of 1886, the export of this seaweed from the shores of the Bay of Fundy was estimated, I am told, at upwards of 190 tons, of which about 50 tons were received and shipped from St. John. The selling price per lb. is from three to six cents delivered in St. John. The revenue from dulse gathered on the Bay of Fundy shores last year could not have fallen short of \$10,000. The coast in the vicinity of Dark Harbor, and other points on the north-west side of Grand Manan, are favourite grounds for the collection of this seaweed. During the lull in the fishing season in August, many turn their attention to this industry. Much that is exported from St. John finds its way to the manufacturing towns in the New England States, where it seems to be in demand among the factory population.

Among the edible Algæ, that which occupies the highest place is *Chondrus crispus* (Irish moss). This when reduced to a jelly by boiling, and seasoned, is tolerably palatable, and has very nourishing qualities. *Porphyra laciniata* and *P. vulgaris*, as articles of food, are in considerable demand in China and on the west coast of Europe. These edible seaweeds are found in great abundance on the rocky shores of New Brunswick; but, either because no urgent necessity has arisen for their use, or because the attention of our people has not yet been directed to them, their qualities have so far been untested. But a knowledge of their value as food, as well as where to look for them and how to