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NOVA-SCOTIA

CONSIDERED

AS A FIELD FOR EMIGRATION.

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CONSIDERED ECONOMICALLY.

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The Map of Nova-Scotia which accompanies this work is copied, by permission of the Proprietors, from the Map appended to Dawson's "Hand-Book of the Geography and Natural History of Nova-Scotia."

NOVA-SCOTIA

CONSIDERED AS A FIELD FOR EMIGRATION.

INTRODUCTORY.

AT a very early period in the history of Nova-Scotia, an impression got abroad concerning the general character of the country which has been highly prejudicial to its interests, and must have been, at the time that impression originated, unjust to its real merits. That impression generally was to the effect that Nova-Scotia was an unattractive and valueless country, having rugged and inhospitable coasts, a thin and unproductive soil, and a cold, damp, and foggy climate; but on the shores of which a tolerably productive fishery existed, and was carried on to a limited extent for the purpose of supplying the West This opinion seems to have become India market. stereotyped, and, with little variation or addition, has been embodied in nearly every work published in the United Kingdom, in which a corner has been afforded for a description of Nova-Scotia. As but a small number of the emigrating class feel disposed to confine themselves exclusively to the occupation of fishermen, among those of that class who have sought a home on the shores of America, during a century past, but a very small proportion have thought it advisable to take more than a passing glance at Nova-Scotia.

When an erroneous opinion once becomes widely disseminated, as in this case, it is extremely difficult to confute it; for the truth itself, when it is heard, is likely to be judged by the standard of the opinion previously entertained. Such seems to have been the fact in the case of Nova-Scotia; for, although a few writers have of late years endeavoured to do justice to the country, still the position which it holds in public estimation, as compared with the other states and provinces of North America, falls far short of that which it merits. There is another cause for this, besides the one already alluded to. The United States, by means and owing to circumstances which it is unnecessary here to particularise, have been brought prominently before European eyes, and have been maintained in that position ever since the American Revolution. The Legislatures of both Canada and New Brunswick have, for many years past, made great exertions to bring their respective provinces to the favourable notice of the public on the other side of the Atlantic, and to attract a tide of emigration to their shores. In both of those provinces extensive geographical surveys have been made at the public expense, for the purpose of ascertaining the agricultural capabilities and mineral resources of the country, and the reports thereupon widely circulated. Elaborate reports upon other partially developed resources have been, in like manner, prepared and circulated ; and, generally speaking, every opportunity has been taken advantage of to disseminate information as to the vast wealth and numberless attractions of those two fine provinces. In each of them, too, a Government Emigration Agent has been appointed, whose occupation it is not only to guide emigrants in their effort to make an advan-

tageous settlement in the province, but to facilitate immi-gration, and to spread abroad, to the utmost of their power, every information likely to be useful to the emigrating classes. In Nova-Scotia the case has been quite different. No public surveys have been made; no emigration agent has ever been appointed by the Government; nor has the local Legislature ever expended any funds, or taken any important steps towards conveying information abroad concerning it. It may be added with regard to Canada, and, in a minor degree, with regard to New Brunswick also, that the fact of their having of late years been engaged in the construction, on a pretty extensive scale, of canals, railways, and other public works, for which it has been necessary to procure English capital, has had no inconsiderable effect in bringing them into more general notice; for those who invest their money in such undertakings naturally inquire into the character and capabilities of the country where it is invested. Until since the commencement of 1855, Nova-Scotia may be said never to have been known in the English money-market. Even the small province of Prince Edward Island is comparatively well known by the British public; and, singularly enough, is by many persons believed to hold out inducements to the emigrant infinitely superior to those of the neighbouring provinces. This can be sufficiently accounted for from the fact that nearly the whole of that island was for a long time, and much of it still is, owned by parties residing in the United Kingdom.

But what in other provinces has been done, in a great measure, at the public expense, has been attempted in Nova-Scotia by private and unaided individuals. Several gentlemen, natives of the province, have, with a vast amount of labour, and with but very slight prospect of

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pecuniary reward, unraveled the thread of its history, explored its hidden resources, observed the country in all its aspects, and have published the results of their researches; but the circulation of these works has been pretty nearly confined to Nova-Scotia itself. At all events, it is believed that little is known concerning them on the European side of the Atlantic. The writer of these remarks believes that the publication of a work, embracing, in a succinct form, such information concerning the province of Nova-Scotia as is most likely to be desired by an intending emigrant, would be of great service both to that province and to the emigrating class of the United Kingdom. With this belief he has prepared the following pages, hoping that where a work comprised in so brief a form is found insufficient to satisfy the reader's curiosity, it may at least lead him to pursue his investigations further in the more elaborate and voluminous works which have been published on the same subject.

To those who desire to obtain further information concerning Nova-Scotia, the author would particularly recommend a perusal of Haliburton's 'Historical and Statistical Account of Nova-Scotia,' a work however which, as the country has much improved, and as the local knowledge concerning it has greatly increased since 1829, the date of the publication of that work, now requires many emendations and additions ; Gesner's 'Industrial Resources of Nova-Scotia,' Dawson's 'Handbook of the Geography and Natural History of Nova-Scotia,' and Dawson's 'Acadian Geology.' Much valuable knowledge upon the same head may also be derived from Montgomery Martin's 'British Colonies.'

CONSIDERED ECONOMICALLY.

CHAPTER I.

NATURAL FEATURES.

GEOGRAPHICAL POSITION AND CONFORMATION.

THE geographical position of Nova-Scotia presents advantages, in a commercial point of view, which can scarcely fail to arrest the attention of any ordinary observer, upon glancing at a map of North America. The province consists of a peninsula, called Nova-Scotia Proper, connected with the remainder of the continent by an isthmus of about twelve miles in width between tide waters; and of the island of Cape Breton, separated from the peninsula by the Strait of Canso, an outlet of the Gulf of St. Lawrence. It lies between North latitude 43° 25' and 47° 10', and between West longitude 59° 40' and 66° 25'. The whole province forms an irregular parallelogram, extending in a north-east and south-west direction, and is rather more than 350 miles in length, and from 50 to 100 in breadth. Its area is nearly 18,600 square miles, or about 12,000,000 acres; and of this area Cape Breton forms about 2,000,000 acres.

The whole province is projected out in a south-easterly direction into the Atlantic, and beyond the other neighbouring portions of the continent, to an extent equal to its greatest breadth. It extends about 200 miles farther east than any other portion of the North American continent, except the inhospitable coast of Labrador; and about 100 miles farther south than any other part of the British dominions along the eastern coast of North America. It consequently lies in the direct course of vessels running between the British Islands or the North of Europe, on one side of the Atlantic, and all of those parts which lie between the head of the Bay of Fundy and Cape Cod, on the other. From these facts it is obvious that, so far as mere geographical position is concerned, Nova-Scotia must possess great and peculiar commercial advantages. That position seems naturally to tend to two prominent and very important results, calculated to make the country a permanently prosperous one. One of these is, that Nova-Scotia will become the great highway for travel between Europe and the continent of North America, lying north and west of that province. The other result is, that from the position which Nova-Scotia occupies relative to the neighbouring provinces of Canada, New Brunswick, and Prince Edward Island, it will become the channel through which a very considerable portion of their foreign trade will be carried on, at all seasons of the year, but more particularly in winter, when all the ports of those provinces, with the exception of two or three, in the western part of New Brunswick, are blocked up with ice and quite inaccessible. We shall presently see that other causes are unmistakeably tending to the same result.

Nova-Scotia is bounded on the north, for the greater part of its extent on that side, by the Gulf of St. Lawrence and by Northumberland Strait, a channel from ten to thirty miles in breadth, separated by Prince Edward Island from the principal portion of that gulf; on the

east, south, and south-west, by the Atlantic Ocean ; on the north-west, the Bay of Fundy forms the boundary between it and New Brunswick, with the exception of the isthmus, already mentioned, between the head of the northern branch of the bay and Northumberland Strait. The province is, in every sense of the word, a well watered country : its rivers are numerous ; but owing to the comparatively small extent and peninsular form of the country, are necessarily small. The Bay of Fundy, which is about fifty miles in width at all its mouths, after extending a hundred miles inland, is divided into two branches. The northern, called Chiegnecto Bay, continues to be the boundary between Nova-Scotia and New Brunswick, and receives at its head the waters of the Macan, Napan, Hibert, and La Planche Rivers, which drain the western part of Cumberland County; the southern of these branches, called at its mouth Minas Channel, rapidly narrows to a width of six miles, and then suddenly expands into the capacious and beautiful Minas Basin, an expanse of water, about forty miles in length and nearly twenty in width : its eastern and narrowed prolongation being called Cobequid Bay. This southern termination of the Bay of Fundy extends into the very head of the country. Twenty rivers empty their waters into Minas Basin, which, with three or four exceptions, are navigable for the ordinary coasting vessels of the country, and for distances of from two to twenty miles. The principal of these are the Shubenacadie, the largest river in the province, and the Avon, from both of which an extensive trade is carried on. The only other river of importance emptying into the Bay of Fundy, from the Nova-Scotia side, is the Annapolis. When near its mouth, this river expands into a beautiful sheet of water, known as Annapolis Basin, affording anchorage for ships

of the largest size; and its waters obtain egress into the bay through a narrow and deep channel.

The other principal rivers in the province are River Philip, Wallace, French, Waugh, John, West, Middle, East, Barney's, and Antigonish Rivers, emptying into the Gulf of St. Lawrence ; the St. Mary's, Musquodoboit, Gold, La Have, Port Medway, Liverpool, Jordan, Roseway, Clyde, Tusket, and Sissiboo Rivers, emptying into the Atlantic Ocean ; and the Miré, Inhabitants, and Margaree, in the Island of Cape Breton. The most important of these, as to length and navigable capacity, are the East, St. Mary's, La Have, and Liverpool Rivers. Nearly all of those named are navigable for a short distance from their mouths.

An extraordinary and most important natural feature of Nova-Scotia consists in the number and excellence of its harbours. It is probable that no other country in the world is so favoured in this case in proportion to its extent; and its coast line embraces a distance of not less than 1000 miles, exclusive of the interior waters of Cape Breton. On the coast of the Bay of Fundy indeed, from Annapolis basin to the mouth of Minas Channel, there is no natural harbour on the Nova-Scotian coast. To remedy this deficiency a number of artificial harbours have been formed by means of piers, or breakwaters, which are being extended, from time to time, to suit the require-Within the Minas Basin, the ments of local traffic. harbours strictly so called are, for the most part, of such a character, owing to the tides, that vessels ground at low water. These tides have become widely celebrated for their great rise and fall, and for the rapidity of their current. An immense body of water enters the Bay of Fundy at the flood, setting upwards at the rate of from two to five miles an hour. This velocity gradually increases

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until the tide reaches the narrow entrances of Chiegnecto Bay and Minas Basin, when, in the strait leading to the latter, it attains a rate of ten miles an hour. The first of the flood, as it approaches the narrower and shallower terminations of Chiegnecto Bay and Minas Basin, forms what is called a *bore*—a foaming column of water with a perpendicular front of from two to six feet in height, according as it is formed by a spring, or neap tide—which stretches across the channel from shore to shore and rolls onward with a tremendous rapidity and a loud rushing noise, threatening to overwhelm all before it. Few of the phenomena of nature are better calculated for—

"Charming the eye with dread,"

than this aspect of the coming tide. Although it is sometimes a cause of unalloyed terror to inexperienced navigators, on seeing it for the first time, yet accidents resulting from it are extremely rare, and the navigation of those estuaries and rivers most remarkable for the strength of their tides, are not considered at all dangerous by persons acquainted with them.

At the confluence of Chiegnecto and Minas Channels, the spring-tide usually rises about fifty feet; and at the mouth of Shubenacadie River, and near the head of Cobequid Bay, it attains a height of seventy-five feet at spring-tides. The retreating tide lays bare, about the termination of these two arms of the Bay of Fundy, many thousand acres of hard, red sand-flats with broad margins of deep, soft mud immediately adjoining the drier land.

The most northern harbour on the Gulf of St. Lawrence is that of Pugwash, where the largest merchant ships may enter a secure basin and lie afloat within a few yards of the shore. It may be observed here that the coast of the

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gulf, unlike that of the Bay of Fundy, is but little affected by the tides. These, as we have already seen, rise in the bay to a height of from fifty to seventy-five feet; whilst in the Gulf of St. Lawrence, owing to its narrow entrances, they do not usually exceed eight or ten feet. Wallace Bay forms a good harbour for large ships near its mouth, and small vessels may proceed several miles up the river. The same may be said of Tatamagouche Bay. Pictou harbour is safe and capacious, and furnishes accommodation for the largest merchant ships. It is formed by the confluence of the East, Middle, and West Rivers, the first and the last of which are navigable for several miles. Merigomish furnishes the only good natural harbour between Pictou and Cape St. George; but Arisaig pier has been erected at considerable expense for the protection of coasters. Between Cape St. George and the Strait of Canso, we find the harbours of Antigonish, Pomket, Tracadie, and Au Bouche, of which Pomket is capable of accommodating ships of any class, the others only available for small vessels.

But it is on its Atlantic coast that Nova-Scotia becomes more particularly remarkable for its numerous and capacious harbours. First in importance among these is Halifax Harbour, or rather Chebucto Bay, which embraces Halifax Harbour, and also the north-west arm and Bedford Basin. It is celebrated as one of the best harbours in America, or even in the world, being easy of access for ships of every class, very capacious, and affording protection from every wind. Immediately above the city of Halifax, the bay, having narrowed considerably, suddenly expands into Bedford Basin, a sheet of water embracing an area of from eight to ten square miles, completely shut in from the sea, affording good anchorage throughout its whole extent, with from four to thirty fathoms of water, and protected by surrounding hills from every wind. The north-west arm, a narrow inlet which bounds the city of Halifax in the rear, is navigable throughout, and, for a distance of three miles, affords safe anchorage in from ten to twenty fathoms of water.

Westward of Halifax the coast is indented by two deep bays, known as Margaret's Bay and Mahone Bay, and which are very similar in their general characters. Each of them is studded with a number of islands having deep water and good anchorage between, and, with its numerous coves and indentations, forms in fact a varied and continued harbour many miles in extent, and affording, in most parts, ample room and protection for first class ships. At the head of Margaret's Bay is a harbour where a large fleet might ride out a hurricane with perfect safety.*

Besides those already described, the following harbours lying between the mouth of the Bay of Fundy and the Strait of Canso, a distance of a little more than 300 miles, are sufficiently easy of access, capacious, and secure for first class ships, viz. : Westport, Pubnico, Shelburne, Port Monton, Lunenburg, Owl's Head, Ship, Spry, Sheet, Beaver, Marie Joseph, Liscomb, Country, Whitehaven, Canso, and Crow Harbours. In addition to these, there are, within the same extent of coast, forty other harbours of inferior capacity, the most of which are, however, available for ships of five hundred tons. Among those of the better class, Shelburne, Ship, and Country Harbours, and Whitehaven, are pre-eminently excellent.[†]

The island of Cape Breton is scarcely, if at all, behind Nova-Scotia Proper in the number and capacity of its harbours. Among those of the first class, Port Hood,

* Blunt's American Coast Pilot.

† Ibid.

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St. Anne's, Great Bras d'Or, Sydney, Louisburg, and Arichat, are more particularly deserving of mention. The most singular geographical peculiarity of this island is the existence of a salt-water lake, or small inland sea, called the Bras d'Or Lake, which occupies the central portion of the island, and nearly divides it into two. This lake is entered from the east by two channels separated by Boulardarie Island, and known as the Great and Little Bras d'Or. After extending inland for a distance of about thirty miles these two channels unite, and expand into a basin called Le Petit Bras d'Or. From this, the tide flows southwardly through the Straits of Barra into the main body of water known variously as Le Grand Bras d'Or, the Big Bras d'Or, the Bras d'Or Lake, or simply the Bras d'Or. The greatest length of this lake is about forty, and its greatest breadth twenty miles; and its whole area, along with that of the channels leading to it, and the various inlets which branch off from them, may be fairly estimated at 500 square miles. This body of water is navigable throughout, its greatest depth being rather more than sixty fathoms; and the Great Bras d'Or Channel, the lake itself, and most of the bays and inlets leading from it, are navigable for vessels of the largest class.

The Strait of Canso, which separates Cape Breton from Nova-Scotia Proper, extends in length eighteen miles, its breadth varying from half a mile to a mile and a half, with from fourteen to thirty fathoms of water ; and comprises several harbours with good anchorage. This strait is the great marine highway for vessels running between the Gulf of St. Lawrence and all of the American coast lying west of its southern termination. It is also the most frequented channel of communication between Europe and the gulf coasts of Nova-Scotia and New

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Brunswick ; whilst ships bound up the river St. Lawrence from the eastern side of the Atlantic, often prefer it to the more dangerous route north of Cape Breton.

GEOLOGICAL STRUCTURE.

The rocks which immediately underlie the soil of Nova-Scotia belong, for the most part, to the older systems. Speaking in general terms as to the relative positions of these systems, as they appear upon the surface in Nova Scotia, it may be observed, that the older and less destructible rocks occupy the line of the Atlantic coast, and form a protection to the newer formations which lie in the interior and northern parts of the province. This Atlantic coast is formed, for the most part, of the older metamorphic rocks, consisting of gneiss, quartzite, and clay slate, in its original form as such, and now in its highly metamorphosed varieties of mica, talcose, chloritic, and hornblendic slates. It is traversed and perforated by great dikes and masses of granite, which occupy a very considerable portion of the surface of this district. The rocks of this class occupy, with the exception, probably, of the carboniferous system, a larger area of the surface of Nova-Scotia than those of any other system. As already observed, it forms the whole Atlantic coast of Nova-Scotia Proper. It attains a width, at its northern extremity, of about fifty miles; but gradually narrows as we follow it eastward, until it almost comes to a point at its termination about Cape Canso. The lands in this district are, for the most part, of inconsiderable elevation. Its greatest eminences are a bold, isolated-looking promontory, of 500 feet in height, between Margaret's and Mahone Bays, called Aspotogoen, a wellknown landmark to ships approaching the coast, and Ardoise Hill, immediately in the rear of that promontory,

and near Windsor, which attains a somewhat greater elevation.

The next group of rocks, in ascending order, which the geological structure of Nova-Scotia presents, has been but partially explored as yet; but it is collectively classed by geologists as of the Devonian and Upper Silurian formations. Associated with the rocks of these formations are found immense masses and ridges, composed of syenite, porphyry, greenstone, compact felspar, and other igneous rocks. This group of rocks forms a number of detached ridges in various parts of Nova-Scotia. One of these, in the western part of the province, extends along the northern margin of the older metamorphic rocks, from the most western coast, at the mouth of St. Mary's Bay, along the southern side of the Annapolis River, to the immediate vicinity of Minas Basin. It also composes the Cobequid hills, which separate the Minas Channel and Basin from Chiegnecto Bay. This ridge extends from Cape Chiegnecto, the point of bifurcation of the Bay of Fundy, eastwardly, through Northern Colchester and Southern Cumberland, to the western borders of Pictou County. The most elevated lands in the province are found in this ridge, but no parts of it exceed a height of 1200 feet. Another range of hills, of like formation, extends from the neighbourhood of the Stewiacke River, about the southern borders of Colchester County, eastward, across the southern part of Pictou County, when it separates into two branches, one of which extends northwardly to Cape George, in the Gulf of St. Lawrence, whilst the other continues nearly due east to Cape Porcupine, on the Strait of Canso. The rocks of this group also occupy a large portion of the island of Cape Breton, but there they are much broken up, and, as to geographical position, of a more detached and fragmentary character than upon the main land.

They form a band along the south-eastern coast, from St. Peter's to Scattari Island; and all that portion of Victoria and Inverness Counties which lies north of St. Anne's, although but imperfectly known, is believed to belong to the same group. A number of isolated, and not extensive ridges, in the north-western part of the island, and between the various arms and inlets of the Bras d'Or, also belong to these formations.

All that part of Nova-Scotia lying north of the older metamorphic district, first described, and east of the western extremity of Minas Basin, which is not occupied by the elevated ridges of the Devonian and Silurian formations, belongs, with some inconsiderable exceptions, to be noticed presently, to the carboniferous system. This district, the rocks of which are found to rest immediately upon those of the Devonian and Silurian formations, just mentioned, occupies a large area, comprising a small strip of the eastern part of the King's County, the northern and middle portions of Hants, the middle of Colchester, extending on both sides of Cobequid Bay and Minas Basin, all the northern and middle part of Cumberland and Pictou, a triangular portion of Sydney County, bounded on the north-east by St. George's Bay, a narrow strip, extending east and west through Guysborough County, and the principal part of the island of Cape Breton, more particularly of the south-western, middle, and eastern sections. This district has been comparatively well explored by several eminent geologists, and its limits are pretty accurately defined. At several localities, it affords excellent opportunities to the geologist of examining the character and relative position of the various carboniferous rocks where transverse sections of them are exposed on the sea coasts and river banks. The shores of Cumberland Bay, at a place called the Joggins, have become

especially celebrated in the scientific world for the almost unparalleled facilities in this way which they afford.

Immediately above the carboniferous rocks, and lying uncomfortably upon them, is the new red sandstone. The rocks of this formation are of but very limited extent in Nova-Scotia. They are supposed to be contemporary in their origin with the Permian formation of European geologists. They form a narrow and well defined strip, extending through the northern parts of the counties of Digby, Annapolis, and King's, from the head of St. Mary's Bay to Minas Basin, and comprising the valley of the Annapolis River. Here it is associated with the trap, which forms a lofty ridge, known as the North Mountain, extending from the western point of Brier Island, along the shore of the Bay of Fundy, to Cape Blomidon, on Minas Basin, and is interrupted only by the navigable channels known as Grand Passage (Westport), Petit Passage, and Annapolis Gut. A new red sandstone again makes its appearance in a narrow strip along the north shore, at the head, and in a few headlands on the south shore, of Cobequid Bay. It is in this quarter that its contact with the carboniferous rocks can be most easily observed. At Five Islands, near the western termination of the new red sandstone in this direction, it is again found associated with trap, which here, and at several other bold headlands on the north side of Minas Channel, seems to be part of the same formation as the North Mountain, already mentioned.

Notwithstanding the statements to the contrary in several published—but not very recently published sketches of the geology of Nova-Scotia, there seem to be no stratified rocks in that province of a more recent formation than the new red sandstone just mentioned.*

* For the geological facts contained in this section the author is

As already observed, none of the lands of Nova-Scotia attain a greater elevation than 1200 feet ; consequently, the natural scenery never assumes that quality of grandeur which is peculiar to mountainous regions. The highest lands are formed by the syenitic and porphyritic ridges associated with the later metamorphic formations, and by the trap rocks which skirt the shores of Bay of Fundy. The remainder of the province is of moderate elevation, and gently undulating in its surface. The natural scenery of most parts of the province, with the exception of some districts of the Atlantic coast, may be classed as decidedly picturesque; whilst in several places, as, for instance, around the Bras d'Or, on the Strait of Canso, the more western shores of Minas Basin and Channel, and those of Digby Neck, Long, and Briar Islands, it approaches the grand in character.

CHAPTER II.

PRODUCTS AND RESOURCES.

AGRICULTURAL CAPABILITIES.

As is to be expected in a country presenting so great a variety of rock formations in its geological substratum, the soils of Nova-Scotia vary much in quality. The least valuable portions of the province, in an agricultural point of view, are those which lie along the Atlantic coast; and which, as was seen by the geological sketch above, contain its oldest rocks. In some parts of this district, for several

indebted mainly to the recently published and excellent work of J. W. Dawson, Esq., of Pictou, now President of McGill College, Montreal, entitled "Acadian Geology."

miles in extent, fields of solid granite, quartzite, or mica slate, may be seen quite exposed upon the surface, or covered only by mosses, lichens, and diminutive shrubs. Owing to their exposed situation, and to the powerful action of rain, frost, and heat, in rapid succession, upon their surfaces, the rocks in this district are being decomposed gradually, but with a rapidity unknown in most other parts of the world. Owing to this cause we find, interspersed through this rocky country, tracts of good soil, usually small as to individual extent, but amounting to a large area in the aggregate. The bad reputation which it has obtained has prevented most persons from inquiring into the agricultural capabilities of this district; and it is not improbable that it contains more good land than is generally believed. But it is also not improbable that such causes will continue to operate against its occupation by agriculturists, until most of the good lands are occupied in those sections of the province more favoured by nature.

There are tracts of excellent land along the margin of many of the rivers which traverse this district. On receding from the shore, the soil greatly improves, owing probably to the greater prevalence of clay slate in the underlying rocks; and in the northern districts of all those counties which front upon the Atlantic, it is of a good quality and amply repays the labours of the farmer. The county of *Halifax*, with the exception of the beautiful and fertile valley along the upper part of the Musquodoboit River, belongs to the granitic district; and it contains a greater proportion of rocky and unproductive soil than any other county in the province. This fact alone has been highly prejudicial to the interests of the colony, for many persons who have made a transitory visit to the capital of the province, and who have seen the inhospitable nature of the country which surrounds it, have allowed themselves to carry away the impression that the whole province partook of the same character, and have conveyed that impression to numbers of others who had no means of judging for themselves.

The soil of Lunenburg, which lies next to Halifax County on the west, although generally stony, is for the most part of a good quality; and many flourishing agricultural settlements are scattered over the county. This is the third county in the province in population, according to the census of 1851; and out of 3630 adult males in the county at that time, 3018 were farmers. Halifax market is mostly supplied with vegetables from this county ; which, with its numerous rivers, bays, and harbours, possesses abundant facilities for transportation. The scenery of Mahone Bay, with its almost innumerable wooded islands, is widely celebrated for its picturesque beauty, and is perhaps unsurpassed in that respect by any spot on the American coast.

In Queen's County the land, for some distance back from the shore, is principally of an unproductive character; but it improves very much as it recedes into the interior. In the northern part of the county there are large and rapidly extending agricultural settlements.

In Shelburne County, the comparatively barren shoreband seems to widen and extend somewhat farther back than in Queen's County; but here too there are tracts of valuable land in the rear of the county. The population however is, as yet, almost confined to the vicinity of the shore, and is engaged more in the fisheries than in agricultural pursuits, there being a smaller number of farmers in this county than in any other in the province.

The soil of *Yarmouth County* is of the same general character as that which we find in Lunenburg, and in the

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northern parts of Queen's and Shelburne Counties. The upland soil is pretty nearly of a uniform quality throughout this county; and, owing to the higher average temperature of the climate compared with that of most other agricultural districts of the province, is capable, under good cultivation, of yielding highly remunerative returns to the husbandman.^{*} This county exceeds all the others along the southern coast in the extent of the dyked marsh lands, which lie along the shores of its many harbours and inlets. This marsh is, however, insignificant in quantity and inferior in quality when compared with that of counties which lie along the Bay of Fundy and its tributaries.

The whole of this Atlantic coast district—including the southern half of the county of Guysborough, which is very similar in every respect to Halifax County—presents many attractions for the farmer, although not usually represented as a valuable agricultural district. The land of good quality in this district is frequently stony and somewhat difficult to clear up and put under cultivation in the first instance; but when once it has been brought to that stage, it is more easy and less expensive to keep it in good condition than many of the more highly extolled soils of the interior counties, owing to the more porous substrata of the latter. Lime, the ingredient which it most requires, can be procured from beds found at the head of Mahone Bay and Margaret's Bay, and on

* The following paragraph from the "Yarmouth Herald" of October 18th, 1855, may give some idea of the capabilities of ordinary upland soil in this county when well tilled :---

"PRODUCE OF AN ACRE.—Mr. Leonard Dennis, of Carleton, in this township, has raised the present season, from one acre of ground, the following crop:—6 tons pumpkins, 14,000 ears of corn, $3\frac{1}{2}$ bushels shelled beans, 4 bushels do. peas, 10 bushels do. corn, 5 bushels carrots, 5 bushels turnips. Mr. Dennis has realised from the produce of this acre upwards of £80."
both shores of the Strait of Canso, and conveyed by water to any part of the coast at an expense which, if the traffic became a regular one, would make its use highly remunerative to the farmer. When the Shubenacadie canal, now in course of construction, is completed, still greater facilities will be afforded the shore counties in this way; and lime to any extent, and at but trifling cost, can be procured from the inexhaustible beds on the Shubenacadie River and its tributaries. Another great advantage which the agricultural district of the Atlantic coast possesses, is its facilities, by means of superior water communication for transporting its products to the best markets, cheaply, easily, and at all seasons of the year. Mention has already been made of its rivers and harbours. It may not be amiss here to add, that this district is profusely dotted with small lakes. The most of these indeed, although they present great charms to the lover of pretty scenery, have few attractions in an economical point of view; but others are of material service as highways through the interior of the country. The largest of these is Lake Rossignol, in Queen's County, a beautiful sheet of water some twenty miles in length by four in breadth, and, like most other Nova-Scotian lakes, profusely studded with green bower-like islets. The whole Atlantic coast district of Nova-Scotia compares favourably with extensive sections of the eastern United States, which, by cultivation, have acquired a high reputation as agricultural countries.

On pursuing our investigations into the northern section of the province, we find land, for the most part, very different from that in the shore counties. Commencing with *Digby*, we find that this difference is, as yet, not very perceptible. The rocks which underlie the soil of the greater part of this county, although not the same as

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those of Yarmouth, are yet very similar; and the soil itself, of all that part of the county which lies south-east of St. Mary's Bay, bears a like similarity to that of Yarmouth. The small portions of the county which remain, are of a different kind of soil, which is, for the most part, highly fertile when once brought under cultivation.

Annapolis and King's Counties are so very similar in their character, that they may be considered together. They are, with scarcely any exception, highly fertile throughout their whole extent ; but afford many varieties of soil corresponding to the rock formations which underlie them. Fronting on the bay shore, the ridge of highlands already mentioned as the North Mountain, stretches along the whole north-western limit of the two counties. The soil upon these hills, composed of disintegrated trap, possesses all the elements of fertility; and accordingly this land, wherever it has been stripped of the luxuriant forests which grow upon it, yields the farmer a rich reward for his labours. Next to this, and about equal to it in extent, lies another broad strip of light and mellow but very fertile soil, based upon the new red sandstone formation. This forms the rich and beautiful valley which is drained towards the west by the Annapolis River and its branches; and towards the east by the Cornwallis, Canard, Habitant, and Pereau-the oldest settled and most highly cultivated region in Nova-Scotia. Lying next to this again, and forming the south-eastern portion of the two counties, is an extensive tract of which the soil, based upon the clay slate with occasional ridges of igneous rocks, is very similar to that of northern Queen's County. A great portion of this tract is still covered with luxuriant forest; but the land, although in some few localities too broken and rocky for cultivation, wherever cleared, has proved itself to be of good quality. In both of these counties, but more

particularly in King's County, there are large tracts of the marine alluvium known as marsh, the most valuable description of soil in the province. The Grand Pré, in Horton, forms the largest unbroken expanse of marsh in Nova-Scotia. The light, loamy soil of the great valley, already mentioned, which stretches across these two counties, seems particularly adapted to the growth of root crops, great quantities of which, especially of potatoes, are there cultivated. In King's County alone, 574,692 bushels of potatoes were raised in 1851; and the crop has considerably increased with each succeeding year since then. Large quantities of fruit-apples, plums, and pears-are also raised in these counties, for home consumption and for exportation to New Brunswick and the United States. It does not appear, however, that they have any peculiar natural adaptability in this way ; for in most parts of the province, fruits of the kinds mentioned can, with ordinary care and attention, be raised in profusion.

The whole of Hants County, with the exception of some inconsiderable tracts in the south-eastern part, possesses a good soil. Owing to this county's lying mostly in the carboniferous district, there is less variety in the nature of its soils than in those of the last two described. It stands high as an agricultural county, and much of its cultivated lands is proved to be in the highest degree fertile. Windsor is among the oldest settlements of the province; and much of the land in that vicinity is in a very high state of cultivation. This county also contains much excellent marsh land along the numerous rivers which intersect it. The Halifax and Windsor railway, now in course of construction, will open up a considerable tract of land in the southern part of Hants, now covered with forest; besides greatly adding to the value of the soil in other parts of the county.

Colchester, another large agricultural county, possesses a greater variety of soil than Hants; but this variety exists in its constituents rather than in its quality. There is a broad carboniferous valley, forming the central portion of the county, with deep, loamy, or gravelly uplands, and extensive alluvial tracts of marsh and intervale. The northern part of the county is occupied by the chain of the Cobequid Hills, already described as of the later metamorphic formation ; whilst some spurs from a similar chain extend into the south-eastern part. These hills, when stripped of the dense, hardwood forests with which the new settler finds them clothed, are found to possess a soil of the highest fertility, and, with the exception of occasional spots of stony ground, easy of cultivation. Some of the most flourishing, exclusively agricultural settlements in the province are to be found on these hills. Colchester contains a greater extent of intervale than any other county of the province. This term intervale, it may be necessary to observe, is applied to the expanses of flat, alluvial soil, formed by the deposits of brooks and rivers before they reach tide waters. Where the sea tides have been mainly instrumental in depositing the alluvial soil, it is called marsh. The name meadow is applied, in Nova-Scotia, only to a more recent deposit of fresh water alluvium, forming flats of wet soil, in its natural state destitute of trees, but covered with a long coarse grass. In every instance that has come under the author's personal observation, and, he believes, in all cases, these meadows have been formed by beaver dams ; and they are the only vestiges now remaining in Nova-Scotia of an animal that once existed there in great numbers. The soil of the intervale just mentioned is a very fertile clayey loam; and it is by many farmers preferred to the usually more expensive marsh land. That portion of Colchester which

lies north of the Cobequid Hills, is similar in soil to that part of Cumberland which adjoins it.

Cumberland, in its southern part, embraces a large portion of those elevated lands known as the Cobequid Hills, the general character of which, in an agricultural point of view, has already been briefly described. It need only be added, that towards the western termination of this range, where it is embraced on both sides by the county of Cumberland, the land becomes more stony than in some of its more eastern sections. The central portion of this county is composed of lands of fair average quality, becoming generally more light and sandy as we travel northwards. Around the head of Cumberland Basin, and along the rivers Hebert, Maccan, Napan, and La Planche, which empty into it, are extensive tracts of fine marsh, of which valuable description of land, Cumberland contains nearly as much as any other three counties in the province; but whether from natural inferiority of soil, or less skilful cultivation, the Cumberland marshes are not quite so productive as some of those which border upon the basin of Minas and its tributary streams. The eastern part of the county of Cumberland, bordering upon Northumberland Strait, consists for the most part of a deep loamy soil, probably unsurpassed in fertility by any upland soil in the province.

Pictou and Sydney Counties are so very similar in their agricultural capabilities that they may be considered together. In no considerable portions of these two fine counties, is the soil of an inferior description. In those portions of them geologically described as the carboniferous sections, the uplands afford a good soil of nearly uniform quality, whilst the intervales, which are extensive, are similar to land of the same description in other parts of the province. The highlands which, as already shown in our geological description, intersect these two counties, furnish soil of more varied quality. In some few localities it is so stony or rocky, as to be extremely difficult, if not even impossible of cultivation; but for the most part the soil of these highlands is of first-rate quality, and is considered the best land in that section of the country. Pictou is, for Nova-Scotia, a thickly settled country; and, from the quantities of the most valuable agricultural products which it has of late years produced, may be regarded as, at the present time, the first agricultural county in the province. Sydney also, in proportion to its extent, occupies a high rank in this respect.

The southern half of *Guysborough County* has already been described as very similar to Halifax County. Its northern part contains much excellent soil; although in some places the land is too strong to be profitably cultivated. There are some fine tracts of alluvial soil along the rivers of this county; and it contains several flourishing agricultural settlements, particularly on the Manchester River and the upper banks of the St. Mary's.

The Island of Cape Breton has, in the quality of its soil, as in many other advantages which it possesses, been highly favoured by nature. The north-western half of the island, comprising the principal portions of Inverness and Victoria Counties, is generally much more elevated than the remainder, which, particularly on the Atlantic coast, is flat, or but slightly undulating. At some localities on this south-eastern coast, forming parts of Cape Breton and Richmond Counties, the land is barren and rocky. Some parts of the imperfectly explored highlands in the northern sections of Inverness and Victoria, are said to be of the same character. But these may be considered as exceptional spots, small in extent when compared with the large tracts of good land comprised in this island. The whole interior, with all the shores of the great Bras d'Or Lake and the many inlets which branch from it, is composed of excellent soil; and the middle and southern portions of Inverness form a large, uninterrupted extent of land highly fertile, and of nearly uniform quality. This county, although its settlements are mostly of very recent origin, is already one of the first agricultural counties of the province. The soil throughout the island generally is of a description very similar to that of Pictou and Sydney Counties; and like those two counties, Cape Breton, with the exception of some small tracts in Inverness, contains no marsh land.

The agricultural products which are, or may be profitably cultivated in Nova-Scotia, are the same as those of Great Britain, Canada, and the Northern States of America. As may be inferred from what has already been said, it has greater diversity of soil and of other conditions favourable to the growth of any particular kind of crop than most countries of the same extent. Something may be said, then, of the special adaptability of certain sections of the province to the growth of certain kinds of crops. Still, classifications of this kind are to be made with caution for two reasons; first, because the country being really small, those diversities are absolutely not very great; and secondly, because the agricultural capabilities of very few sections of the province-perhaps of none-have been thoroughly tested. As a general rule, the lands have been tilled in too slovenly and improvident a manner. The cheapness of the land itself has been one great and perhaps the principal cause of this. The course too often pursued has been something like the following. The farmer, on first "clearing up"

his "new land," has found it to yield an abundant crop of whatever grain or vegetable he has chosen to plant upon it, for several years in succession, without any other expense than merely that of putting the seed in the ground and gathering the crop when it has ripened. When the land, in consequence of this treatment, has begun to fail, instead of skilfully tilling and properly manuring what is already under cultivation, he has preferred clearing up more, and depending a few years longer upon its natural fertility. A constant repetition of this process is, of course, found inconvenient, or even impossible, after a time; but the effects of this habit, as well as the habit itself in a great measure, are long apparent. The farmer trusts still to what remaining virtue the soil may naturally possess, and to the chance of. favourable seasons, rather than to skilful tilling and the application of scientific knowledge to his pursuit. Then, finding that one species of crop fails him, instead of endeavouring to bring the land back to a condition to bear that particular species abundantly, he gives it up, in a great measure, as no longer practicable of cultivation, and gives his attention to the growing of other crops which the land will still produce. Or he spreads his labours and his means over a large extent of ground, vainly endeavouring to realise that profit from the quantity of land cultivated which he might, but does not, derive from its good quality. It is true, that of late years Nova-Scotian agriculturists have begun to see their error in this respect; and, in many parts of the country, a more improved and scientific method of farming is commencing; but still the old error prevails to too great an extent, and has been sufficient to injure the reputation of some naturally valuable tracts of land. For instance, many fine farms in the interior are reputed to be incapable of

producing wheat-a species of grain which grows abundantly upon "new lands" in all the interior countieswhen it is obvious that an improved cultivation is all that is required to insure good crops of that grain. Another result of the cheapness of land has been that land of a comparatively inferior description, or supposed to be so, has been in most instances. condemned without a fair trial and decreed far below its merit. From these few observations it will be seen, that when we judge of the capabilities of any section of the country to produce a particular crop from what it has already produced, our judgment must be liberal in favour of those capabilities. The accompanying table, taken from the census returns of 1851, showing the quantity of live stock, the amount of the various agricultural and dairy products, of each county, will enable the reader to form some idea of the relative capabilities of those counties. It is necessary to make some remarks with reference to that table. The total amount of various products shown by it is not to be considered as a statement of the annual amount of those products, at the present time (1857). Great progress has been made in all the agricultural settlements of the province since the census of 1851 was taken, in the amount of produce raised, and in all that relates to agricultural pursuits. In order to account for the proportionably small quantity of wheat raised, as appears by that table, it is necessary to observe that, for several years previous to 1851, the wheat crop of the province had been almost totally destroyed by a species of worm, popularly known as the "weevil," to the periodical visits of which all the wheat-growing countries of North America are subject; and the little wheat that was sown that year was sown more by way of experiment than with any decided hope of a profitable return.

NOVA-SCOTIA, PRODUCE OF STOCK, AGRICULTURAL AND DAIRY PER CENSUS OF 1851 AS LIVE OF RETURN

2,462 24,640 55,998 16,300 652,069 92,530 93,960 14,410 11,377 55, 13090,726 1,176 3,036 171,961 11,611 977 1,424 1,351 Cheese. PRODUCTS. .sdI DAIRY 78,725 3,613,890 144,909 96,626 69,654 00.869 117,961 232,092 309.013 391,715 317.256 378,471 348,420 95,560 317,014 58,936 329,086 Ibs. Butter. 20,112 287,837 18,063 5,752 5,496 11,59923,985 28,117 25,150 30,430 21,626 17,399 19,176 16,251 17,5388,497 S.384 L, 262 ·Yay. 'suoL 1066,1 32, 325 .615 649 380 Roots. 1,2583,398 5,539 Ł.413 882 816 .394 4.014194 'sladaud 11,295 24,052 69,849 21,718 36,338 73,470 31,658 11,702 20,404 26,947 6,708 39,954 29,694 2,145 4,928 1,332 467,127 4,933 sdum Bushels, 182,645 52,958 53,900 72,939 21,496 51,196 574,692 112.407 128,924 57.603 69,164 1,986,789 94,717 90,236 46.899 31.326 21,033 114.654 Potatos. Bushels, Grass Seeds. 3,086 178 583 550 85 24 66 62 35 170 169 000 124 9 58 20 AGRICULTURAL PRODUCE. Bushels, 4,622 136 ,122 37,475 21,638 889 682 3,833 1.855 2,526 167 Веапз. 1,786 1,781 108 12 Passand sladeng Bushels, Indian Corn. 4.947 403 169 3,948 514 998 413 80 124 4,910 11,290 45,642 wheat. Buck-Bushels, 11,194 1,013 1, S86 46 3,206 13.984 13.138 39,291 13,151 813 4 12 170,301 5,897 4,76I 11,74S 12,955 94,573 70,823 25,702 61,438 1,384,437 10,870 263,703 152,010 51,584 12,4212,129 6,606 108,823 188,188 166.234 142,949 Oats. 'sparsus, 26,S68 1,2422,199 17,035 178 35 6 1023,078 1,761 2,657 000 4T Bushels, Bushels, I 17,048 S,064 24,776 176. 3,072 3,885 6.858 22,103 8,496 £,052 1.401 2,583 5,387 9,378 503 3,153 196,097 50,361 Barley. 'sladaug 1,892 11,403 26,585 30.880 88,186 16.600297,157 5,139 816 228 1,42011,081 34,004 34,304 1,827 28,951 Theat. 'sladeng 2,852 2,989 1,222 4,652 3.100 4,342 4,410 51,533 3,257 1,4501.635 3,605 1.6948,224 2,771 3.521 .suiw2 12,845 11,934 12,449 11,709 17,526 19,383 22, 143 16,377 20,677 29.920 29,000 282,180 5,540 9, 24120,827 9.495 24.127 8,987 .qaada LIVE STOCK. 86,856 5,185 10,030 6,328 3,744 1,553 2,236 2,563 5,158 5,216 5.483 7.092 3.364 1,967 2,810 10,125 8.547 2,450 Milch. Cows. 6,456 9,142 12,54614,176 10.232 11,032 15,278 18,920 11,686 3,295 8,022 6,063 3,231 9,388 11.227 156,857 3,211 2,952 Veat Uattle. 2,636 2,946 28,789 1,762 662 2,623 699 311 496 1.514 2,176 1,628 659 2,755 2,381 4,561715 Horses. Guysborough . Cumberland Cape Breton COUNTIES. Lunenburg Queen's . Sydney . Richmond Total . Shelburne Colchester Yarmouth Annapolis Inverness Victoria. Halifax King's Digby Hants Pictou

Wheat crops do not succeed well upon the Atlantic coast, owing mainly, it is believed, to the prevalence of fog in that part of the country during some stages of its growth ; but it grows and produces well in most parts of the interior where the land has not been exhausted from over-cropping. If any parts of that interior are entitled to a preference with a view to raising this valuable crop, they are the eastern section of Cumberland, the highlands of Colchester, the counties of Pictou, Sydney, and Inver-. ness. Oats, barley, rye, and buckwheat may be raised in abundance and at comparatively triffing cost in all cultivable parts of the province. Indian corn, which is so very profitable to the farmer where it does grow well, can be cultivated with success in all parts of the interior ; but the light warm soil and sheltered situation of the lands in the valley of Annapolis and King's Counties renders them particularly favourable for its growth. Potatoes and root crops of every description succeed well everywhere. The potatoes of Nova-Scotia are very highly esteemed in the United States markets, to which large quantities of them have been exported of late years. They are produced in the greatest abundance in the dry alluvial valleys of Annapolis, King's, Hants, and Colchester.

As a grazing country, Nova-Scotia, considering its extent, probably stands unrivalled among the provinces and states of the eastern part of North America. Rearing live stock and keeping a dairy has long been considered a particularly profitable business in every part of the province, notwithstanding that until late years little pains have been taken to introduce the most approved and profitable breeds of cattle into the country. All the interior counties, from Annapolis to Inverness inclusive, together with many parts of those on the Atlantic coast, are admirably

suited to this purpose; and King's County, Hants, Colchester, and Cumberland, may be named as pre-eminently so, owing to the extent of their marshes and intervales, which, with but little cultivation, yield almost inexhaustible supplies of fodder. Among the agricultural products not named in the census returns referred to, especial mention may be made of *flax* and *hemp*. The latter of these has never been cultivated, so far as the author can learn, except by way of experiment. Flax has been raised, in some parts of the province, with a view to profit; but only to the extent of supplying material for some inconsiderable domestic manufactures. Both flax and hemp of excellent quality can be grown without difficulty in most parts of Nova-Scotia ; and if cultivated to any extent, would yield a handsome profit to the grower. Hops, likewise, grow luxuriantly, especially in the deeper soils of the interior ; but farmers have never thought of cultivating them except for domestic purposes. A good opportunity exists of cultivating them with profit. As already intimated, the apple, plum, pear, and cherry, in all their varieties, flourish well in all parts of the province. Fine peaches and grapes are grown in the open air in some parts, but have not been cultivated to any extent.

GRANTED AND UNGRANTED LANDS—CULTIVATED AND WILD LANDS.

It is frequently said, that all the best lands in Nova-Scotia have been already granted by the Crown; but this assertion requires some explanation. The early settlers did unquestionably obtain grants of all, or nearly all, the *marsh* and *intervale*, which are generally considered to form the *best class* of lands; but that class forms but **a** small proportion of the aggregate of good lands in the

province. The uplands, of which grants were usually obtained by the earlier settlers, lie, for the most part, along the margins of harbours and rivers, and in the immediate vicinity of those more extensive marshes and intervales, along with which they were usually granted, and which were the principal object of the grantee in obtaining the grant. It happens that the uplands so situated are not the best of that class in the province. Indeed they are, generally speaking, rather the reverse, the better qualities of upland being usually found far back upon the more elevated ridges of the interior. Notwithstanding that parties who have, for many years past, taken out grants, have made their own choice of lands, it is questionable if even yet the proportion which good upland bears to that which is inferior among ungranted lands, is not as great as among those which are already granted. The accompanying table shows the extent and supposed quality of ungranted lands in most of the counties of the province in the year 1854, arranged in three classes. It is taken from maps and tabular statements prepared in the Crown Land Office, about the commencement of that year, and laid before the House of Assembly.

During the years 1854 and 1855, over 100,000 acres were granted, the principal part of which were of the description classed in the foregoing table as lands covered with valuable timber. In 1856, 74,470 acres were granted, being mostly of the class capable of profitable cultivation. It is extremely doubtful if so large a proportion of the ungranted lands should be classed "barren," as are so classed in this table. When the primeval forest has been destroyed by fire, the land for many years afterwards wears such an aspect that it has been usual to condemn it as barren, where oftentimes it is of a totally

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Remarks, &c.	No returns. No returns. Returns from part only. No returns. No returns.	
Total area of Crown Lands,	$\begin{array}{c} 558,000\\ 277,600\\ 277,600\\ 200,000\\ 130,000\\ 130,000\\ 130,000\\ 130,000\\ 120,000\\ 122,250\\ 122,000\\ 122,250\\ 122,000\\ 122,000\\ 180,000\\ 180,000\\ 180,000\\ 180,000\\ \end{array}$	
Ungranted Lands commonly termed ''barren lands."	$\begin{array}{c} 160,000\\ 92,533\\ -2,533\\ 87,500\\ 87,500\\ -44,000\\ -120,000\\ 74,000\\ 74,000\\ 74,000\\ 50,000\\ 1189,000\\ 189,000\\ 35,000\\ 35,000\end{array}$	
Ungranted Lands not capable of profitable culti- vation, but covered with valuable timber.	$\begin{array}{c} 254,224\\ 22,533\\ 92,533\\ 87,500\\ 56,000\\ 56,000\\ 140,000\\ 48,500\\ 30,000\\ 30,000\\ 25,000\\ 29,000\\ 29,000\\ 16,000\\ 16,000\\ 16,000\\ \end{array}$	
Ungranted Lands capable of profit- able cultivation.	$\begin{array}{c} 43,776\\ 92,533\\ 92,533\\ 25,000\\ 44,800\\ 120,000\\ 65,000\\ 35,000\\ 80,000\\ 80,000\\ 80,000\\ 80,000\\ 80,000\\ 102,000\\ 102,000\end{array}$	
Total Area in Aores.	$\begin{array}{c} 1,456,160\\ 642,560\\ 551,360\\ 551,360\\ 658,133\frac{1}{3}\\ 384,960\\ 524,800\\ 734,720\\ 650,000\\ 649,840\\ 711,120\\ 945,360\\ 649,840\\ 748,160\\ 665,600\\ 748,160\\ 665,600\\ 748,160\\ 607,000\\ 515,000\\ 500\\ 607,000\\ 515,000\\ 515,000\\ 500\\ 609,000\\ 500\\ 500\\ 500\\ 500\\ 500\\ 500\\ 500\\$	
Name of County.	Halifax. Lumenburgh	

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different character. Large tracts of this description among the granted lands, which had lain under the usual imputation for many years, have, owing to a growing scarcity of reputed good land in some parts of the interior, been experimented upon of late years; and have, to the surprise of those cultivating them, proved to be of excellent quality. It is at least possible that the same result might follow like experiments upon other large tracts of reputed barren land in the province.

Down to the close of 1856, the whole extent of lands granted within Nova-Scotia was 5,616,704 acres; ungranted, 5,442,012 acres. From the fact of so large a proportion having been granted, it does not follow that an equal proportion is under cultivation, actually occupied, or even withdrawn from the market. The "improved lands," in 1851, amounted to only 839,322 acres, distributed as follows :—

Halifax County	ÿ					23,866 a	cres.
Lunenburg						29,396	,,
Queen's .						13,950	,,
Shelburne				•		16,494	,,
Yarmouth .			•			32,295	27
Digby .						17,325	,,
Annapolis .			•			47,305	,,
King's .						73,656	,,
Hants .				•	•	65,454	,,
Cumberland						101,067	,,
Colchester				•		71,670	,,
Pictou .						103,582	,,
Sydney .				•		69,370	,,
Guysborough .			•			11,520	,,
Inverness .						82,264	,,
Richmond .			•			16,581	,,
Cape Breton		•			1	62 595	
Victoria	•		•		5	00,027	"

Total, 839,322 acres.

A great deal of wilderness land, owned by private individuals, and originally purchased from the Crown for

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NOVA-SCOTIA.

speculation, or for the sake of the timber growing upon it, is now in the market. Much of this is of excellent quality.

The upset price of Crown lands, at the present time and for several years past, has been fixed at 1s. 9d. sterling per acre. Wild land can be purchased from private individuals at prices ranging from that of Crown lands up to 20s. sterling an acre, according to the quality and situation. Of cultivated lands, when offered for sale, the average price of marsh, of which Nova-Scotia contains some 40,000 acres, is from £16 to £20 sterling. The prices of other improved lands vary so much, that no approximation to their average can be furnished that would be of any practical value.

FORESTS.

Were Nova-Scotia situated in any part of the world except British America, it would be considered a country of extraordinary value, considered with reference merely to the products of its forests. But it is surpassed in that respect by the neighbouring provinces of New Brunswick and Canada. Nova-Scotia produces, with one or two exceptions, the same kinds of timber as those provinces ; it is of as good a quality; and is produced as abundantly in proportion to the extent of its forests. It is owing to the comparatively small extent of those forests that Nova-Scotia is inferior, as a timber producing country, to New Brunswick and Canada. Still the products of the forest form by far the most important item of Nova-Scotian exports at the present time, with the exception of fish. These products are exported in the shape of hewn timber, -deals, boards, and scantling ; spars, knees, and other ship timber; hoops, staves, laths, shingles, and firewood. The greatest quantities of these products are shipped from Cumberland and Queen's Counties; but all parts of the province participate largely in the trade; and there is no county in it, and no considerable section of a county, in which "lumbering" is not profitably pursued. The manufacture of charcoal and potash might be made profitable employments in many parts of the province; yet but little attention is given to the manufacture of the former, whilst the latter is not attempted at all.

Among the most valuable kinds of timber, the white and red pine (Pinus strobus and P. resinosa) occupy a prominent place. They are exported to some extent as squared timber; but are for the most part brought into market sawed into boards, plank, shingles, and scantling, or made into spars. The hemlock (P. Canadensis) is the most abundant of any of the Coniferæ; it grows to a great size, and is extensively manufactured into deals, laths, scantling, boards for the coarser kinds of work, railway sleepers, wharf logs, piles, and a great variety of other purposes. The black, red, and white spruce (P. nigra, P. rubra, and P. alba), are for the most part sawed into deals, a great number of which are yearly shipped from the province. The fir (P. balsaminia) is not employed for many purposes except for fence rails; but, owing to its great abundance, the fences in all the more recently settled parts of the country are composed almost exclusively of that material. The cedar, which is found so largely among the forest products of Canada, New Brunswick, and the Northern States, may be said not to exist in Nova-Scotia. But in its place the Nova-Scotians have in great abundance the celebrated larch, or hacmatac (*P. pendula*), called also juniper, and sometimes tamarac. Owing to its extraordinary durability and strength, this wood is in great demand for every purpose where such

qualities are particularly desired. It is especially sought after as ship timber, to which it is better adapted than any other wood found in the country.

Among the hard woods, the rock maple (Acer saccharinum) is probably entitled to the first rank for the quality of its timber. It is very hard and strong. A peculiar twist or curl in the grain of some of its trees, causes the beautiful variety known as bird's-eye maple and curly maple. This is highly prized by the cabinetmaker; and when properly dressed and stained, is unsurpassed in beauty by any other species of wood. The black cherry-tree (Cerasus serotina) is also much sought after by furniture manufacturers; but is not sufficiently plentiful to be an important article of export. The rare beauty and durability of this wood, which resembles mahogany, and the medicinal properties of its bark, which is every year taking a higher rank in the American Pharmacopœia, renders it well worthy of cultivation. The white ash (Fraxinus acuminata) is among the most valuable of the hard-wood trees of Nova-Scotia, being very flexible, durable, tough, straight-grained, and free from knots; but, from being so much sought after, it is growing rare. For many purposes to which it was formerly employed in domestic manufactures, the elm (Ulmus Americana) is now substituted. This wood is quite as easily bent to any required form as the ash, and fully more tough, but is not so straight-grained and easily worked. The elm is a stately, beautiful tree, and is the favourite of the Nova-Scotian forest for ornamental purposes. The wood of the oak (Quercus rubra), although considered inferior to the English oak, is of an excellent quality. It enters largely into the wooden manufactures of the country, but is not exported to any extent, owing to its comparative scarcity. The yellow and black birch

(Betula excelsa and B. lenta) stand next to the maple in the extent to which they are exported. The wood of both kinds is strong, close-grained, and durable; and it is extensively used in ship-building, and for a variety of other purposes. The black birch is a beautiful, reddishcoloured, veined wood, not unlike mahogany, and is much used in the manufacture of furniture. The white and red beech (Fagus sylvatica and F. ferruginea) afford a strong, close-grained, heavy wood, which is capable of being applied to a great variety of useful purposes, but is not much used in Nova-Scotia except for fuel. In some parts of the province, where the country for miles in extent is covered with this beautiful tree, large droves of hogs are driven out into the woods in the autumn, to fatten for two or three months upon beech-nuts as they drop from the tree.

The *hard woods*, in which are classed, rather inconsistently, all trees which do not belong to the *Coniferæ* order, are composed mostly of the maples, of which there are five species; the birches, comprising four different kinds; and the beeches, named above. Great quantities of these woods are cut for fuel, both for home consumption and for exportation. The following table shows the value of products of the forest exported from Nova-Scotia, in an unmanufactured state, during the year 1854 :---

Lumber (sawed)				£135,596
Shingles				5,713
Staves and hoops				20,348
Spars and knees .				9,562
Timber (soft wood)				9,213
,, (hard wood)				5,728
Wood (for fuel) .		•		30,577
				£246 737

In 1855 and 1856, there was a falling off in this export.

In the latter year, the aggregate value of the above articles exported was $\pounds 145,592$.

In speaking of the products of the forest, mention is made of scarcely any except those which form important articles of export. To enumerate all of those products which are important in an economical point of view, or which may be a source of foreign trade hereafter, would swell this branch of our subject beyond its due propor-Several species of timber have been already mentions. tioned as highly valuable for ship-building purposes. The great abundance of such timber in Nova-Scotia, the unusual extent of its sea coast, with its numerous harbours and navigable rivers, surrounded even yet, in many places, by the primeval forest, and having, in every case, good timber near at hand; the nearness of the country, compared with other parts of the American continent, to the sources whence other articles employed in the construction of ships must be obtained, and to the principal shipping markets of the world; are all advantages which render Nova-Scotia admirably, and almost peculiarly, suited for carrying on ship-building on an extensive and profitable scale. The growth of this branch of industry, and the extent to which it is now carried on, will appear in a subsequent part of this work.

It may not be unimportant to mention that many of the native trees make excellent hedges, although not much cultivated by the Nova-Scotians for that purpose. They, for the most part, prefer the hastily constructed wooden fence; although, when kept up for a number of years, it is really much more expensive and much less efficient than a hedge would be for the same length of time. The wild hawthorn (*Cratægus punctata*), the beech and elm already mentioned, the balsam poplar (*Populus balsamifera*), and the black willow (*Salix nigra*), make good hedges, and are easily cultivated. Hedges are made of the latter two merely by forming fences of the branches and saplings, inserting an end of each in the ground : these take root, and, in a year or two, form a thick hedge. But the greatest favourite for this purpose is the spruce. It may be cultivated in this way at not more than a fourth of the expense which attends the cultivation of the thorn hedges in England ; and, growing rapidly, it becomes, in a few years' time, a substantial, dense, and almost impenetrable hedge. Being an evergreen, it has the additional advantage of affording a protection against the cold blasts of winter, where that is found necessary.

MINERALS.

Nova-Scotia has been endowed by nature with mineral wealth in a very extraordinary degree. This much can be safely averred, from the facts already clearly substantiated ; although considering that, with reference to its mineral resources, it is still but imperfectly explored, it is not at all improbable that those resources may be much greater than is now supposed. Comparatively little has been done as yet to extract substantial wealth from those resources; because, in a new country like Nova-Scotia, where the amount of available capital is so small in proportion to the number of ways in which it may be profitably invested, it is usually difficult to obtain such large appropriations as are necessary to carry on mining operations to any extent; but the time must come when the minerals of Nova-Scotia will add enormously to its available wealth.

In this brief sketch of those minerals, we will glance successively at the substances useful as *fuel*, *building ma*terials, and mineral manures; ores, and metallic substances, and *precious stones*. Whilst enumerating the articles under each of these heads, and indicating the localities in which found, we will pass through the geological districts in the same order which we have already done in the section upon the geological structure of the province.

Granite, as may be inferred from what has already been stated in this work, is found in great abundance, and of excellent quality, in many places on the Atlantic coast. The quarries which have been worked to the greatest extent are at Shelburne and Halifax. There is no material difference in the quality or appearance of the granites found at these two places. Great natural facilities exist at both for quarrying and shipping the stone. From the "Queen's Quarries," at the latter place, large quantities have been taken for the construction of the fortifications of Halifax, for which purpose it is highly esteemed. Granite has been to some extent exported from Shelburne to the United States and neighbouring provinces. There are large quantities of excellent granite readily accessible for shipment at Barrington, near the mouth of Musquidoboit River, in the vicinity of Cape Canso, and at various other places on the Atlantic coast. The slates of the older metamorphic district afford, at a great number of localities, good material for the rougher kind of walls, and materials which may be quarried and fitted for building at very slight expense.

The Devonian and Silurian district is rich in building materials. *Sienite* and *porphyry* of good and beautiful qualities are found in great abundance in many places on the Cobequid Hills, on part of the shores of the Bras d'Or Lake, and various other places in the island of Cape Breton, and in the range of hills which skirt the Annapolis Valley on the south.* Slate, of excellent quality, is found at New Canaan, near Kentville, along the range of hills lying between the Stewiacke and Musquidoboit Rivers, in the southern part of Pictou County, and at various other points. Quarries have been opened at New Canaan and in the vicinity of the Stewiacke, for the purpose of procuring roofing slates; but, although the slates were found to be of a good quality, the cost of transportation, owing to the inland position of the quarries, was so great, that they could not be profitably worked in a country where roofing materials of wood were so cheap. This difficulty will probably soon be obviated, as railroads, now in course of construction, will run in the immediate vicinity of these quarries. Sulphate of barytes is found in the hills immediately north of the Stewiacke, at Five Islands, on the north shore of Minas Basin, and at some other localities. At Five Islands it exists in great abundance, and both there and at Stewiacke it has been quarried and exported to some extent to the United States and Great Britain, where it is mixed with white lead as a paint. Mineral paints in great variety are procured from the iron ochres of the Cobequid Hills, of which more hereafter. One description, known as artificial slate, is rapidly growing into repute throughout North America. When mixed with oil, and laid on over wood, it possesses the rare and invaluable quality of rendering it impervious to damp and proof against fire.

First among the numerous valuable mineral deposits of the Nova-Scotia carboniferous district we may consider *coal*. It is probable that Nova-Scotia, in proportion to its extent, stands unrivalled in the productive capabilities of its coal-fields. The most western of these valuable deposits, so far as ascertained, exists at the Joggins, on the

* Dawson's "Acadian Geology ;" Gesner's "Industrial Resources of Nova-Scotia."

shore of Cumberland Basin. In this coal-field, there are seventy-six beds of coal, with an aggregate thickness of 41 feet. Of the seams which may be profitably worked, there are six, comprising together a thickness of 18 ft. 6 in.* Only two of these seams are worked as yet; for which purpose two shafts have been opened within half a mile of the shore where the coal is shipped.

About twenty miles south-east of the Joggins, at Spring Hill, on the northern skirts of the Cobequid Hills, we find another great coal deposit, which geologists declare to be quite a different field from the one just described. This being in an inland position, has not yet been opened, or even thoroughly explored. Its coal has been proved, however, to be of excellent quality; and it comprises many valuable beds, one of which is twelve feet in thickness.† From Spring Hill to Parrsboro', a good shipping place, being a distance of twenty miles, a rather extraordinary natural valley extends through the Cobequid Hills, along which a nearly level line of railway could be constructed at far below the usual cost of such works. Such a work must be simultaneous with the opening of the Spring Hill coal mine. Another coal-field can be traced along the southern side of the Cobequid Hills throughout their whole extent, from Cape Chiegnecto to the borders of Pictou County. This field is not yet mined at any point, nor has its real extent and value been yet ascertained by any close examination.[‡] Another coal-field exists on the southern side of the Minas Basin, extending quite across Hants and the southern part of Colchester Counties. Several small seams appear at or near the surface along the banks of the Kennetcook, Shubenacadie,

^{*} Dawson's "Acadian Geology."

⁺ Ibid., and Gesner's "Industrial Resources of Nova-Scotia."

[‡] Dawson's "Acadian Geology."

and Stewiacke, and of small streams emptying into them. The strata of this district is not well disclosed by any natural sections; and as no general geological survey has been made of it, geologists best acquainted with that part of the country believe it quite within the bounds of probability, that such a survey would reveal extensive and valuable coal deposits.*

The next great coal-field that we find, travelling eastwardly, is that of Pictou. The principal beds of *good coal* in this field are of the respective thicknesses of 24, 12, and 6 feet. The first of these has been worked for many years at what are known as the "Albion Mines." The coal is raised from the shafts by means of steam-engines, and is conveyed by railway, a distance of six miles, to the place of shipment at Pictou Harbour.

Beds of coal occur at Little River, and at Caribou Cove, near River Inhabitants, in Richmond County. At the former place, the coal, which is of a good quality, is found in a seam about four feet thick, two-and-a-half miles from the shore. At Caribou Cove, the coal, which is of not so good a quality, appears on the shore in a vein upwards of eleven feet in thickness. Good coal also occurs at various places in the vicinity of Port Hood, in Inverness County. None of the deposits mentioned in this paragraph have been worked to any extent.⁺

A very valuable coal-field exists on the north side of Sydney harbour in Cape Breton County. It comprises thirty-four different seams; but of these only four, having an aggregate thickness of twenty feet, are of sufficient extent to be worked.[‡] A mine has been opened at this place; and the coal is conveyed by railroad about three miles to "Sydney Bar," whence large quantities of it are exported. Excellent coal and in great abundance, is

* Gesner; Dawson. † Dawson.

1 Ibid.

found at many other places in this vicinity. A coal-field extends quite across Boulardarie Island from one of the seams of which, four feet thick, on the Little Bras d'Or, some coal has been raised. Several valuable beds appear also at Bridgport, one of which only, nine feet in thickness, has been opened. Good coal also occurs at Cow Bay, and at various other points on or near the seashore, in that vicinity.* The coal-fields of Cape Breton County would appear to be almost inexhaustible, and nature affords every facility for working them to advantage. The mines at the Joggins, Pictou, Sydney, and Bridgport, are worked by the "General Mining Association." The following statement shows the quantities of coal raised and exported from these mines respectively in 1856.

		×
	Total Quantity raised. Newcastle chalds.	Quantity ex- ported. Newcastle chalds.
Albion mines	44,637	39,801
Sydney	36,247	19,705
Joggins	2,889	2,535
Bridgport, or Lingan	3,324	2,577
Point Aconi (Boulardarie	71	10
Island)		
Total	87,168	64,628

From 1827 to 1853 inclusive, 1,042,621 Newcastle chaldrons were raised from the mines of the whole provice. Of this quantity, 497,183 chaldrons were taken from the "Albion Mines" of Pictou; 479,041 chaldrons

* Gesner.

from the Sydney mines; and the remainder from those of the Joggins, Bras d'Or, and Bridgport.* The extensive coal deposits of Nova-Scotia can scarcely be too highly estimated, when considered in connection with the fact, that no coal-fields of any considerable value exist in the eastern states, Canada, New Brunswick, Prince Edward's Island, or—so far as yet known—in Newfoundland.

Reddish, grey, and brown Freestones are found in abundance in the carboniferous district. Freestone of good quality for buildings is procurable at Horton, Falmouth, Windsor, Shubenacadie, Londonderry, Wallace, Pictou, Guysborough, Port Hood, Margaree, Whykokomagh, and various other parts of Cape Breton. In most, if not in all of these, it may be quarried and shipped with facility. Excellent quarries are also to be found in many places in the interior. Hitherto the greatest quantities of freestone have been taken from the quarries of Wallace and Pictou. The best and most expensive public buildings in the province are composed of Wallace-stone; whilst that of Pictou has been, of late years, extensively exported to the United States, where it is highly prized. Sandstone suitable for millstones and grindstones is procured at Pictou and the eastern part of Cumberland; but Minudie and other localities in the vicinity of the Joggins already referred to are the most celebrated for this material. Grindstones are there quarried and hewn out directly upon the shore of the Cumberland Basin, the great rise and fall of tide enabling those engaged in the business to load their vessels with the stones upon the spot where they have been both quarried and dressed. Large quantities of these grindstones are made and exported ; and they bear a high reputation in all parts of North America. A medal of the London

* Journals of the House of Assembly, 1854. Appendix, No. 38.

Industrial Exhibition of 1851 was awarded to one of the Joggins grindstones.

Lime and gypsum are found in enormous quantities in Northern Hants and Southern Colchester. The quarrying and shipping of gypsum to the United States, from Shubenacadie and the neighbourhood of Windsor, form quite an active and flourishing trade. The quantity quarried in 1851 was 78,903 tons.* It is constantly increasing, and may increase almost indefinitely, for the supply seems inexhaustible. Large deposits of both are also found scattered across the central portion of the county of Cumberland, forming a band extending east and west. Lime is quarried at Cape John, Merigomish, and at the west and east rivers of Pictou; gypsum is also procurable at the latter locality.+ Both lime and gypsum are found in large quantities at Antigonish, and throughout the adjoining country; and there are valuable beds of limestone in the vicinity of Guysborough. The island of Cape Breton contains enormous quantities of both these valuable minerals. Limestone and gypsum occur in large and readily accessible deposits at Plaister Cove, on the Strait of Canso, at several points on the shores of Lennox Passage, at St. Peter's, Arichat, Mabon, Margaree, St. Ann's, Boulardarie Island, Sydney Miré, and upon every hand on the shores of the Great Bras d'Or Lake and its tributary rivers and inlets. These beds are, in many places, found associated with marls.[‡]

Marble of various descriptions is found in several parts of Nova-Scotia. An extensive bed of grey and white marble is found on the southern side of the Little Bras d'Or, near Long Island.§ "Several pretty and unusual varieties of coloured marble" are procurable at Craignish

* Census Returns.

‡ Dawson; Gesner.

⁺ Dawson.

[§] Dawson, "Acadian Geology.

and Long Point, in Inverness, near the northern entrance to the Strait of Canso.* "A curiously waved grey marble is also found near New Glasgow and at Little Harbour, in Pictou County."+ Quarries have not been opened to any extent at any of the above-named places; nor have any decided steps been taken as yet with that object. But a bed of marble exists at Five Islands, in Colchester County, to work which a company was incorporated, in the Nova-Scotian legislative session of 1855, under the name of the "Acadian Marble Company." The Five Islands marble beds have not been sufficiently opened up as yet to warrant a very decided opinion as to their extent or value; but they seem to hold out great inducements to the capitalist. Specimens of white marble are procured from these beds as pure and fine-grained as any which the most highly valued European quarries afford to the sculptor. They also produce several varieties of coloured marble, some of which are very beautiful.

Ochres from which good paints may be manufactured, occur in large quantities on the banks of the Shubenacadie, East River, and other places. A material which makes a hydraulic cement, is procured near Chester; and a species of *umber*, from which paint is manufactured, is found at the same place. There is no part of the carboniferous district of Nova-Scotia, of any extent, in which there is not an abundance of good *clay* for the manufacture of bricks and the coarser kinds of earthenware.

First in importance among the ores and metallic substances found in Nova-Scotia, must be placed *Iron*. Enough is already known concerning the extent and quality of deposits of that kind in Nova-Scotia, to lead to the conviction that iron of excellent description may here

* Dawson, "Acadian Geology."

† Ibid.

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be profitably manufactured to an almost indefinite extent. The ores of this most useful of metals are found in great variety, and in several places widely removed from each other. The most western deposit of any extent yet discovered occurs at Clements, on the south side of Annapolis Basin. The outcrop of the vein may be traced on the surface for the distance of a mile, with an average thickness of nine feet six inches.* The ore consists of scales of specular iron, firmly cemented together, and intermixed with silicious and calcareous matter; and it has been in part converted by heat into magnetic iron ore.+ It yields from 33 to 40 per cent. of cast iron, the quality of which is said to be very superior.[‡] In 1826, a company was formed for the purpose of working this mine. Operations were commenced, and the smelting of the ore and manufacturing of the iron continued for some time; but operations suddenly ceased, owing, it is said, to dissensions among the stockholders, and have not since been resumed.

A bed of iron ore occurs at Nictan ; also in the County of Annapolis, and is similar to that found at Clements. There are several parallel veins at this place, varying from four to ten feet in thickness—six of these have been examined and accurately defined, and the ore contains 55.3 per cent. of iron of excellent quality.§ Works have recently been erected at the falls of the Nictan River, in the immediate vicinity of this deposit, for the purpose of smelting the ore. The great natural advantages of the situation, the good quality of the ore, and the abundance immediately at hand of most of the raw material required, afford every reason to suppose that the operations here commenced will prove quite successful.

* Gesner, "Industrial Resources."

+ Dawson, "Acadian Geology."

‡ Gesner, Ibid. § Dawson, Ibid.

The next great deposit of iron ore which we will mention is found on the southern slope of the Cobequid Hills. This deposit, considering its extent and the variety and quality of its ores, may be pronounced the most important in the province. That part of it to which attention has been most particularly directed lies between the Debert River and a point some two miles westward of the Great Village River, a distance in all of about ten miles. Between these points the vein extends nearly east and west, and at a distance of from five to eight miles from the shore of Cobequid Bay. It consists of a veinstone of the species of ore called Ankerite, associated with Spathose iron, surrounding and including a number of other varieties of ore. Of these the Red Ochrey iron ore occurs in large quantities, but in minor veins and irregular masses ; and the Specular ore, and Magnetic ore, in crystals and nests, and in still smaller veins. Yellow Ochrey ore and Brown hematite are also found in large quantities on the surface of the vein. The whole vein is of very irregular width. At one spot on the bank of the Great Village River it is 120 feet wide ; whilst at another, not far from the most eastern point to which the vein has been traced, it attains a breadth of over five hundred feet. Its breadth is unequal at various intermediate points where measurements have been made. The length of this vein is not yet ascertained : its continuation may be seen near Five Islands, twenty miles westward of Great Village River ; so that the vein is known to extend a distance of about thirty miles in length. It is not at all improbable that upon continued examination it will be found to extend along the whole length of the Cobequid range of hills.*

These ores are of an excellent quality. The Specular,

* Dawson, "Acadian Geology."

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Magnetic, and the Ochrey Red ores, the latter of which is the most abundant ore in the vein, afford from 60 to 70 per cent. of pure iron. From the richness, abundance, and position of the ore, it has been calculated that it can be provided at the blast furnaces at Great Village River at a lower cost per ton of iron than at most of the other principal establishments of the kind in the world.* The iron made from these ores is found to be equal to any in the world, in the rare properties requisite for making good steel.⁺

Furnaces and other necessary works were erected, and the manufacture of iron commenced, a few years since, at the spot where the vein crosses the west branch of Great Village River, by a few gentlemen of England and Nova-Scotia. For the purpose of enlarging their sphere of operations, and carrying on the works with greater vigour, an Act of Incorporation has been procured from the Nova-Scotian Legislature, during the session of 1855, incorporating the proprietors of these mines by the name of the "Acadian Iron and Steel Company." There seems to be no reason why the operations of this Company should not be attended by complete success. As already shown, the supply of the ore appears to be almost inexhaustible. The iron made from that ore is equal to the best quality produced by any other part of the world. There are immense forests in the immediate vicinity of the mines, sufficient to supply them with charcoal, at a small expense, for many years. Good free-stone for building purposes, and, it is said, good fire-brick clay, are found at a short distance from the works. The Great Village River and other streams traversing the vein of ore, afford water-power sufficient to drive any machinery

* J. S. Hayes' "Report to Acadian Iron Mining Association." † Mushet. that will probably be required; and there is a shippingplace, easily accessible, at five and a half-miles distant from the spot where the Company has commenced operations.

A very extensive deposit of iron ore, of a description similar to that of Nictan, is found at East River, Pictou, and within ten miles distance from the Albion coal mines on that river.^{*} The vein at this place is sixteen feet in thickness.⁺ The situation of this deposit, like that of the Cobequid Hills, affords every facility for the profitable manufacture of iron. There is a coal mine in operation, extensive forests for the production of charcoal, and an abundance of good building stone and lime, in the vicinity of the bed of ore. Clay Ironstone and Brown Hematite are also found in abundance in the coal measures, nearer the mouth of the East River, and in the immediate neighbourhood of the coal mines. There are no works in operation for smelting any of the ores found in Pictou County.

Iron ore, in the forms of Red Ochre, Red Hematite, and Brown Hematite, is found on the Shubenacadie, near its mouth. It has also been found in small quantities in several other places, affording good reason to believe that further extensive deposits of that valuable material will be discovered upon a more general research into the mineral wealth of Nova-Scotia.

Copper ore occurs at several places in Nova-Scotia. Large and numerous fragments of that ore are found in the southern part of Sydney County, affording indications of some valuable deposit in that section of the country.[‡] It is also found in the high lands in the rear of Five Islands, and at various other points in the Cobequid Range.

* Dawson, "Acadian Geology." † Gesner, "Industrial Resources." ‡ Dawson, Ibid.

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Copper ores, in the form of the grey sulphuret and green carbonate of that metal, and of a rich quality, occur at several places in Pictou County, particularly at East River, West River, and Carribou. A specimen from the latter place was found, on analysis, to contain 40 per cent. of copper. Ores of the same description are found, at Minudix, in Cumberland, and near Tatamagouche, in Colchester County. No steps are being taken to open mines at any of the places above mentioned, except that near Tatamagouche. The proprietor of the lands upon which the ore is there found has recently petitioned for a lease of a copper mine at that place, of which fact the Lieutenant-Governor has given notice in the Royal Gazette, according to the requirements of a law of the province, to which particular allusion will be made hereafter. Virgin copper is found, in grains and in masses in the fissures of the trap rock at Five Islands, Cape D'Or, and several other points in the trap district.

Galena, or sulphuret of Lead, occurs at Gray's River, the boundary between Halifax and Colchester Counties; also at Guysborough and several other places. At Gay's River it is associated with silver. That particular part of the country where this ore is found is still covered for the most part with forests; and little pains have been taken to ascertain the extent, or discover the most valuable deposit of it. From the indications already observed it is quite probable that, upon a careful examination of the neighbourhood by competent parties, such a deposit will be discovered, of great value, with reference either to the lead or silver contained in it, and perhaps with reference to both.

Manganese ores are found in several parts of Pictou County; also at Cheverie, Walton, and Rawdon, in Hants County, on the banks of the Shubenacadie, at Parrsboro', and at Cornwallis. Small quantities of it are occasionally shipped from Walton alone.*

The mineral substances which, more for the sake of distinction than with regard to strict accuracy, we have classed as *Precious Stones*, are confined mostly to the trap districts. They comprise materials applicable to jewellery and ornamental purposes; and also a great variety of substances of interest to mineralogists as specimens of the minerals formed in volcanic rocks. Nova-Scotia has become widely celebrated among scientific men for the abundance and variety of these specimens, and the facility with which they may be procured. Many of them are very beautiful; and several of those useful for ornamental purposes are so plentiful and so easily obtained as to be quite worthy of attention in an economic point of view. These minerals are found in the rocks throughout the whole Trap district; but are most sought after among the cliffs of Cape Blomidon, Cape D'Or, Partridge Island, and other points on the shore of Minas Channel and its vicinity. At those places the action of the winter frosts upon the exposed face of the cliffs is such that, every spring, great "avalanches," or land slides, take place, and the finely crystallised and beautiful minerals are then found in profusion among the fragmentary rocks scattered upon the shelving beach. Fine specimens of many of the mineral substances already mentioned, are found among the Trap rocks. Of these there are several varieties of iron and copper ores, oxide of manganese, sulphuret of lead, carbonate of lime, and sulphate of lime in its varieties of selenite, and compact, anhydrous, fibrous, black, white, and red gypsum. Besides these, specimens of the

* Gesner ; Dawson.

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following minerals are procurable, and most of them in great abundance at the places already named :---*

Acadiolite⁺ Agate Albin Amethyst Amethystine Sinter Analcime Apophyllite Arragonite Augite Basalt Barytes, Sulphate of Calcareous Spar Chalcedony Carnelian Cacholong Chlorite Chabasite Chlorophœite Hairstone

Heliotrope Heulandite Hornstone Jasper, red and ribband Ledererite Laumonite Mezotype, Natrolite, Scolecite Needlestone **Opal**, Semi-opal Onyx Prehnite Quartz Silicious Sinter Stilbite Thomsonite Tremolite Zeolite

Since an early date in the history of Nova-Scotia, it has been usual, in passing grants of crown lands, to reserve to the crown all mines and deposits of gold, silver, coal, iron, copper, and some others. The mineral deposits so reserved, as well as those existing upon lands still belonging to the crown, were in 1826 granted to the late Duke of York for a term of sixty years, and are now under lease to the General Mining Association, subject to a royalty which already yields a large sum annually to the revenue of the province. All the mineral wealth of the province is not subject to this monopoly, however. No reservation was made in many of the earlier grants; and some whole townships are exempt from its operation. The valuable iron deposits of Annapolis and Colchester

^{*} Gesner, "Geology and Mineralogy of Nova-Scotia," and "Industrial Resources." Dawson, "Acadian Geology."

⁺ So called by mineralogists, from Acadia, the former name of Nova-Scotia, to which country it is supposed to be peculiar.
are upon lands in which no such reservation was made. But a monopoly it certainly is to a great extent, and one which has been a cause of much complaint on the part of the people of Nova-Scotia. Efforts have recently been made by the provincial legislature to break the monopoly itself, or to confine it within such limits as will render it harmless to the interests of the province. The measures taken are such that they may possibly result in some compromise with the lessees of the reserved mines, which will be found not prejudicial to the interests of either of the parties immediately concerned. By a statute of the province already referred to, any individual may petition the Governor for a lease of the unworked mines and minerals upon any Crown lands, or upon any granted lands where they have been reserved, upon which the Governor will cause an advertisement to be inserted for three months in the Royal Gazette, notifying all parties interested in such mines of that application. If such interested parties shall not, within twelve months after publication of the notice, open and work the mines in question, the Governor may then order a lease of them to be made to the party applying for it, for such time and upon such conditions as he may think fit.

FISHERIES.

Nova-Scotia is widely and deservedly celebrated for the extent and value of its Fisheries. It may be safely averred that no country on earth surpasses it in this respect; and it is questionable if any, unless it be the neighbouring province of Newfoundland, even equals it. It has already been mentioned that the coast line of Nova-Scotia forms a distance of not less than a thousand miles. There is no part of that coast on which a highly profitable fishery may not be pursued. The interior of the country is also, as already shown, well watered by numerous rivers. In these, the fishes that usually frequent such inland waters in their latitudes are caught in abundance. The salmon (Salmo salar), the common trout (Salmo fontinalis), and salmon trout (Salmo trutta), are plentiful in nearly all of those streams, and afford fine sport to the angler; and the fishes of the former species are so numerous and of so fine a quality as to be of some importance as an article of commerce. The yellow perch (Perca flavescens), the white perch (Labrax pallidus), sucker (Catostomus communis), chub (Leuciscus cephalus), carp (L. chrysoleucas,) roach (L. cornutus and L. pulchellus), are also abundant in many of the lakes and streams.

The shad (Alosa sapidissima) is taken in great numbers in Cumberland Basin, Minas Basin, and the estuaries of the rivers which empty into them. The taking of this most delicious fish constitutes the principal fishery of those There the shad is taken in draft-nets and in waters. set-nets, and weirs placed along the sloping mud-flats of the shore. Brush weirs and nets thus placed become entirely submerged at high water by the tide, which, in retreating, leaves them high and dry, and the fish which they retain are then carried away without any boating being required. The gaspereau, or alewive (Alosa tyrannus), the cod (Morrhua vulgaris), the haddock (M. æglefinus), the pollock (Merlangus carbonarius), the herring (Clupea elongata), and the flounders (Platessa plana, P. pusilla, and P. limanda), are found in the greatest abundance in all parts of the Bay of Fundy, and also in its branches, Cumberland Bay and Minas Basin ; whilst the hake (Phycis Americanus), the forsk or cusk (Brosnicus vulgaris) and halibut (Hippoglossus vulgaris), are taken in such numbers as to form a very important item in the products of those waters. In the early spring the smelt (Osmerus

viridescens), swarms in myriads up into most of the rivers emptying into the Bay of Fundy. These fish are usually dipped up with scoop nets, about the head of the tide waters. The herring of the Bay of Fundy is small, but usually fat and of excellent quality. The greatest number of those caught are smoked and packed in boxes. The pollock fishery is believed to be the most valuable and extensive of the deep-sea fisheries of the Bay of Fundy.* The cod, haddock, halibut, and gaspereau, do not differ from the fishes of those kinds found upon other parts of the coast of Nova-Scotia. The sturgeon (Accipenser oxyrinchus), is also frequently caught in the Bay of Fundy, but is not highly valued in Nova-Scotia. The bass (Labrax lineatus), a delicious fish, sometimes attaining a weight of forty or fifty pounds, is also common in this bay.

In the Gulf of St. Lawrence the shad and gaspereau are not so numerous nor of such good quality as on the Bay of Fundy coasts. All the other fishes already named, with the exception of the pollock, are there found in abundance. The bass appears at certain seasons on this coast, in large schules. The mackarel (Scomber vernalis), which forms an important article of commerce in Nova-Scotia, but which is comparatively rare in the Bay of Fundy, is abundant in the Gulf of St. Lawrence. The sea perch (Ctenolabrus ceruleus), is also very numerous. It is in the estuaries of the rivers on this coast that the salmon trout, or sea trout (Salmo trutta), already referred to, is found in the greatest numbers in Nova-Scotian waters. Of these, River Philip seems to be more particularly favoured, and is the summer's resort of many anglers. Valuable oyster Fisheries exist at several points on the Gulf coast.

The Atlantic coast of Nova-Scotia is that most celebrated

* M. H. Perley, "Report on the Sea and River Fisheries of New Brunswick, 1852."

for its Fisheries. Nearly all of the salt-water fishes already named are here found in abundance, and many other valuable species besides. The Halifax fish-market is said to be the best supplied of any in the world; and certainly, if such is not the case, it is owing to no lack of means. The cod swarms along the shores and upon the fishing banks which lie off this coast throughout nearly its whole extent. The supply of this valuable fish and of haddock, hake, and pollock, appears to be unlimited. When cured they are most frequently sent to market in the form of "dry fish." Delicious halibut, sometimes attaining a weight of 500lbs., may be taken in the greatest abundance; and the great tunny, or albicore (Thynnus vulgaris), so highly prized in the Mediterranean, is here frequently taken, varying from six to twelve feet in length. The mackarel, so much valued, frequents this coast in immense "schules," the arrival of any one of which gives occasion to a scene of great activity among the fishermen who are anxiously awaiting them. Nova-Scotia is, undoubtedly, without a rival in the facilities which it affords for prosecuting the mackarel fishery with profit. This fish, in approaching the coast from the deeper waters of the Atlantic, seems to have certain favourite resorts; but, unaccountably as yet, it sometimes exchanges a long frequented spot for some new favourite, to return again to the old haunt after an interval of years. The shores in and about Chedabucto Bay, the southern entrance to the Strait of Canso, are especially famed for the myriads of these fishes which resort to them annually. In that vicinity the immense schules of mackarel are sometimes seen several miles in breadth, rendering the surface of the water quite smooth, and forming a mass so dense as even to impede the progress of the smaller class of vessels. These waters are their highway to the Gulf of St. Lawrence, of which, as

already mentioned, they form one of the most valuable Fisheries.

The quantity of fish that may be taken from one of these great shoals seems to depend solely upon the extent of the means at hand for securing and curing them. Immense hauls are sometimes made by means of seines. It is not uncommon to take 1000 barrels at a single haul of one of these nets; and upwards of 3000 barrels have been thus secured in a single night. One night, in November, 1855, 800 barrels of mackarel were landed by a seine on a part of the shore of the city of Halifax, having been taken in the North-West Arm. Upwards of 20,000 barrels were taken in Halifax harbour in the autumn of 1855; and the value of products of the sea taken by the fishermen of Halifax County during that year, were estimated to be over 250,000*l*. A great number of mackarel—probably a greater number than in any other way—are also taken in the deeper waters off shore, particularly in the Gulf of St. Lawrence, by means of hook and line. The mackarel abounds on all the coasts of the Island of Cape Breton.

Next to the mackarel the herring is most deserving of particular mention. Immense schules of this fish also frequent the Atlantic coast. This fish, although different from the herring of the European side of the Atlantic, is, when properly dressed and cured, scarcely, if at all, inferior to the widely celebrated Dutch herring. Those caught upon the Atlantic coast of Nova-Scotia are usually pickled in barrels. There is no part of that coast on which herring may not be taken in great abundance; and they may there be caught at all seasons of the year. But, indeed, nearly every salt-water fish named in this section may be caught in the greatest abundance upon the Atlantic coast of the province of Nova-Scotia,

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and, with very few exceptions, at all seasons of the year.

The following Table, taken from the Census Returns of

Gallons of fish-oil.	$\begin{array}{c} 17,895\\ 8,401\\ 8,401\\ 10,974\\ 7,982\\ 7,982\\ 7,598\\ 1,356\\ 1,356\\ 2,518\\ 2,518\\ 2,518\\ 2,518\\ 2,518\\ 2,518\\ 36,290\\ 36,290\\ 36,290\\ \end{array}$	189,250
Boxes of smoked herring.	93 93 93 93 93 93 93 107 107 107 107 107 107 107 107	15,409
No. of barrels of alewives.	182 202 61 61 10 164 162 162 162 12 32 32 815 53 53	5,343
No. of barrels of herring.	$\begin{array}{c} 5,085\\ 4,878\\ 4,880\\ 6,680\\ 6,680\\ 6,680\\ 6,680\\ 6,890\\ 6,890\\ 5,213\\ 5,233\\ 5,233\\ 8,460\\ 6,78\\ 1,250\\ 8,460\\ 2,287\\ 6,113\\ 6,113\\ 6,113\\ \end{array}$	53,200
No. of barrels of mackarel.	$\begin{array}{c} 29,835\\ 9,417\\ 1,441\\ 1,441\\ 1,129\\ 1,129\\ 1,129\\ 1,129\\ 1,129\\ 1,129\\ 2\\ 2\\ 2\\ 2\\ 2\\ 2\\ 2\\ 2\\ 2\\ 2\\ 2\\ 2\\ 2\\$	100,047
No. of barrels of shad.	$\begin{array}{c c} 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 $	3,536
No. of barrels of salmon.	25 7 7 7 50 8 9 7 9 7 7 15 15 15 15 9 7 7 15 8 601 1033 8 42 8 344	1,669
Quintals of dry fish cured.	$\begin{array}{c} 14,684\\ 21,057\\ 21,057\\ 21,057\\ 35,417\\ 20,270\\ 10,901\\ 001\\ 10,901\\ 0924\\ 87\\ 87\\ 87\\ 87\\ 11,034\\ 11,901\\ 32,255\\ 21,458\\ 21,458\\ 21,458\\ \end{array}$	196,434
. Counties.	Halifax . Lunenburg Queen's Rhelburne Yarmouth Digby Annapolis King's King's Cumberland Cumberland Colchester Pictou Rydney Richmond ritoria	Total

1851, will show the extent to which the Fisheries were prosecuted at that period.

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It should have been observed that the dog-fish (Spinax acanthias) is taken in large quantities along the Atlantic Coast, chiefly for the sake of the oil which is extracted from it. The greater portion of the fish-oil represented in the foregoing Table is obtained in this way. The remains of the fish, after extracting the oil, is usually given to hogs. Of some kinds of fish named in this Table —particularly of salmon—the largest portion are not usually cured at all, but are sent to market fresh.

The following statement shows the quantities of fish and oil actually exported from the province in 1856.*

DESCRIPTION.	VALUE.
Alewives . . Codfish . . Herrings (pickled) . . ,, (smoked) . . Mackarel . . Oils (fish and seal) . . Scale fish . .	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
Total	. £610,002 sterling.

Notwithstanding the large item which the products of the Fisheries form in the exports of Nova-Scotia, it will be presumed from the foregoing Tables, that the catch of fish is small in proportion to what it might be. Such is really the case. The Fisheries of Nova-Scotia afford an immense, and but very partially occupied field for the application of labour and enterprise. As already shown, those Fisheries are productive in an extraordinary degree; and Nova-Scotia, owing to its geographical position, extensive coasts, and excellent harbours, presents unsurpassed if not unrivalled facilities for the profitable prosecution of them.

* Official Returns.

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Yet by the Census of 1851, we find that there were then but 9927 persons engaged in the Fisheries. Of those so engaged, it is a common complaint that they bring little skill to the prosecution of their calling; and are so improvident in their habits as to be nearly always deficient in the means of employing their labour to great advantage. How far soever these reproaches may be well grounded, it is certain that there is abundant room in the Fisheries of Nova-Scotia for the profitable employment of both capital and labour. All that could be asked of Nature is here furnished by her-abundance of materials for the construction of fishing vessels and boats; excellent harbours and fishing grounds, so situated that the business can be carried on with the greatest degree of safety and the least of expense; and unlimited numbers of excellent fish. To these might be added, at the present time, the comparative proximity of Nova-Scotia to the principal markets for the fish taken in North American waters. By the "Reciprocity Treaty" between Great Britain and the United States, which came into operation in June, 1854, colonial fish are imported into the latter country free of duty. The natural tendency of this is to add largely to the profits, and increase the enterprise of the fishing classes of Nova-Scotia. In short, it seems but reasonable to believe that the only thing required to make the Fisheries of Nova-Scotia by far the most prosperous and productive in the world, is the knowledge of their value in those older countries where skilled labour in that department is more abundant and less remunerative than it is here.*

* In speaking of the products of the Fisheries, as in those of the forests, those species only have been named which are of importance in an Economic point of view.

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CHAPTER III.

CLIMATE.

MUCH misapprehension has prevailed, among persons not personally cognisant of the facts of the case, relative to the climate of Nova-Scotia. That climate has been misrepresented as extremely rigorous, disagreeable, and insalubrious. There is but very slight foundation for such misrepresentation. It is true that, owing to causes which need not here be explained, Nova-Scotia, like all countries on the western coast of the North Atlantic, is subject to greater extremes of heat and cold than countries in the same latitude on the eastern coast of that ocean. This comparatively great variety of temperature in North America, does not, in the latitude of Nova-Scotia, prevent the climate being very salubrious and agreeable. There is a lack of statistical information upon this head. No such tabular statements are procurable as will enable us to arrive at general accurate results relative to the longevity of human beings in this province. Notwithstanding this deficiency of statistics, it may be safely averred that the average length of human life is there greater than in most countries in the temperate zone. So far as the writer is aware, there are no diseases peculiar to the country; and there are none which are there disseminated in an unusual. or even notable degree of rapidity or virulence. The most prevalent complaints are those which are caused by sudden transitions in the temperature of the atmosphere; and, therefore, form a class of diseases which are most easily guarded against. There are no large, shallow lakes and morasses filled with stagnant water, which would render the air unwholesome ; whilst the nature of the country's

surface, and the nearness of every part of it to the open sea, in causing a free and almost constant circulation of air over every part, renders that air remarkably pure. Those violent and protracted intermittent fevers which are so prevalent in other parts of America, in and about the same latitude as Nova-Scotia, are never generated in that country. On the contrary, a person afflicted with disease of that kind, and who may have undergone the most skilful medical treatment, with no permanent beneficial result, will, on removing to Nova-Scotia, become quite well in a short time, owing merely to the curative effects of the climate.

Owing to the peninsular position of Nova-Scotia, and the tendency of large bodies of salt water to equalise the temperature of the atmosphere in their vicinity, it is not subject to such great extremes of heat in summer, and cold in winter, as the neighbouring provinces of New Brunswick and Canada, and the North Eastern States. The extreme of cold is 25° Fahr. below zero; the extreme of heat, 95° above, in the shade; but it must be observed, that there is seldom a year in which the temperature attains either of these extremes. The mean temperature of the year is 43° ; and there are about 100 days in which the temperature is above 70° in summer, or above 62° in the remainder of the year; and about twenty nights in which it is below zero.*

The coldest season is comprised in the first three months of the year. During this season the cold weather is not so continuous, nor does the ground remain so constantly covered with snow, as is usual in the neighbouring provinces and states already referred to. At least, when a "Canadian winter" does occur in Nova-Scotia, it is an exception to the ordinary rule. But during the most of

* Dawson's "Handbook of Nova-Scotia."

winters in Nova-Scotia, notable changes of temperature are both frequent and sudden. A great body of snow usually falls in the course of the season; but, owing to the frequency of thaws, it very rarely attains a greater depth than one foot, except upon the high lands; and, not unfrequently, the ground is quite bare for weeks in succession. The local varieties of temperature are more observable in this season than in any other. In the northern and north-eastern parts of the province, the winters are ordinarily colder, there is a more even temperature, and the snow remains more steadily upon the ground; whilst in the south-western parts the weather is comparatively mild and wet, and the snow does not usually attain any depth. An impression very generally prevails among the inhabitants of the country, that the winters are gradually becoming milder, a fact—if it really is one—which is by some attributed to the removal of the forest and the extending cultivation of the soil.

Spring may be considered to commence with April. Throughout this season, but more particularly during the months of April and May, the climate is still subject to frequent and sudden transitions of temperature. The season does not glide gradually from winter into summer; it consists rather of a series of changes alternating between the two. Heavy frosts are rare, but there are frequent northerly and easterly winds which, having swept over the Gulf of St. Lawrence, where great masses of ice still float, and being often attended by light squalls of snow, render the air very chilly and give a wintry aspect to nature. The *fogs* for which Nova-Scotia has been somewhat unjustly celebrated, are, during spring, frequent on the Atlantic coast. They are confined, for the most part, to the coast line, scarcely ever extending any distance inland. In ordinary seasons, they finally disperse about June ; and,

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during summer and autumn, fog is scarcely ever seen on the Nova-Scotia coast, except on the extreme south-western part-even there it is infrequent. Such a thing is scarcely known on the shores of the Gulf of St. Lawrence at any season of the year. Agricultural operations commence in April, and "seed time" continues through May. Owing to the rapidity with which vegetation proceeds when once fairly started, and to the fact that winter crops are rarely, or never, sown in Nova-Scotia, this is an extremely busy season in the farming districts. Spring-or rather the first two months, April and May-is considered the least healthy season of the year; but June, when the mild weather has become more steady, when the migratory birds, including many agreeable songsters, have all arrived, when the field and forest are in full bloom, presents spring such as the poet and painter love to describe it, and such as the most delicate invalid could not complain of.

During the next three months, forming the Nova-Scotian summer, the weather is moderately warm, with no considerable fluctuations of temperature. Vegetation is very rapid. Wheat, oats, barley, rye, are found to ripen in ninety-two days in an average temperature of 52°.* Hay for the winter's fodder is made in July, and the harvesting of the grain crops commences in August. During September the nights begin to grow cool, and are sometimes attended with light frosts.

Autumn is usually a very agreeable season. The skies have the serenity of summer, yet the air is sufficiently cool to be bracing and quite exhilarating to the human system. The appearance of Nature is none the less gay from wearing the symptoms of decay; and the forests, tinted by the frost with all the colours of the rainbow, present that gorgeous appearance which has long been

* Gesner. "Industrial Resources of Nova-Scotia."

remarked as one of the most attractive characteristics of American scenery. At such a season those forests, being stocked with an abundance and variety of game, are a paradise to the sportsman, who carries to the scene of his exciting amusement an ardent love of the beauties of Nature. Usually, but not every autumn, there occurs some time during this season, a continuance of from two or three days to as many weeks of peculiarly mild, calm, hazy weather, known as the "Indian summer." Root crops are secured during the month of October, and the remainder of this season is generally employed in the agricultural districts in "clearing up" new land, and in preparing the ground for the reception of the seed in the following spring. December, although conventionally classed as a winter month, may in Nova-Scotia be, with much more propriety, regarded as a part of the season we are now describing. The weather usual during that month has more of an autumnal than a wintry character.

The mean temperature of the first quarter of the year is 22° ; of the second, or spring, 49° ; of the three summer months, 62° ; and of the autumn, 35° .*

CHAPTER IV.

MANUFACTURES.

As is but natural to be supposed of so new a country as Nova-Scotia, little progress has yet been made in manufactures. Of course, in a country but recently settled, the facilities for carrying on manufactures are few, and the demand for manufactured articles comparatively small. The Nova-Scotian manufacturer has hitherto been almost

* Dawson's "Handbook of Nova-Scotia."

limited to the market of his own country ; and, owing to commercial regulations, he is virtually excluded even from the markets of the neighbouring British provinces. Hence it follows, that, in this branch of industry, operations are not carried on upon a large scale ; yet manufactures have for several years past increased in proportion to the general growth of the country. They consist largely of what are usually called domestic manufactures—that is, of articles made in the rural districts by persons who do not devote their time exclusively to the business.

There were, in 1851, but 10 steam-mills, or factories, in the province. There were also at that time 1,153 sawmills, 398 grist-mills, 237 tanneries, 9 foundries, 81 weaving and carding establishments, 17 breweries and distilleries, and 131 other factories-all upon a comparatively small scale. There were scattered through the rural districts 11,096 hand-looms, from which were manufactured 119,698 yards of coarse woollen, or cotton and wool, cloth, afterwards fulled; 790,104 yards not fulled; and 219,352 yards of flannel. There were 78,076 gallons of malt liquor, and 11,900 gallons of distilled liquor manufactured. The value of agricultural implements manufactured was 16,640l.; of chairs and cabinet work, 11,155l.; of carriages, 9,491l.; of other wooden ware, 19,233l.; of soap, 28,277l.; and of candles, 21,210l. The manufacture of most of the above-named articles has very considerably increased since 1851; but the extent to which they are produced is very far from being commensurate with the consumption of the country. The number of vessels built in the province that year was 486, with an aggregate tonnage of 57,776 tons.

With so much good soil still uncultivated, and with such valuable fisheries upon its coasts, it is not probable

that Nova-Scotia will very soon become celebrated as a manufacturing country. There seems no reason, however, why it should not become so in time-the probabilities point rather to an opposite result. The geographical position of the country in some degree favours such a supposition. The superior "water powers" for driving machinery to be found in all parts of the province-its numerous and valuable coal mines-inexhaustible deposits of iron and other mineral substances-would lead to the conclusion, that, at all events, when the price of labour is lowered by a large increase of population, manufacturing will be carried on upon an extensive scale. Indeed, there seems no reason to doubt that it might be profitably done even now in many articles for which the country affords the raw materials of an excellent quality, and at a comparatively small expense. Whatever may be the inducement to undertake manufacturing on a large scale, it is quite certain that the present wants of Nova-Scotia itself, and in articles not usually imported into the country, hold out employment for a great many additional mechanics. That country is a good field, not only for labouring artisans, but for men who are desirous of investing a small capital in the prosecution of some mechanical art. There is an especial demand for all kinds of mechanics employed about either house or ship building ; but many other trades may be carried on with handsome profit by the industrious and skilful artisan.

CHAPTER V.

COMMERCE.

THE products which have hitherto formed the largest portion of the exports of Nova-Scotia, have been drawn from its forests and fisheries. Mineral substances, --particularly coal and gypsum,-live stock, and agricultural produce, are also exported pretty largely. The exports under this latter head have increased very much within the last few years. The principal markets for these products are Great Britain, the United States, and the West Indies. The principal export to Great Britain consists of timber, both as squared timber and sawed into deals, lumber, &c., and of ships built in the province. In return for these, there are imported from the United Kingdom manufactures of every description suited to the wants of the country. The West Indies have long been the principal market for the fish of Nova-Scotia, which receives in return produce the growth of those countries. To the United States are exported coal, gypsum, wood, fish, and agricultural and horticultural produce. The imports from that country consist principally of breadstuffs and of American manufactures, especially of a cheap description of furniture and cabinet-work, carriages, and agricultural implements.

The general trade of Nova-Scotia being divided among various channels, and carried on in a large variety of products, with no very great preponderance of any one, it has not been liable to such great and sudden fluctuations as have been rather frequent in some neighbouring countries. It has increased very steadily and in proportion to the general growth of the country. The following statement, taken from official returns, shows the imports and exports of the province from 1851 to 1855 inclusive :----

YEAR.	IMPORTS.	EXPORTS.
1851	£1,005,528 sterling.	£708,462 sterling.
1852	1,194,175 ,,	970,780 "
1853	1,417,086 ,,	1,078,707 ,,
1854	1,791,082 ,,	1,247,668 ,,
1855	1,882,703 ,,	1,466,215 ,, *

This statement in itself shows that the trade of Nova-Scotia has about doubled in five years. To arrive at the correct value of the exports, some addition should be made to the above sums for under-valuation of some articles, and for the value of others of which no return has been made. Another very important addition to be made, is that of vessels built in the province and sent out of it for sale. No official returns show the amount of this item previous to 1853. The following table shows the extent to which ship-building has been carried on in the province for the last three years, and the amount of shipping exported for sale :—

Year.	Number Vessels Built.	Tonnage.	Value.		Value.		Value.		Value.		Value. Number exported for sale.		Value.	
1853	203	34,376	£315,418	Stg.	86	21,867	£191,401	Stg.						
1854	244	52,814	509,319	,,	70	21,125	179,316	,,						
1855	236	40,469	448,142	"	53	12,549	117,945	,,*						

Thus it appears that the true exports of 1853, 1854, * According to returns made up since these tabular statements were

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and 1855, as nearly as they can be ascertained, reach the respective amounts of 1,270,308*l*., 1,426,984*l*., and 1,584,160*l*. sterling.

There seems every reason to suppose that the commerce of Nova-Scotia, rapidly as it has grown of late years, must continue to grow much more rapidly. By the "Reciprocity Treaty" between Great Britain and the United States, which went into operation in June 1854, and which has been already alluded to, all unmanufactured articles, the growth and produce of Nova-Scotia, of commercial importance, may be imported into the United States free of duty. The result of this is to cause a great stimulus to the export trade of Nova-Scotia, a result which is yet but scarcely commenced. Notwithstanding that, by one article in that treaty, United States fishermen are privileged to pursue their calling upon the coasts and in the bays of Nova-Scotia, and in the Gulf of St. Lawrence, it is believed that the Nova-Scotian fisherman will ever find a ready market for his fish in the United States. However this may be, there are other articles, the growth and produce of that province, which it is quite certain will ever find a ready sale in the United States, and at a fair profit to the producer. The decided superiority of Nova-Scotia with reference to its agricultural resources, its mines, or its forests, over the New England States, furnishes the best of reasons for such a conclusion. The proximity of the province to the market thus opened to its products, and the comparatively small cost of the transportation of those products to market, owing to the free water communication available for that purpose to every section of that province, add to the

prepared, the imports, in 1856, amounted in value to $\pounds 1,869,832$; the exports, to $\pounds 1,372,958$; value of ships sent out of the province for sale, $\pounds 126,896$, making the total exports amount to $\pounds 1,499,854$.

probabilities of a greatly enlarged trade between it and the United States.

There is an equal probability of a great increase in the trade between Nova-Scotia and the neighbouring British provinces. Previous to 1850 but very little commercial intercourse existed between them. Since that time, owing mainly to an inter-provincial treaty, providing for an exchange of commodities, the growth, or natural products of the province whence exported, the trade between them has considerably increased. Canada affords not a small market for the fish of Nova-Scotia. The latter country is richer in mineral resources than Canada, New Brunswick, or Prince Edward's Island, a fact which will itself, in all probability, lead to an active traffic between it and them. The principal import from Canada has been and will probably continue to be, breadstuffs. But that which is most especially calculated to increase the direct traffic between Nova-Scotia and the more important of these provinces, is the undoubted tendency of the trade between Canada, and, to some extent, New Brunswick also, on the one hand, and the West Indies on the other, to pass through Nova-Scotia. Owing to causes which it is scarcely necessary here to trace out, Nova-Scotia will be the immediate source from which those neighbouring countries will mainly draw their supplies of West Indian produce.

Without descending to particulars, the reader will perceive that from the geographical position and conformation of Nova-Scotia, already so frequently alluded to; the number and excellence of its harbours, its great facilities for shipbuilding, the tendency of these conditions combined with the excellent fisheries upon its coasts, to decide the occupation of a large proportion of its population; it is more than probable that it must soon appropriate to itself a very large proportion of the carrying trade of North America.

CONSIDERED SOCIALLY.

CHAPTER I.

POLITICAL INSTITUTIONS.

THE head of the Executive and Legislative bodies in Nova-Scotia is the LIEUTENANT-GOVERNOR, who is appointed by the Crown. He is nominally subordinate to the Governor of Canada, who is "Governor-General of British North America." The Lieutenant-Governor is advised, in the discharge of his administrative and legislative duties, by an Executive Council, usually of nine members, appointed by the Crown and chosen from the Legislative Council and the House of Assembly. They are responsible to the people for the public acts of the Lieutenant-Governor. Five of the members of the Executive Council are, whilst occupying that position, Heads of Public Departments, or hold important offices of emolument in the province, viz., the Attorney-General, Solicitor-General, Provincial Secretary, Financial Secretary, and Receiver-General.

The other legislative bodies are the Legislative Council, and the House of Assembly.

The LEGISLATIVE COUNCIL, or Upper House, consists, at the present time, of twenty-one members : they are appointed by the Crown, and hold their seats for life. The functions and privileges of this Council, as a legislative body, do not materially differ from those of the House of Lords.

The House of Assembly-The provincial House of Commons-consists of fifty-three members, thirty of whom are elected by the counties, and the remainder by certain privileged representative townships. They are elected every four years. The right to vote at these elections extends to every male of twenty-one years of age, who is a natural-born, or naturalised, subject of the British Sovereign, and who has for one year just previous to the election been a resident of the county or township in which he votes. A residence of five years in the province is required where the elector is not a native of Nova-Scotia. The qualification of residence is in neither case required if the elector has, for six months preceding the election, been a freeholder of real estate, within the county or township where he votes, of the annual value of forty shillings. The elective franchise does not extend to Indians, unless they are freeholders, nor to paupers. The House of Assembly has the power of legislating upon all the internal affairs of the province, and it conforms in its usages as nearly as possible to the House of Commons.

JUDICIAL.

The lowest order of courts for the trial of civil causes, in Nova-Scotia, are those of the *Justices of the Peace*. There is a large number of these officers in every county, and each of them has jurisdiction throughout the whole county in which he resides. One justice may adjudicate upon any matter in which the cause of action does not exceed three pounds; where it is above this amount, but does not exceed ten pounds, two are required. They cannot adjudicate where the cause of action exceeds this latter amount. An appeal lies from the Justices' Courts to the Supreme Court.

The General Sessions are held in each county annually, or semi-annually. They are assemblages of the County Justices and Grand Jurors, for the transaction of certain local business, being legislative rather than judicial bodies.

The *Probate Court* is a County Court, presided over by a single judge, usually a barrister of some professional eminence. It has the custody of all wills; and its function is to dispose of the estates of deceased persons. An appeal from its decisions may be had to the Supreme Court.

The Supreme Court has original jurisdiction in all civil suits where the cause of action is not less than five pounds; and appellate jurisdiction where it is less than that. It is also the only criminal court in the province. This court is presided over by a Chief Justice and four Assistant Justices. The whole province is divided into four circuits; and the sittings of the Supreme Court are held twice annually in each county. A Court of Chancery, which formerly existed in Nova-Scotia, has recently been abolished, and equity jurisdiction conferred upon the Supreme Court.

The Court of Vice-Admiralty, which is unlike the English Admiralty Court in no respect, except its subordinate rank, is presided over by one judge.

The Court of Marriage and Divorce, the nature and object of which are sufficiently explained by its name, is composed of the Lieutenant-Governor and Executive Council, assisted by one judge of the Supreme Court.

The Governor and Council form a *Court of Error*, before which all suits may be brought, on appeal, where the amount of the judgment is not less than £300. A further appeal lies to Her Majesty in Council.

CHAPTER II.

EDUCATIONAL.

THE common schools of Nova-Scotia are supported in part by legislative grants of money, but principally by the voluntary payments of the people, or tuition fees of those educated in them. The annual grant of the Legislature for common schools, grammar schools, and county academies, now amounts to 16,868l. This sum is apportioned among the different counties, and then subdivided among the various school districts in proportion to the amounts therein directly contributed by the people. In each county there is a board-in some instances twoof School Commissioners, whose duty it is to regulate the division of the county into school districts, apportion the Legislative grant among them, examine and license school teachers, furnish educational statistics, and superintend the interests of education generally within its own particular sphere. A normal and training school for teachers, founded by a provincial grant and to be supported by the province, was opened at Truro, the county town of Colchester, in the autumn of 1855. Highly beneficial results are expected to follow the opening of this institution. There are but three teachers engaged in it at present : but from the large number of applications from pupils desirous of qualifying themselves for common school teachers, it is believed that the school will have to be speedily enlarged. The Principal of the institution is also superintendent of education throughout the province.

The common school educational system of Nova-Scotia is, at the present time, inferior to that of Canada West,

and of some of the New England States; yet it has recently made great advances in the way of improvement, and there are reasonable grounds for anticipating that, in the course of a few years, it will be not inferior to any in America. The tuition obtainable at these common schools is so very cheap, and the provision made by the Legislature for paupers so ample in proportion to the numbers of that class, that the rudiments of an English education may be had by all who are really desirous of acquiring them. The improvements now sought to be introduced are for the purpose of elevating the character of the schools; and of providing for their support in such a way that no man shall be permitted to plead poverty as an excuse for bringing up his children in ignorance. The first of these objects will be attained through the instrumentality of the Normal School already established. To attain the other, the plan of supporting schools free to all classes of children, by a taxation of the whole property of the country, has been in agitation for several years, and is now so favourably regarded by all of the more intelligent classes, that there is every probability of its soon becoming law.

There are many facilities for obtaining education of a higher class. Grammar schools or academies, in which the classics and the higher branches of English education are taught, exist in nearly all the towns, or large villages of the province. There are also three chartered colleges in operation—King's College at Windsor, an Episcopalian institution, Acadia College, Wolfville, Baptist; and St. Mary's College, Halifax, Roman Catholic. Another Catholic educational institution of the higher class has recently been opened at Antigonish. Although these institutions are under denominational control, no religious tests are required of students on matriculation. The

curriculum in each of these colleges, extending over four vears, does not differ materially from that of the others. It usually comprises courses of instruction in the Latin and Greek languages, mathematics, logic, rhetoric, and moral and intellectual philosophy. In King's and Acadia Colleges, there are also theological departments having professorships of Hebrew and theology. The "Free Church College for the Lower Provinces of British North America" is located at Halifax, and affords a course of instruction similar to that of the other institutions just mentioned. Gorham College, Liverpool, Queen's County, under the control of the Congregational sect, was suddenly interrupted in its operations in the year 1854, owing to the destruction of the college building by accidental fire. This serious damage has not yet been repaired. The Presbyterian church of Nova-Scotia has a Theological seminary, now at Durham, in Pictou County, but about to be removed to Truro. Dalhousie College, at Halifax, was incorporated in 1820; when a building was erected at the public expense, and a sum invested in the British three per-cents for the support of the institution. It has not, as yet, answered the expectations which were entertained concerning it. Twice has a staff of professors and teachers been appointed, and the institution been opened for the admission of students ; but all attempts to make the college of service to the country have resulted in failure. It has been quite recently opened a third time, with a new set of teachers, as a sort of City High School.

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CHAPTER III.

POPULATION, RELIGIOUS DENOMINATIONS.

THE population of the province of Nova-Scotia amounted, in 1851, according to the census taken that year, to 276,117 souls. It had increased, for the ten years preceding that time, more rapidly than that of the adjoining province of New Brunswick, or of the neighbouring States of Maine, New Hampshire, Vermont, or Connecticut, and at about the same rate as that of the State of New York. It is now probably not less than 330,000.

No considerable portion of this population is collected together in towns. The population of the city of Halifax, in 1851, was 20,949. It may now be computed at not less than 25,000. This is the only city in the province; and there are no other towns of any size, the bulk of the population being scattered over the country in agricultural settlements and fishing villages. The geographical conformation of Nova-Scotia does not favour the growth of large towns. This is such that there is no place in the province distant more than thirty miles from a good shipping port; and indeed there are but few points which are not much nearer than that to several of the many excellent harbours which line the coast. This peculiarity is a great advantage to the country at large; but it has a tendency to prevent any one place from advancing, with remarkable rapidity, in wealth and population.

The distribution of this population, at the time the census was taken, was as follows :

Halifax .								39,112
Lunenburg								16,395
Queen's.								7,256
Shelburne								10,622
Yarmouth			•					13,142
Digby				•				12,252
Annapolis								14,286
King's								14,138
Hants .								14,330
Cumberlan	d				٠	•		14,339
Colchester								15,469
Pictou						•		25,593
Sydney.								13,467
Guysborou	$^{\mathrm{gh}}$					•		10,838
Inverness								16,917
Richmond	•					•		10,381
Cape Breto	n	l						27 580
Victoria		ſ	•		•		•	21,000

The inhabitants of Nova-Scotia, as may naturally be supposed, are mostly of British origin ; but Richmond County, the eastern portion of Sydney County, the township of Clare in Digby County, and some large settlements in Yarmouth, are occupied almost exclusively by people of French descent; whilst the population of Lunenburg is mostly descended from a body of German emigrants who first settled in that county. The townships of Earlton and New Annan, in Colchester, the counties of Pictou, Inverness, Victoria, and the larger portions of Sydney and Cape Breton, are settled by emigrants from the Highlands and Islands of Scotland and their descendants. The largest proportion of Irish is to be found in Halifax. In most other parts of the province, the population is of mixed origin.

The numbers comprised in the various religious denominations in the province, as shown by the last census, are as follows:

Roman Catholics							69,634
Baptists							42,243
Church of Englan	ıd						36,482
Presbyterian Chu	\mathbf{rch}	of	No	va-	Sco	otia	28,767

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Free Church .				25,280
Methodists .				23,596
Church of Scotland				18,867
Lutherans .				4,087
Congregationalists .				2,639
Universalists .				580
Quakers				188
Sandimanians .				101
Other denominations				3,791

The whole number of churches in the province, at the same time, was 567—equal to one for every 487 inhabitants.

CHAPTER IV.

POSTAL AFFAIRS, ROADS, CANALS, AND OTHER PUBLIC WORKS.

POST-OFFICE.

NOVA-SCOTIA is well provided with *postal* facilities; and the post-office department being subject to the control of the provincial Legislature, these facilities are rapidly enlarged and extended as the wants of the country increase. A daily postal communication is kept up between Halifax and Yarmouth to the westward, Pictou to the eastward, and the principal intermediate places. Mails are received and despatched, at least three times per week, at all the most important villages and settlements in the province; and there is no place which can properly be called a "settlement" which does not enjoy that advantage once, or twice, per week. Besides the overland mails which run between Nova-Scotia and the neighbouring provinces of New Brunswick and Canada and the United States, there is a direct communication with the latter country every fortnight, by means of the Cunard steamers; and a more frequent regular communication is maintained, between various ports in Nova-Scotia and in the United States by several lines of steamers and sailing packets. The mail communication with England direct is carried on through the Cunard steamers which, in their fortnightly trips each way between Boston and Liverpool, touch at Halifax. By branch steam packets belonging to the same company a fortnightly mail communication is kept up between Halifax and Newfoundland, and Halifax and Bermuda, from which latter place it is extended to the West Indies.

According to the report of the Post-master General for the year ending 5th October, 1856, there were at the close of that year, in the province, 66 permanently established post-offices, 277 branch offices, or "way offices," and 3,879 miles of mail communication. There is now an established uniform rate of postage throughout the North American continental provinces ; and threepence, Halifax currency—the lowest rate—carries a letter of half an ounce in weight to any part of those provinces. Newspapers are transmitted free of postage.

COMMON ROADS.

The roads of Nova-Scotia compare favourably with those in the Northern States. The country being yet new, these means of communication are being rapidly extended every year. The cost of opening new roads is defrayed in part by legislative grant applied directly to that purpose, and in part by sums granted out of the treasury of the county in, or through, which the road is made. The County Treasuries contain the proceeds of a few inconsiderable taxes levied and appropriated by the Court of

NOVA-SCOTIA.

Sessions. To these means of opening up new lines of road may also be added the voluntary aid of the people immediately interested, which is often contributed cheerfully and with highly profitable results to themselves. Roads are kept in repair by means of legislative grants, and by a tax, payable in labour, but which may be commuted for money, levied upon all able-bodied men between the ages of 16 and 60, according to a scale in which their ages, means, and some other circumstances are taken into consideration. Small county appropriations are sometimes made for the same purpose. The annual Legislative grant to the road and bridge service, has gradually increased in proportion to the increase in the revenues of the province. In 1856, it amounted to 45,000l. Toll-bars are unknown on the roads of Nova-Scotia; and there are but two or three bridges in the province, built by companies, at which tolls are taken from passengers.

RAILROADS.

Nova-Scotia has somewhat extensive works of this kind now in course of construction. It was determined by the Legislature, during the session of 1854, to commence, as a provincial work, certain lines of railway, to connect Halifax with the interior of the province. Provision has been made for procuring the necessary funds by the sale of provincial debentures in the English money market; and the works were actually commenced in May, 1854. The lines, so far as already decided upon by the Board of Railway Commissioners, consist of a trunk-line to extend from Halifax to Truro, a distance of about sixty miles, together with two branches; one extending westwardly to Windsor, about thirty-three miles in length; the other, eastwardly to Pictou, a distance from the trunk,

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at Truro, of rather more than forty miles. But it is also expected that the trunk-line will be extended to the New Brunswick frontier — upwards of sixty miles beyond Truro—as soon as a similar work, to be constructed by that province, shall be brought up to the frontier; and New Brunswick is already fully committed and actually engaged upon the work which is to cause this extension of the Nova-Scotian lines.

Of the lines referred to above, there were, on the 1st of June, 1857, but ninety-two miles located and in course of construction or finished. This comprised a part of the trunk extending from Halifax to Truro, and the whole of the Windsor branch. Of this, twenty-two and a half miles only, upon the trunk, was completed and in operation.

CANALS.

There is not a finished canal in Nova-Scotia; but there are two now in course of construction. As early as 1825, operations were commenced for connecting the harbour of Halifax with Cobequid Bay, by means of the waters of the Shubenacadie River, the Dartmouth Lakes, and the "Shubenacadie Canal." These works were continued for some time, and at a pretty large expenditure of money, but were at length abandoned whilst still incomplete. A new company was incorporated, by Act of the Provincial Parliament, in 1853, to resume and complete the works thus commenced, with some modifications of the original plan. Early in the following year, operations upon the "Shubenacadie Canal" were recommenced. When completed, locomotion is to be aided upon this canal by means of a series of locks and two inclined planes, one of 1,320 feet, and the other of 500 feet in length, to be worked upon by means of water-power machinery. There

are to be eight locks only, each of which will be in length 67 feet; in breadth, 17 feet; and to have 5 feet depth of water. They are intended to afford locomotion to boats of 100 tons burthen.

The "St. Peter's Canal" was commenced in the autumn of 1854, as a provincial work. It is to connect the waters of St. Peter's Bay, on the Atlantic coast of the island of Cape Breton, with those of the Bras d'Or Lake ; and, when completed, will divide Cape Breton into two islands. This will be a work inconsiderable as to its magnitude, but of great importance to the interests of the island of Cape Breton. It will open into the great Bras d'Or a safe and easy entrance, and one by which access to it will be sought much more frequently than through the natural outlet of that lake. The advantages expected to accrue from the completion of the work may be seen by a glance at a map of the country. The length of St. Peter's Canal will be only 2,300 feet; its breadth at water line, 50 feet; depth of water, 13 feet. It is intended to have one lock at the St. Peter's Bay termination, and a guard-gate at the Bras d'Or. The length of the lock will be 120 feet ; width of gates, 22 feet. These dimensions are expected to be sufficient to accommodate any coasting or fishing vessel frequenting the neighbouring waters.

ELECTRIC TELEGRAPHS.

Every county in Nova-Scotia is connected with the provincial metropolis, and with the neighbouring provinces, and the United States, by lines of electric telegraph. Those within Nova-Scotia are owned and worked by the "Nova-Scotia Electric Telegraph Company." They extend over a distance of 1,124 miles; and there are thirty-six telegraph offices in the province. The tolls for messages upon these lines are low, being at the rate of sixpence sterling per ten words, for distances not exceeding sixty miles, with proportionable increase for additional words and for greater distances. During the summer of 1856, the "New York, Newfoundland, and London Telegraph Company," succeeded in submerging a cable, by which the Nova-Scotian lines were put in connection with St. St. John's, in Newfoundland. In the Provincial Legislature, during the session of 1857, a bill was passed giving to the "Great Atlantic Telegraph Company" the exclusive right, for twenty-five years, to land upon the coast of Nova-Scotia a submarine cable, connecting that province with the British Islands.

CONCLUSION.

IT is hoped that the foregoing remarks will be found sufficient to give a correct general knowledge of the resources of Nova-Scotia, and of the advantages which it offers to intending emigrants. When compared with a view to such advantages with the western states, Canada, New Brunswick, or any of the British Australasian provinces, there will be certainly no contrast presented unfavourable to Nova-Scotia. The latter country does not afford the same wide field for the settlement of emigrants which any of the others do; although, as we have already seen, it contains large tracts of good unoccupied land. It cannot be said that, as a wheat-growing country, it is equal to Western Canada or the north-western States, which probably rank as the first in the world in that respect. As a timber-producing country, it is inferior to New Brunswick, Canada, or the British American possessions on the coast of the Pacific Ocean. On the other hand, Nova-Scotia, considered with regard to its fisheries, or its mineral

NOVA-SCOTIA.

wealth, is undoubtedly superior to any of them. It is nearer, and more easy of access from Europe than any of those other new countries to which the tide of European emigration has hitherto principally directed its course. It is more conveniently situated for the purposes of trade, as a glance at the map of the world will show. Lands are generally cheaper there than in the neighbouring provinces or the United States. The climate of Nova-Scotia agrees much better with European constitutions than that of the celebrated wheat-growing sections of Canada and the United States. Leaving out of view all consideration of fisheries and mineral resources, doubtless each of the great emigration-fields of the world at the present day is, in some particulars, superior to Nova-Scotia ; but when everything is taken into consideration, it is, at the very least, extremely doubtful if Nova-Scotia is inferior to any one of them.

The author will not pretend to enter upon the subject, usually occupying so large a portion of works of this nature, of "Advice to Emigrants." In the case of a country so easy of access from Europe as Nova-Scotia is, it can only be necessary to give the intending emigrant every possible information concerning the character of the country itself: an ordinary amount of practical good sense will direct him how to get there, and to dispose of himself on his arrival.

Much might be said, however, upon another point, which comes very naturally under notice in such a work as this; that is, the great advantages, as a place of settlement, which Nova-Scotia, in common with the other provinces of British North America, holds out to persons of a wealthier class than is in the habit of emigrating, at least to that part of the world; persons living upon incomes scarcely sufficient to provide for all their necessities in most countries of the Old World, but which would be sufficient to maintain them with ease, and in comparative affluence, in British North America. To descant upon this branch of the subject with the fullness which it deserves, would swell this small work considerably beyond its limits as originally contemplated ; and it will, therefore, not be attempted at all.

THE END.

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IN

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BY THE REV. ROBERT WILLIS, F.R.S.,

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