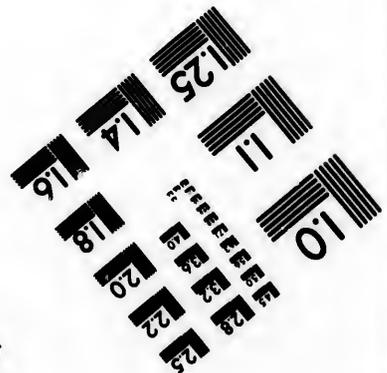
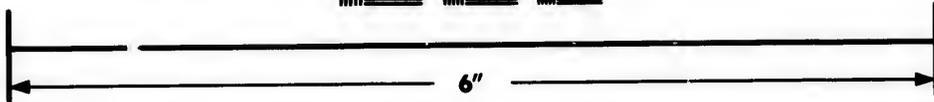
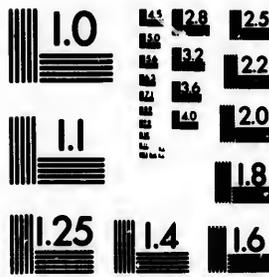


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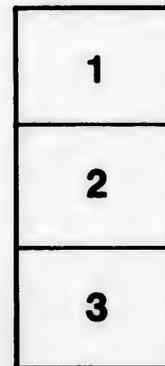
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A DESCRIPTION  
OF THE  
**Forest and Ornamental Trees**

OF  
**NEW BRUNSWICK,**

BY  
**D. R. MUNRO.**

——— " Not a tree,  
A plant, a leaf, a blossom, but contains  
A folio volume. We may read, and read,  
And read again, and still find something new  
Something to please, and something to instruct."  
*The Village Curate.*

**SAINT JOHN, N. B.:**  
CHUBB AND COMPANY, PRINTERS, PRINCE WILLIAM STREET.  
1862.

A DESCRIPTION

OF THE

General and Ornamental Trees

NEW BELL-WATER

D. N. M. 1803

Printed and Sold by J. B. BELL, at the Bell and Water, No. 10, St. Paul's Church-yard, London.

JOHN BELL AND COMPANY, THE PRESS, BRIDGE-WATER, LONDON.  
1803.

*Wm L & D. Hume*  
A DESCRIPTION

*With the Compliments of*

OF THE

*D. of Munro*

Forest and Ornamental Trees

OF

NEW BRUNSWICK,

BY

**D. R. MUNRO.**

---

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SAINT JOHN, N. B.:

CHUBB AND COMPANY, PRINTERS, PRINCE WILLIAM STREET.  
1862.

*Handwritten notes and signatures at the top of the page, including a signature that appears to read "John Tucker" and other illegible scribbles.*

DEDICATED TO

JOHN TUCKER, ESQUIRE,

LLOYDS' SURVEYOR, AT SAINT JOHN, N. B.,

As a mark of respect and esteem,

BY

**THE AUTHOR.**

*Faint, illegible text at the bottom of the page, possibly a printer's mark or a date.*

## INTRODUCTION.

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IN preparing the following description of the FOREST and ORNAMENTAL TREES of New Brunswick, the principal object of the writer has been to present, in as brief a manner as possible, an outline of the general utility of the various woods, and their adaptability for mechanical and other purposes. The time at the disposal of the writer, after the foliage had been collected and arranged, was so limited as to preclude the possibility of any lengthened description. However, it has been the aim of the writer, while forced to adopt brevity as a necessity, to make the sketch as lucid and comprehensive as possible.

The public, the tribunal before which this collection of foliage, and the description which accompanies it, will be judged, may be induced to inquire into the motives which influenced the writer in undertaking its preparation. The explanation can be given in few words; and, it is hoped that when given, it may not be considered exceptionable. At the Provincial Exhibition, held at Sussex Vale, in the Province of New Brunswick, during the month of September, 1861, the writer had on exhibition, specimens of upwards of fifty kinds of woods, with the foliage of each, which were deemed by the Commissioners so far meritorious as to be retained, along with other samples of woods in their rude state, for the World's Exhibition, to be held in London in May, 1862. Observing that there was, among the collections exhibited at Sussex Vale, no detailed description of the different woods, which would give an idea of the uses to which each kind could be applied, the writer determined to make an effort to supply the omission. The result of that effort is now before the reader. Whatever may be its merits or demerits, the writer is fully satisfied that the description may be relied upon as thoroughly accurate.

## TAMARAC.

*Larix Americana.*

Among the many trees found in the forest of New Brunswick, there are none more valuable to the Ship builder than the Tamarac, otherwise known as Larch, Hackmatac, or Juniper.

Trees of this description are very numerous in all parts of the Province, and attain to an altitude of, and in many cases exceed, eighty feet, while it is from eight to eleven feet in circumference at the base.

At the present time there can be seen an immense number of very fine Tamarac trees stored by Messrs. Gass, Stewart & Co., in their extensive ship-building yard at this port; which square upwards of two feet five inches, with sap wood hewed off; many of them exceed fifty-six feet in length, and square two feet at the extreme end.

The wood of the Tamarac is of a dark cast, and is generally considered to be durable, easy to work, and soon seasoned. It is used in the foundations of wharves, buildings and other structures; it is also very valuable for Railway sleepers, water pipes or drains, planking for ships, treenail fastening, keelsons, beams, knees, hooks, bitts, stem and stern posts, aprons, knightheads, hawse timbers, foothooks, top timbers, also for rising floors in the fore and after ends of ships, for which purpose the root of this tree is highly prized, it being easily obtained of an acute or obtuse angle. It may be well to remark that these roots meet with a ready sale in the United States and other markets, and they should not fail to attract the attention of the naval authorities in England, as they form, when properly converted, any desired curve, for ships' bodies or bilges.

Tamarac trees of the largest size are not now so plentiful as in former years, except inland, where the forests are most dense; thus the labor and expense in their transit to market are very great, and largely enhance their value. It may be well to remark here, that many of our best ships have been constructed of Tamarac timber — among the number may be mentioned, with no small

degree of pride, the fast sailing ship "Marco Polo," and others of later date and nearly equal renown. Indeed, ships built of this material, and noted for their beauty, buoyancy, and fast sailing qualities, are to be found in all the principal lines of Australian and other oceanic clippers. Many, if not all, of these ships have been built according to the established rules laid down by the Committee of Lloyds' Register of British and Foreign Shipping, and have deservedly attained a high character.

Tamarac, when devoid of sap and seasoned, has been said to last in ships for a longer period than the seven years at present assigned to it by Lloyd's. It is extremely strong and elastic, and being devoid of acid, tends to preserve the iron or metal fastening from oxydation, which is more than can be said of even English, African, or other Oaks.

The Tamarac tree grows on a variety of soils, but more particularly in low swamps, as well as on the most rocky and sterile ground, and as luxuriantly as other trees of the forest in more favored localities.

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## BIRCH.

### *Betula.*

The next descriptions of wood in general use, especially for ship building purposes, are the Birches, which embrace four kinds, the black, yellow, grey, and white.

**BLACK BIRCH.** — This tree is produced in unlimited numbers, and grows to a height of fifty and sixty feet, and upwards of four feet in diameter. The wood is prepared into large baulks, and shipped to the markets of Great Britain and elsewhere. In ships of the seven years and lower classes, it is very generally used for planking, midship floors, and foothooks. When confined under water, it is considered to be unsurpassed by any other material of a like nature, for ship building purposes. In planking ships of the seven years class, its height is properly restricted to the light line; in vessels of the six years class, it is allowed for first foothooks amidships, not exceeding one half the length of the keel; and in vessels of the four years class its use is unrestricted, except for the main pieces of rudder and windlass; when used for these purposes, it is confined to vessels under 300 tons register. This wood is likewise generally used by boat-builders, cabinet-makers, carriage

builders, and for other mechanical purposes ; and for fuel it is very extensively used. The land whereon the Black Birch is found, is generally of a good description, and much esteemed for agricultural purposes.

**YELLOW BIRCH** — Is very plentiful in various parts of the Province — indeed, as much so as the Black Birch. It grows to a height of sixty and sometimes seventy feet, and about four feet in diameter. This wood is close in grain, and as much used by ship-builders, carriage-makers, and others, as the Black Birch ; and like it too, is prepared and shipped in baulks, for sale in the various European timber markets, and extensively used by the people in the Province for fuel.

**WHITE BIRCH.** — This tree is to be found in abundance in every section of the Province. It usually attains an altitude of sixty feet, and two feet in diameter. The wood is generally used for fuel. The Indians, or aborigines of the Province, use it for making baskets, tubs, and pails, while they make use of the bark for sheathing the shells of their canoes, and, in many instances, for covering their camps, or the rude tenements in which they live. From the White and Grey Birch the best charcoal is principally made.

**GREY BIRCH.** — The Grey Birch, a wood generally used for the planking of coasting and inland vessels, and for fuel, is to be found in large quantities in various sections of the Province, but more particularly in the vicinity of the St. John, — the largest river in the Province, navigable for vessels of light draught a distance of 140 miles from its mouth, and for beauty of scenery allowed to be unsurpassed by any other on the Continent of America. Its growth, as regards both height and diameter, in many cases exceeds that of the White Birch. The bark of the Grey Birch, like that of the White, is much used in the manufacture of canoes. It may be well to observe here, that these canoes are used by the Indians in navigating the rivers and shallow streams ; they are long, narrow, light, and fragile in appearance, extremely buoyant, and, when guided by a skillful hand, capable of being propelled with great rapidity. One of these fragile barks was presented to His Royal Highness the Prince of Wales, when visiting the sister Province in August, 1860.

## SPRUCE.

*Abies.*

There are two kinds of Spruce trees, differing materially in their properties, the Black and the White.

**BLACK SPRUCE.** — Throughout every section of the Province Black Spruce abounds in great profusion, in many places to such an extent as to form immense forests. It attains to a height of ninety, and very often of one hundred feet, and eleven and twelve feet in circumference at the base. The wood has been pronounced by many who have tried it, to be of a tough nature, and, when seasoned, very lasting. It is considered by ship-builders to be deserving of a higher classification than Lloyds at present assign it. Ships built of the Black Spruce, *twenty-five* and even *thirty* years ago, are known to be now running, have had but little repairs, carry heavy cargoes, and do their work well. That species of the Black Spruce, termed, from its extraordinary density, bull spruce, which grows in the portion of the Province laved by the Bay of Fundy, is held in higher esteem than that which grows inland. This extreme density and toughness is supposed to be produced by the saturation which the fibre receives from the thick vapors or fogs which at times envelope the bay shore in a hazy gloom.

It is singular that the Spruce tree, although of a softer nature than the Birches, should retain its beautiful dark green foliage throughout the whole season, while the foliage of the Birches and Maples, and others termed hardwoods, fade and decay as the autumnal season advances, and maintain a bleak appearance until the return of spring, when the leaves again bud forth in all their beauty.

The Black Spruce may, in not a few instances, be found growing in all its splendor upon the most rocky and towering heights, the roots twining and twisting over rock and into crevice, without a particle of earth for a covering. The wood of this tree, like the White Spruce, which shall be noticed in order, is used for masts and spars, and manufactured into deals, boards, scantling, battens, shingles and laths. The transportation of these manufactured articles to Great Britain and elsewhere, gives employment to a vast amount of tonnage, foreign vessels having received for some years past, nearly 40 per cent. of the carrying trade.

**WHITE SPRUCE.** — The production of this tree is unlimited, and grows principally in soft soil, which permits the roots to expand to a prodigious extent; and owing to the elasticity and toughness of the wood, it is highly esteemed. The trees attain a height of eighty feet and upwards, and from nine to eleven feet in circumference at the base. This species of Spruce, like that just noticed, bears a cone about two inches long, and three-fourths of an inch in diameter, and retains its green foliage throughout the whole year.

The White Spruce is very useful to the Indian on account of the tar or resin which it contains. This substance exudes from the knots, and "blazes" made in the tree, and is used for more effectually securing the seams of canoes and various vessels. Fangs, with which the canoes are secured, are also procured from the roots of the White Spruce.

Spars, piles, deals, boards, battens, laths, shingles, &c., are made from this tree, and, in conjunction with similar articles manufactured from the Black Spruce, form a very large item in the annual exports of the Province.

## FIR.

*Abies.*

The Fir tree abounds in all parts of the Province, attains a height of forty-five and fifty feet, and from eighteen inches to two feet in diameter at the base. The foliage is heavier than that of the Spruce tree, while the cone it bears is somewhat larger, and affords food for the Squirrel, &c., in the winter season. The grain of the wood is neither so close nor so hard in its nature as that of the Spruce, is more resinous, but when free from sap is considered to be durable. This wood, like the Spruce, is cut up into deals, boards, battens, &c., for exportation. It is much used in wharf building. When manufactured into tubs, pails, butter firkins, and churns, it is greatly esteemed by farmers' wives, from the fact that the more frequently these utensils are used, the whiter the wood becomes.

It is from the Fir tree, sometimes designated "Silver Fir," that the "Canada Balsam," so highly esteemed throughout the Province and elsewhere, for its great healing properties, is procured.

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## ROCK MAPLE.

*Acer Saccharinum.*

There are four kinds of Maple. The soil in which they grow is of a rich loamy nature, and very justly is more highly valued on account of its agricultural capabilities, than land covered with wood of an inferior description. The species now more particularly under notice, is known as the "Rock Maple." It grows to a height of seventy and eighty feet, and the trunk is generally from three to four feet in diameter. The maple sugar which this tree produces is a great source of profit to the farmer; indeed many make the procuring of the sap and the preparation of the sugar a branch of business. It has been estimated that the quantity of maple sugar annually made in New Brunswick amounts to about 400,000 lbs. weight. The average value of the sugar may be set down at nine cents per pound. The sap is procured by "tapping" the trees in the month of March. After the sap is procured, it is made to undergo a process of boiling, and by this means the sugar is prepared. Wherever sugar is made in any considerable quantity, the trees are preserved for this purpose.

Rock Maple is much used by cabinet-makers, coach-builders, &c., for various purposes, and, in many instances, by mill-wrights for cogs of wheels and other articles, in which the material is exposed to friction. It is, in some instances, used by ship-builders inland, for bottom planking, being, when confined under water, considered equally as lasting as birch. This wood likewise furnishes the best fuel, when prepared for this purpose, and of course commands a higher price than any other wood.

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## BIRD-EYE, CURLY, AND WHITE MAPLE.

*Acer Saccharinum.*

Bird-eye, Curly, and White Maples, like Rock Maple, grow in unlimited numbers. The species called "Bird-eye" is much esteemed by cabinet-makers as a superior wood for various articles of furniture; it presents, when made up, a very handsome appearance.

The "Curly Maple" is likewise much sought after, for articles of furniture. The wood is susceptible of a very fine polish, and when made up, the grain is much admired.

“White Maple” is much used for the planking of vessels, agricultural implements, and many other purposes. The wood is strong and dense, and is much esteemed for fuel.

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## O A K .

*Quercus.*

There are three species of Oak — the white, red, and grey. They are all abundant in the interior of the Province, and usually attain to an altitude of seventy feet and upwards, while the diameter is from two feet six inches to three feet. All of these species of oak are considered elastic, and are much used by carriage-builders and mill-wrights. Ship-builders also use them for paul bits, treenail fastenings, main pieces of rudder, windlass, aprons, and stem and stern posts. Agricultural Implements are very frequently made from all these descriptions of Oak. Staves also are made from them for exportation, and the bark is extensively used in tanning. The wood, however, is not so dense, nor is it held in so much esteem as the African Oak.

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## P I N E .

*Pinus.*

There are three species of Pines, known as the Red, White, and Prince's.

**WHITE PINE.** — The White Pine is unlimited in quantity, and when manufactured, forms a very large item of the annual exports of the Province. It is to be found of an altitude of from one hundred to one hundred and thirty feet, though in some cases it has been found one hundred and fifty feet, and from twelve to fifteen feet in circumference at the base. It is considered to be the finest, most valuable, and most majestic tree of all which compose the forests of the Province. The foliage is of a beautiful green, and contributes much to the natural grandeur of the tree. White Pine is extensively used in the manufacture of doors, sashes, blinds, flooring, scantling, clapboards, trimming, laths, shingles, palings, and indeed every appliance that wood can be put to in house-building. It is likewise manufactured into sugar box shooks,

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an immense quantity being annually shipped to the West Indian markets. In ship-building it is used for water-ways in vessels of the seven years class, and for finishing the interior of ships' cabins, and is found to be very suitable for masts, bowsprits, &c. It is likewise converted into baulks, deals and scantling for export to Great Britain and elsewhere. The baulks in many cases square over three and four feet. This wood is of a light color, is easily worked, makes a good appearance, and when devoid of sap and properly seasoned, will last for a long time.

**RED PINE.** — The Red Pine grows to a height of seventy and eighty feet, and two feet in diameter. It is much impregnated with resinous matter, grows exceedingly straight, and is quite free from limbs until near the extreme end. The grain of this wood is coarse, but when devoid of sap, (of which this tree bears a large proportion,) is said to be durable. It is used pretty generally for the planking of ships, and owing to its elasticity, the ship-builder holds it in much esteem for hooding ends. Pumps for coasting and inland vessels are invariably made from this wood; and for abutments, piles, and planking for wharves, it is very much in repute.

**PRINCE'S PINE.** — This tree is very numerous in various parts of the Province. In height and diameter it somewhat exceeds the Red Pine. The fibre bears a striking resemblance to Southern Pitch Pine, which is indigenous to milder latitudes. The grain appears to be very resinous. The Prince's Pines are generally found in low land, and present an exceedingly picturesque appearance. The timber prepared from the tree under notice, is devoid of knots, and makes rather clean work.

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## E L M .

### *Ulmus.*

There are two species of Elm — the Red and White. They are very numerous, and to be found in various localities throughout the Province. In many cases the white exceeds ninety feet in height, and attains a circumference of twelve feet; while the red, although lofty, is scarcely to be found of so large proportions. The appearance of both species of the Elm tree is very imposing, the foliage being very luxuriant, and the trunk bearing the same proportions from the base to within a few feet of the summit.

They are to be found on meadow or intervale land, on the margin of rivers, and in swampy marshes, where the soil is in the least degree fertile. The wood is generally used in the manufacture of Agricultural Implements, for ships' blocks, keel pieces, planking and abutments for mills and dams, and lasts well, either when immersed in water, or placed in exposed positions. It is not, however, held in such esteem as Tamarac or Birch for keel pieces or bottom planking in ships.

## BUTTERNUT OR WALNUT.

*Juglans Cinerea.*

Butternut, sometimes known as Walnut, and not unfrequently Oilnut, is very numerous. This tree grows very straight, and generally reaches a height of from seventy to eighty feet, and over two feet in diameter at the base. It bears a very palatable nut, of an oblong shape, which is ripe in autumn, and then generally abundant. These nuts, in former times, were very much used by the aborigines for the oil which they contain. The wood of the Butternut tree is very much used by cabinet-makers in the manufacture of the more superior articles of furniture, such as hall chairs, ward-robos, book-cases, toilet and other tables. This wood presents a handsome appearance when manufactured, and being very easily worked, its value is greatly enhanced.

## BEECH.

*Fagus Americana.*

There are three species of Beech—the White, Red, and Pasture Beech.

**WHITE BEECH.**—The White Beech grows to an altitude of sixty, and sometimes seventy feet. It is very plentiful, and is to be found in various parts of the Province, and particularly in fertile valleys, or where a deep alluvial soil exists. In some places these trees cover acres of land, unmixed with other wood. The wood of this tree is used by carriage-makers, and also converted into planking for coasting and inland vessels. Treenail fastening is also made from it, for which purpose it is considered by many

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equal to bolts in the flat of ships' bottoms. This wood is close in grain, and somewhat durable, either in exposed situations or otherwise. It will last for a very long period when immersed in salt water or confined below the light line. Ships planked with this material under the flat have been known to run for years before requiring a renewal of planking on account of defect.

**PASTURE BEECH.** — The Pasture Beech, generally termed sapling or common Beech, grows to a height of twenty and thirty feet, and is seldom, if ever, found over fifteen inches in diameter. The fibre is dense, and the outside or sap is considered by those who have tested it, to be the toughest, and remains sound equally as long as the heart, which is of reddish cast, and about an inch in diameter.

**RED BEECH.** — The Red Beech attains a height of sixty feet, and upwards of two feet in diameter. It is highly prized for the nut it bears, which in winter supplies food for the farmers' hogs and other animals. Many people allow their hogs to roam at large in the forest, to grow and fatten upon the nut, which they do very rapidly. The pork, however, is not held in much repute, being soft and oily. The wood of the Red Beech is used by carriage-builders, and also manufactured into implements of agriculture, treenail fastening, and staves for exportation. The Beech under notice presents a very beautiful and glossy hue when made into articles of furniture and polished. All of the Beeches mentioned are very much used for fuel.

## WHITE CEDAR.

*Juniperus Americana.*

The White Cedar is to be found in vast quantities throughout all the forests of New Brunswick. It is a very beautiful tree, and looks well in forest or on ornamental grounds. It is found from forty to fifty feet in height, and nearly two feet in diameter; when exceeding these dimensions the heart is occasionally discovered to be somewhat defective. White Cedar is generally found in groves unmixed with other trees, covering perhaps twenty to forty, and even eighty acres in extent. The wood is extremely light, and next in specific gravity to White Pine. It is remarkable for its durability, when kept either wet or dry, and is said to retain its

fastenings in a better state, and for a much longer time, than any other tree in the forest, and to resist the attack of insects. It splits easily, and is very valuable for fencing poles, posts, pickets, railway sleepers, planking of boats, and is very generally used by the Indians, in manufacturing pails, tubs and churns. Shingles are made from it, and shipped in very large quantities to the West Indian and other markets. The Committee of Lloyds' Register allow it in many parts of the higher class colonial ships. Cedar most abounds in swamps, and although the soil in which it grows is damp and cold, yet it is alluvial, and valued for the large crops it produces.

## AMERICAN LIME TREE.

*Tilia Americana.*

The American Lime tree, generally known as the Bass-wood tree, grows to a large size in New Brunswick forests, in many instances exceeding eighty feet in height, and of a proportionate diameter. It presents a very fine appearance in the forest, having, with its loftiness, perfect symmetry, but it is not much valued as timber, being rather deficient in strength, and it is not extensively used. The wood makes a very smooth and clean finish, and owing to this and its elasticity, is mostly used by carriage-makers for frame-work, as it is not so liable to shrink as other descriptions of wood; ship-builders use it for ships' rails in many cases. It grows in large quantities in the Northern parts of the Province.

## A S H.

*Fraxinus.*

There are three kinds of Ash — the White, Black, and Yellow or Splint Ash.

**WHITE ASH.** — This tree reaches a height of fifty and sixty feet, and a diameter of nearly two feet. It does not generally grow in groves, but is very much scattered and intermixed with other trees. The wood is very elastic, much more so than any other wood found in the forest. It is extensively used by carriage-makers for shafts and poles, runners of sleds and sleighs; and by boat-builders for planking. Capstan-bars, oars, staves, scythe and

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axe handles are made of it, and indeed all the implements of agriculture in which wood is deemed necessary.

The Ash tree bears a beautiful foliage, and makes a very fine ornamental tree.

**BLACK ASH.** — The Black Ash grows to a size nearly similar to that of the White Ash, but the wood is not so dense, nor yet so much esteemed for general purposes. Among the Indians, however, it is very frequently used in the manufacture of baskets, &c. It is found in low, flat land, and on the banks of streams. Wherever this description of tree is found, the land is generally alluvial.

**YELLOW ASH.** — The Yellow or Splint Ash is unlimited in quantity; but seldom, if ever, exceeds twenty feet in height. It is found in swampy ground, of a character not much esteemed for agricultural purposes. The wood is chiefly used by coopers.

## HEMLOCK.

*Abies.*

Of this there are two descriptions — the Black and White Hemlock. These trees reach a height of seventy and eighty feet, are found on the margin of rivers, lakes and swamps. In many cases it is found in groves also, in company with Maples and other hardwoods. The wood is not esteemed for mechanical purposes, except in bridge and wharf building, and for piles, abutments, and ships' ground ways. It is very generally cut up into boards and lath-wood, the latter being exported in large quantities to Great Britain. The wood is considered very durable under water — in wharves it has been known to remain in a good state of preservation for thirty years and upwards. Lloyd's Committee admit it in ships of the four years class for floors, foothooks, top-timbers, and inside and outside planking.

The bark of the Hemlock tree is greatly used by tanners, and takes the place of Oak bark. The bark is stripped off the tree in long slabs, and answers as a substitute for boards in covering the camps or hovels used by the lumbermen when engaged in the forests in lumbering pursuits.

Wherever the Hemlock and lofty Pine exist, the soil, being cold and wet, is not held in much esteem for agricultural purposes.

## APPLE AND PLUM TREE, AND HIGH-BUSH CRANBERRY.

*Pyrus, Prunus, and Oxycoccus.*

The Apple and Plum tree, and High-bush Cranberry, are, to a certain extent, abundant in various parts of the Province, producing fruit, in size and flavor, equal to that imported from more genial climes.

## WILD CHERRY.

*Cerasus Americana.*

Wild Cherry tree is found of a height of twenty-five feet. It is very abundant; but, as a wood, is not used for general purposes. The fruit is regarded as palatable.

## CHOKO CHERRY.

*Prunus.*

Choko Cherry is found on the margin of streams, and in low, flat land, of a height of twenty feet. The fruit which this tree produces is a pulp enclosing a kernel, and is mostly used for cordials. The juice, which is obtained from the fruit by soaking in spirits, is very astringent, and makes excellent bitters.

## BILBERRY.

*Vaccinum.*

This tree, if it may be so termed, grows to a height of thirty feet and upwards. It is found on the banks of streams and rivers, where the land is any wise of a good description. It is not very abundant, nor is it used for any general manufacturing purpose, though the wood is somewhat dense and very durable.

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## POPLAR.

*Populus.*

There are three specimens of Poplar tree — the Balsam Poplar, (or Balm of Gilead,) the American Aspen, and the Common Poplar. Each of the three kinds of this description of tree grows to a large size. The two former are not over plentiful, and are not much prized, except for ornamental purposes. The Common Poplar is the largest, and is found of a height of fifty and sixty feet, and two feet in diameter. The wood of all of them is of a whitish color, and is neither close in grain, nor yet very lasting. That of the latter is much prized for saw gates in water-power saw mills; it is also cut up into shingles, and is frequently used by carriage-makers, and by the Indians in the manufacture of tubs, &c.

## ROWAN TREE.

*Sorbus.*

The Rowan tree, or Shittim Wood, by some termed Mountain Ash, is very plentiful, and when it has attained its full growth, seldom exceeds 35 feet in height. In the month of December these trees present a very picturesque appearance, being then entirely deprived of foliage by the autumnal frosts, the bright scarlet berries which they bear, stand out in bold relief to their otherwise denuded appearance.

## DOGWOOD.

*Coruus Florida.*

Dogwood is abundant. It attains to a height of thirty feet: the wood is not used for any general purpose, but as the tree bears a very heavy foliage, it answers well for ornamental purposes.

## ALDER AND ELDER.

*Betula and Sambucus.*

Alder and Elder are very plentiful in all parts of the Province, and are found principally upon the banks of streams, and on the

borders of swamps. They generally grow to a height of from six to ten feet, and are well calculated for making good hedges. It is said that the wood of the former makes the best quality of charcoal for gunpowder.

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## HAZEL.

*Corylus.*

Hazel is a small shrub, found in rich, loamy land, and on the margin of streams and lakes where the soil is fertile. It produces a very palatable nut.

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## WILLOW.

*Salix.*

There are three descriptions of Willows — the Swamp, Black, and Basket Willow. The two former grow to a large size, and are very abundant. The wood is not generally used for any mechanical purpose. They are, however, frequently used for ornamenting grounds.

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## LILAC.

*Syringa.*

The Lilac may be considered a shrub. It grows to a height of eight, and rarely over twelve feet, and has a beautiful foliage, which it retains until the approach of the autumnal season. It blooms at a much earlier period in the season than any other garden flower, and emits a delightful fragrance. The Lilac grows thick, and when properly attended to, forms a very nice hedge.

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## HAWTHORN.

*Crataegus.*

The Hawthorn grows to about the same height as the Lilac, and presents a very fine appearance in autumn, being then completely loaded with berries. The hawthorn is used principally for orna-

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mental purposes ; when properly trimmed at suitable seasons, and otherwise attended to, it makes an excellent hedge.

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## CHESTNUT.

*Castanea Vesca.*

The Chestnut, although not a native tree, is found pretty numerous in various localities throughout the Provinces, and is much esteemed for ornamental purposes. In some parts of North America the wood of the Chestnut tree is used for, and makes excellent fencing, and timber for other purposes. Chestnut trees grow very rapidly in light soil, and, if cut in summer, will last for a very long time. The *Country Gentleman* says that many fail in raising Chestnut trees from seed, because they allow the shell of the nut to become dry. Take fresh chestnuts in autumn and mix them with slightly moist leaf mould, and leave them exposed, out of the reach of mice, all winter. They are best if in contact with the moist ground. Then, as soon as they begin to sprout in the spring, plant them two inches deep. To cultivate the Chestnut and Locust, of which there are two kinds, viz : the Yellow, and Honey Locust, plant them in ridges for a few seasons, with corn, beans, potatoes or carrots. As they are rather difficult to transplant, this mode secures vigorous young plants at once.

The Horse Chestnut is admired for the beauty of its wide-spreading branches, and the flower it bears. Its growth is limited in this Province.

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## HORNBEAM.

*Carpinus.*

The Hornbeam tree, by some called Iron-wood, is found in large quantities in various parts of the Province where the soil is deep and rich. It reaches a height of thirty feet. The wood is very dense, tough and elastic. It is much esteemed by the lumberer for axe and other handles ; is frequently used in the manufacture of agricultural implements ; and also by mill-wrights.

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## SUMAC.

*Rhus.*

Sumac is very abundant, and is to be found of a height of fifteen feet. It bears an admirable foliage, with a cone of maroon color,

and of a shape and size similar to that of an ordinary sized carrot. Dye stuff is frequently extracted from this cone, which, after undergoing a certain amount of distillation, assumes a very black color. It is therefore much used in the coloring and dyeing of fabrics, &c.

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### MOOSE WOOD.

There are two species of Moose Wood — the Round-leaf, and Notch-leaf Moose Wood. It is found of a height approaching to ten and fifteen feet, and of a corresponding diameter. As a wood it is not applied to any useful purpose.

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### CRAB APPLE.

*Pyrus.*

The Crab Apple tree, which produces an abundance of small apples much prized by housewives for preserving, is rather diminutive, rarely exceeding fifteen feet in height.

In closing this general description of the forest and other trees of New Brunswick, it should be remarked that there are several minor trees, if they may properly be so termed, many of them assimilating with the various specimens mentioned, though distinct in name, the soil and place of growth being the only distinction. All of them, however, are more or less valuable to the mechanic, the farmer, and native Indian.

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In concluding we cannot do better than quote Mr. McGregor's eloquent description of the magnificent appearance of the British North American forests:—

“ In Europe, in Asia, in Africa, and even in South America, the primeval trees, how much soever their magnitude may arrest attention, do not grow in the promiscuous style that prevails in the general character of the North American woods. Many varieties

of the pine intermingled with birch, maple, beech, oak, and numerous other tribes, branch luxuriantly over the banks of lakes and rivers — extend in stately grandeur along the plains, and stretch proudly up to the very summits of the mountains.

“It is impossible to exaggerate the autumnal beauty of these forests; nothing under heaven can be compared to their effulgent grandeur. Two or three frosty nights in the decline of autumn transform the boundless verdure of a whole empire into every possible tint of brilliant scarlet and rich violet, every shade of blue and brown, vivid crimson and glittering yellow.

“The stern, inexorable fir tribes alone maintain their eternal sombre green. All others, on mountains or in valleys, burst into the most glorious vegetable beauty, and exhibit the most splendid and enchanting panorama on earth.”

## APPENDIX.

A Mr. Robert Murray, in describing a few specimens of British ship timber, and their varieties, very correctly says: —

“ The weight and density of timber is, in general, a sure index of its strength — the densest wood being at the same time the strongest. The Oak, as well as all other timbers, varies in its specific gravity according to the soil which produces it, the density mainly depending upon the length of time occupied in the formation of the wood. Those trees which grow fast, from being located on moist, sandy soils, never produce such strong timber as others of slower growth. It has been found by experiment, that the bottom part of the trunk, with the corresponding branches, is denser and stronger than the upper part of the same tree.

“ The decay of wood by the growth of fungus denominated dry rot, may be traced to the putrifying of the sap, when this has been left within the pores of the timber in the same condition as it exists in the living tree. The various means which are employed to arrest this destructive fermentation are, either to wash out the sap by long soaking in water, aided by the action of the sun; to dry up the sap, either naturally by exposure to the sun and wind, or artificially by baking, or by heated currents of air; or else by injecting into the pores of the wood some metallic salt, to combine with the albumen and render it insoluble, or some antiseptic substance to preserve the vegetable tissue. The various processes, however, for the preservation of timber by the absorption of metallic salts, have all more or less failed in practice, and are now very generally abandoned. They are known by the names of the inventors, as Kyan's, Margary's, Burnett's and Payne's processes. For ship-building purposes, such chemically prepared or salted timber is scarcely to be recommended, as it attracts much moisture, and is very destructive to the metal fastenings. Oils and resinous solutions, although they certainly render the wood impervious to moisture, and preserve the iron or metal bolts from oxidation, are still very objectionable from the increased inflammability which they impart to the structure. The time and expense necessarily required in preparing the wood with the preservative substance, are also great drawbacks to its employment in ship-building, where a delay of even two or three days, more especially in repairing, is often of serious consequence; and it should be remembered that the

timber must be operated upon after it has been shaped or 'converted.' Timber may be preserved—we will not say perfectly—from subsequent decay, by long submergence in shallow salt water, or, which is still better, in salt mud.

“When thus treated for a period of from ten to twenty years, the sap gets thoroughly washed out of the pores of the wood by the alternate absorption and expulsion of air or other gases caused by successive variations of temperature. It need scarcely be hinted, however, that such a mode of procedure, though sometimes adopted in government dock yards, would be ruinously expensive to the private ship-builder.

“Having pointed out the fatal objection generally attending the use of chemically prepared timber for ships or houses, it remains to show what means can be employed, (and that with tolerable certainty,) for preserving the timber of these structures from premature decay. The means at our command for this purpose are summed up in the two words, 'seasoning' and 'ventilation'; namely, thorough seasoning or drying of the timber on shore, when this is practicable, but by all means good ventilation on board. If these well known and universally approved principles were but carried out in an honest and common sense fashion, we should hear but little of rotten gun-boats, or heavy repairs to frigates, after a first commission. Though it is undoubtedly true that the closely packed timbers and double planking of a vessel of war, present great obstacles to a thorough ventilation of the bottom, much may still be done by conducting currents of air down into the hold and between the timbers, by means of wind-sails, or, if necessary, by fanners, worked either by steam or hand, and by so arranging the internal accommodation that there may be as little stagnation of air as possible. However well seasoned and dry the timber may be when the ship is launched, it will rapidly absorb moisture from the damp atmosphere of the hold, unless evaporation from its surface be kept up by a forced circulation of air.

“It is certainly unbecoming the scientific character of the age, that ships built hurriedly and cheaply, and of inferior timber, by what are contemptuously called 'slop' builders, are known to resist the ravages of dry-rot much better than the expensively and elaborately constructed ships of Her Majesty's dock-yards. Nay, more, that these same 'slop-built' ships, even when constructed entirely of green timber, as they frequently are, will last longer than a government ship built of the best seasoned oak. The whole

secret is, of course, the internal ventilation of the hold and frame of the ship. In a cheaply built merchant ship, the timbers are spaced some distance apart, and the ceiling planks are not placed so close together as hermetically to seal the spaces between the timbers, the consequence being that good ventilation is maintained amongst the planks and timbers of the bottom and sides. Even when such a ship is built of green wood, the circulation of air is generally sufficient to season the timber in its place, and prevent its decay, for the dry-rot fungus will not thrive in an atmosphere less moist and stagnant than that of an underground cellar. The shrinkage of green timber, in such a case, would also conduce to its preservation, by admitting the air between the ceiling planks. Sap-wood should always be removed from the timbers and planks of a ship, as, from its spongy texture, and imperfect development, it is more liable to dry-rot than the heart wood, besides being much weaker, and when the dry rot has once commenced, either in a ship or a house, it is rapidly propagated by contagion."

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The Late D. R. Munro.

Word was received in this city yesterday of the death of Mr. D. R. Munro, which occurred in Virginia U. S. yesterday. Mr. Munro was once a very prominent man in St. John. He at one time represented Ward No. 3 of Portland in the Common Council, was superintendent of sewerage and held several other positions connected with that city. He was also a prominent Freemason, being a past commander of the Union DeMolay Preceptory. He also held the office of Provincial Prior for some time under the Great Priory of Canada. Mr. Munro was also a past master of the Union Lodge of Portland and took a very active part in Masonic matters for many years. The position of secretary of English Lloyds was also held by Mr. Munro, under three gentlemen, John Tucker, Christopher Besant and S. Laphorn.

From the St. John Evening Journal  
of Nov. 11<sup>th</sup> 1890

