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HUNTER'S
EASTERN TOWNSHIPS
SCENERY.

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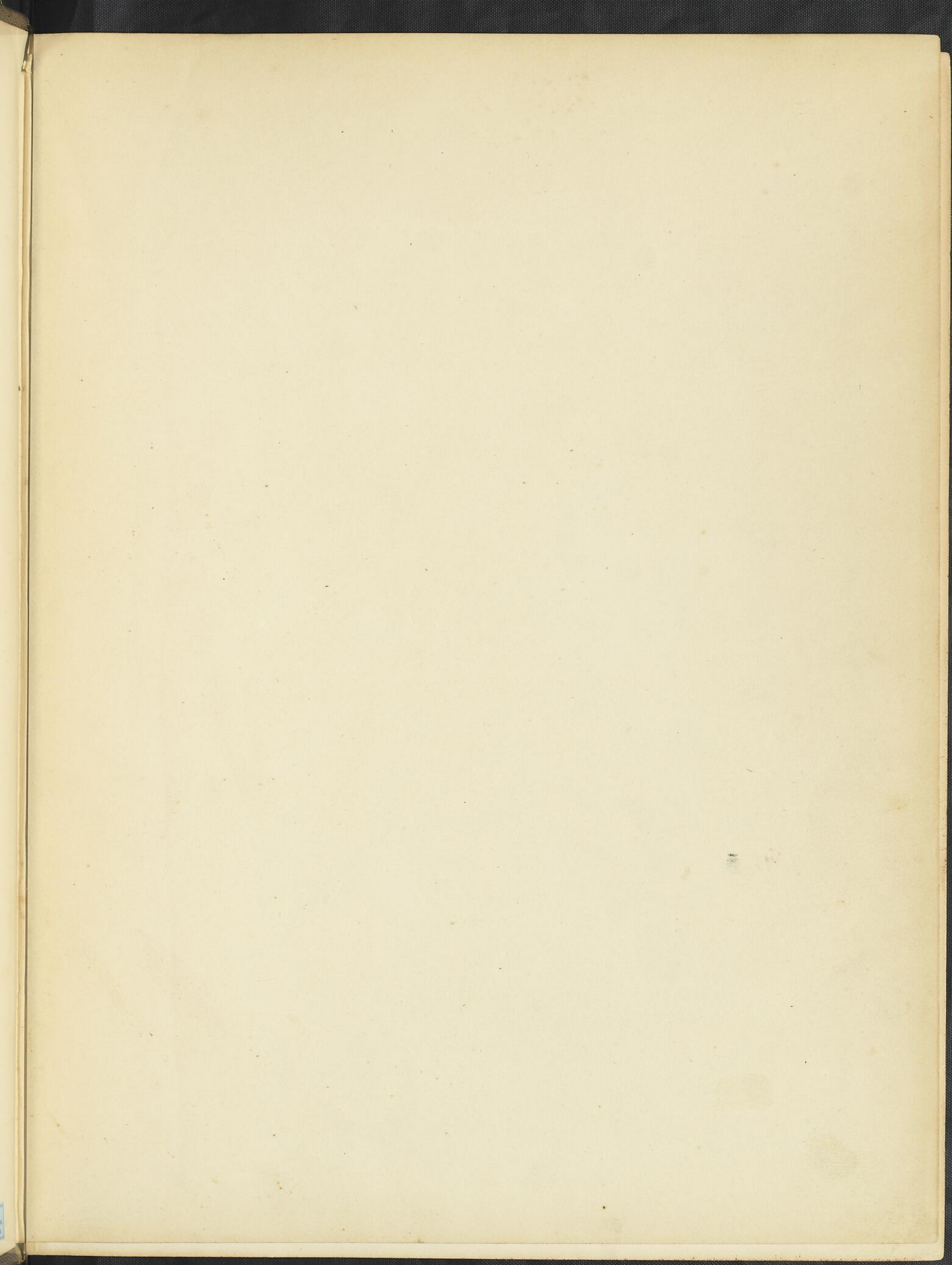
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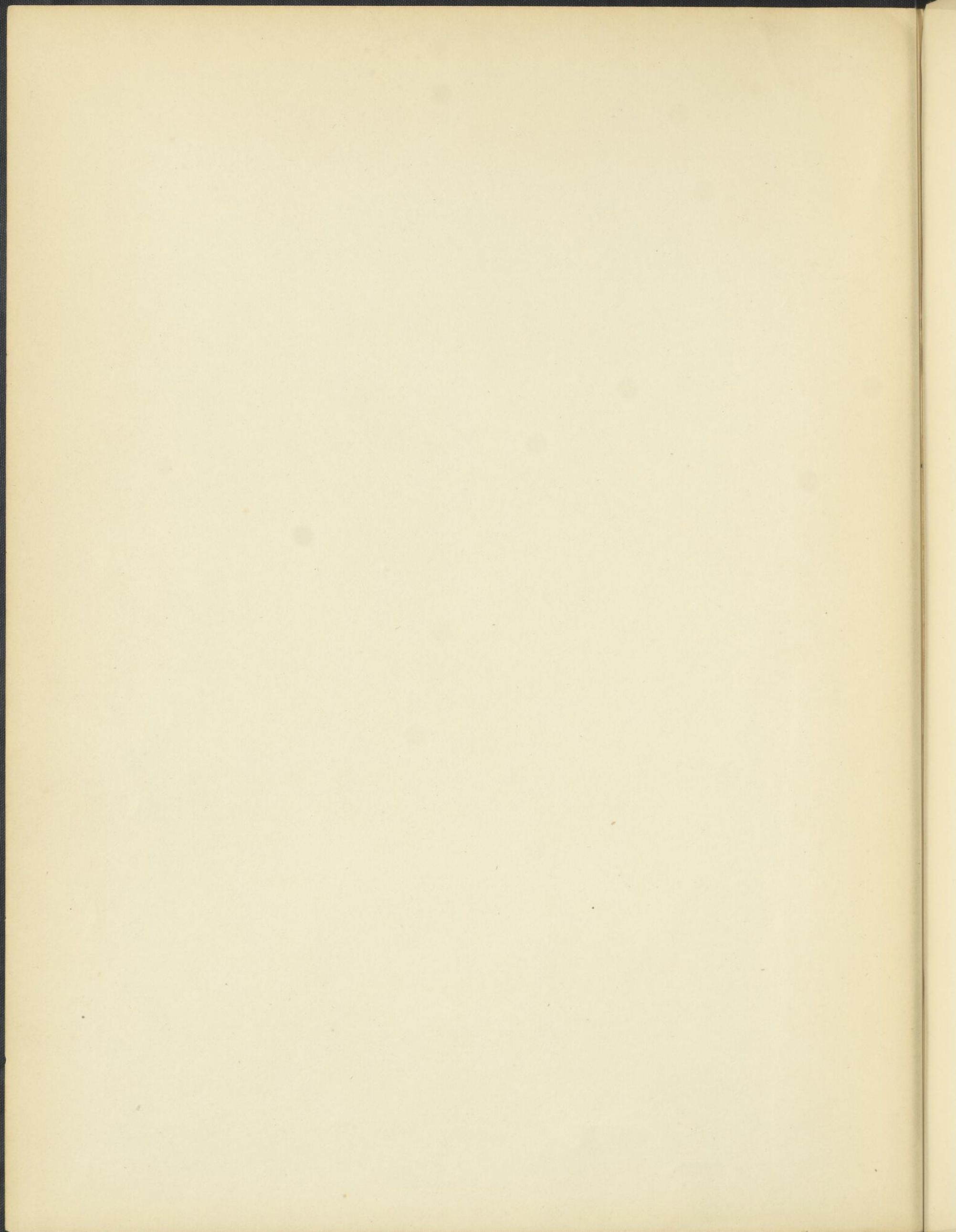
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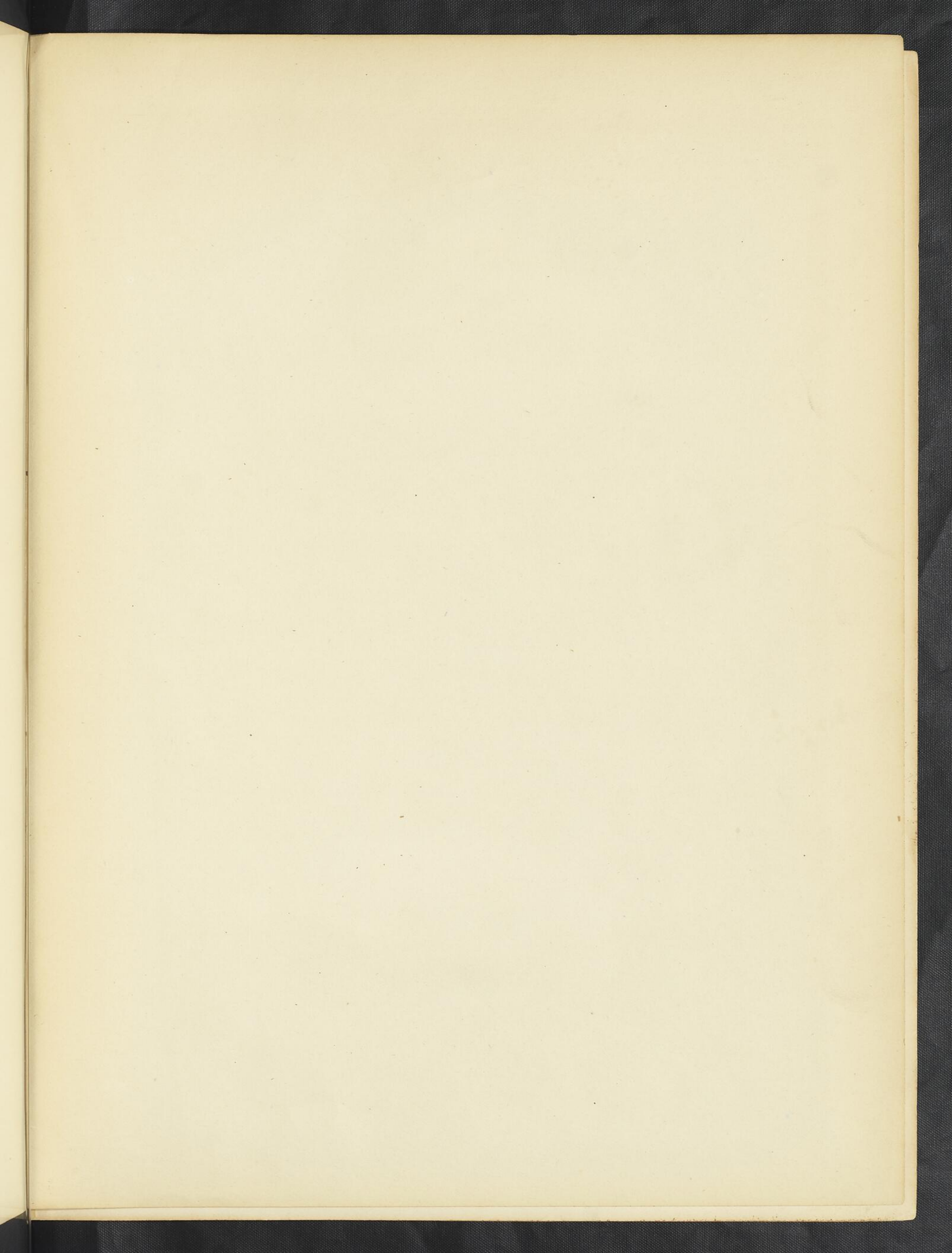
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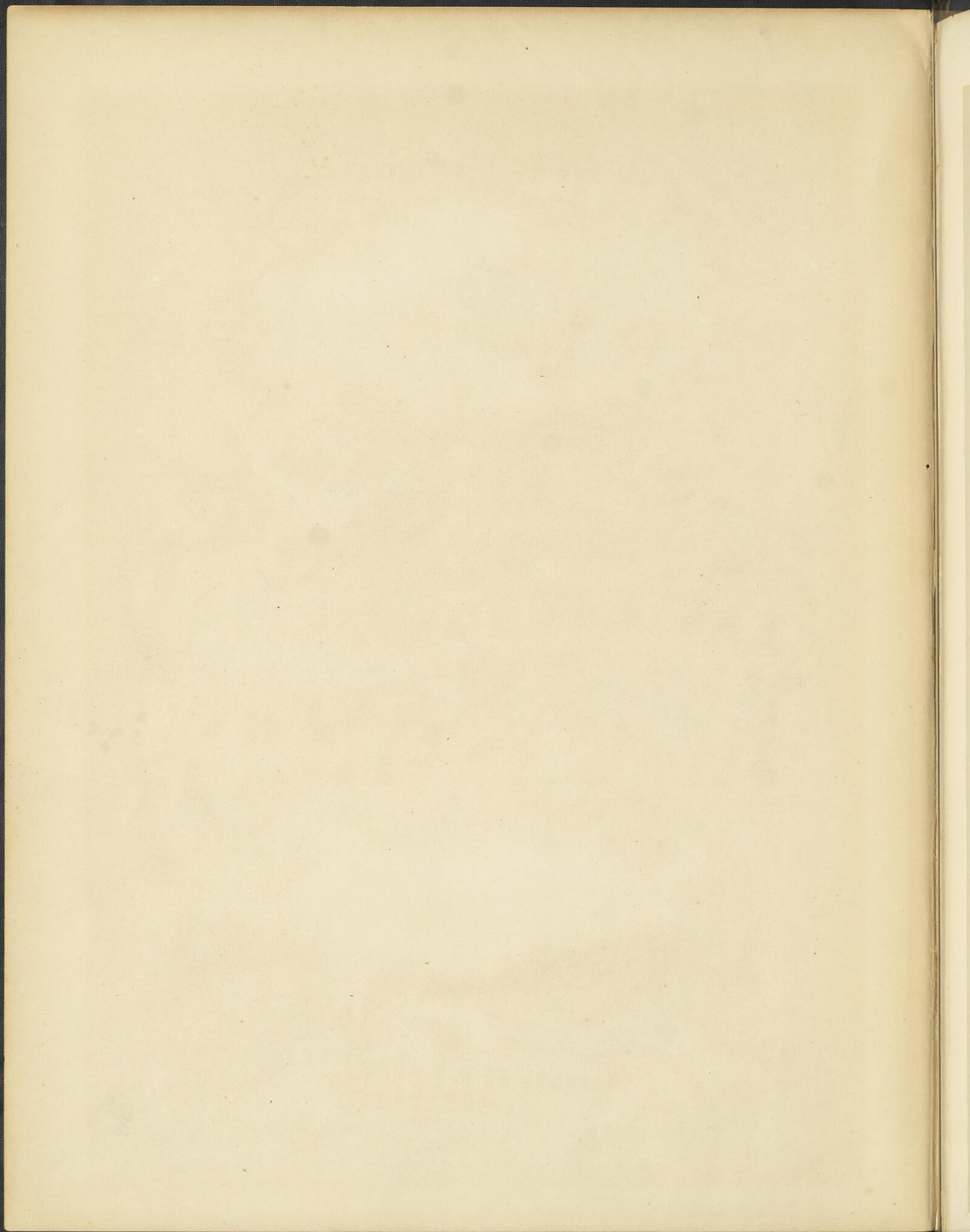
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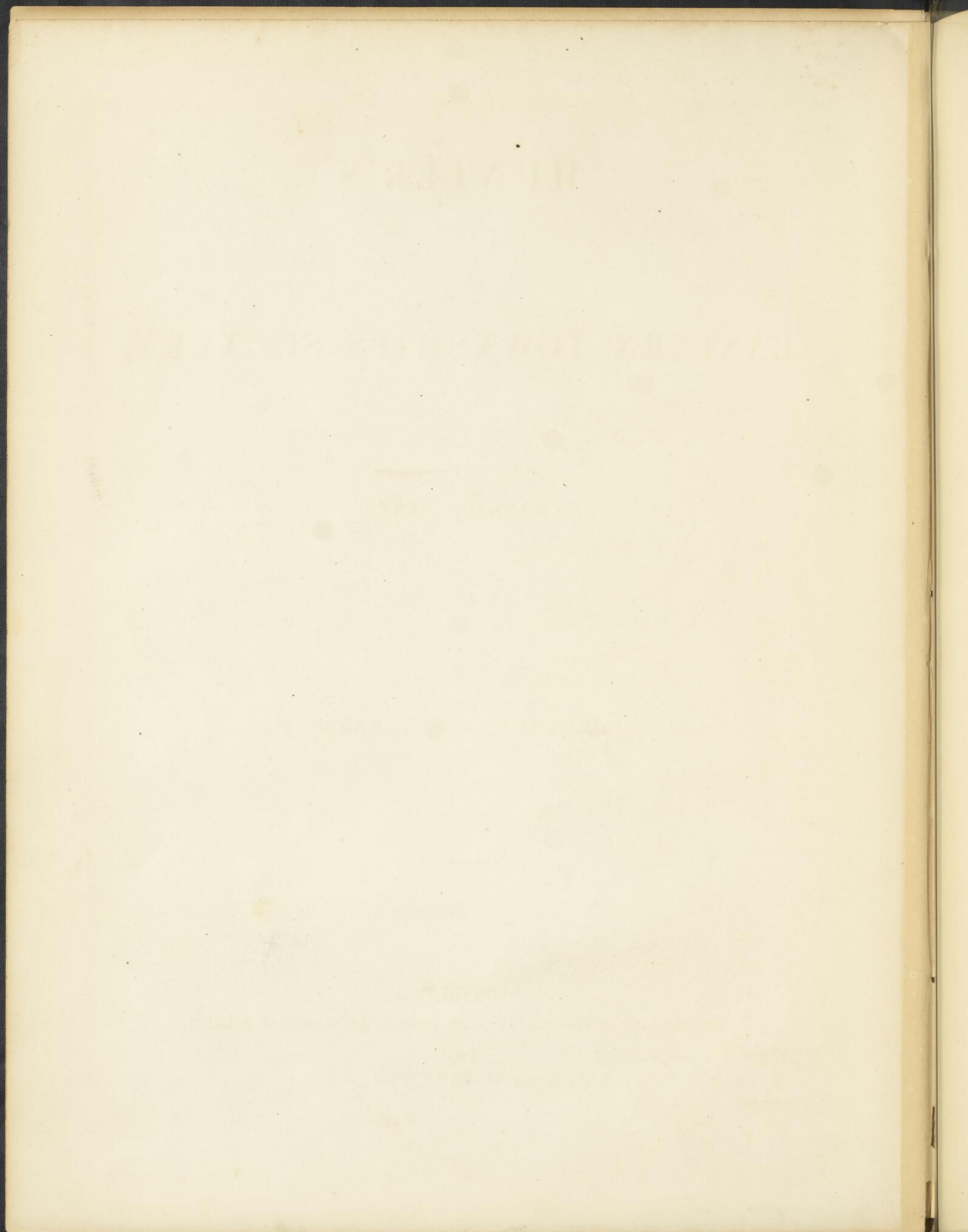






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HUNTER'S
EASTERN TOWNSHIPS SCENERY,

CANADA EAST.

BY

W. S. HUNTER, JUNIOR.



MONTREAL:

PRINTED AND PUBLISHED BY JOHN LOVELL, ST. NICHOLAS STREET.

1860.

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EASTERN TOWNSHIP SOCIETY

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1890

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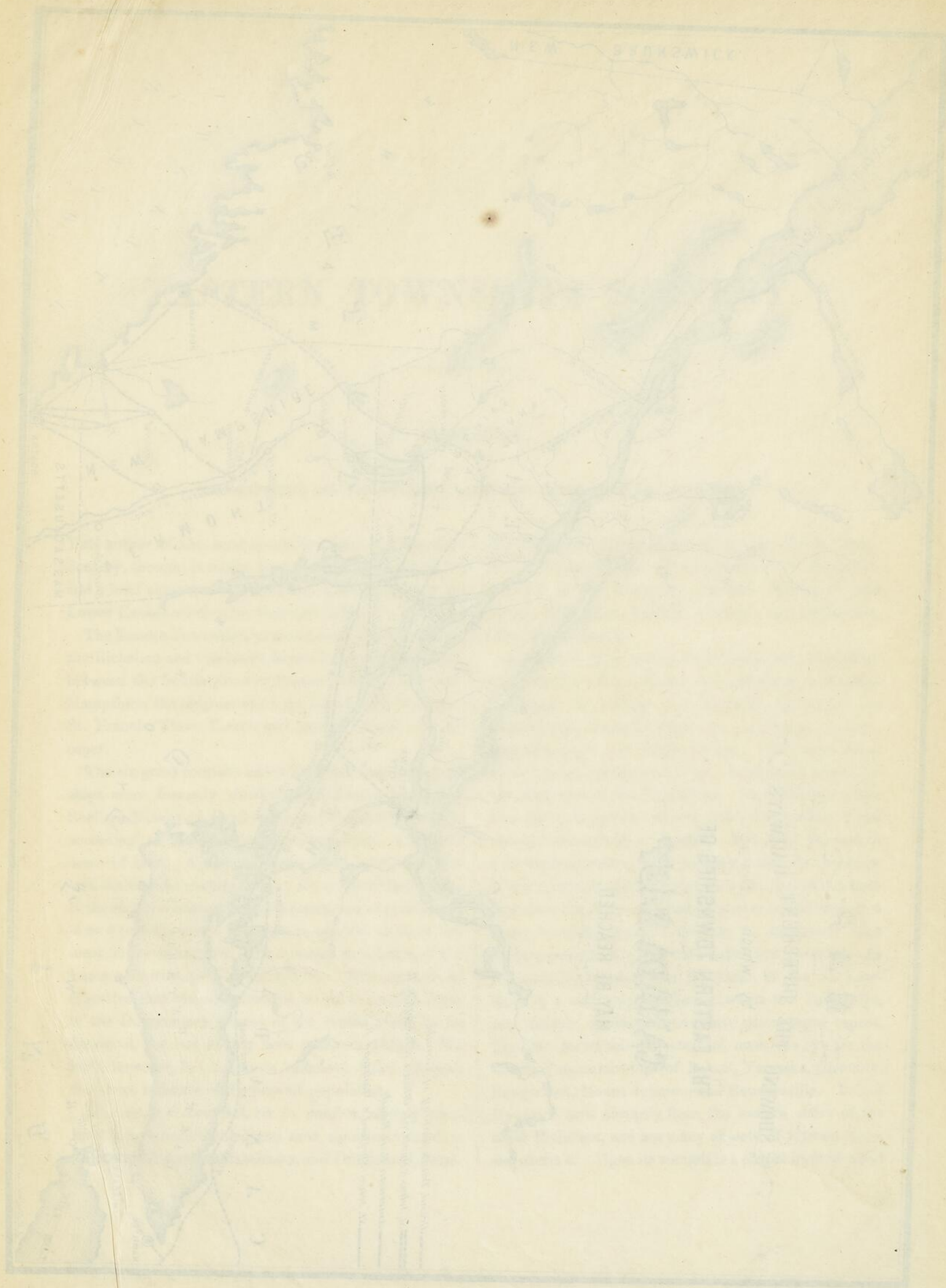
P R E F A C E.

THE Author of the present work having met with liberal patronage from the Canadian Government and people in publishing his "Ottawa Scenery," has been induced to issue one more work of a series he has long contemplated, in illustration of Canadian Scenery. The following work is intended to supply what has long been needed,—a graphic delineation and illustrative account of the beautiful and picturesque scenery of the Eastern Townships. The Author having had a variety of difficulties to contend with, has, at great expense, at last completed his undertaking; and however great may have been his trouble, the support of the Government of his country and the patronage of the Canadian public have been encouraging throughout his labours. Works have already appeared illustrative of Canadian Scenery, in some of which are to be found engravings or descriptions of a few of the best-known points of attraction in the Eastern Townships; but a work exclusively devoted to this section of country,—to the scenery of this locality,—has not been previously published. Amid the inexhaustible variety of scenery, all equally grand, romantic, or beautiful, and comparatively unknown, there was great difficulty in making the proper selections. Numberless views were omitted, and such selected as were deemed the most suitable for the object in view.

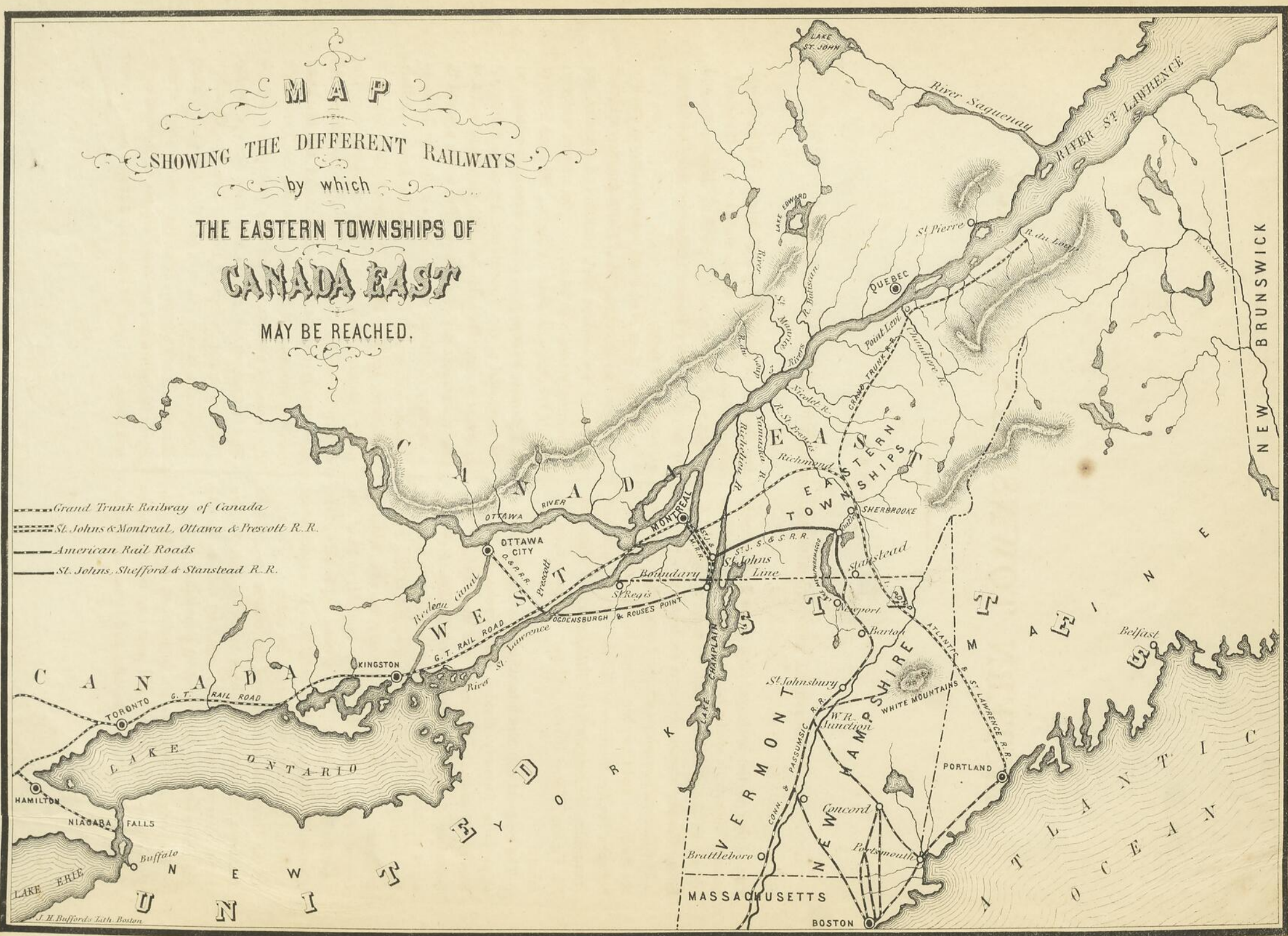
In the delineation of the beautiful scenery in this interesting and important portion of Canada, the artist has endeavoured to be truthful in his portraiture, and has made no attempt at exaggeration.

The letter-press accompanying the views will, it is hoped, be found useful and interesting to the tourist and the man of business; and it may induce readers at a distance to visit the Eastern Townships of Canada.

W. S. HUNTER, JUN.



M A P
 SHOWING THE DIFFERENT RAILWAYS
 by which
 THE EASTERN TOWNSHIPS OF
CANADA EAST
 MAY BE REACHED.



J. H. Buffords Lith. Boston

EASTERN TOWNSHIPS SCENERY.

CHAPTER I.

GEOGRAPHICAL AND TOPOGRAPHICAL FEATURES OF THE EASTERN TOWNSHIPS.

THE author of the accompanying views of Township Scenery, thought it might be acceptable and useful to add a brief sketch of that beautiful tract of country in Lower Canada whence his views are taken.

The Eastern Townships, properly so called, lie between the Richelieu and Chaudière Rivers in one direction, and between the frontier-lines of Maine, Vermont, and New Hampshire, the Seigniories of the Districts of Montreal, St. Francis, Three Rivers, and part of Quebec, on the other.

The six great counties into which the Eastern Townships were formerly divided (Sherbrooke, Stanstead, Shefford, Missisquoi, Drummond, and Megantic), contain, according to Mr. Bouchette's computation, 4,886,400 acres of land. A comparatively small portion of the land is altogether unproductive; for much of that which, in the earlier settlement of the country, was so considered, is now proved, where drainage is applied, to be of the most fertile description. The present population of the Eastern Townships is about 200,000. It is much to be regretted that advantage cannot be taken in this work of the Government returns of the census about to be furnished, the last having been taken in 1851-2. We have, however, had access to sufficient data to furnish the above estimate of the present population.

The original counties, six in number, already mentioned, have been divided and new counties formed as follows:—Megantic, Arthabaska, and Drummond, (form-

ing District of Arthabaska); Richmond, Wolfe, Compton, including Towns of Sherbrooke and Stanstead, (District of St. Francis); Shefford, Missisquoi, and Brome, (District of Bedford); Beauce and Dorchester, (District of Beauce).

As a whole, there is no more beautiful tract of country to be found on the continent of North America, whether we regard its sublime and beautiful mountains, its enchantingly romantic lakes, its picturesque scenery, beautiful rivers, and fertile valleys. The noble River St. Lawrence sweeps past, in its course to the ocean, on the northwest of the Townships. Its banks still retain here that remarkable boldness which they possess at and near the ancient city of Quebec. But as we proceed in a westerly direction, they lose gradually the boldness of their features, till they sink into the flats of La Baie du Febvre; and from this point the river winds through a richly luxuriant plain to the city of Montreal. The country around the city is both fertile and beautiful. As the traveller recedes from the banks of the St. Lawrence in a southerly direction towards the Townships, the country assumes a peculiarly picturesque aspect. The first remarkable objects that meet the eye are the towering mountain-tops of Belœil, Yamaska, Chambly, Rougemont, Mount Johnson, and Boucherville. Belœil Mountain rises abruptly from the eastern shore of the River Richelieu, and has many objects of interest upon and about it. Upon its summit is a chapel built of wood

and covered with tin; an object of much interest to the visitor as it is to the surrounding country, the reflection of the sun's rays upon its surface being plainly visible from Montreal. There was formerly upon the chapel a lofty cross,—now blown down, and lying at its foot. A carriage-road has been constructed on the side opposite the river by the enterprising Seigneur, Major Campbell, leading to the very summit, and passing by one of the most beautiful lakes,—high up in the mountain,—in whose clear waters excellent trout are found in abundance. A splendid Hotel has also been constructed by the Seigneur not far from the Lake, capable of accommodating 200 guests, to which the salubrious air and romantic scenery attract thousands of visitors during the hot months of summer. It is very easy of access, there being a station (St. Hilaire) of the Grand Trunk Railway just at the foot of the mountain. Close to this is the beautiful residence of Major Campbell, famous for the beauty of its architecture and the neatness of its grounds.*

Near this point the beautiful River Richelieu is crossed by the Grand Trunk Railway, which passes over the river by means of an iron tubular bridge. This is one of the principal bridges of the road. Vessels navigating the Richelieu between Lake Champlain and the St. Lawrence are not, in their passage, obstructed by the bridge, it being so constructed as to allow them to pass without interruption.

The Richelieu River, sometimes called Chambly, Sorel, St. Louis, and St. John, affords a quick and easy communication from the United States *via* Lake Champlain. Its length from the Canada Line, crossing Lake Champlain at its northern extremity, to its confluence with the St. Lawrence, is about 70 miles. The banks of the river are generally from 8 to 12 feet high, diversified on each side by many farms and extensive settlements, in a high state of cultivation. On and near it are neat, populous, and flourishing villages, handsome churches, good roads in all directions, and every characteristic of a highly prosperous country.

The Chambly Canal extends from St. Johns to Chambly, a distance of about $11\frac{1}{2}$ miles, and was made to overcome the interruption in the channel of the Richelieu between the two places. The breadth of the bed of the river at its mouth is 250 yards, which it preserves with

a few exceptions (occasioned by some small and beautiful islands) up to Chambly Basin, which is nearly a circular expansion of the river about a mile and a half in diameter, embellished by several little islands covered with fine verdure, and with natural wood artistically grouped.

From the Basin of Chambly, the river continues to increase more or less in width as far as St. Johns, where there is a ship navigation to the towns on Lake Champlain.

Passing on from this point still in a south-easterly direction, through the populous and highly flourishing Counties of Shefford and Brome, the country becomes gradually more and more undulating, until it finally assumes a mountainous character towards the shores of Lake Memphremagog and the River St. Francis. The whole of this tract of land is exceedingly fertile and well populated. Everywhere the eye of the traveller is delighted with rich, luxurious fields and valleys, studded with neat homesteads, beautiful cottages, and flourishing villages.

The St. Francis River flows through a fine country about 100 miles in length, in which the valuable territories of the British American Land Company are situated. It rises in Lake St. Francis, and, having received many tributaries (the Salmon, the Eaton, the the Coaticooke, the Massawippi, and the Magog), reaches the Town of Sherbrooke, the capital of the Eastern Townships. Thence it winds through a highly picturesque country, and finally empties into the St. Lawrence at Lake St. Peter.

The features of the country through which the St. Francis flows are generally varied and highly interesting. No one can have travelled from its mouth, more particularly in the Summer Season, without experiencing the most delightful impressions. As we follow the course of the St. Francis, here we see a valley whose fertility greatly contrasts with the forest we have left; there, in the distance a gently swelling hill, whose easy slope we may ascend without perceiving it. At certain points, the level ground is limited to the breadth of the road. On one side, we see hundreds of feet below us; on the other, we are closed in by a precipice high above our heads. Merging from a defile, we come in full view of the river, here widened by an island "smiling with verdure." On one side we have a farm-house or a little hamlet, neat and even elegant; on the other, a cascade, a factory or mill, around

* Since writing the above, we regret to learn that this Hotel has been destroyed by fire; but in all probability this structure will soon be rebuilt.

which are tasteful dwellings, and frequently a pretty village church.

The next river of importance is the Chaudière, which has its source in Lake Megantic. It passes through a country of about 100 miles in length by about 30 miles in breadth; thus in its course clearing about 3000 square miles of land of its redundant waters. In breadth it varies from 400 to 600 yards; its course being frequently interrupted by small picturesque islands covered with timber-trees, which add considerably to the beauty of the river. The banks of the Chaudière are in general high and precipitous,—thickly clothed with verdure. The bed of the river is rugged, and often much contracted by rocks jutting out from the banks on either side, which occasion violent rapids. Within about four miles of the mouth of this river there is a remarkable fall. The precipice over which the waters rush towers up 130 feet, whilst the breadth of the river at this point is 130 yards. As the waters fall over this precipice, they are divided by jutting rocks into three portions, which unite again before reaching the bed of the river. Here, by the violent action of the water, the rocks are deeply excavated. These, giving a circular motion to the great body of water as it dashes onward, present a peculiar and beautiful appearance. The spray, when carried by the winds, in the sunshine produces a splendid variety of prismatic colours; while the dark foliage on either side, pressing close to the margin of the river, forms a striking contrast with the snow-like effulgence of the falling torrent. Indeed, for picturesque beauty and sublimity few falls can be compared with those of the Chaudière.

The various tributaries of the St. Lawrence just now partially described, with their various ramifications oft spread out into small and beautiful lakes, which bespangle the country among the highlands, give, in association with mountain-peaks, great picturesqueness to the scenery. Each branch of the Nicolet is supplied with its lake among the mountains:—The Bécancour displays a very beautiful chain of lakes in the Townships of Inverness, Halifax, and Ireland; while others on the north-west line of Wolfe's Town appear at the sources of the streams. Throughout this vast tract of country there can be found numbers of streams affording water-power which might be turned to profitable account with no great outlay of capital. The Townships are free from the burdens of the Seigniorial tenure, and Mills and Factories are found in all the settled parts of the country.

There can be no doubt that they are destined to become the Seat of Manufactures.

Lake Memphremagog is about 30 miles long, by a breadth of generally about 2 miles, but in some parts of the Lake three or more. It lies in a semi-circular form, partly among the mountains, and partly in the valley beyond, which obliquely crosses the northern portion; stretching its southern extremity into the State of Vermont, about one third of the Lake belonging to the United States.

The bright bosom of this Lake is everywhere bestudded with romantic Islands, generally covered with woods to the water's edge. The aspect of some of the Mountains from this lake is truly sublime. They seem to rise almost perpendicularly from the waters; while here and there huge rocks, jutting out from their sides, frown threateningly down on the spectator. Among these mountains, the Owl's Head in point of beauty stands pre-eminent. In the Summer season this Lake is much frequented by tourists and lovers of natural beauty. Indeed, it may be said with truth that this lake is fast becoming, during the summer season, one of the most fashionable places of resort. The number of visitors is constantly increasing.

This Lake empties itself into the beautiful River St. Francis at Sherbrooke, by means of the River Magog. The water-power of the Magog is very great, and must prove highly advantageous to the development of Manufactures at Sherbrooke, and to the village of Magog, the latter situated at the Outlet of Lake Memphremagog.

Lake Megantic, the source of the Chaudière, lies about 40 miles in an easterly direction from Sherbrooke, near the boundary-line between Maine and Canada.

This Lake has a length of about 16 miles, and is in breadth about 2. The country about the lake is not as yet much settled; a few beaver finding it sufficiently remote from the haunts of civilization to inhabit some of its tributaries. The St. Francis Indians frequent this section, as it affords them good hunting-grounds, and the waters of the lake abound in fish. This region being susceptible of great agricultural development, it must soon become settled. The Mountains in the vicinity of Lake Megantic have a considerable altitude, but the general aspect is not so picturesque as that of the country which lies nearer the shores of Lake Memphremagog.

Lake St. Francis, whence rises the river of the same name, is situated about 40 miles N. E. from Sherbrooke, and is a beautiful lake. In its length it somewhat

exceeds Lake Megantic, but is not so wide. The Townships of Winslow, Lambton, Adstock, and Price, border its shores, 14 miles long. The principal part of the lumber sawn at the extensive Mills at Brompton Falls, owned by C. S. Clark & Co., is obtained from the forests about this Lake.

Lake Aylmer, through which pass the waters of Lake St. Francis on their course down the river St. Francis, is a very pretty body of water, much less in size than the St. Francis. It divides the Townships of Garthby and Stratford. Great quantities of valuable lumber are found throughout the whole of this region.

Lake Tomifobi or Massawippi lies in the Township of Hatley; length about 9 miles, average width $1\frac{1}{2}$ miles. The scenery about this lake is quite equal to any in this section. In this Lake is found a greater variety of fish than in any lake in the Eastern Townships.

Brome Lake, in the Township of Brome, is a beautiful sheet of water of circular form. Its greatest diameter is about 5 miles. The scenery about the Lake is also very beautiful. Black Bass are taken from its waters in abundance, and it is much visited by sportsmen.

There are many smaller and interesting Lakes worthy of notice. Among them may be mentioned Lake William, in the Township of Halifax; Brompton Lake, in the Townships of Brompton, Orford, and Stukely. Most of the Lakes in the Townships abound in fish.

Colonel Bouchette, the Surveyor General of Lower Canada, is of the opinion that the range of hills traversing Bolton, Orford, &c., are a continuation of the Green Mountains, which form a conspicuous ridge running through the State of Vermont. Sir William Logan, the Provincial Geologist, says that "Between Montreal and course, and presents a flat surface on each bank of the Quebec, the valley of the St. Lawrence has a general N.E. river. This plain extends from 12 to 20 miles in breadth on the N. W. side of the river, to the flank of a wide-spread, hilly but not very elevated country. On the S. E. side of the river the plains are 30 to 40 miles wide, and, with the intervention of a few moderate undulations, reach the foot of a range called the Green Mountains of Vermont, which, after entering Canada, decline in height, but a few isolated peaks are 4000 feet above the sea. A continuous mountain-belt bounds the S. E. side, present-

ing a gently undulating surface. These ranges of mountain and valley are parallel to one another, and to the St. Lawrence."

Orford Mountain, the highest in the Townships, situated near the northern extremity of Lake Memphremagog, has an elevation of about 4,500 feet above the St. Lawrence. From its summit may be seen in one panoramic view eighteen lakes, all emptying themselves into the Yamaska and the Richelieu on the one hand, and the St. Francis on the other.

Owl's Head is estimated to be 2500 feet above the level of Lake Memphremagog, and is situated on the western shore, about the centre of the Lake. There are the Megantic Mountains, and many others of less altitude are scattered throughout the Eastern Townships.

Dr. Thomas Rolfe, who has laboured strenuously on behalf of Canada, remarks that "From 100 miles below Quebec to 100 miles above Montreal, on both sides of the St. Lawrence, there is a most beautiful country, not only cleared, cultivated, and thickly settled, but actually adorned with a continuous line of villages on either bank. There is not a point from which the spire of a spacious and elegant parish Church does not greet the eye, and frequently there are many to be seen in the same view. The Eastern portion of Canada, and probably the Eastern Townships, contain the greatest variety of beautiful scenery,—mountain, rock, hill, dale, plain, forest, waterfall, lake, and river."

The natural features of the Eastern Townships are romantic and sublime; and no one can look upon them without expressing his admiration.

Every Township which is settled has its village,—some possess more; each distinguished from the other by its particular kind of beauty; the one having a charming landscape which cheers the eye, in another the buildings are of a varied style, while others are striking for their situation at the base of a mountain or on the borders of a lake. As we approach the frontier lines, the evidences of prosperity increase, as it was there that the first settlements were made.

The Eastern Townships, as a whole, unfold scenery, the magnificence of which, in combination with the most delightful physical beauty, is unequalled in America, and perhaps in the world.

CHAPTER II.

BRIEF SKETCH OF THE HISTORY OF THE TOWNSHIPS ; THE EARLY SETTLER, AND THE FARMER OF THE PRESENT DAY.

THE first settlements were made about the year 1795, in the Township of Stanstead, which was surveyed as early as 1792-3 by Messrs. Pennoyer and Kilborn, and in the year 1799 about 30 families moved in, emigrating from Massachusetts, New Hampshire, and Vermont.

Much is due to those enterprising and adventurous pioneers, who left their homes of comfort and comparative luxury, to suffer every privation incident to a wild, unsettled country. A large portion of Vermont and New Hampshire was then unsettled. There were vast tracts of forests to be traversed, which lay between the homes of the emigrants and their destination, far off in the wilds of Canada, for their guide following the course of streams and marked trees. It often required months to accomplish their toilsome journey. Great as has been the prosperity of the Eastern Townships, and of the Settlements which everywhere indicate the beautiful country partially described, the people of the Townships must remember that nature has not been wooed without severe trials ; neither have her treasures been won without an effort worthy of their worth. Those who may have had an opportunity of seeing the early clearings in the country, must have been impressed with the utter loneliness and desolate appearance of the first settler's log-cabin. In the midst of a dense forest, and with a "patch of clearing" scarcely large enough to let the sun's cheering rays shine upon him, he looks the very personification of one struggling for existence. For weeks and months, he sees no one but the members of his own family. The boundless, still, and wild forest ever presents itself to his view. "Tall pines, blackened by fire, stand as monuments of the prevailing loneliness," whilst the forest closes around him like the walls of a fortress, and his only hope against its shutting him in for life, is his axe. A little corn and potatoes, springing up here and there among the stumps, are almost choked by the luxuriant growth of underwood, and seem to say to the settler "How can poverty ever expect to escape from such a prison-house?" Happily there is no scene

in life, however cheerless and desolate, that poetry may not gild and brighten the hopes of some, where all the world might despair. The small patch he has cleared, which to others would be but a poor guarantee for a bare subsistence, was nevertheless a source of "bright and happy dreams" to the lonely pioneer. To him it was the foundation of great hopes and future independence, "and the very dream, or poetry, or what you will, cheered him at his hard and lonely toil, and made him contented with his rude fireside." The slight evidences of prosperity in his little clearing, which may have been regarded as affording a small amount of the comforts of life, to him were associated with broad acres and well-filled barns, and the very thought stimulated him to double exertion and he was content. His little, lonely cabin in which his timid children hid themselves,—for they very seldom saw a stranger,—was associated by him, not with the idea of the hardships and privations we would naturally attach to it, but something more noble, that it should be, if life were spared him, by the blessings of God, the spot where he would gain the respectability of those children. This has been the history of thousands of others in the Eastern Townships, who have become independent and even wealthy, against similar difficulties. Such was an early settler of the Eastern Townships ; such were his hardships, his fortitude, and his success. The memory of those hardy sons of toil who first settled this beautiful country should be dear to their descendants, and their names should be handed down to their latest posterity as the fathers of an enlightened and liberty-loving people. They have nearly all passed away ; and the few that remain seem to derive a melancholy pleasure in relating incidents which took place in the early history of these Townships, and narrating their own adventures,

"In life's early march,
When the spirit was young."

There are yet unimproved portions in the Eastern Townships having all the natural advantages which the

early settlements possessed (with the advantage of the improvements of the present day, such as schools, roads, markets, and railway facilities). Let the present generation improve every opportunity of benefitting their country; and our descendants, loving it as we do, will bless our memory, and will consider themselves bound by gratitude to preserve their country, their institutions, customs, manners, and character; and the Canadian spirit will have gained a new element of vitality.

There is not a country in the world whose inhabitants live better, nor is there elsewhere a class who enjoy a greater abundance of the comforts of life than the farmers of the Eastern Townships. To persons not practically acquainted with this section of country, the evidences, not only of comfort but of refinement also, will no doubt appear extraordinary. When it is remembered that the Eastern Townships have only been settled some 60 years, it could hardly be expected they would produce such results. Wealth in agriculture, like wealth in every other occupation, is usually the offspring of skill and judgment, industry and perseverance. The Eastern Townships, bordering as they do the States of Maine, New Hampshire, and Vermont, have a large proportion of their population of American origin. As a natural result of this, there is scarcely an improvement effected in American farming, which does not find its way into the Townships; and any implements of Agriculture which can be used to advantage, are either copied or imported. Agricultural Societies have sprung up, and have been attended with great advantages to the Eastern Townships. Particular pains have been taken to import the best breeds of cattle. This fact, in connection with the superior quality of grass which grows on the uplands, gives the Eastern Townships cattle a decided preference over others. There is not a village that has not horses which exhibit all the fine peculiarities of the best breeds of England, the United States, and Canada. Horses from this section find ready sale in the principal markets of the United States. It will be seen by the official reports of Exports from the Eastern Townships for the year 1858, that cattle, horses, and sheep were exported as follows. An allowance of 25 per cent. may be safely added for those taken out without reporting at the different offices along the frontier between Vermont and the Eastern Townships.

Horses, No.....	1030	Value...\$103,191
Horned Cattle. 5354		142,147
Sheep,.....	25350	54,028
Total,.....	No. 31,734.	Value, \$299,366.

It must be remembered, however, that the crisis of 1857-58 would have its influence on sales and prices. In addition to the above, products from the Townships were exported the same year amounting to about \$620,000.

The Eastern Townships being essentially an agricultural country, the consequence is that the energies of their people have been chiefly directed to Agriculture. It is true that they have valuable water-powers, which would give them great facilities for manufactures, but it is only recently that public attention has been directed to them. They are rich in valuable mineral resources, but until quite lately capital has not been employed to render them available. In fact, whatever prosperity the Eastern Townships people enjoy, they owe it to the soil, and to the use they have made of it. The statistics which mark their annual productions are evidence of their prosperity; and if the reader has a fancy for rich harvest-fields, farm-yards teeming with plenty, and beautiful animals, he can gratify it by taking a trip into the Eastern Townships. Although the Townships, from the want of proper arrangements being made to represent their advantages to the emigrant, have not kept pace in increase of emigration with some portions of Upper Canada, yet some of her counties have recently made great progress. In the seven years preceding 1851, the fine County of Megantic, through which the Quebec and Richmond (Grand Trunk) Railway, passes, increased 116 per cent, the County of Drummond 78, and the County of Sherbrooke 50. Notwithstanding that the Townships have been looked upon as less desirable for settlement than Upper Canada, they have quietly and steadily increased in this respect; for it is a well-known fact, that a country depending upon any one product as its staple is agriculturally bankrupt when that crop fails; but the soil of the Townships is so variable in its nature, so well adapted to the production of all kinds of ordinary crops, that no great injury results from the temporary failure of a particular one.

The Government Emigrant Agent, in his Report for 1858, says: "For the year past there has been quite a large emigration of Germans and Norwegians, who have settled in the Eastern Townships. They all belong to the working classes, and, though possessing small resources, yet as they are industrious, economical, and enterprising, they cannot fail of securing an independence. At the close of the season I paid a visit to the locality selected by the Norwegians for settlement,

where I remained ten days to obtain information about the country and the condition of the settlers. During my stay, I called together an assembly of the Norwegians, in order to learn more fully from them their intentions for the future, and I was glad to learn that they were all pleased with their position, and all manifested a desire that some means might be taken by which their countrymen should be induced to emigrate to so desirable a country." There is no doubt that the present unsettled state of political affairs in Europe will induce many of its inhabitants to leave their country to seek new

homes where peace and prosperity reign. The British American Land Company, holding lands throughout this section, will afford every facility to the settler. Its terms for lands are very favorable, and cannot fail to suit the circumstances of the poor emigrant. The British American Land Company's Office is at Sherbrooke, where all the necessary information can be obtained.

The Crown and the Clergy Lands in the Eastern Townships are offered to actual settlers at merely nominal rates, and embrace some fine districts of wild lands, well timbered, &c., &c.

CHAPTER III.

CLIMATE AND SOIL.

THE influence of climate upon the soil and the country, and also upon its inhabitants, renders it important that enquiries should be made in this respect.

It is now a generally admitted fact that the climate of Canada has undergone a considerable change, partly owing to the motion of the magnetic poles and to the forest clearing necessary for the cultivation of the country. From the time they were first settled, this fact has been particularly noticed by the inhabitants of the Townships. The effect is mainly observable in the lengthened duration of summer and in the consequent shortening of winter. As the Eastern Townships become more cleared and its swamps drained, its climate will become milder. The heat of the summer is now less relaxing and the cold of winter more bracing than the temperature of the same seasons in New York, or, indeed, in any part of the United States. The winter in the Eastern Townships is certainly not, on the whole, unfavorable. The effect of snow covering the earth for a long period is well known to be beneficial; and the fall of deep snow in a country where frost prevails for so long a time, is one instance among the many of the merciful dispensations of Providence. Had it been otherwise, the continued action of cold on the earth would have so deprived it of its natural caloric, that the heat of even the hottest summer would not have been sufficient to restore the warmth necessary to the germination of plants and the ascension of sap in vegetables. The natural heat of the earth is about 42° Fah., but water when cooled down to 32° Fah. is converted into snow and ice. By this means the rivers and the land, with their myriads of fish and insects, are protected by a dense crust of ice, which, being a non-conductor, preserves them from the influence of the immense volume of cold atmosphere which is continually pressing from the polar regions towards the equator. Thus, that very coating of snow which seems so chilling, is in fact a warm garment for the earth; and when the sun returns to melt it, and the north winds are driven back to their icy regions, the latent caloric of the earth begins to be

developed and the snow melts, and percolates with rapidity the stiffest soils, rendering them peculiarly friable and adapted to the immediate labors of the husbandman. It is a singular fact, that, some weeks before the termination of a Canadian winter, vegetation is in active process, even on the surface of the earth, beneath a covering of snow several feet thick.

The salubrity of the Townships is sufficiently proved by its clear skies, elastic air, and almost entire absence of fogs. The atmosphere is exhilarating. The steady frosts of winter and the heat of its summers, hasten vegetation with great rapidity. The transition from winter to summer is so sudden, that it has been made a subject of remark by all Europeans who visit the country. The crops spring up almost instantaneously, and reconcile our inhabitants to the loss of that which is often the sweetest season of the year. But if the Spring be short, they can boast of an Autumn beautifully mild, and lingering on with its Indian Summer and golden sunsets until the month of December. The Canadian Winter is hailed as a season of increased enjoyment, rather than one of privation and discomfort, by the people. Instead of alternate rain, snow, sleet, and fog, with broken-up roads, the Canadian can boast of clear skies and a bracing atmosphere, and of the inequalities in new roads through the country made smooth by snow, "the whole of the country being literally macadamized by nature." It is at this season that the timber is cleared from the land, and the farmer disposes of his produce and supplies himself for the future, and markets are accessible by means of good winter roads. Few who have enjoyed the merry winters in this country, the noble hospitality and the pleasant society, the sleigh-rides and the parties, can easily forget the many attractions of an Eastern Townships winter. Of the general salubrity of the Province of Canada, its vital statistics, as compared with those of other countries, afford satisfactory evidence; and the following table may not be devoid of interest, showing the proportion of yearly deaths

to the population in various countries,—furnished by Prof. Guy :

Austria	1 in 40
Belgium	1 “ 43
Denmark	1 “ 45
England	1 “ 46
France	1 “ 42
Norway and Sweden	1 “ 41
Portugal	1 “ 40
Prussia	1 “ 39
Russia (in Europe)	1 “ 44
Spain	1 “ 40
Switzerland	1 “ 40
Turkey	1 “ 30
United States	1 “ 74
All Canada	1 “ 98

The Eastern Townships are generally regarded as the most healthy portion of Canada.

The soil of the Eastern Townships, with some exceptions, is generally a gravelly loam, seldom deficient in calcareous quality, and often very ferruginous. The Society for the Encouragement of Arts, &c., assert, in the preface to Vol. XXI., that they have ascertained by actual experiments that Canada can furnish hemp equal in quality, for the uses of the navy, to that from the Baltic.

Hemp is one of the most valuable and profitable productions of the earth ; it enriches the cultivator, and furnishes the shipping with the most useful and important part of its equipment. The several processes of hemp, also, benefit the country by employing many hands, that could not be so usefully and profitably engaged in other occupations. The advantage therefore which must be derived from the culture and manufacture of hemp, throughout its several branches, cannot be doubted, and is sufficiently proved by the importance which Russia has derived from her commerce in that article, by which she has, in a manner, rendered the greatest navy in the world dependent upon her will and caprice. The importation of hemp from Russia has amounted to no less than 30,000 tons, for the general consumption of Great Britain and for the use of the Royal navy. It must therefore in every point of view be a great object to Britain to draw her supplies of hemp from her own Colonies. Hemp has been grown successfully in some portions where it has been cultivated in the Eastern Townships ; and there can be no doubt that the soil and climate of this section of Canada would be favorable to the general culture of this article. We hope that the farmers of the Townships will give to this subject, of so much importance, the attention it deserves.

CHAPTER IV.

PRINCIPAL FISH OF THE EASTERN TOWNSHIPS.

THE principal fish which inhabits the larger lakes of the Eastern Townships is the NAMAYCUSH or LONGE; *Salmo Namaycush*, Pennant.

Description.—Form resembling the salmon; head flattened and slightly convex between the eyes, greatest depth contained about five times in the total length. Colour dark bluish-brown above, approaching to black on the head, sides thickly spotted with roundish yellowish-gray spots on a dark brownish-gray ground, the spots unequal but usually about the size of a small pea; belly, yellowish white; fins, dark-brown, mottled with yellowish white; the pectorals, ventrals, and anal slightly tinged with orange yellow. Lateral line, plain prominent and nearly straight. Scales small and thin, but much larger than on the brook-trout. Eyes midway between the tip of the snout and the nape, and twice as near the former as to the hind edge of the gill-cover, the measurement being made from the centre of the pupil; iris yellowish. Nostrils nearer the eye than the tip of the snout, double; orifices nearly equal, the anterior having a raised margin. *Jaws* equal, strong, and armed with incurved, sharp, conical teeth, similar teeth on the front part of the vomer, on the palate bones, and two rows on the tongue, with a deep groove between them. *Preoperculum* but little curved, and nearly vertical. *Suboperculum* large and finely grooved. The *dorsal fin* medial, higher than long, and the *ventral* situated nearly under the middle of it; adipose fin club-shaped and nearly over the posterior ray of the anal; the anal higher than long, the anterior part being three times the height of the posterior; tail forked with pointed lobes. This fish is taken from Lake Memphremagog weighing from 4 to 25 pounds. They have been taken weighing 40 pounds, but fish of this size are at present rarely caught.

History.—This species of Trout bears considerable resemblance to the *Salmo Trutta*, or Salmon Trout, of Europe, and, having been mistaken for that fish by the first European settlers of this country, it has since usually

borne the name of Salmon Trout. In the Eastern Townships of Canada, it is at present extensively known by the name of Longe. In Pennant's Arctic Zoölogy, and by the fur-traders at the North-West, its more common appellation is Namaycush or Namaycush Salmon. It is called by Dr. Mitchell the Great Lake Trout, and he describes it under the scientific name of *Salmo amethystus*. This magnificent trout equals or surpasses the common salmon in size, and is found in most of the lakes and large ponds in the northern parts of North America. In the great lakes in the North-West it is often taken weighing from 30 to 60 pounds, and, according to Dr. Mitchell, it has been taken at Michilimacinac of the enormous weight of 120 pounds. This fish passes most of the time in the deepest parts of the lakes and ponds, but, according to Dr. Richardson, resorts in October to the shallows to spawn. It is a very voracious fish, and is sometimes termed the tyrant of the lakes. It is taken with the hook and line, and is also speared by torch-light. Its flesh is of a reddish-yellow color, and is very much esteemed as an article of food. Roasting is said to be the best method of cooking it. "The Canadian *voyageurs* are fond of eating it raw, in a frozen state, after scorching it for a second or two over a quick fire, until the scales can be easily detached, but not continuing the application of heat long enough to thaw the interior."

This beautiful and valuable fish, which was formerly taken in great abundance from Lake Memphremagog, of late years has considerably decreased in numbers, from the wanton destruction indulged in by thoughtless individuals in the spawning-season. Unless something is done to enforce the law in this respect, the Longe in the Lakes of the Eastern Townships will soon become extinct. Tons of this fish are taken nightly, by spearing and seining, upon the spawning-grounds of Lake Memphremagog.

THE BROOK TROUT; *Salmo fontinalis*, Mitchell.

Description. Color above brown, with darkish markings, fading into white or yellowish-white on the belly; sides

with numerous roundish yellow spots of unequal size, but usually about the size of a small pea; and also very small bright red spots, commonly situated within the yellow ones. These red spots are extremely variable, being very few in some specimens and numerous in others. The caudal and first dorsal fin transversely banded or mottled with black. Head one seventh the total length, darker colored than the back. Eyes large, iris silvery. Teeth hook inward, on the jaws, tongue, palatine bones and vomer; those on the tongue largest. Jaws equal. Scales very minute. Lateral line straight. First dorsal fin on the anterior half of the body; adipose fin small, brownish-yellow margined with black, and behind the anal; pectorals under the posterior part of the operculum; ventrals under the middle of the first dorsal; first ray of the anal, ventral, and pectoral fins white; the second or third ray usually black, the rest of the fin reddish. Tail slightly forked.

History.—The Brook Trout is more generally diffused over the Townships than any other species of fish, there being scarcely a brook, or rill of clear water, descending from our hills and mountains, in which it is not found. When the country was new, they also abounded in the larger streams, where they often grew to the weight of two or three pounds. But they have been diminished by the causes already mentioned; and they have been sought after with such eagerness as the most delicious article of food of the fish kind, that they are now seldom taken in our streams exceeding half a pound in weight, and much the greater number of them weigh less than a quarter of a pound. In many of the ponds, they are still taken of a larger size, but their flavor is thought to be less delicious than that of those taken in running water. The trout is usually taken with the hook, and the bait universally used is the red earth-worm, everywhere known by the name of the *angle-worm*. Fishing for trout is a favorite and common amusement, and parties frequently go fifteen or twenty miles for the sake of indulging in it.

THE BLACK BASS; *Centrarchus fasciatus*, Le Sueur. Form somewhat elliptical, compressed, a little convex on the sides, and pointed forwards. Color dark-greenish above, lighter and faintly mottled on the sides, and grayish-white beneath.

History.—The Black Bass ranks as one of the best fishes taken from our waters; but, as is apt to be the case with good fishes, it is much less abundant than several other species which are greatly its inferior in point of quality. Its weight varies from one to five or six pounds.

It is usually caught with the seine; but is often taken with the hook and line, as well as with the fly.

THE COMMON PIKE; *Esox estor*, Le Sueur.—*Description.* Body thick, somewhat four-sided; back nearly straight from the head to the dorsal fin, and parallel to the abdomen. Color of the back, blackish green; sides lighter; belly pearly white. This fish, like other of its species, has a head one fourth the total length, and is commonly known as the Pickerel.

WHITE FISH, OR LAKE SHAD; *Coregonus albus*, Le Sueur.—*Description.* Form ovate, slightly tapering toward the tail; body deep and thick; head pointed, and, with the mouth, very small. Average weight about four pounds. Color silvery, bluish-gray on the back, lighter on the sides, and pearly-white on the belly. This is a most excellent fish, and nearly all are disposed to acquiesce in this opinion. It is taken in considerable numbers in Lake Massawippi, and in other lakes of the Eastern Townships.

Lake Massawippi is remarkable for the variety of fish found in its waters. Besides the Longe or Black Salmon peculiar to this lake, there are taken of the principal fish of Canada—the Maskinongé (*Esox nobilior*, Thompson), Rock Bass, Black Bass, the Sucker, Mullet, Common Pike, Pickerel, Trout, the Eel, and others of less consequence. The great variety found in this lake may be accounted for by its being so easy of access for fish through its outlet, the River Massawippi, which connects the lake with the River St. Francis at Lennoxville.

There are many other kinds of fish in the Rivers and Lakes, which it is not necessary here to notice. For Trout fishing, the Rapids of the River Magog afford the best sport for the disciples of Izaak Walton. The trout of this river are particularly fine, and are caught weighing from one to six pounds. Fishermen who are *au fait* in the science frequent this ground from Magog to Sherbrooke.

Richard Nettle, Esq., in his interesting work on the "Salmon Fisheries of the St. Lawrence," says:—"A little practice is worth a volume of theory, and that particularly in fly-fishing. Bait-fishing, though requiring a little judgment, is more accidental in its results. I have been beaten by a lady fishing from the same boat. The fish appeared to prefer being taken by her hook, and very few came to my share. The fly-fisher is ever called on to bring into practice those reasoning faculties which we must suppose the fisher to possess. He must know that the soft, warm breezes of June bring into existence the

innumerable ephemera tribe; and that more particularly the evening shews them skipping and dancing lightly o'er river, lake, and stream. He will then

'See the trout, in speckled pride,
Sportive to the bosom spring;'

consequently, the best thing he can do is to see what sort of a fly, or flies, the fish are rising at and choose from his fly-book those that more nearly approach in color and size the *natural fly*, and by his skill try to imitate their hovering motion. A quick eye, and a peculiar turn of the wrist, is essential to make a good fly-fisher; for though sometimes the fish may hook themselves, still it is only by chance that such an occurrence happens. It is scarcely necessary to say that for trout-fishing your apparatus must be finer than for salmon. In the selection of a rod, I would advise you in all cases, unless you are experienced in the matter, to let an old fisherman choose one for you. I know nothing that is more tedious than to have a badly balanced rod; and therefore let your chief care be to guard against such an error, or you will find perchance that you have made toil of what would have been pleasure. With a nicely balanced rod, you may fish all day and not feel the least fatigued. A rod of from 12 to 14 feet is sufficiently long for trout-fishing. The butt should be hollow to contain one or more spare tops. I prefer the spliced rods as giving a greater pliancy; but they require more care, and a young fisherman had better choose a ferruled one. The line should be silk

and hair, dark colored and about 30 to 40 yards in length; and after fishing, care should be taken always to dry it, as if reeled up when wet it will soon rot. I generally rub my line down with a little sweet oil and afterwards with a dry piece of flannel; it throws off the water when fishing and prevents the line from kinking. The reel should be a multiplier without the stop; the *check* of which has lost many fine fish.

TROUT FLIES.

"I here give a selection of a few that I have ever found to be good killing ones. As I have remarked in another place, I copy nature as nearly as I can, and it is what I am particularly fond of. I could sit all day and make flies. I catch the natural fly, and with my magnifying glass view the different colors, and as nearly as possible copy them. I am of opinion, that the water acts as a magnifier on the vision of the fish; else why do the salmon and the large-sized trout rise at the small midge-fly? I may be wrong, but such is my opinion. This fly is scarcely larger than a pin's head, and yet we find the fish rise eagerly at them. It cannot be from any nourishment they receive; but even here comes diversity of opinion."

We take much pleasure in advancing Mr. Nettle's ideas on trout-fishing, as we are particularly fond of this sport, and from observation we think that they are applicable to the trout-fishing of the Townships.

CHAPTER V.

PRINCIPAL WILD ANIMALS.

THE Wild Animals of the Eastern Townships are gradually retreating to other parts. Formerly this whole country was a vast hunting-ground. The principal wild animals now found in this section of Canada are as follows :—

ORDER RUMINANTIA.—*Ruminating Animals.*

MOOSE.

Cervus alces, Linnæus.

DESCRIPTION.—Head long, narrow between the eyes, and large toward the mouth, which has some analogy to that of the horse; upper lip exceedingly developed and very thick; nostrils, a lateral slit, more open anteriorly than behind; eyes small, near the base of the horns; lachrymal pits small; neck short; ears very large and thick; horns, consisting of a very large flattened expansion, furnished with numerous prongs on the external border, with a large isolated branch of the principal stock; tail excessively short. A tuft of long hair-like beard, beneath the throat, in both sexes; and a protuberance in the same place in the male. Legs long; feet long, and placed obliquely in the soil. Hair coarse and friable. General color fawn-brown. Dimensions, as given by Doctor Harlan: length from the nose to the base of the tail, 6 feet 10 inches; height before 5 feet 2½ inches, behind 5 feet 4 inches; length of the head, 23 inches; ears, 10 inches; horns, 37 inches; neck, 18 inches; tail, 2 inches; weight of the horns sometimes 60 lbs. and sometimes over.

History.—Moose were formerly plentiful in the Eastern Townships. In many places the early settlers depended upon their flesh for no inconsiderable part of the subsistence of their families. They are now rarer to be found except in the eastern portion bordering upon the State of Maine. The principal grounds for moose-hunting at present are in the regions of country round about Lake Megantic, and numbers are killed there every winter. Individuals of this class have been taken the head and horns weighing over 100 lbs., and the hide, and quarters when

dressed, weighing over 800 lbs. Height of horns exceeding 3 feet and the distance between their tips more than 5 feet; larger than this are not often found at the present day. But from statements made by some of the early settlers, we conclude that larger moose were taken when the country was comparatively new. The food of the Moose consists of grass, shrubs, the boughs and bark of trees, especially the beech, which they seem to prefer above all others, and a species of maple, *Acer Pennsylvanicum*, which is called moose-wood. In summer they keep pretty much in families; in winter they herd together, sometimes to the number of 20 or 30 in a family. They seem to prefer cold places; and when the snow is deep, they tread it down for a space of several acres, forming what is called the "yard." Within this space they range, and subsist upon the twigs and bark of the trees, while the snow remains deep upon the ground. In order to eat from the ground, they are obliged to kneel or spread their fore-legs, on account of the shortness of their neck. They move with a long shambling trot, and with a rattling of their hoofs, which may be heard at a considerable distance. Their course is swift and straight; they leap over the highest fences with ease. The males only have horns, which are shed and reproduced annually. The rutting season is in September, and the young are produced about the first of June, usually two at a birth. The female is smaller than the male. This animal was called *Monsall* by the Indians, *Orignal* by the French inhabitants of Canada, and *Moose* or *Moose-deer* by the English.

The taking of Moose is sometimes extremely hazardous. The most favorable time for hunting them is towards spring, when the snow is deep, and when the warmth of mid-day melts the surface, and the cold nights freeze a crust, which greatly embarrasses the moose and the deer in their flight.

The following narrative of a moose-hunt will be interesting, particularly to those who sometimes indulge in this sport in the Eastern Townships :—

"As the snow was deep, and crusted sufficiently hard to bear us upon snow-shoes, while the moose broke through at every leap, we were soon sufficiently near them to allow a good shot. One of the men approached within a few yards of the hindmost, and fired. The ball took effect, but did not stop him. Still pursuing, another ball was lodged in his body, when he turned at bay. It was now our turn to retreat; but after making a few bounds towards us, he turned and fled again, when we again came up to the charge. I took the gun this time and approached within fifteen feet of him, and fired. He dropped instantly upon the snow. Supposing him dead, we left the spot and pursued the other with all possible despatch, for there was not a moment to lose, as the fugitive, alarmed by the report of the gun, was redoubling his exertions to effect his escape. The dog, however, soon came upon him and retarded his flight. Emboldened in his successful encounter with the other, the dog dashed incautiously upon him, but nearly paid the forfeit of his life. The moose gave him a tremendous blow with his sharp hoofs, which made him cry out till the woods echoed with his piteous howl. In vain did we try to induce him to renew the encounter: his passion for the chase seemed effectually cooled. As the day was now quite spent, we returned to dress the one we had shot, but were astonished, on arriving at the place where we left him, to find that he had made his escape. Tracking him by a trail of blood which appeared to have spirted out at every leap he made, we soon came up with him, and fired again. The ball hit, but only to enrage him the more. Five additional bullets were lodged in his perforated body, now making in all nine. Having but one shot more, we desired to make it count effectively, so, taking the gun, I approached very near upon one side and fired at his head. The ball passed directly into one eye and out at the other, thus rendering him completely blind. The last shot caused him to plunge and jump tremendously. He now became furious, and, guided by the sound of our footsteps, would dart at us like a catamount whenever we approached him. We had no axe to strike him down, or to cut clubs with which to despatch him. We were at a stand what to do. We tried first to entangle him in the deep snow by approaching him, and thus induce him to spring out of the beaten track into the untrodden snow; but the moment he found himself out, he would back directly into the beaten path again. Our feelings became very uncomfortable, and now, from pity, we desired to put an end to his sufferings. To see his noble struggle for life, with nine

bullets in him, and blind, inspired a painful regard toward him. What to do we knew not. It was really unsafe to approach him so as to cut his throat. We could neither entangle him in the snow, nor bring him down with the small sticks we had cut with our jackknives. At length we hit upon the following expedient. Obtaining a long stiff pole, one end of it was placed against his side. We found that he leaned against it, and that the harder we pushed the more he opposed. Uniting our strength, we pressed it with all our force: he resisted with equal strength. While thus pressing, we suddenly gave way, when he fell flat upon his side. Before he had time to recover, we sprang upon him, and with a knife severed the jugular vein, when he yielded to his fate. It was nearly two hours from the commencement of our last encounter before we despatched him. Leaving him for the night, we returned to the camp, quite overcome with hunger and fatigue.

"Next morning, when we went out to bring in our prize, we found the other moose affectionately standing over the dead carcase of her slaughtered companion, manifesting much reluctance to flee. She permitted our approach sufficiently near to afford a good shot, which we were not unwilling to improve; so raising the fatal weapon to my cheek, I let go. She fell on the spot, and was soon dressed with the other. We took the carcasses into camp, and, after reserving what we wished for our own use, sent the remainder to our friends." The "bull-moose" is a formidable foe when he "gets his dander up," and especially so at particular seasons of the year; then unprovoked, they will war on man, betraying none of that shrinking timidity so characteristic of the *cervine* genus.

Cervus virgurianno, Gmel.—COMMON DEER.

Description.—Form light and slender; colour reddish-fawn in summer, and grayish in winter; horns moderate, with an antler placed high on the inside of each shaft, and two or three others on the posterior side, turned backward, but varying with the age of the animal; lachrymal pits formed by a fold in the skin; muzzle partially developed; no canine teeth. Length 3ft. 5in., tail 10in., height 3ft; length of the head, 12in; of the horns, following the curvature, 22in.; weight from 90 to 140 pounds.

History.—When the country was new, this deer was one of the most common and valuable quadrupeds found in our forests, and its flesh was much depended upon by the first settlers. Indeed, so eagerly has it been

hunted, and still so anxious are the people for its preservation, that laws have been passed by our Legislature for its protection from being killed out of season. But notwithstanding this has been done for their preservation, their numbers have been constantly diminishing, till they have become exceedingly scarce except in the most unsettled and woody sections. The range of this species is very extensive, reaching from Canada to the Orinoco in South America. Its form is slender and delicate, and its neck and tail proportionably longer than in most other species. It possesses great muscular power and runs with surprising speed; it is a very timid animal; its sense of hearing and smelling very keen, and is very difficult of approach. In the fall, the deer are in very good condition, and the venison valuable. In the winter they herd together like moose, and are similar to them in all their habits. During this period they become very lean, and neither the skin nor the flesh is of much value. They produce their young in the early part of summer, and have two and sometimes three at a birth. The fawns are at first reddish spotted with white. They lose their spots in autumn, and become *gray* in winter. This coat is shed about the first of June, and in summer they are nearly *red*, which colour continues till August. The skin is said to be toughest in the red. The horns of the male are shed in January.

ORDER CARNIVORA.—*Carnivorous Animals.*

THE BLACK BEAR.

Ursus Americanus, Pallas.

Description.—Colour shining black, hair long and not curled; nose fawn-coloured, projecting, brightest about the angle of the mouth, and terminated by a naked black snout; forehead slightly arched, ears oval, round at the top and far apart; palms and soles of the feet short in comparison with the brown bear; claws black and strong, with the hair of the feet projecting over them; tail short.

History.—This bear, which is found throughout all the woody parts of Canada, was formerly very common in the Eastern Townships, and is frequently found at the present day. Under ordinary circumstances, the black bear is neither very carnivorous nor very ferocious. Its favourite food consists of vegetables, such as Indian corn, nuts, berries, and roots. But when these fail, it is compelled, by necessity rather than choice, to resort to animal food. In such cases, it will sometimes attack and destroy young cattle, sheep, and hogs, but

will seldom if ever attack a person except in defence of its cubs, or when provoked or wounded. The early settlers of the Townships suffered much from their ravages upon their crops. When the corn was in the milk, they entered their fields in the night and broke down and devoured with great greediness. While committing these depredations, large numbers were despatched by the settlers. In this way scores were annually killed. During the fall, when their food is abundant, bears usually become very fat, and, as the winter sets in, they retire to natural dens among the rocks or uprooted trees, or into hollow trees, and there they remain in a torpid state till the return of warm weather in the spring. The female produces her young during her hibernation, and has from one to five at a litter, but more commonly two. When the bears first leave their winter quarters, they are said to be about as fat as when they retired in the fall, but with exercise they shortly lose their fat and become much emaciated. When the bear is in high order, he is valued for his flesh, his grease, and his skin. With the exception of the moose, he is the largest native quadruped found in the Eastern Townships, and has been frequently killed weighing from 400 to 500 pounds.

Having thus described the Moose Deer and the Bear, and being restricted in space, the remaining animals worth noticing will be enumerated in the following list:—

Order Carnivora.

<i>Procyon lotor</i>	Raccoon.
<i>Gulo luscus</i>	Wolverine.
<i>Mustela vulgaris</i>	Weasel.
“ <i>vison</i>	Mink.
“ <i>Canadensis</i>	Fisher Martin.
“ <i>martes</i>	Pine Martin.
<i>Mephitis Americana</i>	Skunk.
<i>Lutra Canadensis</i>	Canadian Otter.
<i>Canis lupus</i>	Wolf.
“ <i>fulvus</i>	Red Fox.
“ <i>var. decussatus</i>	Cross Fox.
“ <i>var. argentatus</i>	Black or Silver Fox.
<i>Felis Canadensis</i>	Lynx.

Order Rodenta.

<i>Castor fiber</i>	Beaver.
<i>Fiber zibethicus</i>	Musk-Rat.
<i>Arctomys monax</i>	Woodchuck.
<i>Sciurus cinereus</i>	Gray Squirrel.
“ <i>niger</i>	Black Squirrel.
“ <i>Hudsonius</i>	Red Squirrel.
<i>Hystrix dorsata</i>	Porcupine.
<i>Lepus Americanus</i>	Rabbit.

CHAPTER VI.

BIRDS, FOWLS.

THE principal Birds found in the Eastern Townships are as follows:—

Order Rapaces—Birds of Prey.

- Falco leucocephalus*.....Bald Eagle (rare).
 “ *chrysaetos*.....Golden Eagle (rare).
 “ *halicetus*.....Fish Hawk.
 “ *lineatus*.....Red-shouldered Hawk.
 “ *peregrinus*.....Large-footed Hawk.
 “ *cyaneus*.....Marsh Hawk.
 “ *Columbarius*.....Pigeon Hawk.
Strix American.....Screech Owl.
 “ *funerea*.....Hawk Owl.
 “ *nyctea*.....Snowy Owl.
 “ *Virginiana*.....Great Horned Owl.

Order Omnivores—Food of all Kinds.

- Icterus phoeniceus*.....Red-winged Black-bird.
 “ *pecoris*.....Cow Black-bird.
 “ *agripennis*.....Bob-o-link.
Quiscalus versicolor.....Crow Black-bird.
Corvus Americanus.....Common Crow.
 “ *corax*.....Raven.
 “ *cristatus*.....Blue Jay.
 “ *Canadensis*.....Canada Jay.
Bombycilla Carolinensis...Cedar or Cherry Bird.

Order Insectivores—Living on Insects.

- Muscicapa tyrannis*.....King Bird.
 “ *Phoebe*.....Phoebe.
 “ *Canadensis*.....Spotted Fly-catcher.
Turdus rufus.....Brown Thrush.
 “ *felivox*.....Cat Bird.
 “ *migratorius*.....Robin.
Sylvia aestiva.....Summer Warbler.
 “ *maculosa*.....Spotted Warbler.
Troglodytes aedon.....House Wren.
 “ *hyemalis*.....Winter Wren.
Sialia Wilsonii.....Blue Bird.
Anthos spinoletta.....Brown Lark.

Order Zygodactyli—The Toes in pairs.

- Picus auratus*.....Gold-wing Woodpecker.
 “ *erythrocephalus*.....Red-headed “
 “ *varius*.....Yellow-bellied “

Order Tenuirostres—Slender-Bill Birds.

- Sitta Canadensis*.....Red-bellied Nuthatch.
Trochilus colubris.....Ruby-throat Hum'g Bird.

Order Alcyones—Halcyons.

- Aluco Alcyon*.....Belted King Fisher.

Order Chelidones—The Swallow Tribe.

- Hirundo purpurea*.....Purple Martin.
 “ *rufa*.....Barn Swallows.
 “ *fulva*.....Cliff Swallow.
 “ *bicolor*.....White-bellied Swallow
 “ *riparia*.....Bank Swallow.
Cypselus pelagius.....Chimney Swallow.
Caprimulgus vociferus....Whip-poor-Will.
 “ *Virginianus*.....Night Hawk.

Order Columbæ—The Pigeon Tribe.

- Columba migratoria*.....Passenger Pigeon.

Order Gallinæ—Gallinaceous Birds.

- Tetrao umbellus*.....Partridge.
 “ *Canadensis*.....Spruce Partridge.

Order Grallatores—Wading Birds.

- Grus Americana*.....Whooping Crane.
 “ *Herodias*.....Great Blue Heron.
Totanus Bartramius.....Upland Plover.
Scolopax Wilsonii.....Common Snipe.
 “ *minor*.....Woodcock.
Caledris arenaria.....Sanderling Plover.
Ardea virescens.....Green Heron.
Totanus chloropigius.....Solitary Tatler.

Order Palimpedes—Web-footed Birds.

- Larus argentatus*.....Herring Gull.
Anser Canadensis.....Canadian Goose.
Anas sponsa.....Wood Duck.
 “ *boschas*.....Mallard.
 “ *obscura*.....Dusky Duck.
 “ *discors*.....Blue-winged Teal.
Colymbus glacialis.....Loon.

Order Granivores—Living on Seeds.

- Emberiza nivalis*.....Snow Bunting.
Fringilla melodia.....Song Sparrow.
 “ *socialis*.....Chipping Sparrow.
 “ *tristis*.....Gold Finch or Yellow Bird.
 “ *linaria*.....Pine Linnet.
 “ *erythrophthalma*.....Towhe-ground Finch.
 “ *purpurea*.....Purple Linnet.

CHAPTER VII.

FOREST AND FRUIT TREES,—WILD AND CULTIVATED.

THERE is much of interest in every development of nature,—much to admire, especially in the grandeur, the picturesque beauty, and the sublimity of large forest trees. Hence the difficulty of giving a description that does not place the last before each preceding one.

Than Canada, there is no country in the world where the trees contribute more beauty to the forest scenery. In autumn-tide, the gorgeous color of the forest trees in the Eastern Townships is a subject of remark by all European travellers who visit this country. In the latter part of summer and during the earlier part of autumn, the leaves begin to turn from green to a deep crimson, scarlet and gold, with all the intermediate tints. Even corresponding climates with the same families bear no comparison. The difference is said mainly to depend upon the clearness of our atmosphere, and consequently greater intensity of the light; for the same cause which renders a much larger number of stars visible by night, and which clothes our flowering plants with more numerous flowers, and those of deeper, richer tints, gives somewhat of tropical splendor to our really colder parallels of latitude. The Maple stands pre-eminent for the color of its leaves in autumn. The family of the maple-tree is numerous: nearly 40 species are known, of which some 10 or 12 belong to Canada and the United States. The climate of the Eastern Townships is particularly favorable to their growth, as is shown by the perfection to which several of the most valuable species attain. The sugar-maple, *acer saccharinum*, in all respects the most remarkable tree of the family, while young is justly admired for its ornamental beauties as a shrub, and when in a state of maturity for the purposes of art, as no native wood possesses more beauty or greater variety of appearance. In the forest, the rock-maple often attains great height, and produces a large quantity of timber: trees are often found measuring from two to three feet through at the base, and from 75 to 90 feet high, yielding from 4 to 7 cords of wood. From this tree are manufactured by the inhabitants of the Eastern Townships very

great quantities of maple-sugar, yielding a large revenue. Of the sap, the average quantity to a tree is from 12 to 24 gallons each season, and in some instances it is much greater. It may be said that from this quantity of sap from two to five pounds of sugar can be made. Nor is sugar the only product to be obtained from this valuable tree: strong and excellent vinegar is made from it, as well as good wine; and, with the addition of hops, sound and pleasant beer may be made at trifling expense. It is a remarkable fact that these trees, after having been tapped for six or seven successive years, always yield more sap than they do when first wounded. This sap, however, is not so rich as that which the trees distil for the first time, but, from its coming in an increased proportion, as much sugar is usually produced from a tree in the fifth year of its being tapped as in the first.

The process by which the sap is obtained is extremely simple; nothing more being necessary than to bore a hole in the tree, and conduct the flowing liquid by means of a hollow piece of wood or tin spout, which drops into a vessel beneath. Whatever quantity of sap is collected should be boiled down the same evening, as it is liable to be spoiled in a short time by fermentation. Snow should be heaped around the roots of the trees to prevent them from putting forth their leaves so soon as they otherwise would, for as soon as the foliage commences to develop the sap will not run. After obtaining a quantity of maple-sap, it is poured into a large iron pan or kettle and boiled down to a thick syrup, and, after ascertaining that it is sufficiently concentrated to crystalize or grain, it is thrown into casks or vats, and, when the sugar is formed, the molasses is drained off. But little art is used in clarifying the syrup, and the chemist would regard the operations as very rude and clumsy; yet a very pleasant sugar, with a slightly acid taste, is made, and the molasses is of excellent flavor. The sugar frequently contains oxide of iron, which it dissolves from the rusty kettles in which it is commonly boiled down, and hence it turns tea black. A neat manufacturer will

always take care to scour out his kettles with vinegar and sand, so that the sugar may be clean and white. He will also take care not to burn the syrup by urging the fire towards the end of the operation.

If this syrup is acid, a little clear lime-water will saturate it, and the lime will principally separate with the molasses or with the scum. The syrup should be carefully skimmed during the operation. It is not worth while, perhaps, to define the process of refining sugar; but it is perfectly easy to make maple sugar as white as the best double-refined loaf-sugar of commerce. Were it generally known how productive are the groves of sugar-maples, we should, I doubt not, be more careful not to exterminate them from the forest, as is now too frequently done. Groves in which they abound might be spared from the unrelenting axe of the woodman. Maple-trees may also be cultivated, and will become productive in 20 or 30 years; and it would certainly be a beautiful pledge of regard for posterity, to plant groups of maples in convenient situations upon our lands, and to line the road-sides with them. Such a plan, if carried into effect, would please public *taste* in more respects than one, and we might be in a great measure independent of the cane-plantations of the West Indies. It must be also remarked that the manufacture of maple-sugar is carried on at a season of the year when there is little else to be done; and if proper-shaped evaporating vessels were used, a much larger quantity of sugar might be made in the season.

THE ELM-TREE (*Ulmus Americana*).—Of this family there are several varieties; the American, the English, the Scotch, and the Slippery Elm. The elm-tree is deservedly esteemed for its ornament and shade. It assumes many different shapes and all of them beautiful. Of these, three are most striking and distinct. The tall Etruscan vase is formed by four or five links, separating at 20 or 30 feet from the ground, going up with a gradual divergency to 60 or 70 ft., forming a flat top with a pendant border. Transplanting the elm often produces in it an appearance similar to that of the oak. Few trees of other species are to be found standing near the abodes of civilized life, which have attained the dimensions of the elm. Whatever may have been the peculiar property of other trees, those trees have disappeared. Upturned by the passing hurricane or felled by the woodman's axe, they have gone, while the elm stands at our doors, associated with the memory of the generations which, like its autumnal sheddings, have mingled with the dust. This tree some-

times attains a height of 100 feet, with a diameter at the base of more than 4 feet. The wood is of a dark-brown color, and is valuable for several purposes. It is often sawed into planks, and has been considerably used for knaves of wheels. For fuel, the elm is inferior to several other kinds of woods, but its ashes are strongly impregnated with alkali, and no wood yields a greater quantity.

THE BIRCH.—Of the birch-family there are several varieties, called Black, Yellow, Canoe, Gray, and Dwarf. Of these the yellow birch (*Cetula excelsa*) and the canoe birch (*Cetula papyracea*) are the most interesting and useful. The general outlines of the birch often resemble the elm; the root-spurs rise high up the trunk, protruding much beyond the regular circle of its shaft. It is firmly rooted, and is capable of withstanding a violent blast. It attains to the height of 70 or 80 feet, and often measures from 7 to 10 feet in circumference three or four feet from the ground. Its wood is very useful for cabinet purposes, and is excellent for fuel. The white or canoe birch is most remarkable for the beautiful thin sheets of bark which it affords, from which the Indian canoe is constructed, and many Indian ornaments. The white birch possesses in an eminent degree the lightness and airiness of the Birch family, spreading out its glistening leaves on the end of a very slender and often pensile spray, with an indescribable softness; so that Coleridge might have called it, as he did the corresponding European species,

"Most beautiful

Of forest trees, the lady of the woods."

THE BLACK OR CHERRY BIRCH (*Betula lenta*). This tree is called Cherry Birch from its resemblance to the wild cherry. It is also sometimes called Sweet Birch or Spice Birch on account of its agreeable aromatic smell and taste. It grows best in a deep, loose soil, and sometimes reaches a height of more than 70 feet, with a diameter of 3 feet. The wood is highly valued by the cabinet-makers. Being fine grained, it is susceptible of a very high polish.

RED BEECH (*Fagus ferruginea*). The Beech is a tree of no ordinary interest, being more free from impurities than any other tree with which we are acquainted. The bark is very clean and smooth, of a light lead-color, sprinkled with fine dots of black, so that it has a grayish appearance. It attains the height of 60 or 70 feet, with a diameter of one to two feet. This tree is found in all parts of the Eastern Townships, and in some places forms almost entire forests. The wood is valuable for

fuel and the arts. The fruit of this tree is usually abundant. It is often eaten, but not very highly esteemed. A rich oil may be extracted from the nuts. As beech-nuts are injured by the fall rains, those which are designed for preservation should be gathered as soon as ripe. The lower branches of this tree are thrown out in a horizontal attitude, while the upper ones assume somewhat of an erect position. The leaves are of graceful proportions, and profuse, forming a dense shade. "The leaves of this tree were formerly used in Britain, and are to this day in some parts of Europe, for filling beds." Evelyn says that "Its very leaves, which form a natural and most agreeable canopy all the summer, being gathered about the fall, before they are much frost-bitten, afford the best and the easiest mattress in the world. They are used by divers persons of quality in Dauphiné and in Switzerland." We may properly say that

"The wood's a house, the leaves a bed."

The wood of the beech is preferred to all other wood for plane-stocks, saw-handles, and for many other uses. It is said the beech is never struck by lightning. In travelling through a forest country, other trees, and more commonly the hemlock, may be seen riven by lightning, but the beech never.

IRON WOOD (*Ostrya Virginica*).—The body of this tree, while small, is much used for levers in rolling logs, and hence it is frequently called lever-wood. The growth of this tree is very slow, as may be seen by the great number of concentric annual layers contained in a tree of only a few inches in diameter. It is thinly scattered among other trees in almost all parts of the Townships. It seldom exceeds 30 feet in height and 8 inches in diameter.

WHITE ASH (*Fraxinus acuminata*); RED ASH (*Fraxinus pubescens*).—The White Ash is thinly scattered over nearly the whole of the Townships, and seems to delight in cool situations. It is most frequently met with near the banks of streams, and on the acclivities surrounding ponds and swamps. It frequently attains the height of 70 or 80 feet, and a diameter of over 2 feet. By the light color of the bark, it is easily distinguished from the other species. The wood of this tree is highly esteemed for its strength, suppleness, and elasticity. It is always selected by carriage-makers for thills or shafts, the felloes of wheels, and the frames of carriage-bodies and for sleigh-runners. It is also used for a variety of other purposes, such as chairs, scythe-snaths,

rake-handles; hoops, sieves, boxes, wooden-bowls and other domestic wares; also for the staves of casks, blocks for pulleys, and, on account of its strength and elasticity, is considered superior to any other kind of wood for oars. Red Ash is a handsome tree, which grows to the height of about sixty feet. The bark on the trunk is of a deep-brown color, and the wood differs from that of the white ash in being redder, but it possesses most of the other properties of the white ash, and is used for many of the same purposes.

THE BLACK ASH (*Fraxinus sambucifolia*).—The Black Ash requires a moister soil than the White Ash, and is found growing in and about swamps, hence it is sometimes called Swamp-Ash. The saplings of this tree are much used for hoop-poles.

LIME-TREE or BASS-WOOD (*Tilia Americana*).—This tree is found in all parts of the Townships, and grows to the height of 70 to 80 feet, with a proportionate diameter. The inner bark is sometimes macerated in water and formed into ropes. The wood is white and tender, and is highly valuable for many purposes. It is sawed into planks and boards, and is used for the manufacture of chair-seats, trunks, and a variety of other articles. Mr. De Courtenay of Bury, Eastern Townships, (and late of Italy,) states to the author his opinion that the leaf of this tree may be profitably employed in the culture of the silk-worm, and he has made arrangements for trying the experiment.

BLACK CHERRY (*Cerasus serotina*).—This is our largest species of cherry-tree, and sometimes, though rarely, exceeds 50 feet in height and 15 inches in diameter. It is scattered sparingly over the greater part of the Eastern Townships. It is sometimes called Wild Cherry; and also Cabinet Cherry, from the use made of it by the cabinet-makers. The perfect wood is of a dull light-red color, which deepens with age. It is compact, fine-grained, and not liable to warp when perfectly seasoned. It is extensively used in almost all kinds of furniture, and sometimes rivals mahogany in beauty. The bark of this tree is aromatic, has an agreeable bitter taste, and is often used as a tonic.

BUTTERNUT (*Juglans cinerea*).—The Butternut is found pretty generally throughout the Townships. It thrives best on a dark, cold soil, and often measures over three feet in diameter, although it seldom exceeds 60 feet in height. The roots of the butternut usually extend horizontally, with little variation in size and but a few inches below the surface of the ground, often to a dis-

tance of 30 feet or more, which makes it a troublesome tree when growing upon or adjacent to lands intended for tillage. The wood of this tree is light, and of a reddish color, and, though it has little strength, it is durable, and not liable to split. It makes a beautiful finish for the inside of houses, and, when left in its own natural color and varnished, has a fine effect. It however receives paint in a superior manner. The extract of the bark of this tree is sometimes used for a cathartic. The nuts of this tree are generally gathered, and, although very oily, are agreeable to the taste.

The trees described form the most important of the Hard-Wood species found in the Eastern Townships.

"Fir Trees are a northern type, and are very rare in the tropical regions. The freshness of their evergreen leaves cheers the desert winter landscape; it proclaims to the inhabitants of these regions, that, although snow and ice cover the earth, the internal life of the plants, like the fire of Prometheus, is never extinguished."

Pinus balsamea (Balm of Gilead Fir, or American Silver Fir) grows to the height of 50 feet; is an elegant tree, resembling the Silver-Fir of Europe. The Resin of this species is the common Canada Balsam, which is often substituted for the Balm of Gilead. It is found in small blisters on the bark, extracted by incision and received in a limpid state in a shell or cup. The texture of the wood is coarse and firm. Throughout the Townships, in some localities where pine is scarce, it is very extensively used as a substitute for finishing. Indeed, it may be said to afford the principal lumber of the Townships. Where this tree stands alone and develops itself naturally, its branches, which are numerous and thickly garnished with leaves, diminish in length in proportion to their height, and thus form a round pyramid or cone of remarkable regularity and beauty.

Pinus Canadensis (Hemlock Spruce) is a beautiful and very large tree, bearing some resemblance in its foliage to the common Yew-Tree of England. This tree is found quite generally distributed throughout the Townships. It flourishes best in a sandy loam, at the foot of hills, and on lands slightly inclining. In such situations, the trees are often from three to four feet in diameter. The size of the body of this tree is nearly uniform for about two thirds of its length. In very old trees, the large limbs are often broken off four or five feet from the trunk by the weight of the snows lodged upon them, giving to the trees a decrepid aspect. The wood of this tree, though abundant, is coarse-grained

and inferior to most of the other Evergreens. It is, however, extensively used for frames and joists of buildings, for the timbers and planks of bridges, for the floors of barns, for lining-boards, lath-boards, &c. The logs are used for building dams, wharves, and break-waters, and they are bored and much used for aqueducts. The bark of the hemlock is very valuable for the purpose of tanning leather.

Pinus strobus (White Pine).—This Pine has been called by some the "monarch of the forest." Mankind pretty generally, however, are disposed to place the Oak at the head of the vegetable kindgom. To those who have stood in the noble Pine groves of Canada, beneath their giant forms, the wind, sighing through their branches, seemed as it were to chaunt forth the requiem of the Red Man, once the owner of the soil, who has now passed away and gone to the Spirit Land.

"The pines of Mœnalus were heard to mourn,
And sounds of woe along the grove were borne."

The Pine-tree too seems doomed, by the avarice and the enterprise of the white man, gradually to disappear from the borders of civilization, as have the Aborigines of this country before the onward march of the Saxon Race. Twenty-five or thirty years ago, large tracts of the Eastern Townships were covered principally with Pine-trees. These seemed to be purposely located in the vicinity of lakes and large streams. Lumbering operations could then be carried on contiguous to improved portions of the country; but the woodman's axe, together with destructive fires, have, so to speak, driven this tree far back into the interior wilderness, so that but a few isolated pines may now be seen towering above the surrounding forest as monuments of their departed race. The White Pine is much the most lofty tree which grows in our forests, and the most valuable for its timber. While the pine forests were standing, trees measuring from 100 to 150 feet in height were not uncommon, with a diameter of from 4 to 6 ft. at the base. In consequence of the indiscriminate havoc among our forest-trees by the early settlers and of the common use of this tree for timber, boards and shingles for buildings, and other domestic uses, together with the great demand for it for exportation, our forests of white pine have mostly disappeared, and boards and shingles of good quality have become scarce and difficult to be obtained.

Pinus nigra (Double Spruce).—This tree is very common throughout the Townships. The usual height is

from 60 to 80 feet, and diameter from 1½ to 2 feet. It is found on the very summits of our mountains. The wood of the Double Spruce is distinguished for strength, lightness, and elasticity, and is extensively used for frames of houses and other buildings. It is also sawed into boards and clap-boards, which, though more difficult to prepare, are, for many purposes, little inferior to pine. The young branches of the tree, boiled in water, and the decoction sweetened with molasses or maple-sugar, make what is called spruce-beer. The resin which exudes from the bark is called spruce-gum.—*Pinus alba* (Single Spruce). This Spruce is also plentiful in the Eastern Townships. In most respects, it bears a close resemblance to the preceding species, and is applied to the same uses.

American Larch (*Pinus pendula*).—This tree is generally known in the Eastern Townships by the name of Tamarack, but is sometimes called Larch, and sometimes Hackmatack. It seems to delight in a cold, wet soil. In some swamps of the Townships it is found in great quantities. With us this tree seldom exceeds from 60 to 90 feet, with a diameter of from 1 to 2 feet; but in the neighbourhood of Hudson's Bay it is said to emulate our White Pine, rising to the height of nearly 200 feet. This tree sheds its leaves in Autumn, though its appearance in Summer might lead one to suppose it to be an evergreen. Although it snaps considerably when burning, it is much superior to the Evergreens for fuel. The wood of the tamarack is distinguished by the following qualities,—of reddish color, close grained, and compact, remarkable for its great weight, strength, and durability. On these accounts, it is preferred before all other woods for knees, beams, and top-timbers in ship-building. It has crowded tufts of leaves, not unlike those of the spruce or pine, of much lighter green, so disposed on the ends of the branches as to make the foliage of the tree the lightest of all the forest trees, especially when compared with its great strength. Though in America it is most generally found in low land, where it has depth of soil and plenty of moisture, it has nevertheless the property of flourishing on surfaces almost without soil, thickly strewn with fragments of rocks, on the high bleak sides and tops of hills. The successful experiments made by the Duke of Athol in the Highlands of Scotland, are so deeply interesting and important, that the following brief statement of them is given, hoping the example may be followed in similar positions in this country. Commencing in the year 1740, there were planted more than 14 millions of larch-plants, occupying over 10,000 English

acres. It was estimated that the whole forest or waste territory planted entirely with Larch, about 6,500 Scotch acres, will in 70 years from the time of planting be a forest of timber fit for building the largest ships. Before being cut down for this purpose, it will have been thinned to about 400 trees to an acre.

Supposing each tree to yield 50 cubic feet of timber, its value, at a shilling a foot (much less than the present value), will give £1000 per acre, or, in all, a sum of £6,500,000 sterling, equivalent to nearly \$32,500,000.*

The Duke of Athol had the satisfaction to behold a British frigate built in 1819-20 at Woolwich Dock-yard, out of timber planted at Blair and Dunkeld by himself and the Duke his predecessor. This fact should afford sufficient encouragement to induce all to turn their attention to the growth of timber by planting where it is becoming scarce.

White Cedar, or Arborvitæ (*Thuja occidentalis*).—This tree is found growing only in swamps and along the banks of streams and ponds, and is universally known in the Eastern Township by the name of Cedar, and is found in many localities in great quantities. The wood of this tree is nearly white, with a slight tinge of red. It is very light, soft, and fine-grained, and somewhat odorous. For durability, it ranks second to no timber found in this section, and is extensively used for posts and rails for fences.

Mountain Ash, or Moosemissa (*Sorbus Americana*). This beautiful little tree is common upon our hills and mountains, and is found to thrive well upon transplanting. It seldom exceeds 25 feet in height, or 4 or 5 inches in diameter. It is generally known by the name of the Mountain Ash, but is not unfrequently called Moosemissa. No use is made of the wood, but the bark affords an agreeable bitter, and is considerably used as a tonic. But this tree is chiefly valued as an ornamental shade-tree; and its beautiful white blossoms, its pinnated globous leaves, and bunches of red berries, which remain upon the tree during the winter, make it much admired for that purpose. Miss Kent, in her "Sylvan Sketches," says: "In former times this tree was supposed to be possessed of the property of driving away witches and evil spirits, which is alluded to in a very ancient song, called the Laidey of Spindleton's Heughs:—

'Their spells were vain : the boys returned
To the Queen in sorrowful mood,
Crying that ' Witches have no power
Where there is rowan-tree wood ! ' "

* Reports on Trees and Shrubs of Massachusetts.

FRUIT TREES.—For many years after the settlement of the Eastern Townships was commenced, very little attention was paid to the cultivation of Fruit-trees. Apple orchards, it is true, were early planted in many places, and in some cases plums, cherries, and perhaps pears, but they were generally suffered to produce their natural fruit, and very little effort was made to improve it by pruning and cultivation. But for a few years past much more attention has been given to this subject, and many choice varieties of these fruits have been introduced and extensively propagated by grafting and budding.

BERRIES.—The Eastern Townships produce a considerable variety of berries, both wild and cultivated, and many of them are highly serviceable, not only for desserts, but for articles of food. One of the most important of these is the *Currant*, of which we have three species. The red, the white, and the black currant are largely cultivated in gardens, and are highly esteemed.

Whortleberries of various kinds are produced in great plenty in many parts of the Townships.

The *Raspberry* (Red) is very abundant upon our hills and pasture-lands.

Gooseberries are found growing wild in all parts of the country, but the fruit is generally small.

Blackberries are common, and they are universally regarded as the most wholesome and delicious wild berry found in the Townships. A variety of this berry is occasionally found the color of which is a delicate yellowish white. It is sometimes cultivated in gardens, and, contradictory as the terms may seem, several have been able to assert without contradiction that they could entertain their visitants with a dessert of *white blackberries*.

The *Barberry Bush* grows in some parts of the Townships; but so little use is made of the berry, that no effort is made to multiply it.

Two kinds of *Cranberries*, the high and the low, are common in many of the swamps; and preserved in sugar, they make an agreeable and wholesome sauce.

The common field *Strawberry* is diffused over the whole Eastern Townships, and in its season affords a considerable quantity of delicious fruit.

The *Fox* and *Frost Grapes* are sometimes found growing wild in the Townships.

In addition to the above, we have the *Mulberry*, the *Checker-Berry*, the *Partridge-Berry*, and some others, which are eaten; and several kinds, as the *Sumach*, *Elder*, *Juniper*, &c., which are used in medicine or the arts.

In the preceding account of our forest-trees, we had intended to notice a few of the many herbs, roots, and shrubs which are or have been of repute for their medicinal virtues, but we have not room. We would however remark, that the *Ginseng* (*Panax quinquefolia*), which is regarded as a *panacea* in China, and was supposed to be indigenous only to that country and Tartary, till 1720, when it was discovered by the Jesuit Lafitan in the forests of Canada, exists in considerable quantities in the Townships.

FLOWERING-PLANTS. The Eastern Townships are particularly rich, considering their northern situation and mountainous surface, in beautiful flowering-plants. Among our most beautiful flowering-shrubs may be mentioned the *Witch Hazel* (*Homomeles Virginica*). This shrub puts forth its modest yellow blossoms, usually in October, after the leaves have been killed by the frost, but the seed is not matured till the following year. *Poisonous-Plants* which are natives of the Eastern Townships are not numerous. Enough however exist to render caution necessary in gathering herbs, either for food or medicine.

CHAPTER VIII.

GEOLOGY AND MINERALS.

IN briefly sketching the leading Geological features of the Eastern Townships of Canada East, we beg to be understood as doing no more than registering such facts and observations as have been remarked by those who have made this subject their study. It may be here observed, that the geology of a country not only indicates the quality of the soil, but exercises an important influence on the salubrity of the climate.

The rocks of Canada, with the exception of the glacial drift, belong to the Azoic and the Palæozoic eras. The Azoic rocks are divided into Laurentian and Huronian, prevailing on the north side of the St. Lawrence and Ottawa, running in a general course from Labrador to Lake Superior. The Palæozoic consists of Silurian, Devonian, and Carboniferous; the latter forming a narrow strip, without coal-beds, along the north shore of Bay of Chaleur and in Gaspé. The rocks of the Eastern Townships are thus confined to the two lower series of the Palæozoic era. These in Western Canada, from their quiescent condition, give a flat surface; but in the Eastern Townships, being disturbed and corrugated, they give origin to a surface beautifully varied with hill and valley. The physical structure of this part of Canada is thus exceedingly complicated. It has, however, been completely marked out by Sir W. E. Logan; and the details will be found in the Reports of the Geological Survey, to which the reader is referred. The rocks of which the district is composed abound in mineral ores, and many beautiful varieties of marble, specimens of which may be seen in the Museum of the Geological Survey, at Montreal.

The various mineralogical substances found in the Eastern Townships, and capable of application to useful purposes, are enumerated below. The following is a list of the economic minerals of the Eastern Townships:

METALS AND ORES.

Specular Iron Ore.—St. Armand; Sutton, three localities; Brome, three localities; Bolton.

Limonite (Bog Ore).—Stanbridge, Ireland, and other localities.

Titaniferous Iron.—Vaudreuil (Beauce).

Copper.—Inverness and Leeds, *variegated copper*. Upton, *argentiferous copper pyrites*. Ascot, *copper pyrites containing gold and silver*.

Nickel.—Ham, and Bolton, associated with chromic iron.

Gold.—Sir William E. Logan has devoted much attention to the discovery and distribution of gold. The auriferous tract is clearly known to exist over 10,000 square miles on the south side of the St. Lawrence, especially in the Eastern Townships in the valley of the St. Francis, from Richmond to Salmon River, and on the Magog River above Sherbrooke; but remarks "that the deposit will not, in general, remunerate unskilled labour; and that agriculturists, artisans, and others engaged in the ordinary occupations of the country, would only lose their labour by turning gold-hunters."

NON-METALLIC MINERALS.

Chromium.—Bolton and Ham are localities of large beds of chromic iron.

Manganese.—Bolton, Stanstead, Beauce, *earthy peroxyd*.

Dolomite.—Sherbrooke, Drummond, St. Armand, Durham, Sutton, Brome, Ely, Durham, Melbourne, Kingsey, Shipton, Chester, Halifax, Inverness, Leeds.

Carbonate of Magnesia.—Sutton, Bolton.

Iron Ochres.—Durham and other localities.

Steatite.—Sutton, Bolton, Melbourne, Ireland, Potton. The steatite of Stanstead and Leeds is ground and employed as a paint.

Jasper.—Ascot.

Labrador Felspar.—Drummond and many other localities.

Shell-Marl.—St. Armand, Stanstead.

Mill-Stones.—The best is a corneous diorite which accompanies the serpentine of the Eastern Townships, and has been wrought at Bolton.

The granites of Stanstead, Barnston, Barford, Hereford, Marston, Strafford, Whedon, and Vaudreuil (Beauce), are used for making mill-stones. The pseudo-granites and diorites of the mountains of St. Thérèse, Rouville, Rougemont, Shefford, Yamaska, and Brome, are also sometimes employed to make mill-stones.

Whetstones.—Potton, Stanstead, Hatley, Bolton, Ship-ton, and Marston.

BUILDING MATERIALS.

Granites.—Large masses of a very beautiful intrusive granite are found in many of the Eastern Townships; among other localities, in Stanstead, Barnston, Hereford, Marston, Megantic Mountains, Wheedon, Winslow, Stafford, and Lampton. The diorites of the Mountains of St. Thérèse, Rouville, Rougemont, Yamaska, Shefford, and Brome, furnish good building-stones.

Limestones.—Phillipsburg, Upton, Acton, Wickham, Magoon's Point (Stanstead), Hatley, Dudswell, and Richmond.

Roofing-Slates.—Kingsey, Halifax, Lambton, Melbourne, Westbury. Slate-quarries have been recently

opened in the Townships of Kingsey and Richmond, and are now in operation. In specific gravity and chemical composition, the slate is said to resemble the finest Welsh slate. In the Eastern Townships, clay-slates have been extensively discovered.

Flagging-Stones.—Sutton, Potton, Stanstead, Inverness.

Clays.—Clay suitable for the fabrication of red bricks, tiles, and coarse pottery, is found throughout the Townships.

Moulding-Sand.—Stanstead.

Marbles.—*White and Black.*—Phillipsburg.

“ —*Yellow and Black.*—Several varieties, Dudswell.

“ —*Grey* and variegated.—Phillipsburg.

“ —*Green.*—Serpentines affording several beautiful varieties of Marble occur along a range of 150 miles in the Eastern Townships.

It will be seen from the above that the Eastern Townships are rich in mineral resources requiring only enterprise and capital to develop them. Of late years, some investments have been made in this direction, which have not been unprofitable.

CHAPTER IX.

PRINCIPAL TOWNS AND VILLAGES.

THE Town of Sherbrooke—the Metropolis of the Townships—is situate at the confluence of the River Magog with the St. Francis. The position of the Town, rising from the beautiful valley of the St. Francis on a series of falls $\frac{3}{4}$ of a mile in length and having a total height of 100 feet, is most romantic, and, lying as it does almost equidistant from Montreal, Quebec, and Portland, on the great artery of the Grand Trunk Railway, it is destined, on the development of its great manufacturing power, to reach a high position of prosperity. The British American Land Company have their head office here, and own the whole of the very fine water-power.

Amongst the industrial works at present in operation, may be named, a large Saw-Mill, an extensive Pail-Factory, a Woollen-Factory, a Paper-Mill, a Grist-Mill with 4 run of stones, Foundry, Tannery, several Machine-Shops, Wheelwrights, &c. The Head Office of the Eastern Townships Bank is also located in this place, together with an Agency of the Montreal City Bank.

Sherbrooke is the centre of the Judicial District of St. Francis, and has a resident Judge and Bar, with Prothonotary's Office, &c. The Court-House is a fine building on a commanding site, with a Jail in close proximity. The population is about 4000 in number, and very mixed in character,—comprising people of English, Irish, Scotch, and American origin, together with a considerable body of French-Canadians.

The following religious denominations are here represented,—Episcopalians, Congregationalists, Methodists, and Roman Catholics. A new Town-Hall and an Academy have been lately constructed, and add much to the appearance of the Town.

The private residences and gardens of the inhabitants show evidence of great taste and the culture of the humanizing arts.

Sherbrooke is the most important way-station of the Grand Trunk Railway between Montreal and Portland, and, from its happy position near to and amidst fine scenery, a very considerable stream of pleasure travel

passes through it during the summer months,—a daily stage connecting it with the celebrated Lake Memphremagog, only 16 miles distant. There are several excellent Hotels, such as the Magog House, the Railway and St. Francis Hotels, Sherbrooke House, &c.

Stanstead Plain is situated in the County of Stanstead and near the Frontier Line. It is incorporated as a municipality, and has a population of about 1000. It is the business-centre of one of the most wealthy agricultural counties in the Eastern Townships. It is beautifully situated on a plain, commanding a great range of Alpine scenery extending as far as the eye can reach, southerly, along the Green Mountains of Vermont and their continuation into Canada, along the western shore of the beautiful and picturesque Lake Memphremagog, till they are lost in northern distance. Among the buildings of note may be mentioned Christ Church, just completed, and inaugurated on the 16th of November last, by Dr. Hellmuth, Superintendent of the Colonial Church and School Society of Quebec. It is of the pointed Gothic style, of stone (rubble), cruciform. In architectural design, the interior is in keeping with the exterior. The windows are of the arched Gothic form; the principal (east) one being 18 x 9 feet, and set with ground and stained glass. The natural color of the wood used for the finish is retained throughout. The *tout-ensemble* of this Church is most agreeable. To the unwearied exertions of the resident clergyman, Rev. W. L. Thompson, the society is much indebted for the edifice above partially described.

The Wesleyan Methodists have a comfortable and commodious Church, built of brick,—the whole presenting a pleasing appearance. The same may be said of the Congregational Church, the interior of which has lately been remodelled. The Roman Catholics have a large and commodious Church in this place. The Academy is a tasty and appropriate structure of brick, two stories in height, accommodating a separate department for ladies and gentlemen. There are three Hotels,

affording good and comfortable accommodations. The Eastern Townships Bank has here a Branch. Between Rock Island and Stanstead Plain is situated the beautiful residence, in rural Gothic style, of C. A. Kilborn, Esq. Perhaps no where in Canada has so much attention been given to detail of finish as in this building, under the superintendence of Judson York, architect and builder. Messrs. C. C. Colby and A. Knight are just completing two fine residences; Mr. Colby's, of stone, in the Italian style, and Mr. Knight's, of wood, in the villa style. There are many other tasty residences in this village.

Rock Island, situated in so near proximity to Stanstead Plain as to be included in the same village, although out of the municipality, is a thriving, enterprising manufacturing village.

Coaticook, on the line of the Grand Trunk Railway, Barnston, East and West Hatley, Georgeville on the shore of Lake Memphremagog, and Magog at its outlet, all in the County of Stanstead, are pleasant and thriving villages, with academies and Protestant churches in nearly all of them.

At Magog, manufactures are being carried on to a considerable extent, among which is the mill of Messrs. Copp & Knowlton, built under the superintendence of H. A. Dolloff, a thorough millwright. The enterprising and persevering managing director of the St. Johns, Shefford, and Stanstead Railroad, Mr. A. B. Foster, M.P.P., is using every exertion to extend this road to Magog during 1860.

Compton County includes the villages of Cookshire (the *chef-lieu*), Eaton, Waterville, and Compton Centre, in which latter are Episcopal, Methodist, and Roman Catholic Churches, and a High School. Lennoxville is a pleasant village on the Grand Trunk Railway. Bishop's College is here situated, and many fine residences add beauty to its picturesque scenery. Brompton Falls, on the St. Francis, is important, principally on account of its lumbering operations. Richmond and Melbourne lie on opposite sides of the St. Francis at the junction of the Quebec branch of the Grand Trunk with the through-line from Montreal to Portland.

Danville, on the Quebec Branch of the Grand Trunk, is situated in the Township of Shipton, County of Rich-

mond and District of St. Francis, distant from Montreal 87 miles, from Quebec 84. The section of country about Danville and adjacent towns is of a high agricultural character, and has increased rapidly since the construction of the Grand Trunk Railway. The scenic beauties of this region, from a point of high land on the highway leading from Shipton to Danville, are equal in their class to any in the Townships.

Of the Western Counties of the Eastern Townships the principal are Brome, Shefford, and Missisquoi. Knowlton, situated in the former County near Brome Lake, is the *chef-lieu*, has a Court-House, Episcopal and Methodist Churches, and an Academy.

Shefford and Frost villages, in the county of Shefford (one of the most flourishing agricultural counties of the Townships), lie near each other, and are pleasant and prosperous villages. Granby, the present terminus of the St. Johns, Shefford, and Stanstead Railroad, is distant from the St. Hyacinthe Station of the Grand Trunk Railroad 25 miles.

Sweetsburg is the *chef-lieu* of Missisquoi County. Bedford, Stanbridge, Cowansville, Dunham, and Philipsburg, in the same county, are all thriving places, having been settled many years and possessing many advantages of situation and beauties of scenery.

The St. Johns, Shefford, and Stanstead Railroad, now being opened through this section of the country, will afford great advantages in the way of a direct communication with Montreal; and afterward with Boston and New York, as the road is to be extended immediately to Magog, there connecting with the contemplated Newport terminus of the Passumpsic and Connecticut River Railroad, by means of Lake Memphremagog and the steamer "Mountain Maid." It is also intended to form a direct land-connection between these roads at or near the Provincial Line in the town of Stanstead. This will furnish the most direct means of communication between Montreal, the White Mountains, Boston, and New York, for the travelling public, either for business or pleasure. The present connections and arrangements of these roads may be learned upon reference to the advertisements of either of them.

CHAPTER X.

DESCRIPTION OF PLATES.

IN no other country does nature develop her beauty and sublimity in forms more varied than in the Eastern Townships of Canada. This fact is acknowledged by all who become acquainted with their character. Her mountains, sometimes invested in gloom as a thunder-storm deepens the shadows that ever exist in their gorges, have a grandeur which is also congenial with the sunshine that at other times gilds their summits. Their spirit then rejoices in the brightness of light. Wooded generally from base to summit, they repose in majesty, and, as mists withdraw themselves in folds along their sides, they reveal still more of the beautiful and the sublime. Chasms, ravines, and precipices are there, and among their solitudes sublimity reigns. Enchanting lakes lie scattered over the face of the country, bordered here by gentle slopes, there by precipitous cliffs; cultivated fields, and wide-spread pastures, with woods interspersed; vales serene and cheerful, shut in by mountain ranges, with their wavy lines rising and sinking softly in the blue sky; ample plains highly cultivated, and adorned with farm-houses, single or in groups, and beautiful villages.

In accordance with the beauties of nature, and the increased cultivation of the country, the many villas and ornamental cottages that are rising by lake and river side, all furnish a prospect seldom equalled and never excelled. Almost every vale has its lake, stream, or rivulet; murmuring rills and perennial torrents flow from every spring or marsh.

Its lakes are indeed its great glory. By them the glens, the mountains, and the woods are illumined, and its "rivers made to sing for joy." Reflected in this pure element, the great and stern objects of nature look more sublime and beautiful: they appear to belong rather to heaven than to earth. The evanescence of all that imagery, impresses us with the thought, that all it represents, steadfast as it seems, will utterly pass away; and when the setting sun is seen to sink beneath the mountains, and

its golden rays at the same instant vanish from the lake, we sigh to think how transitory are all things.

Were the question asked, What part of the world should first be visited to view nature in her most beautiful aspect? the answer should be, Never go abroad before seeing the beauties of our own land, which generally is and should be the dearest to every man.

That which makes us desire to widen the circle of our observation, is an impulse of delight and love. Strange would it be if we were not first of all moved towards what is most beautiful belonging to our own land; otherwise our hearts were faithless to home affections, from which spring all others that are good. The nurture and growth of the love of country depend on our earliest associations connected with our own soil. These will ever keep it in our eyes the loveliest spot on earth. Other countries will never be as perfectly understood and appreciated. The beauty impressed upon our minds among the scenes of our childhood, and believed to exist there only, becomes a golden light, which, if we do not obscure it, will "shine unshadowed in the dreariest places, till the desert blossoms like the rose."

The title-page contains two views;—one of Owl's Head, Lake Memphremagog Mountain-House, from Skinner's Island; the other, Round Island, from a point near the Mountain House, looking south.

LAKE MEMPHREMAGOG FROM THE RESIDENCE OF M. W. COPP, ESQ., M.T., PLEASANT OUTLET, MAGOG.

In traversing the shores of this enchanting lake, the tourist is surprised and delighted with the variety of aspects it assumes, and the many beautiful prospects which are so often presented. To do justice to this lake, its shores and its many beautiful islands, it would require a volume. This being the principal feature among the

scenic beauties of the Eastern Townships, the artist will be excused for dwelling on the attractions of this lake, and for giving five plates illustrative of its scenery. While he deems it his imperative duty to do so, it in no way militates against the interests of other portions of the Eastern Townships; for in proportion as this charming lake is known, so will the desire increase to visit it, and this beautiful country will become better understood. Among the many varied and beautiful scenes, there was no little trouble in making the selection. Where all that we behold is "ever charming, ever new," it will always be difficult to choose the best. Those that have been given are of great beauty, furnishing a distinct idea of the general character of the scenery.

Mount Pleasant, the residence of M. W. Copp, Esq., whence this view was taken, is situated one mile in a northerly direction from the village of Magog, at the northern extremity of the lake. From this point we see but half of the lake; but the view conveys a clear idea of its scenery, its winding wooded shores, shooting into promontories or withdrawing into lovely bays. The majestic mountains which stretch along its western shore, prominent among which is "Owl's-Head," with its conical and picturesque outline, give a truly Alpine character to the scene. The eastern shore of the lake, with its gentle slopes and cultivated farms, presents a pleasing contrast to the western one.

SUGAR LOAF, VIEW FROM.

This illustration, in connection with the view looking south from the same point, embraces nearly the whole lake. Lake Memphremagog has not inappropriately been called the Geneva of America. The beauty of some portions, and the splendid magnificence of other parts of its scenery, are no where else to be surpassed;—"custom cannot stale its infinite variety." Its bosom is picturesquely diversified by the islands which gem its surface. To the right, on the opposite shore of the lake, are situated the Townships of Stanstead, Hatley, Barnston, and Compton. The scene has not on this side that mountainous aspect which characterises the western shore, but the hills are softly swelling, and have all a green and pastoral appearance, and the open valleys, shining in the sunshine, ever present scenes of calm and quiet beauty. On the verdant slopes, cattle and sheep are seen feeding. Numerous farm-houses are scattered

over this beautiful rural district, with patches of woodland here and there, giving, in connection with the beauties of cultivation and of art, a scene, as has been often remarked by English tourists, decidedly English in its character. The great variety afforded by projecting headlands and receding bays, and by the fairy islands which lie scattered over the surface of the lake,

"As quiet as spots of sky
Among the evening clouds,"

presents a source of pleasure and delight; and when all this country receives the effect of a summer sun, the eye never tires with gazing, and the mind is never satisfied with contemplation.

VIEW FROM OWL'S-HEAD, LOOKING NORTH-WEST.

Among the mountains of the west shore of Lake Memphremagog, Owl's-Head towers pre-eminent. In every view it is an object of grandeur. It is impossible to approach it from any point without exacting the deepest emotions of our nature. The journey to the top is comparatively easy, requiring about two hours to make the ascent. Having once gained the top, one never regrets having made the attempt; the labour is richly compensated by the magnificence of the view there afforded. The lake with all its beauty lies spread out beneath. To sum up in short, one of the most beautiful and grand panoramic views may here be obtained, which it is impossible fully to describe. From this elevated position, the spectator may see clouds floating in the atmosphere beneath, or enveloping the sides of the mountain. The rainbow, when seen from this point, is "beautiful exceedingly"; but when the forked and sheeted lightning is beheld flashing below, and the thunder heard pealing and reverberating among the mountains, the awful majesty of the scene is heightened to a great degree, and all terrestrial impressions for the moment are banished, and one feels no longer an inhabitant of the lower sphere.

The background of our illustration is formed by the mountainous district which lies to the north-west of Owl's-Head, which prospect is truly sublime, mountain piled on mountains.

"Cragg, knolls, and mounds confusedly hurled,
The fragments of an earlier world,
And mountains that like giants stand
To sentinel enchanted lands."

VIEW OF OWL'S-HEAD, MAGOON'S POINT, ROUND ISLAND,
AND WHETSTONE ISLAND.

This view embraces an important part of the scenery of the lake. The spectator is supposed to be standing at a point about half a mile north of Harvey's Landing looking across the Lake, with Round Island near the opposite shore, and Whetstone Island nearest him. Among the mountains on the opposite shore, Owl's-Head towers aloft, in form like a cone, and its sides presenting gentle slopes to the north and the south. To the right is seen Magoon's Point, its shores beautifully skirted with woods, and its background finely diversified with meadows, corn-fields, and farm-houses.

VIEW OF THE ST. FRANCIS FROM THE RESIDENCE OF
M. BOWEN, SHERBROOKE, E. T.

This view is taken from the garden of Mr. Bowen, looking in a northerly direction. This is only one of the very many beautiful and highly picturesque views which may be had along the charming River St. Francis. This river, though comparatively short, is excelled by very few on this continent in the beauty of its views. From its source to its termination, it exhibits one continued series of the most delightful and varied scenery. Who that has seen it, though years have since rolled over his head, can ever forget the valley of the St. Francis or its ever-changing beauties? Yet among the numbers who yearly perambulate Canada in quest of scenic beauty, how few visit this most picturesque spot of all! The Grand Trunk Railway, which passes along at this point, forms the foreground of the picture.

VIEW ON THE ST. FRANCIS FROM END OF THE BRIDGE
ACROSS THE ST. FRANCIS RIVER NEAR SHERBROOKE.

This view is taken from East Sherbrooke at a point near the bridge crossing the St. Francis. The highland in the background is formed by the winding of the river at this point. The banks are here gently sloping for a few feet, until they reach the meadow-land, traversing which we soon attain the hills beyond. On the left, the shores are skirted by beautiful elms, overhanging the river-side. This scene is romantic and full of character.

JUNCTION OF THE MASSAWIPPI WITH THE ST. FRANCIS.

This view is taken from a point opposite Lennoxville, affording a view of the junction of the two Rivers, St. Francis and Massawippi; college-hill and the bridge across the Massawippi forming the background. To the left, Bishop's College and a brick Chapel in Gothic style, present a commanding and imposing appearance. At the right, a short distance from the bank of the river, is situated the beautiful village of Lennoxville.

LITTLE BALDWIN OR PINNACLE LAKE, BARNSTON, E. T.

This small Lake lies in the southern part of the Township of Barnston, about ten miles east of Stanstead Plain. It is surrounded on all sides by mountains, of which the principal is called "Pinnacle Mountain." This eminence rises abruptly from the north-east shore of the Lake. The portion nearest the Lake rises to the height of 1000 feet nearly perpendicular from its base. The mountain is somewhat wooded for nearly two thirds of its altitude. From this point to its apex, no trees are to be seen, nor is there much appearance of vegetation. That portion bared presents little else to the view than great masses of granite rock, thrown together in nature's wildest confusion. The view in the illustration is taken from the south end of the lake, looking north. No view in the Eastern Townships presents so singular an aspect as this.

OWL'S-HEAD FROM SUGAR-LOAF MOUNTAIN.

Gazing from some of the heights or promontories which here surround us, one feels "raptured and amazed." Now we behold Owl's-Head, where the grey rocks dip down into unfathomable water; now deep, retreating bays, then bold and rugged shores which have been washed for ages by the waters of Lake Memphremagog. Rugged and stupendous cliffs rise on every hand, waving with trees which seem to grow from solid rock. Every crevice or cavern returns its echo,—a speaking stillness pervades the whole scene. The eagle may be seen sitting in lonely majesty on some lofty rock, or sailing slowly by high in the air. Owl's-Head, the highest mountain which rises from the shores of the lake, is situated on the western side near the centre of the lake. Its height is 2500 feet from the surface of the lake. In the extreme

southern distance may be seen Willoughby Notch, and to the left of the illustration a portion of the highly cultivated Township of Stanstead; to the south, the lake, with its islands studding its mirrored surface.

FALLS ON THE COATICOOK.

These Falls may be reached by leaving the highway between the Villages of Compton and Coaticook, at a point of the road distant about a mile from the latter village. These romantic falls extend a mile or more. Our view is taken from the interior of the chasm, looking down the river. Here the spectator is surrounded on all sides with rocks of great height, fringed with tangled masses of shrubs and trees, nourished by the constant spray ascending from the boiling waters beneath. Hemlock and spruce trees grow from every crevice and rent in these rocky walls, adding wild grace and beauty to the scene. The roar and din of the falling waters are always heard. Altogether, these falls are full of sublimity and awe; and even the boldest cannot look into the dark chasm and behold its waters tumbling and boiling, without becoming excited in the highest degree.

LAKE MASSAWIPPI.

This view is taken from the road leading to East Halley, from Massawippi Village. From this point, nearly the whole extent of the lake is opened up to view; mirror-like reflecting the mountains which bound the opposite shore. Its shores are richly wooded, and indented by winding bays and points jutting into the lake. In the middle distance and to the right of the picture, is Black-

berry Mountain. Many people resort to this mountain for the purpose of gathering the delicious blackberry, which grows there in abundance. As a whole, this lake affords scenery of the finest description, and it is questionable if it is excelled by any of the lakes of the Eastern Townships.

VIEW FROM THE ARTIST'S RESIDENCE.

The artist has taken the liberty of giving a view from his own residence, considering it as he does one of much beauty. It embraces the range of mountains west of Lake Memphremagog; Owl's-Head occupying the centre of the picture, with a glimpse of the lake at the left. A tract of highly cultivated country occupies the space between the back and fore ground. The road in view is the one leading from Stanstead Plain to Rock Island.

VIEW OF THE RIVER ST. FRANCIS NEAR RICHMOND AND MELBOURNE.

This view is one of the first seen by the tourist in approaching the Townships proper from Montreal, *via* the Grand Trunk Railway, and is the more pleasing as it contrasts with the rather uninteresting country between St. Hyacinthe and this point. The large building in the distance is St. Francis College, now affiliated with the McGill College, Montreal. The Quebec and Richmond Railway connects with the main line of the Grand Trunk at this place. The River St. Francis is here characterized by the beauty which distinguishes it at Sherbrooke, and which makes it everywhere one of the most attractive of American streams. Portions of Melbourne and Richmond are seen in the distance.

Steamboat Landing Outlet Magog.

Trout Fishing Rapids Magog River.



View of Orford Mountain from the Outlet.

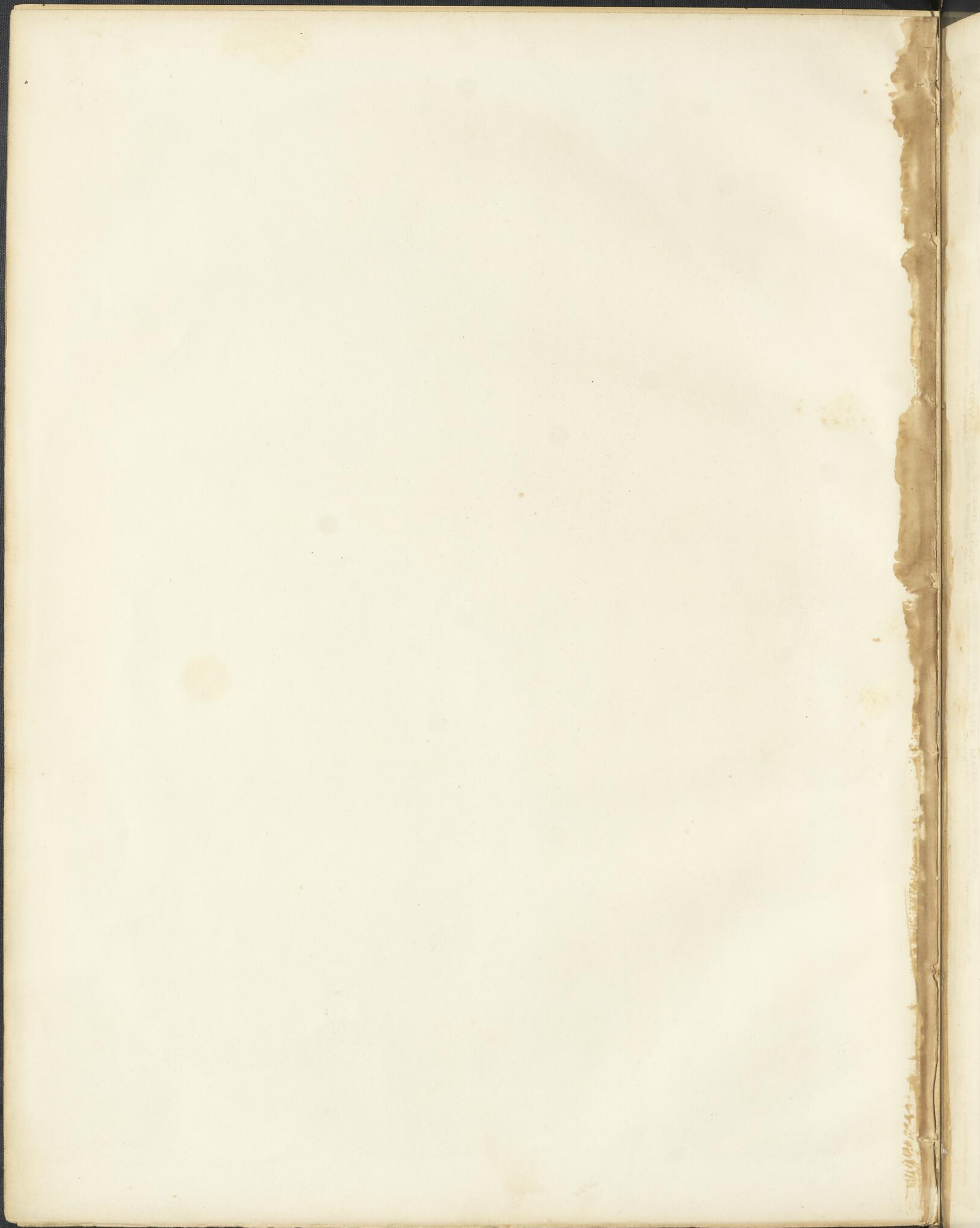
View on the Road from outlet to Sherbrooke.

LAKE MEMPHREMAGOG, C.E.

Looking South from the residence of M. W. Copp, Esq. M^c Pleasant, Magog, E. T.

W. S. Hunter Jr. del.

J. H. Buffords lith.



Trot fishing on Sugar Leaf Mountain.

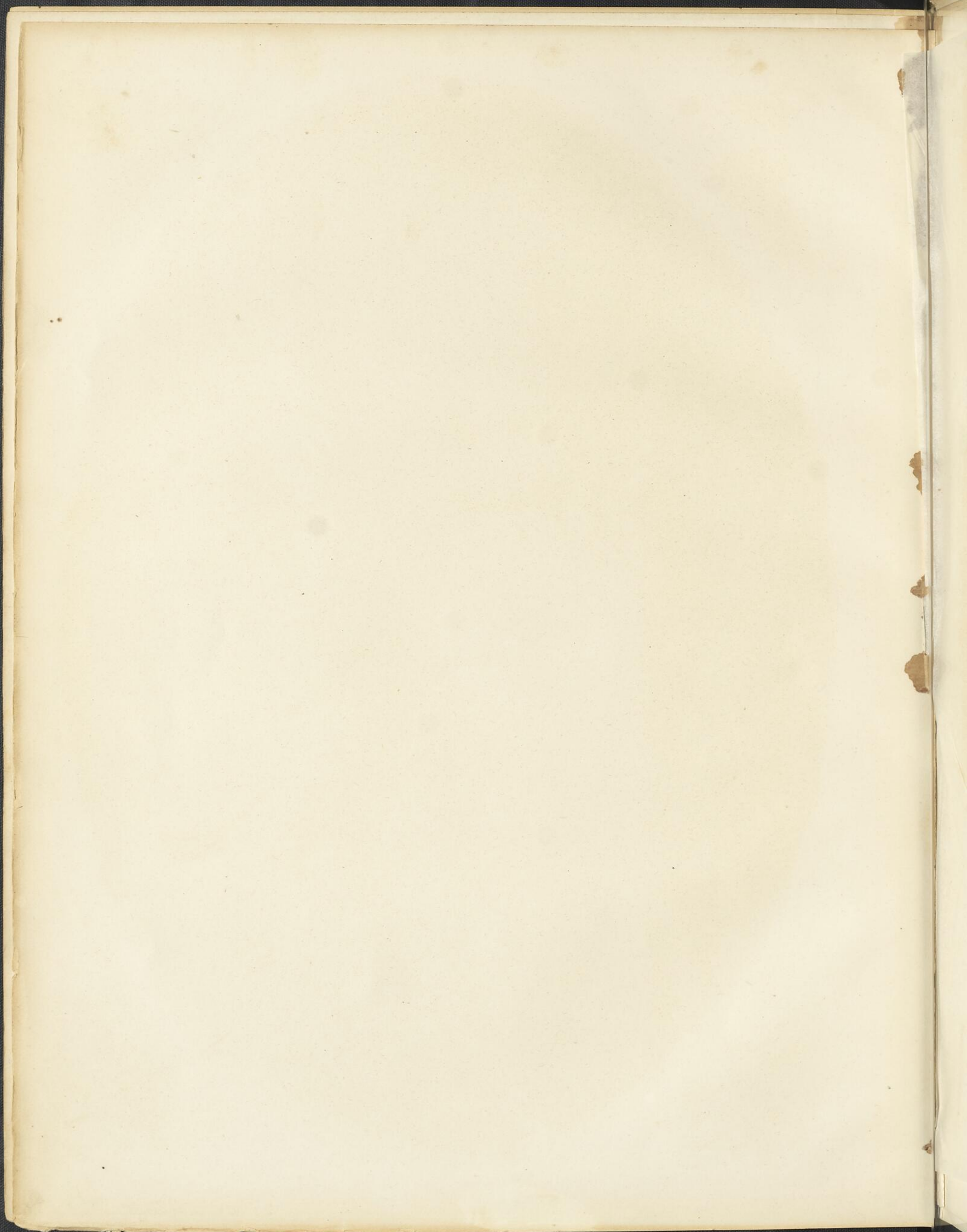
Preparing for Lunch.



Party at the Crossing.

Party & Guide on the top of Owl's Head.

VIEW FROM SUGAR LOAF LOOKING NORTH LAKE MEMPHREMAGOG.
Townships of Stanstead, Hatley & Magog in the distance & village of Georgeville. Eastern Townships C.E.





Orford Lake.

Orford Mountain.

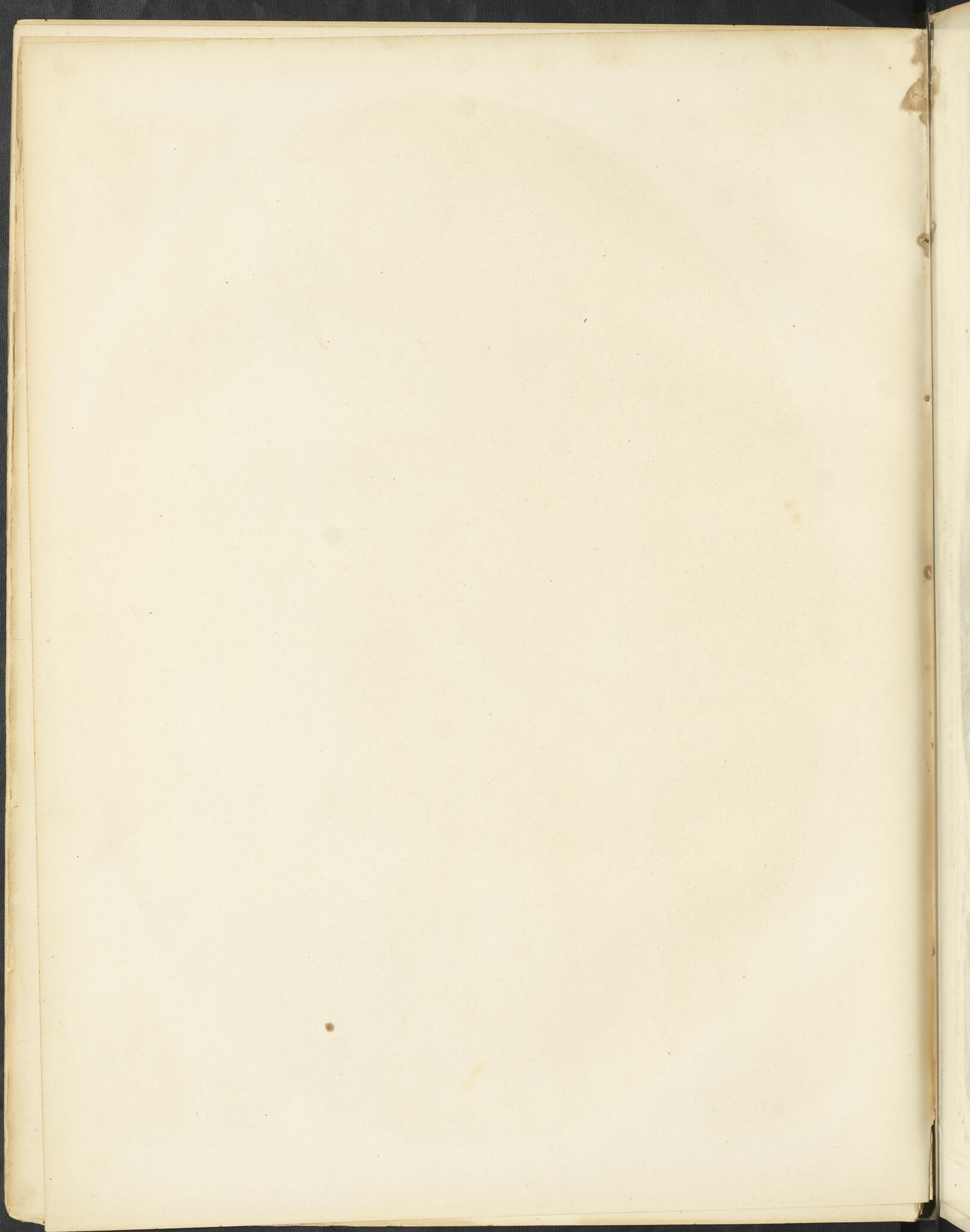
Mountain Pass.

Trout Brook among the Mountain.

MOUNTAIN SCENERY, EASTERN TOWNSHIPS C.E.
From a point looking North West from Owls Head Mountain.

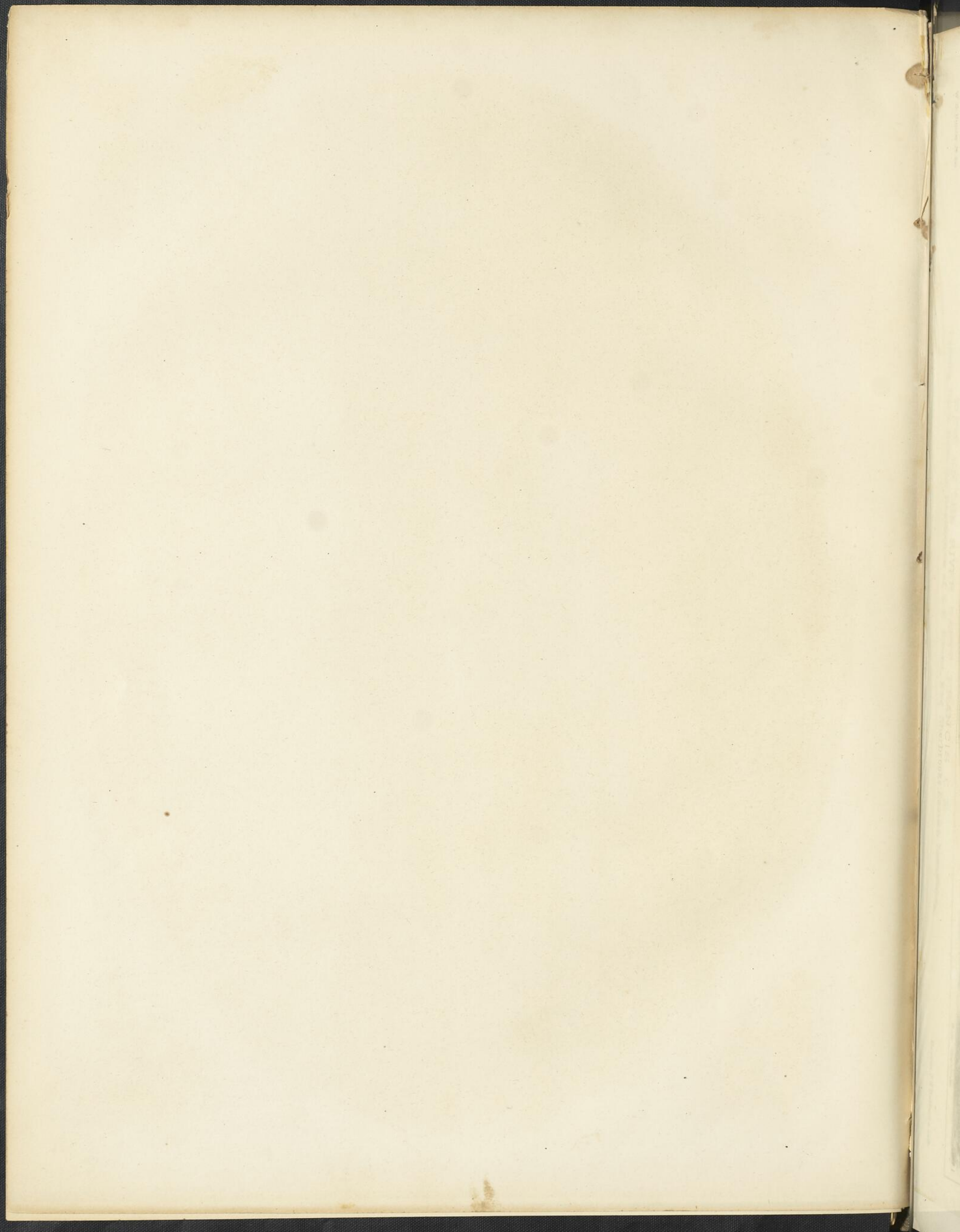
W. S. Hunter Jr. del.

Boston, J. H. Bufford's Lith.





OWLS HEAD, ROUND ISLAND WHET STONE ISLAND, & MAGOON POINT.
Lake Memphremagog, C. E.





Near Sherbrooke.

Near Sherbrooke.

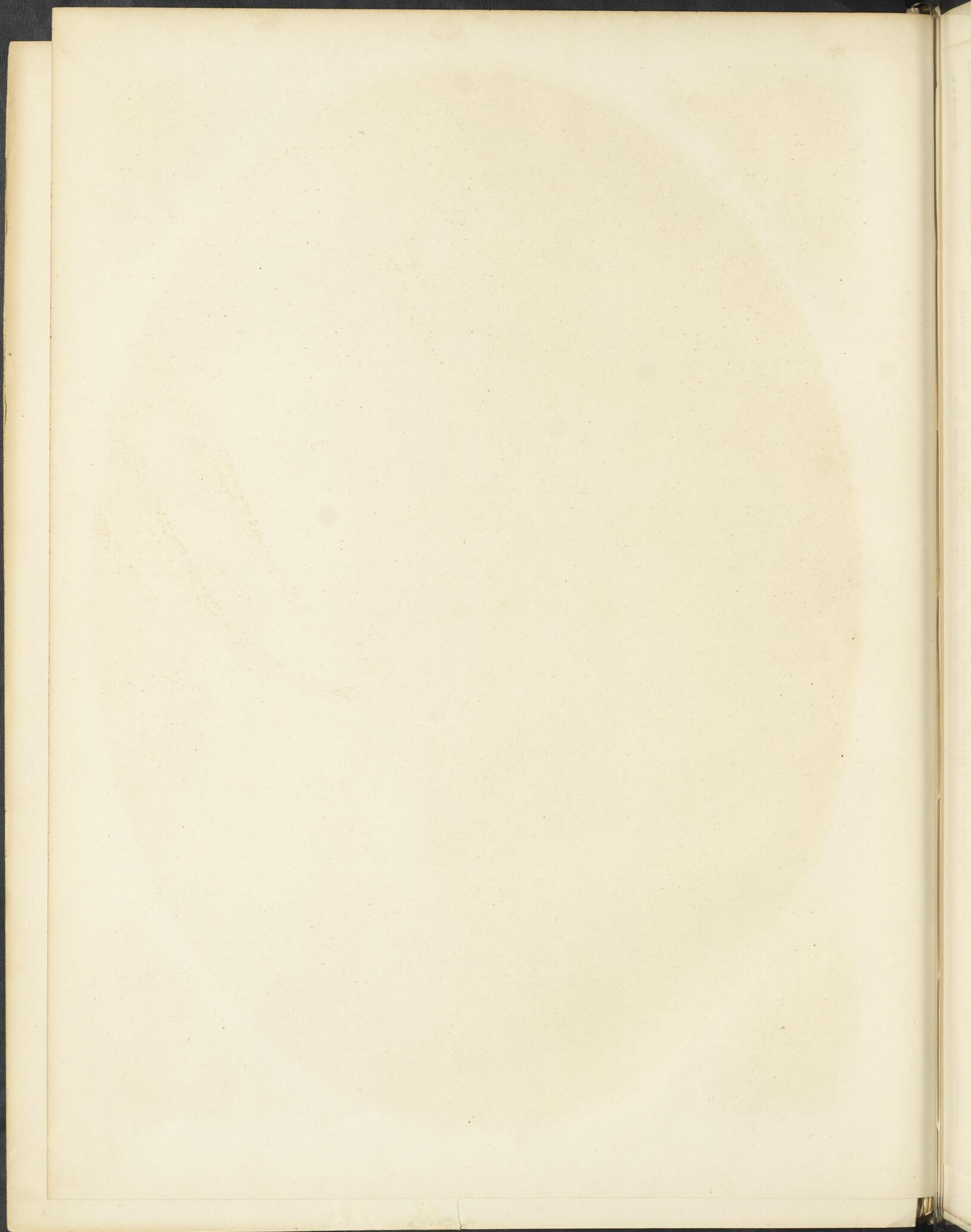
St. Francis near Sherbrooke.

Near Sherbrooke.

VIEW ON THE RIVER SAINT FRANCIS C. E.
Looking North from the Residence of G. F. Bowen, Esq. Sherbrooke, Eastern Townships.

W. S. Hunter Jr. del.

Boston, J. H. Bufford's Lith.



View from Rail Road Bridge looking down the St. Francis.

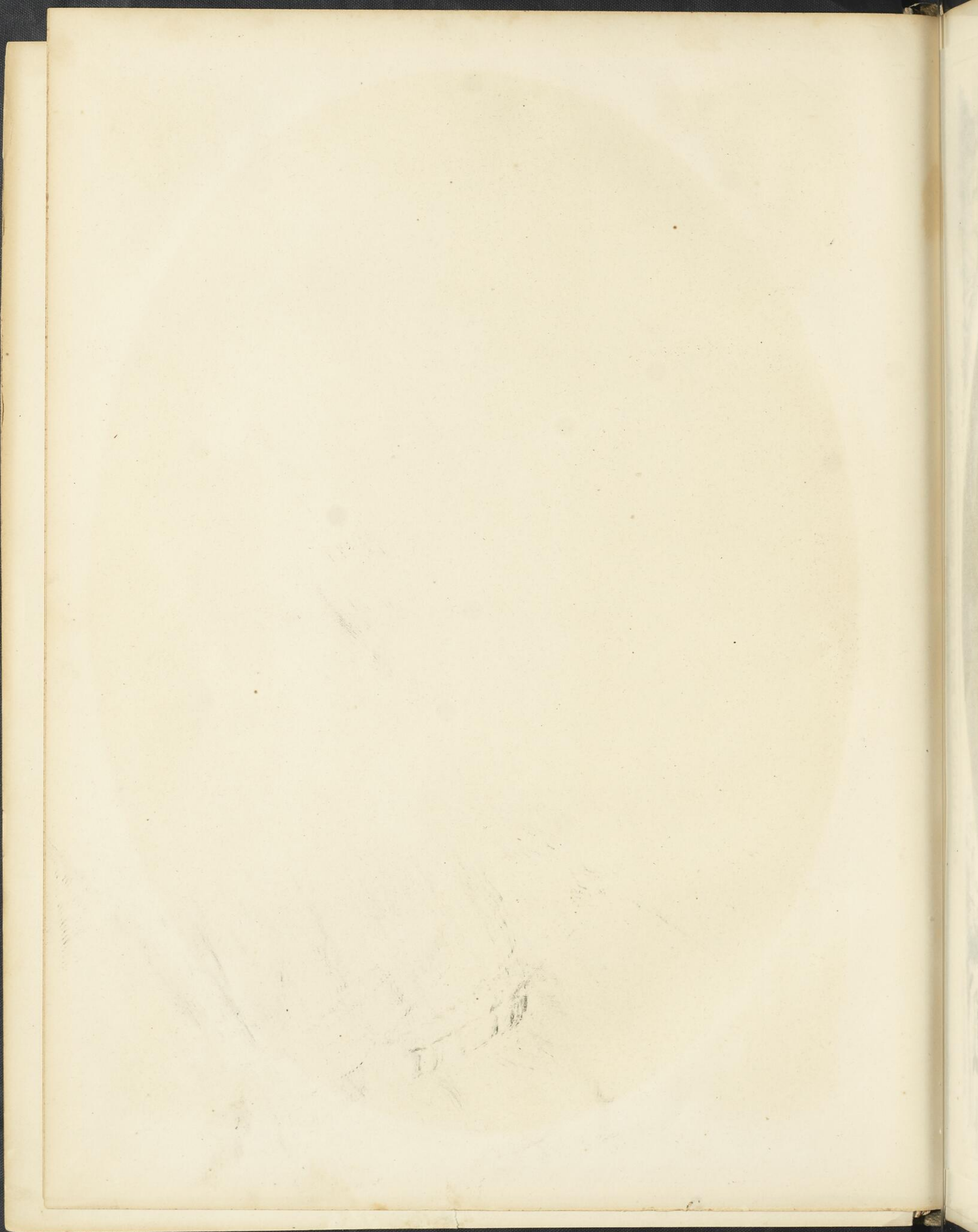
View looking South from Melbourne.



View near Richmond Junction.

Rail Road Bridge across the St. Francis, near Richmond.

RIVER ST FRANCIS NEAR RICHMOND & MELBOURNE,
College in the distance, Eastern Townships, C.E.



Near Lennoxville.

On the Massauwippi River.



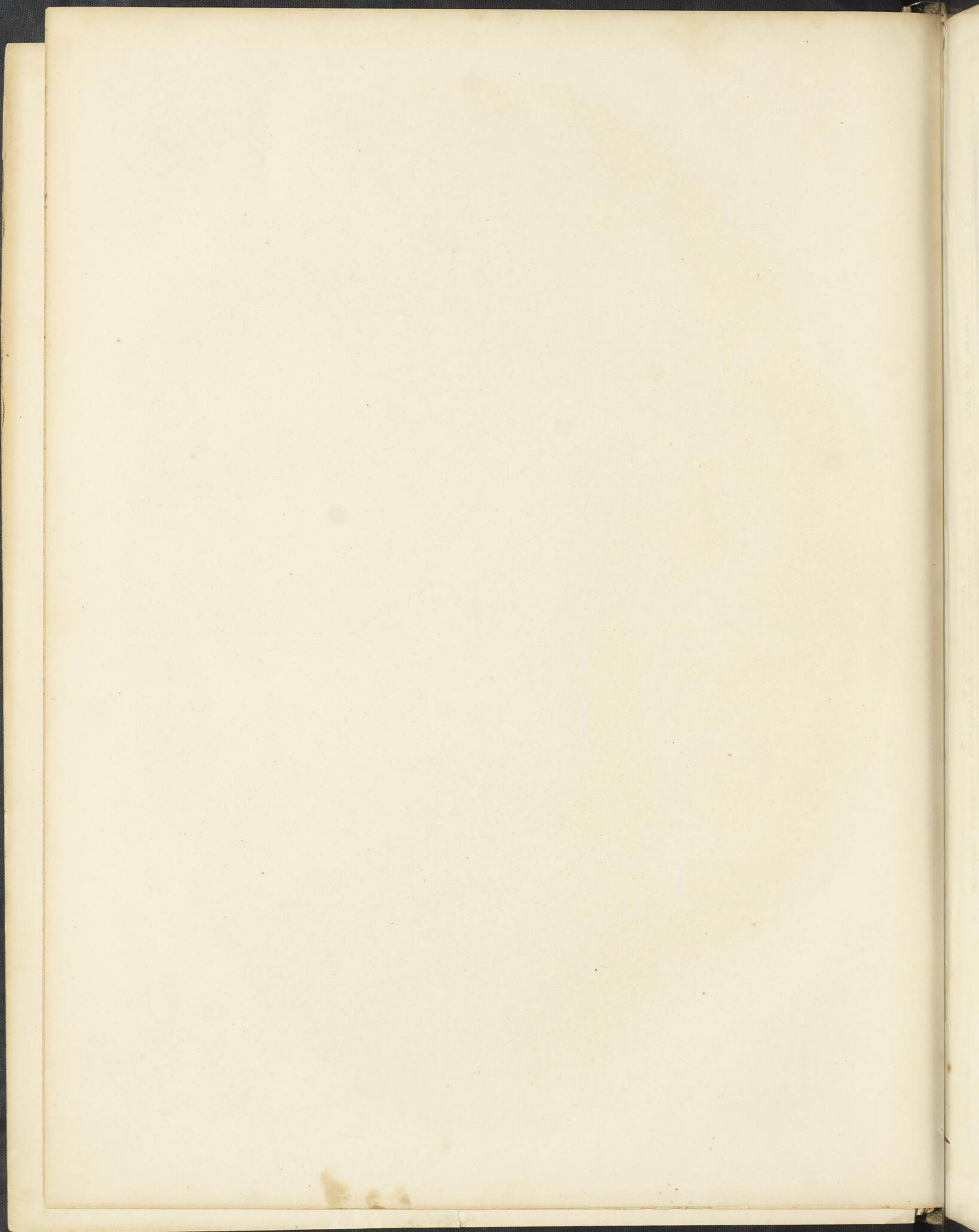
Near Lennoxville.

Bridge St. Francis River.

CONFLUENCE OF THE MASSAUWIPPI WITH RIVER SAINT FRANCIS.
and Bishops College Lennoxville, Eastern Townships. C. E.

W. S. Hunter Jr. del.

Boston, J. H. Bufford's Lith.





Pinnacle from Baldwin's Lake.

View near Baldwin's Lake.

Base of the Pinnacle Baldwin's Lake

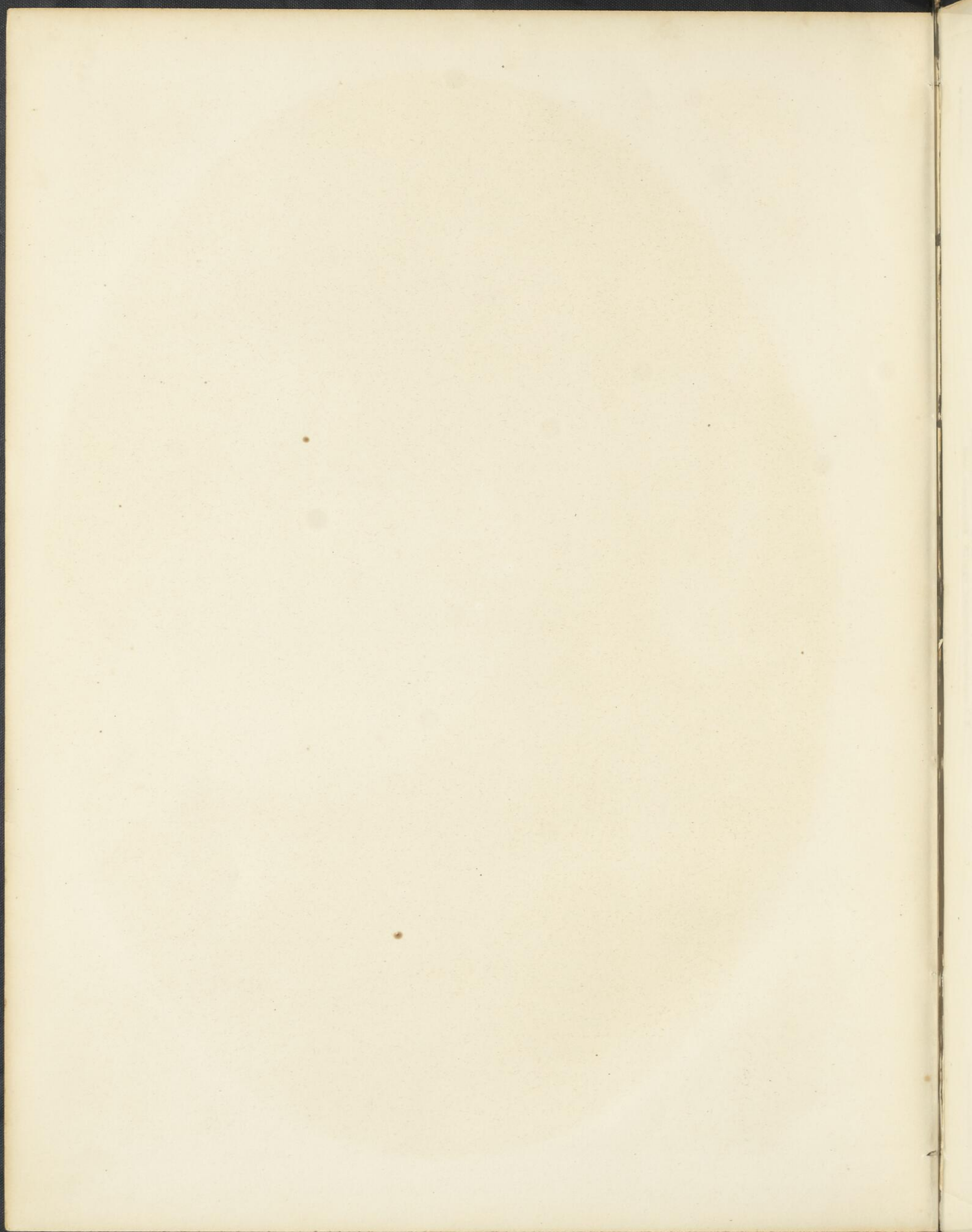
Fishing Ground Baldwin's Lake.

THE PINNACLE LOOKING NORTH FROM THE LITTLE LAKE,

Bennington, Vt.

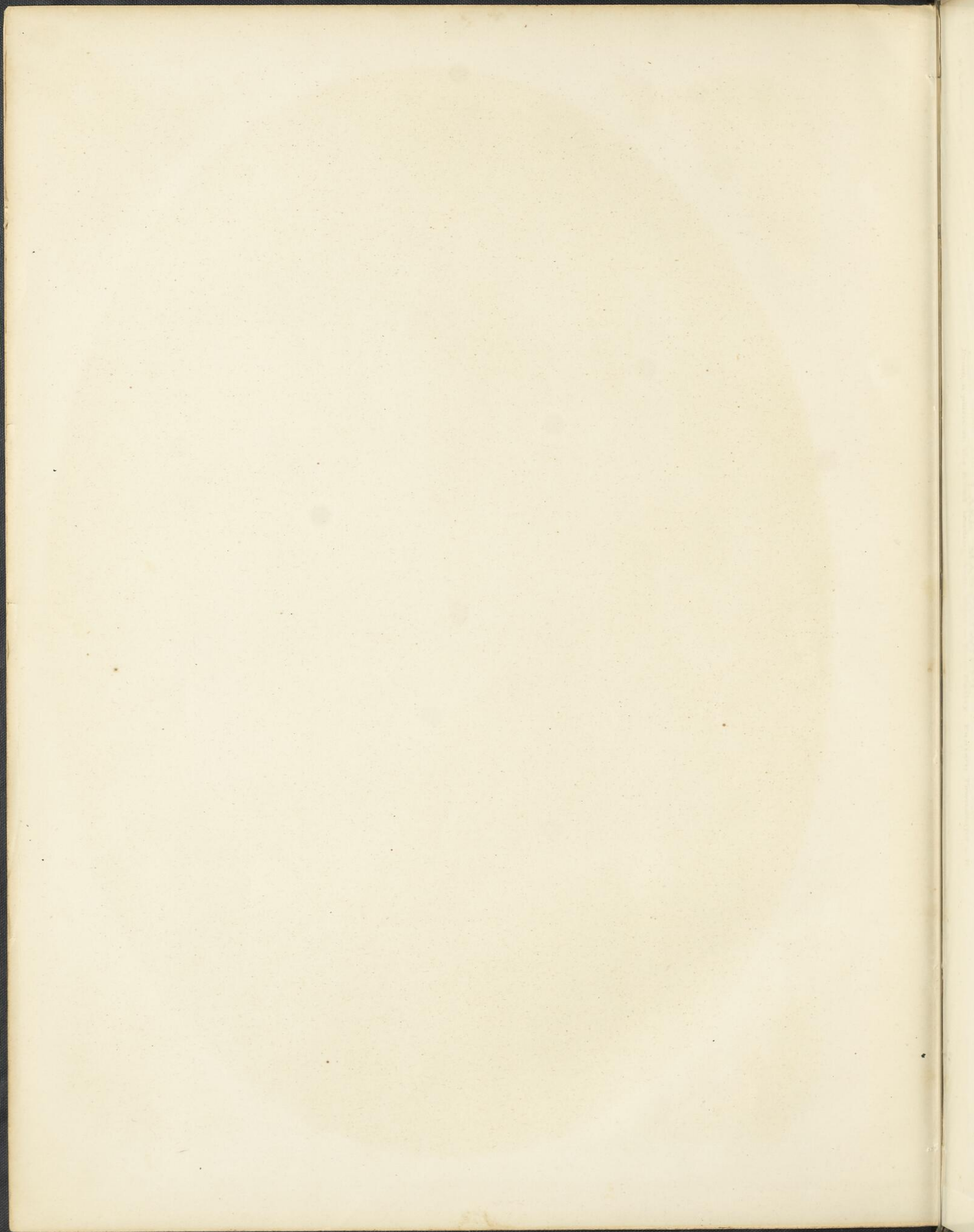
W. S. Hunter Jr. del.

J. H. Bufford's Lith.





VIEW OF OWLS HEAD FROM SUGAR LOAF MOUNTAIN LOOKING SOUTH,
Lake Memphremagog C.E.



Bridge near Compton over the Coaticook, C.E.

Falls on the Coaticook near the Village of Coaticook, C.E.



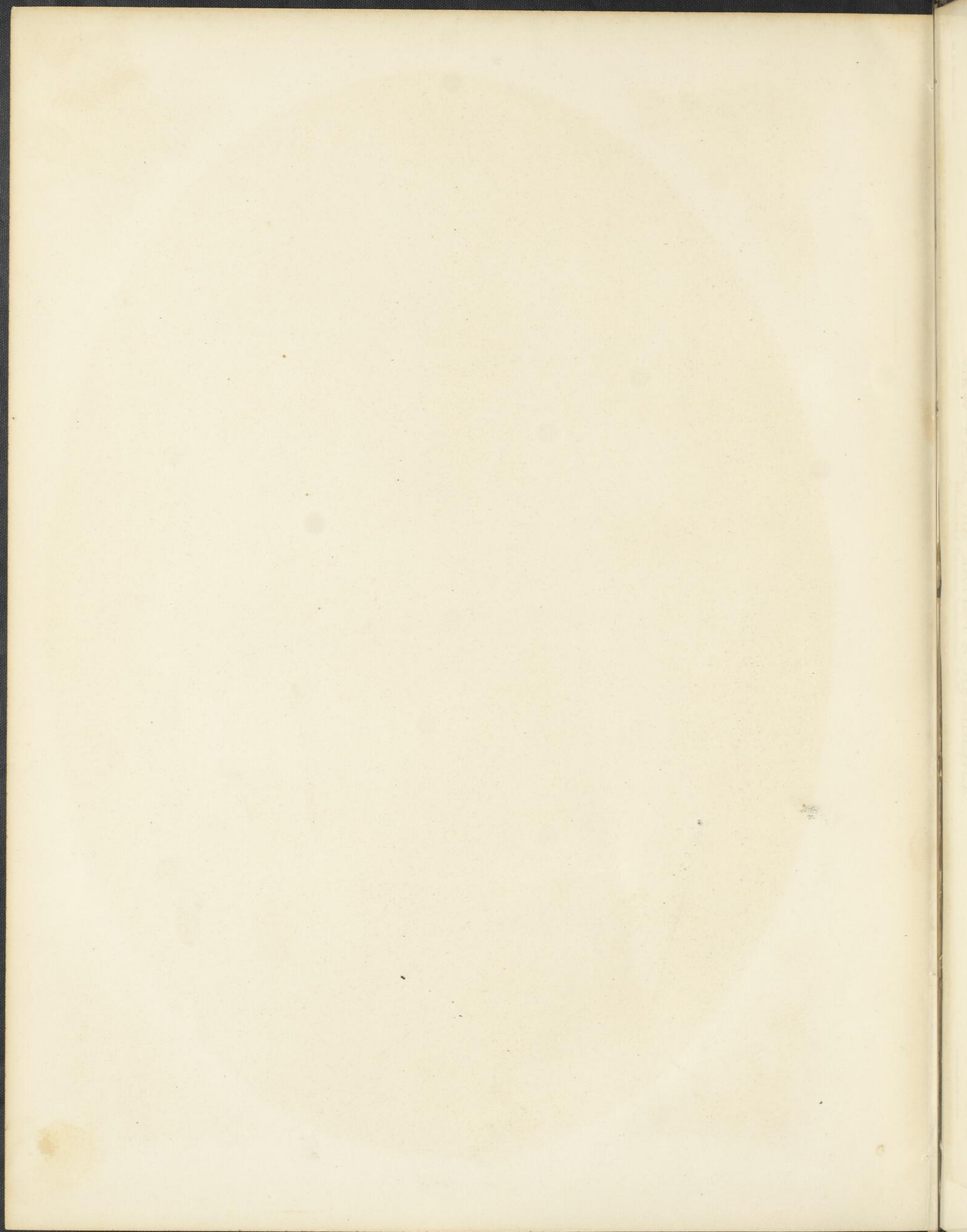
View on the Coaticook Road leading from Coaticook to Compton, C.E.

Falls on the Coaticook near Coaticook Village, C.E.

FALLS ON THE COATICOOK RIVER.
Near Coaticook Village, Eastern Townships, C.E.

W. S. Hunter, Jr. del.

J. H. Bufford's Lith. Boston.



On Massauwippi Lake.

View on Road leading from Ayer's flat to Outlet.



North End of Massauwippi Lake.

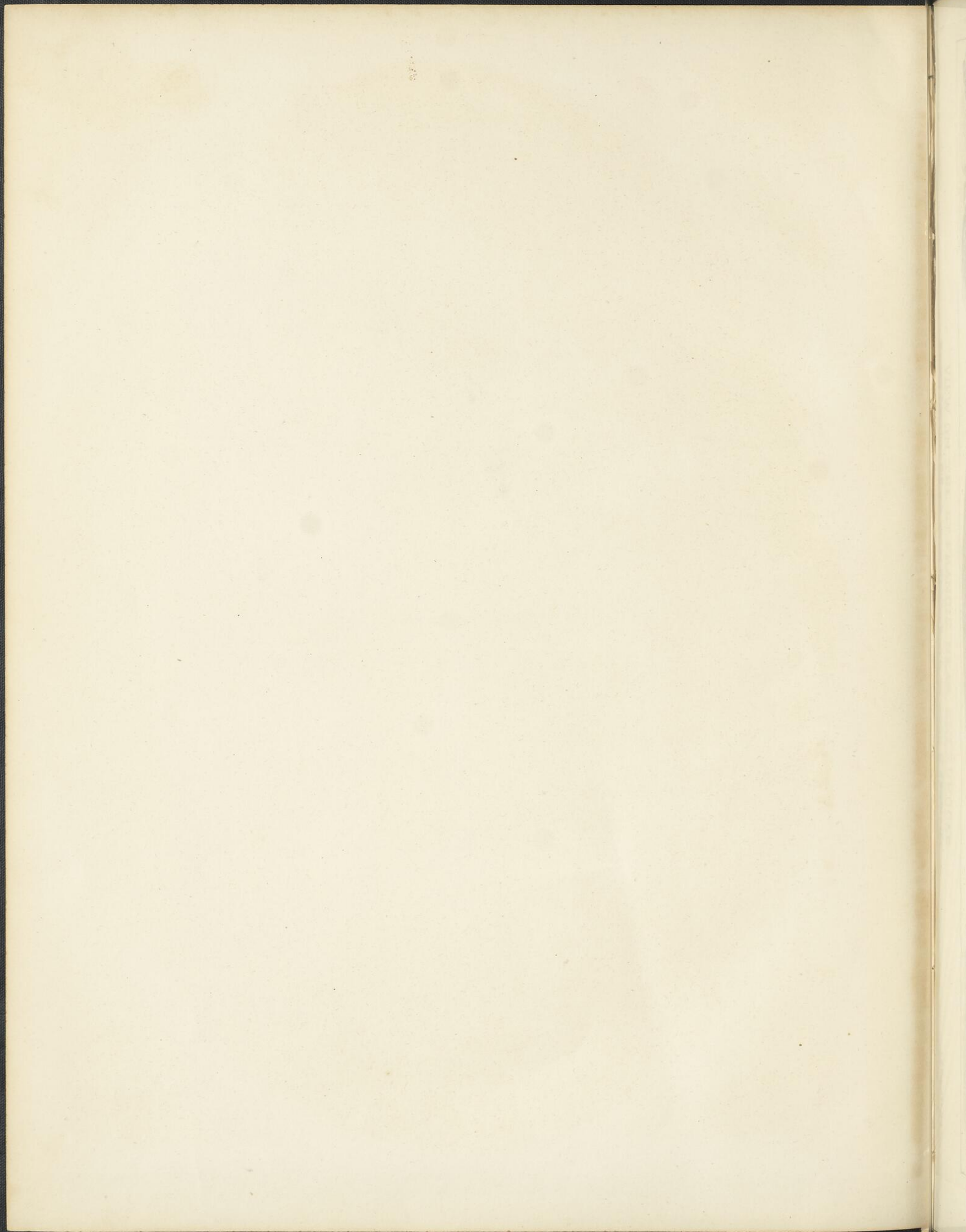
View of Lake Massauwippi

LAKE MASSAUWIPPI,

From a point on the Road leading from West to East Hatley. Eastern Townships C.E.

W. S. Hunter Jr. del.

Engr. J. H. Bullard & Co.



Rustic Bridge, Line River

View near Stanstead.



Bridge over the Line River at Rock Island C.E.

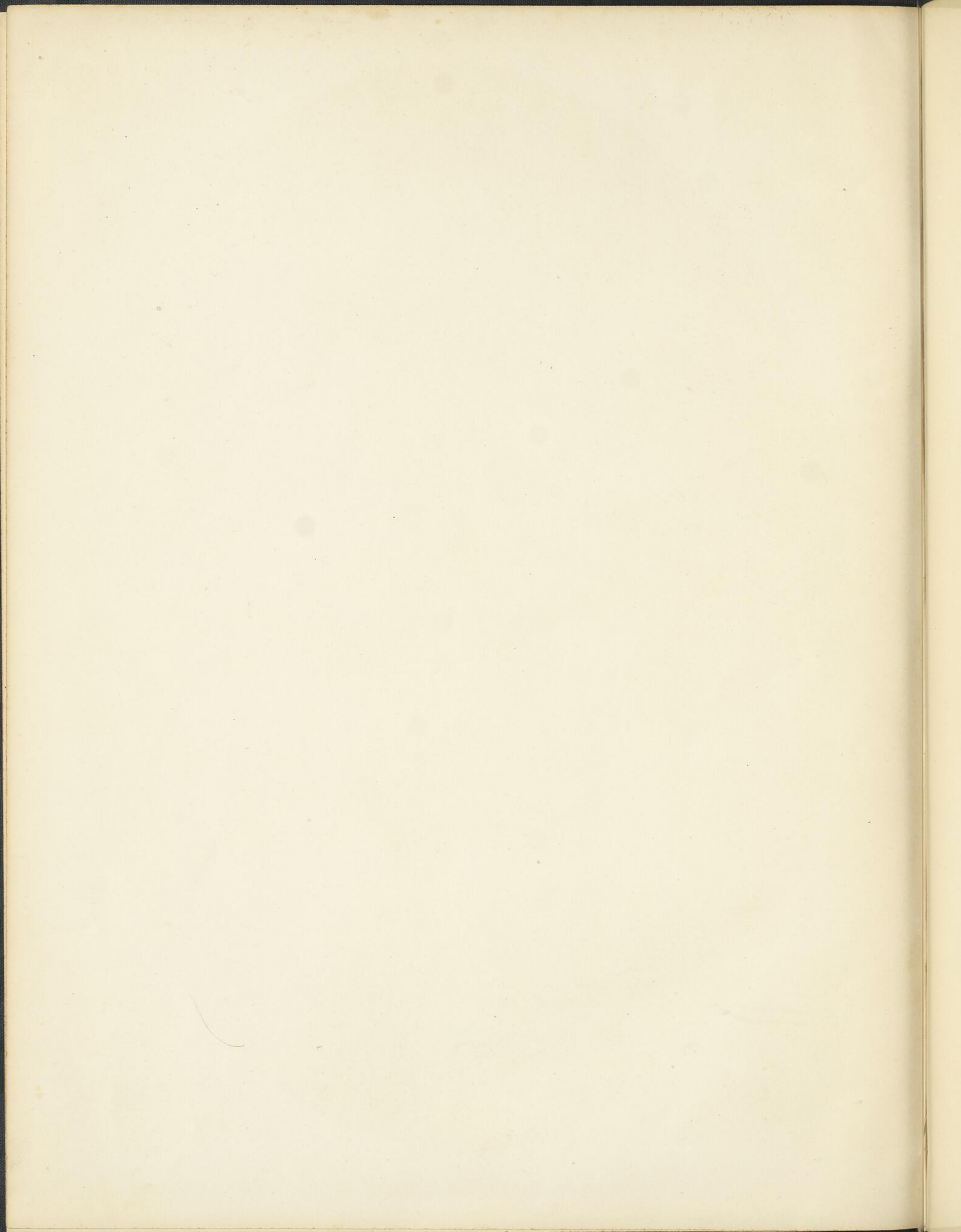
The Old Elm Tree, Stanstead.

VIEW FROM THE ARTIST'S RESIDENCE.

Stanstead Eastern Townships, C.E.

W. S. Hunter Jr. del.

J. H. Bufford's Lith.





VIEW ON THE ST FRANCIS NEAR SHERBROOKE,
Eastern Townships C.E. with corner Vignettes. Views in the vicinity of Sherbrooke.

