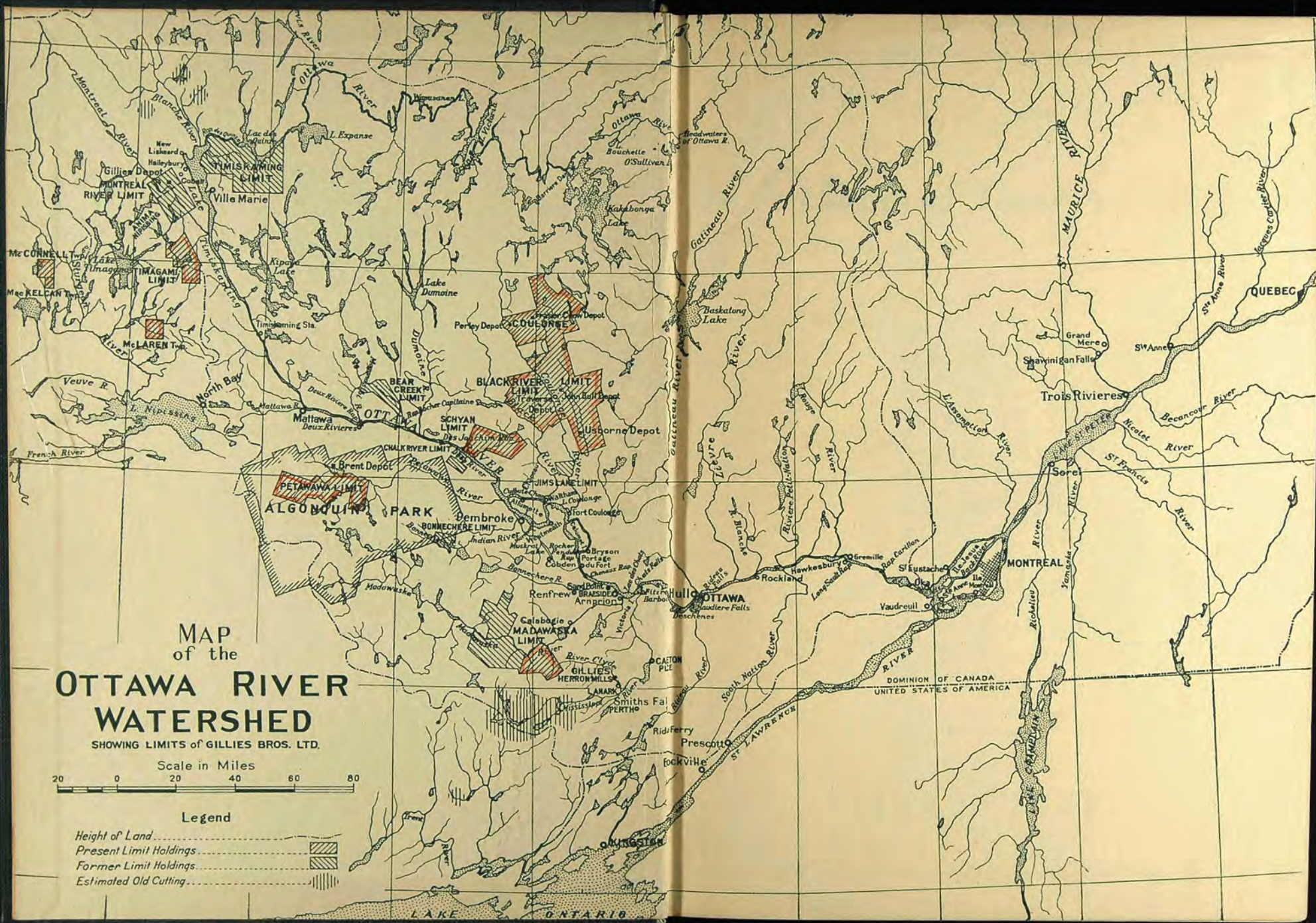


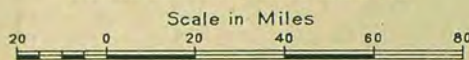
*A Hundred Years
A-Fellin'*

1842-1942



MAP
of the
**OTTAWA RIVER
WATERSHED**

SHOWING LIMITS OF GILLIES BROS. LTD.



Legend

- Height of Land.....
- Present Limit Holdings.....
- Former Limit Holdings.....
- Estimated Old Cutting.....



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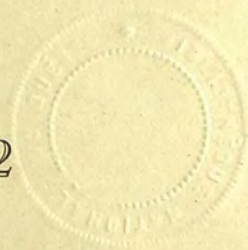
A. Boulin.

A Hundred Years A-Fellin'



SOME PASSAGES FROM THE TIMBER SAGA OF
THE OTTAWA
IN THE CENTURY IN WHICH
THE GILLIES
HAVE BEEN CUTTING IN
THE VALLEY

1842 - 1942



PRINTED FOR
GILLIES BROTHERS, LIMITED, BRAESIDE, ONTARIO

BY
THE RUNGE PRESS, LIMITED, OTTAWA, ONTARIO

BOUND BY
THE HUNTER-ROSE COMPANY, LIMITED, TORONTO, ONTARIO

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GILLIES BROTHERS, LIMITED, CONSIDER THE FIRM
FORTUNATE IN HAVING HAD THE SERVICES, (IN THE
PREPARATION OF THIS MEMENTO BY MISS CHARLOTTE
WHITTON) OF A WOMAN, WHO, WHILE NOT OF THE
VALLEY SETTLEMENTS, WAS BORN AND BRED THEREIN,
AND WHO HAS SEEN AND KNOWN MUCH OF LUMBERING
ON THE OTTAWA FROM THE BONNECHERE TO THE
OPEONGO. SINGULARLY HAPPY, TOO, THEY DEEM THE
ASSOCIATION, IN ITS ILLUSTRATIONS, OF MISS JEAN
MATHESON, OF THE LIBRARY OF THE LANDS, PARKS AND
FORESTS BRANCH OF THE DOMINION DEPARTMENT OF
MINES AND RESOURCES. TO HER, TOO, THIS HAS BEEN A
LABOUR OF AFFECTIONATE INTEREST FOR SHE IS THE
GREAT-GRANDDAUGHTER OF ONE OF THE EARLY VENTURERS
INTO PERTH-ON-TAY, — SENATOR THE HONOURABLE
RODERICK MATHESON.

GILLIES BROTHERS, LIMITED

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MANUFACTURERS OF
WHITE PINE
SINCE 1842

Braeside, Ont.
CANADA.

NEW YEAR'S, 1943

"TO WHOM IT MAY CONCERN"

In spite of war, rather because the timber trade of Canada had its substantial beginnings in Napoleon's efforts to throttle Britain's lumber imports more than a century and a quarter now gone, it seemed appropriate that a firm which has operated in the Ottawa Valley forests for a hundred years should not let the occasion pass without some tribute to the land and people who have made its story possible.

GILLIES BROTHERS, Limited, wish to have this slight memento of one phase of The Valley's life, in this hundred years, regarded as just that, and not as any record or appraisal of such small part as the firm or its founders have been privileged to play therein. It is, rather, an attempt to create a permanent record of many of the phases and people of a day fast passing, while these still live in the memory of those now with us or are fresh in the minds of others to whom, by word of mouth, they have been passed by those who had a great part therein.

It is to the early settlers of The Valley—to their struggles, their sacrifice, their endurance, their vision, and in the end, the vindication of their faith in the freedom and security, handed on by them to their children and their children's children—that the tribute of this memorial is dedicated. Not only to James Gillies, as the Scottish voyageur to Canada, nor to John Gillies, as the founder of the firm, do the Company of today desire to render honour, but to all those pioneers who pushed into the District of Bathurst, in the hard lean years of the early part of the nineteenth century; to all those early audacious adventurers who floated timber down turbulent streams from far inland to the sea; to the vigorous moulders of that trade, to yesterday's and today's colleagues and competitors and to all, who, working with them, made it possible, —the cruisers, the shanty-men, the raftsmen and the river drivers,

the depot men, the mill hands, the office, sales and executive staffs, and the farmers, and the merchants, and all those, all along the way, whose work together made up and still makes up the colourful pattern of lumbering on the Ottawa.

In such thought and spirit, GILLIES BROTHERS, Limited, ask you to accept this anniversary volume as they enter the second century of their operations along the Ottawa. With it they send the hope that, as its pages reflect the sturdy triumph of the faith, determination, courage and sacrifice of people of the British tradition over adversities and suffering and near disaster in days now gone, so may the days now upon us record, for another age, the dispersion of uncertainty and fear before resolute and united nations and, through their valour, the attainment of abiding peace for all the peoples of the earth.

Yours cordially,

D.R. Gillies

President, GILLIES BROTHERS, Limited

ACKNOWLEDGMENT

ANYONE WHO would touch upon the early Scottish migration to The Valley must turn, first and continuously, to the late Andrew Haydon's "Pioneer Sketches of the District of Bathurst" not alone for enjoyment of their affectionate and meticulous recording of that day and its people but for the trails that his scholarly researches have blazed for all future students of the subject.

And the searcher after knowledge of our forest heritage and its development cannot but humbly follow Defebaugh's and Hough's exhaustive studies of the nineteenth and twentieth century, and make constant recourse to Dr. A. R. M. Lower's encyclopaedic work in the last twenty years. In fact, the latter's research and publications, or those of associates working with him, have so comprehensively and faithfully correlated or interpreted most relevant information as to discourage much consultation of primary sources,—it seems such a "work of supererogation."

Of course, "Canada and Its Provinces" remains to this date the greatest single source of information on the Dominion's character and growth, and the Canada Year Books are a reference library in themselves. The Debates of the House of Commons and of the Senate, the Journals of the Legislative Assemblies, the statutes of the British Parliament, of Upper and Lower Canada, of the Province of Canada, of the Dominion and of the respective provinces afford immutable factual records of our unfolding story. The contemporary press is a comparably faithful repository of the country's story though no pursuit is so time destroying in its constant diversion along intriguing by-paths.

To these and to the various sources, hereafter listed, (see pages 171-2), the fullest debt of acknowledgment is recorded.

No mere lines of gratitude can serve adequately as recognition of the generous interest and assistance cordially extended by any from whom information or help was sought,—Dr. A. R. M. Lower and Dr. Lorne Pierce of the Ryerson Press, for permission to reprint certain passages from the former's books; the MacMillan Company for the same courtesy in quoting Stuart Holbrook; Dr. J. F. Kenny, Assistant Dominion Archivist, whose interest was keen and helpful beyond any obligations of his post: the late Mr. Alvin F. Macdonald, librarian of the Dominion Archives and his patient staff; Miss Jean Matheson, librarian, Lands, Parks and Forests Branch, Dominion Department of Mines and Resources, whose assistance was so continuous and comprehensive as more properly to be described as collaboration; the Dominion Forest Service (Mr. D. Roy Cameron, Chief), Dominion Department of Mines and Resources, and especially Mr. J. B. D. Harrison and Mr. J. R. Dickson, who gave of time and advice beyond any official responsibility, as did Mr. F. A. MacDougall, Deputy Minister of Lands and

Forests for Ontario, and the courteous and interested Mr. Joseph W. Michaud, in charge of publicity, Department of Lands and Forests of the Province of Quebec; Mr. Allen O'Gorman, whose interest in his native valley brought his own fine knowledge of maps and map-making and that of Mr. J. V. McCarthy to the evolution of The Valley map and the sketch of the early canals and railways; and also in "Mines and Resources," Mr. Norman Marr, Water Powers Branch; Mr. Gordon Wrong, B.Sc., Chief of the Transportation and Public Utilities Branch, Dominion Bureau of Statistics, for his assistance in historical data re The Valley lines; Mr. William Gilchrist, Chief, Foreign Tariffs Division, Department of Trade and Commerce; Mr. F. A. Hardy, Assistant Librarian of Parliament, Mr. H. D. Troop and Mr. Joseph Tarte of the Library staff; Mr. W. J. LeClair, of the Canadian Lumberman's Association, and his son, Mr. Forbes LeClair; Major E. C. Woolsey of the Upper Ottawa Improvement Company; Mr. R. G. Lewis, B.For.Sc. of the Forestry Branch, Census of Industry; Mr. L. A. Cane, Trade Statistics, Dominion Bureau of Statistics; three veterans of The Valley's story,—J. J. McFadden of Blind River, Ontario, oldest of the white pine operators, Dr. J. L. Morris, Inspector of Surveys of the Province of Ontario, and Mr. Charles D. Macnamara of Arnprior, who probably carries in his personal knowledge more lore of the lower Madawaska than any man living today; Mr. J. Gordon Fleck, grandson of the founder and Vice-President of J. R. Booth Ltd.; Mrs. Louise A. Reid of Portage du Fort, for patient help in the early history of the Usborne family; Dr. E. H. Coleman, Under Secretary of State, for helpful personal comment on other days; and to all the various Gillies of today, and especially to the President of Gillies Brothers, "Mr. Dave", for association in the study and extraction of old files and in consultation and revision of the manuscript.

Part II, "Valley People Remember," being the reconstruction of what John Watson of Queen's described as poetical truth—different but akin to factual truth—has drawn on the personal memories of too many to attempt recording here. Since it deals with certain phases and incidents, out of the century recorded in Part I, it cannot but at times revert to some of its passages, with danger of reiteration, but, it is hoped, without irritation.

To all these and numerous others, whose love of The Valley and The River was an open sesame to any service asked, the deepest of humble gratitude is here recorded with the regret that the result is not worthier of their spontaneous help and of the beauty and mystery of the great Watershed of Twenty Rivers.¹

And just because The Valley is so vast, so comparatively slightly developed in much of its great expanse, so intensely loved by the people who own themselves its native dwellers, no possible tale that dares to tell its story could be without error in emphasis or interpretation, or in selection of the versions of disputed fact. Therefore for sins of decision, commission and omission, expiation is offered in advance of protest and imprecation.—C.W.

¹The Rivers, feeding the Ottawa from the Upper Country to the Lake of Two Mountains, exceed this exact number. The main streams are the Kinojevis, Blanche (upper), Montreal, Kipawa, Mattawa, Magnasibi, Dumoine, Petewawa, Indian, Black, Coulange, Bonnechere, Madawaska, Mississippi and Rideau in the Upper Valley: the Gatineau, Lievre, Blanche, North and South Nation, Rouge and North in the Lower.

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REGISTERED 1943
UNDER
THE COPYRIGHT ACT OF CANADA 1921

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CERTAIN TERMS AND MEASUREMENTS

TERMS

"Timber" today is used as a loose generic term to refer to stands of forests, logs and lumber generally. Originally and until the latter part of the last century, *timber* in the East and in the English market, especially, meant *timber squared to four sides*, hand-hewn and finished to a satin smoothness by the axe of skilled hewers, and each piece known as a stick. From 1861 the term applied to the *waney timber*, also called a "stick", in which the log was bevelled off on the four "shoulders" of its circumference, but with the four faces still hewn, flat and smooth. Today, British Columbia applies the term "*dimension timber*" to sawn squared pieces, 12 inches square or larger, by 40 feet in length or longer.

Trees, felled and trimmed of their limbs but still bark-enshrrouded, and floated as logs to the mills for cutting into deals, planks, boards, etc., have been known as *saw logs* and the sawn products as *lumber* in the Canadian trade.

Wood, sawn to planks, 2½ inches to 4 inches thick, 9 inches and over in width, went as "deals" in the English trade, and the "Quebec deal" came to apply to any sawn plank, of any width, three inches and upwards in thickness.

SCALING MEASUREMENTS

Square timber was originally measured in Canada by cubic feet of contents. A "load", used in the English trade, is equivalent to 50 cubic feet.

Sawn lumber was measured by *board feet*; 12 inches by 12 inches by one inch in thickness gave one foot in board measurement. In 1869, the board foot was adopted as a basis for measure of cubic contents, as well, and since that time timber, logs and lumber have been generally measured by thousands of feet, in board measure. Standard Tables gauge the number of board feet per foot of length for sawn lumber of all dimensions.

In scaling logs, an estimate is made of how many board feet a log will "saw out" and tables of *log-rules* have been calculated, estimating this for logs of differing sizes and lengths. The smaller growth, cut for pulp, is measured in *cords* of 128 cubic feet of piled material, or may also be measured in cubic feet, in which case each piece is measured separately.

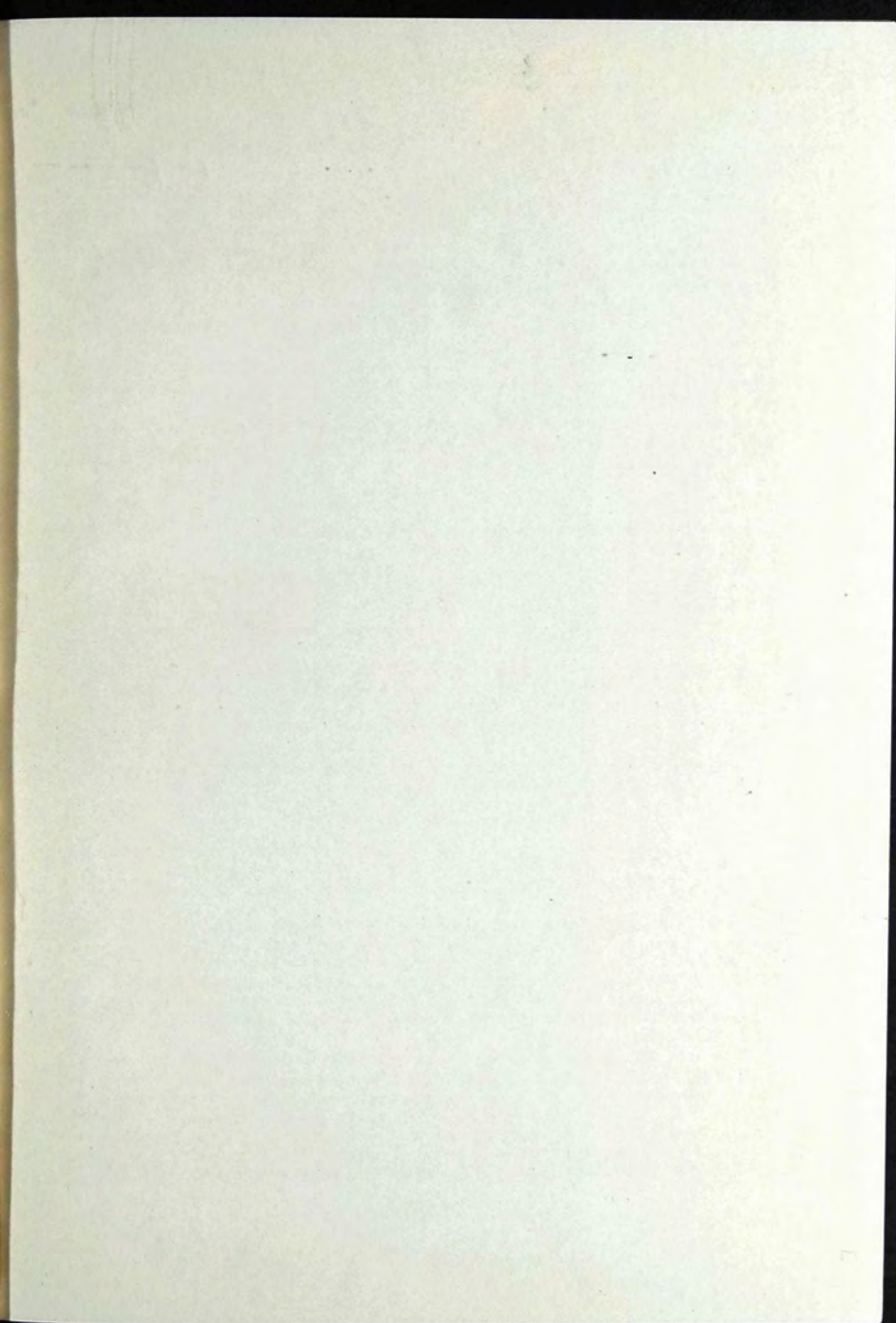
(The *cunit* is a unit, in use in Ontario and Quebec, to describe 100 cubic feet of measured wood. The *bolt* is a term used to denote any piece cut to special measurement for specific purposes, e.g. a shingle bolt is 16 or 18 inches long).

COINAGE AND CURRENCY

Currency, in Canada's early days, was tied generally to sterling, but with varying standards in the Maritime Provinces, and in Upper and Lower Canada. The shilling values to the United States dollar varied in the latter two provinces, while "Halifax currency", on yet another basis, prevailed in the East.

In 1841, when the Province of Canada was created, standards recognized British, United States and French gold coins, British, United States, French, South and Central American, Peruvian, Chilean, Spanish and Mexican silver coinage, and this Halifax currency. For years controversy and confusion continued until 1853 when, on the eve of Reciprocity with the United States, Francis Hincks brought in his decimal dollar currency measure, making the Canadian dollar unlimited legal currency, at \$4.86½ to the British sovereign, and \$1.00 to the United States dollar.

Even then, the new system did not come fully into effect until formal proclamation, January 1st, 1858, when the first shipment of Canadian coins came from the Royal Mint (in Britain) in 5, 10 and 20 cent pieces, (no 25 cent pieces being struck as the shilling went for a quarter) and \$1.00 silver pieces. In 1871 this system was extended to the whole Dominion, (as then constituted) and in 1881 to Prince Edward Island and British Columbia. No gold coins were struck for Canada until 1908 when a branch of the Royal Mint was established in Ottawa, and these were sovereigns. Canadian \$5.00 and \$10.00 gold pieces were first struck in 1912.





JOHN GILLES
1811-1888



JOHN GILLIES
1811-1888

THE TIMBER MAKER AND LUMBERMAN

THE STORY of Canadian development has been one, on the whole, of great ventures against great odds, of vision, of energy, of courage, of determination and sacrifice, often as not, shot through with the glint of the gambler's choice and chance. Timber making and lumbering have been as characteristic of that story as the Canadian beaver is of the Canadian woods. On the great riverways, that were the natural entrances to Canada, the primeval forests stood sentry, resisting easy exploration and discouraging settlement. To the pioneer the trees were enemies to be felled and destroyed. To the lumberman they were the raw material of his livelihood, to be harvested as cheaply and efficiently as possible, ruthlessly even, in the days of early confident belief in the inexhaustibility of the rich woodlands. Early fellings were of simple nature to provide the timber for the first crude shelter that the frontiersman erected. Then more trees were felled and burned to keep him warm; more to clear the small patches whereon his first simple crop of potatoes and grain was sown; more yet for the burning of the potash that was his only hope of early cash earning. And every settler became an axeman, the trees on his land the crop ready to his cutting.

But other men were to come, ready to risk resource and effort to market that crop,—the pioneer lumber merchant or sawmill operator, putting up his bond, to purchase the felled logs from the settler or to send in his own men to cut and float this bulky harvest by difficult waters to the marts where men would buy it for their many needs. That was no small gamble, no light undertaking, to be carried through by unskilled hands or by men without character and resources, for the hazards were many and great between the felling of the trees and the marketing of the timber or sawn lumber.

The planning of future market outlets, the obtaining of cutting rights, the cruising of prospective "cuts" whereon the 'limits' or 'berths' would be leased; the organization of woods operations, (always a whole season ahead of their execution), their management, the felling, the 'drive out' of the timber to the export port or of the saw logs to the mills, the milling and shipping and the heavy, hazardous, wearying burden of actual marketing,—these are one in a long saga, in which each undertaking demanded foresight, skill, shrewdness, and determination. They were not for the adventurer but for the man with temerity and staying power.

And constantly, in the Canadian story, the challenge of the individual enterprise unfolded against the background of a new and uncertain land, that was not yet a nation but a group of young and slightly developed states, in ill-defined relationship to their Motherland and not always friendly each to the other. Lavishly endowed with forest riches, they stood, boundary for boundary, by a greater, more populous land whose trade was vital to the profitable

marketing of their forest crop but against whose exploitation their immature, uncertain economic life felt the constant need to stand on guard. Virile and vigorous, Canadian lumbermen had no home market, commensurate with their power of production: their success depended upon the healthy growth of Canada, but even more upon the capture and retention of the rich market overseas, and the expanding demands of the great neighbour to the south. And, in both areas, keen competition was constant and powerful. The Baltic and Scandinavian forests were but short sea spaces from the markets of the distant Old Country, and the skilful, energetic native traders of the North American States, experienced in forest lore, were keen, and shrewd, hard rivals in their own home trade.

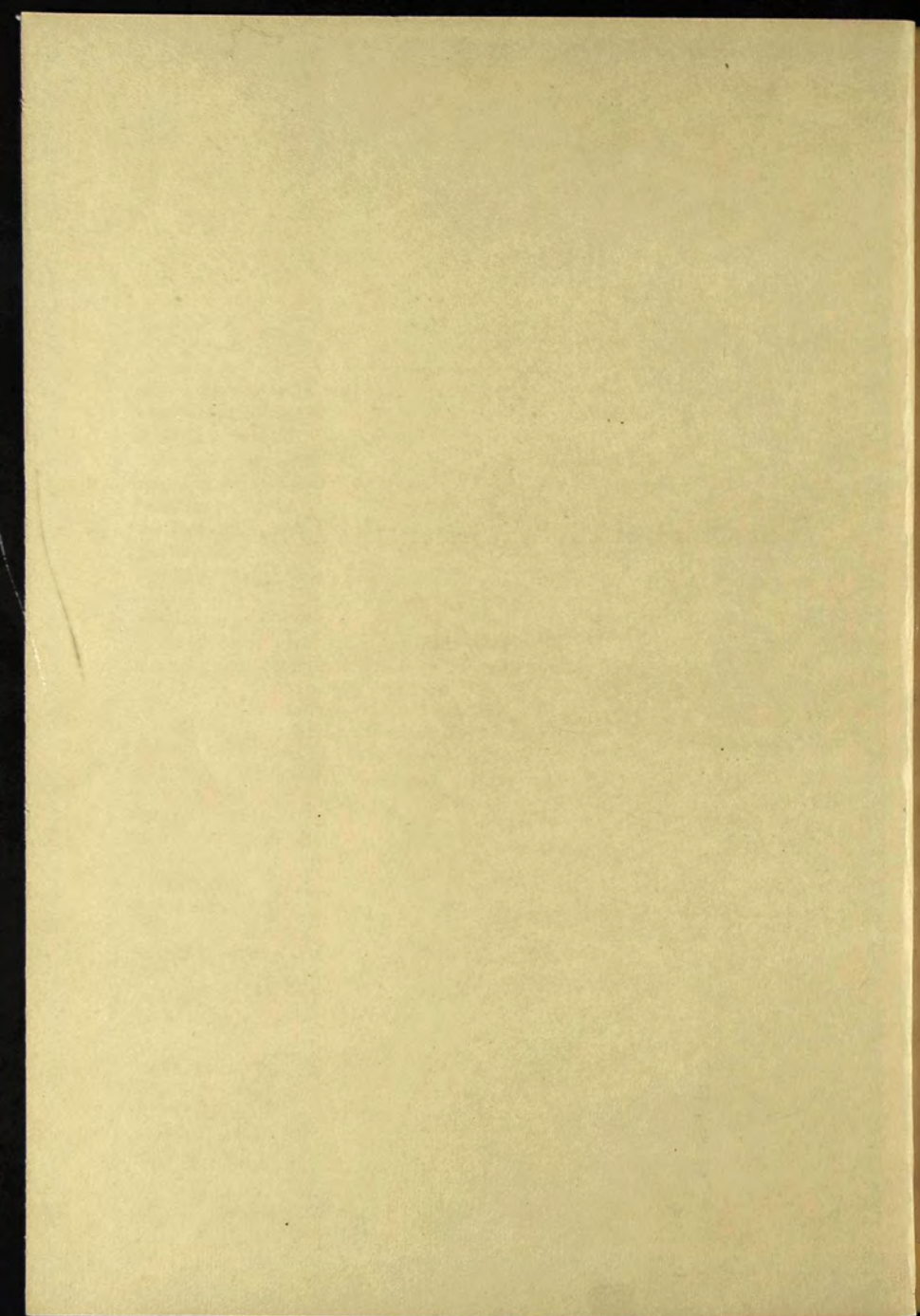
Amid the hazards of forest pest and fire, of inaccessible stands, of adverse grades and impassable chutes and rapids, uncertain autumns and fickle winters, the equation of the human element and climatic vagaries at any stage, from the hauling of supplies in the one autumn to the water supply of the next season, the Canadian lumber trade stood always teetering on this needle-point of risk and tension,—reliance on export demand. It was thus continuously exposed to the competition of labour, living and market conditions in other lands beyond its influence but definitely determining the main elements in its existence.

Wood was everywhere vital to man's life—for his shelter and his warmth,—and it was basic in the ships that carried the world's commerce from centre to centre of the world's needs. It was striven for and a counter among men within nations and between nations. And in that long and ceaseless struggle, little men, faint of heart, weak of will, and slow of mind or slack in spirit, just did not survive. The tale of lumber on this continent may appear to the uninformed to be one only of ruthlessness and brute strength: it is rather a tale of courage, and of skill, of foresight and of planning, of ability to stay the course, and, as in most things, of the survival of the fittest.

Of one small part of its story, in the greatest of the eastern watersheds, these pages now run on to tell.

I

The Story of the Gillies on the Ottawa



FOREST CLASSIFICATION
OF
CANADA
AND
COAST OF LABRADOR
SOUTH OF LATITUDE 75°



Prepared by the Dominion Forest Service. Base map and lithographic plates from Surveyor General's
compiled by the Geographical Section, General Staff, Department of National Defence.

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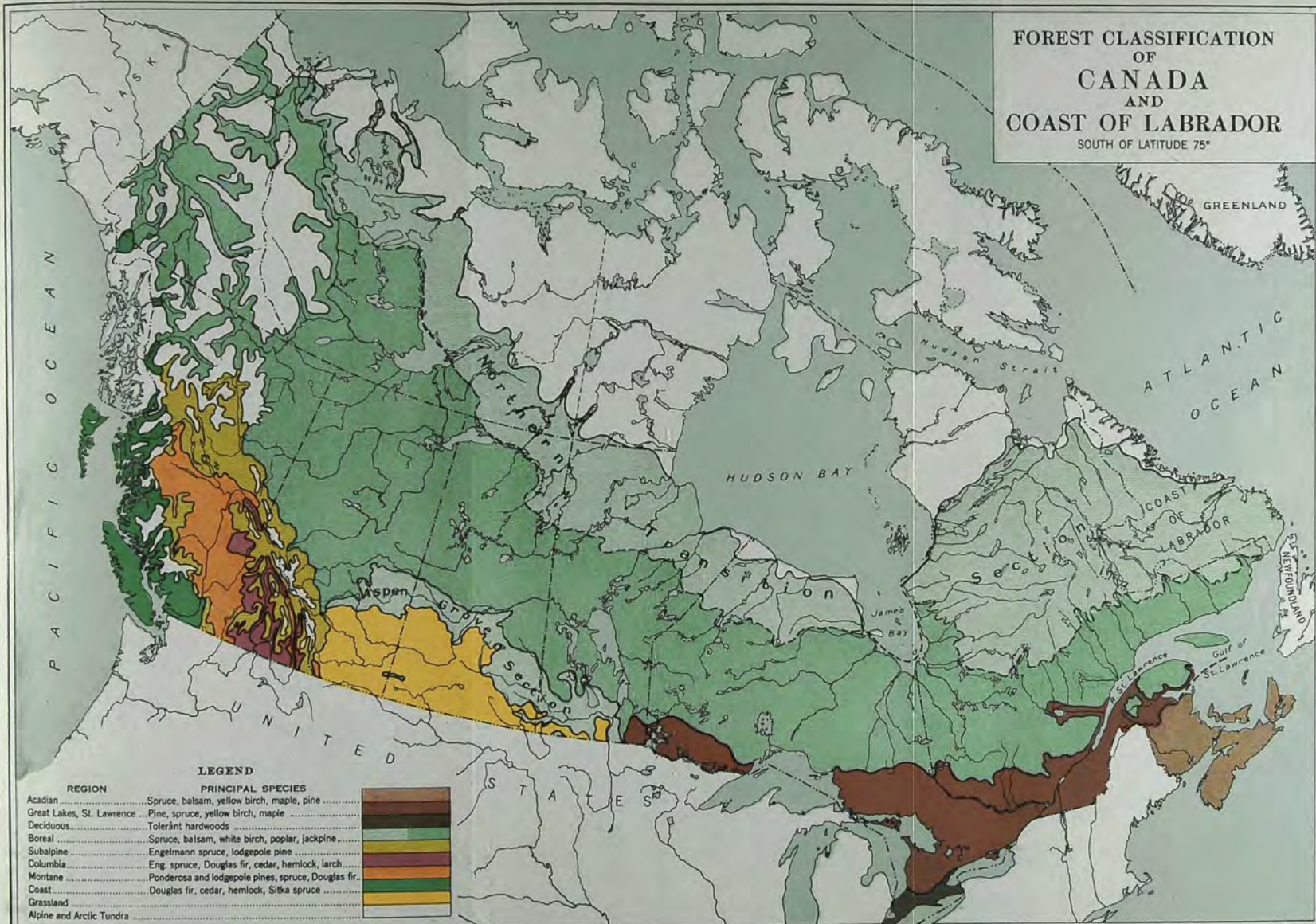
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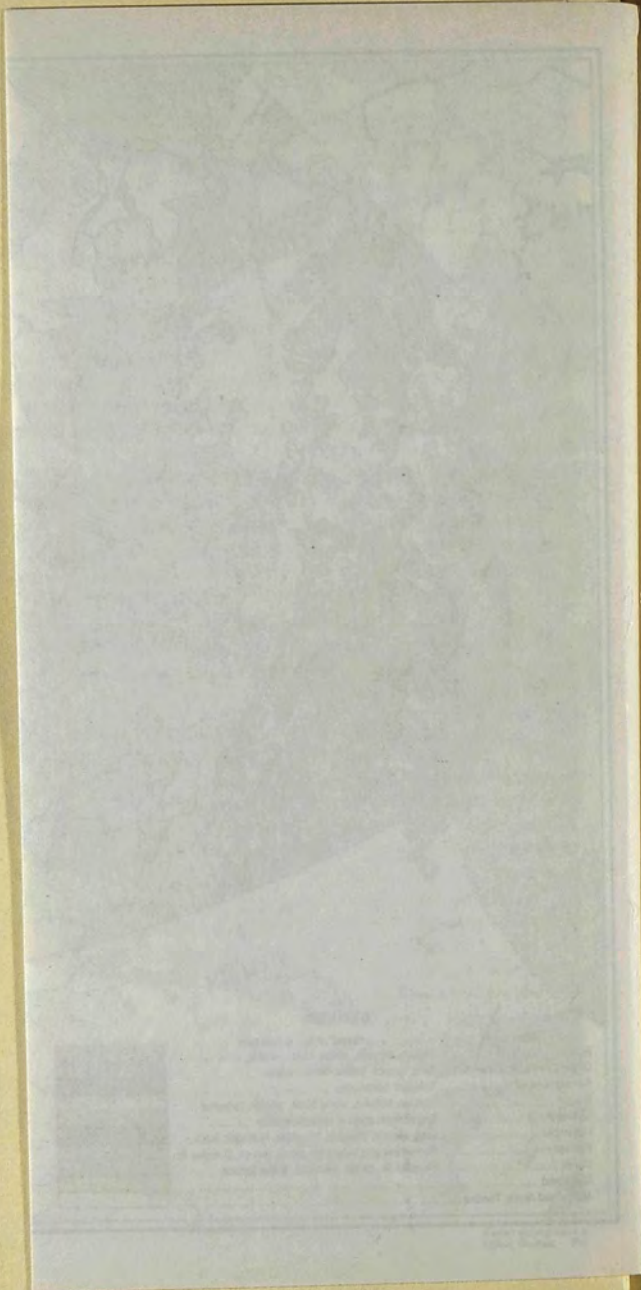
FOREST CLASSIFICATION OF CANADA AND COAST OF LABRADOR SOUTH OF LATITUDE 75°



LEGEND

REGION	PRINCIPAL SPECIES
Acadian	Spruce, balsam, yellow birch, maple, pine
Great Lakes, St. Lawrence	Pine, spruce, yellow birch, maple
Deciduous	Tolerant hardwoods
Boreal	Spruce, balsam, white birch, poplar, jackpine
Subalpine	Engelmann spruce, lodgepole pine
Columbia	Eng. spruce, Douglas fir, cedar, hemlock, larch
Montane	Ponderosa and lodgepole pines, spruce, Douglas fir
Coast	Douglas fir, cedar, hemlock, Sitka spruce
Grassland	
Alpine and Arctic Tundra	





A Hundred Years A-Fellin'

"BACK-DROP"

ORIGINALLY Canada must have stood, enwrapped in forest covering from the eastern to the western coast, with the exception of Quebec, north of the height of land, a small north-eastern corner of Manitoba, the south-western tip of the latter province, the lower two-thirds of Saskatchewan and the southwest of Alberta.

Otherwise, however, the lower Pacific Slope, and well over a million square miles, north and eastward, running from the Northwest Territories and the Mackenzie River delta, through northeastern Alberta, northern Saskatchewan, and central and eastern Manitoba, thence eastward right to the sea, were densely wooded hills and plains and valleys, their forestland an armour challenging the foreloper whether bent on furs, fish, timber or settlement.

North of the St. Lawrence watershed grew only tamarac, jack pine, balsam, black and white spruce, poplar and white birch, not highly merchantable until the evolution of the pulp and paper trade which made the spruce and poplar a ready cash crop for the pioneer.

THE TIMBER STANDS

The St. Lawrence Valley and the Atlantic provinces, in their vast extent, presented a varied forest growth. From Lake St. Clair to Lake Ontario, along the Erie shore, stretched what the foresters call the "Carolinian" woods—large stands of fine hardwood, including black walnut and buttonwood, fallen, this hundred years or more, largely to the pioneer's axe and burning as he cleared land for settlement.

North of this belt, from Lake Huron veering southward across Central Ontario, eastward along Lake Ontario, crowding close to the St. Lawrence shore and, then, turning into the Eastern Townships, ran the so-called "tolerant" hardwoods that can exist in the dense growth of greater trees,—the graceful elm, the gracious beech, the maple, etc., of little commercial value to the first settlers, since they were not floatable. They, too, were doomed to widespread cutting and burning in the clearing of much of our best farmland in the extensive mixed agricultural belt of "old Canada."

Along the south shore of the lower St. Lawrence, and into the eastern maritime provinces, this same growth extended, picking up quantities of red spruce as it moved eastward. The land here is broken, and much of it unfit for farming.

Across the Gulf and River, along the northern St. Lawrence shore as far west as the Saguenay, straggling down to the coast from its height of land, ran the

aspen and paper birch forest, largely quick growth on burned-over or rocky land through which the balsam, spruce, jack pine, white cedar and tamarac of the true far northern fringe push their growth and often dominate. East of the Saguenay on the north shore, there are considerable reserves of spruce pulpwood but other timber is not of great economic value, though some pine may occur therein, nor is the land, on the whole, promising to arability or settlement. It is a tree-clothed country but much of it is a halfway land between the merchantable timber and the merchantable pulp country.

The timberland of greatest growth and value was, and is, the mixed forest area of the Great Lakes-St. Lawrence region.¹ This great district comprised several sections,—the Huron-Ontario Section, the Upper and Lower St. Lawrence, the Algonquin-Laurentides, the Eastern Townships, the Temiscouata-Restigouche, the Saguenay, the Haileybury, the Timagami, the Algoma, the Quetico, the Rainy River and the Lake Superior Sections. Within the whole area, "white pine probably reached its maximum development in Canada" in the Algonquin-Laurentides Section, ("the Georgian Bay District, the Algonquin Highlands, Upper Trent Valley, the upper course of the Ottawa River and the lower slopes of the Laurentide mountains including the valleys of the St. Maurice and Gatineau Rivers"). Its dominant woods are the white pine,—*pinus strobus*—and the red,—*pinus resinosa*. Many of the hardwoods flourish within it and balsam and spruce, typical of the less valuable northern growth, abound in some of its stretches but these lands were essentially and originally "the pineries" of fine growth. They support today the only rich pineries, remaining in Eastern Canada in some generations now, for, by the first half of the last century, most of the accessible pine stands of New Brunswick and Western Ontario were cleared.

Pine has been the wood of builders for many an age in the old world and the new and it was in the stands where it reached high and straight to the sky that eastern Canada's timber trade had its growth and existence—in this great tract from Lake Huron across to the Ottawa, through the Ottawa watershed and about the eastern corner of Lake Superior.



¹"A Forest Classification for Canada," W. E. D. Halliday, King's Printer, 1937.

THE CURTAIN RISES ON OUR TIMBER STORY

THIS forest land and life and trade were to be constant factors in the grim and difficult opening days of Canada's story. "In very few other countries have the forest and the industries based upon it played so large a part as in Canada. For two centuries the fur trade provided one of the chief reasons

to thank for two structure: the pulp power develop country of extract Among such, these very large." So extensive research economic develop of our timber story all who run may from the Company the Treaty of Paris, of the trade that land for the greater when the only trans streams to strange organization, involv highly profitable, less demanding companies to France until Govern date, there in all the

for its existence, and then for another century timber-making and lumbering proved one of its major economic mainstays. In the present century we have the forest more conspicuous props to the national and paper industry and hydro-electric ment. Canada has been essentially a ive industries and staple trades. four based on the forest have bulked writes Dr. A. R. M. Lower¹ whose on the significance of lumber in our ment has made a century and a half a ready documentary reference that read. In the days of the French regime, of One Hundred Associates, 1627, to 1763, there was but slight development was to prove the sheet anchor of the part of the next century. In a day port was by canoe, through unknown places, the fur-trade, calling for little ing light, large cargoes, and these was less wearing than colonization, than lumbering for the royal chartered which French policy entrusted New the institution of Royal ment in 1663. At that were barely 2,500 souls new land. Only with

¹The North American Assault on the Canadian Forest—Lower, Carrothers, and Saunders, Ryerson 1938—p. XX Preface.

Talon's appointment as Intendant, did serious development of a permanent nature begin. Land had been granted under old seigniorial tenure but there was a reservation of all oak on each domain for shipbuilding, and, in later grants, pine for masts and spars. In keeping with these provisions, in 1666, Talon persuaded some of the settlers to turn to the felling and sawing of timber for shipbuilding, and, in 1670, *three ships were completed and sailed for the French West Indies with some timber in their cargo—probably the first such commercial export from Canada.*

But no timber or lumber industry developed for several years. Trees were felled for houses, and, under later reservations, for bridges, for the church, and for the manor house and mill upon the seignior. But, on the whole, the habitant, like his British compatriots later, (and even then to the south), hated the forest tree that stood resistant to the cultivation of his land, and the great timber stands were hewn for firewood or for making potash in which a flourishing trade was developing with France.

In the Saint John Valley, Villebon was more alive to the possibilities of a timber trade with the old land, and, in 1700, sent a load of perfect masts to France in 'the *Avenant*.' She made the voyage in thirty-three days—the first wholly timber-laden ship, it is claimed, to cross the Atlantic.

Nearly a generation later, in 1729, four timber-laden ships, built in Quebec, went to the French Indies, the precursors of energetic shipbuilding in the ancient city from that date to its capture by the British in 1759. Many of these craft were armed vessels built for the French Navy, one, 'the *Algonquin*' (1750), carrying 72 guns.

EARLY BRITISH ADMINISTRATION

The British, to whom New France formally passed under the Treaty of Paris 1763, were alert to the forest wealth of their new possessions, as were the shrewd British North American colonists who had been joined in the fight. Fully a generation before the indefatigable Talon's ventures in Quebec, the latter had been making lumber by hand in primitive saw-pits and in 1631, the people of South Berwick, Maine, had imported, from England, and set up at Salmon Falls River, the machinery of the first water-driven mill in all of North America.

The British Government was fully seized of the present and potential significance of these great timber stands, far from the striking power of European enemies. Its *instructions to General Murray*, named administrator of Canada, on *December 17th, 1763*, are explicit and may be regarded as *establishing, in principle*, the basis of Crown reservation of forest lands that has ever since been a feature of lumber rights in Ontario and Quebec.

"You are", the dispatch ran, "to lay out townships of convenient size and extent, as you, in your discretion, shall judge meet and proper; and it is our will and pleasure that each township do consist of about 20,000 acres having, as far as may be, natural boundaries, extending up into the country and comprehending a necessary part of the River St. Lawrence, where it can conveniently be had". There was to be reservation of "land in each township for the growth and production of naval timber if there are any woodlands fit for that purpose". And

since "the country in the neighbourhood of Lake Champlain and between Lake Champlain and the River St. Lawrence abounds with woods, producing trees fit for masting for our Royal Navy and other useful and necessary timber for our navy constructions, you are therefore expressly directed and required to cause such parts of the said country or any other that shall appear on survey to abound with such trees and shall be convenient to water carriage, to be reserved to us and to use your utmost endeavour to prevent any waste being committed upon the said tracts by punishing in due course of law any persons who shall cut down or destroy any trees growing thereon, and you are to consider and advise with our Council whether some regulation, that shall prevent any sawmills whatever from being erected within our government without a license from you or the Commander in Chief of our said province for the time being, may not be a means of preventing all waste and destruction in such tracts of land as shall be reserved to us for the purposes aforesaid."

That was far-sighted policy for 1763, suggesting controls and conservation at the moment when all the privileges of the British market, on which the great New England trade had been developing for decades, were automatically thrown open to Canadian exports, by virtue of the change of sovereignty. But, Canada, then with a population of but 70,000, (65,000 French and 4,000 to 5,000 British, the latter almost exclusively in Nova Scotia and centred about the scattered forts and outposts of the upper country), had neither the people nor the resources to take advantage of it. These had to come from elsewhere, and the Canadian lumbering industry began, as it was to continue to this day, in an interplay of rivalry between the forest interests of the Baltic on the one hand and of the United States on the other, both seeking the lucrative British market. Events were to precipitate developments in Canada's favour.

The British demand from North America had been for great timbers for the Royal Navy, particularly mastings. The American Revolutionary War (1776) naturally turned the Royal Dockyards at once to the Canadian sources of supply, while it also gave an immediate stimulus to shipbuilding to replace the North American bottoms hitherto active in the carrying trade to British ports and to the British West Indies. Licenses were extensively granted to contractors for the Royal Dockyards to cut in the Canadian forests and they began organization for sub-contracting through representatives, sent out to Quebec. Most of these contractors had well-established purchasing and shipping facilities in Baltic and Scandinavian ports, whence flowed British import trade for domestic as well as military use. The uncertain peace, following on the Seven Years' War, was apparent to these shrewd traders, and, as the reverberations of the French Revolution and Napoleon's emergence sent widening tremours through Europe, they sought safer and more secure sources of supplies, not only for the naval but for the commercial trade. The urgency of the day tended to break down prejudice against "Quebec yellow pine" in a market used to Norwegian red though the Englishman was still to insist on "heart-timber, hand-hewn" which he would import and saw at home.

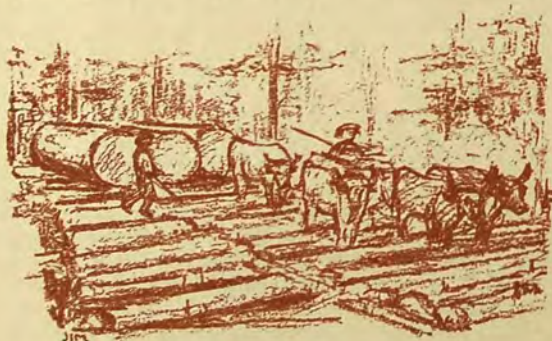
Another factor also entered the Canadian situation. The movement of United Empire Loyalists into Canada in the wake of the Revolution created a demand, at

once, for timber and lumber of all kinds for they were people long settled in the new land and unwilling to endure the crude log shelters of their pioneer forefathers or of such slight contemporary Canadian settlement as was then developing.

THE NAPOLEONIC DECREES

The Napoleonic War enlarged and more of the British operators, in anticipation of sea blockade, moved out of the Baltic to Canada, following the initiative of the first independent trader, Henry Osborne, who located in Quebec in 1801. There were few regulations as this new area of lumber wealth was opened—some provisions on the St. Lawrence for appointing pilots, and officials to regulate the loads on scows and rafts (varying with the depth of the water in the rapids) and some for levying on the river traffic for the cost of improvements. But, on the whole, there was just a sense of urgency to get in and at the forest and to move the timber out and overseas for the Royal Navy's growing needs.

The Napoleonic decrees struck in 1806 and their acceptance by Russia and Sweden, two years later, threw Britain almost entirely upon the Canadian forest for her naval and home requirements, especially in fear of the strains developing between the new United States of America and the Home Government and the consequent uncertainty of any reliance on that market even though some of the New England States were less unfriendly than the Union, as a whole. In the ensuing twenty-four months, Britain's imports of square timber dropped from 215,000 to 25,000 loads and she at once imposed preferential tariffs to encourage rapid new supplies, heavily taxing Baltic imports and extending substantial preferences to those from the British possessions. Thus the Napoleonic decrees, though they did not initiate the Canadian lumber industry, can be said to have established it, on its first secure foundation. Immediately, many of the substantial timber merchants of the Old Land followed their forerunners to Quebec and Saint John, set up their business houses and homes there, invested their capital in ships and trade, and, though primarily naval contractors, sub-let to Canadian agents and operators and dealt in general exports for the British market.



PRELUDE TO SETTLEMENT

SUCH WERE some of the eddies beating upon the shores of the New World in the reverberations of war in the Old. The repercussions within the British Isles were naturally greater. For nearly half a century, Great Britain had been almost continuously at war with France. The Empire of the great Louis had been shaken and broken in the Seven Years' War, terminating in the loss of French North America, and even more turbulent tides were pounding on the sands of time as the rushing waters of trouble threatened to submerge Europe in the upsurge of the French Revolution. Britain, with her interests, then as now, sprawled across half the world's space, stood resolute and stubborn, as she reeled from the uprising of her own kith and kin in the newly won continent, to meet mounting unrest at home.

The far horizons grew darker for, as Napoleon struck at the heart of England through the sea blockade of his decrees and the seafaring Island power fought back with her "right of search" of all ships upon the ocean's laneways, the newly independent United States had allied themselves with the enemy and attacked the sparsely settled and lightly defended stretches of Canada. But the assault was stoutly and successfully resisted by the Canadians, many of them Loyalists who, within the same generation, had sacrificed everything to cross from the new Republic to His Britannic Majesty's northern sovereignty.

SCOTS FOR CANADA

The war had thus spread to North America in 1812, just as the Earl of Bathurst assumed office as Secretary for War and the Colonies in the British Ministry. Undaunted by the widening area of the struggle, (rather, presumably, influenced thereby) Bathurst, in his first year of office, had written to Sir George Prevost, Governor-General of the Canadas, pointing out that, in his judgment, the "same spirit of migration" which had impelled Scottish stock to settle the United States still prevailed in the Highlands, and that there were, even at that time of danger and doubt, "a considerable number of the natives of Sutherland and Caithness who are only waiting for the opportunity to leave their native country." Explaining that he had



been held back only by "the present state of the Canadas" and the probable difficulties of providing subsistence to so many additional inhabitants at the time, Bathurst sought Prevost's judgment as to whether "the male part of such population" might not be "rendered in some degree valuable, both for the present defence and the future protection of Upper Canada by offering to them grants of land and a free passage for themselves and their families."

Prevost transmitted Bathurst's inquiry to Sir Gordon Drummond, (the Scottish-Canadian hero of the battle of Lundy's Lane), then administering the Province of Upper Canada, who cordially endorsed the proposal not only in prospect of such "loyal inhabitants" but of having for the "ranks of the militia a brave and hardy race of men."

THE RIDEAU SETTLEMENTS PROJECTED

Though danger could wring unity into their lives in the actual crisis of attack and invasion, Canadians of the dominant British and French extraction had already found themselves in those fundamental conflicts, the attempted conciliation of which was to be a recurring tragic undertone in all our story. The Quebec Act, passed eleven years after the cession of New France, had created the one vast Province of Quebec, stretching north to the Hudson Bay, west to the Mississippi River and south into the curve of the Ohio. With the American Revolution and Declaration of Independence in the next year, United Empire Loyalists had come across the St. Lawrence and the Great Lakes, necessitating, almost immediately, surveys of the "front" townships that fringe the waterways from Montreal to the Niagara and Essex peninsulas. These settlers of the English tongue immediately sought the judicial and political systems of their ancient tradition and usage and, in 1791, succeeded in having the Province of Upper Canada created under the Constitutional Act, definitely cast in the mould of English constitutional and social practice.

Within the year (July 16th, 1792), the new demesne was divided into *counties*, carrying forward the names and traditions of the similar little local democracies of the Mother Country. One of the new counties was designated *Carleton* (after Sir Guy, later Lord Dorchester) and embraced most of the present counties of Carleton and Lanark and, what was then an unsurveyed hinterland, the County of Renfrew. In 1798, this extensive area of Carleton, with the territory now forming Leeds and Grenville counties, was made into the District of *Johnstown*. This land, about the Rideau Lakes and River, was chosen for the proposed Scottish settlement. Neither the quality of the land, its forest growth nor suitability for settlement governed the choice. Considerations of military strategy prevailed—to assure a safer inland route for supplies than the St. Lawrence and Great Lakes, so uncomfortably close to the boundary, for, from the War of Independence—or the Revolutionary War!—until the opening of the present century, young Canada's fears and defence were predicated upon the danger of invasion from today's good neighbour and blood ally,—the United States of America.

THE SETTLERS COME TO PERTH-ON-TAY

Distance was a more imperious master than now, while governments moved with no greater alacrity, and it was not until 1815 that "Mr. John Campbell, Writer to the Signet, Edinburgh" was authorized to organize the proposed migration in Scotland. It was February 1816, when Sir Sidney Beckwith, Quarter Master General of Upper Canada, was empowered "to purchase from the Indians (the Chippewas and Missesawguays) a tract of country west of the River Rideau to afford an entire range of townships," three of which were named Bathurst, Drummond and Beckwith.

In Scotland plans had moved rapidly, and in July and August 1815, four ships—the *Dorothy*, the *Baltic Merchant*, the *Atlas*, and the *Eliza*—with approximately 625 passengers, sailed for Canada, where they arrived early in September. Some settled in Glengarry, others remained at Brockville and Prescott through an uncomfortable autumn and winter, until the spring of 1816. Then, joined by discharged soldiers of Canadian regiments, (the Glengarry Fencibles, the de Meuron and de Watteville Foreign Corps), they began to move on to their lands for which Reuben Sherwood, chief field surveyor, reported that he had "fixed upon a most beautiful site for the depot stores, nearby where the line between No. 1 (i.e. Bathurst Township) and 2 (Drummond Township) will cross the Pike River." The Pike was named the *Tay*, the site of the King's stores *Perth*, by lonely exiles longing for the homes from which they had started their long journey nearly a twelvemonth before. By October 1816, the new settlement had upwards of fourteen hundred persons.

PEACE IN THE HOMELAND

But the ebb of battle had brought other and graver problems than the conflict itself to the Isles that, for two generations, had strained every fibre of their strength to resist the onslaught on their freedom. The vast contraband trade with which English shipping had met the Napoleonic measures, the British seizure of the colonies of Spain, of Holland and of France, and the growth of trade in raw materials and shipping with British North America and the West Indies, had almost doubled English exports in the last decade of the War. Manufacturing had expanded incredibly with the invention of the steam engine, the spinning jenny and other mechanical devices.

War's needs had concealed the real shrinkage that these changes were to mean in the demand for human power. For practically a generation, immense forces had been mobilized under arms, townsmen and rural dwellers having swelled the ranks of the "fighting men by trade." Country men, in turn, had been busy feeding the new centres of "manufactories" and providing supplies for the armed forces to be borne to the waiting ships as fast as they could be built on the ways of England. These demands and the shutting-off of agricultural produce in an invaded and shattered Europe had sent agricultural prices to an unhealthy height paralleling the incredible increase in the natural wealth. And then came peace.

Britain necessarily ceded many of the conquests that she had held, in trust as it were, for the people of France or of her oppressed allies in Napoleon's power.

Each state naturally turned to restoration of its own life and rebuilding of its home production and foreign trade. Britain's plants, and Britain's farms and Britain's fields found their war-time power of production far beyond their home or shrinking foreign demand. Her population had grown from ten to thirteen million, and to this increased labour reserve were now added thousands of disbanded fighting men, many of whom had known naught but soldiering. Large numbers turned to the towns, wherein their life had lain, to find the old home crafts of their livelihood gone and themselves with no skills for the new processes had the plants been open. Others sought again the small holdings or the country labour from which they had been drawn to fight. The national debt and taxation had become so staggering as, of their very weight, to engender bitterness amid the general confusion and distress, which even a fifty per cent growth in the poor rate was not sufficient to mitigate. Perplexity, suffering, disaffection, serious rioting ran their gamut in various parts of the Isles.

The debates of the British House of Commons became grim, their annals drab with the bitter plight of the people and their "utter inability to obtain adequate subsistence from any application of their labours." Through the industrial counties,—Lancashire, Cheshire, Cumberland, Northumberland and Durham, and through all the western area of Scotland, particularly in the Glasgow and Paisley districts, a sturdy people doggedly faced steadily worsening conditions. Typical wages of twenty-five shillings a week, in the early part of the century, dropped gradually to ten, and, within three to four years of Waterloo, to five shillings, were work to be had at all, for indeed the member for Renfrewshire, presenting a migration petition in the Commons, on behalf of the mechanics of Paisley, speaks of the tragedy of "400 persons in every square mile without the means of sustenance." The plight of the weavers was particularly piteous, for, in parts of Scotland, they had woven at their homes, not a few of them combining weaving with farming on their small holdings. As times grew worse, they and their families worked but the harder, by their industry contributing to the surfeit of produce that pushed upon the market and denied them the sales that meant sustenance. In Lanarkshire, at the Christmas season of 1819, in parish upon parish, Scotsmen's families could not attend their Kirk for want of clothing.

Restlessness and discontent surged through the land, bitter meetings were held among the more self-reliant and intelligent, who demanded more effective measures than such projects as the Glasgow public improvements unemployment scheme, and urged fundamental overhauling of the system of Parliamentary representation, suffrage and general taxation. As these tides rose ominously in strength and scope, and Parliament was being forced to a broader national approach to the problem of a changing social structure, the weavers and farmers in the towns and glens of the western presbyteries, proud and sturdy and independent, seeing the danger of public bounty a growing shadow as idleness and need increased, sought their own salvation in the formation of migration societies and the establishment of a new life in strange lands overseas. Through their representatives in Parliament, they petitioned,—from clachans and glens rich in Scottish story—from Cambuslang and Govan, Kilbride, Stonehaven, Strathaven, Wishawton, Lesmahagow, Rutherglen, Camlachie, Kirkman Finlay, Cathcart,

Abercrombie, Hamilton and scores more—"that they should receive an advance of money from the government to be repaid by them within two years."

Their faith and energy were further fed by the reports of progress seeping back to Scottish farms and Glasgow mills and Clyde banks from their kith and kin who, five short years before, had greatly ventured on the far quest overseas. Bathurst, (still Secretary for War and the Colonies), communicating to Sir Peregrine Maitland, Lieutenant Governor of Upper Canada, (May 6th, 1820), the government's favourable consideration of the petition and the details of the scheme of migration proposed, adds:

"As the disposition which exists among these persons to emigrate to Canada has arisen in a great degree from the favourable accounts which they have received from persons already settled on the Rideau and Tay, from whom they expect to receive some assistance in making their first establishment, it will be extremely desirable that they should be located as near as circumstances permit to the settlements already formed in the neighbourhood."



THE LANARK SETTLEMENTS, 1820 AND 1821

THE CONDITIONS, under which His Majesty's Government was prepared to forward the migration of the people from the glens, are set forth in detail in Bathurst's dispatch. A grant of 100 acres would be met by the government as well as the cost of transport from Quebec to their Canadian destination but the settlers were, themselves, to "arrange the means and defray the expense of their conveyance to Quebec." The government was also prepared to make certain *repayable* advances,—£3 per head on arrival at their destination, £3 at the end of three months and £2 at the end of six months. "Seed corn and implements of husbandry" were to be provided "at prime cost".

Though these various migrations of the Scots were thus developed under government auspices, the substantial responsibilities to be assumed by the migrants themselves¹ indicate that the schemes were comparable to the government aid extended to the movement of the United Empire Loyalists and not relief settlements. Many, the Scottish Committee reported, were embarking "from other considerations than the want of employment at home." Because the intending settlers were scattered and few in a port city, each group was requested to nominate two or three persons to act on their behalf in government and transport negotiations. The glen people had their own migration societies which cleared with the Glasgow Committee thus set up.

NEW LANARK ON THE CLYDE, 1820

Lord Bathurst had proposed a "body of settlers to the extent of 1200 (including women and children)," and almost this full complement sailed in June and July 1820 on 'the *Commerce*', 'the *Prompt*', and 'the *Broke*'. The Governor-General, Lord Dalhousie, reported that they had been given "a new Township called Lanark . . . ten miles square, close adjoining the Perth settlement." The



¹In the Perth-on-Tay migration, a deposit of £16 per adult; in the Lanark settlement, the means and costs of transport from Scotland to Quebec.

surveys named the little stream running through it the *Clyde*, and local story goes that a sign on the King's Depot Stores read "This is *Lanark*," and *Lanark* the new settlement became and remains to this day. Within three months there were "three respectable merchants' stores and a dozen houses," and by January 1821 logs had been cut to erect a building to serve both as school-house and place of divine worship. The Rev. William Bell, who had come from *Rothsay* to serve the people of *Perth-on-Tay*, took the first services in the new hamlet. These Scottish settlements must immediately have taken on a strong character of their own, for an Act was passed in Upper Canada in that year to designate the *County of Carleton* (quite different from the County of 1942) as including the Townships, then surveyed, of *Goulbourne*, *Beckwith*, *Drummond*, *Bathurst*, *March*, *Huntley*, *Ramsay*, *Lanark*, *Dalhousie*, *North* and *South Sherbrooke*, with "such other Townships as may hereafter be surveyed." (The next year (1822), this area was made the judicial *District of Bathurst*¹ with *Perth* selected as judicial centre in 1823).

Such was the founding of *Lanark-on-the-Clyde* in the Township of *Lanark*, *District of Bathurst*, *Upper Canada*.

THE GREAT TREK 1821

Grimness and need still stalked town and countryside in the home Isles. As savings slipped away and credit became strained, more of the sturdiest of the Scots turned their eyes westward as their only hope of remaining independent of public aid. Over sixty-two hundred sought the chance of migration and the Government agreed to sponsor a further movement of eighteen hundred persons on the same basis as that of 1820.

Apparently, the glensmen were learning from those who had gone before, for all through this winter preparations went on among the intending settlers. Stores were gathered, girls were instructed in spinning wool and linen, in cutting out men's and women's clothing, and in knitting woollen stockings, while the boys were taught to make fishing nets and tackle. Provisions were planned to guard against the suffering en route in the delays of the previous migrations to Canada—supplies for eighty-four days from home to *Quebec* were required. They must have been a hearty people,—for each person over eight years of age, the stores required (purchaseable at £2-2) were "18 lbs. of Irish mess beef; 42 lbs. of biscuits; 132 lbs. of oatmeal; 6 lbs. of butter; 3 lbs. of molasses," with three-quarters of these amounts for children, two to eight years of age, and one-half for any under two years! The contract with the shipping agents—*Q. and J. Leitch*, *Greenock*—bespoke foresight, also, accommodation stipulated being far beyond what prevailed or was to prevail in ordinary immigrant provisions for many years to come,—adequate supplies of fresh water, changed daily, fuel and cooking supplies, separate quarters for adult single women and for expectant mothers, assurance of medical and religious services, during the voyage, etc. The travellers were precluded from bringing any furniture but, indicative of

¹In 1850, the territory of the present *Lanark* and *Renfrew* Counties was separated and administered as the *United County* of that joint name until 1861, when the area was divided and the separate counties created. *Lanark* with the county town still *Perth*. *Renfrew* with the county seat at *Pembroke*.

their background, they insisted upon "books of their private library." "A number," wrote the Secretary of the Committee, "are also able to pay their passage without any assistance from the public" and adds his anxiety, as he checks off those leaving, lest "these men may carry away with them the science and intelligence of old Scotia."

With the coming of spring, the plans for leaving the homeland were complete, and between April 14th and May 19th, 1821, 1883 souls shipped from Greenock to Quebec via the ships 'George Canning' (490), 'the Earl of Buckinghamshire' (607), 'the Commerce' (422) and 'the David of London' (364).

THE PASSENGERS ON THE DAVID

Upon 'the David of London,' 380 tons, (Captain Gemmill), sailed "chiefly country people from the Counties of Lanark, Dumbarton, Stirling, Clackmannan and Linlithgow," with members of two of the Stirlingshire Societies—the Balfour and the Deanston—heavily represented. Each member was required to deposit £4-5s, for each adult, £2-13-6 for each child eight to fourteen years, £2-3 for each, two to eight years, and 18/6 for each child under two. The passengers on 'the David' must have been a reasonably self-sufficient lot for the Secretary reported that for the 364 persons thereon "the money lodged for the outfit of the vessel, for provisions and freight of the Societies was £1198, 4 sh, 6d., and, after paying all charges, the emigrants have received, to be divided amongst them, agreeable to their respective interests, £93, 11sh., 8d., which will be of more use to them in Canada than if it had been spent here" (i.e. in Scotland).

The Secretary leaves a picture of 'the David,' as it moves away from the "misty isle." Anyone, who from the deck of his boat at Greenock has seen the crofters of a later day come aboard for Canada, stern-lipped, and tight-eyed, watching the receding coast as if they would conjure from its shadow the 'lone shielings' far in the glens, can picture that embarkation of a century and more now gone.

"The ship 'David' left the East Quay on Saturday,¹ about one o'clock, p.m., with 364 passengers. She was towed out by a steamboat and immediately proceeded to sea with a fair wind, under very favourable auspices. The 'David' was left by the owner and friends of the passengers about two miles below the Clock Lighthouse, at six o'clock, p.m. with three hearty cheers from the passengers and crew, which was immediately returned from the boat and repeated from the ship: a general smile of satisfaction closed this parting scene."

That night, a committee of the settlers, as they moved into strange seas, bearing most of them forever from the lands of their fathers, drafted a message home, in words reflecting the inner strength that, to this day, characterises the old settlement of which they were to become part.

"We especially thank you for applying to the British and Foreign Bible Society for granting to so many of us that inestimable treasure, the Word of God, of which we received so many copies, the perusal of which, we hope, by the blessing of God, will be attended with the happiest results."

¹i.e. May 19th, 1821.

Thirty-seven days, nine of them of "fierce storms," they sailed westward, their strange, new experience described in a letter which one of them, William Purdie, sends home in quaint words: "I take the opportunity of the bearer, Mr. McLimont, the second mate of the ship '*David*', to hand you this note." The business of living, life and death moved on, impervious in their cycle—three of the voyageurs were to find their final rest at sea, four young lives opened on board the frigate of new hopes.

On June 25th, 1821, 'the *David*' moved into Quebec, the settlers dazed with the mighty expanse. "The St. Lawrence, the King of Rivers," writes one, "is crowded with rafts, flat-bottomed boats from great distances; large long boats and canoes, with their various traffic, to Montreal and Quebec; fleets of brigs, sloops and schooners, coming up with their wares and to receive wares in return."

That night they slept on board, and left the next night, under dour augury "in a tremendous storm of thunder and lightning, the most dreadful I ever saw or heard," writes John McDonald, whose faithful diary is preserved in the Archives of Canada. That journey took twenty-four hours by steamboat and the next night (that would be June 27th) they arrived in Montreal, "after uncommon heavy rain, drenching our clothes and spoiling our meal and bread." There they carried their luggage from the small steam vessel to "abundant waggons, provided by the government" whereon were loaded the baggage, "women and children and all who were unable to walk." Beyond Montreal they drove, ten miles to Lachine, where they arrived June 28th, the fourth day after their landing at Quebec. And, there, for four more days they were delayed, awaiting the "*Durham*" boats to take them up beyond the shallow rocky rapids. Into each boat were loaded three families and their goods, and the river journey was begun—120 miles to Prescott round shifting rapids and uncertain shoals.

PRESCOTT TO PERTH TO NEW LANARK

Apparently the waters were low, the boats grounding so that "all the men who were able were necessitated to jump in up to the middle of their bodies and sometimes deeper. At these rapids the women and children were obliged to come out and walk and in several places the rapids ran with such force" that they "were compelled to get two horses to haul every boat."

Seven days and nights, the journey took, these inland dwellers of a far-off land being "obliged to continue night and day in wet clothes," sometimes "with access to farmhouses and sometimes not." "Some got into barns, but the most part of them lodged out in the fields for five nights," in the mornings "nightcap, blankets and mat" being "so soaked with dew that they might have been wrung."

On the 9th of July, two weeks after landing at Quebec, they reached Prescott where, for lack of waggons, and because of much sickness (especially ague and fever), the pilgrimage was delayed three weeks. Here, due to poor management, one-half the passengers of 'the *Buckinghamshire*' and all of 'the *Commerce*' were already tied up making, with 'the *David*'s, a thousand souls to be cared for at this small "mail coach stop." The suffering was intense. Some of the venturers died from their untoward experience, and one man, named Dick, was drowned, leaving nine or ten children. But there could be no rest short of

their destination, and at nine o'clock on July 30th they set out again in the great waggons, making six miles that night, when they slept on the floor of an inn, whence they were roused at daybreak and driven nine miles further to Brockville, where they breakfasted!

At Brockville, they left the river road, for the back country trails, but after a few hours the way became so rough that the horses could not proceed, and, again, the weary pioneers slept in their clothing, this time upon new hay in a barn. Some of the waggons were overturned, many of the people "very much hurt," and one small boy killed. Horses laired in the mire which (and many an Easterner will attest to the same qualities today) "was so tenacious, being a tough clay," that it was necessary to "disengage" their feet "by hand-spikes," and, even this failing to free them, oxen had to be brought up to get some of the waggons out. Rain fell in "a great quantity;" night came on again, and again the worn caravan rested in crude farm shelters. The roads grew steadily worse, at times the only way lying through the fences of the small clearings "here and there in the midst of this immense forest;" but, finally, New Perth was reached, where, again, however, the only shelter was in stables. Fourteen miles stretched the weary way still to New Lanark beyond "a large stream called the Little Mississippi," passage of which was by ferry, and *the evening of August 4th, 1821, brought them within two miles of their new home sites.*

The spot of the first night's tenting became known later as "Granny Cummings' Corner," after the first settler, and later still, and today, as the village of Watson's Corners. It soon became a real "crossroads" and when lumbering developed a place of overnight stop and trade. (Here, the few books remaining from the settlers' early 'Dalhousie Library' are still kept in the Sons of Temperance hall).

Crude temporary shelters awaited them, from which each settler went forth to view the lots, available for their grants, each such tour "commonly occupying three days," an undertaking with the toil of which "even stout young men were so completely worn out, that they could scarcely get home and were afterwards confined to bed and fevered from the great fatigue and exhaustion of bodily strength occasioned by excessive perspiration during the intense heats of the day and from sleeping all night in the woods exposed to the cold and heavy dews. One of our companions, a young man, leaving a wife and family, died after such an excursion."

Sir John Colborne,¹ later Governor of Upper Canada, transmitting a report on the settlement to the Secretary for the Colonies, has left a poignant picture of the end of the long and toilsome trek,—"*encamped in the midst of a wilderness, far in the interior of a strange country with little or no means to help themselves, . . . fatigued and beginning to be indisposed, they were glad to fix upon any spot which they could look upon as a home.*"

Thirty-seven days they had sailed over the seas; forty days they had journeyed by boat and ox-cart and waggon over the miles that led from Quebec to Montreal up the St. Lawrence and overland from Brockville to New Lanark.

¹ In a despatch, 1835, urging upon the Home Government to remit all claims for repayment of advances made to the settlers of 1821.



ONE NEW LANARK FAMILY

AMONG THOSE who had joined the venture of 1821, from the glens via 'the David' to New Lanark on August 4th, 1821, were James Gillies and his wife, Helen Stark, who their own family records attest were of the group financing themselves from Stirlingshire.

James Gillies was the son of George Gillies and his wife Janet Nisbeth of Green House, in the village of Banton, in the parish of Kilsyth. Neither James Gillies nor his wife was young: he was in his fifty-fifth, she in her forty-third year. The eldest daughter, Elizabeth,¹ (then twenty-two years of age and married to one Robert Brash) remained in Banton, but with their parents came five children, *Janet*, twenty-one years of age, (soon to marry and found her own home in Canada); *John*, in his tenth year, *George*, eight, *Helen*, four and *Isabel* but a year old.² (*Christian*, a seventh child, born the year after settlement in Lanark, died in early life).

James Gillies, while financing his own and his family's migration, was not a man of means but rather one of substance, of the strength of sturdy character and honourable tradition of the people and country of his birth.

(The Gillies—Gillespie, Lees, MacLeish, MacLise—are a sept of the Clan Macpherson. This sept sprang from a younger son of Ewan Macpherson, brother

¹She and her husband later started to Canada in 1826, but Brash died on board ship and was buried at sea. She proceeded to Canada, later marrying into the McLatchie family, and some of her descendants are still in The Valley.

²Some of the Stirlingshire women followed "their men" the next year. Certain it is that James Gillies, the unmarried daughter, Janet, and the two boys John and George came on 'the David,' and the opinion suggested in some of the early Gillies letters and papers to the effect that Janet Gillies and the little girls came the next year notwithstanding, there seems substantial evidence that the whole family came on the one sailing, or Mrs. Gillies not later than the autumn of 1821, if on a later boat.

of Kenneth, ancestor of the Macphersons of Cluny, the Chiefs of the Clan. It developed in the thirteenth century, when Alexander III was King of Scotland, under Elias Macpherson of Invereshie, founder of the "MacGhille Iosa."¹ His descendants were known as the "Sliochd Gillies" or "offspring of Gillies." In the roll of broken clans, listed in the Act of Parliament of 1594, Clan Macpherson and its septs appear, and in 1603, the signature of its Chief Andrew, affixed in Cluny, is on the Bond of the Clan Chattan, the great federacy, the headship of which the MacGillivrays and the Macphersons contested with the Mackintoshes. In the '15 the Macphersons and their septs stood for the Stuarts, under their chief Duncan, and, in the '45, Ewan and six hundred of his men followed Prince Charlie to Culloden. Though they came late to the battlefield one of them, Gillies MacBean, six feet four inches, held one gap in the line for hours and Ewan aided the Prince in his escape, for which his lands and titles were forfeited and a price of £1,000 placed on his head. He escaped to France but not until 1784 was the attainder lifted, when Cluny was restored to his son Duncan. To the present day, the clan and its septs are bound by their common crest of "a cat sejant proper," their common motto "Touch not the cat bot a glove," their badge of boxwood, and their "sluagh ghairin" or battle cry of "Creag-Dhubh Chloinn Chatain, the Black Crag of Clan Chattan.")

The years after Culloden were years of dispersal for the clans, but though many of the chiefs went into exile, the rank and file clung still to Scotia's hills and glens and carried on her work and story. In many a cottage, the clansman cherished still the sword and dirk of his grandsire's battle days, and an Andrea Ferrai sword and Highland dirk, still in the Gillies family, were brought to Canada by the first James Gillies. In Stirlingshire some, at least, of the Gillies had stayed, in the ancient county that the early British had named "Ystref-lin—the place at the pool in the river." Bounded by Perthshire, Dunbartonshire, Lanarkshire, Linlithgowshire, the Firth of Forth and Clackmannanshire, it lies in the very heart of Scottish story, its people bred in beauty and romance. Bannockburn, where Bruce of Scotland triumphed in 1314, lies in Stirlingshire and the hill, from which in the crisis of conflict twenty thousand of his followers charged and turned the tide of battle, ever since has borne the name of Gillies' Hill, (Ghille—adherent, follower). And, here too, Montrose at Kilsyth itself won the sixth of his great victories over the Covenanters under Baillie in 1645. That Scot indeed would be dead of soul, who could dwell in Stirlingshire and not be as conscious of his race's glory, as of the beauty of the land about him. And it is a beautiful country. The Campsie Hills and Ben Lomond look down upon the Shire, the Kelvin, and the Carron and the Endrick rivers cross it, while many a burn and brook wind through its granite and whinstone hills, or pass moorish meadows and the carse or bogland. Springs of wholesome water and "the sloe, the hawthorn, the hyacinth, the wild rasp, the elder, the bramble, and the hazel;" hill pastures and grass farms alternate with "gravelly, tilly, and clayey strath," the chronicler tells us of the parish of Kilsyth—"place of peace"—twenty-four square miles, set amid the Carron, Kelvin, Bonnyburn, Inchwood and Bushburn.

¹Clan Macpherson were descended from a clerical line, 'Macpherson' being 'son of the parson.' Elias Macpherson presumably desired to maintain the sense of religious obligation and tradition in his sept. Later, probably at the time of the dispersal, a branch must have crossed to Ulster and become the "Gillie" under which name they appear in the *Sloinne Gaedial* in Gall of Ireland as 'MacGiolla Iosa—son of Giolla Iosa—the servant of Jesus' which is the actual translation, as well as the designation, of the Scots clan.

Kilsyth lay in the Presbytery of Glasgow, the viscounty of the Livingstones but Livingstone of Kilsyth had joined the rebels of 1715, found himself forfeited of all possessions and fled to Flanders. Until 1837, Kilsyth, twelve miles each way between Glasgow and Falkirk, was the parish church for Banton in the East Barony, a village of 655 acres, three miles away. In 1821, Kilsyth was a town of 4,260 souls, Banton, a hamlet of some eight hundred, described as "an industrious, frugal and sober population." About one hundred of the villagers were agriculturists, the others in trade, manufacturing or handicrafts, chiefly as miners, colliers, or sickle makers. (Banton, incidentally, reflected the high Scots regard for education for it had three schools, with one "school and school master's house" described as "substantial and commodious.")-

Stirlingshire and Kilsyth were comparatively blessed with good coal deposits, and limestone, profitably burned to the value of £2000 annually. Reddish free-stone was carried to Glasgow by the great canal, constructed in 1768 to connect the Firth with the Clyde, while the ironstone deposits sustained the vast Carron Iron Works on the Carron River, whence, in the war years, over two hundred tons weekly were shipped to London and Liverpool. Salt works and wool plants, weaving from the sheep of the district, the manufacture of carpets and serge, and later of linen, sustained the parish, Kilsyth ranking as a market town, with the proud privilege of holding four annual fairs for its varied products.

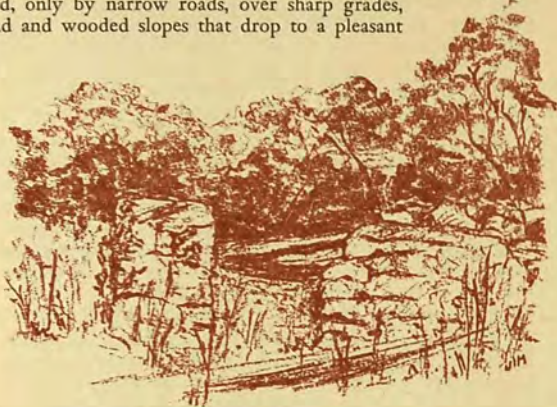
Happiness, prosperity, ambition and progress had marked the story of the rugged and elevated parish, "commanding a view of sixteen counties,"—a nostalgic boast of the early Lanark settlers, that the records show to have been valid. Little wonder that the men and women who themselves, and their fathers and yet again their fathers before them, had found their work and happiness here would struggle, through long years of post-war despair and near disaster, ere they could accept fate's bitter verdict that not again could they find labour and sustenance here but that their way must lie over wide seas and in strange lands, ere security could be theirs again.

George Gillies of Green House was apparently a farmer, his son John, the postmaster of Banton and James Gillies, his second son, a small holder himself but also of the craft and guild of the weavers, who, at the end of the eighteenth and opening of the nineteenth century, wove in their own homes, either on individual or community contract, for the great new firms in Glasgow, Stirling, and the larger towns. In 1821, no less than four to five hundred looms were thus employed in Kilsyth by Glasgow manufactories. These weavers, living on their own lands, with abundant fuel, fresh streams and good waterfalls, also operated the great "printfields" and "bleachfields" upon which the city plants relied for their cotton and linen finishing. As a class, these Scottish agricultural-industrial workers were a peculiarly independent, and self-reliant type, land dwellers, carrying on home crafts under their own contracts, with their churches, schools and local government in their own hands.

James Gillies and his wife, as they left the glens, which they and their forebears had known, and, with five children, faced the hazardous journeyings of nearly three months to an uncleared forest lot in a new land, could not have hoped, in their lifetime, for any respite from toil, nor for any comfort, comparable to that which they were leaving. Their eyes, in confidence, looked beyond the masts of 'the *David*,' beyond the tree-choked vistas of the broken trail to the crude shelters of New Lanark, beyond the small clearing on "the 10th lot of the 5th concession of the Township of Lanark" to fulfilment of their

dreams in a day, they would not live to see, but in which life would be freer, fuller, richer for those who would carry on their faith and traditions.

Their lot was not a front line grant for the early and the good land had been taken, and rocks and shale were part of its portion when the first pines and cedars and black cherry, still found in its woods, were cleared. Even today, the homesite is reached, only by narrow roads, over sharp grades, through pastureland and wooded slopes that drop to a pleasant marshy pond still known as Gillies' Lake. Clumps of straggling lilacs break about the timbers of the old home, and lean forward, sheltering the crumbling grey stone of the dairy and vineclad chimneyplace that was the first hearthstone of James Gillies in the new land.



THE LEAN YEARS

Naturally, the settlers who had come to Lanark in 1820 had obtained the "front townships" and the best land, and as MacDonald, the diarist, wrote, "inferior or worse lots" were left to those who followed. The Township of Lanark itself, at the date of the arrival of the settlers, was described¹ as "an entire forest, without a single token of a human being ever having visited it, save at the extremities, where the concession lines had been marked out by the surveyors. The open air was their only resting place, and their only protection from the dews of the night were the fires they lit on either side of them. Their provisions had to be brought from Perth, distant twenty-six² miles. Cattle to transport food they had none and even if they had there was no road through which they could pass. To get as much provisions as a man could carry, it was necessary to travel fifty miles, and the half of the way with the burden on his back, along a road only traced out by the marks on the trees. At length a log house was raised." Mail came only to Perth, and from time to time, a list of names was "affixed to the door of the King's Store at Lanark" of those "for whom letters were lying" at the Tay.

The first houses were small log buildings, built perhaps of round logs, as felled, perhaps squared off, with the chinks between filled with moss or clay, or both tightly packed in. There were no shingles, the roof, sloped enough to shed

¹ Archives, Q 345 p. 219.

² The early chronicler was probably speaking of a round-about trek: there were few bridges, swamps and forests were often impenetrable. The old record says 26 miles where the distance over roads and bridges today is really 16 miles.

the rain but flat enough to retain a snow blanket against the winter winds, was laid of "scoops." These "scoops" were logs, split in half, hollowed out, and laid to overlap, first convex and then concave, much in the way of modern tiles, thus affording at the same time, covering for the cracks and a ready runnel to carry off the water. Light came from the open chimney and large door for there was no glass for windows. A large open fireplace, built of stone, provided the heating, with a bake oven in the side and an iron crane from which hung kettle and cauldrons. Years later, the first house to obtain a stove was a centre of interest, visited on Kirk days, from all the concessions about.

These landmen had to learn, and learn the hard way, the exigencies of new tasks. In their first fellings, they knew no better than to "beaver" around a tree, the while slashing out a path by which to run out, as it toppled. But, not having controlled the notching, they never knew which way it would fall, and many were killed or seriously injured in the early land-clearing. One ex-sailor in the Lanark settlement, struggling with his brace of oxen, had them "turn" in the yoke, and sought help from another settler, explaining "the starboard ox is on the larboard side and they're all buckled up in the rigging."

With shelter over their heads, the settlers' next step was the arduous clearing of the land, ploughing and sowing it to crop. Produce of a limited nature, they could grow, and cattle they could raise. They could be assured of food, of fuel, of coarse clothing, made of the wool of their own sheep, of which however there were few, and coarse leather of their own tanning from the hides of their cattle. But of those things for the acquisition of which money was required, they stood in piteous need. "They are," runs the contemporary record "far from a market to sell their produce, the nearest being Kingston or Brockville, both sixty miles distant by the shortest road. There is a scarcity of draught animals such as horses and oxen, being high in price and the inability to purchase."

There were not even the ordinary waggons or buggies of a later day. A sort of "summer sleigh"—a jumper or stoneboat, made entirely of wood, generally cut on the home clearing and hand-fashioned by auger and axe, was the usual vehicle. It was drawn by one ox or perhaps a yoke. For some reason, lost deep in Valley lore, the yoke invariably went by the names of "Buck and Bright."

Food was high for those days, a barrel of flour \$7; pork 6d., beef and mutton each 5d a pound; eggs a shilling a dozen, a hen 15 shillings; a horse £7 to £10 Sterling, and any food brought in generally had to be toted miles on the settler's back.¹ But whiskey was cheap—rum 3½ shillings to 5 shillings per gallon, and the best Holland gin 6 shillings. Within five years, there were four distilleries within the village! But on the whole, the settlers substituted for the things they lacked. Maple syrup and sugar replaced cane and molasses; brew from maidenhair fern, the inner bark of the maple, velvet tea and sanspareil had to do for the tea of the Old Country. Wild plums, prickly gooseberries and raspberries were the fruits of common use, while good fishing was to be had in all the rivers. Yeast was made from burnt hardwood or with fermented bran, and candles by dipping crude wicks again and again in tallow.

¹ The old records use dollars, and Sterling, interchangeably and often together, as here, for both the United States dollar and Sterling were current, though Sterling was the currency of the Province.

Only from the sale of potash (exported to Great Britain and the United States for the dyeing of textiles) was there money for all other requisites. The potash was laboriously produced, men, women, and children sharing in the heavy work. No less than sixty large maple trees were required for a barrel of 650 to 700 pounds of potash. The ashes of the burnt wood were leached in wedge-shaped wooden troughs, and this liquid was then boiled down and cooled in huge vessels or "coolers" where the lye solidified. Two coolers would fill a barrel. If the settler marketed this on his own, "toting it out" to the nearest buyer for ready cash, urgently needed, he might get only \$8.50 to \$9.00, but if he could wait and accept a "down" payment from the traders and shippers, who teamed and hauled at the season of their own convenience, he might get \$10.00 or \$12.00 with a possible second payment, after marketing at Montreal, where a barrel might bring \$30.00, less, of course, commission, risk, and portage costs. The need for this pitifully hard-won money led to clearing of more land than could be cropped and, not infrequently, to concealing, for years, the fact that the holding itself might not be profitable or capable of sustaining the settler from the growth of its poor soil. But every man became a fair axeman and when the trees were felled, and the potash all "rendered" many sought shanty work further afield as lumbering developed or "hired out" to help in clearing on various projects developing "on the front." But the eastern and inner counties were not like Western Ontario in this respect. Labour could not be widely marketed. Petitioning in 1825 for remission of the Crown's claim upon the advances made to them, three hundred of the Lanark settlers thus describe the plight of those in this area:

"Being situated in a back corner of the Province, the land in general of an inferior quality, and the distance to market great, and the roads in a great measure impassable for more than six months in the year, much of their labour goes for almost nothing, whilst what is had in return can only be purchased at an exorbitant price: and although every exertion on their part is made still it is nearly impossible to turn any of the produce of their labour into money."

In addition, it was soon to be evident that much of the Bathurst District was "a very inferior tract of country" as stated in the surveyor's report to the Governor on the validity of the settlers' petition. Describing this whole area the document runs:

"The country to the eastward _____ is generally level and consists for the most part of either a cold clay land (in many places swampy- or flat lime rock) with but a thin covering of soil. To the westward _____ is little else than a continued succession of rocky knolls or ridges with scraps of good land between." Within this latter the Lanarkshire folk seem to have fared worst of all for the comment continues:

"The townships in which the Lanark Society settlers, as they are termed, were placed are Ramsay, Lanark, Dalhousie, and North Sherbrooke. There appears to have been located to them in these townships 370 lots of 100 acres each —about fifty of these lots in the eastern part of Ramsay are good and worth being settled. The remaining lands _____ viz., west of Ramsay, Lanark, Dalhousie and North Sherbrooke, should never have been attempted to be settled. They are most perfectly (with the exception of about half a dozen lots in Lanark

and as many more in Dalhousie and Sherbrooke) of the description above given, viz., a continuous succession of rocky knolls with scraps or bits, seldom exceeding an acre in extent, of good land between.

The above being the case, it appears a matter of surprise how the people have managed to obtain a living here.

The timber is generally hardwood, viz., maple, beech, elm, etc., and has hitherto, by being converted into potash, proved the principal source of support to the settlers. In pursuing this business they have in many instances made large clearings, which are now of little or no use to them. The people, as would be expected from the foregoing statement, are barely managing to live. They are universally industrious, temperate, and moral, and appear faithfully attached to the British Government. The young men, as they grow up, gradually emigrate to different parts of the Province in search of something better than their own neighbourhood affords them and in many instances the older people follow their children."

By 1835, of 569 families or heads of families located in the original settlement, 118 had left either for other parts of the Province or for the United States, and seventy-three had died. The earliest days of settlement took heavy toll particularly of those past middle age, and of the women. But the heart of the settlement beat strong and vigorously and church and school, (the former a stone building twenty-six by thirty-six feet, accommodating three hundred), a St. Andrew's Hall, and, as early as 1828, the old Dalhousie Free Library, were the outward and visible expression of the developing and characteristic life of a community which had become a vital organism to its people. Courage, ingenuity, versatility, were the attributes of those who wrested from these untoward circumstances the ways and means of settled life for themselves and the little hamlet increasingly reminiscent of its progenitors in the Scottish shires. Each year as the winters broke in the spring, and the heavier crops were seeded, men went far afield, travelling the harsh roads on foot, searching for labour in Kingston, Brockville, on the Canal, or as far afield as the United States, Great Lake and St. Lawrence fronts.

Two young lads in the Lanark land were offered work, "out at Kingston" in the depth of one hard winter, but their family lacked the means to purchase the clothing necessary. Several of the friends in the settlement combined, bringing the shearings of their sheep's necks. With the women of the little group working "day and night shifts" it was washed, carded, spun, woven and then made up into serviceable, if not Bond St., suits, wherein garbed, the boys set out, and, incidentally, prospered as the initiative of their "clan" would suggest. Years later one of the mothers of the early settlement recalled these days.¹ As her husband left to work on the Oswego Canal, she says "I took heart and with the boy (a lad of nine, the oldest then of a family of four) began to dig between the stumps and plant potatoes. When the fall of the year came and we had gathered them in, how many do you think we had? No less than 380 bushels of potatoes and thirty bushels of corn raised by myself and my little boy. Oh! it was a faithful piece of

¹Mrs. John McLellan, Perth, in the Bathurst Courier, March 15, 1861, quoted by Honourable Andrew Haydon in "Pioneer Sketches in the District of Bathurst."

land. When we had cleared it all, save what was reserved for firewood, we maintained eleven sons and two daughters and now one daughter has fourteen children. We put most of them to learn trades and saved something forbye. . . . My heart is in that land yet."

So dogged and steadfast was the courage of these women whose strength gave character to these Ontario settlements that their loneliness and heart-sickness rarely broke through to the knowledge of husband and children. Down in the Northumberland-Durham country, in the Christmas season of 1831, one old Scots body gave words to the sorrow and longing within her:¹

*"I canna ca' this forest hame,
It is nae hame to me:
Ilk tree is suthern to my heart
And unco to my e'e.*

*If I cou'd see the lane kirkyard
Whar' friends lye side by side:
And think that I cou'd lay my banes
Beside them when I died.*

*Then might I think this forest hame
And in it live and dee
Nor feel regret at my heart's core
My native land for thee."*



¹ *Cobourg Star*, Dec. 27, 1831. Anonymous, quoted by E. C. Guillet. *Early Life in Upper Canada*.

THE OTTAWA VALLEY

BUT THE Valley of the Ottawa had more and other to offer to those who would bide within it and probe its secrets and its strengths. For it was rich in its forestland, as those could see who appraised it for its timber wealth no less than for its promise of cultivation and of settlement.

As the Napoleonic War had dragged on, and the conflict had spread to Canada in 1812, the demand for ships and yet more ships had encouraged the import to Britain, not only of timber but of "deals" or sawn lumber, as well, as the Old Country sought to keep her life-line strong and unbroken. The British timber contractors, who had come to Canada, had been chiefly middlemen, purchasing their timber from Canadian operators as they had in the Baltic ports. They were merchants, bankers, ship-owners or interested in shipping firms, and, on the whole, with their major investment and life overseas. To the enterprise of Canadian dwellers had been left the actual timbering from cruising of the forest stands to delivery of the great cargoes at the Port of Quebec. Gradually some of the British firms began to venture into woods operations and the Canadian operators to develop their own export plans. And the call for timber sent both further into the woods, out of the Richelieu and lower St. Lawrence, beyond Lake Champlain into Upper Canada, shoving along the shores of the Great Lakes on the south, but, particularly into the dense and unopened Ottawa Valley.

The great watershed of the Ottawa had all to offer for which the seeker of true, tall, clean, sound white pine could ask—close stands of fine trees, marching on hills of good slope for piling and skidding, and abundantly watered every few miles with streams, naturally more or less floatable, or easily made so, for timber or logs. The circuit of the watershed embraces just over one thousand miles, the Ottawa River itself, in its utmost length of 780 miles, falling barely fifty miles short of the Rhine.

To the Indians, as close to nature as was the stream itself, "The Great River" was known simply by that name, "Kitchissippi." As Europeans pushed into their country they gave the territory, the name of that tribe of the Algon-



quins who dwelt in its lower tributaries—the Outaouis or Outawis phonetically transmuted to the Ottawas.¹

Bouchette,² the historian-surveyor, writes of it with affectionate pride. "Issuing from Lake Timiscaming, upwards of 350 miles northwest of its junction with the St. Lawrence and having its remotest sources beyond that lake, the Ottawa river flows majestically through a fine and fair country."

Its "remotest sources" indeed stretch back to forests primeval³ for the Ottawa Valley is really a bay or inlet of an ancient geological sea, which covered the south shore, and, along the north, washed barriers of gneiss, the Laurentian hills of today. Its southerly shore was the granite ridge, discernible south and east from Portage du Fort to Brockville, and forming the Thousand Islands of the St. Lawrence. The town of Mattawa on the Mattawa River stands at what was the head of this inlet, whence a narrow defile led up through Lake Timiscaming to the Cobalt mining land and an upper interior basin—the geologic Lake Barlow, eight hundred to a thousand feet above the Atlantic. Grand Lake Victoria today marks the centre of this ancient floor. Far in here, lie the sources of the Ottawa and all its upper reaches, granite-ridged, and with a natural growth of pine, spruce and hardwood.

Over sixty thousand square miles are drained by the great river and its tributaries, each of them comparable to streams of old story in other lands, the greater to the Thames, and the Hudson, and others to the Shannon, the Tweed, the Loire, and the Rhine.

In streams and springs almost indistinguishable from those of the Gatineau and St. Maurice, the Ottawa takes its rise, some of its primary feeders far in Lake Eshwahani. Lakes Bouchette and Sullivan are enlargements of the beginning river which winds into Lake Kakabonga and out, just at the Barriere on the serrated lake which serves the head waters both of the parent river and the Gatineau. By many a twist and turn it enters Grand Lake Victoria, out of which it tumbles to that Lake's off-shoot, the Waposenaw, thence westward through running rapids ere it flows southward into Lake Monewaja. Through short, swift reaches it moves north and westward, turns south again to form Lake Expanse, where it merges with Lake des Quinze, and out of which, through the fifteen rapids of the Quinze River, it enters Lake Timiscaming just where the boundary lies between Ontario and Quebec. Out of that Lake the Ottawa, free at last in its own identity, flows in broad waters, fed by small streams, southward and eastward, to its junction with the Mattawa that here has hurried, via Trout and Talon Lakes, thirty miles from close to Lake Nipissing whose waterways link, by the network of the French and Pickerel Rivers and many a lesser lake and stream, with Georgian Bay. Here The River broadens and swings due east, rushing over the Deux Rivières rapids between rocky shores, The Maganasibi (or Magnissipi as it is sometimes distorted) flows in from the north, and the swollen River runs through rapids to the headlong plunge down the Rocher

¹ This tribal designation meant "The Human Ear" a not inappropriate appellation in these later years for such a centre of rumour and surmise as Canada's national capital.

² Topographical Description of Lower Canada, 1832.

³ Georgian Bay Canal Survey, 1909. Appendix R, C. R. Coutlee.

Capitaine. Thence the stream, gathering the waters of the Dumoine from the north, runs on through high bluffs to the heavy Des Joachims Rapids. In fifty-three miles from Mattawa to Des Joachims The River has dropped over 130 feet, whence for nearly forty miles flows the broad "Deep River" flanked by steep, beetling rocks on the north shore, until it breaks at the great island of Alumette. Greatest of these is the Oiseau Rock, in which and along this part of the shore open small dark natural caves wherein the Algonquins buried their dead. The tribes, further west in the head-waters of the Opeongo, slung theirs high in the tallest trees, enshrouded in finely sewn birch bark caskets. On Green Bay, in the Opeongo, the tall pines held several of these swaying sepulchres until recent years, when, a drive encountering recurrent gales off the point, the foreman was forced to arrange interment before his fearful and superstitious rivermen would attempt the run again.

At Alumette the mother current gathers in the Petawawa, that has drained 2200 square miles in its 140 mile journey, and a few miles further south, the smaller Indian River. The south arm twists about Alumette Island, turning north, almost at right angles to join the north arm—the Culbute—just where the 130 miles of the Black River tumbles, in foam, the drainage of 1800 square miles. The stream widens into Lake Coulonge. Just below it, the Coulonge River, in cascades of churning spray, discharges the waters of an 1800 square mile basin that it has borne down the precipitous 150 miles from the network of its headwaters. Proof of the turbulence of the Upper Valley's waters is the testimony of Alexander Murray¹ to the superior strength of the "birch bark canoes which are acknowledged to be the very best of their kind, both in build and material, which are brought from Lake Nipissing to Lake Huron, and appear to have given to Indian craft in that remote region an impetus not often seen elsewhere." Below the Coulonge the main River widens again, to flow in a sandy reach, north of Calumet Island tumbling down by the Calumet Falls and westward through the churning rapids of the Rocher Fendu channel.

In the Calumet Channel a memorial cross marks the sacrificial heroism of Cadieux of Calumet, whose dying requiem "*Le Lament de Cadieux*" is still sung on The River, and here, as the raftsmen went down, the rivermen on their cribs or running the tumbling logs murmured a rapid prayer for luck in forest and river.

(Cadieux was a young Frenchman of culture and good family who married into the Algonquin tribe and made his life with them on Calumet Island. As spring broke they were about to start down The River with their furs when a scout brought word that the Iroquois were ambushed, awaiting them below the Rapid of the Seven Chutes. Their only hope lay in a reckless running of the Rapids and to that they turned, Cadieux with one companion remaining in the woods to engage and fight their enemies. The Indians afterwards averred that "the form of a tall lady in white (STE. ANNE) hovered over their canoes and showed them the way." They escaped and, gathering their allies, returned in a few days to find Cadieux's comrade dead, and Cadieux's own body, lying in a shallow grave, covered with boughs, wherein he had lain himself down to die. In his

¹ Assistant provincial geologist. Upper Canada. Report 1854.

hands he held a birch scroll, on which he had inscribed a charming chanson of his fight, his fears, his loneliness; bade the rossignol bear love to his wife, and, in its last quatrain, dearly loved of the River people, commended his soul to the Saints;

*"C'est donc que le monde m'abandonne
Mais j'ai secours en vous, Sauveur des hommes!
Très Saint Vierge, Ah! ne m'abandonnez pas;
Permettez-moi d'mourir entre vos bras."*)

Reunited below the Calumet, The River darts south between deep banks through the Cheneaux Rapids to Chats Lake, one hundred feet below the level of Coulonge Lake: (Chats Lake is sometimes described as Arnprior Lake but never by anyone from The Valley).

In powerful lazy sweeps The River twists eastward again as the 110 mile Bonnechere from the south debouches its waters from its 980 square miles of drainage. The River splays out then and, joined by the tempestuous Madawaska, which in dangerous twists and treacherous rapids has raced two hundred miles, through its 4100 square mile valley, to form Chats Lake. Just here too, the Mississippi, draining 1100 square miles in its hundred mile journey joins the main River, their united water swirling about Victoria Island to tumble through the sixteen chutes of the Chats—"the Wild Cats"—into Lake Deschenes, that lazes its lovely length, to empty into the Deschenes Rapids and then crash sixty feet in the seething cauldron of the Chaudiere Falls. Here, the Indians always invoked the guardian of the Falls, putting tobacco into a dish and throwing it to the boiling flood. Below the Chaudiere, the great Gatineau that has roared its fierce way through a 420 mile channel carries in the drainage of a kingdom—12,000 square miles—and from the south shore the Rideau, which has wound its way for 116 miles through 1,350 square miles of quieter, softer valleys, ends its journey with precipitous drop, in the "curtain of spray" whence its name derives.

On flows The River, widening, gathering strength and depth. The 260 mile Lievre rushes in from its 4,100 square mile basin on the north, the Blanche, the North (Petite) and the South Nation, the Rouge join a stream, gathering force and strength, as it flows in its longest unbroken stretch of sixty miles until it breaks in the five mile Long Sault Rapids. Then The River moves on to the Carillon with its drop into the gracious Lake of Two Mountains, twenty-five miles long, with its seven chapels at Oka, consecrated to the Mystic Seven of St. John.

Out of that Lake, the great River finds its way to the strength of its greater sister—the St. Lawrence, its waters, brown as tan bark, joining the deep purple-blue of the larger stream at Lachine. Then the waters by four channels wind about the Islands that form Montreal—the Vaudreuil between Ile Perrot and the Mainland, the Ste. Anne between Ile Perrot and Ile Montreal, the Back River running between Ile Jesus and Ile Montreal, and the St. Eustache between Ile Jesus and the mainland on the north.

The waterway passage for timber from the Ottawa into the St. Lawrence wound by the Back River, thence eastward across Lake St. Peter, and down the long driveway to Quebec, its timber coves and waiting ships.

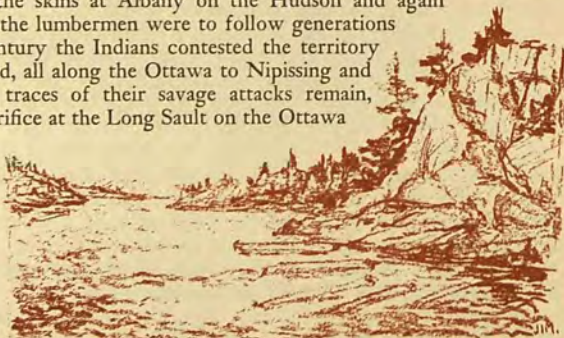
These were the waterways, these and the thousands of dotted lakes, these and the hundreds of tributary streams, that the lumbermen of The Valley were to make their own, to live with, to love, to tame, and to run, until they moved among their forests and their shoals, their rapids and their deeps, their white water and their calm and brooding broadenings with the sureness and the silence of the beaver, who, with them, shared the art and secret of felling and floating out the timber from its hidden places. These were the hazardous routes whereby the raw product of a land's crude resources was brought by men of courage and of daring into the reach of ships to bear it to far-off marts. Thence, in exchange, would come the goods and wealth wherefrom a nation's life might flow, and other men, learning of the country's strength and promise, were to seek out that land and crave a part in her growth and destiny.



LUMBERING BEGINS ON THE RIVER

HUMAN FEET, for many a century (as time is recorded in Canada's youth) had trod the Ottawa for the Algonquin tribe were settled in 1600 in the Rideau and South Nation river valleys and about the mouth of the Rigaud on the Lake of Two Mountains. One branch—the Petite Nation—was located near the mouth of that river from about the present Plaisance to Montebello, and the other—the Grand Nation—held Alouette Island. This is certain from Samuel de Champlain's records who, in the never failing search for the way to the western sea, pushed up the Ottawa in 1613. From the hill at Braeside an Island in Chats Lake is visible on which Champlain planted a red cedar cross. He spent some time at an Indian village, on Morrison Island near the junction of the Indian and Ottawa Rivers, the present Pembroke, with the Chief, Tessouat, where he learned that his guide Vignau had misled him about the western route, so he returned to winter at Montreal.¹ Two years later he pushed by canoe up the Ottawa to Mattawa, crossed from there to Lake Nipissing, and, by the French River, into Georgian Bay, and thence along the Trent Valley to the Bay of Quinte and into Lake Ontario—all routes which the timber drives were to follow in later years.

Not until many years later, 1650, was there much traffic from white men in the Ottawa, when one "Nicolas Gatineau dit Duplessis," living at Three Rivers, pushed up the St. Maurice and down the Gatineau, giving the broad district his name. The Valley had meanwhile passed to the fierce Iroquois who trapped its beaver, marketing the skins at Albany on the Hudson and again opening a trail that the lumbermen were to follow generations later. For half a century the Indians contested the territory with the French, and, all along the Ottawa to Nipissing and down the Rideau, traces of their savage attacks remain, Dollard's heroic sacrifice at the Long Sault on the Ottawa (1660) and the massacre at Lachine (1689) being imperishable records of the story of The Valley. In spite of forays and massacres, the



¹In his expedition, Champlain lost one of his instruments—the astrolabe—which was turned up in ploughing by a Mr. Overman on Lot 12, Ross twp., at Green Lake near Muskrat Lake in Renfrew County, in 1867 and which was the model for the instrument he is depicted holding aloft in McCarthy's fine memorial on Nepean Point, Ottawa.

settlement of Montreal grew and French policy, facing the inevitable struggle for supremacy with the New England colonies to the south, set about opening and fortifying the St. Lawrence and Great Lakes waterfront, leaving The Ottawa to the Indian and the fur trade. Far inland the canoes of the traders pushed to the north shore of Lake Superior, whence they would come down to the Sault, thread between Manitoulin Island and the mainland, cut across to the French River and thence into Lake Nipissing, down the Mattawa to the Ottawa, and the hundreds of its miles to the depots at Montreal—along the natural route where millions of the trees that sheltered them were later to float by foam-flecked waters to the sea.

And so, beyond the Lake of Two Mountains, little but the fur trade was interested in the Ottawa throughout the eighteenth century. The southern boundary of the Province of Quebec, as defined in the Proclamation of 1763, extended only from the south end of Lake Nipissing southeast to a point on the St. Lawrence a few miles below Montreal. When settlement promised westward of these boundaries, with the United Empire Loyalists and the creation of the new province of Upper Canada in 1791, it naturally followed the closer, more hospitable St. Lawrence and Great Lakes ways. To individual enterprise, not official action, was the opening of the Upper Valley to settlement and to its destiny—lumbering—to be due. In Woburn, Massachusetts, dwelt Philemon Wright, an enterprising farmer and cattleman, Puritan in faith, Kentish in extraction. Like many a New Englander, he found himself out of sympathy with developments following the American Revolutionary War, and, though not an original United Empire Loyalist, he decided to follow the thousands who had migrated to Canada. In the winter of 1798-99 he made an exploratory trip to the Ottawa, and decided, in the first year of the new century, to locate on the banks of the Chaudiere, on a site, he had named Hull. With five families of women and children, twenty-five men with mill-irons, axes and scythes, in seven sleighs, with fourteen horses, eight oxen and "many barrels of clear pork" he set out from Montreal and in five days reached Oka on the Lake of Two Mountains. Here, they broke a road twelve miles along the river to cut across the south shore beyond the rapids. For this they took four days, at night sleeping beneath the open sky. Then they took to The River, going ahead with axes to test the ice, and, after five days of such travel, reached the site of their future home on March 7, 1800. Fourteen days the journey took from Montreal to Hull.

For twenty dollars, the Indians sold remission of their claims to the extensive area of the later settlement. Trees were felled for winter shelter, crops put in with the first hope of spring, and a small mill built for the sawing of their logs, for these people were experienced New Englanders, accustomed to life in a new land. Their farms and settlement prospered but there was no adequate market so Philemon Wright decided upon the alternate activity that was to play so large a part in The Valley's story, the supplementing of agriculture by lumbering, and, vice versa, the assurance from the settlers of supplies adequate to the lumbering trade. But Mr. Wright had always done things on a large scale and he decided on entering the timber trade in a substantial way taking out a raft of square timber to Quebec on June 11th, 1806. *This was the first raft of square timber to leave*

the Ottawa, which had been hitherto thought unnavigable, the timber cut to that date in Eastern Ontario having gone down the St. Lawrence. Through unknown currents and uncharted rapids the Wright raft was run,¹ and, reaching Montreal, was taken through the Back River, by a new and perilous route. Twenty-eight days it took the cribs from Hull to Montreal Island, eight days more from Montreal to Quebec. Others were to follow in the way and trade that Wright had opened and up the Ottawa pushed the timber cruisers to be followed by the camps and drives.

In 1808, Wright built a saw and grist mill on his land; in 1800, first the Mears, and in 1811, the Hamiltons located at Hawkesbury. In 1815, a Mr. Storey had a mill on the south shore: square timber and sawing were started on The River.

Into The Valley, in 1810, came John Jacob Astor, running a canoe line, via the Ottawa into the Northwest States, with craft capable of carrying four tons each but the fascinating possibilities of this enterprise were shattered by the declaration of war in 1812, in which year the project was abandoned.

But the Valley was at last opening and its upper reaches becoming known to trade. By 1815 Bouchette was recording:

"The townships on the Ottawa, abounding with timber of the best growth, either for shipbuilding, masting, planking or staves, it may be worth while to remark that a very great proportion of that trade has been furnished from them to Montreal and Quebec; not from those on the north side only but vast quantities have been supplied from those on the south, in the Upper Province, and the rafts brought down the River and Petite Nation (North Nation) into the Ottawa."

EARLY TRANSPORT IN THE VALLEY

Few eras or areas of development in Canada demanded the ingenuity and persistence continuously exacted of the men who opened the Ottawa to the timber trade. Until 1825 all goods for the Upper Country were carted from Montreal to Lachine, whence they were loaded on to Durham boats for the diverse St. Lawrence and Ottawa routes.

Before steamboat transport, the traveller and freight for Ottawa went by cart for twelve miles from Point Fortune to Grenville, and thence by bark canoes to Hull. The ever-enterprising Wright built the first steamboat on the Ottawa at Grenville in 1819—"the *Union*"—and operated it on the Grenville-Hull reach. Due to the rapids at the Carillon and Grenville, a double service was needed until the canalization of the stretch, the Grenville to Bytown run of sixty miles requiring twenty-four hours.

In 1828, Macpherson, Crane and Company put 'the *Shannon*' on the run from Montreal to Point Fortune and St. Andrew's, and held a monopoly of the lower river, created by the construction of a private lock at the mouth of the Ottawa,

¹Mr. Wright's daughter—Bertha Wright Carr-Harris—in "The White Chief of the Ottawa" (p. 91-4) describes the smashing of some of the cribs at the second chute of the Carillon, and the rescue of two of the men by a boat sent out from Barron's Point. At the head of the Sault, Indians from Caughnawaga were hired to help. While anchored at Point aux Trembles, a heavy storm swept masts, tents, cabins and the roof of the camboose downstream, scattering the cribs in all directions, requiring "three days looking for lost timber and repairing damages."

charging a prohibitive toll on competitors. When the Rideau Canal was opened, the Ottawa and Rideau Forwarding Company came into the picture in 1833, with boats meeting the stage at Lachine, then proceeding two days to the Carillon, whence passage was by stage to Grenville, and boat again to Bytown,¹—three days from Montreal to Bytown or seventy-two hours in all. From there, travel went down the Rideau Canal, passengers on the whole route on the boats, freight towed in barges.

In 1841, Captain R. W. Shepherd of 'the *S. David*' opened new routes. He towed the first raft of logs by steamboat across Oka Lake and Lallemand Rapids for Hamilton and Low, and in the same year, broke the Macpherson, Crane monopoly by finding a passage through the Rapids at Ste. Anne. This led the Ottawa and Rideau Company in 1842 to put on a daily passenger service, without barges in tow, to do the Montreal-Ottawa run in twenty-four hours. In 1846, the Company put 'the *Emerald*' and 'the *Oregon*' on the Upper Ottawa, which this firm was to dominate until river carriage gave way to rail.

Lumber towing developed rapidly, the boats and their barges,—great blue ones,—four to six to a tug—each with loads of a quarter to a third of a million board feet of lumber, coming up the Ottawa, and down the Rideau Canal. Dennis Murphy, starting his line in 1856, became the founder of the largest company on the river, the Ottawa Navigation Company, whose barges still haul on its waters.

Into the Upper Ottawa, the route lay over a nine mile macadam road from Bytown to Aylmer to where the Holt Stage Line contracted to carry passengers and freight. Early Gillies records show "portage" charge for men from Ottawa to Aylmer to have been 40 cents per man in 1875. Along this route, all summer long, large waggons hauled their five ton loads on their first lap to the lumber country,—pork, beans, molasses, tea, axes, chains and rope, etc. Goods were carried to the wharf at Aylmer, where a side wheel steamboat departed daily for the Chats Falls, twenty-five miles up The Valley. Here at Pontiac Bay, passengers



¹At that time bridges were lacking from Bytown to Hull and rocket ropes were thrown by cannon across the Chaudiere, with messages and instructions. The Chaudiere Bridge was not constructed until 1843.

and cargo were let out upon a low level landing, from which an ingenious, if slightly disturbing, rising platform moved unsteadily upwards forty feet to the top of the cliff. There a tramcar, like unto a small ark, stood, drawn by two horses, harnessed tandem for the narrow precipitous way (a horse railway it was called) by which means the three miles to the head of the Chats was covered.

A steamboat again took over to cross Chats Lake, and sneak through the Cheneaux, at low current to Portage du Fort. (There were three small steamers here—the *Oregon*, *Alliance* and *Prince Arthur*—all side wheelers of five foot draft, carrying both freight and passengers. In high water the current was so fast that an auxiliary steamer was used to afford a landing on Limerick Island). At Portage, the stage coach again became the means of transport, to skirt the stretch around the Calumet rapids and bring its joggled human freight and goods to the wharf at Bryson from where the good boat *Calumet* ran through the North Channel and wound about the peninsula past Westmeath to the foot of Morrison Island where passengers walked and freight was toted the length of the Alumette Island to connect with the ferry to Pembroke. In low water, however, the steamer could run the Culbute to Chapeau with easy stage and ferry to Pembroke. (Here, years later—too late for the railway was even then twisting its way through the woods—the largest wooden locks ever built, (200 ft. long, 45 ft. wide with 6 ft. of water on the sills) were constructed to bypass the Culbute).

If one were bent for the Renfrew country, the Chats Lake steamer unloaded at Farrel Bay, below the Cheneaux rapids, and a stage connected with Cobden on Muskrat Lake, whence a stern wheeler plied down the Lake and Muskrat River over the old Champlain route to Pembroke. All in all, from Aylmer to Sand Point,¹ in later years of fixed time-tables, the steamers made a forty-five mile run, then from Sand Point to Castleford six miles, and from Castleford to Portage nine, the Portage to Pembroke run being thirty-three miles over land and by water.

From Pembroke, further up The River, or from any tributary stream or route, transport was long a personal responsibility for which one brought one's own boat. Not until 1854 was a string of steamers, part and parcel of the Upper Ottawa story, put upon the Deep River to ply the upper waters,—the *Pontiac*,² 'the *Pembroke*', 'the *Ottawa*', 'the *John Egan*', 'the *Christopher Reilly*' and 'the *Empress*.' One boat ran the forty miles of quiet water to Des Joachims, where another took the lap to Rocher Capitaine and yet another from there to Deux Rivieres, whence the last run left for Mattawa. Such was the long and wearing pilgrimage for man and beast in opening The Ottawa to timbering, the freight often consisting of heavy boats, paddles, oars, barrels of supplies, bags, bales and trunks.²

The trade of an Empire was to drive down The River up which they so patiently pushed with their men and supplies and where Philemon Wright and

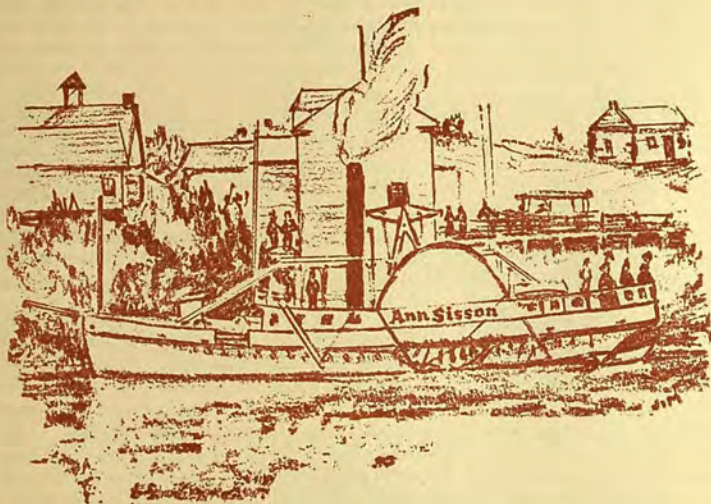
¹ In the first days of early naval purchasing, the masts that went out of The Valley were almost fabulous—some 110 feet long with a 12 inch top, hauled out to the water by oxen; one old trail near Sand Point on The Ottawa still is known as "the Mast Road."

² J. R. Booth, half a century later, states that on these first visits to the Upper Country he required three days for the trip of 233 miles, and seven for a round trip journey, now a matter of half a day by modern transport.

his sturdy farmers had risked a strange new task in angry and unknown water. From the imposition of dues in Upper and Lower Canada in 1826 until the export restrictions in 1894, eighty-five million pieces of pine, seventy-eight and a half million logs were taken from the Upper Ottawa.³ For a century and three years square timber was to ride The River until the last crib would go through the Chaudiere in 1909. In that century from the slopes of the Height of Land, hundreds of miles in the silences of the watershed, down to its tributary streams these millions of great trees were to ride the Ottawa's lake expanses, reaches and rapids to the waiting ships, afloat where Wolfe had drifted, pondering on death and the battle which was to bring half a continent to the little Island that he loved.

Today no boats ply the busy waterways, save the sturdy smokedugs, still towing The Valley's logs eastward to market, and deserted, dank and decayed lie the wharfiges whereby the needs of half a nation's timber trade passed upstream to the forests.

³ Johnson—Forest Wealth of Canada.



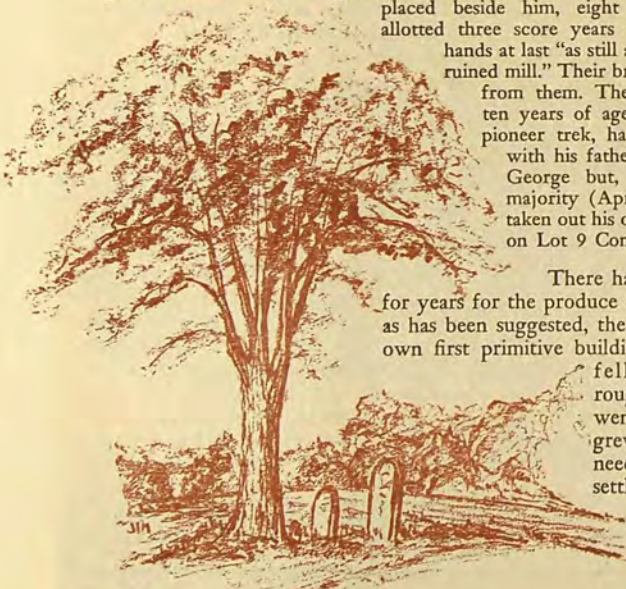
'The *Ann Sisson*' was the fourth boat on Lake Deschenes, running seventy years ago from Aylmer and the head of Deschenes Rapids to Pontiac Bay at the upper end of the Lake. The lift, by which the passengers went to the upper landing, is within the building. The horse railway car waited on the frame trestle. 'The *Ann Sisson*' had overhead "hog posts" and "hog bars" to prevent her from "hogging," that is dipping bow and stern because of her relatively great length.

LANDSMEN TURN LUMBERMEN

JAMES GILLIES had been one of the men of The Valley who had stayed on its harsh, defiant land, clearing and working his west half of the 10th lot of Concession 5, in the Township of Lanark to the end that, all conditions fulfilled, it was patented to him on September 13th, 1837,—(the year in which Victoria came to the throne of England, Upper Canada flared in open rebellion against the Family Compact and his son John, then twenty-six, had taken musket and joined the loyal volunteers at the front). Thirty years of arduous life he had been vouchsafed as he saw forest recede and crops and flocks and home rise on the land he had won by the sweat of his brow, until, eighty-five full years accomplished, the Scottish dalesman was laid in the silent soil of the little Middleville cemetery, early hallowed to their dead by the settlers of New Lanark. Five years later to a day, the quiet, staunch and faithful helpmate of his years was

placed beside him, eight years beyond her allotted three score years and ten—her worn hands at last “as still as the waters under a ruined mill.” Their brood had not all gone from them. Their eldest son, John, ten years of age in the year of the pioneer trek, had worked the land¹ with his father as had his brother George but, upon attaining his majority (Apr. 2, 1832), John had taken out his own 100 acres of land on Lot 9 Concession 3.

There had been little outlet for years for the produce of the settlers, save, as has been suggested, their potash. For their own first primitive building the settlers had felled and trimmed rough logs. But as life went on and buildings grew, sawn lumber was needed, especially in a settlement where many a man had been a stone mason, and sought wood for the interior and



¹ James Gillies, March 25, 1766—Nov. 25, 1851. Helen Stark Gillies, 1778—Nov. 27, 1856. In the year of his death, James Gillies (March 8, 1851) transferred the homestead to his grandson, James Brash; George Gillies, his second son, purchased it in 1873, and sold it, in 1883, to Alex. Lawson.

trim of his second home built of the grey limestone which was abundant in the district. There were two great needs,—mills for the sawing of timber, and “the scarcity of corn mills and the great distance to which it was necessary to send grain to be grinded.” “There is one,” says John MacDonald in this same diary of 1821-2, “at New Perth, the nearest at present, and fourteen miles from New Lanark, and double that distance from any new settlements. There are other mills erecting at New Lanark¹ and Dalhousie” but still he feels that these will be far distant from many a settler. There are good mill seats on many of the farms, and those who have the means “will be induced to erect them for their advantage and that of others.”

On the need of saw mills, let Robert Drysdale of Lanark² speak, as he describes the wood cut for the Lanark Church in 1823 “as sawn in the midst of the forest, in a rude saw-pit, where even not a pound of flour could be gotten for the workmen . . . their only food for a considerable time consisted of hard boiled eggs and rum. These same sawyers however, were good men and more than one of them are yet to the fore to tell that the old Church was very well built under the circumstances, and that it stood for thirty-seven years.”

The saw mill became a necessity in the early life of the settlement, regarded almost as a local possession like the school and, like the smithy and the grist mill, a place of gathering and exchange of news as settlers made their long trips to market their produce and buy their staples. It generally came later in settlement because, while in Eastern Ontario, “all hands” might “turn in” for its “raising,” it usually required the risking of a fair sum of money by some one settler for its costly machinery. Then too, profit was apt to be low, and in kind, for each settler would cut his own timber during the long winter and haul it to the stream by the mill before the spring “break-up” of the roads. There it was sawn, the farmer keeping out what he needed for his own use—as his ambitions sought to replace or ‘line’ his log cabin with the frame work of sawn lumber—and the mill-owner was paid on a barter basis. Or a ‘deal’ might be put through whereby yet a third party exchanged his produce to owner or sawmill for the lumber he needed. Transport was costly, demand small, so that the sawmill either closed down when the haul was cut or took on “side lines,” in other forms of milling, utilizing the same water power.

THE FIRST GILLIES LIMIT—THE CLYDE 1842

James Gillies’ oldest son, John, was awake to these needs in the immediate settlement and he had selected his lot with an excellent mill-site on the Clyde. Here, he apparently worked and cleared through the next few years, marrying on January 4th, 1839, Mary Cullen Bain, a daughter of the same stock and settlement, and on March 18th of the next year 1840, obtaining the patent to 200 acres—his grant and apparently another 100 acres by purchase. On the west half of the lot,

¹These mills were apparently Ferguson’s at Lanark, which the eastern side settlers used and Robert Currie’s on the Mississippi at the head of Dalhousie Lake, or an even earlier mill of his at Hopetown. In Bathurst Township, also on the Mississippi, there was Playfair’s mill, one of the best known and frequented by the ‘west side’ settlers. It was built by Col. Playfair, an outstanding figure among the retired officers of the 104th Regiment, one of the units settled in the Rideau area.—(MacDonald’s distances—round-about trails through the woods and about unbridged streams are greater than the more direct routes of later days).

²In *Bathurst Courier*, Nov.-30, 1860, quoted by Andrew Haydon idem. p. 108.

he erected a small saw mill, with a wooden frame, and a single upright saw weighing ninety pounds and which he toted on his back fifty-five miles over the primitive roads from Brockville to Lanark. (He must have been a young man of strong physique and energy for, fifty years later, the local papers recall that he had frequently walked to Brockville one day, and back the next, packing his purchases with him). His account books show that he started cutting here in 1842. Logs were first hauled from his father's and his own homestead and lumber sawn and sold to the local trade, boards selling at \$6 to \$8 per thousand feet. He sawed for neighbours, and shortly added a grist mill, an oatmeal mill, and a custom carding woollen mill across the river, employing David Bowes and Hugh Ackland in these undertakings. The site became known as *Gillies' Mills* and a focus of the settlers. Lumber was in demand, and he extended his operations, his records showing that he brought logs down the Clyde, and added a mulay saw and later a circular saw to his mill. He took on contracts, one being typical of the enterprise of the early settlers,—three inch planks to floor the swamp road from Lanark to Perth at \$12 per thousand, delivered on the road but "never paid for," an experience probably accounting for the caution in the old mill sign, decipherable even today:

*"No credit here
For wool carding
Or cloth dressing."*

There was little waste around the Gillies' Mills. One of the sawyers, used to the straight, first-cut perfect trunks, was muttering complaints at a run of crooked logs. "Saw them up. Saw them up," said John Gillies, "crooked logs, well-sawed, make straight dollars."

Meanwhile, "out front" on the St. Lawrence and up the Ottawa, the timber and lumber industry had been developing apace,—at first for the British and later for the new United States market. Settlement was fast extending into Upper Canada, canal transportation changing the face of trade as overseas migration poured into the Eastern States. The English and United States merchants were shoving further and further up the Canadian waterways. In 1815 there had been one sawmill in the Ottawa district, in 1823, there were nine; in the eleven districts of Upper Canada, 363 in all. The English market, protected by heavy preferences, had built up an extensive square timber demand and there, so the word ran through the settlements, fortunes had been made, were still to be made, as the fine pine stands of the Upper Ottawa were opening.

The two basic industries of Canada were beginning—lumbering and agriculture. However, enterprise was interested primarily in timbering, the extensive sawn trade was to be another score of years in maturing. Great overseas firms, coming first as traders, had extended their interests to a stake in the land. Henry Osborne with Peter Patterson, in 1811 had added the mill site on the Montmorency to their merchant lumber trade, (a plant to become later George Benson Hall & Co.). Outstanding confidence in the timber future of the slightly known land had been given by William Price, sent out in 1810 to seek a new supply source for masts for the battleships of Britain. As representative of the Admiralty, he had returned to England, fulfilled his mission, but impressed with his explorations of the Saguenay, had decided, in 1817, to throw his all into Canada. With James McGill, later founder of the University that bears his name, he began

modest cutting on the St. Margaret River, from which operations extended, becoming the large mills of Price Brothers and Company, as his three sons, David, William and John joined him. In 1840, he started wider undertakings at Chicoutimi, where a monument today commemorates "le père du Saguenay" in the country where, by Confederation (1867), the Price interests were to own great mills, limits and power plants, and continue to this day. The Gilmour, Pollock interests of Scotland had come into Quebec and Montreal in 1827-8. William Sharples of Liverpool and Henry Burstall of Hull had transferred part of their interests to Quebec in 1830 and '32. H. D. Breakey, founder of the Breakeys of Breakeyville, began operations in 1846. James Gibb was beginning the later Gibb and Ross enterprises, which reflect the interlocked undertakings of the day. With his nephews, James Gibb Ross and John Ross, his interests extended from a wholesale grocery in Lower Town to loans to the timbermen of the West (Upper Canada) whom he supplied. He lent them money, purchased limits, got into ship-building and then ship-owning and operation. In national development, association in the founding of the Quebec Bank and the Lake St. John and Quebec Central line followed for James Gibb Ross. The rosters of the trade in the ancient capital were filling rapidly, berths on the Coves reading like streets of Liverpool or Glasgow.—James Little of Londonderry, King Brothers, John Thomson, Colvin, Cook, and Counter, Timothy Dunn, G. B. Symes, Henry Fry, Wilson's of Liverpool, Nicholas Flood from Wexford in Ireland, Dobell, Beckett & Co., John, Alex, and Peter McArthur. They came in a steady tide of powerful able men, bringing their families from the old land, building the tall narrow gracious houses, that speak to this day of pleasant, generous living, opening the new land with their wealth and enterprise but, always, keeping the close tie with home, sending their sons and daughters across the Atlantic for their education, weaving strong strands, that, to the present time, bind their families in Quebec to the ancestral homes from which their forebears came.

Up the St. Lawrence, at Three Rivers, Thomas Malone's enterprises were based, ultimately to extend to shipping from the Ottawa, Michigan and Wisconsin to Britain. And here too, Alexander Baptist was opening the trade that was one day to make him the chief operator on the St. Maurice.

But away from the great port, up in the forests from which the timber wealth came down to market, another type of Canadian enterprise was developing, younger men, some of means, some with no backing save their brain and brawn, were founding new enterprises, typical of the new land, following where Philemon Wright, the Mears and the Hamiltons had broken the way in the first decade of the century. George Hamilton was to be outstanding in a day of achievement. From the north of Ireland, he was the younger son of a firm of wealth, one brother being a banker in Liverpool, the other a timber merchant at Quebec. They bought out the Mears interests at Hawkesbury and developed a business of £10,000 per month. Then disaster struck. Within a couple of months the two brothers died, high waters carried away the season's logs, the family home was burned and the mortgage on the mill demanded. Starting for Montreal by boat, Hamilton was capsized, and though his wife was saved, their three children were lost. Yet obtaining credit, he re-established his business, and sons born later—

Robert, George, and the Hon. John—as Hamilton Brothers, (later the Hawkesbury Lumber Co.), became one of the most powerful and respected firms on the Ottawa.

Some men young, some older, were beginning the typical venture of the Ottawa, the individual family firm. At Fitzroy Harbour on The River itself, William Mohr, born in 1813, a veritable giant of a man, was starting the enterprises that were to take him to the Quyon, the Bonnechere and the Petawawa, and to carry his operations into this century and his ninetieth year. Alexander Fraser, son of "Highland Hugh," a veteran of the war of 1812, had started rafting on the Black River, a venture to mature in the fifties in the Fraser Lumber Company. This firm, under his son John B. Fraser, became one of the largest timber enterprises of The Valley, and still has holdings on The River. From Ireland in 1818 had come Charles Hurdman, whose five sons born in The Valley—Robert, Charles, John, George, and William—were to leave their names indelibly on its annals. From England in 1820, William Edwards had journeyed to Clarence Township in Russell County, his son and nephews and great-nephews to build a firm whose name would endure through the years. Out of Devon came Thomas Cole of Westboro, who was to develop Papineauville, and, with James MacLaren, cut on the Nation River. David MacLaren had come to Torbolton Township in Carleton County from Scotland in 1824, his oldest son, James, then but six years old. In 1842 (the same year as John Gillies began his venture) the MacLarens went in to Peche on the Gatineau, and in 1853 James went in to partnership with J. M. Currier, erecting a saw mill, with operations extended to Buckingham on the Lievre in 1864, where his sons, David, Albert, Alex and John were to assure to this day one of the strongest industries of the Lower Valley. From Cumberland in England, James Skead had come to Bytown in 1816, he, too, a boy with his father, who, by 1840, was to hear the call of the timber in the woods, and follow a trail that would make him a force in the public and commercial life of confederated Canada. "Up" The Valley on the south shore, venturers were pushing whose trails were to lead to its future towns.

The Buchanans had ventured into the sawn trade, founding *Arnprior*, but with little success and the mills had been abandoned after the death of Andrew, the bankruptcy of the firm and the tragic death of George at the Chats. Young Daniel (Donhuil) McLachlin of Scots descent, son also of a Highland Hugh, then in his early thirties, had set up a small saw and grist mill, with three run of stones, at "The Timber Snic" at Bytown, which riding he was elected to represent in the first Canadian Assembly after the Act of Union, 1841. Within the next few years, he was to turn to the Upper Valley to found his own great firm and develop the modern town of Arnprior.

At the second chute of the Bonnechere, one Coyle and one, Joseph Brunette, had wandered, cutting and hauling timber in 1820 to '23, and there their cabins were built. Thomas MacLean from the Lanark land, Sgt. Henry Airth from Rutherglen, Scotland, via the Arnprior trail, Joseph Mayhew of Chateauguay with Xavier Plaunt, as his helper, had followed and taken up land in 1828 to 1830, in the township of Horton, on the site of the present town of *Renfrew*.

Still further up The River, settlers from the fire-swept desolation of the Miramichi had staked their claims in 1825. Here Peter White, with his family, paddling fourteen days up The River from Bytown, three years later founded *Pembroke*. White, then 34 years old, had been in the Royal Navy, had come to Canada with Sir James Yeo in 1813, served on the Great Lakes during the War and at its close, remained in Canada. The firm he founded was carried on by his sons (the Hon. Peter White, and his brother) as A. & P. White. W. A. Moffatt, in 1840, was erecting the first saw mill in the "lumber capital of the Upper River."

In Beckwith, one of the townships surveyed in Lanark County in 1816, a small settlement had grown about Morphy's Falls, where pioneers of Irish descent, Edmund Morphy and his sons, William, John and James, had located in 1818. Here Hugh Bolton had erected a grist mill and in the next two or three years, William Moore, Robert Bennett, Thomas and George Willis, Alexander Morris and John Loucks moved to the small community developing on the river. In 1830, the first postmaster, Caleb Bellows, gave the modern town of *Carleton Place* its present name, in honour of the popular Sir Guy. In the forestland along the Mississippi, the Gilmour Pollock firm now began to buy extensive limits and a small saw mill was operating in 1842.

Back in the Clyde and Lanark Settlement were other young men besides John Gillies. Boyd Caldwell had come in the same year from the same Scottish country, had taken land, had turned to timbering, too. He and his family were to become powerful operators, both in lumber and in the fine woollens, synonymous with their name. They were to be friendly competitors of the Gillies and of the MacLarens, rivals worthy of their effort and respect. And in Ramsay township was another young Scot, George Bryson, born in Paisley, coming with his people in the same trek in 1821, farming in the summer, getting out cordwood in the winter. At the age of 22, he joined with Hiram Colton of Pontiac to take out timber on the Ragged Chute on the Coulonge River and, to become the progenitor of a firm and family than whom none was to rank higher on the North Shore, to one of the loveliest of whose villages he gave his name. In the Coulonge country he and his descendants have dwelt and given high public service, now into the third generation. Robert Blackburn, coming from Scotland with his father in 1841, was to be in the trade by 1848. John Egan was already established in the square timber trade on the Ottawa. (Later, Blackburn and Egan with Hiram Robinson purchased and operated the Hamilton interests as the extensive Hawkesbury Lumber Co.).

W. E. Logan—later Sir William—provincial geologist of Upper Canada,¹ leaves a picture of the Ottawa in this decade (1840-50) that, in the retrospect of almost a full century ago, is, at once a record and a prophecy:

"In the district that came under our examination, though some species of hardwood trees are found on the flat lands and occasionally clothe the higher grounds, the proportion which they bear to timber of a soft description is quite significant. Red and white pine form the staple wood of the country, and the banks of the Ottawa and its tributaries may most emphatically be said to constitute one of the most important pine timber regions anywhere to be met

¹Geological Survey Report—1845-6: 10 Vic.A.1847—Appen.C.

with. The endless succession of forests of both species mentioned, presented to our view in the whole of our exploration above Bytown, would seem to be almost inexhaustible, and it appears to me that in the higher parts of the main stream visited by us, the quantity of red pine preponderates over that of white. The greater value of the former causes it to be sought for at greater distance than the other. We found *chantiers* established for the purpose of cutting it, as high as the Galine, on Lake Temiscaming, where lumberers were then in full operation, and we observed a deserted one several miles above the Hudson Bay Company's Post, where red pine had been prepared two or three years ago, by the Messrs. McConnel, whose enterprise has carried them farther up than any other lumberers on the river. We were informed the time occupied in conveying the timber from this distant point to Quebec, was, under favourable circumstances, just two months. No white pine timber has yet been carried from any place higher than Bennett's Brook, which is about 140 miles lower than the other spot, but as settlement creeps up the river, and increases the facilities with which provisions and material for the uses of the woodsman, with fodder for his cattle, can be supplied, it will gradually be sought at higher points.

On the Ottawa, the occupations of the lumberer and the farmer have been a great encouragement to each other, and while the advance of settlement has enabled the lumberer to push his enterprise farther and farther up the stream, it is mainly in consequence of the trade in its timber that the banks of the river are so fast filling up with inhabitants.¹ The wants of the lumberman afford to the farmer a ready market for his produce, at high prices, and present a great encouragement for location wherever good land occurs; while this has been found in sufficient abundance to establish many thriving settlements in localities, which but for the timber trade, might have been overlooked for some time to come.

These settlements, once established, producing enough for their own consumption, and something to spare, may ultimately constitute a back country of considerable importance to the prosperity of those points at the mouth of the river, conveniently situated for supplying the wants of its inhabitants: and Montreal, as the principal of these, may hereafter find the valleys of the Ottawa and its tributaries of essential benefit in assisting to support the eminence she has attained among the cities of British North America.

Below the Joachim Falls, which, as has already been stated, are situated about five miles farther down than Bennett's Brook, several clearings occur on the south side of that fine navigable reach of the Ottawa, called the Deep River, which there stretches twenty-four miles in an almost perfect straight line; at the foot of it, also, there is a block of settled land, not yet surveyed, behind Fort William, on Lake Allumette, and many locations have been cleared on the Alouette Island, which has now been recently surveyed: but the village of Sydenham, (including Campbelltown, which is part of it) at the mouth of the Muskrat River, in Pembroke township, may be considered the highest centre of settlement on the river. The distance above Bytown is about 85 miles by land and 95 by water: and in addition to many neat and substantial

¹Into the areas, adjacent to the camps, settlers incredibly pierced. One experienced operator, stumbling on a clearing, asked the backwoodsman how on earth he and his family had got in. "Oh," he replied, "walked. Any of the youngsters big enough carried a hen, the little ones coaxed the pigs along with a dish of peas, and the rest of us hauled the dunnage."

houses, with stores for the sale of merchandise, it possesses a grist and two saw mills, and several respectable tradesmen there find full occupation in their several arts. In the grist mill, were ground in the season previous to our visit, 12,567 bushels of wheat, 19,789 bushels of oats, 5,659 bushels of Indian corn and pease: and as there is another grist mill at the foot of the Alouette Island, which probably may have done equal work, about 25,000 bushels of wheat, one half of which is fall sown, may be considered the quantity of this species of grain raised from the clearings in the vicinity. But the grain, to the cultivation of which the cleared land is chiefly devoted, is oats. It is found a more profitable crop than any other, in consequence of the great demand and the necessities of the timber trade occasion. Sydenham constitutes a market for a considerable quantity of oats, brought from the lower point of the river; and in winter, this, and other descriptions of grain, with flour and barrelled provisions, in addition to the regular supplies of these last commodities, carried up systematically by the principal timber merchants, by the Ottawa, are brought from localities on the St. Lawrence as low down as Brockville. The ordinary price of wheat is 6 shillings per bushel, and that of oats, 3 shillings. Hay is sometimes brought from equal distances, and its ordinary price is from 6 to 7 pounds per ton."

Five years later, another and a different visitor was equally enthralled with the beauty, vigour and promise of the developing Valley, W. H. Smith, one of the earliest of "almanac-ers":¹

"As far as our knowledge of the country extends, we find the greater part of it covered with a luxuriant growth of red and white pine timber, making the most valuable timber forests in the world, abundantly intersected with large rivers, fitted to convey the timber to market, when manufactured. The remaining portion of it, if not so valuably wooded, presents a very extensive and advantageous field for settlement.

The great regions on the upper course of the western tributaries of the Ottawa, behind the red pine country, exceed the State of New Hampshire in extent, with an equal climate and superior soil. It is generally a beautifully undulating country, wooded with a rich growth of maple, beech, birch, elm, etc., and watered with lake and stream affording mill sites and abounding in fish.

In diversity of resources, the Ottawa country presents unusual inducements alike to agricultural industry and commercial enterprise. The operations of the lumberers give an unusual value to the produce of the most distant settlers by the great demand they create on the spot, while the profits of lumbering yield those engaged in it a command of wealth, which otherwise could not be had in the community."

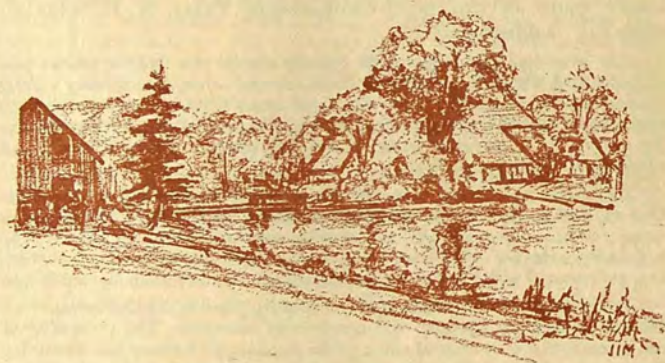
"Taking Scotland as our data, which the Ottawa country surely equals in soil, and might, with its peculiar advantages, resemble in commerce and manufactures, the valley of the Ottawa should ultimately maintain a population of 8,000,000 of souls."

With such talk and expansion in the air, the challenge came to the local timber operators in the smaller streams of the tributary valleys, either to venture greatly with the great names of the firms from overseas, the Quebec Coves, and to the South, launching into the risks and battle of big enterprise in square timber,

¹Smith, W. H.; Canada, Past and Present 1850.

or to stay with the small local trade, facing possibly shrinking markets, and exhaustion of their contiguous timber stands.

John Gillies, with courage and credit both good, took the risk, sent his men and oxen and camps higher up the Clyde, up the Mississippi, across the height of land into the Trent watershed, and while still maintaining his mill, went into the square timber trade on the latter river, rafting his timber down the St. Lawrence to Quebec. With that decision, the large scale modern business of "the Gillies people" had begun, for the annals of the firm from then on are inextricably woven with those of the other great lumber interests of the Ottawa, whose story and that of The Valley itself are one. In the complexities, discouragements and achievements of that developing tale, the son of the Scots glensman, and his sons, were to assume a constantly enlarging and responsible part.



TIMBER BECOMES OUR LIFE: 1806-46

THROUGH the generation, following Waterloo, the British States had pursued a fiscal policy of a tighter conservation, among them, of a shrunken world trade. Consistent therewith, the Home Government had not only continued but steadily increased the preferential timber duties until 1822.

Behind the rampart thus designed to aid Canada one of the persistently recurring problems in the Canadian industry made its appearance,—the utilization by the United States lumberman of the Canadian family entrance to the British market. The enterprising Vermonters began to run their rafts down the lower St. Lawrence to Quebec, and, thus shipping from a Canadian port, derived all the benefits of the preferences. Upon special inquiry by the British Parliament, in 1822, the Imperial Government attempted to overcome this by imposing a duty on the importation of United States timber to this country. This sustained

the Canadian industry, at this difficult period in post-war adjustments but, in the very security of the market, expansion tended to become hectic rather than healthy. Waste, irresponsibility and abuses crept in which threatened disintegration and forced official action to attempt internal consolidation.

As suggested earlier, the monopoly, held by the Royal Navy contractors, had encouraged development of a middleman marketing trade, rather than the growth of responsible timber operations. These commission merchants would buy where they could, might even "get together" and, with the Quebec Coves full of rafts, purchase at rates disastrous to small operators. Unfortunately the small amateur timber maker was encouraged, often to his own undoing, by conditions generally. The settlers of Upper Canada, located on good land, wanted it cleared, rapidly; those on poor land had only their timber to crop. It seemed comparatively



easy to get out the good square timber from the great trees. A settler might get together a small gang, act as his own liner or scorer, or hewer, or pick up the other help he needed, and, with a cookee helper and his team, timber on his own land, sublet a small lot from a contractor, or just trespass on the Crown lands, especially along the Ottawa, where the divided jurisdiction of the two provinces lent itself to such subterfuge. Or two or three settlers might get together, keep rough tote of costs, float their small raft (with potash and any other goods aboard) down to the main streams, or even to Quebec, sell where they could, and roughly divide the spoils. Such operations were wasteful, deadly to the forest in its slaying, full of danger in the slash and risk of fire. They defeated much hope of stabilization in labour or living conditions or wages for the regular shanty or riverman. They were, often as not, full of doom for the settler himself. They tended to make him think of his farming and cutting as alternate undertakings, forgetful that the timber was a non-recurring, if profitable, crop, and that, if he neglected his farm, he would find himself, shortly, with neither source of income. Nor was his cutting always profitable. He could not gauge markets and demand; he might get out a good cut to find no purchase in a year of glut. He was not always familiar with forest and river conditions, and not infrequently his timber might be caught in short snow, or not out for the early spring break-up, or stranded in low water. He had no backlog to finance such reverses and cattle, farm, and horses were pledged (and sometimes lost) to back credit, that, in the nature of timbering and farming, could not be extended in a sixty or ninety day note but stretched from one season to the next.

As soon as the urgency of the war years seemed to abate, many of these phases of the trade became clear. Especially in the stability afforded by the continuance of the high British preferential tariffs, it became increasingly evident that the house of the Canadian industry must itself be set in order. Agriculture and timbering, lumbering and its marketing, were emerging as definite activities, demanding definite controls, techniques, and responsibilities, calling for concentration and integration within themselves. Only failure and insolvency seemed to await those who thought they could serve one, and make a handmaid of the other.

EARLY REGULATIONS 1826: AND NEW ABUSES

Obviously the first thing to be done was to bring all operations under the control of the Crown, to give effect to the principles, enunciated but not executed, in the instructions given to Murray in 1763.

Various sporadic enactments, somewhat comparably enforced, were passed in Lower Canada, from 1808 onwards to 1825, for "the better regulation of the timber trade," these becoming the basis of later cutting standards and brands. No legislation of such type was passed in Upper Canada until 1818-9, though instructions to the Duke of Richmond, in the former year, called for reservation of pine lands: the 1819 measure provided for duty on imports from the United States to encourage Canadian cutting.

By proclamations, issued in Upper and Lower Canada, in the same year, 1826, the monopoly of the Royal Naval contractors was broken, and provision

made for the issuance of licenses to cut timber on ungranted Crown lands, and timber, not squaring more than eight inches, in diameter, to be taxed double dues.

In 1827, a "Surveyor-General of Woods and Forests" was sent from England to put the system into operation. His policy was based on recommendations made by one of the early settlers of Carleton County, Robert Shireff, whose son was made first collector of Crown timber dues for both provinces. Each licensee was made liable for payment of 25% of his estimated dues, upon issuance of his license, the balance to be covered by bonds. He might apply, upon posting of further bonds, to increase his estimated cut. Upon sale of his timber, the exporter's bills in Quebec might be submitted in place of his bonds, thus allowing the proceeds of his sales to be drawn on in London, before he had to settle with the Government for his bond balances—a procedure of considerable value for new operators in a country of small population, no wealth as yet but its fur and timber trade, and little development of credit facilities. In the first year of operation of the new system, 1827, timber dues paid in Upper Canada amounted to only \$360 precursor payment, however, of revenue to the Crown, that a century and a quarter later, in 1941, yielded practically \$4,200,000 in the same province.

Through these years with recovery proceeding slowly in England, but settlement extending in Canada and the United States, lumber and wood products of all kinds became the basic factor in the Canadian economy, then playing much the part of gold in the depression decade of 1929-39. It was a natural resource, accessible, fairly readily marketable, of good repute, and in good demand in a protected market abroad and a growing market, next door. With the introduction of licensing, it had come under controls that tended to discourage the irresponsible privateer, while technical improvements, (the introduction of the timber slide in 1829, to by-pass high falls, the development of the sawn lumber market and so of mills, etc.), operated to the same end in that they demanded continuous attention to lumbering operations and substantial planning of finance and marketing. Settlement and agriculture both followed the extending lumber trade, pushing further into Upper Canada, and this market for produce and labour rescued the bush settlements of the province from those harsh and primitive conditions which, for nearly a generation, seemed to threaten to grind them into something not far akin from the European peasantry.

But, again, the very prosperity or promise of the trade, and the immediate access to the power of the state, which is peculiarly prevalent in a new land, were breeding vitiating abuses, especially in Upper Canada. With settlement active, friends of the administration, by private grant or cheap purchase, acquired large tracts of forested land. In some cases, they held them out of use, for long periods, the value increasing, as timber operations swept about or beyond them, or they cut them over, avoiding timber dues, and then allowed them to revert to the Crown, denuded of their stands, stump-scarred and unsuitable for settlement, with no promise of either lumber or potash. As one result, an average of one-third of the surveyed townships of Upper Canada were unsettled, with tragic drops in land values, and with heartbreaking handicaps in the development of schools,

roads and bridges for the honest struggling settlers, who were attempting to develop stable farming. Resentment at this notorious practice was widespread and open in the Rebellion of 1837.¹

Meanwhile, as market conditions had fluctuated, many of the timber agents in Quebec, trading in exporters' bills, failed, involving the Crown in heavy losses. So, from Lower as well as Upper Canada came representations for change, and a settled timber policy.

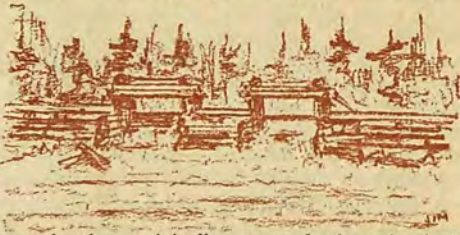
PROVINCE OF CANADA POLICIES 1841

One of the first measures taken by the new Province of Canada (created by the Union of Upper, which became Canada West, and Lower, which became Canada East, in 1840) was recasting of the licensing system to prevent such abuses. Striking at absentee licensees, holding timber grants out of use, the new regulations put a period on the tenure of the lease, limited each berth to ten miles river frontage with an annual minimum cut of 5,000 feet per mile of frontage, and imposed forfeiture of tenure for smaller cut. Dues were assessed upon each stick of timber extracted, regardless of size.

In 1842, controls were devised to assure the standard and quality of Canadian timber by an enactment (6 Victoria Cap. 7) "to regulate the inspection and measurement of Timber, Masts, Spars, Deals, Staves and other articles of a like nature, intended for shipment and exportation from this Province." This represented a definite attempt to give Canadian timber a hall-mark abroad beyond political and commercial exploitation.

Provision was made for the appointment of a supervisor of "cullers," to be named by the Mayor of Quebec and a Board of Examiners of cullers to be appointed by the Quebec Board of Trade. Cullers were to be stationed at all "places of sea shipment": "all holders of measuring tapes and scribes of timber" were to be sworn, all measuring tapes to be tested, "each scribing knife to be inspected." Timber was to be marked *M*, merchantable, *U*—sound but *under* merchantable quality, and *R*, rejected.

The specifications for "Square Pine,—White or Quebec Yellow"—speak eloquently of the mighty growth that originally covered the pineries.²



¹Lord Durham's Report comments:—

"From 1763 to 1825, during which period the population had grown slowly up to 150,000, the quantity of land, granted by the Crown, was upwards of 13,000,000 acres, while, during the thirteen subsequent years, in which the population increased from 150,000 to 400,000, the quantity disposed of, including the sale of the Clergy Reserves, was under 600,000 acres."

²Each stick was to be not less than 20 feet in length, not less than 12 inches square in the middle; the taper was to be not more than 2 inches for a stick under 30 feet in length, nor more than 4 inches for any greater length. It was further to be "free from rot, bad knots, rings, shakes and other defects, properly hewn, squared and butted, and was not to "have more than one bend or twist in a log, which bend or twist shall not be more than 3 inches hollow, for every 20 feet in length, including any not less than 15 feet in length and not less than 16 inches square."

These regulations came into effect in the year in which the founder of the Gillies firm, John Gillies, risked his all in the building of his mill on the Clyde. Always far-sighted and shrewd, it is not unlikely that his decision to turn from farming to lumbering was influenced by the attention being given by the government of the new united province to the encouragement and regularization of the latter industry.

FISCAL CHANGES IN ENGLAND—1842 TO 1846

But even as the new province was thus struggling gallantly to bring its vital timber trade through the rapids, undercurrents were rushing in upon it. In an England, torn for a generation in post-war social and industrial change, harried governments were turning from one to another line of inquiry and action. A British Parliamentary Committee, after exhaustive inquiry, in 1835, had recommended against the maintenance of the Canadian preferences on lumber, and on wheat and flour, milled in Canada. Near panic had seized both the Canadas and the Maritime Provinces for wood products were much more than half of the country's export trade, square timber shipped to Great Britain in 1840 totalling 375 million board (approximately 37 million cubic) feet. Through a rather unsympathetic Lord Sydenham, Montreal, Quebec, Bytown, the Saint John and Miramichi Valleys made earnest representations as to the paralyzing effect of such action on the young Canadian economic structure. But England was in desperate plight herself, and Sir Robert Peel came into office in 1841, determined to wipe out the imperial duties. The first reduction came in 1842 but, as conditions grew worse, the English railway building boom collapsed and much of the new industrial building reached its climax, the preferences on timber were drastically cut again in 1845 and 1846, leaving them almost nominal. The repeal of the Corn Laws knocked the props from under Canada's other staple exports, wheat and flour, and the repeal of the Navigation Laws, 1849, gave the lustier U.S.A. shipping free access to all British ports.

The reputation of Canadian timber had meanwhile been helped by the first imposition of quality standards through an enactment of the united Province in 1845. These provisions stipulated that square timber must be measured in one of three ways,—for full circumference in raft or otherwise; in shipping order "sound, fairly made timber;" or culled and measured in a merchantable state with the standards prescribed. Quality standards were set forth,—first, second and third. These trade improvements, the fact that the repeal of the preferences had long been mooted, hope that once again action might be deferred and a natural stepped-up import by old country buyers of supplies "against the day" had kept the market up, nearly 500 million board (50 million cubic) feet going out of Quebec in 1845. Lumber has to be cut a year ahead and the operations went on, at the market rate, the weakness of the 1840 regulations not yet plain. Their uniform dues on all sticks encouraged the rapid cutting of the biggest and best timber, but, equally devastating, they made large cuts obligatory, as a condition of license, regardless of the market. So the 1846 cut was heavy and poured out of the woods to be backed up with the tariff changes in Quebec, all up the rivers, right to the tributaries of the Ottawa. In 1847, of an almost record cut moved

to Quebec, only nineteen million of nearly forty-five million cubic feet were taken, and in 1848 only 17,500,000 of practically 39,500,000 cubic feet.

The whole Canadian economy shuddered as the timber industry, the carrying trade, the healthy wooden ship-building of Quebec City and the Maritimes, the milling industry, and the credit of the Canadian farmer were all struck at once. The United States, guarding her house against the rising storm, increased her duties on Canadian lumber in this year of near disaster (1846). The Canadian industry reeled, stunned by these blows, but it did not collapse. Those of the British who were only middlemen, trading, and shipping, were to go: a substantial, more characteristic, integrated industry,—felling, sawing, shipping, marketing—was to take their place.



HALF A CENTURY OF ECONOMIC STRUGGLE

1847-1897

MORE THAN a generation of almost uninterrupted development, with assurance of the British market, had closed. The industry was thrown back on itself, without protection in Britain or foreign or even home markets, in a country with few though developing means of transport for the opening of interior markets, and with a population of but one and a half million people, whose staple means of livelihood were now similarly threatened, and whose purchasing power (even had it been possible to arrange transport) was also atrophied. In this crisis, the Canadian lumberman displayed the initiative, courage and capacity for organization, characteristic of his own bush operations, and rallied to a fight for survival, in which, as in the century which has since elapsed, he learned that salvation would depend upon himself. The purely middleman and the "cut-by-nighter," the "come and go" man, taking out a few timbers here and there, in the off-season from other occupations, did not survive the strain. Those who rode through the rapids were the sturdiest and most responsible in fibre and determination.

They set about slashing several trails out of the swamp,—better organization of production at home, and production in quantity, and yet quality, to offset in the British market the advantages of the short shipment, low living and cost standards which the Baltic trade enjoyed. They pressed for some protected access to the British West Indies market, and, above all, determined to break through to the United States market, for whose increasing demands the New England forests were already proving inadequate.

A Parliamentary Committee of inquiry was first obtained, on whose report *the first comprehensive statute on the Canadian industry was passed in 1849*—"An Act for the Sale and Betterment of Timber upon the Public Lands,"—the basis, to this day, of regulations in Ontario and Quebec. This was further implemented by regulations in 1851. The principle of permanency in the tenure of limits was introduced, giving the holder *prior* claim to renewal of his own license. Applicants, with equal rights, were to be settled by lot, and new sales



by auction with an upset price. Power was assumed to waive the minimum annual cut requirement, if market conditions warranted, while dues were made optional upon the count of logs or their actual measurement,—a fairer basis, more conducive to good cutting than the previous flat rate per stick, regardless of size. A *ground rent* of 2 shillings 6d per square mile was introduced, to be doubled on the renewal of a license and to be increased each year, if the conditions of the license were not fulfilled. The old and disastrous "dog-eat-dog" policy, whereby operators had kept large gangs of powerful men on their limits to fight out any contest with a competitor, was scotched by making it an offence to resort to force in settlement of a dispute.

MARKETS OPEN OVERLAND

But recovery was to involve radical change in the direction and emphasis of the industry. While saw mills had developed throughout the east, they had been primarily for the local trade, the larger Canadian interests concentrating on the British market for export, and the British market calling for square timber, or, if sawn at all, for heavy "deals" (mostly three inches thick). In the United States, a thriving lumber industry had been turned in upon itself, in the loss of the British market through the Revolutionary War, the inauguration of the Imperial preferential tariffs and the Navigation Laws. With the development of settlement throughout the eastern seaboard, and south and westward, the United States industry naturally went into extensive sawing as well as timbering operations.

With the British market protected, the Canadian trade had shown little interest in any demand which might raise difficult problems in transport and marketing and which called for the investment of new funds in new techniques and equipment. Up until almost the opening of the eighteen thirties, there would appear to have been little or no Canadian timber or lumber moving into the United States. But within a few years (with the agitation against the duties recurrent in England, and shrewd men seeing the growth of the eastern states on the one hand and the cutting-out of the New England forests on the other), the Canadian operators, especially on the Upper St. Lawrence and in Eastern Ontario, were less unmindful of the possibilities of another market close to their stands.

THE CANALS OPEN NEW ROUTES

The enterprising eastern states were changing the face of transport, with their canals. The Champlain Canal in 1822 gave a continuous waterway through the Richelieu, from the St. Lawrence, down Lake Champlain to Albany and the Hudson. The Erie, more daring in 1825 linked the Hudson route via Albany with the populous western area at Tonawanda in 1825, and the Oswego feeder canal, built three years later, allowed the Upper St. Lawrence and Lake Ontario to tap the Erie at Syracuse. On the Canadian side, the Grenville Canal gave the Lower Ottawa, and the Galops, Long Sault, Soulanges and Lachine Canals gave the whole St. Lawrence front easy water access to the Richelieu and thence down the Champlain Canal to the heart of New York State. From the Ottawa to Lake Ontario, via the Rideau country, the British Government, largely for military strategy, had constructed the 126 mile Rideau Canal between 1827 and 1832, 'the *S. Pumper*' being the first boat to pass through on May 30th of the latter

year. This waterway, the enterprise of Perth and the Lanark country tapped with the seven mile canal from Perth-on-Tay to Lake Rideau¹ in 1834.

The Welland Canal was to give direct access to Lake Erie to the traffic that could reach Lake Ontario. So, in the decade and a half preceding the abrogation of the British preferences, the Ottawa and Trent Valleys were to be assured easy waterways to the populous eastern states, and down to the very heart of New York State, east, central and west.

To this market, their energies had already been turning as the Maine and Vermont operators found their stands thinning out before the increasing demand of the growing cities, and had clashed in the "Aroostook War" with the New Brunswick operators as they pushed into a debatable hinterland, whose boundaries were fixed by the Ashburton Treaty of 1842. This U.S.A. market wanted sawn lumber of all types and so induced another and different type of lumbering in which the Rideau country, with its many local mills, could particularly benefit. The Canal changed the method of transport, too, bringing in to the Ottawa and Rideau the slow-moving great blue barges, and later steamboats, some built at Smiths Falls, on to which the lumber could be loaded, brought down to Kingston, and there transferred to Lake schooners, many of them built on Garden Island off the city. The schooners crossed to Oswego, whence, generally by barge again, the loads went down the feeder canal to the Erie, shipping east to the hungry market that could not be satisfied and bearing back cargoes, mostly of coal, the two-way loading again cutting costs.²

The trade was getting well under way when the Upper and Lower Canada rebellions cut across its development but the phenomenal growth of the eastern United States was in full stride, and nowhere so conveniently could its people obtain the wood for which a thousand needs called. Continuously, the Trent, the Rideau, the Ottawa and Upper St. Lawrence trade sought the maintenance of this market and specialization became more evident,—one section of the industry emphasizing square timber for the British market, the other favouring logging and the operation of saw mills cutting for this American trade. The early operators on the Ottawa naturally clung to the square timber, the interests on the tributary rivers, already owning local mills, went in for lumber and the United States market.³

A new and strong factor now came into the Canadian, and, particularly, the Ottawa Valley picture, with the "discovery," as it were, of the stands of The Valley as a supply centre for the U.S.A. trade. This was the United States operator

¹Built by a private corporation, on government loan, it was not very successful and was later taken over by the Dominion. The subject of frequent and warm political debate, it is still known locally as "Haggart's Ditch," the Hon. John Haggart long being federal member for Lanark, and later Postmaster General of the Dominion.

²These three shifts sound cumbersome and costly, but local freight of and for the settlers was carried all along the way, keeping rates low. With labour cheap it was apparently profitable. (See *Kingston Herald*, and *Montreal Gazette*, May 14, 1836, quoted Innis and Lower, *Select Documents in Canadian Economic History*). Later, barges were built to take the loads directly down the Rideau and across Lake Ontario to Oswego.

³The *Montreal Gazette*, May 18, 1836, reporting the *Perth Courier*, recounts how the settlers in the Perth and Lanark country had been giving up square timber, and getting out saw logs for local cutting and shipping by the Canal to the U.S.A. Dr. Lower cites this change in *The North American Assault on the Canadian Forest*, p. 251.

and merchant in one, who, unlike most of the British importers and merchants in the square timber business in Quebec, was loath to rely upon the production of the Canadians, but moved over to Canada, purchasing rights and erecting mills therein, many of them to merge their lives forever in that of the Dominion. First of the new men in the new industry on the Chaudiere was A. H. Baldwin, who, in the early fifties, came from Maine, about the same time as O. H. Ingram and Levi Young, also destined to be powers on The River. From Lebanon in New Hampshire came the firm of Perley and Pattee, W. G. Perley, the senior partner being the father of Rt. Hon. Sir George Perley, who was to serve both Church and State with distinction, in a long and useful life. From New York State came Henry Franklin Bronson, to build on Victoria Island, his son, too, the Hon. Erskine Bronson to play a large part in the public life of Upper Canada. From Burlington, Vermont, in 1854, came Ezra Butler Eddy, whose name was to become synonymous with achievement in Canadian lumbering and related industries. From Ireland, in 1842, came William Mackey to work with G. W. Buchanan on the Chaudiere Slides, and, with Neil Robertson, to begin timbering in 1850, on the Madawaska, and later on the Amable du Fond.

And, sawing his way from Waterloo, Quebec, in the Eastern Townships of the Lower Province, with a small portable plant, in 1857 came the most picturesque and powerful of the timber men who were to mould much of the life of Eastern Canada in the next half century,—John Rudolphus Booth, the great "J.R." Travelling with him was another, a youngster, destined to play a large part in Canadian story, Robert Dollar. Dollar had come out from Scotland, just a short time before, a Scottish orphan boy, hiring to Hiram Robinson (of the Hawkesbury Lumber Company) at \$10 a month, as a chore boy, and later to W. C. Edwards. Then he himself records his next job. "Mr. Booth operated one lone machine all day and two other boys and I packed shingles for him." Dollar became a gang foreman on The River, then moved to the Huntsville area, whence he engaged in the Michigan trade and followed the U.S.A. tide to California, to become eventually head of one of the world's greatest shipping fleets—the Dollar Line.

There are vivid pictures¹ of some of the timber stands in the Upper Valley just at this period, when the sawn trade was organizing to follow through the assault of the timber makers. On the Petawawa, above Cedar Lake in 1853-4; "although the quality of the timber on the upper parts may be good, its size is perhaps not sufficiently large to permit the extension of lumbering speculations in so remote a region; but the remains of surveyor's stakes, and the marks and numbers in several instances discovered on the trees, are sufficient evidence that timber locations have been projected.

The lumber trade has already extended to Cedar Lake, and farms in connection with it have been established on that lake, and at Trout Lake, and large supplies of squared timber are annually brought down to the Ottawa. A settlement appears at one time to have been attempted at Lake Travers, where produce would have had a ready market, as the lumber trade extended to the interior, but it has since been abandoned."

¹Geological Reports—Upper Canada 1853-4.

On the Madawaska, "leaving Barry's Bay and the dense forests of pine by which it is surrounded, where hitherto, the timber has for the most part not been disturbed by the axe of the lumberman, further than to blaze a trail to guide the traveller from one water to another, the prevailing forest is pine throughout the length of the river."

"Although the greatest part of the timber on the main river, the Bonnechere area of The Ottawa, has long since disappeared—a large portion having been swept away by fire, independent of that removed by trade—there are still vast quantities brought down the tributaries annually, and made to descend to the Ottawa by the course of the Bonne-Chere. On our way up the stream, we repeatedly found it almost entirely blocked up with squared timber, sometimes for miles together."

Back on the Clyde, John Gillies was not greatly perturbed for he had kept two trails open. He had been one of the earliest of the local mill operators to reach out into extensive timbering as well, and had not only sawn for the local trade, but for shipment down the Rideau Canal, and had continued rafting for the English market. These years of uncertainty for many an operator and firm, established in the English market, were years of enlarging enterprise for him as he pushed his operations out further on the Mississippi, and diversified his sawn lumber trade, with the growing grist and woollen mill custom. His interests thus fed one another and he was in a position to benefit from any general development in the economic situation, and to do business with his competitors in any line of his own supplies. Developments were further to favour a firm, located like his, on streams, feeding either the square timber and mills of the Ottawa, or the sawn lumber route via the canals and waterways to the United States.

RECIPROCITY WITH THE U.S.A.—1854-1866

The heavy movement of U.S.A. capital and operators into the Ottawa synchronized with a like movement into the Erie and southwestern Ontario areas, and their influence was undoubtedly large in the next significant development in the lumber story of the Canadas, the execution of the Reciprocity Treaty of 1854 with the United States. Under its terms each country granted free entry to the other of its natural products and raw materials, including board and scantlings and sawn but not dressed lumber.

The natural effect of the treaty was a marked increase in exports to the United States, which, in the next three years, for the first time in the Canadian story, exceeded those to Great Britain. This was definitely Ottawa Valley trade in sawn lumber for the timber trade, moving through Quebec, was still primarily directed to the British market, which had called again on Canada for increased imports both of square timber and agricultural products to meet its needs in the Crimean War (1853-6) and the Indian Mutiny (1857-8).

Railway talk and railway building (much of it on borrowed and imported capital), and the needs of communities, springing up along the railway lines, also gave a fillip to the whole industry—square and sawn—and, with more money in the hands of the farmers and merchants, created a secondary demand from them as well. But both demands were really temporary. Peace brought the inevitable collapse from war's costs and exertions, and the first hectic speculative phase of

construction passed. As has not infrequently happened in Canada's annals, crop failure synchronized with economic recession and served to deepen the depression groove, through 1857 and 1858.

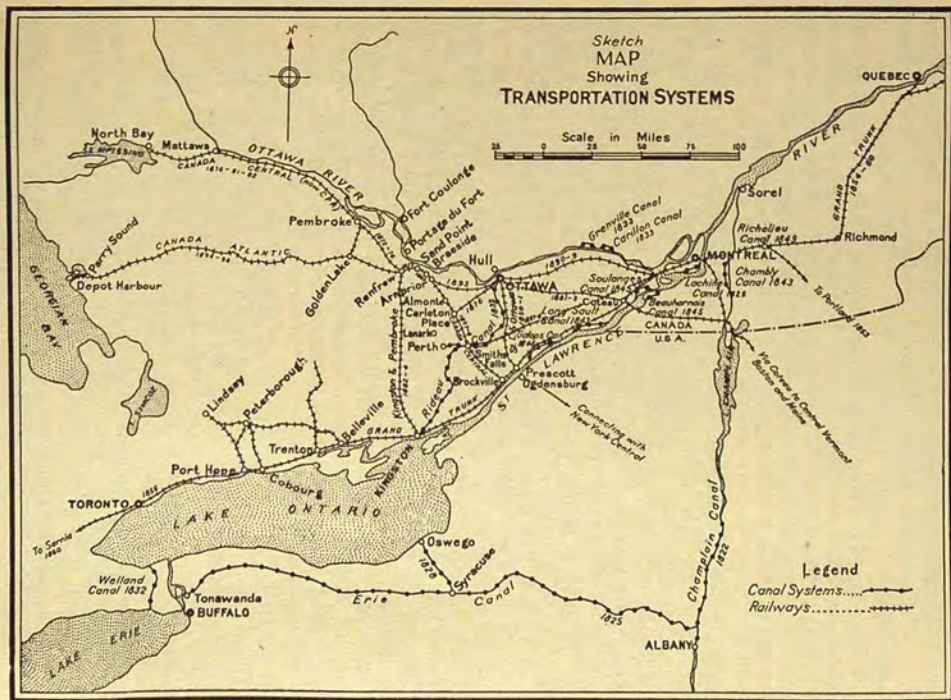
Having stayed with the U.S.A. market, the Ottawa Valley escaped a great part of this setback. Besides a new dignity had come to the small lumbering centre of Bytown, which, in 1854, had renamed itself 'Ottawa,' as the centre of the great Valley, drained by The River and as a memorial to the gallant tribe whose ancient hunting ground it had been. In 1858, Her Majesty Queen Victoria had settled the long rivalry of claims among York, Kingston, Montreal and Quebec, by selecting Ottawa, (contemptuously dubbed "Slabtown" by these rivals because of its mills) as the capital of the united province of Canada—a suggestion offered by Durham nearly twenty years before. This, of itself, created a boom in land and building, carried to its crest with the letting of contracts for Parliament Buildings of substantial design and extent. Ambition begat ambition and responsible interests, both native and from the United States, sought to harness more and more of the Chaudiere's power, while the growth of population and prosperity created an increasingly diversified demand for wood products, and for goods, subsidiary to forest and mill operations.

Shingle mills, sash and door factories, manufactories of wooden household and farm utensils, of matches, baskets and boxes, of barrels, chairs and furniture, sprang into life throughout Ontario, to meet the building of new communities, or the improvements of existing early homes by a generation of more prosperous farmers. Waggons and sleighs, axes, tools, scythe, saw, and edge tools, iron and foundry products sustained growing plants and distributing trades wherever the lumber camps pushed or the still increasing mills found good seats.

But, as always with a trade as speculative as lumber, and, like the Canadian, fundamentally dependent on outside demands, clouds were gathering on distant horizons even when near valleys were bright with promise. The industry had revived on the United States trade, and that of the Ottawa had adapted itself to its demands for sawn lumber. The Civil War, breaking in the U.S.A. in 1861, not only slowed up the United States demand, but adversely affected the British in the dislocation of the English textile trade, dependent on U.S. cotton. For nearly three years, the whole industry shook in the repercussions which thus struck both the square and newer sawn market, and echoed through a backed-up demand for agricultural produce, and the immature young supplementary industries which the expansion had encouraged from 1857 onwards.

Again war's destruction was to be the trade's resuscitation. Shipping losses had to be replaced, and the northern states also sought safer carriage by British and Canadian bottoms, while, as the war dragged on, the demand for Canadian supplies soared, and the increased purchases of the belligerents from Britain revived overseas demand as well.

This new extensive sweep into the United States market was facilitated by the railways, in which there had been much speculation and considerable building



New transport routes changed the channels of trade and the changing trade opened still other rail- and water-ways.

(Acknowledgment is recorded for the basic idea of this map to Dr. Lower's comprehensive treatment of the whole subject in "The North American Assault on the Canadian Forest").

in Upper and Lower Canada from 1834 to 1860,¹ in which latter year construction on the Grand Trunk had been halted. And, as in the development of the canal system, a generation earlier, the Ottawa trade had been alert to the enlarged outlet they could create into the United States market. The tremendous transference of U.S.A. personnel and capital to the Chaudiere also afforded an open channel of communication between Canadian production and United States purchasing power.

The canny Ottawa Valley interests had induced much of this improved transportation, as well as benefitted by it. They had conceived the ambitious project of linking Ottawa to the St. Lawrence by a railway of that name, running to Prescott, thence connecting by boat with Ogdensburg, and by rail to Boston and the Atlantic seaboard. Boston capital was interested and the line completed in 1851-2.

To get the Rideau, Mississippi, Bonnechere and Madawaska production into close touch with the New York market, the project of the Canada Central Railway² was launched five years later, building from Brockville as far as Almonte, beyond Carleton Place, in 1858, with a branch thrown out to Perth. It was planned through to Pembroke but due to the upset conditions in the sixties, carried only as far as Sand Point in 1869. By 1872 the line was carried to Renfrew; Pembroke succeeded in getting the extension there, whence it was to push on to Callander from 1876 to 1882. Lanark and Renfrew counties spent \$800,000 as subsidy to the line. The Grand Trunk had been completed from Portland to Montreal in 1853 and thus traffic could come down to the St. Lawrence with two outlets to the Atlantic Coast. These developments, with the constant improvement of the St. Lawrence channel and the steady demand for sawn lumber, meant that Montreal was rapidly replacing Quebec as the centre of export trade, even for Britain, and the world's tradeways were brought that much closer to the Ottawa's outlets. Population and growth were moving ever westward in the United States, and the Georgian Bay and Lake Huron country were energetically developing the Michigan and Chicago market, spurring the Ottawa trade to greater cultivation of the southwestern market via Oswego and the Erie Canal as far west as Tonawanda and Buffalo.

And the railway lines brought yet more operators into the upper country on the Ontario side,—among them Alexander Barnet of Renfrew and Thomas Mackie of Pembroke, shipping by rail for rafting at Papineauville: Duncan Graham and George B. Ferguson of Renfrew, cutting in the North Bay and T.N.O. country, and railing for rafting at Collins Bay, and R. H. Klock of Almyer, also cutting for shipment to Papineauville.

Trade gathered momentum and production threatened to over-reach itself. So much lumber was rushed to the U.S.A. that, at one time, prices there dropped by half. Questions arose in the minds of the operators themselves. Those who

¹The first steam railway built in Canada was the 16 mile link from Laprairie to St. John's, Que., of the Champlain-St. Lawrence Railway, incorporated in 1832 and opened in 1836. The rails were of wood, with flat iron strips spiked on top of them. Though 17 railways were chartered in Upper Canada alone, in the next 15 years, only 66 miles were built. From 1850 to 1860, over 11,000 miles were constructed. Canada Year Book 1941—p. 545-6.

²Sold to the C.P.R. in 1881.

had weltered through the bad years, from 1846 to 1850, after abrogation of the British preferences, became fearful of a similar tendency now to repeat the trade's earlier mistake and rely upon one line, sawn lumber, as they had previously upon square timber. Freight transportation right to Montreal brought the British market closer, and there was renewed interest in meeting its needs,—deals and square timber.

Public opinion began to worry over the stripping of the Canadian forests for shipment to U.S.A. needs, with so much of the profit payable in U.S.A. centres, even though the operators might be located in Canada and carrying full citizen responsibilities therein. Another factor of perhaps greater importance was the growth of strong Canadian firms, not only in lumbering but in related auxiliary manufacturing. Several of the United States operators had settled in Canada, especially in Ottawa, and had become part and parcel of the country's life. Many of the native timber makers had also become substantial firms, largely controlled within a family group, carrying on bush, timber, sawing and export business as inclusive and continuous enterprises. At the same time, the united Province's expanding needs demanded more public revenue, and the tariff was being examined as a source of income rather than merely as "protection." All these factors combined to bring about the termination of the Reciprocity Treaty in 1866. Both countries tightened their tariffs. A duty of 20% was placed on Canadian imports to the United States and Canada placed an export duty of \$1 per M feet on pine saw-logs with the dual purpose of reviving the square timber trade and encouraging sawing and finishing of lumbering in Canada.

Cancellation of the Treaty had required a year's notice and, in that period, incredible quantities of raw materials were rushed into the United States, the payment for which naturally carried the Canadian business forward well into the next year. The Civil War had ended and reconstruction called for lumber in such volume as to defy the tariff. With the throwing open of the West, the greatest trek in U.S.A. history began, sustaining this demand.

THE SECOND GILLIES LIMIT, 1862

Through these years of change in the trade, John Gillies had maintained his steady pace of dual operations,—square timber for the Quebec trade (down the Clyde to the Mississippi, out the Mississippi to the Ottawa, down the Ottawa to Quebec, or from the Trent to the St. Lawrence and Quebec), and sawn lumber, not only for the local trade, but, pushing further, into the United States markets, hauling to Oliver's Ferry (now Rideau Ferry) on the Rideau and shipping thence to Kingston and the Oswego trade.

His business had grown, and, working with him, he had now a young man of Lanark, from the same Scots settlement as he himself had come,—Peter McLaren, born in the village in 1831, and at the age of thirteen, leaving school for the mill and bush. John Gillies saw his mettle and early made him his foreman, working out from the Palmerston Depot. In 1853, when McLaren was but 22 years of age, Gillies, in the informal way of the day, told him they would work henceforth as partners, and such was the basis of an agreement on which the Gillies and McLaren Company was founded, and on which, a generation later, the adjustment of hundreds of thousands of dollars turned.

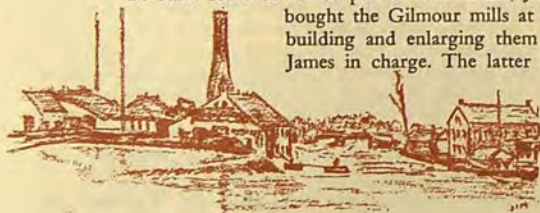
The Clyde was timbering out of the fine white pines; the Mississippi cuts were further in; the sawn market was more certain than the square. It was time

to explore further fields and foresight indicated two, pre-eminently. The Canada Central Railway out of Brockville had crawled as far as Almonte by 1859, and was projected to go on to Arnprior for the Madawaska country and trade. That area was comparatively untapped for the river's turbulent waters had defied running until 1835. From Almonte the rails would shove on to Renfrew for the Bonnechere, and connecting at Sand Point with the Union Forwarding Company's steamers for river haulage to Portage du Fort for the Coulouge, and Pembroke for the Petawawa. Ottawa capital, concerned at this probable by-passing of the growing town, was pressing for a line from Carleton Place to the City. Carleton Place on the Mississippi and the Arnprior country at Chats Lake and the Madawaska were therefore obvious points of future location to any shrewd inland observer, who hoped to compete with the tide of powerful capital moving up the Ottawa itself. Both areas offered good routes to good tributary rivers and stands, both offered operating bases for floating timbers, or logs further down for the timber or saw log trade, or good milling sites and shipping points for the Ottawa, Montreal or St. Lawrence and Lake Ontario outlets to the U.S.A. by rail, and barge and schooner.

John Gillies may not have glimpsed this panorama opening all the way to the upper stretches of the Ottawa. He could not but sense its whole pulsing promise while his business acumen showed him that his own immediate country was "timbering out" for any large emprise.

Again, John Gillies had to choose. He had built his new home in 1861 on the Clyde, overlooking his mills, a home that today still speaks of comfortable living and the pride of achievement of a young man in a new land. Was he to venture further, risk this and all his twenty years had brought—home and trade and mills, a position of respect and security in this countryside where his father had first broken the untrodden soil of the centuries? Two of his boys were now at manhood estate and working with him—James and William—one daughter was grown; four younger boys and two small girls played about the new house and pleasant Clyde bank. As his father before him had done two generations now gone, so did John Gillies—he cast his die not for present living but for future hopes, and, though already clouds were gathering in the Canadian markets, bought the 300 square miles of the Gilmour limits on the Mississippi in 1862. Over the greater part of six townships these limits spread—Palmerston, Barrie, Angelsea, Clarendon, Olden and Oso, including the site of today's well known resort, Mazinaw Lake. Nothing could be more indicative of the growth of his business in a score of years than his ability to purchase this holding from the powerful Scottish firm, operating from Glasgow to the Gulf of Mexico and from the Miramichi to the Upper Gatineau.

To serve some of the output of these limits, John Gillies, four years later, bought the Gilmour mills at Carleton Place, entirely rebuilding and enlarging them and placing his oldest son James in charge. The latter married and established his home there in January 1867. John Gillies did not leave Gillies' Mills on the Clyde until 1871 and his next venture into new forests and waters in The Valley.





CONFEDERATION AND TRADE, 1867-1872

AS JOHN GILLIES and his young partner, Peter McLaren, were making their grave decision, confederation of the Canadian provinces was moving to consummation with hopes greater than its fears, and the inspiring project of "a West of our own." Under the British North America Act, control of the forests, as a natural resource, passed to the provinces and the industry found itself faced with even more complicated problems in operations, particularly the firms on the Ottawa, with limits and waters in both provinces. More difficult, however, was the anomaly inherent in the situation. Canadian lumber depends on its export markets; these were henceforth, as in the past, the responsibility of the Dominion power, while factors, so conditioning operations and costs, as leases, dues, and cutting rested with divers and often competing provincial authorities. The problems of marketing and of transport were to bring this interplay of interests and authority into evidence increasingly through the years, and to the present day, but for the next five years, the trade with Europe, the U.S.A. and at home was to be so brisk that many of the shoals were to be hidden in the rushing waters of a present, if short-lived, prosperity. In Europe, war again called out for the New World's timber, France and Prussia both buying from Britain and the United States, and the former (in spite of heavy reliance on the nearby Baltic sources) placing sufficient orders in Canada to cause a definite increase in our exports over the next few years.

The Ottawa Valley, with its criss-cross of railways, operating or nearing completion, was bound to benefit. The *Renfrew Mercury*, July 7, 1871, reported thirteen rafts of 1173 cribs (containing 1,806,950 cubic feet of timber) as running through the Chaudiere slide at Ottawa, in four days at the end of June. Ottawa City's seven mills produced lumber valued at \$1,564,000 with nearly 1200 men working, and the census divisions of Prescott, Lanark and Renfrew on the Ontario side, and of Ottawa on the Quebec side, were in the first rank of all census divisions in Canada, in one or other aspect of timber and lumber production.¹ By 1874, the cut in the Valley was 25,000,000 cubic feet of square timber and 423,750,000 board feet B.M. of sawn lumber and deals.² (For the peak of the square timber trade see p. 136).

¹Lower—The North American Assault on the Canadian Forest, p. 169.

²Rowland Craig—The Lumber Trade in The Ottawa—*The Citizen*, Aug. 16, 1926.

THE THIRD GILLIES LIMIT AND MILL: BRAESIDE 1873

Men, born and bred in The Valley in those days, were said to have pine sap in their blood, and the blood of John Gillies and his four sons was bound to beat the faster as the eyes of the new Dominion turned to her pineries. The pine stands of the Mississippi were becoming less attractive, less promising than those more remote ridges from which great timbers were moving into the Ottawa from the northern Quebec shore. Besides there was the Railway, the Central Canada, pushing into the Upper Ottawa. Now it was to go beyond Sand Point to Renfrew, further to the Mattawa and North Bay, and to Callander in the Nipissing country, from which point the projected Canadian Pacific was authorized to tie it into its lines; and these, by the articles of Confederation, were to push on to the Pacific Coast. Between the Bonnechere and the Madawaska, cutting was planned right across to Georgian Bay, and out of this rich pine country, yet another new railway line was dimly envisaged, cutting from Ottawa by Coteau along and across the St. Lawrence, into the hungry, lucrative Vermont and New York markets.¹

John Gillies' family had come on. James, the oldest was now over thirty, married with a young family, and for six years had been manager of the Carleton Place mill. William, John, David and George were all over twenty, Alexander almost ready, in his late teens, to learn the business in shanty or mill. John Gillies himself was past sixty, hale and vigorous, but readier for the consolidation of his own interests and their redirection by his sons, than for new ventures of his own which he might not live to bring to fruition. But his active mind was scouting new supply sources and strategic sites for berths and mills, where he could establish his four sons in hope of adequate resources for future cutting. In 1868, the two oldest, James and John, had started and operated an additional shingle mill at Arklan, near Carleton Place, but, ambitious and eager, and with heavy responsibilities in the main mill, they wanted to know more about this upper country, the Madawaska and the Coulonge, from which these fine timbers came floating down The River. From the Coulonge to Portage du Fort, the Usbornes were bringing timber, and at Braeside, halfway between Sand Point and Arnprior, they were rumoured to be locating a mill. And at Arnprior, in "the McNab" country, the powerful McLachlin interests were operating the largest sawmills outside the City of Ottawa. So John Gillies, the younger, went to Braeside "to look things over."

On this Upper Ottawa there was romance and colour where the foaming River's waters cascaded in the "wild cat" leaps of The Chats before losing them-

¹These were the ingeniously connected lines which the active brain of J. R. Booth was to devise and bring into being in the ensuing few years until from Depot Harbour on the Georgian Bay to St. John's, Que., and across into New York and Vermont a patiently linked route was to carry the timber and lumber of the back country to the continent's heaviest market. The lines were projected, from 1870-1 onwards, with the first grant in 1872 to build the Coteau and Province line and bridge from Coteau Landing across the St. Lawrence to St. John's. In 1879 authority was obtained to amalgamate this with the Montreal and City of Ottawa Junction Railway, under the name of the Canada Atlantic, which between 1881 and 1883 was built from Coteau to Ottawa. Eight years later, 1891, this road was authorized to amalgamate with what was to be the Upper Country line, run through in 1893 from Ottawa to Golden Lake, as the first leg of the "Ottawa, Arnprior and Parry Sound." This line then connected with Pembroke by the purchase of the Pembroke Southern from Golden Lake to Pembroke in 1891. From 1894 to 1898 the "O.A. & P.S." was run through to Depot Harbour and the amalgamation with the Canada Atlantic consummated in 1899. In 1903, the Grand Trunk arranged to operate this line and in 1914 took it over by purchase.

selves in Lake Deschenes' broad expanse. To this district in almost the same years (1823) as those in which the Scots from Stirling and the Gillies were making their way along the Tay and Clyde, had come Archibald McNab, last Laird of Arnprior. Penniless, he had fled his debtors via Dundee and London to Quebec, whence he made his way to the Glengarry settlement and, from there, getting in touch with the government of Upper Canada, offered to locate a similar settlement in a township of 81,000 acres then under survey, along the Ottawa, adjoining Fitzroy. Concluding a contract, he sent to Scotland, whence on April 19th, 1825, 84 men, women and children embarked at Greenock for Montreal, which they reached on May 27th, to be met by "the Chief and his piper," where Daniel McLachlin, a Scot, earlier come to The Valley, contracted to bring their baggage by sled and oxcart to Hawkesbury, the settlers making their way on foot that far. From Hawkesbury to Hull they came by 'S.S. Union,' and thence, one version says, by foot to Chats Lake, whence they were ferried across. Another claim says they came by canoe from Hull to the Chats Falls, whence they walked on. In either case, twenty-eight days out from Montreal, they arrived at a site near the wharf, at the foot of what is now John Street, in the town of Arnprior, and the Township of McNab, where the Chief had already erected his own log seat—Kinnell Lodge. The settlers spread up the Madawaska country out from Arnprior into the Flat Rapid and Horton area, some building their shanties along a stream, that, sick for home, they named the Dochert. In a strange country they accepted terms from the Chief, which he had no authority to impose, feudal dues upon each bushel of wheat, corn or oats for every acre cleared, to him and his heirs forever. Further, the Chief claimed all timber growing in the township.

Through long years, the inequitable struggle went on between the remote, unknown settlers and the debonair Chief, known in the lobbies and homes of Kingston, York, Montreal and Quebec. In Montreal, in 1831, the McNab met distant relatives, George and Andrew Buchanan, to whom he offered a free mill site and timber at nominal fees, to locate in his settlement, and, there, naming the mill seat, Arnprior, for their distant home, they erected dam and bridge, saw and grist mill, store and dwelling house in 1833. But the Buchanans, too, found the Chief¹ difficult and, quarreling with him sold the property in 1834 to Gould, Simpson and Mittelberger, an old country firm. The Buchanans attempted to locate further on at Waba where Andrew Buchanan died in 1835, and the next spring George Buchanan failed, the entire firm passing to Gould, Simpson and Mittelberger, who, in 1839, abandoned the townsite and assigned the mills to Middleton's of Liverpool. For a decade they lay idle, until, in 1851, Daniel McLachlin, who, a quarter century earlier had transported the settlers the first lap on their way, purchased the water power and 400 acres, which he surveyed as a townsite, selling some lots, giving away others, and equipping the small sawmill with one circular saw, only to have it carried away by a freshet. He was then living in Ottawa, and engaged in the timber trade and milling. He did not move to Arnprior until 1853. For several years he timbered but, with the extension of the Canada Central Railway up The Valley, he built first one and then a second large water mill (the latter on the site of the first Buchanan mill) having the cut of the first one ready to ship out with the opening of rail transport in 1866-7. He had retired from business in 1869, entrusting to his three eldest sons,—John H., Daniel and Hugh F.,—an extensive and flourishing business, to

¹The condition of the settlers was brought to Lord Durham's attention in 1840. In 1843, the Chief was found guilty at the spring assizes at Perth of being a "public nuisance," and, in a suit for defamation against Francis Hincks, ignominiously won £5 damages. Discredited, he later left The Valley and died in Lanion near Boulogne, France, in 1860.

which in 1871, a steam mill was added at Chats Lake, and later a fourth and even larger mill was erected.¹ Arnprior had become the greatest centre, outside the cities, handling lumber in the East.

On the Quebec side of the River, further up, had come a family of venerable standing in the English and Quebec trade, the Usbornes, represented by George William Usborne,² younger brother of that Henry who is regarded as the first of the English merchants to have located in Quebec in 1801. Upon reverses in the English trade, the Usbornes purchased limits on the Coulonge and built a mill at Portage du Fort. Henry Usborne returned to England but George William had taken over the Portage business. (He had married Mary Seton Ogden, daughter of Gouverneur Ogden of New York, and their remains rest today in the crypt of the Anglican Church which he and his employees built at Portage). Rev. Henry Usborne, rector of Bittern Parish, near Southampton, England, became head of the Usborne interests, which had suffered considerably in Canada through the loss of three laden timber ships at sea. George William Usborne was looking, like all the lumbermen, for quick and economical routes to the U.S.A. market. From Portage, the Union Forwarding Company's steamers ran directly to Sand Point, to which the Canada Central Railway had been extended in 1869, thus giving direct rail shipment from the Ontario shore to both Brockville and Ottawa.

Near Sand Point, was a small settlement, *Braeside*, laid out in 1822, by Alexander McDonnell³ of the former village. It was two and a half miles from the Point, three miles from Arnprior, a hill site on rock, but with a fine mill-pond. This site—"*Blocks A B C and D Braeside*"—was purchased from Alexander McDonnell and his wife Janet by the Rev. Henry Usborne, apparently still the principal of the firm, on November 6th, 1869, and the deed registered the next day, but the property must actually have been acquired some time earlier in the year, for the date plate on the old mill is 1869. Mr. Usborne and his son John moved their mill interests here but operated out of Braeside for two years only, for the County Registry office records that on December 14th, 1871, the property was sold by the Rev. Henry Usborne to the Hon. Asa Belknap Foster, member of the first Senate of Canada, and whose interest in the site and Valley would be obvious—he was managing director of the Brockville and Ottawa Railway, Vice-President and General Manager of the Canada Central Railway, then but recently run through to Sand Point.

Again, an hour of decision had come for John Gillies, again the scales must tip—for quietness and security, or for risk and adventure in a bigger way, and, this time, the destinies of six sons⁴ were in his hands, as well. The extent of the

¹ On the death of the two older sons, the Company was re-organized in 1876 as McLachlin Brothers, including "Mr. H.F." and the youngest son, Claude. Upon Mr. Claude McLachlin's death in 1904 the firm became a limited company, with Mr. H. F. McLachlin, president, and his son, Daniel, vice-president. The former died in 1912 and the latter lives retired at Arnprior.

² It is interesting that George William Usborne was the grandfather of Admiral Usborne, R.N., and of Commodore H. E. Reid of the Atlantic Command, R.C.N.

³ Macdonnell was a Scot who had come first to Perth about 1817 but later became interested in the Madawaska and Bonaventure country.

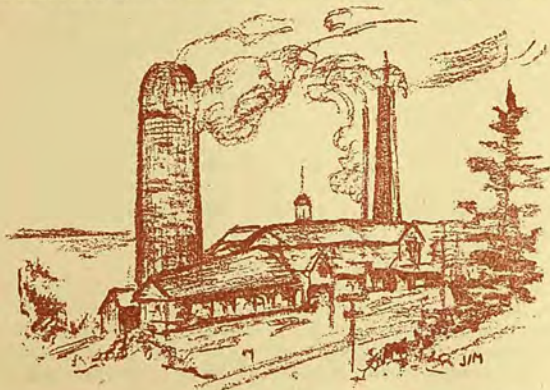
⁴ Four sons were established in the lumber business. A fifth, George, then 22, was assisted in establishing a machine works at Gananoque which he operated successfully and where he made all the drop forgings for the McLaughlin Carriage Works and later purchased and enlarged the Swansea Bolt and Forging Co. near Toronto. Both plants were later sold to the Steel Company of Canada by whom they are still operated. The sixth son, Alexander, was later set up in a machine and foundry business in Carleton Place—Gillies, Beyer and Co. under which name it carried on, after his untimely death by drowning in 1878 at the age of 22. This firm built the steam power plant for the Braeside mill when it was rebuilt in 1893.

hazard is clear in the steps involved in taking it, for John Gillies sold first the most loved and cherished of his holdings— the grist mill and home at Gillies' Mills, May 18th, 1871, to John Herron,¹ to be henceforth known as Herron's Mills, and to his partner, Peter McLaren, he sold his Carleton Place and Mississippi holdings in 1873. The proceeds he shared, in part, with the four older sons, now all come of age—James thirty-three, William thirty-two, John Jr. twenty-seven and David twenty-four. To them he advanced what he deemed a fair share of their inheritance, with which to finance the purchase of the Braeside Mill, yards and village holdings. "Blocks A-B-C-D Braeside," the registry office records being sold by "The Hon. Asa B. Foster and his wife to James Gillies, John Gillies Jr., David Gillies and William Gillies on February 22nd, 1873." The purchase included 250 miles of the heavily timbered Coulonge Usborne limits.

The New Lanark family, in its third generation, and half a century after migration from Scotland, had reached out of the Lanark country for the first time into another province, Quebec, on to a new, strange, turbulent river—the Coulonge—bearing some of the richest pineries of the great River itself.

All the tributaries of the Ottawa, above The Chats, were also available as possible sources of supply to the four young men who carried forward the Gillies name in their newly formed firm of *Gillies Brothers*, and in which the procedure followed to this day was set—the oldest member took the presidency, and sales, mills and woods operations were divided among him and the junior partners. James, the president, remained at Carleton Place, still associated with the many interests that his father retained, and handling, from there, the finances, sales and general policy of the firm. John Gillies took over the management of the mill and yards at Braeside, and William and David took charge of logging, including log and timber making.

For thirty-six years, this original partnership of the four brothers was to continue unbroken, until the death of James Gillies in 1909—a record unique in Canadian lumbering annals. In all those years, however, no sterner testing was to come than faced them in their first months and years of operations.



¹ The East half of his original purchase, Lot 9, remained in his name, until December 13th, 1887, when it was sold by John Gillies the second as administrator to William Rodgers.

THE GREAT DEPRESSION 1873-8

The feverish prosperity of the timber and lumber trade from 1866 onwards had carried it on its own momentum beyond the onset of an almost devastating depression. Peace came in Europe, and a slackening in the pace of western growth of the United States, which in 1862, imposed a specific duty of two dollars per thousand feet on lumber, practically closing the market to any but the Canadian quality product. Within twelve months, the United States placed saw logs on the free list, adding disaster for Canadian mills, and uneasiness at the stripping of our forests, to the growing sense of fear in Canada. The world rolled into widespread economic tension, and 1873 to 1878 the Canadian lumber business describes as "the great depression" in which, in less than five years, exports dropped by more than half. Failure followed failure from Quebec to the smaller tributary streams, and only those firms came through whose principals stayed close to their limits and their mills and cut expenses to the very bone. Powerful firms rather than throw their cut on to the already glutted market "netted" their rafts of square timber in the Coves at Quebec.¹

Dr. O. D. Skelton² describes these years in bold strokes:

"Over speculation brought its speedy nemesis. The crash was worst in the United States; in September, 1873, there came a series of colossal failures of banks heavily involved with expanding railroads; bankruptcy succeeded bankruptcy—five thousand the first year, ten thousand in 1878; industrial depression followed financial panic; demand shrivelled far below the output of new establishments into which domestic and foreign capital had been poured; factories closed by the thousands, and workmen were thrown out of employment literally by the million. Germany entered the worst crisis of its history hitherto, and in Austria the crash on the Bourse preceded the United States panic. France, with its sounder credit basis, suffered less, but Great Britain experienced a paralysing reaction after the years of fevered activity."

"Canada could not escape the maelstrom. Her shipping ceased to find employment in the foreign carrying trade, and returned to cut into the home coasting trade or lie idle at the wharves of Quebec or Halifax; the lumber industry, second only in magnitude to the agricultural industry, and especially important in the ready money it circulated and the wide employment it afforded, stimulated as it had been into rapid expansion by high prices and big profits, found the eastern United States market suddenly fall to little with the general cessation of building, and found that little perforce shared with increasingly aggressive competitors from Michigan. The malady spread, and soon production, trade, finance, exports and imports all approached a dead level. Then began six years of stagnation and hope deferred, making the heart sick."

The Gillies firm's records show a dogged determination, strict attendance on duty, and a readiness to sacrifice as the four young partners of Gillies Brothers, with a new clientele and in new country, drove the rapids. One account was played against another as obligations were met through the nearest bank at Perth, to which their customers 'paper' went for discount, and cash came back in

¹ That is they piled the timbers many tiers deep thus submerging them below water, and preserving them from sun-check and decay as they waited another season for selling.

² Canada and Its Provinces—Vol. 9-I-137.

actual collateral—"4's and 5's" to pay their men. Names of power and presumed strength are shown, tossing the tumbling balls of profit and loss, one against the other. E. B. Eddy has had for a year over \$5,000 worth of escaped logs and timber from the Gillies' drive; the firm ask him to pay in to their bank at once to meet the orders they are sending there; the saw logs are rated at \$1.25, the boom timbers \$1.50 each. Great overseas and United States importing firms are meeting only part of their drafts to the young company, for example, sending "gold draft for \$. . ." and wanting "a renewal for balance" of \$1,000. Rafts and timber sold, exceeding \$30,000 to Quebec firms, are covered by promissory notes. Competition is bitter: "three months is our usual terms" but if ordered now,—in February 1875—"we would give four months without interest." To their agents in New York State they had shipped, in 1874, 1,146,068 ft., price \$10.50 per M for 12 inch Mill Run White Pine at the mill,—the best net that the sales will bring—which raises doubt as to selling any more on commission in 1875, with interest on one 30 days' draft protested at 13% and 14%! Every day, the office writes, far and wide, sending estimates and prices, seeking trade, inviting buyers to the new mill and yards—to Albany firms galore, to Boston, to Brockville (offering good common plank for sidewalks 2x12x16 and 2x10x13 and x16 for \$12.00 per M. F.O.B. Brockville, freight was \$1.15 per M), to Gloversville, to Ogdensburg, to Calumet, to Portage du Fort and Gananoque (bidding on sidewalks), West Troy; shipping red pine plank to the Canada Central Railway, to whom timber had always been sold; to Oswego; to the Brockville and Ottawa Railway, then building wharfage; to Renfrew and to Carillon.

Men are quarrelling on the booms, and the firm is seeking a contract with the Booming Association to take their logs out. From far and near, teamsters, bushmen, rivermen and mill hands are writing in for work, and, except for the best of teamsters, there is little hope—camps will be few and it is uncertain whether the mill will run. The best teamsters are getting \$1.00 per day with teams. Old metal is salvaged and shipped to the foundries, and always there are the payments to be made on the mill purchase, and insurance. In 1875, the mill closes "nor have we the slightest idea when we will start again," and the partners agree to withdraw only \$50 per month each from all income and earnings of the yards, as minimum living expenses for themselves and their families.

George Gillies, the fifth brother, is at the same time getting his firm under way at Gananoque, and the firm ships lumber to Brockville to be dressed and forwarded on to him, and all is duly billed and paid, for business could only be business to survive.

And then the fire strikes the limits, two hundred million feet of fine standing white pine on sixty square miles of the 250 miles of the new limits, is burned by a malicious and ignorant "stopping-place" owner, named Remon, in the hope of forcing the owners to operate in salvaging the burnt timber. He was overheard saying "a penny will buy a handful of matches and they will be working next fall." He was reported to have fired the scoops of an old camp in dry and hazardous weather on the East Branch Coulonge, six miles above the present Osborne Depot. The fire ran for miles in every direction, through the magnificent stands on the Coulonge River, the John Bull and Pickanock Creeks. (For the reputation of the firm it is perhaps as well that the culprit, pursued by William Gillies, fled the country and was never again seen in the district).

With the mills not operating, there was only square timber to provide running expenses, and the firm planned to take out several large rafts, carefully selected, and undamaged by the worm. Prices asked for this timber, flattened

12 inches and upwards, was 7 cents per running foot, at the Coulonge, 12 cents at the boom at Ottawa; for square timber, 11½ cents per foot delivered at Ottawa. There were few takers, buyers offering 10 cents per cubic foot or \$8.33 per M. feet.

Not until October do the rafts get down to Quebec in 1875, when "our Mr. William," the firm's books record, sold two rafts of 242,607 cubic feet for \$43,139.94. There are 3917 sticks of white pine in them, 110 of small pine, 475 of red pine, one piece of ash 65 feet long, selling for \$9.20. But the trade is flat—only \$5,000 is paid in cash, the balance in five equal promissory notes, bearing interest at 7% payable only from April 30th to June 4th of the next year, 1876, which would be eighteen months after some of the timber had been felled—and shanty costs paid. Boomage, slidage, and Crown dues, costs incurred in selling the timber, amounted to \$4,392.80—the firm had \$607.20 in cash on its deal until the summer of the next year.

The next year, five rafts were marketed in Quebec, by Mr. William—two in September—one of 2944 pieces of square white timber and sixteen waney pieces, 140,767 feet, at 14½ cents a foot to Allan Gilmour and Company of Quebec for \$22,291.48; one of 2244 squares, two waneys, 465 red pine, one tamarac—115,186 feet at 14 cents to Burstall and Company for \$16,212.38, and three in November to Allan Gilmour and Company. These three rafts had 8681 pieces of white pine, 41 waney sticks, 596 small white pine, 182 pine and two ash floats—425,508 feet at 13 cents—the whole going for \$62,473. Again the cash payments were the lesser part of the purchase, notes running until June 1877. Boom charges were \$1257, and Mr. William, selling \$85,000 worth of timber, had to borrow eight dollars in Quebec! Such were some of the exigencies of the worst years the trade was to know for six decades.

For four years the mills, with their thirteen million foot annual capacity, lay idle at Braeside, and the picture there was typical of Canada, as a whole. The young men in the young company came through, by their own doggedness and with the backing of John Gillies. But while their father backed them, it was just that: he did not let them lean on him. Time and again he advanced loans when trade was lowest,—but at 5% interest, the extent of his paternal indulgence being a rate 3% lower than the prevailing commercial charge.

THE NATIONAL POLICY AND ECONOMIC CONFLICT—U.S.A. 1878-1898

The country was stricken in every fibre of its life, frightened and dispirited, and there was widespread support for shutting the house, barring the door, and building a more self-dependent economic life within it. In this spirit, the new "National Policy" of trade protection swept John A. MacDonald into power in the Dominion elections of 1878.

The immediate establishment or expansion of Canadian enterprises, behind the tariff wall, naturally stimulated both industrial and housing construction, with the tremendous project of the transcontinental railway, a condition of Confederation, beckoning enterprise and settlement. Europe's depression had stimulated the migration out of that continent, which was to flow in an incredible tide to the United States for some decades, turning northward to the Dominion in increasing volume with the opening of the twentieth century. Shipping, railway building, railway construction, new industries, new housing, called out everywhere for wood. The lumber business in Canada entered the generation of

its greatest robustness for, with this active demand at home, came fresh demands from the United States operators, but with them came, too, problems of vital import. The white pine stands of the States could not feed their insatiable saws and U.S.A. interests began towing logs across the Great Lakes for their Michigan mills, and, in every pine stand, sought purchase rights to hold against future cutting. So extensive the incursions, so heavy the cut, that, with the United States admitting saw logs free, Canadian public opinion became alarmed and pressed for a doubling of the export tax of one dollar per M. feet on pine saw logs, which had been imposed in 1866. In 1870 the United States had put saw logs on her free list and, about twenty months later, imposed a specific duty of two dollars per M. feet on sawn lumber. In 1886 Canada raised the saw log export tax to two dollars, and, three years later, to three dollars because the United States had still been taking out the booms. This trebling led to a real "saw-off," the United States agreeing to reduce their import duty to one dollar, if the Dominion would waive the export tax on logs.

These changes, however, coincided with another general slackening of the economic tempo, while both the cost of transport and the uncertainty of trade agreements were inducing more and more United States mills to locate in Canada. They were moving up through the Georgian Bay and Sault country, where they could cut and haul cheaply, and market through their home connections behind United States protection. A temporary acceptance of free trade by the United States in 1894 did not greatly affect a sluggish general market, while it ushered in a principle that put the Canadian industry in a cleft stick for the next few years—any export tax imposed by Canada on logs would be countered by an equal import tax on sawn lumber. Reports to the Gillies office from their Morristown, N.Y., connections tell of conditions being so "flat" on the St. Lawrence that one man living at Ogdensburg, N.Y., walked the eleven miles, each way, to Morristown and back to earn \$1.25 for the ten hours that then made up the working day.

In 1897, this retaliatory principle reached a crisis in the "Dingley Tariff" which put a two dollar rate on Canadian lumber, *and continued the provision to impose, on top of this, additional levies corresponding to any Canada imposed.* In anticipation of some such action, there had been heavy cut and export in 1896, which left the United States market so over-supplied that it only added to the collapse in Canadian exports, and incidentally brought wide need among the bush and mill men for, behind these ramparts, United States mills sawed at home the logs brought from Canada.

Never did the ingenuity of the Canadian industry, nor their ability to get together in a common danger rise better to the occasion. With the Dominion Government jammed on any tariff action, in 1898 the industry persuaded Ontario, the province whose forests were most affected, to attach to the conditions already imposed upon permits to cut on the Crown lands, the stipulation that no saw logs cut thereon could be exported. This restricted export possibilities solely to lumber, cut on privately owned lands, and so practically forced United States importers either to buy or to lease and operate saw mills in Canada. *The measure may be classified, with Dalhousie's proclamation of 1826 and the Crown Timber Act of*

1849, as the *Bill of Rights of a stable Canadian trade*. It was challenged by United States leaseholders but upheld in the Courts, and the Canadian trade with lumber prices doubling in the next year, entered a period of prosperity that was to run to the eve of the Great War.

MORE LIMITS AND NEW MILLS, 1887-1899

These were years of fairly steady growth for *Gillies Brothers*, for, having ridden out the storm, they were in a position to extend their trade as Canada's growth moved apace. The partners knew woods and timber and lumber and markets, and, at every sale, one was present, or, in fact, anticipating sales and seeking to acquire limits by private purchase. Every detail of the firm's operations passed ultimately through one of the principal partners, their capacity for detail, the assurance of efficiency and economy in management, from the sending in of supplies to the marketing and delivery of the timber or lumber. Letters go from the head office to the depots, warning as to carelessness in small purchases, checking on supplies, urging early effort to retain particularly good workmen. Boomage and rafting supplies and space are always ordered well ahead. There is scrupulous honesty in quotation on quality and reservations when next year's cut is not certain. Freight and market prices are combed for the firm's benefit, bank instruments put through promptly, interest and other charges meticulously observed, both ways, and, always, new sources of supplies are checked, new sales outlets canvassed, all wastage eliminated in woods or plants.

The business acumen which had governed the maintenance always of two lines—square and sawn timber—of outlets to three markets, the English and the United States and domestic—was transmitted to John Gillies' sons. With the development of wider lumber interests, John Gillies had thrown out diversified auxiliary businesses, buying and operating the McArthur Woollen Mills in Carleton Place. James Gillies later purchased the Code Woollen Mills (now owned by M. J. O'Brien, Ltd.) which he carried on for several years as an independent venture. After the tragic drowning of Alex, the son for whom the Gillies and Beyer Machine Shops had been established, John Gillies carried on the business under his own name, manufacturing mill machinery and small marine engines. After his death, this business was continued as the John Gillies Estate Co., Mechanical Department. (The McArthur Woollen Mills (now "Bates and Innes") carried on as the John Gillies Estate Co., Woollen Department until its purchase in 1897 by the Canada Woollen Mills).

In 1887, operations were pushed further up The Valley, on the Quebec side to the Temiscaming this time, where 465 miles were purchased, though these operations involved new and heavy undertakings, the placing of the Company's own steamer on the Lake, and the adding of new risks, such as was incurred in the loss of the ill-fated '*S.S. Anna Marie*,' which got caught in a November freeze-up so that she "could not go forward or back"—the ice moved and cut her sides so seriously that although everything was done to save her, it was unavailing and she went down. "The funnel was about 18 inches out of water but the moving ice soon cut it away." She was replaced by a new steamer, '*the Clyde*,' in honour of the first limits and mills.

That year, 1887-8, the shanties on the Temiscaming cost \$217,712, of which \$171,900 was for current operations—\$8.59 per 1000 feet board measure on the twenty million feet of lumber taken out—such now was the scope of operations of the fifteen year old firm on its new limits, alone, in addition to their considerable undertakings on the Coulange limits.

The first chapter of the first generation of the Gillies to timber in the new land was closing, however. In the summer of 1888, on Saturday, August 11th "at twenty past twelve in the morning" John Gillies, the founder of the business died in the seventy-eighth year of his age, at Carleton Place—his story one of Canadian opportunity as well as of Scottish integrity and thrift. "Scotch Presbyterians," wrote *The Canada Lumberman*, "had an exceedingly honourable connection with lumbering in the Ottawa, and none have been more deservedly successful than the late John Gillies and his descendants." The press of the towns, close to which all his life had been spent, gives the warm judgment of neighbours and friends as it describes the long funeral cortege of "forty-five covered rigs" and many hundreds "on foot," winding through pouring rain all the miles from the Town to Cram's cemetery, where lie so many of those who built the pleasant junction community on the Mississippi. Speaking of his success, his simple generosity, the *Carleton Place Herald* writes a short, fine epitaph; "His deeds speak for themselves." The *Perth Courier* of his county town put it thus; "A quiet and unobtrusive gentleman, he was at the same time one of the most enterprising and best businessmen in the County. Shrewd, honest, liberal and kind-hearted, he was beloved and respected by all who knew him . . . there are few like him, left in the County."

Mary Cullen Bain Gillies was to survive him for more than a decade, (to May 28th, 1900), her wise, kind counsel, always mildly given, available to her sons. In the Clyde country and Carleton Place the influence of her quiet strength had been widely felt. A typical pioneer woman, the practical responsibilities of a large family in a comparatively remote, small settlement seemed but to make her more responsive and sympathetic to the needs of others, particularly the families of the men in her husband's camps. As the Gillies' holdings expanded and centred in the substantial home and mills in the town of Carleton Place, her innate neighbourliness took on but a wider range that neither age nor failing strength could diminish for she had early schooled her daughters in the unassuming practice of a warm charity. Through them her good works lived on. Few there are who would not crave the simple dignity of the tribute in which the paper of her adopted town recorded her passing; "Where there was sickness or suffering, there she would be found, in her quiet way administering to the needy, and many a poor family in town will miss her kindly ways and generous hand."

* * *

New and widening were the trails opening for the second generation of the Gillies. The Canadian Pacific Railway had been completed in 1886 and had bought out the Canada Central, placing Braeside on the main line. J. R. Booth, had completed one branch of the Canada Atlantic by 1883, giving direct connection with Montreal via Coreau and, in 1888 had obtained his charter to build the Arnprior and Parry Sound line through to the Georgian Bay via Eganville. The "Kingston to Renfrew" had been built 1882-8. Ever studying and planning cutting and marketing in relation to transportation, the Gillies interests, in these immediate years, sought limits in the country whose working the new lines would make practicable. In 1891, John Gillies' sons, for the first time in their own right as *Gillies Brothers*, started cutting for their own mill "on the Ontario side" with the purchase of fifty square miles of the famous Martin Russell limit on Round Lake and the Bonnechère. The same year, they acquired part of the Alexander Barnet limits in Renfrew County and 191 square miles in the extensive Perley and Pattee Petawawa limits in Algonquin Park, where they are still cutting. In 1892 they went into the Madawaska country above Calabogie, their first oper-

ations on that rough and unruly river. Two years later, in 1894, they acquired the Klock Bear Creek limits—fifty-five square miles—and in 1895, fifty square miles on the Montreal River. With the purchase of the Perley Limit of 250 miles from the Fraser-Bryson interests on the Upper Coulonge in 1899, they became one of the most extensive operators on that river.

As their holdings grew, they had enlarged their working plant and in 1893 entirely rebuilt the mill at Braeside, installing twin circular saws, a 52-inch Wickes gang saw, two band saws and two resaws, with modern edgers and trimmers, bringing the plant to a 300,000 ft. daily maximum capacity. In the same year, the old family partnership was changed to *Gillies Brothers, Limited*, the original senior partners taking in John Stark Gillies, the oldest son of James, the firm's president, as secretary-treasurer; John A. Gillies, the oldest son of John, the vice-president, in charge of logging operations; and George Henry Gillies, John's second son, as a member of the Board. The youngest of the original partners, David, in the preceding year, had been elected member of the Legislature of Quebec from the County of Pontiac, for which his familiarity with the needs of the area, as head of the woods operations for twenty years, particularly qualified him. For seventeen years, he was to represent the constituency, working energetically for the development of agricultural societies, the construction of bridges and of colonization roads to assure to farmer and lumberman economic transport of their needs and profitable marketing of their products.



THIS CENTURY'S HOPES AND FEARS

THE TWENTIETH century opened, belonging, said Sir Wilfrid Laurier, to Canada, and indeed no country in the world surpassed the Dominion in growth in its first decade. Railway development and extensive shipping expansion were necessary to move the population and goods that energetic government and transportation propaganda were bringing into the country. Mining and the beginning of the pulp and paper industry were changing the face of the Laurentian shield. The cities, towns, and villages of the British Isles and the plains of Central Europe were sending an increasing stream of settlers to the discovered wheatlands of the West where they competed for holdings with an exodus of easterners, especially from Ontario and Nova Scotia, while a prosperous well-equipped population flowed northward from the western United States. The prairie population more than trebled in ten years (1901-11); the new provinces of Alberta and Saskatchewan were set up in 1905; capital poured in from other lands; the East waxed strong on supplying the new markets, and, in every activity, wood and wood products were so necessary that mill production and exports of forest products, marched apace to the peak year of 1911, in which the cut reached nearly five billion feet. It was all a part of the same 'boom' story; construction, wheat-growing, timber, manufacturing, power development, public works of all kinds were predicated upon permanence in what was a temporary expansion. The Ontario Employment Commission¹ was later to establish that at this time (1911) our manufacturing capacity alone was being carried at two hundred million dollars potential production in excess of our immediate requirements.

The last decade of the nineteenth century had been one of consolidation of the Gillies interests in bush, and mill and marketing, completing their gradual withdrawal from square timber to sawn lumber. All in all they were in a favoured position, albeit of their own planning and preparation, to participate fully in the general economic expansion of the pre-war decade of the century. They had opened a wholesale yard and planing mill in Morristown, N.Y., in 1891² and sent



¹ Commission Report 1916, p. 20.

² Discontinued in 1913 when tariff restrictions on Canadian dressed lumber changed.

their representatives selling through all of New York State, and into New England and Pennsylvania. (Mr. D. Earing, "Dean" Earing to the trade, and President of the Frontier National Bank of Morristown, their representative in this area in 1942 completed fifty-two years of continuous association with the firm). Company files at this time show inquiries and tenders from Quebec, Montreal, Buffalo, discussing purchase of the entire year's cut; shipments go out to the West Indies by 1,000,000 foot lots through New York and Boston with prices low, but much improved, compared with the disaster entries of 1878 on, and the slow climbing of the next few years. First quality white pine deals, F.O.B. Braeside, are bringing \$53; second quality deals \$33; third quality \$19 and fourth quality \$13.

The Schyan limits (132 square miles) were bought in 1902, formerly owned by Bronson and Weston, and, as increased output called for further limits, more were bought (100 square miles) in the Montreal River in 1906 from Booth and Lumsden to supplement the old limits, taken there ten years earlier.

In 1903, *Gillies Brothers* ran their last raft of square timber down the Ottawa, Mr. David A. Gillies, the present president, the raft clerk. In 1905 they shipped their last square timber—from the Montreal River limit by rail to Kingston, where the Calvin Company rafted it at Garden Island, and drove it down the St. Lawrence for delivery at Quebec.

By 1909, the Company's destinies were all directed from Braeside. The mills were cutting 30 to 35 million feet in the season, running 10 hours per day. A cedar mill had been opened in 1899 to meet the demand for ties. The "gold rush to the Klondyke" was on and business could not wait. Construction was rushed through the cold winter weather, and the workmen named the new building the "Klondyke" Mill, and so it was known throughout its years of operations. It ran 150,000 ties and 25 million shingles a year at peak demand.

On the night of July 4th, 1910, red glows suddenly showed in the summer skies for miles about and, though the Braeside, Bonnechere and Madawaska country knew the Gillies had a comfortable United States trade, no one could imagine these flares to be in honour of "the Fourth." The startled people soon learned that the West Yard of the Company had been fired by a locomotive, lifting cars in the early evening. Though the night was still with but a light wind, burning brands were carried four and five miles across country as the fire equipment of Arnprior and Carleton Place was raced in to fight the conflagration. From seven in the evening until seven in the morning the flames burned fiercely, the main line C.P.R. trains being held up for hours to escape the blazing fury, as 29,750,000 feet of lumber made a fiery pyre against the background of mill and lake. Incredibly, the East Yard, but eight hundred feet away, was saved by stubborn struggle but all the West lay waste, even the steel rails twisted into useless snake-like spirals from the overpowering heat. Within thirty days, debris was cleared, tracks and frames replaced and new piles of fine, fresh pine, drying in the sun.

The Company's business expansion is clear in the Secretary-Treasurer's negotiations with the C.P.R., pointing out that cars of which twenty-five are required daily, must be provided for lumber orders "just as urgent as the grain trade. They must be filled before the close of navigation. Space is engaged for lumber and it simply means that dealers will not in future make contracts with us, if they find, as has been the case the last two years, each fall, that we cannot ship." Men and horses are idle—"40 men and 3 teams today (Sept. 24th, 1902), a loss of \$65.00 or more each day." The trade routes, whereto the Gillies business

had by then extended are many, set forth in a memo to the railway listing the 356 freight cars then required for immediate shipments—"100 are to go to Montreal with export orders, 120 for the New York Central lines, 20 to Montreal for local trade, 12 through to Burlington, Vt., 80 are required for C.P.R. local lines, three to haul local orders over the Canada Atlantic, one to haul on the Grand Trunk."

With heavy traffic moving and lumber calling for more tonnage, the railways threatened an increase in freight rates on wood and wood products, and the Eastern operators took the initiative in getting the diverse competing interests of the trade together. In June, 1908, at a meeting in the Board of Trade rooms in Ottawa, the Canadian Lumbermen's Association was formed prior to which collaboration among Canadian operators had been sporadic and inadequately organized. In its creation, Mr. J. S. Gillies, then Secretary-Treasurer of Gillies Brothers (later described as "that life time proponent of lumber trade promotion")¹ took a leading part, serving on the first Board of Directors.

The year 1909 had marked the first break in the unique family directorate of the four brothers who had formed the original Company in 1873. James Gillies, president and, as the eldest son of the founder, naturally its counselling and guiding genius (though retired from active business in 1897) died in the first month of the year, while at the Queen's Hotel, Toronto. His interests had been many and varied, in his church, and in his party, as president of the Lanark County Liberal Association and active in the National, though always declining parliamentary nomination; in finance as a member of the Ottawa Advisory Board of the Toronto General Trusts Corporation; in education as a member of the local school board, and in business as sponsor of the local Board of Trade. He was laid beside his father, near the town in which he had started the mills, forty-three years before. His death necessitated a change in the management of the Company, his brother John, though not "next in age" moving up to the presidency² and David Gillies to the vice-presidency. Mr. David Armitage Gillies, Mr. James Gillies' youngest son, and Austin Bain, Mr. David Gillies' son, were added to the Board, the Company thus resting in the hands of the three remaining original partners, and five of the third generation of the Gillies to lumber on the Ottawa. J. A. Gillies, eldest son of John, took over in 1915, as Managing Director, the supervision of the River operations of the Upper Ottawa Improvement Company.

Following the traditions of the family, the Company kept their eyes on changing trends, and, like many other Eastern and United States interests, turned their attention to the heavy stands of timber on the Pacific Coast, in 1914 and subsequent years buying altogether about sixty limits of 38,000 acres in British Columbia in the Drury and Seymour Inlets and adjacent tide-water areas. But the Gillies are Valley men, and logging there they left and have left to contractors, working on a stumpage basis.

1914—THE GREAT WAR AND AFTER—1929

The Great War was sweeping across the heavens of history bringing Canada's hectic whirl of expansion close to the dance of death but many of the elements of weakness in our whole economic structure, though not yet visible, were maturing without and before the conflict.

¹Canada Lumberman, April 1, 1940.

²The unmarried second brother, William, who would normally have "moved up," had been in ill-health and inactive in the business for several years.

The generally heavy cutting, with little conservation, had carried operations further and further afield, and made them more costly. As the heavier stands of pines cut out and gave way to lighter growth and to the jackpine, balsam, spruce, etc., the more difficult operations, necessary in handling smaller timber, meant losing ventures. Forest fires had done their work in some of the eastern stands; and the spruce budworm was threatening the timber surviving in the burns and that might otherwise have been salvaged for pulp. And pulp and paper were creeping up on the saw log operations as these latter, half a century before, had crept up on the square timber. They competed for sites, for power, for men, for transport, for timberlands and for capital, and sent up all costs through their vigorous competition. The very vigour and self-sufficiency of Canada, expressed in changing attitudes to Imperial relations, was a factor in a hardening of British policy from sentimental to economic considerations, most evident in her readiness to favour cheaper lumber imports from Russia and Scandinavia.

Transport again was changing the routes of trade and, this time, with ominous possibilities for the domestic and local market which had always provided a sound back-log to the eastern industry. The rich forests of British Columbia and of the southern United States, (with year-round operation possible and large, tall timber of high quality, close to tide water) had had long rail and wide ocean spaces to traverse to compete with the eastern sources of supply. Now, however, the Panama Canal, (through which, ironically, the first ocean steamer was to pass in 1914 the day before the declaration of war), was complete, with its ultimate terrific impact on transportation, markets, and domestic trade in making it possible and profitable for Pacific lumber, ocean-borne, to pierce the very purviews of the long established trading of the East.

With the War came a paralysis of all plans for construction of all sorts, and the lumber business stood still. With woods and mills operations both slack, the husky men who shantied and ran the rivers enlisted in thousands. Not until 1916, did the organization of the allied countries catch up with the need of construction, in shipping particularly, to meet the conflict's demands, and in the next year lumber production shot over four billion feet. Surfeit ocean tonnage and transport, after the Armistice, were cheap, and until 1919-20 trade increased steadily in quantity and value, to Britain and the United States. Without controls, prices rose to artificial levels and sank again in an inevitable and disastrous slump. The war-time prices had been firm enough to give a start to a secondary prairie trade in Northern Manitoba and Saskatchewan, and this continued to meet the cheaper needs of the local western buyers, causing a further recession in the longer established eastern markets. As armed forces were demobilized, many to idleness, there came a short sharp economic snap, all across Canada, and lumber production dropped below three billion feet in 1921. Many eastern firms (and these not small nor recently established) started "leaving the woods," either selling out entirely or shifting their interests to the Pacific Coast, or into pulp and paper, or power.

The vigorous expansion of the Pacific industry tended to make lean years usual in the Eastern centres. Previously, when purchasing fell off in the home market, a back log of demand accumulated and, when "times came back," this was filled by competitive sales from the operators within the contiguous territory,

prices finding their level in comparable conditions and costs of production. Such 'lifts' in post-depression periods served to even out loss and costs over the whole period of operation. But when the Panama route made possible cheap wood of high quality, any increased demand was now more likely to go to the Western than the Eastern trade, since the former could deliver right into the heart of old Ontario at a profitable cost rate less than that of the industry there. By 1920 British Columbia was exporting more timber than any other province; by 1926, more than all combined, holding half the United States market, controlling the prairies' purchases. The operators, but few of the general public, appreciated what was happening all through recent years—until not only sale prices but limit values were dropping as even white pine stumpage, (as honoured as British consols in timber dealing), receded in value, resulting in bankruptcy for many firms who had to face increased carrying charges and shrunken income.

Dr. Lower¹ was one of those who saw that what was happening in the eastern stands and mills was more fundamental than the back-wash of recurrent depressions. But even as he saw a darkening day, he saw a brightening far horizon in the East's unalterable heritage as a timberland. He anticipated "the decline of the Eastern Canadian industry both economically and technically." He wrote, "while in individual instances it is probably more efficient than ever, taken as a whole, it is hardly up to the levels of its best days. Or it might be fairer to say that it has altered in character, has become more decentralized and is just as efficient on a different but not necessarily lower plane. No doubt when the Pacific forests have been gutted, as gutted they will certainly be, and the forests of the East have enjoyed a well-earned rest, the Eastern saw mill industry will again come into its own. For there is nothing clearer than the fact that if ever a country was naturally equipped for an industry, that country is the Laurentian region of Eastern Canada and that industry is the making of lumber."

The war had taken Mr. Austin Gillies to his Battery as Major and Mr. J. A. Gillies to be associated with James Playfair of Midland in forming a company to build wooden ships for the Atlantic services. William, one of the original partners had died in the autumn of 1913. Mr. John Gillies, president of the Company and third son of the founder, followed him within a year—Nov. 16, 1914. The double loss left a group of younger men, facing experiences such as the Dominion had never known, with but one surviving original partner, Mr. David Gillies, who became president of the Company. Mr. J. S. Gillies, moved up to the vice-presidency, and Mr. D. A. Gillies was named secretary-treasurer. Mr. J. S. Gillies, became the directing genius of the Company, in charge of finance, sales and policy, Mr. D. A. Gillies taking on the gruelling burden of keeping men in the woods, and the mills supplied with logs, doing the impossible in deliveries for Canada and the Allies.

Mr. David Gillies and Mr. J. S. Gillies represented the Company in all its public interests and in governmental contacts in Ontario and Québec, while several of the partners were active in local war and patriotic work.

The war over and the market demand in 1919 still holding well and in fact more buoyant than in the War, the GILLIES MILL at Braeside was running its full capacity (300,000 feet a day) on June 23rd, 1919. The log pond was full, sawing having begun only in mid-May. Suddenly in the late afternoon, with the

¹The North American Assault on the Canadian Forest, p. 52.

plant in full swing, fire broke out below the saws. Though the plant was well protected, fire equipment rushed from Arnprior and the McLachlin Company's fire boat brought 'alongside,' within an hour the mill was swept and its frame collapsed, even the great steel burner telescoping and canting over. Saw mill, harness shop and railway station burned as the flame-shot darkness gathered and the work of half a century lay in ashes. But the yards had been saved and the logs in the pond. Within a few days, through the courtesy of the Hawkesbury Lumber Co. sawing was resumed at Hawkesbury one hundred miles down The River and plans were immediately put in hand for the erection of a new mill. On October 15, 1920, after exhaustive study of some of the most modern plants in the United States and Canada, the new plant was begun; trial runs were made the next year, and the new mill fully commissioned on April 25th, 1921, with a daily output of 200,000 feet. Fireproof, electrically driven, built of steel and concrete, the *Canada Lumberman* described it as "unique in construction, daring in achievement . . . the only one of its kind in the Dominion" marking "a new era in saw mill enterprises." "To carry out a project of this proportion, expenditure and design" the publication continues, "required vision, faith and courage, for the plant of Gillies Bros. Ltd. is one that establishes a radical departure from the usual run of activities in the lumber line." And even while the mill was rebuilding, the Company was reinforcing its other lines of defence, looking always to future supplies. In 1919 it went into the upper watershed in the Timagami. In 1922, the substantial holdings on the Coulonge were enlarged by the purchase of 274 square miles from the W. C. Edwards Company, and three years later, fifty square miles in the Petawawa were acquired from the Hawkesbury Lumber Company. In 1927 an electric driven planing mill was added to the Braeside plant, with modern matchers, re-saws, stickers and shaving press, thus providing for direct shipment of dressed as well as rough lumber. In 1927, the Timagami holdings were enlarged by another block of fine virgin timber, falling to the Ottawa River.

THE CRASH 1930

The opening of the new Gillies Mill coincided with the severe recession of 1921, from which recovery was gradual until the beginning of North America's wildest boom of modern times with the economic index soaring and lumber, of course, benefitting in the building, industrial and residential, which was in progress everywhere from profits that were apparent rather than permanent. Almost without a break Canada's production climbed to within striking distance of the 1911 record with 4,700,000,000 feet in 1929. From that peak it was to crash in a few months, and, by 1932, decline to the lowest figure in three quarters of a century—less than 1,750,000,000 feet. Ontario dropped from production of 900 million to just 200 million feet. Nor was the tragedy of the trade relieved. The United States reverses were as great, and competing interests there, crying out for safeguarding, were protected by the Hawley-Smoot tariff, jumping the duty on Canadian lumber from one to four dollars per M. board feet, thus creating a practical embargo on all but certain lines that could hardly be deemed to compete with the U.S.A. trade. Canada nose-dived into the depression of the thirties.

The lumber industry was hard hit, and, of all, hardest in the East, faced increasingly with the strong Pacific competition from within its own household,

by new routes round half a continent. The skilful marketing of products of high standard brought to the Coast industry an increasing percentage of a trade that, at best, was shrinking. Only the firms with devoted experienced executives, staying close to operations in forest, mill, or market centre could hope to come through as even replacement purchasing fell off in the domestic markets.

Not even in the dust blown prairies was the outline of human discouragement, despair, and need bleaker than in the grimly silent depots and shanties of the Eastern woods, the empty booms, and the still mills where dampness, rust and rot had their way, and many a plant was dismantled for sale as salvage, with not enough therefrom to meet taxes on the site. Population slipped away and from the Miramichi to Superior, grey little ghost towns and villages, row of empty houses facing empty row, marked the memory of struggle and achievement, now thwarted in the grip of a changing age.

THE IMPERIAL TREATIES 1932 AND THE CANADIAN INDUSTRY

The lumbermen set about wresting hope from this frustration. They prepared their own submission for the Imperial Economic Conference convening in Ottawa.¹ It is its own testament of the fundamental place of wood and wood products in the Canadian economy in the close to seven score years since Canadian timber first moved in great shipments overseas. The industries engaged in wood and paper products, (the lumbermen were able to assure the Conference), over the five year average of 1926 to 1930 had exceeded all other classes of manufacturing industries in the number of their establishments, the capital invested, the number of their employees, the salaries and wages paid and the value added to their natural product by their processing. They represented a quarter of the manufacturing industry of Canada. One billion, nearly one hundred million dollars was tied up in their capital investment. Salaries and wages paid in these manufacturing activities ran almost \$175 million a year to over 150,000 employees. In addition, another \$183 million capital was invested in woods operations with salaries of \$75 million paid to 91,000 employees. The total business operations of the former meant an annual turnover of \$373 million in value added through manufacturing, and, in the latter, \$210 million in woods operations and products—an aggregate of \$583 million per year, “as the annual contribution of the forests and forest industries to the wealth of the Dominion.” Their tonnage provided 18 per cent of all freight, carried by the Canadian railways, required more freight cars than the movement of grain. Fifty per cent of their product they sold outside Canada, ranking second only to agriculture in export trade, while their contribution to the favourable balance of trade (an annual average of \$240 million dollars for the period 1926-30) was larger than that of any other single industry. For their operations they imported over \$200 million dollars worth of goods annually—\$31 million from the United Kingdom, \$175 million from the United

¹Submission, Imperial Economic Conference, Canadian Lumbermen's Association, Ottawa, June, 1932.

States. Their average production from 1908 to 1931 had been 3½ billion board feet annually, which had shrunken to less than half that volume by 1932.¹

That atrophying shrinkage had been due, in part to world conditions, but in no small part to loss of the United Kingdom, European, Uruguayan and Argentinian markets by the competition of the state operation and export subsidization of Canada's centuries' old competitor, Russia. Russia had offered 900 million board feet of timber to the British market at prices lower than any other country was offering, with a "fall clause" guaranteeing the purchaser against any loss in the transaction, should any other exporting nation offer lower prices. Canadian exports to the United Kingdom had immediately dropped 40 per cent in spite of the British preference of 10 per cent extended to Canadian timber, as part of the 1927 agreements. No tariff preference, no lowering of wage scales allowing minimum living, no improved efficiency in Canadian methods of production could combat such a policy. To meet their need the Canadian industry asked a 20 per cent preference against any country but Russia, and the adoption of a quota principle whereby one quarter to one third of Britain's import requirements would be reserved to Empire countries, with the balance pro rated to Russia on the basis of a past five year average, and no restriction placed on the amount of the remainder coming from Empire sources save that the lumber should be manufactured from trees actually grown in that state.

Would Britain grant these conditions the Canadian industry was prepared to guarantee her almost unlimited quantities of eastern wood for shingles, laths, pit props, etc. They also guaranteed to saw to any possible specifications in any season, to deliver, at any time from either coast, all orders that Britain might place averring that they could double Canadian production at once without a single increase in any unit in Canadian mills. For every 1000 million board feet taken, they pointed out that they could put 30,000 to 35,000 men into production. Their purchases and equipment for running such a quantity of lumber would equal their payroll and thus they claimed would automatically double the volume of work created through this direct employment.

Their arguments were reasonably successful, the Imperial Treaties, arising from the Conference, continuing the existing preferences on timber (10 per cent in the United Kingdom, over lumber from non-empire countries) but including a new provision, Article 21 in the U.K. agreement, whereby each government bound itself to assure the effectiveness of the preferences granted under the Treaty, were these likely to be frustrated in whole or in part by reason of the creation or maintenance, directly or indirectly, of prices "for such commodities"

¹*Woods Operations*

Sample investigations in 1940 showed that the marketing of 1000 cubic feet of standing timber involved an average capital investment of \$63, an average expenditure of \$13 on materials and supplies, an average employment of 9 man-days, and an average wage distribution of \$27. Applying these figures to the total cut of over 3,344 million cubic feet indicates a total capital investment of about \$209 million, total expenditure of about \$44 million in materials, 30,113,000 man-days of employment and a total pay-roll of \$100 million.

Woods Industries

In 1940 capital invested was \$1,021,849,742; employees numbered 160,895 and were paid \$193,765,595. Net value of production was over \$396 million, gross value over \$750 million.

Reference—Dominion Bureau of Statistics.

through state action on the part of any foreign country. In 1933, when Russian action would have again vitiated the benefits of the Treaty, under this clause, the British Government took action and the Russian quota was cut by 500 million feet and the 'fall clause' eliminated.

In 1925 Canada had secured a lumber preference of 66½ per cent in Trinidad, Barbados and British Guiana; 25 per cent in Jamaica and Bahamas, 33½ per cent in British Honduras, and an undertaking, (later partly implemented) in the Leeward and Windward Islands to grant the 66½ per cent preference. These various preferences were increased by the 1932 and 1937 agreements through a specific duty of 10 shillings per 1000 feet, (later reduced to 8 shillings as part of the United States agreement of 1938). Australia and New Zealand, 1931-32, granted a preference of 20 shillings per 1000 board feet to Canadian over non-British lumber.

The difficult next year of organization of Canadian production, in the trough of the depression, the Canadian Lumbermen's Association chose Mr. J. S. Gillies, president of Gillies Brothers as their president. His leadership was exercised along broad lines, perceiving many of the problems of the industry to be deep-set and persistent. Russian production (and he pointed out that Norwegian, Swedish and Latvian practice would likely be the same) bore no relation to costs, export being subsidized from the consolidated revenue of the producing state. "Our aim should be," he argued, "to foster the British market by patient and steady education of our manufacturers as to what the United Kingdom wants and by the reduction of all our costs, production, transportation, and marketing, and also through the reduction of Government charges, of rail and ocean freights." "The lumber trade," he found, "lacking in the past" and "still lacking" in that it "is largely inarticulate and has not either felt the need or realized the benefit of taking the public into its confidence. In future much more should be done to have the public realize both the difficulties of the industry and its importance in the economic life of Canada." "It would seem to me," he said, "that one of the great difficulties since the war (i.e. the war of 1914-18: he was speaking, 1933) has been a failure by governments and by our people generally to understand that the economic machine could not possibly support the war debts and other obligations and the heavy overhead of government, provide commodities in volume and leave the needed margin for the basic industries to carry on and grow."¹

THE UNITED STATES AGREEMENT 1936

The terrific extent of the depression in the United States, and the operation of the Imperial Treaties combined to bring about a change in policy and attitude there in respect to imports needed from Canada, and the export of products for which the outlet of the Canadian market was urgently desired. In January, 1936, (informally on Nov. 15, 1935), the United States agreed, in return for reciprocal concessions on various products, to continue to grant free entrance of wood pulp and newsprint, from Canada into the United States; to cut in half the duty on fir, spruce, pine, hemlock or larch lumber, and the revenue tax on all lumber. A quota was fixed on the importable quantity of Douglas fir and British Columbia hemlock but this was removed in November, 1938. At that time the revenue tax was lifted entirely from northern white pine, Norway pine and western white spruce, which thus became subject to duty of only 50 cents per 1000 feet.

¹Presidential address, Canadian Lumbermen's Association, 1933.

TRADE WITH THE WEST INDIES AND SOUTH AMERICA

The development of canal and rail transport together had given the upper provinces a chance at another market, largely denied to them in the second and third quarter of the last century,—the British West Indies and later South America. The idea of a complementary trade between Canada and the British West Indies is as old as the French regime and as new as today's Imperial preferences.

In 1664, Louis of France gave the monopoly of all trade and all feudal rights over lands to the West India Company, a charter Talon stubbornly fought and finally had abrogated. He had a ship built in Quebec in 1669, and sent to the Indies with fish and salt, the rum and sugar received in return being marketed directly in France. The West Indies trade grew especially with Acadia.

A flourishing trade had been built up between the British Indies and the New England colonies which was throttled at once by the American Revolutionary War. For many years thereafter, Britain sought diversion of this trade to the Canadian provinces and her fiscal and navigation policies were designed to maintain the market and carrying trade between the Mother Country, and the colonies, and among each of them in turn. The Atlantic provinces benefitted greatly, especially Nova Scotia, in their exports of timber and fish, and also in ship-building, the St. Lawrence being more remote, and the retention of French commercial law handicapping Quebec traders. The inability of the Canadian trade to keep up with the demand and the retaliatory measures, open to the United States, led to a peculiar circumvention in British regulations, whereby goods might pass overland through Canada and then go to Britain or the West Indies as if British products. A heavy port and carrying trade developed that extended to the upper provinces with the demand for sawn lumber which was then largely a United States activity. By 1828, one quarter of all Canadian exports to the British trade was going via such indirection to the West Indies,—timber, lumber, and shooks being a large portion. In 1830, this trade was opened directly to the United States, with an immediate falling off in Canadian business, disastrous for some of the ports of the Maritimes. Not until the depletion and shift of New England cutting westward and northward was the Canadian trade to get into the market, again, in substantial degree. Shipments moved down the River and St. Lawrence via the Richelieu, Chambly, Champlain, Hudson and the barge routes to New York, or later out of Ottawa by rail to Portland and Boston in either case for ocean transport. As ocean steamers came up river to Montreal, the Ottawa trade increased not only to the Indies, but to the new South American market, where the liberation of the Spanish and Portuguese Republics had thrown their trade open, at this period of national stimulation and growth. Millions of feet of lumber were cleared from Montreal to South American ports for a score of years from the late sixties onwards. Old Gillies account books show their participation in this trade from the Braeside mills. As the period of heaviest building passed, the trade slowed down, but the adoption of the reciprocal British preferential tariff by Canada in 1897-8 revived trade with Bermuda, the British West Indies and British Guiana. It was further strengthened by the extension of mutual preferences of 20 per cent in the agreement of 1921, and the Dominion's

participation in subsidized transport services on the routes of shipment. Of course the Imperial agreements of 1932 were of practical benefit in the Indies trade. Though the West Indian trade has held up—and the demand since the war increased—the profitable Argentinian and other South American markets were almost lost by Canada, in Russia's state-subsidized exports and the availability of cheaper Brazilian pine. Canadian pine exports to South America in 1939 were less than one per cent of her trade, to the West Indies, $7\frac{1}{2}$ per cent, and by 1941 the former had disappeared, the latter dropped by half. This trade has always been heavier from the Maritime cuts though the sawn trade and timbers of fine quality from the Ottawa, as already noted, were at one time substantial to Buenos Aires and the River Plate, whose demand for domestic building was almost exclusively for "highest grade 12-inch white pine." Whereas, some years ago, shipments from Montreal or New York or Boston would crowd the wharves of the waiting ships, Gillies Brothers' last shipment to the Argentine, made in 1928, was the only car-load to go out from The Valley, that year. Shipments still leave the mill on the Chats for the British West Indian trade, but the latter is less than two per cent of an average year's sales.

THE OUTLOOK 1939

The Imperial preferences, arising from the agreements and treaties of the 1932 Conferences, revived the Canadian trade as similar preferences had nurtured it to birth from 1806 onwards. Exports to Britain immediately moved upwards and continued to improve. With the United States agreements following, in 1936, for the first time in ninety years—since the abrogation of the British preferences in 1846—Canada had comparable access to the British and United States markets, and a preferred position in the British West Indian trade. Those who had followed the long trail, through the years, came into the clearing at last for the industry had what it long had sought, hope of a fair chance in export trade to balance the domestic market, which was normally good for half of the sawn production. By the end of 1936, Canadian exports of wood and wood products had increased nearly 20 per cent to a total value of over \$210 million—those to Britain by nearly 23 per cent and to the United States by almost 19 per cent. By 1939, that volume had grown to \$242½ million, of which about 18 per cent went to the United Kingdom and 70 per cent to the United States,

These years of strain, however, from 1930 to 1937 and 1938, when the benefits of the new markets began to accrue in mills and woods, had taken their toll of many a business and those with whom their direction rested. The Gillies firm, on the same site where the first partners had struggled for survival sixty years before, had reinforced its reserves for the battle.

Markets had been sagging for them, as for others, steadily from 1929 to 1930. In 1932 the mills were closed and in 1931-2, and again in 1932-3 no bush operations were carried on—a repetition of the experience of the firm nearly sixty years before in the 1873 to 1878 collapse. Lumber values dropped to half the cost of production as bankrupt stocks were thrown on the market by the chartered banks, thus lowering the value of all cuts, and incidentally reducing the potential value of what might really have been held for capital appreciation. Firm and village stood together in the mounting storm. The teams from the woods were placed with farmers in the neighborhood, just for pasturage. A

system of relief was organized for the village, administered by a committee, representative of the employees, of the Company, on whom 80 per cent of the local tax cost rested, and the Victorian Order Nurse—the Company having developed this service in 1929. Aid was organized on a self-help basis; for instance, flour, not bread, was provided, milk was not delivered but supplied on call, etc. Various schemes were developed for barter of labour or products.

With the Imperial preferences of 1933, it was possible to resume some woods operations and short sawing. Once again, through close application and detailed organization, the firm had come through a whirlwind that many had failed to weather.

Mr. David Gillies had died in 1926, seventy-seven years of age, the last of the four founders of the Braeside firm, and direction of the business passed entirely to the third generation, cousins and brothers, associated where their fathers before them had carried on. Mr. John Stark Gillies became president of the firm, Mr. J. A. Gillies, vice-president, Mr. D. A. Gillies remained secretary-treasurer. In that same year Mr. J. S. Gillies was one of the prime movers in bringing about the first co-operative effort of competing producers to assist each other in the formation of the White Pine Bureau to serve as a common medium for the advertising, grading and marketing of "Pinus Strobus" under a registered trademark of quality—"PS" in a triangle. Walter M. Ross, of the J. R. Booth Co., James L. Craine, J. J. McFadden, W. H. Milne, B. A. Bain, of the George Gordon Co., and S. C. Thompson of the Canadian International Paper Co., were charter members of the Board of which he took the chairmanship. To its development, Mr. D. A. Gillies also devoted himself, as chairman 1931-2, and heading up the grading committee in the years from 1928 to 1933, in which the first standardization of rules and grading of white pine was effected for the Canadian industry. The project so proved itself that by 1939 the Canadian Hardwood Bureau and the Lumber and Timber Associations became affiliated.

But now the years were moving on and the third generation of the family was passing with them. Janet, daughter of John Gillies, the first, had married James F. McEvoy, the first agent in charge of Gillies operations in the Coulonge. Their son, Mr. Justice J. A. McEvoy of the High Court of Ontario had been added to the directorate, as had Mr. W. R. Caldwell, also of the early Lanark stock and who had married Elsie Ross, daughter of David Gillies. Both these directors died in 1936 and, for the first time, women in the family entered directly into its management, Mrs. Caldwell succeeding her husband on the Board. The next year Colonel A. B. Gillies, son of David, and J. A., son of John, died within a few weeks of each other: and in 1938, Mr. Alfred J. Gillies, son of James.¹ That year, too, marked the loss of the Company's directing genius in the men of that generation,—John Stark Gillies, who, for over thirty years had been one of the strongest albeit one of the quietest forces in the Eastern lumber trade, and of whom it was said that he was as upright, clear and strong of character as one of his own white pines. Mr. D. A. Gillies, son of James, remained the sole member of the Board of Directors elected in 1936 and young men of the fourth generation were called to the Company's direction—J. A., son of J. A. (grandson of John and great grandson of the first John) became vice-president, and F. H. Bronskill, trusted employee of the firm, secretary-treasurer. Yet another granddaughter of John Gillies, Mrs. Neil Robertson (Ida Gillies, daughter of James) took over business responsibilities as a member of the directorate, on which she acted until

¹He had not gone into lumbering but in 1905 had founded his own company in Toronto manufacturing lacings, braids, etc., as the A. J. Gillies Manufacturing Co.

others of the younger generation were trained to direction. In 1939, George Brodie Gillies, son of George A. (professor of Metallurgy in the University of British Columbia) and grandson of James Gillies, was added to the Board.

So, in 1939, the destiny of Gillies Brothers was still in the hands of a family group, all descendants and heirs of James Gillies of Banton who had come to Canada 128 years before, and of his son, John Gillies of The Clyde, who had started operations on that stream a hundred years now gone. In that year, Major E. C. Woolsey, secretary-manager of the Upper Ottawa Improvement Company and Mr. W. R. Beatty, manager, The Consolidated Pulp and Paper Co., Pembroke, were added to the Board.

And again war came to the British peoples.



CONSERVING RESOURCES THROUGH THE YEARS

MEANWHILE, through the decades, the men of the woods had not been unaware of the need of conservation of the forests nor inactive in the study of ways and means to assure this. Their interest and efforts had kept pace with their organization for the preservation and expansion of trade. The depression of the late seventies had served to point up the wastefulness of certain forest operations, especially the backing up of surplus cut with its danger, not only of exhausting the stands, but, often, of sacrificing the solvency of established firms through the glut of markets.

With characteristic prescience, Sir John A. MacDonald had been one of the first among Canadians to be concerned over the ultimate price to be paid for the high incredible expansion of the timber and lumber trade in the sixties and seventies. On June 22nd, 1871, he wrote, apparently from his study at Earncliffe, looking down on the raft assembly ponds, to John Sandfield MacDonald, Premier of Ontario.

"My dear Sandfield,

"The sight of the immense masses of timber passing my windows every morning constantly suggests to my mind the absolute necessity there is for looking at the future of this great trade. We are recklessly destroying the timber of Canada and there is scarcely the possibility of replacing it. The quantity of timber reaching Quebec is annually decreasing and the fires in the woods are periodically destroying millions of money. What is to become of the Ottawa region generally, after the timber is cut away, one cannot foresee. It occurs to me that the subject should be looked in the face and some efforts made for the preservation of our timber. The Dominion Government, having no lands, has no direct interest in the subject, but it seems to me that it would be a very good thing for the two Governments of Ontario and Quebec to issue a Joint Commission to examine the whole subject and to report:

"1st. As to the best means of cutting the timber after some regulated plan, as in Norway and the Baltic; 2nd. As to replanting so as to keep up the supply as in Germany and Norway, and 3rd. As to the best way of protecting the woods from fires."

Nor was Sir John unaware of possible practical political merit in his proposals for he closes:

"The Commission would be a popular one if the men were well chosen, and their report if drawn with



care, would be of incalculable value. I think you might make a good strike by taking this subject up vigorously."

The forestland is the assurance of continuing investment and livelihood to the earnest lumberman, and, years in advance of public opinion, many of the more far-seeing and public-spirited men in the industry sought action, primarily, along the three lines, envisaged by Sir John,—classification and closing of lands, unfit for settlement: care of present forest growth and natural reforestation for future stands; and education of the public and protection of the woods against the danger of fire.

CLASSIFICATION AND FOREST RESERVATION OF LAND

With the first fine ridges of great pine thinning, the timbermen began to see not only the wastefulness of "squaring" as against the waney cut, but also the wanton waste of having abandoned many a fine tree bole, which now they turned to garner along with smaller trunks passed by in the earlier felling of only the mightiest first quality trunks. And, as the easier cutting of high returns failed, they perceived, too, what has been the tragedy of so much of the hinterland of the Trent and the Ottawa, the ghastly error of having allowed, even encouraged, settlement on land, incapable of sustaining a stable community life, once there was no subsidiary crop of timber, potash, or, later, of pulpwood to be sold. It was from the men who owned and worked the timber limits, that early representations were made—and in vain—to successive governments, to close such areas to settlement, and to devote them either to forest reserves or to reforestation, and, if not to prohibit, at least to make it unprofitable for the sporadic settler to squat near valuable timber stands. Here his carelessness, often culpable, not infrequently caused forest fires, destructive in a few hours of more of the nation's wealth than he and a score of his fellow squatters could add to it in a quarter century. One of the wrongs done to agricultural settlement, as well as to forest conservation and lumbering, in the Laurentian Shield, (so much more adapted in the long view to the latter than to the former), has been the exploitation of the popular vote in the granting of the right to cut, through the pseudo opening of lands that should have remained closed and under control of the Crown. Neither agriculture nor good lumbering has been served thereby, the settler disillusioned, embittered, likely as not impoverished, moving on from his shack, when even the piteous last young growth has been sold for firewood, or with his small family ragged and unkempt, living in his squatter's clearing, as life has passed on. The harsh land pulls him and his wife down into a degeneration bred of isolation, worse than an urban slum can breed, for, there, life and community interest and responsibility will break in and salvage human wreckage.

But settlement and private rights and timber leases and commercial development are easily thrown into an antagonism of apparently conflicting interests in a democracy whose operations lie in as full view of the people as in Canada, or the Provinces. The years were to be wide and long before much constructive action was to be taken. Operators urged that lands, classified as unlikely to prove capable of sustaining community life, should be set aside as great natural reserves for the people or sown to new forest crop either by present operators under

lease and supervision or by the Crown. Some of The Valley lumber interests, working with Aubrey White, Alexander Kirkwood and officials of the Ontario Department of Lands and Forests were influential in bringing about one of the most far-sighted measures ever adopted in Ontario, the creation of Algonquin Provincial Park. Its area of one and three-quarter million acres, over twenty seven hundred square miles of territory, enclosed (in the Opeongo district) the head waters of the South Muskoka, the Madawaska, Petawawa and Amable du Fond, Magnetawan and Bonnechere Rivers, and some of the last and finest of the white pine left in Canada. (However, most of this has since been cut). Its name and purpose ran together in the recommendation of the Commission¹ proposing it, which read:

"It is fitting that a once great and powerful people who, in their savage manner, held sway over this territory centuries ago, should bequeath their name to a part of it, which it is now proposed to maintain, as nearly as possible in the condition in which it was when they fished in its waters and hunted and fought in its forests."

The park area had then been logged over twice, once for square timber, once for saw timber, and a large part a third time for hardwood and young pine, of second growth, or growth where the fires had swept. But a few stands of virgin growth were still left. Many timber leases, (on which some of the communities outside park limits were dependent), had therefore been long in operation, and the provincial and park authorities and the lumbering interests combined to reconcile these apparently conflicting interests. Timber leases were all due to expire at certain fixed dates, but by voluntary action, many firms have given up their cutting rights on shore lines, highways and ridges where denuding would mar the beauty and depths of the forest. Over-mature pine has been cut and some slash cleared. This "cleaning" of the woods has so encouraged rapid second growth, that, in recent years over these areas, a considerable amount of the former loss by fire and cutting has been overtaken. New logging or mill settlements, within the park, are prohibited, and existing ones bonded to remove outfits at conclusion of the cut, thus preventing the slum, ghost villages so often haunting streams and tote-roads where lumbering is dead. So successful has been the co-operation of government and lumber industry in "The Park" that the Deputy Minister of Lands and Forests for Ontario was able to report, forty-five years after the reserve was dedicated (and it had then been timbered over for sixty years), "It should be possible with some give and take, to log ninety percent of this area in perpetuity without destroying shore lines, or what is now the natural beauty of the Park. It should also be possible to improve the beauty of the park for the use of nature lovers."

Where The Valley and Ontario led the way, fifty years ago, every province but New Brunswick now has followed in setting aside great natural forest reserves for the use and enjoyment of their people forever.

¹An Eastern Ontario man, who did much to further forest conservation, was a member of this Commission, Thomas Southworth, editor of the *Brockville Recorder*; in 1895, made Clerk of Forestry and, later, Director of Forestry and Colonization for the Province.

FOREST CONSERVATION

As the people began to realize the wealth—and wastage—of their forest heritage, public interest focussed not only on the reservation of timber lands but on saving or renewing them. One result was the appointment, within the Department of the Interior, of a Forestry Commission, headed by J. H. Morgan, which filed three reports in 1885, 1888, and 1889. It recommended the creation of schools of forestry in New Brunswick, Quebec, Ontario and the Pacific Coast, and the development of experimental stations, reporting that "the destruction of our forests by fire and the axe goes on with unabated fury and with painful disregard of the inevitable consequences in the near future." Little appears to have been done however, until 1890 and 1900 when, again, action would seem to have been forced by some of the lumbermen themselves who were active in the establishment of the Canadian Forestry Association in the latter year. This re-awakened interest led to the appointment of an inspector of timber and forestry in 1899, and the creation of a Forestry Branch within the Department of the Interior "to inspect the existing timber reserves, to visit timbered lands generally, with a view to setting apart further reserves and to look into the causes of forest destruction, particularly by fire and to suggest means of protection."

Public opinion was but slowly aroused and not until January 1906 could the Dominion Government be induced to convene in Ottawa the first convention on forestry to be held in this land of timber. It was called "to devise ways and means, if possible, to make every class in the community realize the great importance of maintaining, preserving, and protecting our forests."

Sir Wilfrid Laurier, then Prime Minister, sounded the note of concern, which had been so slowly permeating the country's consciousness:

"It is not fair to the country—it is not fair to us who are living, and still less is it fair to the generation to come after us—that we should allow the destruction of the forests to go on year by year by the cutting down of the trees and make no effort whatever to replace what is thus taken away. The trees are a crop like any other growth. True, they are a crop of slow growth but that is the only difference between trees and any other crop. In this, as in every case when a crop is taken off, steps should be taken to replace it at once with another . . . The forest unfortunately has many enemies. Man is bad enough. We all agree: but man is not so bad as the insects and the insects are not so bad as fire. The fire is the great enemy of the forest."

Mr. R. L. Borden put the need for a new forestry policy in a sentence: "The object to be attained is continuity and conservation of the forests, which are to be regarded as capital upon which individual enterprise shall not be allowed unduly to trench."

The veteran lumberman, Hon. W. C. Edwards, gave striking testimony as to how in his opinion the forests could be sowed and saved. In 1871—thirty-five years previously—he stated, he had bought the Six Portages limit on the Gatineau, considered as worthless and timbered out, from Hamilton Brothers. The farm in the property was under hay at the time but he had resown it to pine and, upon measurement now, he had a healthy pine forest in which trees recently measured

were 14 inches in diameter 30 inches above ground, and one at least was 19 inches. The northern portion of the Ottawa region and from the Gatineau westward, Senator Edwards deemed to be the most rapid growing pine district in this portion of Canada. "In that region, it is my belief," he added "that if the pine is carefully cut just as with the spruce, it will never be exhausted." (The cutting went on with comparatively little concern as today's bare slopes grimly testify).

One result of the Convention was the immediate enactment of the Forest Reserves Act, setting apart 5392 miles in the Prairie Provinces under the Superintendent of Forestry, and from 1910 to 1920 increasing study of forest conservation under the Commission of Conservation. Its work passed, in 1920, to the Dominion Forestry Branch, which became the Dominion Forest Service¹ in 1930, upon transfer of their natural resources to the Prairie Provinces, at which time schools of forestry were operating in the four universities, recommended in 1889 by the first Commission.

Forest Products Laboratories, in which the fundamental characteristics and commercial applications of wood are under constant study, are operated by the Dominion Forest Service at Ottawa and Vancouver. In the Pulp and Paper Research Institute in Montreal the resources of the Forest Service, McGill University and the Canadian Pulp and Paper Association are combined to ensure that Canada's great cellulose industries have the benefit of up-to-date research facilities. The Forest Service also operates five forest experiment stations, ranging in size from seven to one hundred square miles, where problems of forest development and practical forest management are under constant study.

Today, each province has its own legislation, governing the forest, the industries whose base lies in it, and the related interests of water conservation, of preservation of game and fisheries, and of maintenance for the people of the health and beauty of the waterways and timberlands that are of the Canadian's heritage. Whatever the lumbermen of the early careless days may have done in ravaging the forestland, their descendants, in all these later years, have seen, often with clearer vision than the people themselves, the inter-relationship of protected growth, wise and temperate cutting, planned distribution and assured marketing. To the industry must go considerable gratitude for the conservation policies of the last half century.

Mr. J. S. Gillies in a letter to the Minister of Lands and Forests for Ontario in 1924, records simply and honestly the story of the best type of owner: "We have been in the sawmill business in Ontario for three generations, since 1840," (Mr. Gillies is referring obviously to early cutting by his grandfather before more substantial operations, beginning in 1842) "and under our present organization at Braeside since 1873: and, instead of cutting the timber off as quickly and as closely as possible and then abandoning the limits, as has been done and is today being done by other manufacturers, we have been content to make a smaller cut and put back the profits, if any, into standing timber with the view to as long a life as possible for our sawmill. We are, today, on these old limits taking out timber which we could not do if we had to pay a heavy stumpage value for it and the Province secures all the benefits of the money expended in converting it into lumber instead of leaving it behind in the woods."

¹In 1936, the Dominion Forest Service became a bureau of the Lands, Parks and Forests Branch in the newly created Department of Mines and Resources.

The same faith found expression in his message to the trade when retiring as president of the Canadian Lumbermen's Association:¹

"Timber is a crop and is being continually reproduced and should be marketed when ripe. The protection of the forest is largely dependent on the sale of timber products in volume at a profitable price."

FIRE

Fire, the lumberman has fought implacably, for fire means disaster to limit, camp or mill and death to the forest stands for generations to come. "If fires are kept out of the forest," said the veteran operator J. R. Booth, in 1906, "there will be more pine in this country, one hundred years from now, than there was fifty years ago and we shall have lots of timber for the generation to come."

All up and down The Valley, stark memorials of fire's devastation mark ridge and dale, campsite, village, town, and even the cities.

Year in, year out, decade after decade the costly tragic story has run,—carelessness in the dry woods of late spring or early autumn, a spark from tug or locomotive in the parched growth of drought, lightning striking in fated places, and inferno breaking on sod or forest land. All Ontario, especially New Ontario, has paid heavy toll, and the Ottawa costly tax. The Pontiac country was ravished, time and again, one of the worst of the fires of pioneer days laying waste 1,600,000 acres of forestland in 1833, while in the 'sixties,' fires sweeping down from the Upper Country burned off two-thirds of Fabre Township, one-half of Guigues (where the Gillies later had one of their large depot farms), and all the western half of Boisclerc. A riotous riverman, firing off a musket, was responsible for a conflagration that burned over all the area known as the "Big Pine Country" at the mouth of the Bonnechere, in 1851. In 1860, the Trent's upper watershed suffered great destruction, and in the next few years, havoc ran through the country northward to Mattawa; in these fires billions of feet of the best white and red pine went into ashes. Three years before Confederation, fire on the north shore of Lake Huron ran through the pine from Thessalon to the Whitefish but seven years later, 1871, in one day roaring flames swept from Thessalon to the Wahnipitae River, through a strip a hundred miles long and, in depth, twenty miles back from the waterfront. Meeting up with other fires in a hot, dry season, it tore westward to Bruce Mines, and Lake Nipissing, laying waste 2000 square miles of Ontario's best pine and hardwood. An earlier fire had already worked desolation west of Lake Nipissing and along the Montreal River. The Upper Ottawa had a bad few years from 1868 to 1876, in which some of the country now in Algonquin Park was destroyed. In 1868, a fire beginning on Bissett's Creek burned from the Ottawa River to Lake Traverse on the Petawawa; in 1870 another destroyed the Skead limits in the Opeongo, and in 1876, again a careless river-driver was to blame for havoc that ran through the back country from the Petawawa to the Bonnechere.

Portage du Fort, loveliest of all the Upper Valley villages, with its old world limestone homes perched above the rushing River, lay in ashes between the sunrise

¹ *Canada Lumberman*, August 15, 1934.

and sunset of one red day, the fate too of much of the comfortable hamlet of Eganville on the Bonnechere on a pleasant Sunday of a far-off June.

On April 26, 1900, the Chaudiere paid costly toll, Hull was laid waste and all its larger firms suffered heavily—J. R. Booth (who lost mills and 100,000,000 feet of lumber) the Hull Lumber Co., E. B. Eddy, Gilmour and Hughson, Bronson and Weston, and Paer's Mill. In the afternoon, the fire leapt the River, burning before midnight all the Capital that lay west of Division Street, from the Chaudiere to Dow's Lake, rendering thousands homeless, costing seven lives and property damage of ten million dollars.

Such have been some of fire's exactions in The Valley story. The Gillies' finest limit, the Coulonge, was fire-ridden in 1875, in the depth of the great depression of 1873-8, when 200,000,000 feet of timber fell in the burning of sixty square miles of the finest woods in the Upper Ottawa. (See p. 67).

In 1908, fire upon fire broke out on the Gillies' limits in the new Cobalt mining country, occasioned by the locomotives of the T. and N.O. throwing fire. Action was taken in the High Court against the Ontario Government. And, though liability was clearly established, judgment was given on the traditional "non-feasance"—"the King can do no wrong"—and the T. and N.O. Railway, being a government-owned line, was the government and therefore the King, and legally incapable of the evil practice of setting fire to his subjects' timber. But lumbermen are persistent, if loyal subjects, and Scotch Presbyterians not least so of the tribe,—in the end, a private measure of the Ontario Legislature awarded Gillies Brothers partial compensation for the loss.

Fire, and "the worm" and other forest pests and fungus growth, that follow fire, are the forest's terrible enemies, more ruthless and destructive than the most callous of fellers, for the feller leaves, at least, the chance of growth again but fire can burn the flesh of soil and leave the bare and barren rock in which no seed can sprout for many a year to come. Fifteen to twenty years ago, Mr. Roland Craig was authority for the statement, that, at that date (1926) for one tree cut to commercial use probably nine were being lost to fire or forest disease or other carelessness or indifference of man.

In this last decade (1932-41) Canada's fire loss has averaged over 830,000,000 board feet plus 2,500,000 cords of wood, annually, valued at \$5,300,000. Over 6,000 fires have been reported each year, only 15 per cent of which have been due to lightning, the balance being man-caused, but only 12 per cent due to industrial operations.¹ In recent years fire loss has been reduced to about one-sixth of the amount cut.

Neither words nor dollars nor board feet can convey the tragedy and horror of the bush fire sweeping across forest and stream, racing over clearings, roaring down in fiery fury upon mill and settlement, with gangs in the woods, horses, stock and wild life rushing out ahead of the licking flames, men trenching and back-firing to meet the blaze with scorched earth. Camp and mill whistles shriek as women and children, wet towels about their heads and nostrils, stumble through the choking smoke to flat-cars, waggons, boats, or, just on foot, along the roads or railway right-of-way, and as precious possessions are buried in shallow ditch, in garden or yard. Terror rides ahead, disaster and devastation, in the wake of

¹Report 1942 Land, Parks and Forests Branch, Dominion Department of Mines and Resources.

the forest fire, as its flame-pierced smoke and blistering heat leap ahead from crown to crown of the higher trees, or the flame may steal like quicksilver over dry surface soil or grass to rear itself in a fiery circle far ahead of the blazing pillars of the main fire that lean forward from the far horizon. Battered, singed birds fling themselves through the air, as the wind-tossed fragments of limbs and timbers twirl in the stifling blinding smoke, and maddened wild beasts stampede to stream and clearing, all fear of man shattered before this terrible unknown. And man, blinded, gasping, stumbling, flees too from the horror that every forest fire exacts,—death and sepulchre in the stricken woods for some of those, whose lot it is to stand and fight back that others may be safe and other life go on.

As long ago as 1859, the timber men and the officials of Upper Canada urged public action to protect the forests against this most terrible of all its enemies, but not until 1870, in Quebec, and 1878, in Ontario, was legislation enacted and this was but partially effective, for, while it provided for the designation of certain areas as fire districts and required certain precautions from operators, settlers, railways and travellers therein, it made little provision for effective enforcement. This again was to come from the initiative of the operators themselves and from one of the greatest of The Valley firms of the day, when McLachlin Brothers of Arnprior, in 1885, agreed to place ten to fifteen of their men at the disposition of the Ontario Department of Lands and Forests, to act as fire rangers with full government authority to enforce regulations. McLachlin's agreed to pay half the wages and expenses for an experiment which proved so successful that it was generally adopted, the licensees splitting dollar for dollar with the Government. The plan was wholly voluntary until 1900 when the inequity of costs for those who did participate led to enactment of compulsory provisions, and by 1905, 300 to 400 fire rangers were engaged. Protection has gradually been extended and improved, the governments of the Provinces accepting increasing responsibility and control over the setting out of any fires, the disposal of slash, etc. The fire look-out tower, the telephone, the aeroplane, and radio have made significant progress possible and fire protection has become a public service, met in part from general taxation and assessment and in part from the timber dues. Ontario maintains a provincial fire protection service. On the Quebec side of The Valley this rests with co-operative owners' groups. The Ottawa River Fire Protective Association, capably managed by Mr. A. H. Graham, "fire-patrols" the north shore, bringing into immediate action, anywhere in the area, full fire-fighting strength. It has greatly cut fire loss on the Ottawa. But education of the public, especially a migratory public whom the motor car brings to the very heart of the forest, lags. Canada still loses annually through fire loss four to five million dollars' worth of timber, nearly half of it in those areas of Ontario and Quebec, closest to the denser settlements of the East, with their forests easily accessible to the too indifferent fisherman and tourist. The Forestry Branch of the Dominion Bureau of Statistics estimates that the timber cut averaged two and a half billion cubic feet for the decade 1930-39 while the Dominion Forestry Service places our annual forest loss by fire at four hundred and four million cubic feet. The people, to whom, in the Ontario and Quebec democracies, the Crown lands and forests actually belong, are more profligate of their property than the lumbermen who pay to harvest the crop thereon.

WOOD AND THE WAR: 1939-42

THE YEARS were rounding out towards the second half of the second century of Canada's timber and lumber development. The industry seemed justified in hoping for a reasonable period of export and domestic stability. Its own house was being put in order through co-operation in place of ruthless competition, through conservation, seeking to outlaw exploitation. And, again in 1939, the wheel of destiny whirled in mad gyration and war was come upon the world once more. War wanted wood, and, as in 1806, in 1812, in 1854, in 1861, in 1870, and in 1914, it wanted wood from Canada.

First Britain, then Canada itself, then the United States of America were to turn desperately to the woodlands of the Dominion in feverish need of lumber, as shipping sank in devastating slaughter, and as wood was sought for an incredible range of replacement of the vital materials from lost lands, whose products through the years had supplanted the strong firm timbers and fresh lumber in man's affection and use.

Not only wood but woodsmen the United Nations sought from the Canadian forests. Canadian lumberjacks, working in Britain's ancient forests, now fell her stoutest oaks in two hours, take out in a day 250,000 feet of timber,¹ as the people of Freedom's isles spare nothing from the sacrifice of the struggle. Nothing could afford a greater contrast in a century's timbering than that in the same woods work the "Lumberjills," a division of the British Women's Land Army, housed in hutments in the English and Scottish woods, doing forest work, driving, measuring, in pitwood operations, following the fellers, trimming out, cording, clearing, burning, themselves felling trees of pit-prop size, and operating small dip-mills, marking and cross-cutting logs, loading timber and working in the saw mills. On the Canadian Pacific Coast, a thousand women are reported now in lumber operations. Will women camp and mill hands be yet seen on the Ottawa?



The Canadian industry, through the lean years, had organized itself to greater strength, and, through the Canadian Lumbermen's Association, and its affiliated Bureaux, was able to turn at once to war's challenge with a greater efficiency of centralized plans and policy than characterized much of Canada's initial war effort. If

¹Press Release—Summer 1942—Dominion Department of Munitions and Supply.

export markets were crashing in other areas of the world the lumbermen were only freer thereby to hurl their fullest strength to meeting Britain's needs, abroad, and for her war orders here and in the United States. Export production was stepped up in 1941 well over ten per cent, and over a billion feet of lumber was rushed to Canada's own war needs in 1940 and 1941, with this year's demands well over half a billion feet. Of 345 million cubic feet of standing timber cut in 1940, 91 per cent was retained in Canada for use in some manufacture here; of sawn lumber, 40 per cent was retained much for rough structural work in war buildings.¹ Upon the appointment of a Canadian Timber Controller in June, 1940, Britain's war needs were given first claim upon our resources, Canadian war needs second, the United States' needs third and Canada's domestic needs last. Since the United States entry to the war, that country calls out to Canada with present shortages greater than the Dominion's full cut of five billion feet. Civilian demand in Canada is being ruthlessly slashed and Canadian production is earmarked for British, United States and Canadian war needs, in a three-way split. As in the early days of Canada's settlement when the great, undeveloped country hungered for capital and had but wood and wood products to sell, so, in the days of desperate destiny after Dunkirk and until lease-lend became a pooling of resources, Canada's forests were again her life and strength for from them poured across to the United States, millions of feet of lumber and millions of tons of pulp and paper, for dollar exchange, establishing credits for vital needs of the Motherland and Canada, available only in the United States market. Prices were fixed early with the result that the industry was operating through patriotism rather than profit, long before heavier controls were more widely extended. Average export prices per 1000 feet of sawn lumber stood \$22.85 in 1939, \$27.39 in 1940, and \$32.50 in 1941. Typical increases in timber have averaged about \$5 a thousand, as contrasted with jumps of \$25 in white pine and \$27 in Douglas fir in a similar period in the last war. The spread in Canadian prices has been occasioned in part by the heavy upswing in wages as lumbermen sought desperately for manpower and as employment jumped over fifty percent in three years. In mid-summer, 1942² over 50,000 men were engaged in logging, and 65,000 in manufacturing lumber, no less than 39,000 of them in finishing rough and dressed lumber. Aggregate pay rolls for logging exceeded one million dollars weekly; for lumber manufacturing, \$1,480,000, of which \$920,000 went into the sawn business. The production of pulp and paper and paper products engaged another 53,000 men with a weekly payroll of \$1,600,000. The Bureau of Statistics estimates that the marketing of 1000 board feet of standing timber involves capital investment of \$63, average expenditure of \$13 on materials and supplies and an average wage distribution of \$27.³

Wood and the men who fell and finish it have a job to do in this war. War calls for speed, war calls for much temporary construction with costs kept low. Wood comes into its own for the temporary building that springs about defence and war activities, and to house and warm the workers on the home front, as power and oil fall under strain to drive the wheels of war production. People,

¹ Estimate of Forest Production in Canada—1940—Dominion Bureau of Statistics.

² Dominion Bureau of Statistics—Employment Situation, June 1, 1942.

³ Dominion Bureau of Statistics—Forest Production, Canada 1940: 1942.

used to steel and concrete, had forgotten the great timbers that sustain many a mighty vaulted roof of ancient fame; never knew the towering barns that have stood a hundred years on many an eastern Ontario farm. For construction sheds, and great plane hangars, for the ways where ships are building, for many a use within those ships, timber has come into its own again. Laminated wood girders and timber connectors give the strength of steel to giant supports, replace steel for present tasks that early industry never entrusted to anything but wood. In the plant where the Canadian made bomber, the Catalina, PBV5 is built, only timber has gone into trusses, columns and exterior finish, thus saving tons of metal for the great ranging scout planes. New war shipyards are using wooden derricks to lift ten ton loads. Fences of wood again skirt highways; roofs and drainage, spouts and containers again lean back on wood while, within home and office, shop and factory, wood replaces steel, enamel, rubber and their products in a score of old and new ingenious uses. And everywhere within these buildings and their furnishings, native Canadian woods are replacing costly and distant imports. E. B. Eddy made pails from sawdust, and experimenting firms are bringing in wood fabricated bath-tubs, sinks, kitchen and farm equipment, of wood or its products. Nashcrete is a British product of sawdust and concrete which can be mixed, hardened and used for building, thus saving steel and sawn lumber. Shavings and sawdust are being used not only for such ingredients but for wood flour (the base for plastics), dynamite and hundreds of uses including the manufacture of linoleum, replacing rock wool in insulation, and as fuel for engines and furnaces, for which it has been so used in the steam mills of the East from the early decades of their operation. Even small trees can provide broad sheets of plywood peeled off the circumference of the log. Plywood and laminated wood, toughened and flexible, are doing war work for sheet metal and steel in ships and planes, the automotive and numerous other lines of production, and here, in countless every day uses, these light woods and cellulose plastics spell off for aluminum and other light and vital metals. And as wood moves into the actual battle lines, research has worked to overcome its greatest weakness, inflammability, and weekly, its products are being made more fire resistant, while on the other hand, science makes wood-cells one of the bases of nitro-cellulose, the terrific explosive in cordite. Cellulose products replace the lacquers lost in war zones. Reconnaissance and "second front" plans turn in no small part upon photography, and wood is drawn on for the celluloid basis of the film, upon which too the wide recreational and educational significance of the motion picture turns. And more and more wood products and wood fibres are clothing the people, replacing silk, and wool, and cotton and hemp, and even shoe leather in a land where these are lacking or harder come by.

And, of course, on the smaller and other growth that the square timber and sawn lumber trade passed by, in other years, rests the continuance of newsprint supply: so the freedom of the press of the United Nations is in no small part dependent on our forests. Of Canada's newsprint production, over three quarters is exported to the United States or Britain, in which two countries so many of the shattered nations carry on their continuing struggle by the written and the spoken word.

Every sheet of document, every instruction, regulation, map and design, on which war's communications and strategy run, call for paper, paper from the wood of the forests, and, for the British cause, that is wood pulp from Canada or Newfoundland. Supplies of food and munitions rest now in wood or paper containers. Priceless equipment, and the radio of intricate power, increasingly depend on wood products for enclosure and casings.

This year probably five billion feet of sawn lumber, over ten million cords of wood will come out of the Canadian forests, vital as shells, and tanks, and guns and planes, and ships to the fight, for all of them reach for wood for their making or ask wood to release scarcer metals for their manufacture.

Freedom's fight will go forward or falter as the ingenuity and resourcefulness of Canada's lumbermen and the resources of her forests are found strong or lacking.

In spite of the generations of their cutting, the forests stand, adequate to the need, and to the future.

Of Canada's land area (3,466,556 square miles) just over one-third (1,220,000 square miles) now bears forest cover. Of this latter totally forested area, fully three-quarters may be regarded as true forestland, that is better adapted to growing trees than to any other purpose. Of course, in parts of this tremendous forest area trees do not grow well enough to yield commercially valuable timber but the truly "productive" area—from which logs and pulpwood come—occupies more than three quarter million square miles (770,000) over half of which (430,000) is considered accessible to commercial operations. This accessible forest contains 212 billion possible cubic board feet of sawn lumber and 1,500 million cords of pulp and fuel wood, etc. The average annual cut in the last decade has been over $2\frac{1}{2}$ billion cubic feet, but these war years have averaged nearly $3\frac{1}{2}$ billion cubic feet. War needs this year cry out for five to six billion cubic feet from Canada, an unprecedented production if it can be met.

The rate of consumption of forest products is high: forest fires and insects take their toll in the yearly depletion but our forests reveal such a remarkable capacity to reproduce themselves that growth is going far to make good our annual loss. In truth, the supply of virgin timber is being rapidly exhausted, and in the future, the Canadian logs being used will be of smaller average than in the past, but that does not mean that Canada will run short of wood as such nor yet that the lumber industry will recede to insignificance before the expansion of cellulose products.

The stands are there and the industry is ready, but, today as a hundred years ago, manpower and skill alone can fell and drive the great trees down waterways to man's uses. And Canada is desperately short of manpower. Given the manpower the timber- and lumbermen will not fail their country, the Empire nor the Allied Nations, though they know that the very treaties that were the basis of their renewed strength are in the discard in this pooling of everything that free men possess to save everything that they have ever cherished. They know that the very extent of their tremendous effort now may mean, as it has meant so many times in the past, increasing capacity beyond our normal production

demand, and so, inevitably, recession, collapse, loss and slow adjustment when the battle is done.

But will it, this time, be so? Or, may it be opined that the reliance of science and freedom, on wood, to which the disasters of recent months have again brought modern man, will continue into a new day? Let us hope so!

Stuart Holbrook¹ prophesies:

"Technicians have developed more than four thousand things that can be made with cellulose and lignin, and doubtless there are thousands of other products, still unknown, to come from trees.

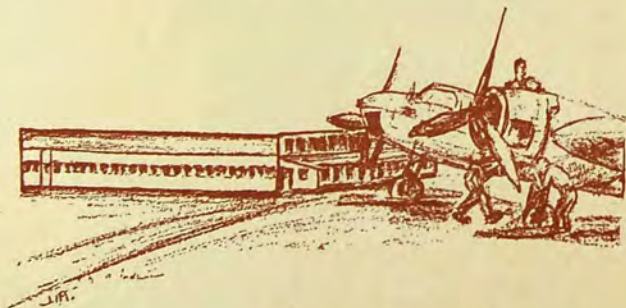
"One morning soon—this seems a likely happening from progress already made—the lumberjack will crawl out of his blankets, made of cellulose, and pull on a pair of caulked boots, made wholly of pulp paper."

"His breakfast," says Holbrook, "will have biscuits, with shortening made at the pulpmill" and "a pretty good syrup made from plain sawdust that was converted into soluble sugar by dilution with acid."

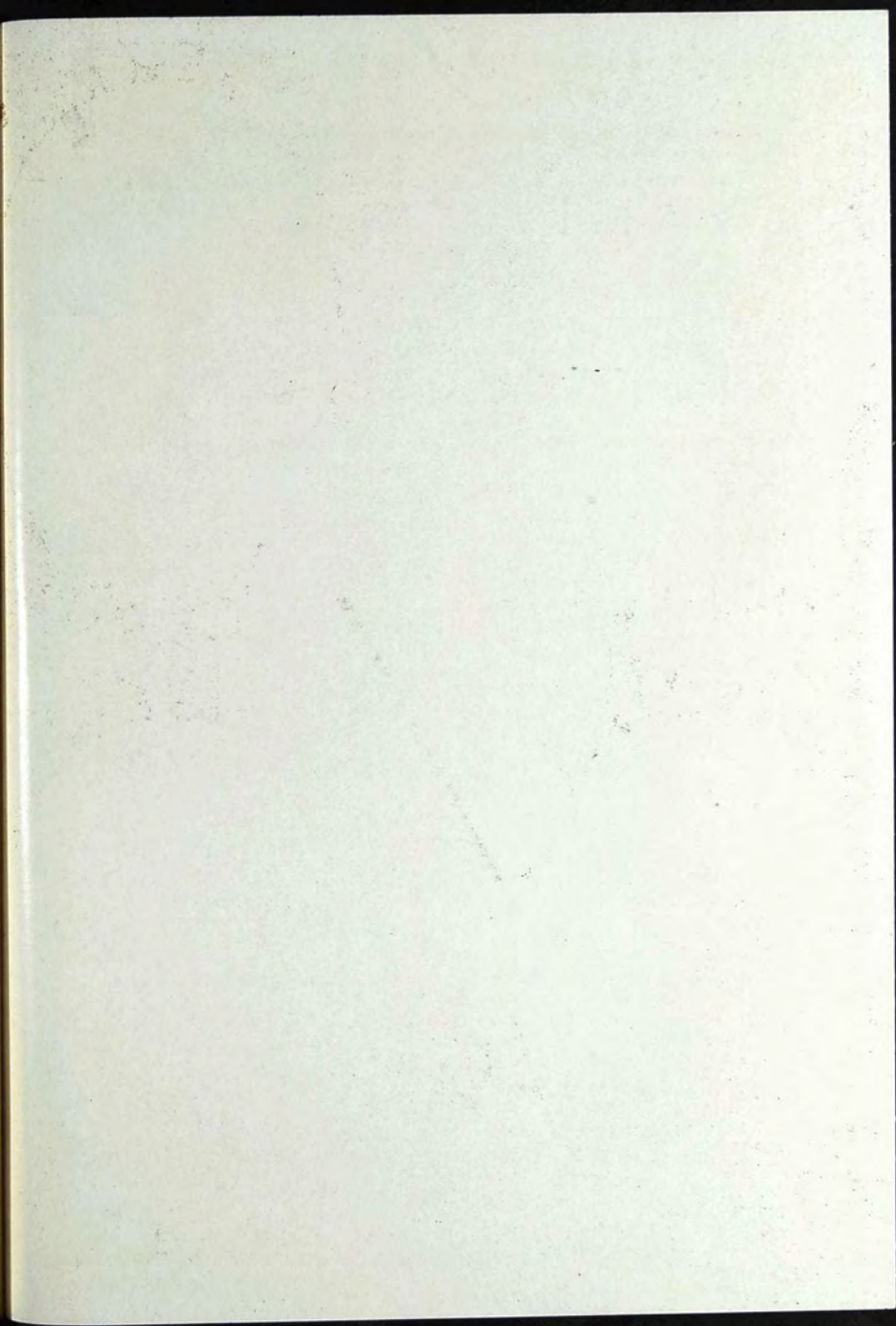
"The blasting for road building will be done with dynamite made from sawdust. The logger's truck road will be surfaced with Raylig, a product of waste sulphite liquor from pulp mills, and other materials. The handles of his felling and bucking saws will be plastic. The hose he uses to fight forest fires will be of cellulose. The nozzles and connectors will be of wood plastic."

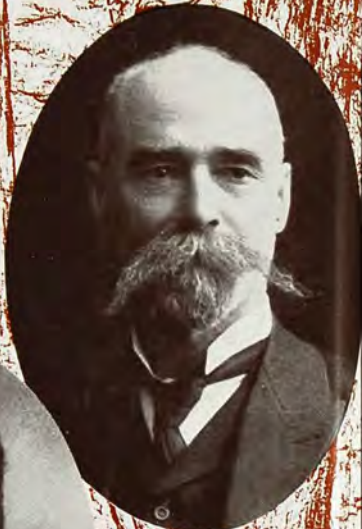
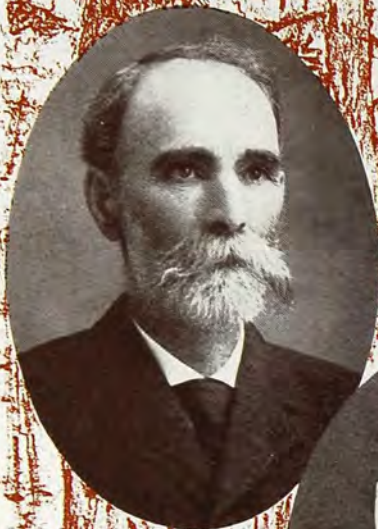
And so, he avers, it will go on not only in logging camps but in all walks of life, as technicians leave untapped few human needs that wood cannot serve,—planes, clothing, oil, producer gas.

Is it perhaps written in the stars, that forest and stream, shanty and river, and lumberman, mill and laboratory, having worked together to save our way of future living, will then continue until lumber and lumber products become in the Canadian economy, in the forties of the twentieth century, the dominant factor that they were from 1840 to the opening of the West and the golden age of wheat?



¹Tall Timber—Stuart H. Holbrook—MacMillan, 1941, p. 167.





JIM

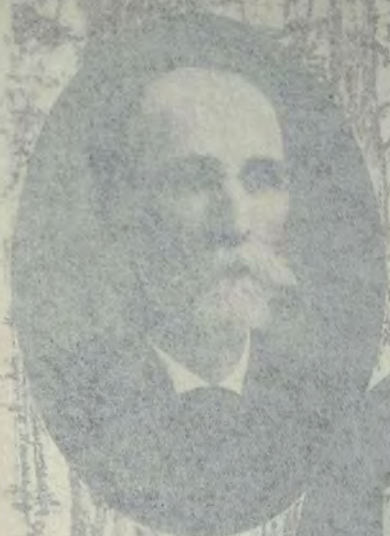
DAVID GILLES
1944-1958

JOHN GILLES
1944-1958

DAVID GILLES
1944-1958

D. A. GILLES, 1949

J. S. GILLES, 1949-1958



JOHN GILLIES:
1909-1914



DAVID GILLIES:
1914-1926



JAMES GILLIES:
1873-1909



J. S. GILLIES: 1926-1938



D. A. GILLIES: 1938-



THE NEW LANARK FAMILY ONE HUNDRED YEARS AFTER

JAMES GILLIES, the elder, had left the glens of his people in the drear darkness that had followed on his country's long grim struggle for survival. Four generations and six score years thereafter, Britain's bugles, blowing again the blasts of her destiny, summoned his descendants to their battle posts, in the new land, in whose building they had played a man's part. And, as in 1914, each member of the firm quietly fell in at that post and to that duty for which his years and his experience best qualified him in the struggle.

Trained for warfare, the Vice-President of the Company, Major John A. Gillies, (now Lt.-Col.), son of J. A. and in charge of woods operations, immediately joined the Forces, in charge of the 27th Battery, 1st Anti-Tank Regiment, Royal Canadian Artillery, and proceeded overseas. He had been joined on the Board by his brother, Norman B., who, however, shortly afterwards followed him overseas and is now captain with the Royal Canadian Engineers.¹ Carrying on her brothers' work, Miss Janet H. Gillies, great granddaughter of John, joined the Board. George Brodie Gillies, another director, and a graduate in Engineering of the University of British Columbia, took over, as had his uncle, D. A., in the first great war, the nerve straining task of keeping men in the woods, timber coming to the mills and war orders filled. Mr. D. A. Gillies, president, for the second time in a quarter century—this time without the help of J. S.'s broad, wide counsel and carrying much of the work of the directors overseas,—assumed war-time direction of the Company and all its outside contacts with governments, the trade, and the Allied War Supply contractors, as well as the generous discharge of obligations, voluntarily assumed, in the lumber industry's many vital associations and undertakings.

These have been heavy and varied, chief among them the chairmanship of the Pine Committee under the Dominion's War-time Timber Controller

¹For full war service of *all* John Gillies' descendants, see page 163.

and membership on the Sub-Committee on Natural Resources, Forests, Mines and Water Power of the Dominion Government's Committee on Post-War Reconstruction. Maintaining the firm's strong convictions on the necessity of co-operation within the industry, D. A. Gillies serves as vice-president of the Quebec Forest Industries Association, and as a vice-president of the Canadian Lumbermen's Association, in the development of which the two preceding presidents, J. S. and David Gillies, were actively associated.

Braced to the shock, the Company closed out the first century of its operations in the forests of the New World.

* * *

One, not of the clan, looking at that long sequence of the years, can see the warp and woof of its story, being woven in strong threads and quiet colours to a common pattern, true to the character of the men of the Highland glens, and to The Valley traditions, which the Gillies have not only continued but helped to create.

The story of timber, in far too many areas of this continent, has been one of ruthless ravishing that left the great forest land desolate, naked and incapable of bearing tree or farm crop. Though The Valley, too, had its raiders, they were not the dominant group, nor were there ever the bitterness and enmity between settler and lumberman that left scars upon the memory of New Brunswick and of Maine.

Nor was timbering and lumbering in The Ottawa largely an ephemeral industry, that either raked the land of its forests, and left it to a quiet and successful agricultural development, (as happened in much of western and central Ontario) or, on the other hand, that passed, and abandoned the country to the poverty of bare rocks, rotting stumps, decaying shacks, dead depots and ghost towns which mark the trail of the trade across so much of the northern and upper part of the province. The Ottawa is essentially forest area, reliable estimates placing the productive forest land at four out of five acres, three quarters of it in the Upper Valley.¹ A five million acre survey suggests that, allowing for rocky and swamp land, not more than one in five acres in The Valley's entire thirty-five million acres gives good agricultural promise,² and this too is in the upper country on "the Ontario side," for arable land on the North Shore is limited, occurring in parts of the Gatineau and in comparatively small patches in tributary valleys. Though they have, too, their barrens and their desolations, where, bleak and bare and broken, cabins of dead hopes sink into the tangled growth of a forsaken countryside, many of the areas of the Lower Ottawa, and in the Upper, the Rideau, Mississippi and Bonnechere country offered reasonable agricultural return.

As lumbering expanded, the pioneer agricultural settlements found a market at their doors and in fact could not keep up with it, tens of thousands of barrels of pork having to come in from Chicago, when the industry was in full stride in the second and third quarters of the nineteenth century.

¹Roland D. Craig, Dominion Forest Service in various articles on the Ottawa.

²Mr. J. R. Dickson, Dominion Forest Service.

A Dominion Government publication in 1886¹ might have been written of The Ottawa:

"Timber" it states, "was long the staple article of Canada's export trade, but with the settlement and development of the country, it now ranks after agricultural produce.² Still it should not be forgotten that the farming interests of the Dominion owe their expansion to the lumbering industry. In clearing the land of its primeval forest growth, the soil became amenable to culture, the lumberman was the first and best customer of the farmer: nay, he provided the farmers. The newly arrived immigrant in the majority of cases possessed little or no capital, but, immediately on his arrival in the country, he found regular and lucrative employment in the service of the lumberman. A few season's steady work afforded him the means of buying a lot of land; it gave him that knowledge of the woods and handiness to shift for himself which are so essential to a newcomer, placed in surroundings foreign to his past experience. Hence he was enabled to select a suitable location, and build his own dwelling or shanty without extraneous help; when he had raised a small crop of hay, oats and potatoes, he found a ready market at his door; when he was able to purchase a team of horses, he found employment for them during the winter months, in hauling logs, and he had them for his farm work during the summer. Such in brief, is the history of many a thriving farmer, or his father, in Canada. The lumbermen are the pioneers who have opened Canada. First clearing the land along the banks of the largest rivers, they have followed every tributary stream that could float, or could be made to float a log in the spring freshets, until they have at last penetrated every nook of what at one time was a trackless and impenetrable wilderness, hewing and constructing their roads, bridging and damming rivers, establishing depots, which speedily developed into villages and towns, and withal contributing largely to the revenue of the country." (Incidentally the report adds: "one other advantage Canada owes to its timber trade is the enormous increase of its mercantile marine, which ranks fourth among the maritime nations of the world").

These and several related factors probably contributed to a happier relationship and growth of common interests and community life in The Valley than in most of Canada's other timber lands. For nearly two generations, the timber operators were settlers as well. Even if they made lumbering their chief activity, they were pioneers, with their homes and interests in the tributary streams or main rivers where their limits lay: they were not merely contractors, or agents, nor yet merchants interested solely in marketing. They carried on inclusive operations, shantying, rafting and driving, and so were interested in keeping their men together, and their supplies assured over a long period each year. Not infrequently they operated other mills, grist and woollen, and foundries and general stores, auxiliary to their own "bush" needs. As the sawn lumber market opened, and they adapted to this demand, they were able to plan even more continuous employment for their people, and the company town or village became characteristic of the Ottawa and its tributaries. The large United States operators moved in to locate sawmills on the Chaudiere, and ready to buy their logs from

¹A handbook prepared for the Colonial and Indian Exhibition, London, 1880, under direction of the Dominion Minister of Agriculture, Hon. John Carling.

²Note this was in 1886. Now again, forest products, including newsprint, take first rank as "the staple article" of Canada's export trade.

jobbers, but they too settled to the rhythm of The River, and to its life and ways, making their homes in Bytown, or in the villages and towns where they located depots or mills, as cutting moved further up the main stream or its branches.

The geography of The Valley contributed to common interests in the undertakings of the community, for each small stream, each main tributary of the Ottawa formed its own valley, without much easy "criss-cross" until the railways came. The local firm, self-contained among family members or close friends, its complementary cluster of employees about it, became characteristic of the smaller valleys of these tributary streams, and the whole "tribe" of the "Ottawa operators" (no matter how they may have quarrelled among themselves) as close-knit as a clan in the face of criticism or competition from the other river valleys.

No family, now timbering on the Upper Ottawa, has dwelt there a longer spell of years nor carried forward its typical operations over a longer time than the Gillies, its members taking an increasingly important part in the developing national industry. Decades ago, while others were cutting nearer the seaway on the Lower Ottawa, or in the profitable Trent, the Gillies stayed their faith on the Upper Ottawa and its tributaries. Out from the little Clyde they went to the broader Mississippi, from the Mississippi to the strange Coulouge country in another province, back into its remoter reaches in the Timiscaming, across the Ottawa again to the Ontario side, to the Bonnechere, the Madawaska and the Petawawa, up to the opening country of the Montreal River; farther westward to the Timagami but always faithful to the waters of their own great River. The hundredth anniversary year closes with the purchase, in December, 1942, of the McLachlin limits of 181 square miles on the Black River.

Though their interests have strengthened and spread through a century now, the firm has never had any government grant of free timber but has always acquired its limits by public tender or direct negotiation. Through all the years, their purpose and programme have been singularly direct—the making of timber or sawn lumber, on which the 'G' of their name and the 'V' of their mark stood in all men's eyes for "Good Value." From one generation to the next,¹ the pledge has been passed, honest timbering, wise nurturing of old limits, constant seeking of new stands of sound growth, felling, floating, sawing and selling a well-graded, well-manufactured product of good quality—pinus strobus, white pine, and on occasion, a block of red pine or spruce.

There is but one record of any of the firm having been beguiled from their native watershed. Intrigued with southern pine, seen in halcyon holiday mood, he bought limits at Clinton-on-the-Clinch, Tennessee, but when, with spring floods, the stream rose forty feet in twenty-four hours, he hid him home for the broad and temperate Ottawa. (Nothing is more typical of the family firm's close federacy than that all his losses were met from the common exchequer, and no

¹ John Gillies had six sons, of whom four went into the firm of Gillies Brothers: (one was drowned in young manhood, the other went into steel forging). One of these four sons did not marry, the other three had ten sons (grandsons of John) of whom one died young, five went into the firm, and four into other lines. One granddaughter is on the directorate. In the fourth generation, there are fourteen great grandsons, of whom three, as well as a great granddaughter on the Board, are already associated with the firm. One other is in lumber, Arnold G. Muirhead, B.Sc., graduate of Queen's in chemical engineering, now assistant superintendent of a large Canadian pulp and paper mill in Eastern Canada.

contemporary knew that a Gillies had been susceptible to the charm of far but false green pastures).

The traditions of the firm can be seen as the projection of family traits,—a taste for modest good living, faithfulness to duty and a great reserve in tasks well done, patent honesty and straight-forward dealing, few but strong loyalties, fixity of purpose, caution and dogged determination in execution. John and his sons were active in the building of their communities—Gillies' Mills, Carleton Place, of which James Gillies was the first municipal treasurer in 1871, and Braeside. Schools and church and public services, and all good works engaged their active interest and their unproclaimed but consistent support. John Gillies gave several generous donations for those days to the funds of struggling Queen's, and the site and a large gift for the building of St. Andrew's Church, Carleton Place. James Gillies was active in the local Board of Education. The Gillies' account books show their activities in assuring schools at Braeside, in which in seventy years, there have been but three postmasters, the successive managing directors of the Company, resident there.¹ "Scots schooling" was insisted upon, and the names of John Gillies' descendants are on the rolls of the Universities of Queen's, McGill, Dalhousie, British Columbia and Toronto, David A. Gillies being national president of the General Alumni Association of his University, founded in the same twelvemonth as his grandfather's firm.

The quiet affectionate service of the reserved Lanark Scots centred about their homes, their kirk, their schools and, inevitably, they were interested in their protection, and so it was with the Gillies. John Gillies, reserved and withdrawn as he was, left his inner concession farm to go with the volunteers in the Rebellion of 1837. In each generation some of the family have been in military training or service, four having attended the Royal Military College of Canada and no less than twelve descendants being under arms in the second World War.

The "women folk" have not been unworthy the courage of the Scots woman, who, in the forty-fourth year of her age, left her homely valley for the hard journey to strange lands oversea. Granddaughters and great granddaughters serve on the firm's directorate. Others have been active in educational, church and community service. Miss Helen McEwan holds office in the Federation of University Women, and Miss Flora Gillies Campbell, W.R.N.S., posted to duty at the Casablanca Conference, North Africa, was one of the first women ever to sail on duty aboard a British warship, serving as a full member of the wardroom.

The family characteristics and the relationships of the close-knit blood partnership permeated the woods and river and mill operations, as business undertakings developed and continued, even as they grew to broad proportions. Gillies Brothers was a joint undertaking, in which all that each could give was pledged, and in which no risk or share of other help was sought. "Your men work with you, not for you—remember always," was the injunction given by John Gillies to his sons, as he started them on the independent venture of Gillies Brothers. And something of the spirit and unity of the clan grew into the fibre of the firm on the Coulonge and Ottawa,—a compact, patriarchal, even, in some fine aspects,

¹ John Gillies, 1873-1914; J. S. Gillies, 1914-1938; D. A. Gillies, 1938-. The great-great uncle of the Gillies was postmaster in Banton, Scotland, in 1821, when the family migrated.

feudal in the warm good comradeship and sense of responsibility that knit together the partners and the people, whose fidelity helped build it, in common effort, achievement and proud satisfaction.

"It's a hell of a fine job, you've done, this drive," an Irish operator on The River is reputed to have said to his foreman, as the timber neared the Coves. "The next year," he tells, "I was with Mr. —, a Devon man, and he said 'Sandy, I'm well pleased with your work'." "Then," he is alleged to have concluded, "I took the next drive down the rarin' Coulonge for old man Gillies' sons, a fine run we made, and across St. Peter with the rafts from the Lower Ottawa, and all the old man said was 'Guid' but I stayed with them twenty year."

Such could be the transmission of the sense of duty to the firm and of attachment to the Ottawa from its principals to its men. They stayed with timber and lumber, and in their Valley, through good times and grim; they were not induced to profitable sale of limits and mills to "Sassenachs" and easeful retirement on gilt-edged bonds of the growing Dominion; nor did they swerve aside to the seductive lure of pulp or paper or power. New limits on the Pacific Coast were acquired to hedge and protect The Valley undertakings, their first and abiding loyalty, and neither the milder climate, more majestic grandeur nor mechanized advantages of Coast timbering could woo them from the harsh winters, hazardous drives and turbulent waters of the Upper Ottawa.

So, it is that yellow brittle time sheets and pay rolls of half a century's age are still current for many a name today. Founders and foremen, founders' sons and grandsons and great grandsons, old men and the descendants of yet older have kept faith and service and built continuity of policy and operations through the years.

As Gillies Brothers enter the second century of unbroken timbering on the river reaches and rapids of the Ottawa, the pages red-tabbed in the annals of their first hundred years are not more the acquisition of this limit, nor the floating of these record rafts, nor the sale of the whole mill cut, than the honouring of the years of service of men whose labour has been long and faithfully and happily blended in their own, and whose sons and grandsons, nephews and great-nephews are still on the pay-sheets in shanty or in mill.

Through the pine-scented mists that, at sunrise and sunset, float across Chats Lake, softening the outline of the hill and village, and the mills and yard, many a name and memory haunt the work-ways that their days had known. There are David Macpherson, faithful executive of the Braeside mill from its first worrying weeks through many a year, and the man who followed after, A. E. de Renzy, admitted to the family undertaking as Secretary-Treasurer, with forty years of service in the Company. Staunch believer in the four young men in 1872 was James Coleman, who, on the dissolution of the John Gillies-Peter MacLaren partnership, chose the risk of their new venture rather than the security of an established firm, and came to Braeside as yard superintendent. His two sons, reared in the village, were to travel to high places, "E. H." to become Under Secretary of State for Canada and "D. C." president of the Canadian Pacific Railway. Today's yard superintendent, R. L. Kirby, completes a half-century of service just as the Company itself closes out its first one hundred years. McNabs there

have always been with the Company—Archie McNab, today, after 43 years of service, being cashier of the Company at Braeside, whence Charles W. McNab went forth to found and operate his own lumber business in the Kootenay. Long too were the years put in by the versatile Captain Blondin who ran the Pickanock Depot in the winters and 'the Clyde' on Lake Timiscaming through the summer.

Bush superintendents, foremen and clerks, the memory of whom is still vital up and down The River and the Coulonge, the Madawaska, the Timiscaming and the Bonnechere—"T. B." Lunan, 'Archie' Mackinnon, 'Tom' McNeely, 'Bob' Moorhead, John B. Kerr, John McCulloch of Bais des Peres, Andy Moran, 'Phil' Munro, John Thompson, whose grandson is in the Coulonge depot today, stride, strong, taut-muscled, unafraid across the hand-written yellowing leaves of old depot files and orders. Now and then a name breaks through from the past destined to play a larger part in The Valley's story,—Peter MacLaren, to become a partner of John Gillies, later his own operator, and a member, too, of the Senate of Canada; young George Gordon, at sixteen years of age, leaving Pembroke High School to follow his father in woods operations in the upper country, working beside the Gillies, and later becoming a large scale operator, and member of the Upper Chamber of the Dominion.

And the partners, and agents and heads of other undertakings rub shoulders in the dim and faded records with the Rainvilles of Perkins, Quebec, "best of timber makers," and Sam Herbert and William May, fine teamsters of price above even good white pine, rivals for the Gillies' best team "Maggie and Prince." There too, passes William Douglas, for half a century mill superintendent at Carleton Place and Braeside. He appears in firm records in the "sixties," in an instance, bespeaking the direct action and rough practical reasoning of a day of less sophisticated business ethics. The Carleton Place mills were running at full output, two eleven hour shifts of 100 to 150 men each. The crown gear of one of the waterwheels broke during the night run, and that meant a delay of two or three weeks for replacement. At Arklan, there was a small mill, whither Douglas repaired with some of his mechanics, in stealth removed a similar gear, without waking the unsuspecting owner, installed it in the Gillies' mill and resumed cutting before daybreak. His argument to his own and the rifled firm was that the latter was running intermittently, only a few men would be displaced, that the Gillies Mills would pay compensation both for the part and the wages,—which they did—and that 200 to 300 men would be kept at work in the larger plant.

Names and names run on—"Bill" Sereney, skilled wood-scaler, George Armstrong, mill engineer, and John Mills, superintendent of mill construction and operations,—all on the long roster of employees and friends, the value of whose services stretches far into the present day and honoured record of the firm.¹

Of the principals of that firm, the journal of the lumber trade² has written "They have inherited a splendid name among the lumbering fraternity and have maintained its merits undiminished to the present day." But all the owners would be the first to claim that not they alone, but those who have laboured with them, have kept afloat and driving the raft of fine enterprise of which John Gillies first

¹See also pages 166-70.

²Canada Lumberman, August 1st, 1909.

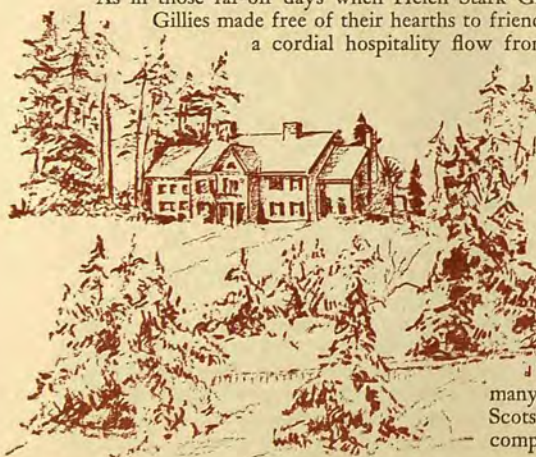
dreamed on his father's holding, on the west half of lot 10, concession 5, in the township of Lanark in the District of Bathurst, ere Ottawa was a settlement or a canal or railway had pierced The Valley. Though carrying broad business interests and their full share in community, church, and educational enterprise, the Gillies dwell as they have always dwelt with their men close to the forests and the rivers wherefrom their sustenance came and whereby they have found a good life no less than good living.

John Gillies built his comfortable home on the Clyde's sloping banks, and, about it clustered the few houses of Gillies' Mills. James Gillies built, too, in the heart of the small community which, in part by his enterprise, was to become the pleasant Carleton Place of today. And when the Gillies Brothers bought up The River, there too they moved their hearths, David taking over the old Osborne home on the brae's side and John building at the small hamlet's edge. When David moved to be closer to the Carleton Place interests, the Osborne house became the home of J. S. of the third generation. Today the village rambles in its picturesque rows of pleasant little houses and lawns and gardens along the brow of Chats Lake and, westward to Arnprior rises the home of the present President, built as the founder's a hundred years ago, all of good white pine. "The Grove" rides a crest in the centre of a white pine woods, part of the original grant to the old Chief, and, from the height, looks out upon The Ottawa and the unfolding Laurentian hills of the Quebec shore. It is constructed of sound white pine, grown on Gillies limits, cut and floated by Gillies men, manufactured in the Gillies mills and worked into a home of the same pure Colonial design, by which, down through New England and the Southern States, one may trace the tradition of gracious mellow living, brought from the homeland overseas, generations now long gone, by the early settlers of British North America.

As in those far-off days when Helen Stark Gillies and Mary Cullen Bain

Gillies made free of their hearths to friend and stranger guest, so does a cordial hospitality flow from today's president and his wife, Jessie Stewart Gillies, to the firm's employees, to colleagues in the industry and to the many guests whom their keen interest in community, educational and public affairs welcomes to the ever-open doors of "The Grove."

About the busy River and log-pond and mills a sturdy community has grown, the typical mill village of Ontario in many of its aspects but, under Scots tutelage, not the "bounden company town" for Braeside is

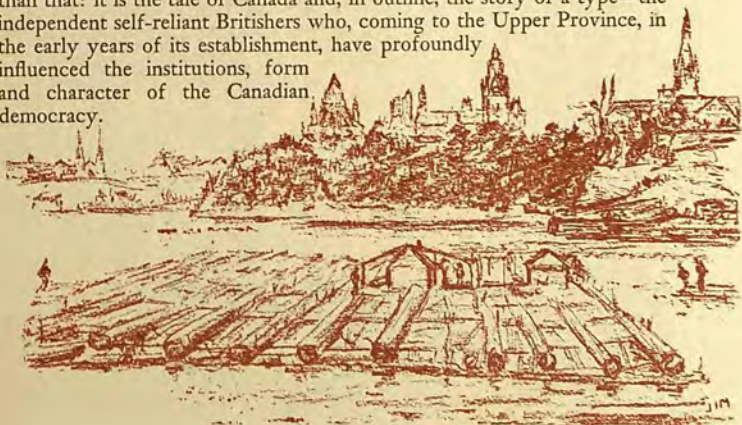


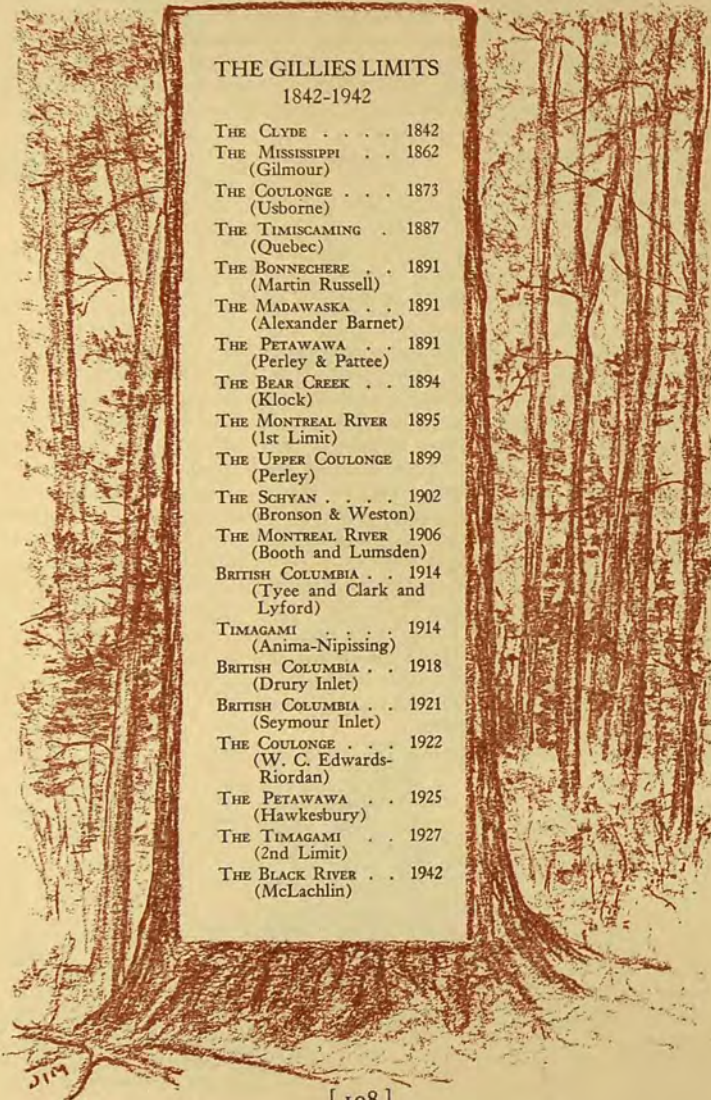
its own incorporated village, with its own Reeve, Council and School Board, and its own tax assessment and collection, though over 70 per cent of the municipality's revenue derives from the Company's payments. The affinity of Church and school and work of The Valley's communities runs true,—with two well-supported churches (the United and the Roman Catholic) and a Presbyterian mission, serving the population of 475 persons, of whom 110 are children attending the competent school with its three teachers.

Here the Gillies Brothers' interests head up, here and in their sixteen hundred square miles of limits, with their eleven hundred employees in their camps and mills and yards whence, with trade at normal, the loaded cars glide out from the miles of siding, bearing in a year, thirty million feet of lumber, of guaranteed quality, to the markets of Canada, the United Kingdom, the United States and the British West Indies, in the end as in the beginning, all but a small per cent of it, *pinus strobus*, the white pine of Canada.

In a small Scottish kirkyard, by a small grey church, sleep George Gillies and his wife, Janet Nisbeth, in far-off Banton, in the parish of Kilsyth. In the little pioneer cemetery by Middleville's crossroads, James and Helen Stark Gillies rest beneath the towering elms, and in an honoured grave in the Cram cemetery near the town of Carleton Place, lie John Gillies, and, near him, his sons and his sons' sons. In the Upper Ottawa, from its headwaters to the mouth of the Madawaska, other sons' sons, and greatgrandsons carry on. And overseas, in the Motherland and in strange and dangerous places, yet other men who bear his name have turned aside from their well-loved Valley and forests to serve the freedom that their fathers bought. One, one of the youngest among them all, has flown to daring and to death, across the English skies, and another, seriously injured in military manoeuvres overseas, has been honourably invalided home.

The story is a story of a family and a firm, but it is more and other than that: it is the tale of Canada and, in outline, the story of a type—the independent self-reliant Britishers who, coming to the Upper Province, in the early years of its establishment, have profoundly influenced the institutions, form and character of the Canadian democracy.





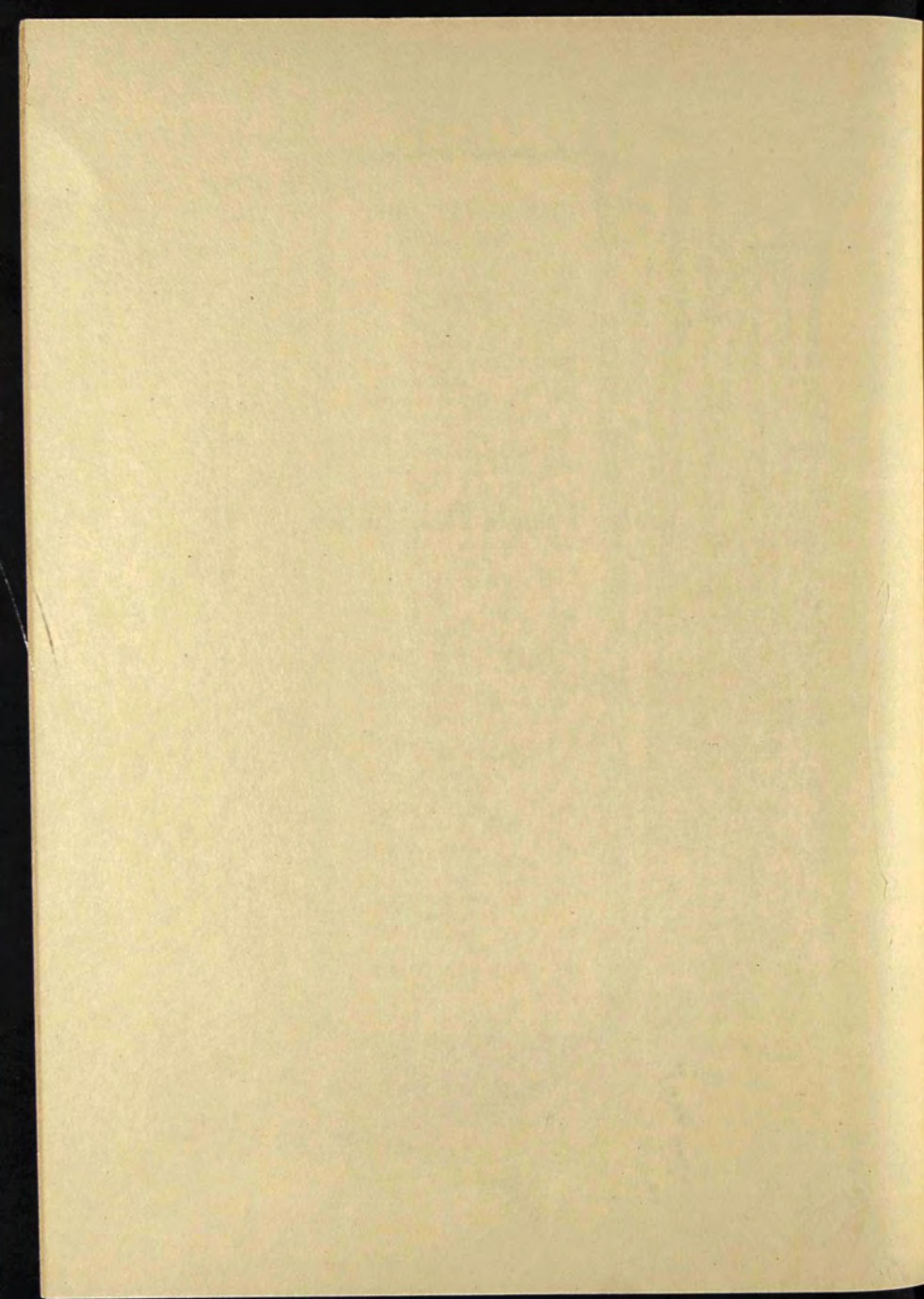
THE GILLIES LIMITS

1842-1942

THE CLYDE	1842
THE MISSISSIPPI	1862
(Gilmour)	
THE COULONGE	1873
(Usborne)	
THE TIMISCAMING	1887
(Quebec)	
THE BONNECHERE	1891
(Martin Russell)	
THE MADAWASKA	1891
(Alexander Barnett)	
THE PETAWAWA	1891
(Perley & Pattee)	
THE BEAR CREEK	1894
(Klock)	
THE MONTREAL RIVER	1895
(1st Limit)	
THE UPPER COULONGE	1899
(Perley)	
THE SCHYAN	1902
(Bronson & Weston)	
THE MONTREAL RIVER	1906
(Booth and Lumsden)	
BRITISH COLUMBIA	1914
(Tyee and Clark and Lyford)	
TIMAGAMI	1914
(Anima-Nipissing)	
BRITISH COLUMBIA	1918
(Drury Inlet)	
BRITISH COLUMBIA	1921
(Seymour Inlet)	
THE COULONGE	1922
(W. C. Edwards- Riordan)	
THE PETAWAWA	1925
(Hawkesbury)	
THE TIMAGAMI	1927
(2nd Limit)	
THE BLACK RIVER	1942
(McLachlin)	

II

Valley People Remember



SQUARE TIMBER

SQUARE TIMBER was rafted out of The Valley for a century, and, though the high mark of its glory was probably from 1861 to 1891,¹ never were the clean white timbers cribbed nor ever the great sticks driven down a stream that colour and romance, daring, high adventure and brave and careless living were not there. For square timber was of the very heart of our early forest story and the square timber of the Ottawa was of the very fibre and soul of that rich and long lost day.

In the days of early settlement, even the square timber was cut largely on the settler's own land, and, were he enterprising, he might even float out and raft his timber himself to the market at Quebec. But as the granted lands were cut over, and the market expanded, successful operations demanded more definite organization, with careful planning and assured financing. As government regulation developed, leases on timber "berths" or "limits" were offered at public auction by the Crown. The leases were granted, at first, for indeterminate periods but later, on annual tenure, renewable at the first option of the present operator. The berth or limit tended to become roughly ten square miles, but in some leases might be as great as one hundred square miles. The limit was let on payment of an annual license fee, with "timber dues," varying in different periods, calculated on the basis of the actual cut.²

Prior to bidding on the timber berth, the prospective purchaser arranged a 'cruise' of the area when the leaves were off the trees and the tall trunks clear to the uncannily keen eye of the skilled cruiser. In the Ottawa, March was the favoured month for these surveys, when the ice was still good, while the toboggan could replace the canoe and the flies of the later spring were not yet infesting the woods. The cruisers travelled light, packing tent, sleeping kit, equipment and



¹See footnote at end of this chapter.

²These dues at Confederation were rental \$1-\$2 per square mile, and timber dues 1c per cubic foot, 10c per standard sawlog of 12 ft. length and 21 inches diameter. Ottawa Valley licensees operate under two schedules today. The Crown dues in Ontario call for annual ground rent of \$5 per square mile (unless a different ground rent has been provided in the contract) with fire protection charges of \$6.40 per square mile, with dues of \$2.50 per M. ft. B.M. for pine logs, \$1.50 per M. ft. B.M. of jackpine. Quebec ground dues are \$8 per square mile, while fire protection is carried out by co-operative association of the operators at a cost of \$7 to \$8 per square mile. Recently, Quebec has shifted to the basis of cubic foot measurement used in Europe and dues are assessed at \$1 per 100 cu. ft. of logs.

supplies with them. They were men of great skill and probity, woodsmen-brothers to the surveyor, for, within the surveyed areas offered as limits, they not only estimated the timber stands and values, but indicated configuration, floatable streams, improvements necessary for driving on others, possible dam and camp sites, and often the line of the probable main roads. As their craft developed they devised the practice of sample plots and tallied acres. Neither engineers nor foresters, they perfected processes utilizing the arts of both, intuition, skill and experience combining with mathematical processes of their own to produce estimates upon which operators would risk their fortunes and their futures.¹ The names of such men as P. H. Colton, William and John Kennedy, and Arch. MacKinnon are well held in grateful memory by Valley firms today.

The cruise on which the bid for the limit was based might or might not be thorough and detailed enough to serve as the basis of the first operations. Generally, after acquisition of the berth, second special cruises were made for this purpose. Different stands on the holding were assessed, the timbers that would square were gauged, and, on the basis of proximity to the best cuts, slopes for roads, sites for skids and routes of floatable streams, and camps were indicated. The forest trees stood together, the naked hardwoods (maple, elm, basswood, paper birch, beech, red oak, yellow birch, ash, balm of Gilead), the conifers, well-cloaked (the white and red pine, the hemlock, the balsam, white spruce, white cedar and tamarac). And, of all these, the searchers sought but the pines. In the earliest days of the trade, the pineries might cluster in close stands of wonderful quality, size and soundness, perhaps one tree in every ten, at worst one in every hundred, of the high perfection square timber demanded—free of all knot or blemish of any kind. Early cruise reports describe mile on mile of blue green pines, riding the ridges like a great comb, standing out clear against the dark green of the hardwoods, the lighter green of the poplars. But as time and the trade moved on, the good stands were further in, fire and insect and wind had their way, and the virgin pine was scattered through hardwood or second growth, and a range of five to six miles might have to be covered to reach good sticks. Often only one tree in a thousand would yield a finished "stick"—(so was the heavy squared timber nonchalantly called in the trade)—fit for export. A good stand might yield thirty to forty trees an acre, for over the whole area allowance had to be made for "wants"—the non-bearing patches of swamp, burn, etc. (Today a whole township or limit may not have one good square stick of the quality of the square timber of another day).

After the cruises were complete, the advance gangs came in to make the camps where the blazed trails led. By cart, (and the wheels were made of solid wooden discs, later bound with metal rims, or tyres) and riverboat, and later

¹ A century later incredible new methods were in use beyond the ken of any sane man in the early timber days. By 1941, over 900,000 square miles of forest had been aerially photographed by the Dominion, the provinces and private companies. Forest typings completed from photos exceed 113,000 square miles. "Tree heights and crown diameters are obtained from fine measurements made in the photographs: the density of the timber is revealed; hardwoods are separated from softwoods and species identified; and estimates are made by the use of volumetric data based on height rather than diameter." The work is best done in the winter when the conifers may be judged by their crowns, and the cost is a third to a half lower than ground survey. Unpublished manuscript "Vistas from a Forestry Library"—Jean Matheson, 1939, and Dominion Forest Service later figures.

steamboat, the motley cavalcade of oxen (and later horses), men, food and equipment would wend its way up The Valley in the late autumn, but before snowfall, as soon as the teams could make their way from the scattered farms and small settlements for, through many years, the farmer and the farmer's sons built the struggling agriculture of The Valley on the sale of their supplies and labour to the camps. They sold whatever products they had, especially their oats. Supplies were the farmers' pork, and flour from the local grist mills, put up in barrels made by local coopers. Some of the Gillies' letters show the supplies to have been bagged to save heavier carrying charges at the portages,—and the bags ordered returned to be used again! Potatoes were boiled, peeled and packed in barrels, and sent to the camps frozen. Pork, beans, flour, syrup, or molasses, with such local supplies as might be obtained, were the run of the camp food. Tea and sugar were not always assured being sometimes brought in by the men as rations. Old contracts show many of the men to have been hired at so much per month, plus tobacco, and plus tea and sometimes sugar. The men in the camps were not "light-eaters." An old depot diary shows an autumn order for the Gillies camps—this was in the later years of heavy operations—to have been of more than tea-party proportions,—“75 bbls. of flour; 568 bbls. of pork, 5,000 lbs. of apples, 5,000 lbs. of sugar, 5,000 lbs. of butter, 12 tons beef 'or more if you can get it,' 1,600 lbs. of tea, 25 boxes of soap, 2,000 lbs. of currants, 1,500 lbs. of rice, 60 lbs. of hops, 150 bushels of beans, 30 caddies 'Brunette Smoking,' 5 caddies 'P.B. Smoking,' 10 caddies 'Black Smoking.'” (The same clerk wanted 60 teams, 12,765 bushels of oats, 175 tons of hay, and 3 barrels of coal oil).

Local farmers, some contracting only, toted in supplies and equipment in waggons, on stoneboats and jumpers (a sort of summer sled), and by sleigh: they “hired” out, man and team, for the winter's work in the bush, with board for man and horse, at what was considered a “high going rate.” But “high” was different in those days! The Gillies account books show men, bringing their own teams, sleighs and chains, being paid \$1.00 a day and board, all through the '70s, and with more asking than the trade could take. The men who took their oxen—until about 1855 or thereabouts oxen were in use in the Mississippi—or their horses to the camps were usually the more established farmers or their sons, the aristocracy of the gangs, Scottish and Irish settlers from the banks of The River or its tributaries. Other than purely local labour would come by stage and riverboat from the lower Valley and the Ottawa district, or on foot, by wood or snowshoe trail, when striking across from one tributary camp to another.

At the end of the journey, as far as team or boat could conveniently and economically travel, they pitched their temporary camp, from which they worked in to their camp site. (As the trade developed and more definite organization emerged, a depot was established where stores and gangs reported in, where “the company's clerk held out,” and whence, all winter long, teamsters would come out for more supplies, and mail, and such news of the outside world as might have trickled in. Here the man “fired” or leaving, checked out. From the depot, wherever the trail led across broad open snow stretches, it was marked by cut evergreens, “winter lighthouses” to guide man or team in drifting storms. See also page 118).

The gang once in by road, or stream or on foot, the foreman laid out the camp and stable sites and work began,—on the main shanty (French “chantier—shed”), the stables for the oxen or horses, the landings and the roads to them, all marked out by blazed trail.

All buildings were erected from the trees felled on the spot. The camboose¹ camp was generally forty by twenty-six feet. Four large timbers, laid flat upon the ground, were dovetailed together, and the walls formed by placing four to five layers of large timbers, tier by tier above them, to a height of six feet. The floor was laid of logs hewn smooth and flat. Two huge timber “scoop-bearers,” laid on the end walls, about eight feet apart, and running parallel to the side walls, supported the roof, made, as in the settlers’ cabins, of “scoops,” flatted logs like railway ties, six inches thick, with one face ‘scooped’ out to a depth of one to one and a half inches. They were overlapped alternately to provide a water-tight surface and immunity to rain or melting snow. All chinks in walls or roof were stuffed tightly with moss or hay, the shanty being snug and tight against drifts and wind. (Many a camp, half a century old, still stands resistant to collapse and decay in the old depots of the timbered-out country today). The shanty had, generally, but one low main door, four feet wide, made of “shakes”—logs split into thick boards. It was not until comparatively late in timbering that windows were cut, usually in the gable ends. The air and light came from above the “camboose”—the great square fire-place built up in the very centre of the shanty with rocks and fine sand, and with a canopy of shakes, tapering into the square frame of the wooden chimney, projecting five to six feet beyond the roof to the open sky. Through this seven or eight foot square aperture, the smoke passed upward from the blazing fire, which, burning the twenty-four hours round, consumed one to two cords of firewood in a winter’s day. The fire was vital in keeping the early camps sanitary and “air-conditioned,” a ready incinerator for all refuse, a natural ventilator with its own fine draft.

From the fireplace swung the cook’s cranes. Here the shantymen hung shirts and socks to dry, and here, as truly as about the hearth at home, the life of the camp circled through the long nights of the cold winters. Like the Irish peasants’ peat fire, the shanty fire was never suffered to go out, day or night, until camp was broken in the spring. Light, too, in the early camps, came only from the fire, or, in some, from large tallow ‘candles.’ As late as 1887, word went up to the Coulonge Depot of the Gillies people to make candles taken from the tallow of the beef if the coal oil “ran done before sleighing.” Later, huge coal oil lanterns and lamps sputtered and added their peculiar fumes to the fragrance of frying pork and the steam of drying woollens, so redolent of shanty air.

About both sides of the shanty and the wall facing the door ran the double rows of bunks, into which the tired men tumbled, clothed and in their blankets, to sleep the night through to “day break in the swamp,” heralded always by the cookee’s reveille which became a characteristic call, varying with camp and cookee.

Below the bunks on the “long walls,” for the full length of the camp, ran the long benches—the Deacon Seats—where the men sat to eat, to smoke, (more

¹Camboose was a word borrowed from the cook’s galley on a merchantman, in turn a derivation of the Low German—Kamboos.

likely to chew and hit the cuspidor in excellent marksmanship), to "jaw" and "yarn," as they sharpened axe or saw or fixed their harness, or to read their rare and write their rarer, painfully inscribed, short letters, and to pull on and off their heavy boots and "gallusses" for such was their undressing.

Here the fiddler or mouth-organ player sat, as the songs went round or the more spirited step-danced in stocking feet before the playing fire.

Along the fourth wall, by the door, stood the water barrel, the wash basins and the woodpile.

Later there were cook-houses with board tables, but the old time shanty was "self-serve," the men eating, as they sat on the Deacon Seat, using tin plates "heaped high and sent back for more" and drinking, from tin basins, their stewed tea "strong enough to float an iron wedge." Drummond's¹ aging shantymen redreams it all:

*"But firs' t'ing I don't know no'ting, an' den w'at you t'ink I see
Yourse'f an' res' of de boy, Johnnie by light of de coal oil lamp,
An' you're singin' an' tolin' story, sittin' aroun' de camp."*

In the days of early operation, with good stands, compact and accessible, the roads were generally short and close to the streams. So, with the camp built—a matter of a few days only to expert workmen—timber-making began at once, the route of the road and the dumping grounds being governed by the immediate stands. Early owners, (usually farmer-operators), roadmakers and timbermakers might all work together and on one undertaking. However, as lumbering developed its own techniques, planning became more definite, and dumping grounds were selected with relation to timber stands, haulage, physical configuration, and floatability of stream, though, in the days when each timber was of considerable value, it was not infrequently less expensive to build a longer road than to improve a stream. Then the foreman spread out his gangs, roadmakers to build the rollways and roads to them, timbermakers to start at the felling and making of the timber.

The "landing" or "rollway" or "skidway" was chosen on a sloping bank, sharp enough to afford good rolling of the timbers out into the stream, as the ice melted and the heavy blanket of sticks could spread out upon the waters, but not so steep as to cause a slide and jamming or smashing of the timber in precipitous descent. Where the roads could be routed to drivable lakes, timbers were simply dumped on the ice, and boomed or left loose as the size of the lake determined.

From the skid site, the head road-cutter, or "buck-beaver," marked out the road into the forest, likely already indicated in the cruise sketch or map, and this, and the chief tributary trails were cut and cleared as soon as the camp was set up.

Camp organization was no casual or informal undertaking. The size of the camp was determined by the anticipated cut. On the Ottawa, when men were men and the trade at its strength, a gang of twenty to twenty-five, with five to six teams, would be counted on to fell the timber for a raft of 1,500 to 2,000

¹"De Camp on de Cheval Gris." W. H. Drummond.

pieces in a season, varying with the size of the timber, the snowfall and timber weather. A camp would have forty to fifty men, a company of good size five to six camps "in," though at the height of the industry, the largest Valley firms might run twenty-five to thirty camps in some years.

All operations of a firm on any one limit or watershed were directed by the "agent," (an Ottawa Valley term borrowed from English practice and corresponding to the U.S.A. woods superintendent or "walking boss"). Each camp within the area of operation was under the immediate control of its own dictator—the camp foreman or "boss." The foreman "bossed" the gangs, whose size and supervision varied with their duties; e.g. the timbermakers, the cook-house, etc. "The office end"—the books, supplies, time, etc.—were in the hands of the camp clerk. The domestic economy was under the cook, and his cookees, and the price of a good cook was worth many cribs of sound timber. The hauling operations were under the head teamster, the loading—difficult and dangerous—under the head-loader. Felling was the purview of the "liner," who travelled with his "scorers" or axe-men, each gang having its own hewer.

Camp, roads, gangs and actual timber-making the operator strained to have well under way before the heavy snowfalls, after which the road was broken, side roads opened, and the heavy influx of teams and teamsters for road-breaking and hauling poured into the area of operations, the French teamsters generally clad in great blanket coats, with kapot hoods, and wearing the long "ceintures," coloured scarves worn as belts. Then the head roadmaker trudged along the main road, and the subsidiary trails, followed by the roadmakers, breaking and clearing the way with a single 'V'-shaped wooden plough, throwing back and levelling the snow. (The Brazil or "patent" ploughs and the tank sleighs that made it possible to ice the roads do not seem to have been used on the Upper Ottawa until the late eighties or early nineties). On dangerous grades snow was entirely removed and hot sand sprinkled. Where the curves skirted a hill, a "gallery" road was built out and around to take the swing of the sleigh and the sweep of the long trailing timbers. Before the use of sand hill roads was developed, brake chains were simply run about the rear runners of the sleighs or snubbing ropes were set up on capstans on the hill-tops to hold back and control the momentum of a heavy load that might otherwise overrun or "bush" a team, killing oxen or horses and men.

When timbering began, the liner went ahead, picking and assessing each pine marked for felling, so skilful that with a sharp glance from where he stood, he could discern the blemishing curves, or the "cat's face" on the tree, that bespoke a "blind spunk" or the rot that meant rejection in the timber. The scorers or axemen straightaway began the felling, notching the tree on the side, towards which it was to fall. The expert scorer made his notches with the precision and smoothness of a plane. Two men, alternately notching, cut until the tree swayed to crash in its determined direction. Hanging branches, high on a tree, often dislodged with the notching, whirling down with such deadly danger that the fallers called them "widow-makers." Flying limbs, "sailors," sliced off by the falling trees, might also carry disaster where they struck. Skilful older scorers—and the axes they swung were six and seven pounds on 48 inch helvies—had a test

of their craft; they drove a tall stake in the path where the tree was destined to fall for the falling trunk to drive into the ground! (In the early days of timbering, all felling was done by axe, the crosscut saw was not used in the felling on the Ottawa until about 1875. Sawyers then sawed through from the opposite side to the original notch which still governed the fall of the tree). Once felled, all the top of the tree above the first branches was then sawed off.

All the years in which the square timbers were water-driven, they were hewed, quadrilaterally, to pyramid points at each end to afford an oblique surface which would cause the timber to glance off shore or rock or other obstruction, as it struck, hurled by the wild strength of the current or rapids. Otherwise, the timbers would have split and large chips have flown off. (Later, when timbers could be hauled to market by sleigh or cart, or barge or flat-cars, they were left with the ends plain-sawn).

Then the liner measured out the fallen tree, deciding the lengths into which it would be cut for straightness, soundness, quality and freedom from knots,

and blemish. Usually, however, in all but the earliest years, one tree would produce but one timber stick of Ottawa quality: the process was

wasteful for only two-thirds of the ordinary tree was used, the top, often of prime sawing

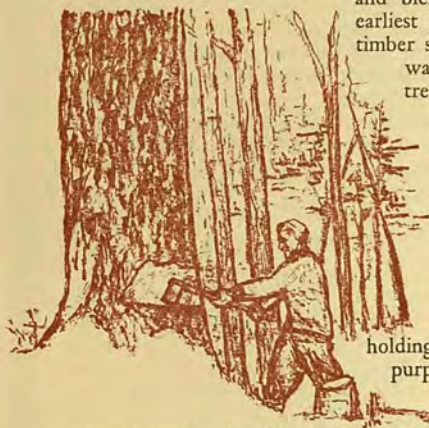
quality, being left to rot in the forest. The liner looked with practised eye along the length of the trunk, calculating

where the piece would square. Then with a short steel implement, something like a hoe, and called a "rosser" he scraped or "rossed" the bark to the red smoothness of its inner skin, in a broad scar, indicating generally where the 'line' would fall. The line was made by

holding the "chalk line," made for this one purpose, tense at either end of the stick. Then

the liner pulled it taut and high to his waist, letting it go with a hissing

twang to mark a line fifty feet long and as true as if drawn to scale. This was then repeated at the second side. These marked the 'down' lines, from which the 'round' of the trunk would be 'beaten,' as it were, in a giant fifty foot slab, to leave a straight flat face. The scorers mounted the trunk, and under the liner's direction, notched it into the depth of its squaring in long 'V'-shaped gashes, repeated every four feet, the entire length of the liner's mark. Then using a special scoring axe, with a cold chisel edge, the scorers "knocked the blocks" off the trunk, the blocks being huge "chips" four feet long and the depth of the notch, and, such was the strength and precision of the scorers, wielding their huge axes, that these great pieces might be hurled for many feet, as the gang rhythmically slabbed off a trunk. But the most difficult part of their job came next, the 'score hacking.' The slabs off the stick, the scorers hacked parallel vertical rows, up



and down, about four inches apart, the full length of the exposed timber, setting out the depth of the face, along which the liner's line had indicated the stick was to be finished. Here eye and hand again must work in perfect unison, for a shallow cut would leave too heavy a task for the hewer's fine-edged broad-axe, a deep cut would pierce to the 'quick' and leave the face scarred. Woodsmen of such fascinating skill and strength are no longer bred in this mechanized day.

The trunk was "score-notched and hacked" on the two sides and then came the most skilful of all the woods craftsmen, the "hewers," swinging huge ten and twelve pound broad axes,—in design and weight not unlike the ancient halibreds—sharpened to a razor edge with which, following the hacks, and, standing beside the stick, they shaved it to the satin sheen of a planed surface. It took no little art and skill to "hew to the line" for the inexpert worker might "hew standing," leaving the under-edge wider than the top, or "hew under," leaving the upper edge in an over-hang. Both sides of the timber thus hewn, it was "turned down," that is jerked over with a timber hook and chain, coupled about the stick and meeting in an iron ring through which a pole was inserted, to act as a lever for the turning. Powerfully built hewers and liners could themselves haul down the sticks. Then the timber was "black-lined": this time, the liner used a cord, blackened in the charred ashes of dogwood or poplar, indicating the hewing for the other two sides along the clean, cream face of the finished top-side of the turned-down stick. Then the other two faces were similarly scored and hewn. It was not unusual, on the turn, to find blemishes on the third or fourth side which meant all labour lost, for nothing but a perfect timber could be offered for export. All four sides completed to a fine "proud edge" the artist-hewer, using a "scribing iron," signed each timber at the centre of each face with his own initials and the owner's timber mark.¹ The fresh-made timbers had the soft yellow sheen of the tassels of ripe corn glistening in the sun.



¹Dominion legislation in 1870, required the registration of each owner's timber and log marks, in the official Timber Register, maintained at Ottawa from that date.

The Gillies' early timber marks varied—"J & J.G." but in continuous use has been the double upright St. Andrew's Cross, with a bar transversely across it, cutting the design into four open "V's" like the log mark. See page 162.

These great, clean smooth white pines of the Ottawa were the main item of lumber export from Canada for over two generations in the last century and many a fine interior, built in this period, in Britain, and many a fine colonial home in the northern and Atlantic states was constructed from The River's magnificent hand-hewn timbers. Perhaps the finest white pine to be seen in Canada today is the magnificent carved panelling in the Library of Parliament, cut on Constance Creek, near Ottawa by J. R. Booth in 1858.

The Ottawa timbers never squared less than 12 inches and, in the days of the great trees, ran to 24 inches and more. In the squaring fully a quarter of each tree was lost, much of it of the best outside clear wood, which led, as supply sources receded, to the "waney" squaring of later days (1861) whereby a bevelled shoulder or wane—really the curve of the trunk's circumference—replaced the "proud edge" or sharp corner, and the four faces were thus slabbed by a thinner trim, so saving that much on each face. But at the height of The Valley's trade, square timber was square timber with no gracious waney bevel about it.

Hand-hewn and squared the timber was then swung about and tipped up across a small tree or prop, called a skid, so that its 'head' would stick out above the snow, always pointing toward the trail, and down grade. This swinging was done by a team with a chain about the timber. These trails to each timber were narrow winding paths, cut just to take the team and teamster. At the junction of each trail with the main road a blaze was struck upon a tree, and the number of tipped-up-timbers, awaiting hauling, marked thereon.

Hauling of these individual timbers was done by a one-sloop sleigh of two runners with a bunk bar across. This sloop was backed under the tipped-up timber which was chained to the sloop, and, the end trailing, hauled through the brush to be stacked at the main road.

Not infrequently in later years, the main road was many miles long, with piles of timbers at intervals in its length. On the slant or slope along which the road was cut "head blocks" were laid,—logs fitted in at right angles to the slope—on the ground level, with two or three timbers, laid horizontally across these, and then others laid at right angles, fitted on top of these against the hill. This really afforded a firm criss-cross loading platform, on to which the timber was canted from the sloop and piled.

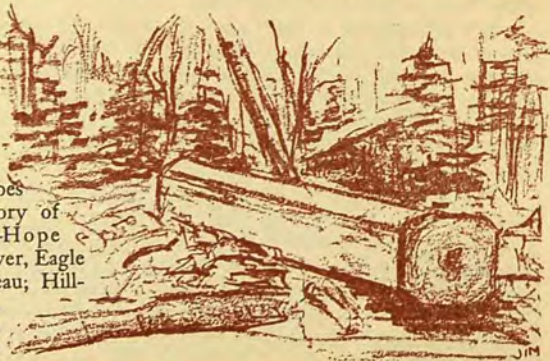
The timber sleighs picked up the timbers from these trail piles for the main rollway. The sleigh, first used, was just a settler's long sleigh with three braces across it, but the timber sleigh or double sleigh proper was early evolved. It had two pairs of runners, linked together by long diagonal chains, affording, in handling sticks of varying length, great manoeuvrability for each sloop. The "nose" of each runner was raised and fitted with rollers, while across the middle of each were strong wooden short beams or 'bunks.' These sleighs were "worked" and turned by experienced teamsters, in front of the timber pile or skidway, varying with the slope, and the timbers canted, under the head-loader's directions, by man and ox and horse power alone, on to the timber sleigh. It was many decades before the derrick, and jammer were available. An average timber ran forty to sixty cubic feet, and weighed anything from one to three tons. An

exceptional stick might measure two hundred cubic feet and weigh five tons, As one old Valley shantyman, now eighty-six, put it, "they weren't tooth picks, we heaved about."¹

Even a few timbers made a load to strain the strongest of oxen or horses and when, on a slippery surface, their weight gathered momentum, driver and "snubber" had to work skilfully together to keep the chained load from overtaking the driven team.

Arrived at the landing, the timbers were again canted on to the dump. At the skid, timbers were measured for length (marked thereon), and assessed for content by the owners or purchasers' agents but the official culling was at Quebec City. Marked and measured, the cut awaited spring's summons to move—good snows for sledding, keen ice and good snows for melting and high water for the drive were the favours the timbermaker asked of his gods!

The Ottawa square timber trade was always strongly self-contained. Many of the operators, in fact, later setting up their own farms, maintaining their own teams, supply sources and stores. These depot farms were comparable to the Hudson Bay posts. They were erected at strategic points, to serve a wide area of related operations under common ownership. They were designed to provide hay and fodder, particularly in remote areas, and so to lessen the cost of hauling long distances over indifferent trails, often passable only in winter. Hay, in the "eighties" and "nineties," in some of the up-river country, ran to \$40 per ton, and instances are recorded where, with roads impassable and teams in, in the autumn, settlers collected as high as \$100 for one ton. A large depot farm might cover a clearing of 500 to 600 acres, with farm quarters, gardens, poultry and cattle for the staff, fifteen to twenty barns and storehouses and stabling for a hundred teams or more. The depot farms were great gathering centres for a "week-end" leave for agent or clerk on isolated operations and many an old depot name echoes warmly in the memory of Valley operators—Hope Farm on the Black River, Eagle Depot on the Gatineau; Hillcrest, Cedar Lake, Bark Lake, Schyan and the famous "Basin"



¹E. T. Smith, collector of Public Works Revenue for Canada, in his report of 1911-2, cites an old timber account in Quebec, showing a raft of 70 cubic foot square timbers bringing 3d-6 cents a foot—in 1841, with prices 41d-9 cents—in 1846 though by 1862 the price was 71d-15 cents. This meant that these timbers laboriously finished, when delivered at Quebec City, would yield only from \$4 to \$9 varying with size and year.

Depot" on the Upper Bonnechere; or those dated by the heavy cutting for Crimean war supplies—Redan and Alma—and yet others bearing the names of well-known firms—Perley and Usborne Depots, Eganville, the Klock and Caldwell Farms, Fort Eddy and MacLaren's Bay. Valley people, coming on their abandoned sites, where the deer now crop and the groundhogs, balancing on their haunches, sniff curiously at the intruder, do not trespass, but turn silently aside, in tribute and memory to a day now gone.

Between close of felling and the spring thaw, the Ottawa camps, in all the early years, made their own river supplies, including the heavy canoe-boats, cut from selected trees, to follow the loose drive, of which the best were brought back, collected at suitable points on The River, and carted to the shanty sites in the winter. The old Gillies files abound in instructions to depot clerks and foremen as to shipment of boats, paddles,¹ oars, etc. The paddles and oars, the peaveys and pike poles were all made in the camps, until the latter part of the century, and here, too, the men put the wythes² in shape for binding of the cribs.

As the timber started to move—or rather "the drive" began—cat-footed rivermen (these were bushmen signed not only for the shanty like the teamsters, but for the 'round trip' from "fall freeze-up to Quebec") with picks, bars, spiked poles and "peaveys" swarmed nimbly over them, here loosening, there shoving, over here hauling, always helping and keeping the timbers on their way, and always dodging the danger of a false step, a sudden rush of timber and a death, swept out into the waters in the swirling mass of rolling sticks. Mr. David Gillies leaves, in a few words, a graphic picture of the difficulties of the early days of the river work when he, as a mere youngster, was in his father's camps and drives. "The equipment used was very crude," he wrote, "since suitable tools had to be evolved. They had no peaveys and so the floating of the logs, the breaking of the jams had to be handled with wooden hand-spikes,—no jam dogs, dynamite or caulked shoes (which were not used until 1869) and working from a wooden canoe." Only gradually did better appliances develop—"hand-spikes and poles shod with iron," later with a hook, attached "by a ring to the hand spike" and "known as a sling-shot." Not until 1855, and then in Maine, whence it had to work north, was the lumberman's "huswife," the peavey,³ evolved.

Thus equipped, when the drive started, the rivermen followed along the stream, under their foreman, shoving off the lingering timbers. By banks and

¹The paddles were made of hard maple or white ash, which had been noted and marked during the winter felling, and cut and brought out after the timber cut was finished and before the teams left. The logs were split, hand-hewn and sawn; axe, small saw, spokeshave, and drawknife were the standard tools. The long river boats, "the bonnes," were 30 to 40 feet long, flat bottomed with a four foot beam, pointed bow and stern. They carried three or four pairs of long oars, and paddles seven to eight feet long, all cut and finished in the camp.

²For the wythes, birch saplings were cut, 12 to 24 feet long and not more than one and a half inches at the butt. They were done up in bundles of twelve each. They were twisted until they split into long flexible fibres and these then were further twisted, about and about, until they wound into what was really a wooden rope of remarkable strength and pliability.

³It was the invention of Joseph Peavey, a blacksmith in Stillwater, Maine, near Bangor, the first great centre of eastern timbering. It is a long pole with a sharp spike in one end. That end is reinforced by several iron bands about a strong iron collar with lips through which a strong steel hook with a sharp-upturned 'V' tooth is bolted and thus can play freely up and down. The spike of the peavey is driven into the log, and the hook swung free to give purchase at any place in its radius; then driven in, and pressure applied to the pole to roll the log.

behind the drive, the "bonnes" accompanied the moving sticks, each with a crew of eight to twelve, tending the drive on its way. The square timbers did not float flat, but perversely diagonally, always with one of the corners as the floating surface. So when a riverman had to move a stick into place, he had to keep it rolling and twirling under him, much like a squirrel on a revolving roller—"birling" the rivermen called it. Nor were these casual acrobats fitted with tights and gymnast's shoes, for these feats of their daily tasks. In heavy woollen breeks, red shirts and toques, and high boots, they packed a heavy load of clothing as they leapt from shore to boat and to twirling timber, from one timber to the next, or back from the timber to boat or shore. They clung by their great knee boots, bellow-tongued against the water, but while, towards the close of the century, these were full-caulked sole and heel (twenty-five to thirty in the sole, half that number in the heel), in the 'seventies only six or eight of the best men in the gang would be so outfitted, and with boots that had only three or four handmade caulks¹ in the heels.

From daylight to dark, and, in tricky water in a year of light snow, sometimes (if the critical nature of the drive necessitated it) by bobbing lanterns after dark, the gangs worked to get the cut out of the creeks and smaller streams to The River, while the water was high and heavy enough to float the drive. "Come hell and high water!" was the river driver's challenge for then was his testing time in the short season of the fresher's rushing waters and the piling timbers. A timber, caught on a ragged rock, or stranded in the shallows, clutched at another and another. Following timbers twisted, criss-crossed and jammed, and a serious jam, the horror of the drive had come,— for a jam was worse in these racing waters than at the roll or skidway.

While blocking and jamming of timbers (and also of logs) were and are part of the cost and problem of driving on any rapid stream at any time, a real jam is something that only skill and daring can handle.

The jam might prove defiant to every effort, pile and pile, and threaten the clogging of the stream for all other cuts, and then the only course was a year's delay, leaving the timbers until the snow and ice and next year's water had its way with them, or, in later years, dynamiting the jam. Either was costly, the latter more so, and again, often of limb and life as well as of timber. A good foreman deemed it a disgrace to dynamite his drive and would risk almost any alternative.

Not infrequently the price the timbers asked, as they hurried forward again, was the crushed and mangled body of the driver who had probed their secret and released the key sticks. As the tons of loosened timbers eased they hurled high and forward and, though the skilful driver leapt and bounced from one to another in that tossing mass, they too often followed faster, or his misjudgment of the fraction of an inch in his leap threw him, just another stick, into the seething mass.²

¹When the riverman got into a fight, he never drew knife or gun, he pounded and kicked and possibly bit! The scars left by the boot caulks were always known in The Valley as from "shanty-men's smallpox."

²George Buchanan, one of the founders of Arnprior, met his death from the blow of a stick of timber in the breaking up of a raft in The Chats Rapids in 1840.

All along the timber country, there are lonely nameless graves of the rivermen who might be found and buried as the drive drove on. There was no workmen's compensation; the men "took up a collection," handed it over to the office, which added something, and it "went out" to the widow and her children, or to the aged mother and father on the little farm or, as in the case of one of the foremen, "Young Munro," whose name was known to every child in The Valley, at the turn of the century, to the "girl who waited weeping for her battered shanty boy." Young Munro's fate was the subject of one of those rhymes, written in the simple narrative of the direct of speech and of the emotions of a people of plain life and ways. It was the more indelibly stamped on the youthful mind for its awful moral, for he had called the men to work on a Sunday!—

*"Some of them were willing and some of them were not
For to work on jams on Sunday, they did not think we ought.
They had not rolled off many logs when they heard his clear voice say
'I'd have you men be on your guard for the jam will soon give away'
These words were scarcely spoken, when the mass did break and go
And carried off our six brave boys and their foreman, Jack Munro."*

The industry, concerned in these costs of life and timber, in what was an inevitable feature of water-driving, evolved the "jam-dog"—a heavy hook attached to a rope, by which the key logs were tugged loose by the men, safely on shore, until the jam 'pulled' or broke.

Slow water had its menace, too, for, in it, timbers just loafed and sighed. On little lakes and sluggish streams, small temporary dams were thrown up with one or more 'gates.' The timbers were allowed to gather, and then skilfully guided through the carefully opened gates, into the 'made' current, heavy enough to bear them to good driving water further on.

A good foreman was a "stream-line executive," sought after by every operator. One of the most skilful in square timber was John McCoshen of the Coulonge and Madawaska. He made a record of taking his timber from Opeongo to Quebec in one season on several occasions. (Later, as a partner of Fraser and McCoshen, he timbered out of Bryson, near which his substantial square brick home still looks out upon the river that he ran).

When timbering was far in the upper waters, the drive did not get out in the one season, but the sticks might be boomed, or the rafts held over at the farthest point, to which they could be safely run, until the next season. Boom charges and charges for "wintering timber," when it got to the Quebec coves late for the autumn market, run through the early accounts of the Gillies firms. From the Upper Ottawa to Quebec, W. E. Logan,¹ says the average run for the rafts to Quebec was two months. From the time the operator on the tributary started his drive out, the least absence he faced was three months from home with little or no means of communication with his wife and small family. It was all a part of the self-sufficiency which the pioneer Canadian woman was called upon to develop.

(On one occasion when John Gillies came back from the running of the rafts to Quebec, he quietly remarked that his six to eight weeks' longer absence

¹Geological Survey, 1845-6.

had been due to a side trip to Scotland, on one of the timber boats, so suddenly arranged at Quebec that, with no rapid means of communication between that port and Eastern Ontario's interior, any letter entrusted to uncertain ways and couriers would hardly have preceded his own return. On another he found that two men left in charge at the mill had come down with typhoid fever. Under instruction from the doctor, "getting in" once a week, Mrs. Gillies had pulled them through, the while managing her home and nine children).

The river driver's day began with dawn and a heavy breakfast of pork and beans, and, possibly when near settlement, of fried eggs, all washed down with the basins of tea, like lye, and "packed" with chunks of the fresh camp bread, baked like the beans in hot sand. At ten in the morning came "first lunch," with "second lunch" at 2.00 p.m. and dinner at 7.00 or 8.00 p.m. The last gang came home at dark when the "night snack" was "dished up." On the drive to the main stream, tents were used to shelter the men who slept on "balsam feathers"—the tops of balsam boughs—or just in their heavy woollen blankets, spread out on the still frost-bound ground. On the Ottawa, with the rapids many and swift and streams narrow, the 'bonnes' carried the cook-house personnel and all their paraphernalia, including the food, and these men served as an advance crew to pitch camp each night before the tired men came off the river.

In 1828, Ruggles Wright, son of the original raftsmen of the Ottawa—Philemon Wright—utterly transformed driving by his development of the timber slide, to by-pass the worst waters. He built the first at the Chaudiere in 1829, where the disbursement of £2,000 on a timber channel was also authorized to be made under Colonel By's direction (the founder of Ottawa and builder of the Rideau Canal) to afford a shorter run than the portage for timber coming down.

The timber slide provided an artificial channel, to by-pass the rapids or cataract, at the head of which a dam with sluice gates was constructed, opening into a 'slide' or runway, following the general route of a portage round the falls.

The first slides¹ were all built of timber, and wide enough only to run the long timbers loose, but later they were built 26 feet wide to allow the passage of the cribs of timber usually 25 feet 6 inches wide. The slide was built on an incline to afford rushing water, the floor running out well over the bed of the stream, to which it discharged, in what was called an "apron," from which, as a result, the crib was thrown or pitched, by the force of the stream, clear of the slide into the river channel, thus avoiding piling at the bottom. Timbers or logs, driving loose, were hurled free, in a forty to fifty foot plunge, to "plunk" into the eddies, from which they would pop up and off into the racing waters. The timber slide greatly lessened the dangers and speeded up the drive.

¹The most important slides and years of construction are listed in the Report on Ottawa River Storage, Department of Public Works of Canada, 1911-2, p. 207—Chaudiere, 1829 (Ruggles Wright); Chaudiere, South side, 1832 (George Buchanan); The Chats, 1835 (George Buchanan); Portage-du-Fort, 1838-9, rebuilt 1841 (J. Poupore); Calumet Id. and Des Joachims, 1843 (David Moore, Sr.); Gatineau Boom, 1848 (Government of Province of Canada); High Falls, Madawaska, commenced 1838-9 by the lumbermen in the Madawaska Improvement Company, rebuilt 1846-7 (by Government Public Works); Coulouge, 1865 (Government Public Works); Black River, 1867 (J. Poupore); Petawawa, 1857-8 (Public Works); Dumoine River, 1851, (Dumoine Boom and Slide Company, 1851).

The square timbers were floated free in all the tributary waters until they reached their rafting grounds at the junction with the Ottawa. The Ottawa industry was singularly comprehensive and self-contained and in no phase was this more evident than in the versatility with which many of the same men in its gangs shantied, drove the streams, built and rafted the cribs and ran The River itself, full way to Quebec. It was not so on the St. Lawrence where the drive and rafting were almost always separate undertakings, the rafting industry, centred at Garden Island and Collins Bay, contracting to construct and run the rafts¹ of timber, (delivered from the Trent Valley and the Great Lakes) from Lake Ontario to Quebec.

Where the tributary waters emptied the timbers for rafting, "boom logs" (great timbers, linked together, to contain the tumbling sticks) were spread widely,—and the booms—the encircled timbers—were then floated by favourable winds or towed to the rafting site on The River. Men were sent ahead to get a site and prepare a camp. "The Point" near Arnprior, on Chats Lake, was the assembling ground for the Madawaska rafts. Men, still living in Arnprior and Braeside, can recall tramping the trail, by the breaking light of day, as more than a dozen camp fires flared along the shore, each the site of a rafting gang. Mr. John Gillies, founder of the Gillies firm, recalled one spring in which, at one time, the combined raft crews exceeded 2,000 men, each gang working feverishly to have the first raft through the Chats slides.

The special hazards of The River were recognized in the exemption of the Ottawa District from the timber restrictions which prohibited cutting of rafting

stuff on Crown lands or road allowances, because "on the Ottawa, timber and logs come from a long distance up the river and from different tributary streams, and have to be rafted, broken up, and re-rafted in some cases several times before the timber and logs reach their destination: whereas on the rivers in other parts of the Province no rafting takes place, the timber and logs being driven down the streams loosely till they reach the large waters of the lakes or the river St. Lawrence on the shores of which rafting stuff can be cut or purchased."

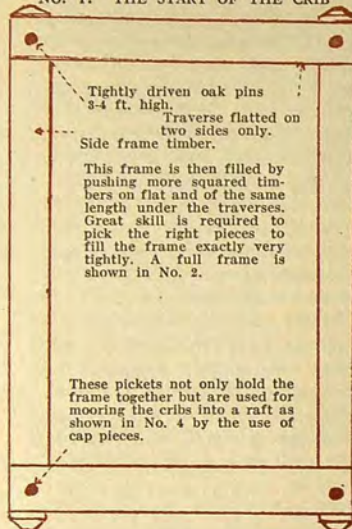


¹ On the St. Lawrence the rafts were differently built also—of three to four tiers, with the non-floatable oak tier wedged among the buoyant pine. They were called "drams" not rafts, a word probably adapted from the trade with England where, from the middle of the seventeenth century, much of the best square timber had come from Drammen in Norway, and where, as a result, these timbers were called "drams."

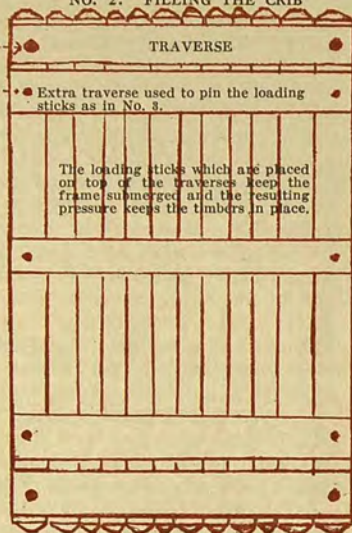
SQUARE TIMBER CRIB

SCALE 8 FEET = 1 INCH

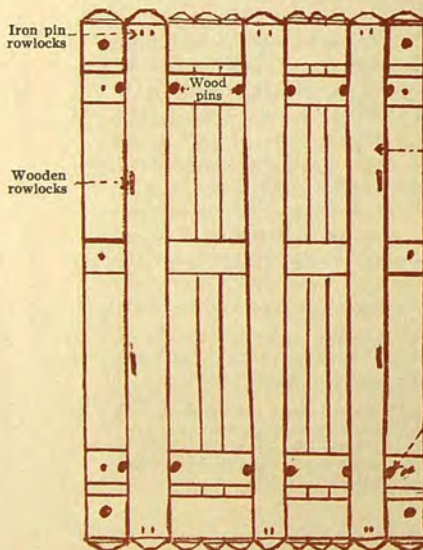
NO. 1. THE START OF THE CRIB



NO. 2. FILLING THE CRIB



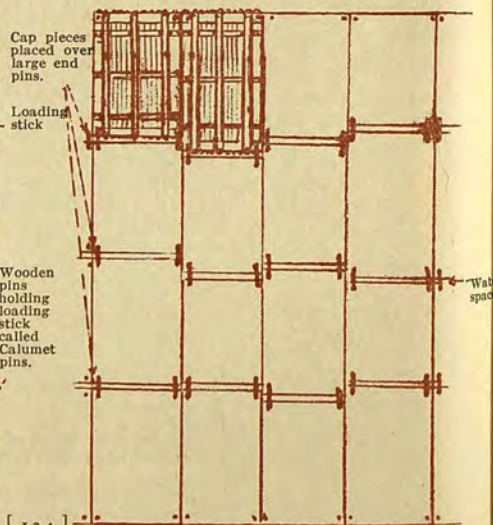
NO. 3. PLACING LOADING STICKS
(the crib is then complete)



NO. 4. RAFTING THE CRIBS

[NOT TO SCALE]

Cribs are banded together sideways by banding chains and endways by cap pieces.



At the rafting grounds timbers were always sorted into comparable lengths, to be readily available, for rafting up of sticks of the same length into the one crib.

Rafting was an achievement in design and workmanship. The unit of the raft was the *crib*. For this two long, fair square timbers, usually of red pine and of exactly the same length, were selected. They would be the length of the average timbers of the crib, forty to fifty feet each.

About a foot from the end of each side stick, three-inch auger holes were bored, and into these pins—strong wooden stakes or pickets, usually of ironwood or oak, about three feet high—were tightly wedged.

Then two timbers of about 25 feet 6 inches each were selected (the slides were 26 feet wide),—of red pine or white spruce or white pine or tamarac. These were hewn flat on two sides to a thickness of about eight inches and also bored with auger holes, at each end, at such distance in as to bring them flush with the outside edge of the side timbers, on top of which they were wedged down tightly on the same bolt pins. These were the cross pieces or *traverses* which, with these side timbers, formed the frame of the crib. Then, parallel to the side timbers, one timber after another was fitted in, lengthwise *under* the "*traverses*,"¹ to the number of twenty to twenty-four, varying with the size of the timbers, the last timber being shoved in, to fit so tightly that it had to be wedged. Then two more *traverses*—on a heavy crib perhaps three—were spiked down to the side frames to contain the buoyancy of the timbers themselves.

The four or five *traverses*, all in place, and the timbers wedged tightly in the frame, the heavy "loading sticks" were then pulled on to the crib. These were large "waney" timbers (the bevelled edges were apt to be easier on a driver's shins, even through rivermen's boots!) They were placed on top of the *traverses*, one at each side, over the side frame timbers, and one or two towards the centre. To save the timber, they were not bored through, but were held securely in place by wooden "calumet" pins driven tightly in to the *traverse* on either side of each. In the centre of the outside loading sticks heavy rowlocks were securely fastened to hold the oars by which the crib was ordinarily propelled. At each corner of the side loading sticks, iron thole pins were driven (on a heavy crib, on the end of the central loading sticks as well). These pins were wide enough to take the huge oars—twenty-two to twenty-five feet long—when manoeuvring of the crib required a quick shift for its direction from either end.

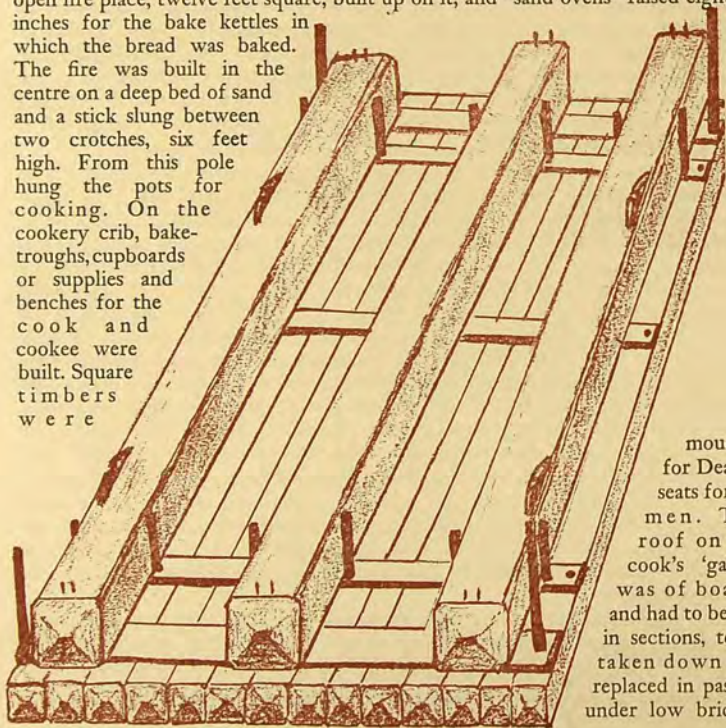
The cribs were built to run through the slides and fairly heavy "white water" but before the slides were built, and where they were not available, cribs were dispersed and the timbers driven through loose. Consequently, each piece in the crib,—*traverses*, timbers and loading sticks,—was marked with the number of the crib and its place in the frame so that it could be quickly reassembled, in the banding waters.

The cribs made, they were then assembled into rafts, each raft containing from ninety to one hundred or even up to two hundred cribs, strung out eight to ten cribs wide on a corresponding depth. The cribs were "coupled" together,

¹ *Traverse* is the correct spelling but '*traverse*' every riverman in The Valley pronounces it, so in this section resort is had to the liberty of phonetic spelling.

end to end, by "cap pieces,"—usually red pine, (8 inches or 10 inches by 3 inches thick), and long enough to stretch from the bolt stake or picket on one crib to the one on the next, and permit three feet of open water between cribs to allow for play and flexibility, as the great blanket of timbers rode the waters. Cribs were laced together, side by side, by banding chains. On the St. Lawrence rafts were always bound together by "wythes"—the birch saplings, twisted into long sinewy thongs—which were then used as "ropes." On the Ottawa these cap sticks and chains were used for the main "couplings" of the cribs, the wythes being used largely to lash travarses and timbers, and travarses, side timbers and loading sticks together, for cribs going through rough water. The "band" was a unit of the raft, into which it might be broken for running through main stream rapids of moderate drop like the Chats or Long Sault. The band would be three to five cribs wide, by three to seven long, varying with the width of channel of the rapid and the volume of water in the stream.

One crib was fitted out as the "cookery crib," complete with central open fire place, twelve feet square, built up on it, and "sand ovens" raised eighteen inches for the bake kettles in which the bread was baked. The fire was built in the centre on a deep bed of sand and a stick slung between two crotches, six feet high. From this pole hung the pots for cooking. On the cookery crib, bake-troughs, cupboards or supplies and benches for the cook and cookee were built. Square timbers were



mounted for Deacon seats for the men. The roof on the cook's 'galley' was of boards and had to be laid in sections, to be taken down and replaced in passing under low bridges.

Each large raft required a crew of forty to fifty men, and their bunk houses or cabins were built on the cribs—small sheds about six by eight feet and only four feet high, into which the men rolled in their blankets. Cook-house and cabin cribs were run cautiously through the sluices and rapids; most turbulent waters might demand their difficult dismantling, for their destruction or loss was a grave impairment for the whole drive.

The raft completed, the owner's pennant, with his timber mark on it, was broken in the centre, and not infrequently a small pennant from each cabin. The owner's representative had his 'office' on the raft: many of the old Gillies' letters are addressed to Mr. David "on raft Coulange" or Mr. William, or Mr. John S. "on raft."

The foreman in charge was called the pilot. He took over and remained in command until his cargo was snubbed in the coves at Quebec. An average Ottawa raft of 100 cribs contained 2,000 to 2,400 timbers, 80,000 to 120,000 cubic feet of sound white pine. It was a huge and costly heaving blanket, woven of thousands of dollars' worth of unblemished timber, that floated out upon The River when a Valley raft moved off from its banding grounds.

The record Gillies raft to go down The River was probably one taken from near Kaladar, in the head waters of the Mississippi, which averaged 90 cubic feet a stick. At mid-century and in the depression years of 1873-8, fine white pine brought as little as 12 to 15 cents a cubic foot, a fine raft of 2,000 pieces only \$12,000 to \$15,000. By 1880, the same raft would be worth \$25,000; by 1900, when the trade was passing, \$100,000. Today, one of these great rafts would be worth almost its weight in gold.

The rafts were "sweet" by the large oars or sweeps and sails in the early days, the smaller rafts and cribs of the early settler-operators often carrying barrels of potash or pork for sale down the stream.

When the huge rafts struck still water, they were usually 'kedged.' An anchor was cast out a considerable distance ahead, and the floating floor of timber was kedged up to it, from a capstan and windlass on one of the cribs. This was operated by several men, trudging in turnstile fashion. Then the anchor was lifted, moved ahead, cast again, the rope cabled out, and kedged up again. Such was the slow heavy progress before the day of the tug; even the danger of the racing rapids was a most welcome break.

In broad waters with good winds, "whites" or sails were mounted, the sweeps steering. After 1841, steam tugs were used, chugging and grunting as they towed their heavy cargoes, (just as they strain and pull their heavy booms of sawlogs on The River today). The strange "fiddle boats" were used on the Ottawa also—two small boats with a paddle wheel between them.

When the raft reached the slide or rapids, it was snubbed, broken into its separate cribs, and each run through the slide, clear of the apron, and out of the rapid water beyond.

Running the cribs through the slides was thrilling and adventurous, but running the rapids where there were no slides and before the day of the slide called for skill and daring of a degree unequalled in any other pursuit which Canada asked her sons to follow in the opening of her resources and the earning

of their daily bread. Natural-born river drivers were the Iroquois from Caughnawaga, keen, intelligent, sinewy and skilful, to whose uncanny handling of canoes many a shantyman, thrown in the crackling of a crib, owed rescue. (For years the Caughnawagas ran the rafts in the open season, their long straight hair in stiff braids, for, with cynical and profitable enjoyment, many of them went to United States centres in the autumn and winter, appearing in vaudeville, or, more usually, as tribal "medicine men," travelling with the itinerant vendors of patent medicine, before the days of the Food and Drugs Act. With the development of steel construction, the Caughnawagas became the most agile of structural workers, hundreds of them being employed—and many lost—on the famous Quebec Bridge, and with the Dominion Bridge Company to the present).

A crew of four to six men took the crib, the pilot guiding as they moved into the slide (or, where a slide was lacking, into any rapids with decent running risk). Every man at his sweep, the crib was launched on its "close shave" down the slide, where jamming meant the clogging of the drive, even disaster, had any error sent another crib ahead. The slide run and clear of the apron, or, where the drive was direct through white water, the crib might lurch right or left to rock or rapid, until it made the assembly pond. For the average slide, one crew could take two to three cribs through in a day, getting up at early dawn, trudging back over the portage, running a second crib, or if the run were short, a third, and tramping back, generally by dark, after the last run.

Not only could bands be run in some rapids but in rough water and churning currents, where the depth and width of the stream gave manoeuvrability, most skilled and experienced pilots and drivers could run an entire small raft. As it twisted and heaved in the waters, the timbers grinding, grating and crunching, the pilot's voice would be heard, generally in French, rolling out above the roar of the water—"En avant au terre!" "En avant au large!"—"Pull for the shore!" "Now to the stream!" and with prayers and curses, skill and muscle, the band or raft was swept free and safe.

In the Ottawa cribs, for heavy running, "beaver tails" or "timber-dogs" were often used—flat diamond-shaped pieces of metal, pierced to take a rope, and with a straight sharpened tongue which could be driven into each timber. These were then threaded in and out, with the ropes, which were pulled taut and thus added strength to the crib. As a crew delivered the crib to the snubbing



ground, they slung their ropes and the threaded beaver tails over their backs, and, in single file, struck the trail, through the dark trees of the portage. And as they walked, the deep roar of the tumbling waters was broken through with the clank and tinkle of

the swinging metals, a rhythmic tattoo in a day that is gone. Through the night lights would break and flicker. First to the rapids, first through was the rule of The River and it was not unusual for four or five rafts to be snubbed and waiting their turn to run. From the rafts on the upper waters and banding grounds on the lower, from shore and stream, the gleam of a fire, the flame of a torch would play, song and laughter and boisterous revelry echo through the forest silences and the eternal deep undertone of the cataract.

From the Upper Ottawa to Quebec, rafts were snubbed, broken, banded, floated, snubbed and broken again for by-passing the insolent cascades that would keep their timber in their glades—through the Rocher Capitaine, the Des Joachims, the Coulonge, the Rocher Fendu, the Cheneaux, the Chats, the churning Chaudiere that brought its cribs to rest in the lee of Parliament Hill, the Long Sault, the Carillon, to Laprairie, Lake St. Peter and the open St. Lawrence, and thence into the marketing coves at Quebec.

At the Shrine of Ste. Anne on the Island, where the Ottawa merges in the St. Lawrence, the river drivers made their thank offerings for safe passage down The River, and sent up their votive prayers for the perilous long way, still ahead. It was here that Moore wrote his "Canadian Boat Song":

*"Faintly as tolls the evening chime
Our voices keep tune, our oars keep time
Soon as the woods on the shores look dim
We'll sing at St. Anne's our parting hymn.*

*"Utawa's tide: this trembling moon
Shall see us float o'er thy surges soon
Saint of this green isle: hear our prayers:
O grant us cool heavens and favouring airs.
And blow breezes, blow, the stream runs fast
The rapids are near and the daylight's past."*

Come to Quebec, the rafts were delivered. The Government inspectors came aboard, two and three men to each raft, driving their fine measuring tapes between and about each timber, hooking them up, and quickly toting up size and content by each species, returns being filed with Government and owners, the while the latter were already bargaining with merchants and exporters, unless, like the Gilmours, they were operators, shipping in their own vessels.

Here in The Coves stood the waiting ships of all builds and types and registry (over twelve hundred of them moving in and out of Quebec harbour in a peak year like 1871). The boats were loaded through the bow port-holes. Runners moved over the floating timbers, pike poles in hand, snaffling the timbers to a chain, controlled by a spar on deck, which swung them on to a roller from the receiving port. Aboard the ship, men worked a capstan, treadmill-fashion, hauling the great sticks into place. As the lower ports received the heavy timbers, the vessel itself lowered and presented higher ports and deck for final loading. The deals, rafted down usually from the Lower Valley (and sold as "floated deals," "wet," or "dry floated deals") came alongside on barges, moored, fore and aft, to the freighter, but, like the timbers, were put in through the lower ports until the vessel settled to her cargo.

Nor were the hazards of square timber marketing over when the timber was in the hold, for wrecks of the sailing vessels in the untoward currents about Anticosti Island were frequent. Loss from wreck and later loss from drifting of loose timbers and loose logs was one of the wastes of the rich forest products in the careless halycon days of peak cutting. In 1856, James Richardson, exploring the Gulf, wrote to Sir William Logan: "The quantity of squared timber and saw logs which are scattered along the south shore of the Island, is very surprising: according to the calculation which I have made, if the whole of the logs were placed end to end—they would form a line equal to the whole length of the Island—or 140 miles; this would give about one million cubic feet. Some of the squared timber may have been derived from wrecks, but the great number of saw logs, which are not shipped as cargo, induces me to suppose that the main source of this timber is drift."

Once a heavy west wind held up the sailing ships in the Gulf, and when it changed no less than eighty ships were sighted, beating up, on full tide, to the Coves. M. Michaud, of the Quebec Ministry of Lands and Forests lists thirty-five coves, full of timber, at the middle of the last century, with but two in use today—Etchemin's, where the old firm of Henry Atkinson operates, and Breakey's at New Liverpool.

The timber sold, the crews were paid off, the lumber of the travarses, cabins, cap pieces, oars, etc. bargained off to jobbers, the escorting "bonnes," the sweeps, the chains and beaver tails, in the early days sold, too, but, in later days, shipped back by rail to serve the next year's drive. And the owners and their families dined along the Grand Allee and the rivermen made wild the night in many a tavern of the ancient capital. Were it put to them, wherein, of all the long story of their harvesting, from winter freeze-up to summer pay-off, their hearts and pride had longest lingered, probably not a man but would have chosen those hours of daring and of danger as their cribs and timber shot the slides or rapids.

EDWARD VII IN THE VALLEY

It is not unfitting that the day, cherished in the epic story of lumbering on the Ottawa, should be September 1st, 1860, when the raftsmen of The River ran their future king on their own cribs through the Chaudiere Slides. Victoria had sent her son to be her legate in the laying of the cornerstone of the first Parliament Buildings of the united Province of (Upper and Lower) Canada. Four score of years now gone, it is, and the Queen-Empress, and her son, and her son's son sleep in the royal mausoleum of an Empire, joined in battle. Long passed from the sight of men are they, who gathered to pay honour that far-off first day of autumn in a little new capital of a young dominion, its population of 14,000 "standing in an attitude of expectation." H.R.H. the Prince of Wales had come by road from Montreal to Ste. Anne's, and at the portage there had taken the 'S.S. *Phoenix*' which brought him to Ottawa, at seven o'clock of the evening of August 31st, 1860, where waited the "stalwart lumbermen by the thousand."¹

"When 'the *Phoenix*' was within two miles of the city, she was met by a fleet of one hundred and fifty canoes, manned by near a thousand lumber-men.

¹Robert Cellem—Visit of the Prince of Wales, Toronto, Rowsell, 1861.

These were all dressed in white trousers and red shirts, faced with blue. As they floated down the river, they presented a most remarkable and exceedingly attractive appearance. To the measured cadence of their boating song all the paddles bent. There was no confusion among them: all was order and precision, manifesting a skill which long practice alone can give. The banners on their boats floated freely, the sound of their voices reached the ears of the crowd on shore in wave after wave of wild exciting melody. And when they gained the vessel containing the Royal guest, the hurrah they gave echoed far and wide: it was a glorious hurrah, a real welcome: a hurrah which came from the hearts as well as the throats of a thousand as stalwart men as the world may find . . . Their hurrahs finished, the canoe-men wheeled round and accompanied the Prince to the landing. It was hard work to keep to hand, pulling against the heavy stream racing with a swift river steamer."

But, such was the prowess of these rivermen of another day that "about twenty or thirty of them (the canoes) were around 'the *Phoenix*' when she made the wharf, the rest came rowing in like bees to the spot whither their Queen leads them."

The next day, September 1st, 1860, His Royal Highness laid the cornerstone of the Parliament Buildings of confederated Upper and Lower Canada. After lunch in a temporary wooden structure erected on Parliament Hill, the Prince was driven to the Chaudiere Falls and the 'new' Suspension Bridge over it, where again the lumbering kings of the Ottawa had come into their own, in the erection of the magnificent "Lumbermens' Arch."¹

"This arch," wrote *The Times* special correspondent (N. A. Woods) "was the most extraordinary the Prince had seen or is likely to see again . . . In form a broad and lofty structure like the Marble Arch of Hyde Park but built entirely of planks of raw deal laid transversely one over the other, without a nail or fastening of any kind from first to last. Light as it seemed, there were nearly 200,000 lineal feet of plank used in its construction . . . It was the arch of all the arches, the Prince had had erected to his honour: and it was almost a pity that a monument so strong, so beautiful and so characteristic of the country should be removed."

From this arch the Prince went down the river bank to mount a square timber crib, prepared for him to run the slide whereby the timber was and still is run round the churning waters of the Chaudiere. "On each side of the slide were thousands of people and the numerous bridges which crossed it were alive with human beings. When the Royal crib got under way and shot down past or below them, these people cheered and waved their handkerchiefs and the most intense excitement prevailed." Down the slide sped the Prince's crib, floating "into the centre of the bay at the foot of the Chaudiere, and there they found themselves surrounded by a hundred birch canoes, manned by lumberers in scarlet shirts and white trousers." In his canoe the Prince was paddled "through the lake-like

¹The most remarkable thing about this Arch is not noted in *The Times*' report. It was the gift of lumbermen "all natives of the neighbouring Republic." It was suggested by the Hon. James Skead, but sawn in the Pattee and Perley Mill where one gang of saws was kept on the job for a week. It was erected through Messrs. Merrill, Baldwin and Young, assisted by Harris, Bronson & Co.—*Ottawa Tribune*, September 1, 1860.

expanse" to a beautiful island, with "two thousand people in small boats on the water, 2,000 more in the half dozen steamers which were playing about, 20,000 on the heights on either side of the shore." Thence came "a barge with a blue silk canopy," manned by half a dozen gentlemen of the city, in blue silk blouses and white trousers, "the Prince's standard at the stern." From the barge, the Prince mounted a lumberman's scow, before which seasoned rivermen from all the Ottawa's waterways raced a mile course each way paddling "well, magnificently even," says this old country newspaperman.

Timber was indeed King on the Ottawa and paid its tribute in a royal wage. The day closed with "huge bonfires which reddened the sky and all the hills and a fine illumination lit up all the streets."¹ Ottawa "lighted all its candles and stuck them in all the windows." Little wonder that the record closes:

"There was also a procession of the physiocarnivalogicalist society but after all the splendid incidents of the day it had comparatively small effect."

On September 3rd, the Prince went by carriage to Aylmer, where the party embarked on board a steamer to the Chats portage, "one of the finest pieces of rock and scenery on the Ottawa, if not on any river in North America" says the enthusiastic *Times* correspondent. "It is a huge semi-circle of rocks, nearly three miles wide, and over which the river pours in no less than twenty-four distinct huge waterfalls, some of them about fifty or sixty feet high, but all with a broad impetuous rush of water, which gives to the whole portage a wild, rough, animated grandeur, the effect of which from the river below is striking beyond all description. Seen, as the Prince saw it, with the hot sun lighting up each cataract with rainbows, the gay little canoes dancing about among the Rapids below them: the intense, deep stillness of the pine forests sleeping in the sun: the air of still, solemn wild repose which reigned over everything, mountain and rock, lake and wood, with only the great drowsy roar of the cataracts to fill the ear with a dim, sleepy hum!—these made altogether one of those scenes of soft impressive grandeur which can never be forgotten. Slowly as the boat approached the portage, the canoes, manned by lumbermen, Indians, and squaws, tossed their paddles into the air and gave one long cheering whoop, which went echoing away among the hills with a soft and gentle noise as the sound died out."²

And here, on the Upper Ottawa, in this setting of their own, the men of The Valley presented what was probably the most characteristic pledge of fealty, ever offered to the Crown in Canada.

"The Prince, stepping on board one of Mr. Osborne's rafts, at the head of the Chats, as he was embarking on the Royal Canoe, the shantymen, through Mr. Mason, presented His Royal Highness with the following address, written on birch bark—

"We, the Raftsmen of the Upper Ottawa, constitute a body of 13,000, the bone and sinew of Canada.

We take advantage of meeting Your Royal Highness upon a raft, respectfully to offer you our hearty welcome and to express our loyalty, our devotion, and our affection for the Queen. God bless you.

May Your Royal Highness long remain the Prince of Wales."²

¹Robert Cellem—Visit of the Prince of Wales, Toronto, Rowsell, 1861.

²See Footnote on page 133.

The Prince's canoe came alongside the raft, manned by twelve strapping Scots lumbermen, who "sent it along like an arrow." A half mile portage and another paddle brought the Royal party "across the water some six miles to Arnprior, where His Royal Highness proceeded to "the picturesque home" of the lumber squire of the Madawaska town, Daniel McLachlin, for luncheon "which would have done credit to the *Trois Fieres* for its style and elegance."

Along roads where the pioneers had trekked, by streams the lumbermen had driven, Edward passed to Pakenham to entrain at Almonte for Smith's Falls and Brockville, where he took steamer for the old city of Kingston, and so passed out of The Valley and the Rideau country. He had looked upon and shared in a part of Canada's story—the making of square timber—that was to move forward yet another rich and colourful stretch, ere it was to falter, wane, and, even in The Valley and on The River of its struggle, pass slowly from the knowledge of men ere another Edward came to England's throne.

• • •

Square timber, river-run, raft-driven down the main waters, and shipped in sailing vessels from Quebec, was the characteristic ingenious answer of North America to Britain's exclusion of sawn lumber from her market at the end of the eighteenth century, while timbers came in free. When war cut in between the British Isles and their nearest sources of supplies, and later the rich resources of the United States, the enterprise of the Canadian trade played no small part in saving British shipping and in building up the strength that, in the end, defeated Napoleon. The British preference, in those days of little production but timber, potash, furs and some stock and grain, acted as stimulant to a fever of production that sent every settler, cutting on his grant, and the more ambitious branching into wider ventures. Gradually, as in all things, the demands of responsible enterprise tended to shaking down within the trade, a process completed by the exigencies of the crisis, impelled by practical withdrawal of the preferences by Britain in 1846. From that date, the industry recorded a steady trend toward regularization in all its phases from bush operations to marketing, which allowed it to run the alternate rapids and long stretches of good water, occasioned by the continuous advances and recessions, inevitable for a product, primarily dependent on foreign markets and especially susceptible to the vagaries of demand involved in economic upheavals or in war.

Crests and troughs marked its up and down progress for all the latter half of the nineteenth century, the year of His Royal Highness' visit being one of buoyancy and further promise. While heavy construction in Canada was to lift and sustain enlarging demand for some decades still to come, there were shadows falling on all the stands. The stands themselves were failing, with wasteful cutting, fire and forest disease. Costs mounted as drives went further in, and mills, operated closer to the felling, were more profitable, if sawn lumber had a market. As technical devices grew and rail transportation evolved, there were other, less wasteful ways than the squared timber rafts of getting out the cut. Every timber

² *Ottawa Tribune*, Sept. 22, 1860. The spelling of the paper is in error. This was a raft of Mr. Osborne of Portage, who was operating the mill there and built the Braeside mill, which Gillies Brothers purchased in 1873.

maker knew the square trade to be wasteful, knew that the wood beaten off in hewing was the clearest lumber for the sawn trade, knew the fire danger in the slash, knew the tree-top log, left lying in the wood, good lumber for domestic or U.S.A. sawn demand. But early primitive working conditions and stream transport dictated the squared trade as the only means of marketing above mere cost. The trade evolved the waney as one less wasteful step, then combined logging from the butts and tops as a supplementary activity to timbering, and, gradually, as stands were further in and second growth smaller, concentrated on logging and sawn timber. The sawn trade could use smaller and faulty trees, on the old limits, and provide an outlet for a double cut of inferior timber as well as that from prime stands on the new berths. The enlarging United States demand asked for sawn products, while the steamship made lumber shipments feasible for an overseas trade. Barge and rail transport completed the cycle closing in on the practical and profitable operation of the picturesque handhewn and water-driven timber. Gradually the cut grew smaller and flat cars hauled the waney sticks to efficient mechanical loading directly on to ships from the port of Montreal. The first raft of rail-shipped square timber went from Mackey's Station on the C.P.R. in 1883, and another in the same year from North Bay to Papineauville, where it was rafted and floated to Quebec.

The Gillies ran their last raft of square timber in 1903. The last crib passed through the Chaudiere in 1909, a J. R. Booth raft, and the last great shipment of waney sticks from The Ottawa was their 120,000 cubic feet shipped to British order in 1925. Today only odd shipments leave The Valley of former timber glory. Such square timber as now goes out, is finished to Admiralty order, old timber-makers being rustled from their dreaming retirement to finish the

¹Mr. McFadden is practically the last of the Ottawa's timber powers, with continuous participation from the height of the square timber trade through to the peak of the sawn lumber trade, and into the present. A boy of eleven, he haunted the Bonnechere, and hung on the edge of the River gangs as the great timbers went through the "second chute" at the town of Renfrew in 1875, and "as soon as the law allowed" was off to "help about" the Booth camp on the Mississippi branch of the York branch in the Madawaska country, under John Ferguson, one of "J. R.'s" best known agents. On the Veuve, the Amable du Fond, and Georgian Bay, he worked with Thomas Hale and Robert Booth—cousin of J. R.

Loose timber from the Little Nipissing (a branch of the Petawawa) in those days was driven to the Cheneaux Boom. In the depressed market of 1889-90, two of the greatest blocks of waney white pine to leave the upper country were taken out by Hale and Booth and Robert Booth, driven from Petawawa to Cheneaux, rafted and held there for over a year, awaiting a price lift. At that time, "J. J." himself went into contracting, taking out sawlogs. On his earnings he broke into "waney," making timber in Michigan, for four years, in partnership with his former employers Hale and Booth. They shipped on vessels of the Collins Bay Forwarding Company, who rafted it into the St. Lawrence River "Drams" for the Quebec market. Later, Mr. McFadden, and his old friends John Ferguson and William Anderson—all three old J. R. Booth men—organized the firm of Ferguson and McFadden, and their waney white pine was railed by the C.P.R. to Kingston, taken by the Hiram Calvin Co. and rafted at Garden Island for St. Lawrence running. With John D. Malloy, Mr. McFadden also formed the firm of McFadden and Malloy, making waney timber, logging and manufacturing lumber from the "North Country" to Michigan, routing often from Lake Superior through the St. Clair and Welland Canals to Kingston.

As the square timber trade receded, the McFadden interests did not forsake it, but developed logging from the Spanish River and the Webbwood country, to serve their mills at Spragge and later Blind River, where Mr. McFadden today actively directs one of the largest sawmilling projects in Eastern Canada, as keen and loyal to the forest and lumbering as when he "broke school" for the woods in the late "seventies."

waney sticks. J. J. McFadden¹ at Blind River made square timber on the Missis-sauga in 1938-9 trucking the sticks out on a ninety mile road by motor truck for shipment by rail to boatside at Montreal. In 1941, A. B. Gordon Company made a shipment of such timber for forwarding by rail from the T.N.O. to Montreal for delivery to the Admiralty.

The trade has gone, but its memory lingers on, and enriches the traditions of a Valley, whose part in Canada's story has yet to be truly told. And Valley firms, still felling on their limits, bring out their logs and ship their fine white sawn pine to home and foreign markets, but among them there is a closer inner brotherhood, unsigned and even unspoken. It is the quiet pride of those who share the timber mark of early faith and olden quality, whose trade escutcheons show that they were of the day and race who floated out square timber from the upper watershed to the coves above Quebec. Old firms have gone; new firms have come. Of all of those who drove the rough waters, that long way, one hundred years ago, only the Gillies still bring their logs down from the inner rivers to the Ottawa today.²



¹See Footnote page 134.

²The Booths, the other large firm on the Upper Ottawa today, were not on the upper River until 1857.

PEAK OF THE SQUARE TIMBER TRADE

It is practically impossible to fix, beyond any question, the peak year of square timber production.

Franklin B. Hough in his exhaustive "Report upon Forestry," prepared under authority of the U.S.A. Congress, 1876-80, quotes (p. 459) a Canadian authority: "There are no data available which would enable me to form anything like a fair estimate of the annual forest production of the country . . . Private lands render no returns: the local consumption cannot be guessed at, and the Crown Lands returns are very untrustworthy." The census returns, this official states, are more reliable but being taken but once in ten years may not be typical even of a decade.

Hough takes two bases, the export figures and the figures of forest products passing the government slides. The Trades and Navigation reports, he quotes, are in tons for which the conversion unit of 50 cu. ft. is used. From 1856 to 1867 (Confederation) Hough gives 1863 as the peak year:

White pine—640,483 tons,	32,524,150 cu. ft. valued at \$3,304,093
Red pine —103,329 tons,	5,166,450 cu. ft. valued at 745,642
Total	37,690,600 cu. ft. valued at \$4,050,545

The peak years of *square and flatted timber* going through the slides and booms on the Ottawa and its tributaries from 1851 to 1879 are listed as 1863—424,999 pieces: 1877—445,430 pieces.

Defebaugh in his exhaustive "Lumber Industry of America" includes a table of timber, cut from *Ontario* Crown lands from Confederation to 1903 (Vol. I, p. 184), in which 1869 *with a cut of 12,360,880 cubic feet of square timber is the peak year, contested by 1871 with only 800,000 cubic feet less*. The cut then moves up and down, to a low in 1879-80, never exceeding 2½ million cubic feet, after 1892, and never, in the fifty ensuing years, passing 2 million cubic feet.

Defebaugh also, through Messrs. Walcot, Ltd. of London presents (p. 123), an excellent schedule of production tables for *Quebec* of square and waney white pine from 1850 to 1904. This reveals 1852 as the *peak production year with 27,631,000 cubic feet*. The years 1861-4 offered the highest sustained cut over a period and 1863, with 23,147,000 cubic feet, was the peak year of export.

Dr. A. R. M. Lower in his "Trade in Square Timber," presented to the Royal Canadian Institute in February, 1932, bases his excellent chart, tracing the rise and decline of the trade in the exports, by which he establishes 1845—*with 475,000,000 bd. feet reported and 1863 with 33,000,000 cubic feet as the peak pre-Confederation years*.

There would seem, therefore, to be warrant for fixing 1845 and 1863 as the *peak years of export for the combined operations of Upper and Lower Canada and the periods of 1861 to 1864, and from 1869 to 1871 or 2 as the best sustained periods of production*.

GONE WITH THE RAFTS FROM THE RIVER

Former firms no longer on The Ottawa, the first list, those of the high water of the trade, the second those who have dismantled mills since 1890.

I

Aglet, James	Portage du Fort, Que.	Mason & Sons, Wm.	Ottawa, Ont.
Aumond, Joseph	Ottawa, Ont.	Moore & Cutler (Isaac Moore)	Ottawa, Ont.
Baldwin, A. H.	Ottawa, Ont.	Moore, David	Aylmer, Que.
Batson & Currier	Hull, Que.	Mohr, William	Fitzroy, Ont.
Bell & Hickey	Pembroke, Ont.	Mosgrove & McHallis	Gloucester, Ont.
Bell, John	Pembroke, Ont.	McAllister, W. B.	Pembroke, Ont.
Bell, Joseph	Pembroke, Ont.	McConnell, B.	Aylmer, Que.
Benson, Bennett & Co.	Quebec, Que.	McConnell, R.	Aylmer, Que.
Blondin & Riopelle	Ottawa, Ont.	McCuaig, N.	Bryson, Que.
Brown, J. T.	Pakenham, Ont.	McDonald, W. J.	Arnprior, Ont.
Buckingham Manufacturing Co.		McDougal, J. L.	Renfrew, Ont.
	Buckingham, Que.	McDougal & Mills	Renfrew, Ont.
Burton & Watson	Cumberland, Ont.	McDougal & Sons	Three Rivers, Que.
Cameron, Colin	Sand Point, Ont.	McLean, J. & W.	Aylmer, Que.
Chevier & Leframboise	Ottawa, Ont.	McTiernan, Thomas	Bryson, Que.
Conroy, R. & W.	Aylmer, Que.	McVeigh Bros.	Bryson, Que.
Derenzy, E.	Sand Point, Ont.	Poupoire, John	Waltham, Que.
Dickson, J. B.	Pembroke, Ont.	Rochester, John	Ottawa, Ont.
Dufrene & McGarity	Ottawa, Ont.	Rowan, J.	Pembroke, Ont.
Dunlop & Ellis	Pembroke, Ont.	Skead, Hon. James	Ottawa, Ont.
Featherson, W. J.	Carp, Ont.	Skead, Robert	Ottawa, Ont.
Findlay, Walter	Westmeath, Ont.	Skead, W.	Ottawa, Ont.
Fraser, Allan	Fitzroy, Ont.	Smith, Jos.	Ottawa, Ont.
Grant, Allan	Fitzroy, Ont.	Smith, Walton	Quio, Que.
Heenan, J.	Pembroke, Ont.	Stubbs, W. & G.	Ottawa, Ont.
Hilliard & Dickson	Pakenham, Ont.	Taylor, Wm.	Ottawa, Ont.
Humphrey, & Co. A.A.	Quebec, Que.	Thistle-Carswell & Francis	Pakenham, Ont.
Jamieson & Co., J. C.	Ottawa, Ont.	Usborne, Henry	Portage du Fort, Que.
Law & Johnston	Ottawa, Ont.	Walker, James	Eardley, Que.
Lendon, John	Waltham, Que.	Wright, Edward	Hull, Que.
Linton, M. W.	Ottawa, Ont.	Wright, Wetherall	Hull, Que.
Mallock & Adams	Arnprior, Ont.	Young, Estate of Levi	Ottawa, Ont.

GONE WITH THE RAFTS FROM THE RIVER

II

Baillie, James	Aylmer, Que.	Klock & Co., R. H.	Klocks, Ont.
Barnet Lumber Co.	Brule Lake, Ont.	Lake Expanse Lumber Co.	Haileybury, Ont.
Caldwell & Son, Boyd	Carleton Place, Ont.	Lette & Sons, Geo.	Campbell's Bay, Que.
Caldwell, W. C.	Lanark, Ont.	Lumsden, John	Timiskaming, Que.
Canada Lumber Co.	Carleton Place, Ont.	Mann, John	Ville Marie, Que.
Carswell & McKay	Renfrew, Ont.	Munn Lumber Co.	Whitney, Ont.
Church & Bros., S. C.	Sand Point, Ont.	McCamus & McKelvie	New Liskeard, Ont.
Colonial Lumber Co.	Pembroke, Ont.	McLachlin Bros. Ltd.	Arnprior, Ont.
East Templeton Lumber Co.		McLaren & Co., James	Buckingham, Que.
	East Templeton, Que.	McLellan & Co.	New Liskeard, Ont.
Eddy Company, E. B. (Sawmill)	Hull, Que.	McLelland & York	New Liskeard, Ont.
Edwards Lumber & Pulp Co.	Pembroke, Ont.	McMaster Lumber Co.	Deschenes, Que.
Edwards & Co., Ltd., W. C.	Ottawa, Ont.	McLaren & McLaurin Lumber Co.	
Empire Lumber Co.	Latchford, Ont.		East Templeton, Que.
Farr, C. C.	Haileybury, Ont.	Papineauville Lumber Co.,	Papineauville, Que.
Findlay, Walter	Fort Coulonge, Que.	Pembroke Lumber Co.	Pembroke, Ont.
Foster, G. A.	Haileybury, Ont.	Petawawa Lumber Co.	Pembroke, Ont.
Fraser, A. & F.	Pembroke, Ont.	Rideau Lumber Co.	Ottawa, Ont.
Fraser & Co.	Deschenes, Que.	Ritchie, R. & T.	Aylmer, Que.
Gilmour & Hughson	Hull, Que.	Russell, Martin	Renfrew, Ont.
Golden Lake Lumber Co.	Golden Lake, Ont.	Shepard & Morse Lumber Co.	Ottawa, Ont.
Grier, J. B.	Montreal, Que.	Stearns & Co., M. L.	L'Original, Ont.
Hawkesbury Lumber Co.		Timiskaming Lumber Co.	Haileybury, Ont.
	Ottawa and Hawkesbury, Ont.	Thistle Lumber Co.	Pembroke, Ont.
Hull Lumber Co.	Hull, Que.	Tomiko Lumber Co.	Tomiko, Ont.
Hurdman, R. M.	Ottawa, Ont.	White, A. & P.	Pembroke, Ont.
	Whitney, E. C.	Whitney, Ont.	

SAW LOGS AND LUMBER

THE TREE was man's first foe and nearest friend as the pioneer settled on his grant. Not his first grain nor his few seed potatoes could be planted until he felled and cleared the stubborn stumps from a little space within the survey stakes. But for warmth while he laboured, for shelter when he rested, the felled tree afforded fuel and roof above his head. Axe-hewn and finished logs in all the early cabins bespeak the heavy toil of the pioneers, whose first sawing was done in crude pits dug out of the ground with an "up-and-down" hand saw whose sawdust showered upon "the underdog," the man who stood in the pit. The first sawmill machinery came from England to the United States to Berwick, Maine, in 1631, but where and when sawing actually began on the first clearing in Upper Canada is debatable. Records of the French regime suggest about 30 mills operating, east of the Ottawa country in 1734. Some claims put the first Ottawa mill at Point Fortune in 1790. The first mill on the Chaudiere was Philemon Wright's built in 1808.

The early mills were neighbourhood activities, taking their cut from the owner's and nearby settler's lands, and restricted to a local market until well on to the middle of the nineteenth century, for the British market took only timber, and the United States market was still being served by its own operators. Large enterprise therefore went into square timber, and square timber discarded all the upper trunk of the tree, and despised for felling all but the towering perfect pines. Yet the lesser trees and the sawmills were eventually to possess the trade, for with the depletion of eastern forests and the rapid expansion of the United States, sawn lumber or logs for its sawing became a staple export of the Canadian neighbour whose streams and timberlands were so continuous as at times to be conveniently indistinguishable to the Maine and New Brunswick operators, finding home stands ragged.



Canadian timber operations were faced with significant changes—a turnover or variation in operation to furnish saw logs for export or the erection of mills for the production of sawn lumber and the organization of its transport. Events governed developments, to some extent, for United States interests did not hesitate. Finding good stands, close to navigable waters, abundant waterpower, and but slightly developed sawing, they invaded the Ottawa, Georgian Bay and Huron territory in force of numbers and funds. Many of them began bush operations: others were ready to purchase their logs. Though the square timber people were the last to capitulate, the Canadian industry turned more and more to saw logs and sawn lumber.

Bush operations were similar to those for square timber. No such highly skilled men as the expert liners, scorers and hewers were required, nor was the intricate technique of rafting comparable to the simpler driving of the saw logs. The log drive had, however, its dangers, its difficulties of a different nature. The great timbers paid for the making of roads to the main streams; the smaller, less valuable logs were piled in greater numbers, heaved forward in heavier masses, and were run through tiny creeks and streams with piercing rocks and clutching shallows. So the drives were longer in distance and in time, and were fed to the main streams over a wider area of operations. Each piece had to be shepherded, even though of lesser unit value, and being smaller, more liable to split itself in bashing upon the shoals, while sinkage might run three to four per cent of the drive.

But for general operations the same type of labour supply was needed, the same problems of shanty construction and operations, of road-making and of getting out the logs had to be met, but all of these were simpler and less costly than in handling timber, because of the greater supply of smaller trees and the greater ease of their extraction. The timber sought was still pine, spruce not coming into the market in quantity until towards the end of the last century and the hardwoods, for which demand was growing, were not floatable. Trees for logs were felled, trimmed of branches and sawn into required lengths, usually eight inches above measurement to allow for "broomage" that is, bruising in the drive. When the logs were made, they were bark-marked, then skidded by side trails to the skidways on the main road, whence, high piled on sleighs, they were teamed to the dumping grounds. There, the owner's mark was axed and hammer-stamped on the end.¹

Saw logs are driven free and loose through streams, rapids, and slides, until they reach the main watercourses wherein they can be boomed and towed to the mill for their cutting. In the days of export of saw logs to the United States they were towed in booms across the Great Lakes, or other navigable waters. For two generations before the use of the steam tug in 1841, these booms were painfully "warped" by man or horse-power across the large bodies of still water.

¹For seven decades now the Gillies' log mark has been a "V-for Victory," cut in a sixth sector of the log from heart to bark—probably an adaptation of the old Osborne mark, an upright "V" headed-arrow, distinguishing the independent operator from the broad arrow of the Admiralty contractor. The government mark, the broad arrow, known to lumbermen as the "crowfoot" has survived as His Majesty's proclamation to all and sundry that the public work, the boom chain, or equipment, therewith inscribed, is sacrosanct to the Crown, and consequences dire wait upon the man or woman or child who would misappropriate or suborn that article to personal use—or misuse.

A cadge or kedge crib was built, with a large capstan, serving a lengthy cable, with anchor attached. This was coupled to the boom, and the boom actually hauled by winding up the windlass, sometimes by hand with four or five men winding in a practical treadmill, or perhaps by horses, carried right on the crib. A large flat-bottomed boat (in local Valley parlance sometimes called a "winch-boat," sometimes a "tar baby") carried the hand-worked windlass. This was probably the legitimate progenitor of the "alligator," known wherever eastern rivermen gather. The latter was a great awkward flat-bottomed boat, generally painted dark red. Like the creature whose name it took, its progress was unbroken on land or water, for, coming to rapids or portage, with its "anchor" thrown ahead, it could waddle up on shore, and, with greased skids placed under it, "winch" its slow way laboriously across the trail. The first alligators were paddle-wheel type but later carried screw propellers. Each was equipped with a "fragrant," chugging wood-fed engine which would shove it along and allow it to pull a small boom, to which the windlass could be adjusted and the boom hauled by cable, while the alligator was snubbed and then moved another long distance for another haul. The windlass was capable of holding a mile and a quarter (6000 ft.) of five-eighths inch cable for the anchor. This hybrid craft could develop amazing power in low gear and could warp a boom or "bag" of many thousand logs, weighing ten thousand tons or more, slowly but surely through the waters.

The driving of the logs had much of the danger and romance of square timber and called for similar skill and agility in the rivermen. At the mouths of the main streams, facilities for sorting booms were maintained, where skilful, clear-eyed rivermen standing on the floating boom timbers, or sorting jacks, speared and guided the logs of each owner into separate booms. The booms were then towed to their mills where they lay in the "log-pond" to be hauled up and cut. The old mills were all driven by water power, and Heron's mill—the original Gillies' mill built in 1842—is still in operation on the Clyde sawing by the power of its five waterwheels. In the earliest mills, a bull-wheel brought the logs from the pond to the level of the mill-floor, the log being snaffled on to a rope, chain or wire cable and a great wooden windlass hauling it in. Later, a spiked carrier, called a jack-ladder chain, brought the logs up an incline plane to the log decks. From the deck, the logs passed to the saws which consisted of one or perhaps two heavy upright saws, running at a slow steady rate, with a single edging saw, (cutting the sides of the board) and a "butting" or circular cross-cut saw, (cutting the ends). The Honourable J. K. Ward, in the Canadian Record of Science, describes the one upright saw at Point Fortune as cutting so slowly that the owner-operator could eat his dinner while one board was being cut from the log. The greater part of the sawn timber in early days, however, was sold with rough edges and not finished. The plank or board cut was marked by the foreman, and sent to the piling grounds. In the early days, the boards were carried by hand, if the yards were right at the mill, or loaded and hauled by horses. Later, rails with lorries carried the boards to the piles, just by momentum, if the grounds could be laid out on a slight grade; otherwise, "dinky" engines transported them. The piling grounds were sought near to navigable water in the days of barge transport, and later railway sidings were run in. Many of the mills had only cartage from the grounds to river, road, or later, railway.

An anonymous pamphlet, 1870-1, dealing with lumbering on the Ottawa, suggests that for 150,000 logs, which would give a run of 30 million feet, 450 men were required to get them out, 300 men piling and forwarding and 300 men and teams. The supplies listed for these operations are impressive—825 barrels of pork, 900 barrels of flour, 500 bushels of beans, 37,000 bushels of oats, 300 tons of hay, 3750 gallons of syrup, 7500 pounds of tea, 1875 pounds of soap, 1000 pounds of grindstone, 3000 pounds of tobacco, 3750 pounds of rope, 1500 boom chains 7 ft. each, 45 boats, 900 pairs blankets, 15 cookeries, 375 cant-dogs—at a cost of about \$55,000.

The story of sawn lumber gradually became one of more and more efficient mills, as The Valley firms combined bush, sawing and distributing activities under their own management. Bush operations could be speeded and drives enlarged at any time though water and weather put some limit on the maximum number of logs that could be brought down any given route in an average season. So production turned on the speed of sawing, the saw-kerf or percentage of the lumber that was cut into sawdust, and the facility of clearing the saw of its sawn-boards and getting these out of the mill to the piling grounds.

To improving these processes, the sawmill industry applied its not inconsiderable ingenuity and resources through the years. The gang-saw—simply fitting more saws into the saw frame—made its appearance just about the time that the United States mill interests began moving on to the Ottawa. From 1860 to 70, effort concentrated on improving this device, while the evolution of the iron turbine wheel, replacing the wooden water-wheel, contributed also to increased power, and so, to increased cutting. The circular saw was the next invention, followed by the band saw just towards the end of the century. These developments in power and sawing dovetailed into others—the steam-driven log-kickers which threw the log from the log-deck to the carriage, the mechanically propelled log-carriage itself, carrying the log back and forth to the saw, where it was flipped by the steam ram or “nigger.”

Other devices gradually emerged to complete the mechanization of the sawmill. Boards dropped off from the saw on to “live rolls,” tables rotating like the rolls in a wringer, which carried them to the edging and butting saws, past automatic hammers, stamping them with the mill mark,¹ to the graders, who assessed and marked each board, carried past them on travelling tables, from which they dropped on to the loading rollers. From the latter, they were swung by busy loaders into waiting lorries and shunted to the piling grounds or directly to the dry kilns, planing mill or shipping shed.

As capacity and cuts increased, the previous disposal of refuse and sawdust by dumping into the mill stream threatened to foul and clog even the larger rivers, and a New Brunswick operator, with the advent of steam, hit upon the device of burning it for fuel to drive the engines. As cuts increased and offings with them, and with the coming of power, the sawmill thrust into the sky its characteristic and picturesque cylindrical burner, a plume of smoke, flaunted to the sky by day, a torch of fire by night, its red glow quivering in the darkening waters by many a mill stream where a modern plant rose on the site of the

¹The Gillies trade-mark is a ‘G’ in an equilateral triangle.

pioneer mill. The modern sawmill became a medium of magic transformation, from which a huge, rough log, floating in the mill pond, mounted the jack-ladder to emerge in a few minutes and a few hundred feet, as smooth boards, ready for the kiln. It has been a triumph of cumulative co-operative enterprise, in which each device, evolved by one firm or branch of the industry, has become a common possession for the common advancement of a common undertaking. In such pooling of resources and inventiveness has the sawn trade survived in the face of competition from scientific wood substitutes and from such perfecting of processes has each wooden sawmill become a large scale industrial undertaking in itself.

The little plant, such as John Gillies first built on the Clyde, could cut perhaps a thousand feet a day, at full running. Five water wheels still supply the only motive power for the peaceful mill, basking on its quiet mill pond, enclosed in grass-grown dykes whereon the house, built by John Gillies in 1861, still looks down. The old wool and carding mill and the old saw mill have gone, but in the old grist mill much of the original machinery remains, and the logs brought in from the local cut are hauled slowly up to one large circular saw, and leisurely sawn for the local trade. Though the mill building has been altered from time to time, much of the original equipment is still there, skilfully fashioned of wood by millwrights of the day, on the property where it still stands. In the mill and sheds are old hand-hewn square timbers felled and finished on the ground, some of them bearing the 'G' in a closed circle that was the first Gillies timber mark, hammered in a generation before the passage of the Timber Marking Act in 1870. The old conveyor belts in the grist mill are of wood and leather, in broken spirals, and the old mill stones stand idle where they ground the wheat and pease meal. The bake-house of stone shelters close to the mill. It is of two stories, the first divided into two sections; on one side are the huge limestone kilns which, piled high with wood, sent up the heat (and smoke!) through hundreds of small slits in the sheet metal 'ceiling', serving as floor to the chamber above, and into which the unhulled oats or unshelled peas were shovelled and baked. From the baking floor they passed through chutes into the other half of the first floor where they were bagged and carried across the mill yard for winnowing and grinding, to the grade required, the oatmeal and pease meal from which the porridge and pease-brose of Scots strength in Ontario was daily made and fed to a hardy generation.

Many a year the bakehouse has stood idle, but many the hundred bags of oats and peas that roasted on its aged and sagging floor, as the settlers brought their lumber for sawing, their grain for grinding, their wool for combing, carding and spinning at the cluster of buildings where John Gillies first ventured greatly, a young man in a new land. The story of a whole industry stretches between that little mill on the Clyde with the owner and his neighbours cutting their own logs, and hauling them for casual sawing, and the modern plant of GILLIES BROTHERS at Braeside.

By 1866, when John Gillies was embarking on larger ventures, the mills he bought on the Mississippi had probably an annual capacity of 20 to 25 million feet. His sons' new mills at Braeside, a few years later, could cut 15 million feet, and by 1893 were cutting 30 to 35 million feet in a year. The mills, destroyed by fire in 1919, could cut 300,000 feet a day.

The modern mill of GILLIES BROTHERS, erected in 1921, is a reinforced concrete building, resting on solid rock with structural steel frame, and steel trussed roof, covered with heavy galvanized iron, its basement nineteen feet high, nearly as high as John Gillies' first mill, its outside measurement 75 by 190 feet, larger than his first mill-yard. Its supporting columns are of reinforced concrete, on which the weight of the building is carried, and on connecting concrete beams. Eight-inch brick curtain walls run between the outside pillars. The mill is lighted by wire glass windows and open steel stairways, and a steel bridge, across the whole mill, not only contributes to its general light and airy effect, but provides an over-all view of all operations on the floor.

While the five quiet water wheels still turn on the first John Gillies site, the Gillies mill at Braeside is driven by fifty-one electric motors, single and grouped, ranging from one to one hundred and fifty horse power, run from its own power plant, housed in a brick and concrete unit, 50 by 80 feet, in which an Allis-Chalmers condensing turbo-generator of 500 k.v.a. and auxiliary equipment of exciter engines, vacuum pump, etc., provide electric energy. In the boiler room, there are five 72-inch diameter tubular boilers, each sixteen feet long, and equipped with Dutch ovens, into which an overhead conveyor, gravity-fed, delivers saw dust and log chips from the mill for fuel, with outlets for depositing surplus fuel on the concrete floor for running when the mill is idle. An eight-inch steam pipe supplies the steam feeds, loaders, kickers, niggers and set works of the carriages, as well as the nine steam trips on the various lines of live rolls. The jack ladder hauls the logs from the pond to the top, where steam kickers throw each into different decks for the band saws. At the left, a chain transfer carries the medium-sized logs to one band mill, the larger logs go to a band mill on the right.

There are three band saws, each with 150-h.p. motors, and the band re-saw is driven by a 100 h.p. motor. The band mills are equipped with eight-foot wheels and 12-inch double cutting saws, each of the three carriages being run by 12-inch gun shot, steam-fed cylinders. The largest carriage is steam-set, the other two hand-set, each calling for three operators—one setter and two doggers.

Farther back on the left, on a shorter deck, a centre band mill takes the smaller logs. The smallest of these are sent to live rolls and transfers to a cluster-edger, sawing up to six inch cants. The slabs go to a seven-foot horizontal band re-saw. There are three edgers, two single with three saws each, the third a double two-man edger, with six saws.

(The filing room is suspended over the band saws on steel bridge trusses. The casings of the band mills are iron sheathing and the mill conveyors are steel troughs on structural steel legs and angles. The huge band saws go up and down from the filing room by a special frame in a hand-worked winch. Grinders, stretchers and brazing outfits are electrically driven.)

The lumber from the mill drops on to the sorting and transfer table, which carries the boards along on the sorting chains to the graders. Beside the sorting chains, parallel transfer tables, travelling in reverse, take any boards, not passed by the culler, back into the mill to be remanufactured. (The sorting and trimming shed is 236 feet long and 50 wide, with steel trussed roof on concrete walls, on which rest the concrete slabs forming the sorting table and supports for the sorting rolls. The sorting rolls are sixteen inches below the level of the runway, eliminating heavy lifting.) As the boards go past to the sorting tables, they are automatically stamped with the Gillies' trade mark, and the symbol of the

White Pine Bureau. The finished boards pass on to waiting turn-table lorries to go to the yards.

Directly behind the edgers, a slasher crosses the floor and picks up all the edgings and refuse slabs from the whole mill. All slabs that will produce pieces five-eighths of an inch thick and six feet long, are converted into crating, boxing, etc. Edgers, slashers and re-saw transfers operate automatically by steam, the edger transfers under control of the tail sawyers, the others of men, stationed on a platform in the centre.

All the material for the five-saw overhung slasher drops into a steel trough conveyor and goes to a separate building 35 by 100 feet—the box and picket department where everything suitable goes through a horizontal band re-saw with 60-inch wheel and 8-inch blade. The box-boards, from four-foot slabs, are edged and trimmed and drop through chutes to floors below, where they are sorted and loaded on rollers to be shipped to the yards. All material, three inches and wider, thirteen inches and longer and from five-eighths of an inch to two inches thick is made into box boards. Smaller edgings and slabbings are run through the picket machines, which drop them into a steel hopper to the floor below, for sorting and bundling. Pieces not suitable for pickets are made into lath, then sorted, tied, trimmed and lowered to the ground floor for the lorries. When market conditions justify, all two-inch blocks, suitable for matches, are picked out; four-foot and sixteen-inch wood is picked up for sale as fuel in the village, or "outside." The 'waste,' of which there is little, is carried in a steel conveyor to the burner, which was salvaged from the old mill—a hundred feet high, brick-lined to within twenty feet of the top, and twenty-eight feet across. Beside it towers the great steel smokestack, visible over land and river, six feet six inches across, its steel tower rising one hundred and fifty feet on its ten-foot concrete base.

All the mill's varied merchantable products, (except the fuel carted off in dump carts), pass out on turn-table lorries which "meet up" with the only team of horses on the plant. They are used to place the lorries for loading, and again to couple them into the small train which is hauled by a thirty-ton gas locomotive to the yards. Loads are cranked off into the piling frames in the 150 acres of yards, capable of holding 45 to 50 million feet of lumber, served by eight miles of standard gauge track.

Fragrant, symmetrical, pile on pile stands the sawn lumber that, a bare year or two since, marched, tree on tree, up the green slopes of the watershed. Daily it leaves the yards to meet man's ever continuing, ever changing needs—now, as in the beginning, to help the Motherland in desperate need, and thousands of pickets go daily to the New England States to make rollers for the black-out blinds of the threatened Atlantic Coast. The little wooden mill on the Clyde and the great steel structure on the Chats are one in the same story of war and peace, effort and achievement, the inseparable and continuing life of the old world and the new.

SHANTY AND RIVERMEN

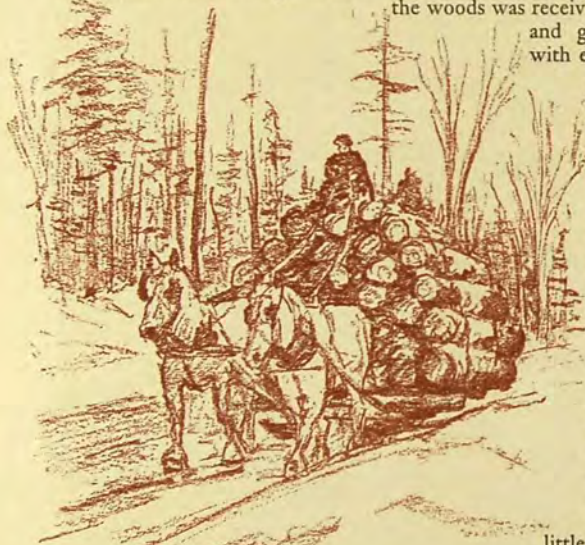
THE BUSH and the river asked strength, daring, alertness in mind and limb from the men who wrought among the trees and rode the currents and the rapids. Their life lay in the open, in long days of hard work and heavy eating, in long nights of dog-tired sleeping with no break but the fun of their own creating, the scrawled letters from home, the yarns they wove into the night. They were axemen and sawyers, teamsters and bushmen. Though liners, scorers and hewers were skilled craftsmen, "larnin' and figgerin' and books" were for "dudes" and the "cock-pen" (the office). They lived to themselves the long months through, for many miles of almost impassable trail stretched between them and civilization. All things contributed to a camaraderie of boisterous horse-play, boasting and feats of physical endurance, rising to its fullest flowering when a "tenderfoot" came along the trail. The missionary or priest who came through the woods was received with a simple respect

and generosity, if generally with equal reticence. Though

many firms prohibited his entry to the camps as costly in their exploitation, the Assyrian pedlar—for of such a common origin was The Valley apt to classify all of the calling—was a familiar figure, trudging from camp to camp, with his packs of oddments on his back, an exciting break in a winter's night with too profitable sales, for the men's savings, of trinkets, gaudy scarves, shirts of Joseph's colours, and a medley of articles of

little worth, but at least something to send or take

home. A quick selling number was the little heart-shaped brooches of mother-of-pearl, with "Sweetheart" or the girl's actual name twisted across it in a pliable gold wire.



There was heavy chewing, heavy smoking, but only of pipes, where fire was destruction. Liquor was taboo where a glancing axe meant a severed artery, an error in judgment death from a crashing tree, the least unsteadiness, over-running and horrible death for team and teamster beneath down-rushing logs. Sheer, high animal spirits loosed tongues to tales and strong-thewed limbs to jigs in stocking-soles.

The life developed a language and phrase of its own, strong, picturesque, full of bush terms, and not apt to lose from the strange mixture of its references or the naivety of its turns. Unlettered, these men were neither uneducated nor unintelligent, nor indeed illiterate in the sense of being unlearned, for many of their skills were highly developed, their minds well-stored with much of the experience and wisdom of their people, who had garnered well of the past, and in other older lands where learning was not by rote but a growth in daily teaching and the lore of living. Many were endowed with a natural lively wit, and most of them with keen powers of observation. Sometimes, the expressions they learned "out front" or "down The River" required a good interpreter when thrown into their current usage, as for instance, with one Rusty McGavan, who, extended to his fullest vocabulary for terms to describe the competent cook-waitress daughter at one of the better stopping-houses on the Bonnechere, stated that "she's fine, she's first quality pine; she's good enough for any man to marry. Why, she's good enough to be the Government's wife." (Government was then comparatively new, less close and familiar to the people of The Valley than today, when familiarity has bred, well, not exactly awe of Parliament Hill in the reaches of the Ottawa).

Or, there was Sandy Martin, who spelled out the Ottawa paper with dogged thoroughness, each mail from the depot, and threw its terms into his talk. He was heart of pine and well-liked—The Valley's term of high approbation—and down The River when the drive was on he came into the tavern at one of the slides, saying to all and sundry—in the way of the riverman in a grog-house—"Say, I never saw ____ (referring to a government official on The River) looking so well in his life. My, my, but he looks fine. O just grand. You know they want me to be alderman at the big funeral." "What funeral?" came from the bar. "Why ____'s funeral," he said, "didn't I tell you I never saw him looking finer? He's dead there, all dressed like a king, I never saw him look so well in his life. And they want me to be one of his aldermen at the funeral but I'm afeared. I've worked up and down The River, in shanties and on the drive and farms but I've never done work about a church, and I'm sure I'd give the crib a steer the wrong way, so I told Mrs. ____ to get another alderman, thanking her just the same."

"He's such a man as Pontius Pilate, always lookin' for his pound of flesh! Sure, Judas Iscariot would be ashamed to speak to him in daylight, and afraid to meet him in the dark," was one shantyman's summary of his walking boss. "Moriarty was laid out at the Albion, last night, and they got his name; was I with him?" was the fearsome inquiry of a driver, whose wife was not "an easy woman to explain things away to." At the height of attempts to extricate men, caught in The Chaudiere in 1857, and thought to be in one of its caves, the Irish foreman, directing operations, roared "If yez are not in there, will you let us know and then we can stop this hollering?"

The bunkhouse tales were of a varied nature, of the beaver and the bear, of the strange things that could happen in the woods, but mostly of fighting foremen, of bad luck, of the breaking of the Crotch Lake dam, and of great drives, not infrequently of the splendour and the spending of the "big shot" and his family—the owner to whom the men from his own country paid an almost feudal pride. The French bushmen were strong on the 'serial' story, cached from some village raconteur in the parish back home, spun out night after night, often with repetition, reminder and additions. Many a yarn bore a sinister haunting strain for, like all men close to nature, the shanty and river men were superstitious, and strange the apparitions that had been known to flit through woods, where murder had stalked, or that hovered over the rocks where river men had been lost. There is one passage on the Madawaska where, it is said that, on a clear night of the May full moon, eerie cries and haunting shouts echo. There a crib, buckling in the shoals, carried its crew to death among the ragged rocks and crashing timber, and to this day some aver that the spirits of the lost men shift among the mists and the trees of the shore, seeking sepulchre.

Some old rivermen contend that the exploits of Paul Bunyan were of the woof of these old tales, but more say that Paul was a later invention of "dude writers of the western states." Certain it is, however, that, years ago, the Bunyan yarns were current in construction, if not in lumber camps in The Valley, probably brought thither by drifters from other camps or men from Canadian shanties and drives, for they were adorned with references of no U.S.A. origin. For instance, in The Valley yarns, Bunyan was born in Nova Scotia, of such prodigious size that the Admiralty lent a cruiser in the harbour for his cradle, but, rolling over, his weight was such as to cause a tidal wave of untold damage to Halifax. He and his blue ox, Babe, "eleven axe handles and two plugs of 'chewing' wide between the eyes," timbered through New Brunswick to the Georgian Bay, and, wanting a good stream for his logs, he channelled out the Mississippi. The Pacific firs and California pines were only growths of seeds he had brought from Maine and New Brunswick woods!

But in their own exploits, the men had tales often defying fiction, stories of 'dares' to battle, or to run or 'bir' the timbers, or of eating contests, that, begun in bravado, not infrequently ended in fierce conflict, gang against gang, or the whole outfit of one firm against the other. One old time woodsman, Dave McTiernan, still spry and erect and well on in his eighties, living near the Coulonge waters, that he drove for many a year, made the hundred odd miles on foot, in January, over snow and icy roads, from Perley Depot to Bryson, from six of one night to midnight of the next, just because he said he could, and another woodsman, set on checking him, trudged on, always finding "he'd gone hours afore."

Rough readiness was the riverman's rule of work, the foreman the spur to action. "Mountain Jack" Ryan—from Mount St. Patrick—sweeping a rapid in the early spring drive found one of his men, turned out with day-break, speculatively contemplating the icy churning waters, the while he twisted his peavey. With characteristic forceful preface, he ended up, "Now, get into it. It's boiling, but it won't scald you."

Nor were the rivermen alone tough. The men who were bred to the direction of the Ottawa firms were seasoned in the woods. When, in the cold and mushy autumn weather of 1878, William Gillies, then thirty-seven years old, at the Fort Coulonge Depot, heard of the drowning of his brother Alex, he struck out and made the seventy-five miles of rough road and trail to Braeside in thirty hours.

When the men came out with the drive, older men and women all through The Valley have but one judgment that "hell broke loose on The River." As Mr. Charles Macnamara of Arnprior says, "they were land sailors, loose on a river beat, after months in the bush." There were the same high spirits, the same abandon, the same wild spending of money and, perhaps too, a certain sense of "eat, drink, and be merry," for "to-morrow they might die" in tossing crib, or hurling logs. At the head of the slides and rapids, and at the rafting grounds, rival gangs might be tied up days and weeks, and the taverns and resorts, where "Meals and Beds"—and anything else—were offered, swarmed with the heavy-shod men of The River, drinking, singing, swearing, chewing, wrestling and brawling.

Renfrew is one of the few Valley towns which actually profited by these rampages of the rivermen. In the earliest days of the settlement, with modest settlers of meagre means and no municipal organization, there was no way of crossing the Bonnechere, and neither the tiny township of Horton nor the large District of Bathurst could raise the funds for a bridge. A shanty gang from the Conroy camp raised a row as they went through the Village, cracked some heads and passed on, but not so the men of Renfrew. Arming themselves, a dozen or so went in pursuit, overtaking the roysterers at Moore's Mills in Admaston, whence, rounding them up, they marched them before John Lorn MacDougall, Justice of



the Peace, (father of "J. Lorn," later Auditor General of Canada). 'J. Lorn' fined them £10 each to provide funds for the building of the first bridge across the second chute of the Bonnechere. It stood many a year, mounted on triangular piers, the apices heading upstream to break the ice and deflect the logs coming downstream in the spring.

These were the times and places where the rivermen were "rolled," as they slept off a drunken orgy, that is they were stripped of their winter's earnings—generally carried in an ornate, Indian-beaded belt. One such driver, living quietly years later in a small Valley town, was surprised to see his own name, with a substantial sum opposite, in the listing of unclaimed bank balances. Upon getting in touch with the local manager in a northern lumbering centre, it was ascertained that "rory-eyed" but still sensible enough to know what he was doing, he had "banked his roll" against being stripped, but when he had "sobered off" some days later, and found himself without a sou, he had no memory of his own

caution, concluded he had been "rolled," and, shrugging it off as "the luck of the drive," had signed on at the mill and another winter in the camp.

But no yarn could give the picture of the riverman come on land that facts portray in a story in the *Arnprior Chronicle*,¹ of one Baptiste Fortin of L'Ange Gardien, who had apparently reached his little village and his wife Exina, with but \$54.13 in hand, after winter in the bush and spring on The River. And Exina, or Baptiste, or someone on their behalf, was inclined to check the firm's agent on Baptiste's earnings. And the agent sought to establish the proof of his firm's good faith by actually tracing what had happened Baptiste and his earnings in the pay-off. Baptiste had struck Ottawa early on a Thursday morning. With advances and hold-backs on earlier loans, he had been paid off with \$150.13. With this in pocket, he bought a whiskey flask for \$1.25 and a briar root pipe for the same sum, which he, however, traded almost at once for a simpler 25 cent one. Flashy ear-rings appealed to him for \$1.75 but he exchanged these for a gaudy Japanese neck-kerchief. (Valley towns can all recall how typical were the gypsy ear-rings and scarves of the rivermen thronging their board walks when the drive was on). For breakfast he had three plates of oysters, for which he paid \$1.50 and then went to the barber shop where he paid \$1.50 for a shave and to have his hair cut, and shampooed, and \$2.00 to have his mustache dyed black, and \$2.00 more to have it dyed brown, when the black didn't suit. So trimmed out after his months in the woods he "met up with the gang," to make their rounds of the bars, where, for the next few hours, his share of drinks, cigars, and 'chewing' cost him \$30.00. The unfailing photographer appeared and Baptiste paid \$5.00 for 24 copies of a tintype. He wanted to see Ottawa and engaged a carter who drove him about in his waggon for \$7.00. It must have been a shopping tour for he bought a suit for \$17.00, later found worth \$9.00, and red-topped boots of \$1.75 value for \$5.00. A watch and ring, purchased for \$3.25, he later exchanged for "two plugs of chewing." He engaged a room in one of the lower town boarding houses, and paid \$5.00 ahead for bed and board but ate only one meal there, preferring the shantyman's hall. Somewhere he tipped one, Marie Christine, \$2.00 for sewing on the buttons that had come off his new pants! He got into the inevitable "drive row," fighting with Xavier Lacasse, and having to pay \$1.00 for having his face stitched. He kicked over an organ grinder's box, and then, sorry for the old man, gave him \$2.00. And, of course, he got into "a dare," betting Narcisse Plamondon \$2.00 that he could wrestle and throw him in the hotel yard gateway, which test of strength he lost. Three days of such expansion after the winter's isolation, and Baptiste hired a cab for \$1.50 to take him to the station, where he bought his ticket, completing the dissipation of \$96.00 in 72 hours.

There was little for the riverman to do, when he struck the settlements on the drive, high spirits in his heart and money in his pocket. He was a bird of passage and neither community nor church sought him out—in fact, it took imagination to see what they could do to offer anything to hold the roaring tide of men, swinging off their rafts and logs for a night ashore. The taverns and the liquor stores and their auxiliary reinforcements opened enticing doors and became the bane of rivermen, operators and clergy alike, forcing, in the end, some regu-

¹April 18, 1890.

lation of the traffic, and a clean-up that has left many a town and village of the Valley "dry" from the days of the Scott Act to the present.

One could sympathize with the distraught mother in one of the doggerels, roared on the drive:

*"I had not been in Quebec for weeks 'twas scarcely three
When the landlord's lovely daughter, she fell in love with me.
She told me that she loved me and she took me by the hand
And shyly told her mamma that she loved a shantyman.
'O daughter, dearest daughter, you grieve my heart full sore,
To fall in love with a shantyman you never saw before'
'Well, mother, I don't care for that, so do the best you can,
For I'm bound to go to Ottawa with my roving shanty-man."*

Rough and boisterous, rugged and rollicking, were The Valley rivermen, a race that has largely gone. But their very directness and simplicity of action were part of their daring, their good nature and generosity. Swift to anger and fierce in fight, they fought cleanly and settled the brawl by physical strength—never were guns or knives or even bludgeons used unless the latter might be necessary in an odd case, where "a drunk went berserk." They were kind to the children who swarmed about their camps near town or village; they were kind and responsible to their own aged. They were ready to "pass the hat" for anyone in need or sickness, for quick sympathy to the relatives of anyone lost or hurt in the drive. When they reached home, village or farm, they settled down to a summer's work, and quiet living, except for the Saturday night in town or the occasional back-country man who ran his own still.

"Going down with the rafts" like seeding and harvesting, sugaring-off, and haying marked off one season in the settler's life from the next. Events were planned in reference to the drive. In the White Lake district of the Madawaska country, one old Scot was known as the best native distiller beyond "the Queen's line." His daughter was to marry when the gang came back, "flush with cash," from the marketing of the rafts in Quebec, her father being one of The Valley's doughtiest raftsmen. Against the festal day, her provident parent made a hogshead of his most potent recipe, sinking it secretly in one of the bogs to mature. He was lost on the run, and no one knew the place where his treasure lay deep. All these years between, recurrently, some hopeful idler goes studying old township maps and probing the swampland for "Mac's wedding barrel," whose value today would be beyond any liquor ever distilled. When by night, lights are seen o'er the local bogs, it's all right for the teacher to say it's carbon dioxide gas, rising from decaying vegetation; the local people say "It's another search party for the ——— whiskey keg," while the Irish dwellers say "Sure, it's Mac and his cronies 'oncet again' stealing out of heaven for a nip of home-made high wines."

Bytown was the great clearing and hiring centre, for here men came from up and down The Valley and both sides of The River. Responsible firms and private agencies sought out gangs and exploitation became so rife and grave that the industry itself gradually built up controls, eventually leading to fairly regularized employment services. Ottawa is still the major supply centre of shanty and rivermen for the entire eastern and much of the northern Ontario industry.

These men came through the years from French, Scottish and Irish stock, and, even today, The Valley camps, unlike those of the North and Pacific Coast, have few men of other extraction but, whereas forty years ago the camp and drive would be about equally represented from these three groups, today, the French Canadian would be two to one of his Scot or Irish confrere. To the roaring English-speaking raftsmen, the term "shiners" was applied—usually to the Irish—one explanation ascribing it to a corruption of the French "cheneurs," workers on the oak bridges, which were erected on so many of the streams by English-speaking work-gangs as the Ottawa and Upper St. Lawrence Valleys were opened, in the creation and development of the province of Upper Canada.

In the days of earliest settlement, the farmer himself would leave his small clearing for a "winter in the bush" taking oxen or horses with him, if fortunate enough to own them. Settlement in the forest land was costly, costly in its clearing, slow in coming to its crop, precarious as to marketing. Thousands of prosperous farms in The Valley counties today owe clearing, buildings and permanence to the supplementary earnings of the grandsire in the shanty, and the courage of a forgotten grandmother, who, with her brood of youngsters, ran the holding through the work-racked days and nights of wakeless vigil, in which she sat keeping the box stove stacked, while children slept and the northern lights played through the crackling, icy darkness of the dim wolf-haunted woods. Half the correspondence of the Gillies camps in the early years were the letters sending the small sums of money, dangerously earned, 'out' to the waiting wife and children, at addresses from the Mattawa to the Lower St. Lawrence, and inland to the Lavant and Mount St. Patrick country. As agriculture developed, largely due to the market which lumbering opened at its door, it was the settler's sons, who became the men of bush and river, and, as the sawn lumber trade grew in The Valley the sawmill village sprang up, clustering about the mill and along the banks where the booms floated. The men who followed the square timber trade lived their winters and the weeks or months of the drive with it, and, after pay-off in Quebec, scattered to their homes, for the summer's harvesting or for other work on ship or shore or in construction gangs. The sawn trade made possible work, almost the whole year round, and so the mill town or village took on a permanency of community life, with homes from which the younger men went to the bush and on the drive for winter and spring, and turned to the mill for the sawing season.

THE NILE EXPEDITION

From the Ottawa lumber country and camps came the first Canadian contingent to serve with British forces overseas. Lord Wolseley had known Canadian river and boatmen in the Northwest Rebellion. Entrusted with the relief of Khartoum, where Gordon was besieged in the Soudan, he requested the Governor-General of Canada to consider sending Colonel F. G. Denison of the Governor-General's Foot Guards with a detachment of voyageurs to handle the small transport boats in the cataracts of the Nile. On September 15th, 1884, within three weeks of Wolseley's request being received, Denison, with five other officers and a hospital sergeant, sailed on 'the *Ocean King*' with 400 of these Canadian boatmen, officially gazetted in their regular gangs of twenty-four to twenty-six

men and with a *foreman*, so designated officially, in charge of each. Of the 400 bateliers, nearly a third—124—came from the immediate vicinity of Ottawa, rivermen from the main stream and the upper tributaries. From the Trent came fifteen in the Peterboro gang under their own foreman. From the St. Lawrence raft and rivermen came two gangs, raised in the Caughnawaga area, and from the Lower St. Lawrence, men from the Eastern Townships and the South Shore, serving in three gangs, organized at Three Rivers. Four gangs only came from elsewhere—all from "the Northwest," signed through Winnipeg. The expedition was fully representative of The Ottawa and St. Lawrence rivermen,—Scots, Irish, a very large number of French-Canadians and several Indians.

Their shooting of the Nile's rapids, reported in London dispatches, was characteristic—"The Bal-el-Kebir is regarded as one of the most difficult passages on the River, as its name—'the barrier'—implies. It occurs on the East Channel of The Nile, broken in The Narrows as in many of the other passages along the Second Cataract by a large number of rocky islands. At this narrows, the course forms a chute less than 25 feet wide and 50 feet long, with a drop of $3\frac{1}{2}$ feet. The water having dropped six feet in the preceding 15 days, the English sailors had given up navigating the pass, and for a week had portaged round the narrows, considering it impracticable even for the unloaded boats. Their surprise may be judged when they saw the pilot Remington (a French-Canadian with an English name) and his gang from Three Rivers ascend the channel with two loaded boats. At the foot of the rapid, the sails were clewed up and, in the flash of an eye, the men had jumped out on the rocks and hauled up their small boats by the tow-line."

The expedition's record evoked a resolution of recognition and gratitude from the British Lords and Commons, on August 12th, 1885 when, their task of aiding the transport of the Imperial forces completed, and Khartoum again under the Union Jack, they returned to Canada. Four had died on service, eight were lost in the treacherous Egyptian rapids of Semneh and Ambignol. Their names and sacrifices are recorded in the ancient land of the Pharaohs, where these rivermen of the New World's forests brought the unique skill of their calling to the Empire's aid in the hour of need.¹

Incredible change and development have come in shantying and river-driving as in all other phases of lumbering. Men are hired through the regular employment services and travel to camp by rail—or even plane—with meals and berths provided on long routes. Transport is by car or truck if the way lies at all by open roads though on unbroken trails or routes the grey team is still the "old reliable," especially in these days of oil and rubber shortage. All camps, bunk- and cook-houses are built to government specifications and subject to regular public inspection. The buildings are large, well-lighted and fully equipped, single beds with mattresses replacing bunk and deacon seat, and spacious, airy dining camps, the "dished-up" meal on the out-thrust tin plate. Food is well-cooked and varied and, even with war rationing, comparable to good, average hotel fare though never more appetising than the rich, plain cooking of the old cambooses. Reading

¹Reference—Brochures Canadiennes, "Les Voyageurs Canadiens a l'expedition du Soudan"—Gaston P. Labat, Quebec 1886—Library of Parliament.

matter, the radio and the services of the Frontier College cut down the isolation and vary the evenings in the camp.

Health and compensation provisions afford protection to the men and their dependents in all stages of employment, advances welcomed by the progressive firms, who, in Ontario and Quebec, operate their own additional safety associations, optional under the workmen's compensation laws. The Ontario operators have also developed a special rehabilitation division for the treatment and re-training of employees, handicapped by occupational illness or accident.

Mechanization has affected all bush and river work from road-making to driving quite as much as it has sawing. Roads are broken with bull-dozers and tractors and kept open with mechanical ploughs, comparable to a city's snow-fighting equipment. Horse and power-driven jammers,—“haul-up” and “let-down” contrivances—take the “lift” out of loading: “crazy-wheel” snubbers control slithers and over-running on dangerous slopes, and, on long hauls, trucks nip along iced bush roads pulling two, three, or even four well-loaded sleighs.

The development of motor transport affords alternate operations to the dangerous and costly driving formerly necessary in small, shallow streams and curving creeks.

Streams improvements, log-towing and various other devices have greatly modified all river-driving and reduced its risks but it still demands skill, dexterity and daring that only the human brain and body can supply.

Lumbering is part of the building of Canada, and this will continue to demand, as it has demanded in the past, a rugged life, with sacrifice of many of the ordinary conditions of natural living upon the part of the men who pushed back the bounds of settlement, or widened the paths to her resources, their extraction and marketing. Hunting and trapping, fishing, lumbering, mining, construction, the opening of agricultural land in the western pre-emptions—these called always for strong and vigorous men, free of family ties or ready to forego home life for long months, and sometimes years, while they went far into unknown or lonely places, wherefrom even infrequent communication was difficult. The demands of these pursuits called, too, for great mobility—gangs had to be foot-loose to shift as sources of supply changed, or from one phase of operations to another. Such conditions tended to discourage marriage and ‘settling down,’ and contributed to creating great pools of men, without homes of their own, who balanced off their work throughout a twelvemonth, shifting from one job to another, and following work where it could be found, living in off-weeks in the small hotels or boarding houses in the fringe towns or cities, nearest hiring centres on the highway to mill or camp or mine or harvest fields. They asked little but good, heavy food, to “swing their own gait,” and the chance to get a little “put by” against the day when muscles flexed less easily and joints moved less freely and they chose to settle down. But many an “old-timer” preferred to follow the wood trails and Lake routes to the end, their shacks and cabins, in their small clearings, dotting forgotten roads and railway lines, all the way from The Ottawa to the Lake of the Woods and north to the height of land.

When hard times struck, these men would try to ride them out, searching for work by road and rail, the wandering tide of men, without homes or residence,

who, not infrequently, chose just to disappear ere they would eat the bounty of city missions or shelter in the charitable refuges of church or state. Not so many months ago, an old bushman of the Ottawa, having come, after the ten years of the depression, to the end of his savings and all hope of future work, found himself, through the good intentions of kindly interested people, in the County Refuge. The first night of his stay he walked down its flower bordered pathways, out and directly up the nearby track to meet the onrushing evening express, and no one who had known his days and the life of his kind in the camp and on the drive deemed the coroner's inquest necessary or that he had acted while of unsound mind.

Lumbering, particularly, asked separation and elementary conditions of living, for the better part of each year. Most of those who followed bush trail and river drive and sawmill, flowed back and forth in great tides, east and west and north and south, as new stands opened and tales of higher wages and better jobs went the round of bunkhouse and camp fire. But for a century and a quarter now, owners and operators, shanty and rivermen and mill hands in the Ottawa have been marked by their attachment to their own thousand mile River and the tens of thousands of square miles of its watershed. Within it, they have pushed to remote headwaters, lumbered along all its tributary streams, passed back and forth out of it as they marketed their cut down the St. Lawrence to Quebec, or over the Trent, or by barges or rail to the United States. Far-sighted operators bought stands on the Pacific Coast, as word of its rich possibilities came through, and balance off operations there with their eastern trade, but, all in all, The Valley has been almost unique in its self-contained and continuing trade—its limits, its shanties, its drives and its mills held within family ownership and operation, with no offering of stock to a general public, and the men, who cruised the limits, felled and hauled and drove and worked in the mills, drawn, decade after decade, from the same tributary valleys and modest farm holdings on the rocky ridges of the timber fringe.

And, in much that way, its firms and people carry on to this day.



DRIVING RIGHTS ON RIVERS AND STREAMS

THE FIRST spring freshet run on any stream was what every operator sought for his logs, especially on the only tributary leading out of any territory to the main stream. The rougher the river, the more important it was to own the first drive that went down in the first fullness of the freshet for the channel was then freer of stranded sticks and caught logs. On streams where competition was keen, old-timers tell how the first drive to reach the chute might stick out its owner's flag, but men from another gang, in the darkness, might shift the pennant to second run and supplant their own. Distances were great, settlement sparse and remote, courts far away and costly, their sessions months in the future when a cut was disputed on a limit or the order of running on the drive. More often than not issues were settled by force of strength. Operators sought out "fighting foremen," great ruthless men, straight and tall and strong, four

square to all currents of life as the timbers they felled and floated. They made short shrift of argument, but, striding through the woods or riding the bobbing timbers, came on with their shouting, swearing squads of caulked-booted men, to throw the opposing drive off the stream or campsite. Of such was Larry Frost, of Pontiac, foreman through the years for different operators on the Ottawa. At Lanark-on-the-Clyde, in the old inn, the caulk marks of his boots may still be seen upon the ceiling timbers, where, warmed on the whiskey of the Perth distilleries, he would gather himself together, and cartwheel through the air, striking



JIM

every third or fourth beam with his heels to record his progress. But as the industry developed the rough justice and rugged living of the trial by combat proved costly and unprofitable, and force as an instrument of adjustment was prohibited by an enactment of the Province of Canada in 1849.

Yet bitter feuds were to run through woods and courts ere timber and river practice were to become orderly and co-operative.

THE RIVERS AND STREAMS BILL 1881-4

One of the most famous of all causes and clashes in Canadian constitutional history was to turn about the use of a timber slide in The Valley—one built by John Gillies to run his logs past the High Falls¹ at the head of Lake Dalhousie on the Mississippi watershed. This slide passed to Peter MacLaren in the sale of properties upon the dissolution of their partnership. MacLaren, to serve his limit "between Buckshot Creek and Louse(!) Creek," extended and added to the improvements in an amount variously argued in the ensuing conflict, as from \$150,000 to \$250,000. The Caldwells, operating in the adjacent country, proposed to run their drive through the slide, to be immediately challenged by MacLaren on two grounds that, resting on a precedent in a judgment of a court in former Upper Canada, navigable streams, open to all comers, were only those 'navigable in a state of nature,' and that passage through waters, diverted across private property and made navigable at the proprietor's cost, were closed to other use, save by proprietary grant and conditions. Strong controversy developed, MacLaren bringing his drive down under "one of the river-busting, fighting McIlquahams" as foreman and Caldwell entrusting his to Larry Frost, no less, to serve as warning to all and sundry. The Caldwells brought on their logs and MacLaren appealed to the Courts, obtaining an injunction in the County Court at Perth, in 1880, restraining Caldwell from use of the improvements which he had made. Caldwell appealed to the Ontario Court of Appeal which reversed the judgment of the lower court, whereupon MacLaren carried the case to the Supreme Court of Canada, obtaining there a favourable decision. By this time the case had taken on significance far beyond the Mississippi Country, for no less than 234 streams in Ontario were affected by the decision. Honourable John Haggart, the member for the South Riding of Lanark, stated that for sixty miles on the Mississippi alone, proprietary rights had been acknowledged on the land at every fall, and toll or compensation paid for any local improvements whenever expropriation had been made.

Inevitably, personalities and politics churned in the eddying waters. Sir John MacDonal was Prime Minister of Canada, his erstwhile partner, and now bitter political opponent, Sir Oliver Mowat, Premier of Ontario. Their former colleague, Sir Alexander Campbell, was Sir John's Minister of Justice—all three from the Kingston district, all three knowing the Rideau and Mississippi country and the adversaries, intimately, and "in a party way." MacLaren was Sir John's friend and supporter, Caldwell's nephew, W. C. Caldwell the representative of Sir Oliver's party in the Legislature from Lanark. The never-failing issue of Dominion-Provincial rights was, as always, to the fore. On the contention that the civil

¹The penstock of the present Ontario Hydro Electric development runs in the identical course of the old Slide.

rights of the people to the use of the waterways, ("the public highways for our timber," the Honourable Donald Guthrie described them) were infringed, Sir Oliver Mowat the next year (1881) enacted a provincial statute for "the protection of the public interest in rivers, streams and creeks," giving all persons the right, during freshets, to float timber and logs, etc., down the rivers and streams of the Province. An official scale of tolls might be charged by those who had made improvements thereon, but any exclusive proprietary rights therein were denied. Immediately the Dominion disallowed the legislation, and the clash over the use of the timber slide on Dalhousie Lake became a national issue in Dominion-Provincial rights that involved opinion from coast to coast in the fifteen-year-old Confederation. Ontario re-enacted the measure, the Dominion disallowed again. There are few more bitter debates, few with more powerful figures in the Dominion's early history more angrily involved, than that on the Disallowance of the River and Streams Act of Ontario, joined in the House of Commons on the afternoon of April 15th, 1882, and continuing until daylight of the next day, Sir John declining when he rose to defend himself at 3.30 a.m. "to give an address on the Constitution" at that hour. Great names, powerful and picayune phrases thundered back and forth across the floor after Malcolm Cameron for the Opposition and Dalton McCarthy for the Government had spoken hours in scholarly and at times scurrilous exposition of the case. Edward Blake, Honourable William MacDougall, Honourable Mackenzie Bowell, Sir Albert J. Smith, the young member for Quebec East, Mr. Wilfrid Laurier, the members from Lanark, North and South, (Donald Macdonnell and the Honourable John Haggart) were all in the fray, Edward Blake delivering what even Sir John described as an "able essay on the Canadian Constitution," closing with the oft quoted:

"We should by our vote this night announce and declare that these rights and liberties, which we obtained as Provinces in 1867, which were recognized as ours in 1868, which have been recognized as ours ever since, shall not be tampered with or trampled upon by any Ministry, however powerful, or the supporters of any Ministry however servile or subservient."

Sir John rose to reply on behalf of what had been described as his "senile and obsequious majority." He was at first facetious. "I am very glad that this issue is brought before the House. I was apprehensive originally that we might have another and not so agreeable nor pacific a mode of defending ourselves, the government and perhaps this House on the subject. Why, the belligerent Premier of Ontario had threatened to march with his armies into the Northwest because the present government had asked for a reference of a disputed question to the highest Courts in the land, and I did not know but that the same belligerent might come down here because we had advised His Excellency, the representative of the Sovereign, to use the Royal prerogative of disallowance. I was afraid that he might come down here like another Oliver and order our Sergeant-at-Arms to 'take away that bauble' and break us up."

His friend MacLaren he described as a poor victimized linnet. "The cuckoo watches the linnet building its nest and just as the nest is finished it goes in. Mr. Caldwell is the cuckoo who asks the linnet to walk out." But the temper of the Commons was up and even Sir John became more serious as the Opposition chal-

lenged an appeal to the country on the issue, and matched Blake in his final eloquence:

"Here where we are one country and altogether, and we go from one Province to another as we do from one county to another and from one town to another, is it to be borne that laws which bind civilized society together, which distinguish civilization from barbarism, which protect life, reputation and property should be dissimilar, that what should be a merit in one Province should be a crime in another, and that different laws should prevail. There may be differences in the laws in detail but the great grand principle that every man should have the right to occupy his own house and property, sit under his own fig-tree, cultivate his own vine and be protected in all this, is the common law of all civilized countries and must prevail throughout the Dominion."

Of course, the motion to condemn disallowance was lost on a party vote (110 to 50), and Sir Oliver Mowat again put his bill through the Ontario Legislature, and the Dominion a third time disallowed it. Then Caldwell carried the case to the Privy Council, whose decision in 1884 was in his favour, whereupon the Ontario Legislature once again passed the measure, and this time the Dominion authority recognized its validity. It established the right of the private citizen or company to construct works and otherwise to improve streams for the purposes of legitimate commerce upon payment of reasonable tolls approved by the Crown, but denied him or it the privilege of refusing passage to any and sundry upon those streams.

In 1887, the Ontario Legislature supplemented this measure with the Ontario Saw Logs Driving Act, providing that the party responsible for causing a log jam must undertake to clear it, and that if he fails to do so, others using the stream may clear it, and the cost be arbitrated. When logs of several interests become mixed in the drives, common sorting and handling are to be undertaken, with fair apportionment of costs.

These became and remain to this day the basis of respective rights, privileges and responsibilities in driving on all Canadian streams.

THE UPPER OTTAWA IMPROVEMENT COMPANY

While conflict thus raged on the tributary streams and in waters running through private holdings on The River itself, the cost of works and the folly of cut-throat competition in use of the waters had led to constructive co-operation among many of the operators. The importance and significance of the industry had also brought about the construction and operation of a large number of slides, dams and booms as public works of the Province of Canada. Where these were for the general use of a wide group of operators, this policy and public expenditure were practicable but where a stream was utilized by only a group of operators or perhaps even by one or two companies, progressive developments might be hindered by reliance on a prospective but uncertain public work. So, in 1853, provision was made in the Province of Canada for authorization from the Crown to duly incorporated companies to construct works to facilitate the transmission of timber down rivers and streams. Various enactments were consolidated in Chapter 68 of the Statutes of 1859, and the principle was carried forward at Confederation under the supervision of the Dominion Department of

Public Works. Under this practice, operators in a given area practically became trustees for the Crown operating, for the use of all comers upon payment of due tolls, services which they themselves required and with all services and assessments subject to government authorization and inspection. Here again The Valley lumbermen pioneered in what was one of the earliest—as it is still one of the most successful—joint enterprises in the substitution of common planning for ruthless rivalry in the trade—the Upper Ottawa Improvement Company, whose “ICO” may be seen cut deep in the boom and towing timber all the way from the head of Lake Timiscaming to the Chaudiere, for over this stretch of three hundred miles of The River, its chartered rights and responsibilities extend today.

It has been directed by capable men as managers,—G. B. Greene, in the heavy timber years of the last century, Major E. C. Woolsey, the present secretary-manager. To its successful operation, J. A. Gillies, vice-president of Gillies Brothers, contributed no small part, first as superintendent of all logging operations of his own firm and later as the managing director of the Company itself. No man of this generation, the old timers surviving claim, knew every mile of the Ottawa so well, and that experience and his natural ability were generously at the service of all operators on The River.

On May 28th, 1868, the year after Confederation, the operators on the Ottawa River, for mutual benefit, formed themselves into a company, by the name still borne, to apply for a charter under the Joint Stock Companies Act of the Dominion of Canada “to construct works to facilitate the transmission of timber down Rivers and Streams, for the purpose of constructing booms, dams, slides and piers in the Ottawa River to facilitate the transmission of saw logs down the same.”

Works projected by the original charter of the Company, May 28th, 1868, included numerous booms and slides, some so long and extensively used that they are as much taken for granted by the average citizen as the rocks and currents of the Ottawa itself. The charter cited a pocket boom at the “Lime-kiln Eddy,” a Chaudiere boom at Remoux, booms at Honeywell’s point, Wood’s Bay and in Deschenes, the Leith’s Point, the Mississippi Chenail boom at Fitzroy Harbour, the Cheneaux, Lapasse, L’Islet, Rocher-Fendu, and Des Joachims booms, on the upper waters, and a dam and slides at Learmouth’s Mills.

(Various of the works then contemplated can be identified today,—the Thomson Bay, Deschenes and Hull Booms reaching from the Chaudiere to the Deschenes rapids: the Quio boom and Chats Rapids works at the head of Deschenes and at Chats Lake. The Cheneaux boom is at the head of Chats, while up The River stretch the Lapasse, Fort William, and Des Joachims booms).

Six names, (John Hamilton, A. H. Baldwin, Levi Young, H. F. Bronson, E. B. Eddy, and W. C. Perley), synonymous with lumbering in the Ottawa, took up 300 shares at \$20 each and a seventh, J. R. Booth, 200 shares of the \$40,000 of the Company’s original capital. Incorporation was obtained in June, 1870, and in 1875, additional powers were conferred by a private Act of Parliament (c. 77-38 Victoria) to acquire real estate, including sites for ten booms then on the Upper Ottawa, and the right “to save drifted or escaped timber logs and lumber and to secure the same for the rightful owners.” At that time the capital stock

was increased to \$130,000 with maximum issue fixed at \$200,000 and the number of shares enlarged to 6500.

Co-operation was proving itself and, in 1886, the Company acquired from the private owners—J. R. Booth, Perley and Pattee, Bronson's and Weston, G. A. Grier and A. H. Baldwin—the great "Chaudiere Assorting Boom" extending from the foot of the little Chaudiere Rapids to the owners' private log ponds. Two years later, (c. 102-5J Victoria 1888), the scope of operations moved further up river to the Quinze Rapids, at which time the Gillies Brothers and others came directly into the company, the purchase of the Quinze Boom from the Gillies firm being made in an issue of stock. The Company's capital issue was enlarged to \$250,000. The widening interest of the public in the timber wealth of the country was indicated in this amendment which required that the new stock was to be advertised in Pontiac and Renfrew Counties, and in Ottawa, and offered for sale to the general public. These amendments also authorized the Company to construct and operate private telegraph and telephone lines within its area of undertakings.

And its responsibilities were broadened to "sort and tow" the stranded or drifted timber of co-operating owners, and to this end it was authorized to acquire and operate steam boats and tugs for the towing of logs and timber from the Quinze to the Chaudiere. Any day from open water on to autumn, the visitor, following the Capital's driveways, along their pleasant water courses, may see the sturdy little gray tugs, puffing their way down the River, huge booms of logs in tow. Of such craft are the fleet of the "ICO", operated by the sons and grandsons and nephews and great-nephews of the men who, long ago, learned that in co-operation lay strength, and who, for nearly four score years now, have worked together under their joint charter, to make safe and clear the highway for their "business and works upon the Ottawa River and the banks thereof."





III

Directory



H.M. KING GEORGE VI inspects Canadian troops "Somewhere in England". On His Majesty's right, LT.-COL. JOHN A. GILLIES; on His left, LT. GEN. A. G. L. McNAUGHTON, Commander-in-Chief, Canadian Corps.



ON HIS MAJESTY'S SERVICE
DESCENDANTS OF JOHN GILLIES
IN
THE ARMED FORCES

THE GREAT WAR—1914-18

- LIEUT.-COL. AUSTIN B. GILLIES, R.C.H.A., 1915-19
(son of David Gillies, grandson of John Gillies—died 1938)
*Officer of the Order of the British Empire; Medaille d'Honneur avec Glaives
sen Vermeil; British War Medal; Victory Medal; Officers' Long Service
Decoration Medal.*
- CAPT. ALLAN ROSS GILLIES, 1st Brigade, C.F.A., 1st Canadian Division, C.E.F.
Wounded at Vimy, 1917.
- LIEUT. CLYDE CAMPBELL GILLIES, 48th Canadians
Wounded at Somme, 1916.
(sons of George Gillies, grandsons of John Gillies)

THE WORLD WAR, 1939

- CAPT. ADJUTANT ALLAN ROSS GILLIES, Edmonton Fusiliers, (served 1914-18)
- LIEUT.-COL. JOHN A. GILLIES, 7th Anti-Tank Regiment, R.C.A.
- CAPT. NORMAN B. GILLIES, Royal Canadian Engineers
(sons of John A. Gillies, great-grandsons of John)
- LIEUT. DAVID STUART GILLIES, 16th Battery, 3rd Light Anti-Aircraft Regt., R.C.A.
Seriously injured in England and invalided to Canada.
- LIEUT. SIDNEY ALEXANDER GILLIES, 11th Battery, 12th Field Regiment, R.C.A.
(sons of Lieut.-Col. Austin Gillies, great-grandsons of John)
- CAPT. EWAN RONALD CALDWELL, Lanark and Renfrew Scottish
(son of Elsie Gillies Caldwell—Mrs. W. R.—great-grandson of John)
- CAPT. RALPH MUIRHEAD, R.C.A.M.C.
(son of Mary Eleanor Gillies Muirhead—Mrs. W. J.—great-grandson of John)
- LAC. ALLAN J. GILLIES, R.C.A.F.
(son of Alfred J. Gillies, great-grandson of John)
- SGT. GEORGE WILLIAM GILLIES, 92nd Battery, R.C.F.A.
(son of Capt. Allan Ross Gillies, great-grandson of John)
- PILOT OFFICER KENNETH C. CAMPBELL, R.A.F.
Killed in Battle of Britain, July 29, 1940.
- ROBERT J. CAMPBELL, Officers' Training Corps
- THIRD OFFICER FLORENCE GILLIES CAMPBELL, W.R.N.S.
(children of Florence Gillies Campbell—Mrs. K. C.—great grandchildren of
John)



ON HIS MAJESTY'S SERVICE
"GILLIES' MEN" ON ACTIVE SERVICE
IN
THE GREAT WAR, 1914-18

Armstrong, Noble
Armstrong, G. E.
Armstrong, Phil.
Babina, Crani
Barr, Crawford
Beattie, James
Behan, Hy.
Bray, Percy
Bronskill, F. H.
(Lieut. R.C.A., R.A.F.)
Burton, Henry
Burton, Murray
Brunette, Robt.
Campbell, Duncan
Campbell, Colin
Carmichael, Wm.
Carmichael, Donald A.
Carmichael, Wellington
Clarke, Percy
Clarke, Stanton
(Killed in Action)
Cockroft, John
Cotie, Versal
Corneau, Chas.
Colton, Jno.
Crosby, John
Crosby, Clifford
Derumbla, Jacob
Dillon, Joseph F.
Driscoll, James
deBaer, Jelle
Dmytro, Tony

Eady, Calvin
(Killed in Action)
Frappier, Hector
Gee, George
(Killed in Action)
Gahan, Patrick
Henry, James
Homuth, Wm.
Hobbs, Norman
Hyland, Hy.
Haggarty, A.
Kelly, Lorne
Kirk, Jas.
Lee, Wm.
Lavergne, Eugene
Marienczuk, Loji
May, Clarence
Marcott, Arthur
Mantel, Jas.
Moreau, John
Moreau, Robert
Moreau, Fred
Moreau, Keneth
Mosley, John
Mosley, Phil
Mosley, George
Moyle, Henry
Murphy, James
McCuaig, Jas. C.
McConneghy, John
McConneghy, Peter

McFarlane, W. B.
McKinnon, Lloyd
McKinnon, Mary Bell
McKinnon, Hiram
McLelland, Sam
McLeod, Geo.
McMahon, Peter A. R.
McNab, Walter
McPherson, Geo.
McNulty, A.
McNab, A.
Neuman, Con.
Montell, R.
O'Brien, Morgan
O'Leary, Dan
O'Shaughnessy, Rich.
Poitras, John
Poitras, Tony
Proulx, Frank.
Sayles, Thos. H.
Sly, Percy
Shield, John
Shield, Jas.
Stranger, John
Steele, McAdam
Sauve, Isaac
Sauve, Albert
Taylor, Angus
Taggart, John
Walters, H.



ON HIS MAJESTY'S SERVICE
"GILLIES' MEN" ON ACTIVE SERVICE
IN
THE WORLD WAR, 1939

Armstrong, Phil	Coveau, Hermidas	Lachapelle, Oscar	Payar, Ferdinand
Autaya, Sylvestre	Coveau, Leo.	Lafleur, Omer	Payer, Ovilla
Bayford, T. G.	Dagenais, Joseph	Landry, Leo.	Peaver, Cyril
Bayford, W. E.	Dawson, Gordon	Lascelle, Wm.	Phillips, Donald
Beattie, Mac	Derocher, Wesley	Leblanc, W. C.	Powell, R.
Beaudoin, Oscar	Desjardins, Gerald	Leblanc, D. A.	Proulx, Cyril
Berndt, Donald	Dillon, John H.	Leblanc, Lorne	Proulx, Gerald
Blackburn, Orville	Duncan, Ellwood	Leblanc, James	Raymond, Rolland
Bradford, John	Eady, Eldon	Leckie, M.	Raycroft, Earl J.
Brandymore, Leo.	Eady, Lloyd	Lentz, M.	Reckenberg, Wm.
Brunette, Albert	Farrell, David	Lentz, C. E.	Roach, Ambrose
Brunette, Herbert	Farrell, John	Lynch, Mike	Robertson, Con.
Brunette, Stewart	Farrell, Joseph	Meek, George	Rollins, Elmer
Buckley, Thomas	Felteau, Chas.	Mills, Theodore	Ryan, Cletus
Burns, Samuel	Fortin, Emile	Molson, Gordon	Sharbott, Harold
Burns, Gerald	Frank, John	Moran, Daniel	Sharbott, Jerome
Butler, Gordon	Gilmour, Ira	Mosley, Lloyd C.	Somerville, Lindsay
Butler, Lawrence	Gilmour, Ken	Mullin, David	Smith, Arthur
Caron, George	Godin, Thomas	Murray, A. C.	Smith, Graham
Carmichael, Neil	Gravelle, Louis	McAffrey, H.	Teske, Burton
Carroll, Dennis	Gravelle, Sylvester	McCuaig, Allan	Teske, Ernest
Charron, Aurelle	Grover, Percy	McCuaig, Eber	Tripp, William
Charron, George	Henderson, Stewart	McDonald, Eddie	Walker, Wm.
Clouthier, Henry	Hogan, Lloyd	McDonald, John	Watson, David
Clouthier, John	Holland, Harry	McGonigal, Edward	Watson, John
Clouthier, Joseph	Joly, Omer	McKie, Robert	Watson, J. L.
Clouthier, Maurice	Kane, Frank	McKie, Stanley	Wescott, Robert
Cole, Richard	Kelford, Francis	McLean, Norman	Wurm, Cecil
Cook, J. P.		McMillan, Peter	Wurm, Verner
Craig, Clarence		Neuman, Willard	Wurm, Albert

BRAESIDE OFFICE AND MILL STAFF 1942



SALES

L. Chamberlain and Dean D. Earing

OFFICE

C. D. Young
E. Sereney
T. B. Moore

R. A. Sereney
E. Burton
E. Parsons

W. J. McNeil
G. Carmichael
I. Clarke

A. McNab
M. B. Armstrong
N. Cahan

MILL SUPERINTENDENTS

John Mills and Roger Barter

YARD SUPERINTENDENT

R. L. Kirby

MILL, SORTING TABLE AND BOX FOREMEN

R. Thomlison, C. Gilmour and S. Burton

PLANING MILL FOREMAN

H. Mongson

FOREST ENGINEER

J. H. Hope

BRAESIDE—THE MILL VILLAGE—1942

AREA 475 ACRES: POPULATION 475

Reeve . . . Mr. D. Carmichael

Secretary . Mr. R. A. Sereney

Councillors

C. Young G. B. Gillies
R. Mullins P. Leblanc

School Board

C. Gilmour, Chairman W. J. McNeil
F. H. Bronskill Jos. Desjardins
J. Meek G. C. Carmichael

Teachers . . . Mr. A. McNab

Miss M. Hanson

Miss J. Boyle

Clergy The United Church of Canada—Rev. George Puttenham
The Roman Catholic Church—Rev. Father Windle
The Presbyterian Church—Mission Service

COMRADES-IN-TIMBER

IN WOODS, ON STREAM AND IN THE MILLS

GILLIES BROTHERS, LIMITED

HONOUR AND HOLD IN DEEP GRATITUDE

AGENTS: PAST AND PRESENT

(in order of years of appointment)

The firm's deputies, with whom, often without communication through long weeks of impassable roads and difficult streams, rested the management of all operations in one district or on one river. On their ability, faithfulness and integrity depended successful operations, with justice to firm and man alike.

J. F. McEvoy	Robert Moorhead	John B. Kerr	W. B. McFarlane
Archie McKinnon	Alex Carmichael	Patrick Farrell	Joseph Farrell
John McCullough	James McKinnon	H. R. Lunam	Harry E. Mielke
Thomas B. Lunam			

FOREMEN: PAST AND PRESENT

(in order of seasons of employment)

While the agents were the general managers of the Company in any one area, actual operations in the woods, and on the streams, turned upon the skill and judgment of the *foreman*, in direct charge of each undertaking, and who, in each camp or raft or drive, held the whole emprise in his responsibility, as truly as the captain of a merchant vessel.

Archie McBride	John Connelly	James McCord	Jean Baptiste Morin
James Bush	Vincent Ojeck	Roderick McCoshen	D. J. Moorhead
David Seguin	Phillip Larocque	Dan O'Leary	Martin Wagonblass
Charles D. McNab	Jonathan Ardill	John J. Gilchrist	Norman Meehan
James Carmichael	James C. McCuaig	Fred W. Schwartz	William Butler
Duncan McNaughton	Patrick Dillon	Hiram Clarke	Walter Purdy
Nap. Laviolette			William McComb
John Henderson			
John Odbur			
Aristide Belisle			
Alex Carmichael			
Thomas Philbin			
Robert Moorhead			
Wm. C. McNab			
Phillip Munroe			
Sylvester Kennedy			
John Sloan			
William Carmichael			
Xavier Soucie			
George Murphy			
Dan McLean			
Arthur Strachan			
James McCann			





FROM ONE GENERATION TO ANOTHER

Families, of which members have been employed with the Gillies in woods and mills for a score or more of years, and the majority for two or three generations:

The Acklands	The Douglasses	The Leitchs	The Proulxs
The Acres	The Dubeaus	The Lepines	The Priors
The Armstrongs	The Duncans	The Lepacks	The Rainvilles
The Atkinsons	The Farrells	The Lunams	The Reckenbergs
The Barrs	The Frappiers	The Madores	The Richards
The Beaudoins	The Frosts	The Martins	The Rivets
The Berndts	The Fultons	The Marchands	The Roberts
The Bethunes	The Gagnons	The Mays	The Robertsons
The Blacks	The Gahans	The Mills	The Ruttles
The Brisbois	The Gauthiers	The Moffats	The Savards
The Burns	The Gibeaus	The Moores	The Seguins
The Burnettes	The Gilmours	The Moorheads	The Sereneyes
The Burtons	The Godins	The Morins	The Sloans
The Butlers	The Grants	The Mosleys	The Smiths
The Campbells	The Gravelles	The Mousseaus	The Spences
The Carmichaels	The Harrisons	The Mullins	The Stangers
The Carriveaus	The Henrys	The Murdocks	The Stewarts
The Cartys	The Hodgins	The Murrays	The Steeles
The Clarkes	The Hogans	The McCanns	The Stevens
The Clouthiers	The Horners	The McConneghys	The Stevensons
The Commandants	The Kelfords	The McDonalds	The St. Aubins
The Coughlins	The Kinghams	The McIlquhams	The Telfords
The Crawfordds	The Lagasses	The McNultys	The Thomsons
The Dales	The Lafleurs	The Normandeaus	The Thomlisons
The Dagenais	The Lances	The O'Malleys	The Tremblays
The Daggs	The Lavernes	The Orems	The Trudells
The Derochers	The Laundrys	The Patrois	The Tubmans
The Desjardins	The Lebeaus	The Payers	The Twas
The Denaults	The Leblancs	The Pelletiers	The Vincents
The Dorions	The Legardes	The Playfairs	The Ways
		The Pilons	The Youngs

PARTNERS THROUGH THE YEARS

OFFICE MANAGERS AND OFFICIALS

(in order of date of service)

David McPherson
Alex. E. deRenzy

Alfred Lyons
Chas. Stewart

Walter A. Black
Ariel Larson

TIMBER CRUISERS

PAST AND PRESENT

Archie McKinnon
W. C. McNab
Duncan McNaughton

James Halliday
James McCann
Frank McNab

Alfred Farrell
W. B. McFarlane
James Wilson

DEPOT AND CAMP CLERKS

PAST AND PRESENT

Patrick Griffin
Donald McCallum
Sam F. Fidler
Archie McNab
Andrew Moran

H. A. Riddell
A. W. Thomson
James Campbell
John L. Playfair
Harry McDonald

Wm. J. McNeil
W. E. Thomson
Kenneth A. Neuman
Henry Miller
W. S. Swale

Patrick Ryan
Joseph McMillan
Stewart Foster
Ivan Thomilson

MILL AND YARD SUPERINTENDENTS

AND

COMPANY OFFICIALS

PAST AND PRESENT

James Parks
John Millions
Drummond McNeely
William Douglas

James Coleman
W. H. McAuliffe
R. L. Kirby
George Bowen

George Armstrong
Charles Patterson
S. F. Caldwell
George Bond

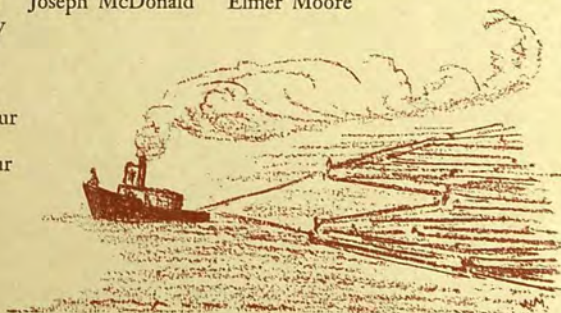
SCALERS—LOG—LUMBER

PAST AND PRESENT

William Sereney
J. G. McIntosh
John Moorhead
John H. Findlay
James Halliday
John H. Clarke
John Dillon
James B. Gilmour
John Carty
William Gilmour

Richard D. Pell
Thos. M. Callaghan
Joseph McDonald
Hugh Grierson
John J. McDonald
Elmer Moore

Joseph Seguin
Herbert Hogan



TIMBER-BROTHERS ON THE WESTERN SLOPE

AGENT IN CHARGE

Of the properties of GILLIES BROTHERS, Limited, in the province of
British Columbia;

P. L. LYFORD

LOGGERS

Operating, in 1942, on British Columbia Licenses, owned by the Company,
or in which they have a substantial interest;

ON DRURY INLET

O'Brien Logging Co.
Hiland Logging Co.
Keystone Shingle and Lumber Limited
J. A. McIntyre

ON SEYMOUR INLET

Dumaresq Brothers, Ltd.

ON THE TYEE

Blaney Clarke
Crucil Logging Co.

ON THE DESERTED RIVER

Gustavason Brothers
Logging Co., Ltd.

ON KNIGHT INLET

D. A. Leveque



REFERENCES

EARLY SETTLEMENT

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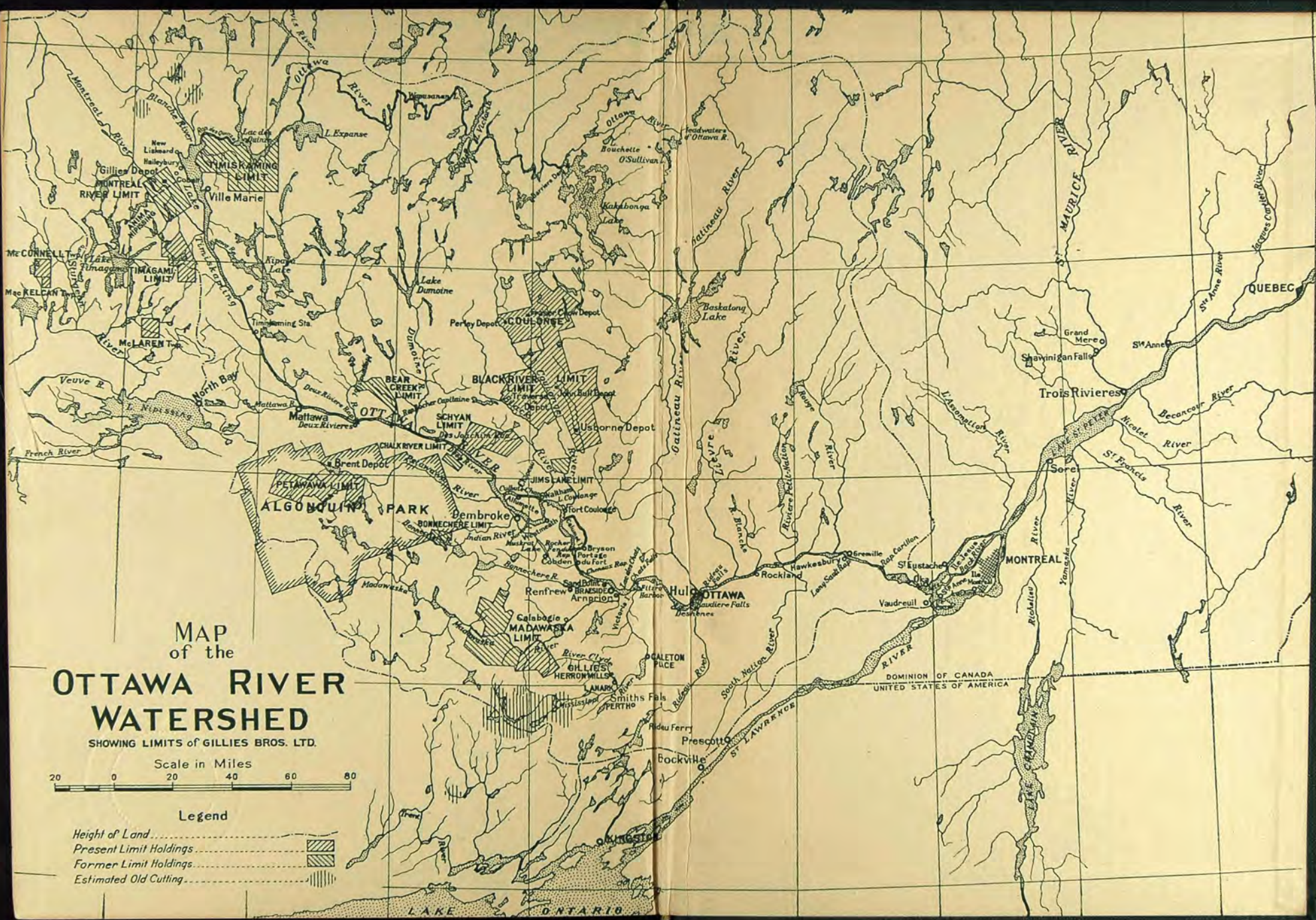
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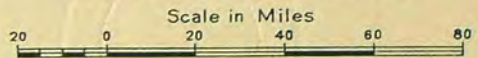
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MAP
of the
**OTTAWA RIVER
WATERSHED**

SHOWING LIMITS OF GILLIES BROS. LTD.



Legend

- Height of Land
- Present Limit Holdings
- Former Limit Holdings
- Estimated Old Cutting

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