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THE POLITICS AND ECONOMICS OF TWENTIETH CENTURY MARINE LOSSES IN THE ST. CLAIR RIVER

by Cris Kohl

A Thesis Submitted to the Faculty of Graduate Studies and Research through the Department of History in Partial Fulfillment of the Requirements for the Degree of Master of Arts at the University of Windsor

Windsor, Ontario, Canada

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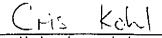
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ABSTRACT

This thesis examines the politics and economics of twentieth century marine losses in the St. Clair River, beginning at a time when such losses were commonplace, and ending with the virtual elimination of such accidents due to the establishment of aids to navigation, the reduction of natural dangers through dredging of the river, advances in electronic technologies, and a dramatic reduction in shipping traffic.

Vital to Great Lakes commercial shipping, the 36-mile-long, narrow bottleneck of the St. Clair River, which forms part of the international boundary between Canada and the United States close to the epicentre of the Great Lakes waterway system, has played a major role in twentieth century marine history. A necessary, natural link between the three northwestern and the two southeastern Great Lakes, the St. Clair River has long been the scourge of vessel owners and ships' captains; skilled, experienced navigators have dreaded passing through these fast-flowing waters since the time that LaSalle's *Griffon* first sailed upbound here in 1679.

Following a description of the geographic features of this river, a chapter outlines the progressive developments in the establishment of the international boundary through, and the navigation status of, the St. Clair River. An overview of the economic importance of this river to the resident population in terms of shipbuilding history is given.

The specific and significant areas of dredging in the river to an ever-increasing depth for the accommodation of expanding vessel dimensions and capacities are reviewed in their historic context.

The economic reality of shipwreck removal to maintain safe and open navigation is analyzed from the point of view of marine insurance and the evolution of the salvage laws; frequently, government agencies lacked co-operation from a wrecked vessel's owner or the insurance underwriter. The internationality of the St. Clair River, on occasion, complicated the realization of a swift remedy.

For a variety of reasons (collisions, burnings, founderings, abandonments), over 100 vessels sank in the St. Clair River in this century alone. An overall survey of the commercial shipping losses on the St. Clair River between 1900 and 1972 is made, while four of the more significant losses involve detailed description and analysis.

Many aspects of St. Clair River marine losses are studied, with particular attention paid to the changes witnessed from the beginning to the ending of the twentieth century.

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The personnel who helped me through the vast maze of the Public Archives of Canada in Ottawa.

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v i

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INTRODUCTION

Shipwrecks and marine disasters project some of the most dramatic, colourful, exciting aspects of nautical life; their unique element of mystery reflect man's struggle for survival, demanding his utmost skill, his maximum strength, his superior ingenuity, not to mention, much of the time, his blind luck.

Vital to Great Lakes commercial shipping, the 36-mile-long, narrow bottleneck of the St. Clair River, which forms part of the international boundary between Canada and the United States close to the epicentre of the Great Lakes waterway system, has played a major role in twentieth century marine history. A necessary, natural link between the three western and the two eastern Great Lakes, the St. Clair River has long been the scourge of vessel owners and ships' captains; haunted navigators have dreaded passing through these fast-flowing waters since the time of LaSalle's *Griffon* in 1679.

The turn of the last century showed remarkable changes in the face of commercial shipping on not just the St. Clair River, but the entire Great Lakes system. For example, in the year 1897, there were 993 U. S. commercial sailing vessels comprising a total of 334,104 tons registered on the Great Lakes; a scant ten years later saw their number more than halved to 466, totalling 256,104 tons.¹ This is reflective of the demise of small, independently-owned sail-powered vessels as they were rebuilt as, or replaced by, larger tonnage ships. Small cargoes no longer made enough money to remain competitive in an increasingly profit-minded world. It was the beginning of the age of enormous, maximum-

¹Herbert C. Sadler. "Some Points in Connection with Shipbuilding on the Great Lakes. U.S.A." Read at the Spring Meetings of the Fiftieth Session of the Institution of Naval Architects, April 2, 1909. London: Institution of Naval Architects, 1909. 3.

dollar cargoes, where the regular sailing vessels that found their place in the last century proved ineffectual in competition with the newer, larger schooners.

However, the obvious change in Great Lakes commercial shipping involved steampowered ships. In 1897, 1,775 commercial steamships of United States registry plied the Great Lakes waters, displacing 997,235 tons; by 1907, their numbers had increased insignificantly to 1,873, but their tonnage had boomed to 2,044,553, indicating an influential increase in size per vessel. In 1897, the total number of commercial vessels registered at United States Great Lakes ports was 2,768, with a total displacement of 1,311,339 tons; by 1907, the total number of ships had actually decreased to 2,339, but their tonnage had increased significantly to 2,300,657.² The age of the super-cargo-carrier was here.

The late 1800's witnessed numerous changes to the geography of the river and its delta, known as the St. Clair Flats, due to dredging. As commercial vessels became mammoth in size in the early twentieth century (the turn of the century showed an increase in maximum vessel length from 400 feet to 600 feet)³, deeper dredging became necessary. In some locations, altering the shape or flow of the river was viewed as the only viable alternative. One chapter of this thesis relates information on the dredging of the St. Clair River over the years, well into the twentieth century.

However, until this human labour (not only the dredging, but also the installation of safety factors such as lights, buoys, rangemarks, etc.) was completed, numerous shipping accidents continued to plague this passageway. The chapter on dredging in the St. Clair River will also cover the gradual installation of aids to navigation along the St. Clair River, and why some of them were more vital than others.

²Ibid.

³Ibid.

Frequently, the removal of a shipwreck to ensure continued safe navigation for other vessels was a matter not easily rectified. Government agencies did not always have the wholehearted assistance of the wrecked vessel's owner, or the insurance underwriter, in solving the dilemma. The situation of, for example, an American-owned vessel sinking (by whatever means) in Canadian waters, or vice versa, was sometimes politically complicated, as a lack of co-operation between competing commercial and political factions forced occasional stalemates and heated debate.

Salvage laws, complicated by the internationality of the St. Clair River, are studied in relation to specific shipping losses. Conflicts at the diplomatic level involving specific marine losses are also analyzed.

The financial losses to commercial shipping, marine insurance company regulations, the underwriters' rates, and the gradual decline of commercial shipping losses in the St. Clair River are also examined.

For a variety of reasons (collisions, burnings, explosions), over 100 commercial vessels, both sail and steam powered, sank in the St. Clair River in this century. An overall review of all the commercial shipping losses on the St. Clair River between the years 1900 and 1980 is made; four of the more significant or dramatic losses involve detailed analysis.

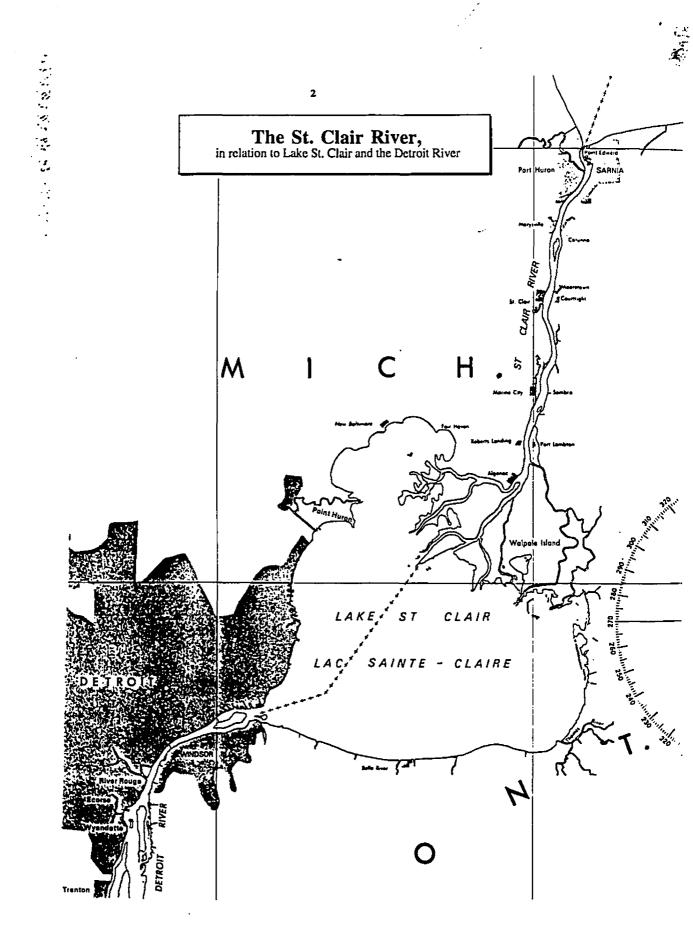
CHAPTER I

Geographic Features of the St. Clair River

The 36-mile-long (58-kilometre-long) St. Clair River is the connecting waterway between huge Lake Huron and the minute, by comparison, Lake St. Clair, and the river is the only natural outlet for the waters of the upper Great Lakes, namely Lake Superior, Lake Michigan, and Lake Huron.

Geographically, the St. Clair River can be divided into two parts, each with its distinctive characteristics: the upper, or normal, channel, and the lower, or delta, section. The upper part of the river, characterized by a single channel, runs a distance of about 27 miles (43 kilometres) from the southern portion of Lake Huron almost due south to the head of the Chenal Ecarte (the "Snye Channel," as the name has become bastardized locally). This portion of the river varies in width from about 1,000 to 4,000 feet,¹ although the narrowest section, right at the Bluewater Bridge, is a mere 920 feet wide. The river depth ranges from knee-deep near the shoreline to a deep basin which sinks to a depth of 85 feet near the Bluewater Bridge (although the average depth runs between 25 and 55 feet.) Because the St. Clair River at the Bluewater Bridge is at both its deepest and narrowest, the water issuing from Lake Huron is at its greatest velocity. In fact, the depth of the St. Clair River has a definite relationship to its velocities; in general terms, the deeper the river, the faster the current. There exists a similar relationship of width to depth; the

¹Robert L. McNamee. The Surface Waters of Michigan. (Ann Arbor: University of Michigan, 1930): 76.



wider the river, the shallower the depth. The current in the St. Clair River is, where it enters Lake St. Clair, approximately half of what it is where the river enters Lake Huron.²

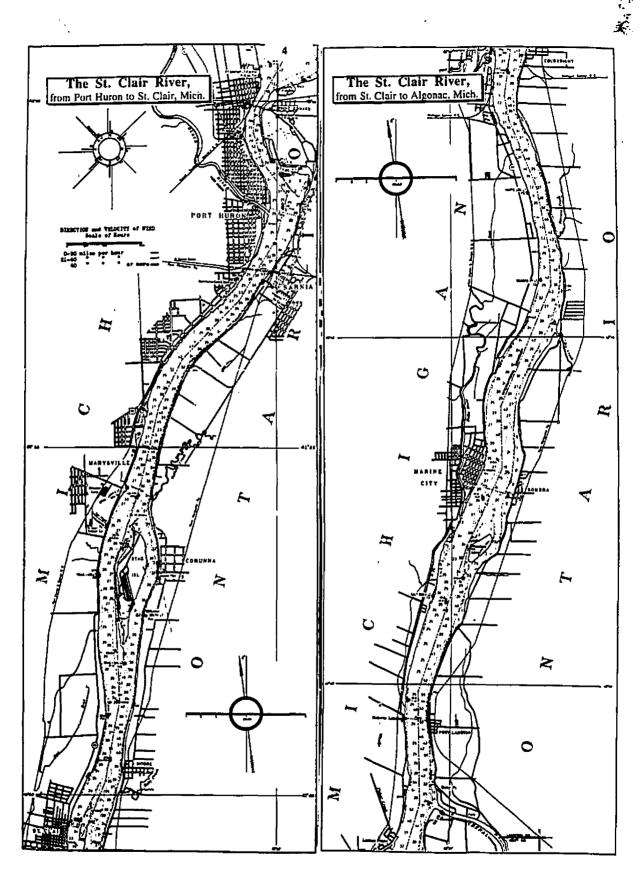
Average water velocity in the St. Clair River ranges from about five miles (eight kilometres) per hour at Port Huron and Sarnia, to as low as one and a half miles (two and a half kilometres) per hour in the lower channels. Where Lake Huron attempts to cram itself into the narrow confines of the St. Clair River at Port Huron, the speed of the river is at its fastest, with eddying currents that bear to the east. The current during normal river flow in the one-half mile between Fort Gratiot (northern Port Huron) and the Bluewater Bridge spanning the St. Clair River is a rushing 4.5 miles per hour, while from the Port Huron Coal Dock downriver to the Stag Island Upper Light, a distance of about four miles, it diminishes by about half to 2.3 miles per hour, and considerably further downstream, between the Harsens Island Front Range and the Walpole Island Upper Light, it mellows to a comparatively soothing 1.5 miles per hour.³ The ever-changing currents are generally strongest in the middle of the river, being about one-and-a-half times the average velocity.⁴ Currents will also be stronger when there is a north wind. Heavy precipitation upon the local drainage area, which consists primarily of farmlands, washes noticeable quantities of clay silt into the river, which impart to it a high turbidity and a dark colour.

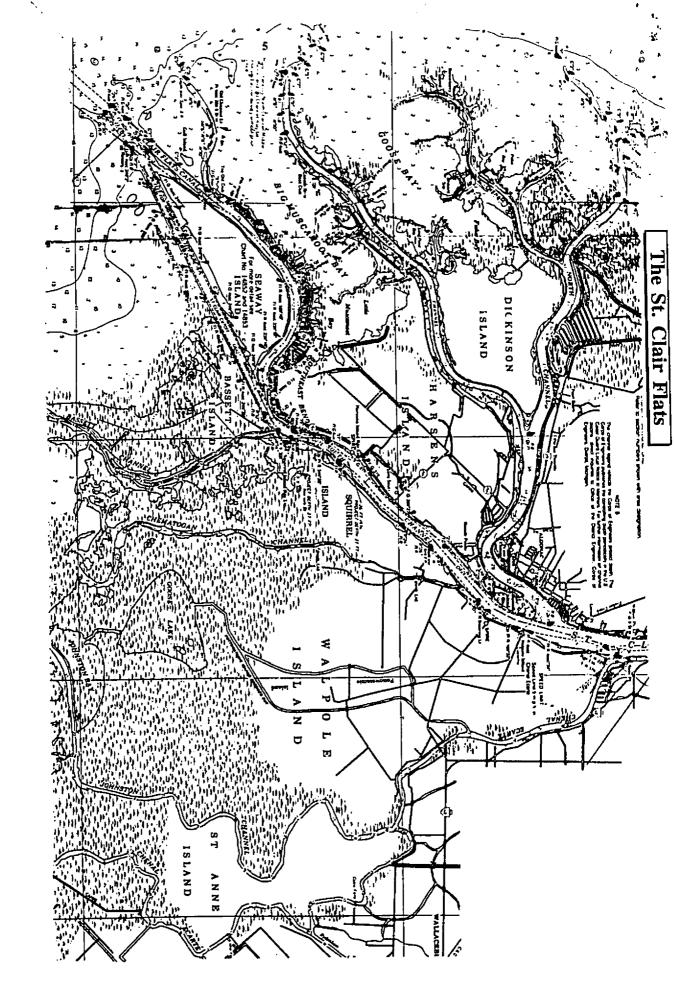
There are two distinct islands located in this upper section, namely Stag Island opposite the town of Corunna, Ontario, and Fawn Island (also called by its earlier name, Woodtick Island), just downstream from Sombra, Ontario. Both islands sit on the

²Sailing Directions, Great Lakes, Vol. 1. (Ottawa: Department of Fisheries and Oceans, 1979): 383.

³Captain T. Edward O'Leary. An untitled booklet which serves "as a speedometer for any ship passing up or down the Detroit River, St. Clair River, and St. Mary's River." (Printed in the U.S.A., 1953): 2.

⁴Waterway Guide, Great Lakes Edition. Volume 38, Number 4. (New York: Boating Industry Magazine, 1985): 173.





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Canadian side of the international border which runs approximately up the centre of the river.

The lower section of the river, about nine miles (14 kilometres) in length as the crow flies, divides into seven main, meandering channels and a multitude of islands that form the delta portion of this waterway, known as the St. Clair Flats, which occupies the circular space roughly between the head of the Chenal Ecarte and the main basin of Lake St. Clair proper. The South Channel, about 13 miles (21 kilometres) in total length as it winds its way to Lake St. Clair, is used by deep-draft and commercial vessels. Prior to reaching the lake, this natural channel connects with a dredged channel which runs in a straight line through the southern St. Clair Flats area and connects seamlessly with the similarly dredged channel across Lake St. Clair. The discharge of the St. Clair River is enormous; during the 72 year period from 1900 to 1971, it averaged 178,000 cubic feet per second.⁵

There is a 5.1 foot difference in elevations between Lake Huron and Lake St. Clair;⁶ the St. Clair River drops an average of one foot every seven miles, not enough to warrant the construction of locks to assist in upstream navigation.

The annual water level fluctuations of the St. Clair River are dependent upon the seasonal level variations of Lake Huron, but the average rise and fall is about one foot. Occasionally, rapid fluctuations of two feet are caused by high winds.

For mariners, it is important to know that for almost the St. Clair River's entire length, the upstream channel is on the Canadian side of the river, with the downstream traffic channel being on the American, or United States, side. At Stag and Fawn Islands in

⁵Great Lakes Pilot, 1973. (Detroit: Department of Commerce, National Oceanic and Atmospheric Administration, 1973): 298.

⁶*Ibid.*, 297.

the upper portion of the river, these traffic channels were once split by the islands; today, all commercial shipping traffic in both directions passes to the west of these islands. The east channels, formerly for upbound traffic, are no longer maintained at Stag and Fawn Islands. The movements of sediments down the St. Clair River produced islands and shoals in the river which, in turn, determined the upbound and downbound navigation channels.

Sediment movement is basically responsible for the formation of the narrow mouth of the St. Clair River:

... The Canadian shore of lower Lake Huron faces west and northwest, and receives the full force of the heaviest storms causing erosion of the lake shore and producing loose gravels and sand that are deposited on the spit at the head of the St. Clair River. The spit is a southward pointing feature one and one-half miles long on the Canadian side of the river. As the gravels are rolled into the opening of the St. Clair River, the strong currents carry away the finer particles and deposit only the coarser material, adding layer after layer of coarse gravel to the westward side of the spit. Thus, the spit has crowded the river toward the western bank and has made it narrow. It is this crowding and narrowing that causes the rapids at the head of the river....The west bank of the river and the rapids have no protection against the swift current and are eroded away as fast as the gravels on the east side press westward. Thus, at Port Huron, the river has eroded into the shore westward about one mile from its initial position. All fine sediments resulting from the erosion of lower Lake Huron are carried down the river and built into the new portion of the St. Clair delta on the American side of the international boundary.⁷

Although not cursed with extremely severe winters, the St. Clair River does, on occasion, jam with huge volumes of ice moving downstream from Lake Huron. Temperatures are low enough to freeze together these ice floes, and, although the current's

⁷Andrew D. Perejda. "The St. Clair River - A Study in Political Geography." (Ph.D. dissertation: University of Michigan, 1950): 27-28.

velocity is sufficient to carry them downriver, the narrowness of the channel at various points impedes their passage southward. Although ice impediment varies with each river section, the average opening date for the navigation season is April 1, while the average closing date is December $10.^{8}$

Except for the cities of Port Huron, Michigan, (1976 population, 33,981), formerly named Desmond, with the Black River flowing through it and joining the St. Clair in midcity, and Sarnia, Ontario, (1976 population, 55,576)⁹ at the northern end of the river, there are no large ports along its course. Downbound along the Canadian shore are the communities of Corunna (1976 population, 3,723), which is just east of Stag Island, Mooretown (1976 population, 250), situated about 1.5 miles above Courtright (1976 population, 778), which is opposite St. Clair, Michigan, Sombra (1976 population, 439), the site of a government wharf and an automobile ferry running across the river to Marine City, Michigan, and Port Lambton (1976 population, 716), situated on the St. Clair River about one mile above Chenal Ecarté. Wallaceburg (1976 population, 11,132) is technically not on the St. Clair River, but rather on the Sydenham River which flows into the Chenal Ecarté, a branch of the St. Clair. An industrial town, Wallaceburg has long played host to shipping, made conducive by the almost constant 200-foot width of the Sydenham River from the Chenal Ecarté.

Along the United States shoreline south of Port Huron are several communities of varying sizes. Marysville (1976 population, 7,345) is located just south of Port Huron, and opposite and slightly northward of Stag Island in the St. Clair River. St. Clair (1976 population, 4,780), formerly named Palmer, is opposite Courtright, Ontario, and is considerably larger than the latter place. The Pine River flows through St. Clair,

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⁸Great Lakes Pilot, 1973, op. cit., 385-394. All community populations were taken from this source. ⁹Ibid., 300.

maintaining a respectable width of 100 to 150 feet within the community; this waterway had practical uses during St. Clair's heyday of commercial shipbuilding, as all of the vessels were launched along the Pine River shores. Marine City (1976 population, 4,414), formerly named Newport, lies upstream from, and opposite, Fawn Island. The Belle River flowing through Marine City has contributed to the community's heavy involvement in shipbuilding, particularly in the nineteenth century. Algonac (1976 population, 4,412), located at the head of the St. Clair River's North Channel at the northern end of the St. Clair Flats, is a village and summer resort opposite Russell Island; automobile ferries run to Harsen's Island, Michigan, and to Walpole Island, Ontario.

The passage along the steep, clay banks of the St. Clair River resembles cruising through a pastoral scene, with flat meadowlands stretching on both sides, interrupted only by the occasional small community. This tranquil scene is shattered at the northern, "Chemical Valley" portion of an otherwise idyllic waterway; this area represents the greatest concentration of industrial development along the river, where factories such as petroleum refineries stand as questionable symbols of progress.

Evidence of the river's busy, commercial nature at Sarnia is witnessed by the number and sizes of wharves jutting into the St. Clair River: Shell Canada, Ltd., operates a 1,500-foot-long wharf, Belton Lumber Company, a 1,000-footer, and the government north slip is 1,700 feet in length, while the Canadian National Railways dock is 1,100 feet long. Twelve more commercial docks range in length from 300 to 900 feet.¹⁰

The St. Clair River is one of the busiest waterways of the world. Upbound, it leads to the ore mines and grain fields of the west and northwest; downbound, its waters connect with routes to the Atlantic Ocean, making the multi-national shipping population understandable. Smaller overseas vessels that could navigate through the limitations of the

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¹⁰Sailing Directions, Great Lakes, Vol. 1, op. cit., 395.

St. Lawrence waterway and the Welland Canal prior to their enlargements enjoyed Great Lakes trade since the previous century; however, the internationalism of the lakes did not develop noticably until the late 1950's with the opening of the St. Lawrence deep water seaway project. To this day, however, the predominant vessel nationalities are Canadian and American.

The St. Clair River is a very small geographic area in light of the enormous amount of commercial shipping traffic plying its waters. Historically, it has been in this position for a long time. In 1899, for example, over 36,000,000 tons of freight passed through the river on commercial vessels, an impressive volume when viewed in isolation, made more astonishing in comparison. The total tonnage of all the seaports in the United States in that same year was only 26,000,000, while the combined arrivals and clearances, both domestic and foreign, in London and Liverpool, England, totalled only 33,000,000 tons that year.¹¹ This river has clearly earned its reputation for being one of the world's busiest waterways.

¹¹C. M. Burton. Historical Paper delivered before the Society of Colonial Wars of the State of Michigan, January 26, 1902. (Detroit: Winn & Hammond, 1903): 17.

CHAPTER II

International Boundary and Navigation Status of the St. Clair River

There is a need to establish the international boundary aspects of the St. Clair River in any writing which intends to discuss potential political complications of two countries sharing one long, narrow body of water, the transient shipping population of which is disproportionately high. The Canadian-United States border comprises a total of 4,001 miles (or 6,440 kilometres), but the St. Clair River portion of that border, which is a small segment only about 35 miles long, had difficulty being ascertained.

In 1755, John Mitchell (1690-1768) made the only map he is known to have drawn, yet it has been called the most important map in North American history. An American physician, chemist, biologist, and botanist of considerable note, Mitchell, at the request of the Earl of Halifax in England, drew "A Map of the British and French Dominions in North America with Roads, Distances, Limits and Extents of the Settlements," 21 editions of which were published between 1755 and 1780. This map was used by the Treaty of Paris negotiators in 1783 to help determine the boundaries of the United States and British North America, it enormously influenced subsequent cartographers, and it continued to be used to settle territorial disputes into the twentieth century.¹²

¹²Pierluigi Portinaro and Franco Knirsch. *The Cartography of North America*, 1500-1800. (New York: Crescent Books, 1987): 316.

However, John Mitchell's map of North America was inaccurate in many respects, and led to at least nine boundary problems.¹³ One of these problems was the St. Clair River area.

The border, after crossing Lake St. Clair and following the South Channel of the St. Clair Flats, enters the St. Clair River proper. From there, the international boundary in the St. Clair River traverses "....the middle of the St. Clair, keeping to the west of and near the islands called Belle Riviere Isle [Fawn, or Woodtick, Island] and Isle aux Cerfs [Stag Island] to Lake Huron."¹⁴

The Preliminary Articles of Peace, signed in Paris on November 30, 1782, provided the official beginnings of the international boundary in the St. Clair River. Article 2d describes the Great Lakes section of the United States--British North America border as running "....into Lake Erie, through the middle of said Lake, until it arrives at the Water Communication between that Lake and Lake Huron; thence along the middle of said water communication into Lake Huron...."¹⁵ Except for minor changes in punctuation and capitalization, this wording remained the same in the final Definitive Treaty of Peace signed at Paris, September 3, 1783. Unfortunately, this terminology led to numerous misunderstandings, mainly due to a lack of accurate knowledge of the geography in question, i.e. the numerous islands in the St. Clair River at all, or any of the myriad of islands located there. This map gave the St. Clair River a general width of from two to three miles,

¹³The Canadian Encyclopedia. Second Ed. (Edmonton: Hurtig Publishers, 1988): s.v. boundaries.

¹⁴Definition by the International Boundary Commission, U. S., Alaska, and Canada, U. S. Section, Washington, D. C., Mr. Edgar A. Klapp, Secretary. Quoted in Andrew D. Perejda, op. cit., 5. Words in parentheses are insertions by the author.

¹⁵Hunter Miller, ed. Treaties and Other International Acts of the United States of America. (Washington: Government Printing Office, 1931): Vol. 2, 97.

containing many islands, and having a total length of only 20 miles. It was inevitable that these deficiencies would necessitate later changes in the treaty and boundary descriptions.

Provisions were made at the close of the War of 1812, in Article 6 of the Treaty of Ghent, signed on December 24, 1814, for the appointment of Commissioners to determine and report upon the true intended course of the international boundary from the St. Lawrence River through the Great Lakes and their interconnecting waterways. The commissioners thus appointed made their conclusions on June 22, 1822; the description of the course of the boundary through the St. Clair River was:

....to Lake St. Clair: Thence through the middle of said lake in a direction to enter that mouth or Channel of the river St. Clair which is usually denominated the Old Ship Channel; Thence along the middle of said Channel between Squirrel Island on the south east and Herson's [sic] Island on the north west, to the upper end of the last mentioned island which is nearly opposite to Point aux Chenes on the American Shore: Thence along the middle of the river St. Clair keeping to the west of and near the islands called Belle Riviere [Fawn or Woodtick Island] and Isle aux Cerfs [Stag Island]¹⁶ to Lake Huron:....¹⁷

Thus the boundary passing through the Great Lakes and interconnecting waterways was a curving line based on points in the rivers and lakes which were equidistant from the nearest points on opposite shores. Thus the boundary was entirely dependent upon the meandering lines of the shores.

International law generally recognizes that a nation's sovereignty includes an area of water paralleling her coast, i.e. the United States, Canada, and Great Britain observe a width of three miles along their seashores (originally determined, it is said, by the range of cannon fire, a measure which long ago ceased to keep up with technology). International

¹⁶Names in parentheses are the author's insertions.

¹⁷Miller, op. cit., Vol. 3, 68.

law accepts a nation firing upon a foreign ship which has entered her waters without permission.

On the Great Lakes, whose waters are viewed as the territory of the United States and Canada, regardless of the distance offshore to the middle of the lakes, no rule of territorial waters is officially observed. Normally, a nation may exercise her sovereign powers by defining the conditions under which vessels may enter her waters, but the international boundary has no impeding effect on free navigation of the Great Lakes. Neither Canada nor the United States maintains warships on the Great Lakes, nor do they police their waters to exclude ships of the other, with the exception of commercial fishing vessels which operate under a mutually-legislated set of conditions.

Since the War of 1812, the United States and Canada have exemplified an exception to the proven observation that enemies of war perpetuate their differences; naval disarmament on the Great Lakes seems to have deterred the waging of war. Both Great Britain and the United States agreed in 1817 that the naval strength of each country should be limited to "one vessel not exceeding one hundred tons burthen and armed with one eighteen-pound cannon" on Lake Ontario, plus two similarly limited vessels from each country on the upper lakes,¹⁸ mere symbols of token strength actually representing lasting peace.

While navigating a vital border river like the St. Clair, a commercial vessel finds itself one moment in the waters of one country, and the next, in waters of the other. For navigation purposes, the boundary line has been virtually removed.

The Treaty of 1842 made a broad provision for Great Lakes navigation in areas where boundary lines meandered:

¹⁸Note from His Majesty's Minister at Washington to the United States Secretary of State, April 28, 1817.

The Channels of the River St. Lawrence on both sides of the Long Sault Islands and of Barnhart Island, the channels in the River Detroit, on both sides of Island Bois Blanc, and between that island and both Canadian and American shores, and all the several channels and passages between the various islands lying near the junction of the River St. Clair with the lake of that name, shall be equally free and open to the ships, vessels, and boats of both countries.¹⁹

The Treaty of 1872 dealt with, among other things, waters which lay exclusively within the territory of one country. The United States gave Great Britain's (including Canada's) ships the right to navigate Lake Michigan,²⁰ while Great Britain gave the United States ships the right to navigate the St. Lawrence River from the place "where it ceases to form the boundary between the two countries, from, to and into the sea....,"²¹ meaning unhampered passage for over a thousand miles eastward from the Cornwall, Ontario/Massena, New York border, past the major ports of Montreal and Quebec City, to the Gulf of St. Lawrence. Concessions by one country to the other were instrumental for establishing cooperative action in this evolutionary series of navigation treaties.

In 1895, after consultation with ship operators and mariners in both countries, Congress enacted legislation for distinct pilot and navigation rules applied to Great Lakes waters, somewhat different from the international rules of the road. Canada moved quickly to adopt the same rules, and since that time, there have been no substantial changes to the rules by either country without the approval and adoption of such changes by the other. In the St. Clair River, for example, until 1984, the speed limits for commercial vessels 65 feet or more in overall length differed between upbound and downbound vessels, and in different segments of the river (for example, between Fort Gratiot Light and Stag Island

¹⁹Treaty of 1842, Article VII.

²⁰Treaty of 1872, Article XXVIII.

²¹Treaty of 1872, Article XXVI.

Upper Junction Lighted Buoy, the downbound speed limit was twelve statute miles per hour over the bottom, while upbound vessels in that same stretch of water were limited to nine statute miles per hour over the bottom. The middle and lower sections of the St. Clair River posted different limits.)²²

On April 19, 1984, mutually-accepted amendments, effective April 30, 1984, simplified that section of the Canada Shipping Act slightly: "...no ship of 20 metres or more in length may proceed at a speed greater than 10.4 knots between Fort Gratiot and St. Clair Flats Canal Light '2'...."²³ This speed limit applies to downbound or upbound vessels throughout the entire course of the St. Clair River. With the emphasis on safety, this revised agreement also demands that "every ship shall maintain a continuous listening watch on channel 11 between Lake Huron Cut Lighted Buoy '11' and Lake St. Clair Light."²⁴ (The governments of Canada and the United States have long allocated common frequencies for ship-to-ship and ship-to-shore communication.) Similarly,

Every ship shall...make a traffic report to SARNIA TRAFFIC on the channel on which it is required to maintain a continuous listening watch, indicating its

- (a) identity,
- (b) location,
- (c) intended course of action, and

(d) estimated time of arrival at the next location referred to in column 1 of the schedule. 25

²²Canada Shipping Act. Chapter 1469: "Regulations Respecting the Speed of Vessels on the Connecting Waters of the Great Lakes from Lake Huron to Lake Erie." (Short title: "St. Clair and Detroit River Vessel Speed Regulations"). (Ottawa: Queen's Printer for Canada, 1978): Section 3.

²³Canada Shipping Act. Registration SOR/84-335. "Regulations Respecting Navigation Safety on the Waters of the Great Lakes from Lake Huron to Lake Erie." (Short title: "St. Clair and Detroit River Navigation Safety Regulations"). (Ottawa: Queen's Printer for Canada, 1984): Section 18.

²⁴*Ibid.*, Section 5.

²⁵*Ibid.*, Section 6.

These traffic reports must be made four times by downbound vessels at specific locations in the St. Clair River,²⁶ and four times by upbound vessels,²⁷

General rules of navigation safety are outlined:

No person shall navigate or operate any ship in a manner that is dangerous to any person, that ship, or any other vessel, having regard to all the circumstances, including the nature and condition of the waters being navigated and the use that is or might reasonably be expected to be made of those waters...

Every ship shall, by using navigation safety calls, communicate its intentions to any other ship in the vicinity and ensure that the movements of the ships are coordinated and there is an agreement between the ships before proceeding to overtake or meet it....

In the St. Clair River..., no ship shall anchor in such a manner that it may swing into the channel or across steering courses.²⁸

An important marine decision regarding the anchoring of vessels in navigable waterways was made in 1883 due to an incident which occurred in the St. Clair River. Because the court decision was so relevant to the navigation interests of the lakes, and because it involved a feature not previously faced by the courts, the Great Lakes press gave longer-than-usual accounts of the situation.

The schooner, *Sunrise*, upbound in the St. Clair River in tow of a tug on October 18, 1881, voluntarily came to anchor at ten o'clock in the morning near the upper end of the Middle Ground, where the channel is about 700 feet wide, and substantially in the middle of the channel. The vessels had opportunity to raise anchor throughout the day and

²⁶Ibid., Schedule to Section 6. These locations are the Port Huron Traffic Lighted Buoy, the Salt Dock Light, Grande Pointe Light "23", and the St. Clair Flats Canal Light "2".

²⁷Ibid., Schedule to Section 6. These locations are the Port Huron Traffic Lighted Buoy, Stag Island Upper Light, Grande Pointe Light "23", and the St. Clair Flats Canal Light "2".

²⁸*Ibid.*, Sections 9, 15, and 16.

that same evening, and head for less-travelled waters of anchorage, such as Sarnia Bay, the docks at Port Huron, or the waters below the Middle Ground, where they would be safe from descending vessels. However, the *Sunrise* stayed in place.

The steambarge, Oscar Townsend, towing the schooner, Kelley, entered the St. Clair River from Lake Huron at about 3:00 A.M., following the usual course for downbound traffic. The full complement of officers and men on deck watching for lights did not discover the light of the anchored Sunrise until the steamer was within 400 feet of her. Immediately, the steambarge veered to starboard and passed clear, but her tow, by the force of the river's current, swung in just enough to come in collision with the Sunrise and inflict great damage, for which the Sunrise's owner sued.

> Defendants set up that they had ample watch; that on entering the river they were obliged to go by landmarks, and that, owing to the rapid current of four or five miles an hour, a steambarge having a tow was obliged to determine upon and take her course, and that after she had taken her course it was difficult, if not impossible, to change it so as to avoid any vessels or obstacles which might suddenly appear; that this was owing to the rapidity of the current and the speed which a steambarge having a tow was obligated to keep up in order to retain control, which two things together made it impossible for a steam vessel to do what she could do in the open lake where there was no current; that is, to check or stop. And that hence a vessel lying in her way, unless seen at a very considerable distance, could not be avoided, making it a case of exceptional navigation to which the ordinary rules in relation to steam vessels approaching sail vessels or vessels at anchor in the lake or in still water would not apply. It was claimed that this light on the anchored vessel was not seen until within four hundred feet; that the light was dim, and that in crossing the river at this point in the usual way the lights on the shore at Sarnia produce a confusion of lights which makes it impossible or difficult to distinguish a vessel's light from those on shore until very close, and that in addition to this the background of land and of structures at Sarnia makes it impossible in a dark night to

distinguish the hulls or spars of vessels until very close aboard.²⁹

The trial lasted nine days, in which time a very large number of the most experienced navigators on the lake testified on behalf of the respondents that a vessel anchored in any part of that channel is in a highly dangerous position; that no vessel should anchor in the channel except under the clearest necessity, and should then take the first opportunity of getting a better place, or, by means of the aid of her helm, allow herself to drift closer to shore so as to be substantially out of the channel. The need to keep regular sea watch throughout the night, instead of a mere anchor watch, also surfaced; in short, the need to be ready to execute any maneuver which would tend to avoid a collision or lessen its consequences was stressed.

Over two dozen similar court cases were cited as authority by the respondent's counsel, all the while providing a banquet of entertainment and information for hungry Great Lakes sail and steamboat men.

The court found in favour of the defence, holding the libellant's vessel at fault for improper anchorage. Among the charges were that the *Sunrise* did not comply with rule 10, R. S., sec. 4233, which required that all vessels when at anchor in roadsteads or fair ways, shall exhibit, where it can best be seen, a white light, so constructed as to show a clear, uniform and unbroken light visible all around the horizon; that she did not display, as it was her duty, a torch light when the lights of the *Townsend* and the *Kelley* were first made as they approached her, to enable them to see her and avoid a collision; and that immediately before the collision, she failed to change her position, as she might have done

²⁹The Cleveland Herald, June 26, 1883.

by putting her wheel to starboard instead of to port, and thereby cause her to swing out of the way of the approaching vessels.³⁰

Additional marine rules exist, such as those regulating the towing of ships:

A ship shall not overtake another ship...except a ship engaged in towing, in the ...St. Clair River between St. Clair Flats Canal Light "2" and Russell Island Light "33"....

(1) A towing ship shall not drop or anchor its tow in such a manner that they may swing into a channel or across steering courses.

(2) A towing ship engaged in arranging its tow shall not obstruct the navigation of other ships.³¹

These regulations apply to all ships in the Canadian waters of the St. Clair River, and to all Canadian ships in the United States' waters.³²

Returning to the evolution of boundary and navigation agreements between the United States and Canada, another treaty, concluded on April 11, 1908, stipulated in Article IV that the boundary through the Great Lakes region should be ascertained and reestablished, with its course being marked

> by buoys and monuments in the waterways and by permanent range marks established on the adjacent shores or islands, and hy such other boundary marks and at such points as in the judgement of the Commissioners it is desirable that the boundary should be marked; and the line of the boundary defined and located as aforesaid shall be laid down by said Commissioners on accurate modern charts prepared or adopted by them for that purpose, in quadruplicate sets, certified and signed by the Commissioners, two duplicate originals of which shall be filed by them with each Government, and the Commissioners

³⁰Ibid.

³¹Canada Shipping Act. Registration SOR/84-335. "Regulations Respecting Navigation Safety on the Waters of the Great Lakes from Lake Huron to Lake Erie." *Op. cit.* Sections 11 and 19.

³²*Ibid.*, Section 3.

shall also prepare in duplicate and file with each Government a joint report or reports describing in detail the course of said line and the range marks and buoys marking it, and the character and location of each boundary marker. The majority of the Commissioners shall have power to render a decision.³³

This Treaty of 1908 established the boundary through the lakes and connecting waterways in a series of straight lines, clearly defined by courses and distances, following the general course of the curving line which had designated the "middle" of the river. The boundary, for example, of the St. Clair River from the Chenal Ecarté to the mouth of the river, is defined in 23 straight line courses.

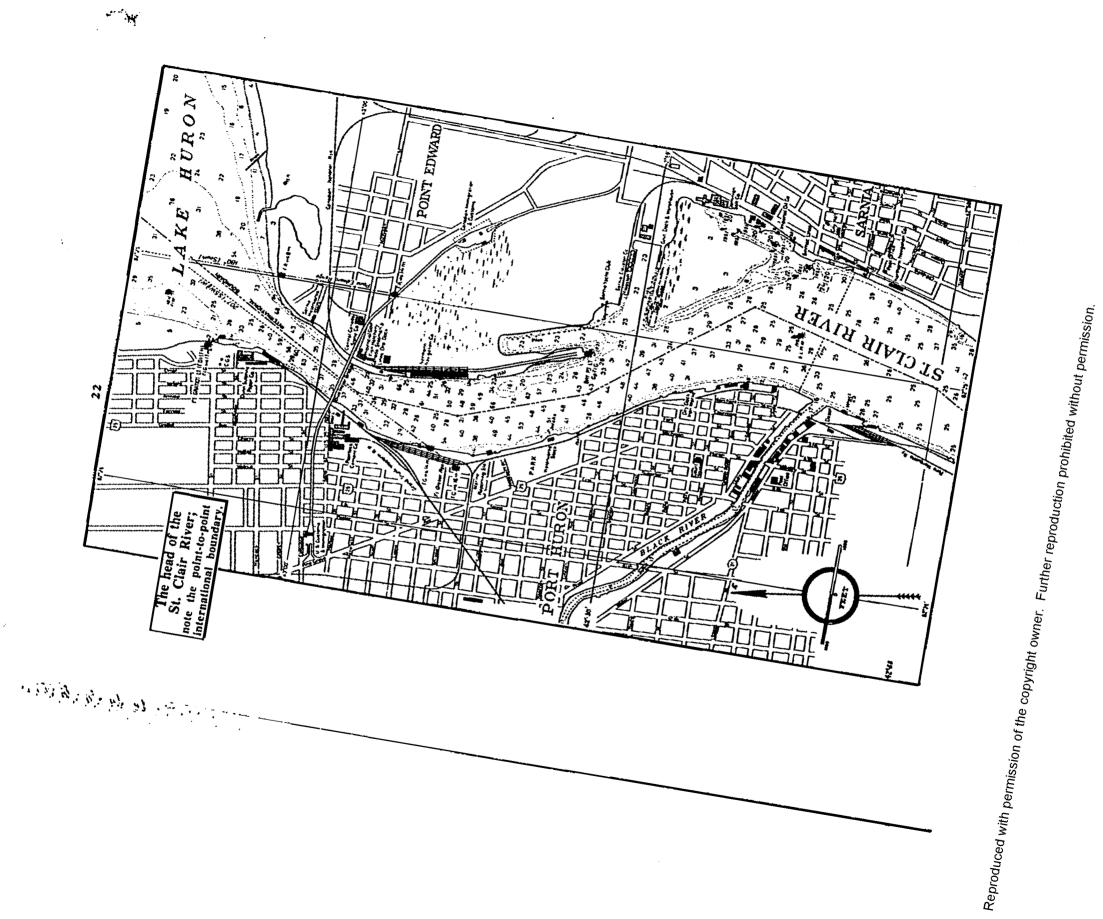
The Boundary Waters Treaty of 1909 provides, in part, that all waters through which the international boundary passes, from shore to shore, including all bays, arms, and inlets, and Lake Michigan, should be regarded as boundary waters,³⁴ which "shall forever continue free and open for the purposes of commerce to the inhabitants and to the ships, vessels, and boats of both countries equally....³⁵ Each nation reserves the right to enact laws within her own territory, conditional upon the laws being "not inconsistent with the right of free navigation" and that they apply "equally and without discrimination to the inhabitants, ships, vessels, and boats of both countries.³⁶ This treaty protects each country's vessels in their domestic trade, i.e. neither the United States nor Canada allows the ships of the other to engage in her coastwise trade, viz. transporting passengers or goods between her ports. For example, an American vessel may not transport passengers

³³William M. Malloy. Treaties, Conventions, International Acts, Protocols and Agreements between the United States of America and Other Powers, 1776-1909. (Washington: U. S. Government Printing Office, 1937): Vol. I: 822.

³⁴Boundary Waters Treaty of 1909, Preliminary Article.

³⁵Boundary Waters Treaty of 1909, Article I.

³⁶Ibid.



between Sarnia and Goderich; nor may a Canadian ship carry coal from Cleveland to Duluth.

However, the full significance of the rights secured by the Boundary Waters Treaty of 1909 may be illustrated in the development of navigation projects:

> ...up to 1944, the United States had expended about \$24,000,000 in the lower Detroit River and...more than half the expenditure was directed to projects in Canadian waters.

> No treaty or other formal agreement expressly authorizes these improvements which the United States has made in Canadian waters. The obvious explanation is that by the Boundary Waters Treaty of 1909, the United States obtained perpetual navigation rights for her ships and citizens in Canadian waters. Having those rights, the United States needed no further guarantees and it was entirely proper for the Congress to authorize the improvements and make appropriations for their construction and maintenance as though the improvements lay wholly within our territorial waters.³⁷

Finally, the Treaty of 1925, which was signed at Washington, D. C. on February

24, 1925, provided for the maintenance of the entire boundary between Canada and the

United States. Article IV empowers the Commissioners

to inspect the various sections of the boundary line between the United States and the Dominion of Canada and between Alaska and the Dominion of Canada at such times as they shall deem necessary; to repair all damaged monuments and buoys; to relocate and rebuild monuments which have been destroyed; to keep the boundary vistas open; to move boundary monuments to new sites and establish such additional monuments and buoys as they shall deem desirable.³⁸

³⁷Gilbert R. Johnson. "United States-Canadian Treaties Affecting Great Lakes Commerce and Navigation." Inland Seas, Summer, 1948, Vol. 4, No. 2. (Cleveland: Great Lakes Historical Society): 115-116.

³⁸Treaties, Conventions, International Acts, Protocols, and Agreements, between the United States of America and Other Powers, 1923-1937. (Washington: U. S. Government Printing Office, Senate Document No. 134, 75th Congress, 3rd Session, 1938): Vol. IV, 3992.

That same Article compelled the Commissioners to submit reports at least once each calendar year to their respective governments,

containing a statement of the inspections made, the monuments and buoys repaired, relocated, rebuilt, moved, and established, and the mileage and location of vistas opened, and shall submit with their reports, plats and tables certified and signed by the Commissioners, giving the locations and geodetic positions of all monuments moved and all additional monuments established within the year, and such other information as may be necessary to keep the boundary maps and records accurately revised.³⁹

There were several difficulties pertinent to the establishment of the St. Clair River boundary, and there were, of necessity, revisions in the border from the time of the Preliminary Articles of Peace in 1782 to the Treaty of 1925. These difficulties included the lack of geographical knowledge of the waterways, particularly with reference to the islands in the St. Clair River (keeping in mind that the 1755 Mitchell map lacked detail and was not based on accurate surveys), a lack of guidelines for what constitutes and determines the "middle" of the river, and the question of whether the international boundary should be delineated in a series of straight lines from one buoy to the next or whether it should conform to the outline of that river. By the time the Treaty of 1925 was signed, these boundary problems were resolved.

Canada and the United States are both equally sovereign nations, and, as such, either country has the inherent power to require that ships of the other nation conform to laws within her own waters. By the various navigation treaties, however, both countries have relinquished a substantial measure of sovereignty, with each giving a voice and lending an ear to the other in matters that could legally be viewed as her own affairs.

³⁹Ibid.

CHAPTER III

Maritime and Shipbuilding History of the St. Clair River

The largest vessel to travel the St. Clair River waters for centuries was the Indian birchbark canoe, generally of such diminutive construction that it carried only two or three persons plus a small cargo. Its usefulness and practicality were accepted by the first French and English explorers in the area, opening these hinterlands to the expanding fur trade and the religious conversion efforts of the missionaries.

French fur traders introduced a larger, heavier, more stable and more European mode of water transportation, a boat called a "batteau," propelled by oars rather than paddles, and capable of carrying greater loads.

Réné-Robert Cavelier, Sieur de la Salle, is generally credited with the construction of the first heavy draft sailing vessel on the upper Great Lakes. Built at Niagara in early 1679 and named the *Griffon*, (also spelled *Griffin* in fewer sources), this small trading vessel carried a displacement of about 45 tons in a length of only about 40 feet, and left the safety of its anchorage in eastern Lake Eric on the seventh of August that year with a crew of about 34 on a fur-trading voyage to the far end of the Great Lakes in upper Lake Michigan.⁴⁰

Sources indicate that LaSalle named the St. Clair River. Others question this by arguing that LaSalle left the Detroit River and entered a small lake, which, in honour of the

 ⁴⁰George I. Quimby. "The Voyage of the Griffin: 1679." *Michigan History*, Vol. 49, No. 2, June, 1965: 97.

saint's day of August 12, he named Lake Ste. Claire.⁴¹ No mention is made of the naming of the river encountered after August 12, although descriptive accounts of the expedition's upstream progress exist:

...As it was St. Claire's day, [Father Louis] Hennepin's proposal that the name of the founder of his order be given to this lake was carried out, and it received its present name.

When the Griffon had crossed the lake, the men saw before them wide marshes through which the swift-moving river had many a winding channel. They had come to the St. Clair Flats, a fan-shaped delta of seven channels, on which has been built today a popular summer resort. They set to work sounding one passage after another, only to find them shallow and almost barred with shoals. But at last they came upon an excellent channel about a league broad, with no sands and a depth everywhere of from three to eight fathoms of water through which the vessel sailed easily toward Lake Huron. At the mouth of the river, however, they were forced to drop anchor and remain for several days. A north wind had been blowing, driving the water of the three upper lakes into the strait. This had increased so much the usual force of the current that it was as violent as that of the Niagara, and entirely impassable for a vessel like the Griffon. Even when the wind turned southerly, LaSalle could make no headway against this current until he sent ashore a dozen men who hauled and towed the vessel along the beach for half an hour, dragging her out of the narrow mouth of the channel into the wave-tossed waters of the lake. Once more, all returned "thanks to the Almighty for their happy navigation," and set sail on the 23d [sic] of August on Lake Huron.⁴²

Incidentally, some modern historians claim that the St. Clair River was named in the early 1800's in honour of General Arthur St. Clair, who, in the 1780's, was Governor of the Northwestern Territory, of which Michigan was a part. The river supposedly had borne the name Huron River on an early map, and had been named Sinclair River in 1765 when Patrick Sinclair bought land and built a fort where the town of St. Clair, Michigan,

⁴¹C. M. Burton, op. cit., 8-9.

⁴²Edward Channing. The Story of the Great Lakes. (New York: The Macmillan Company, 1909): 63-65.

now stands.⁴³ "St. Clair," it has been suggested, could also be a pronunciation breakdown of "Sinclair."

The *Griffon* reached Green Bay on Lake Michigan and left on September 18, 1679, loaded with a valuable cargo of beaver pelts. Two days later, the ship was last seen "tempest tossed in the Straits of Machinac, which connect Lake Huron and Lake Michigan, and 'being driven towards the Huron islands' of Georgian Bay."⁴⁴ The *Griffon* disappeared on this return leg of its maiden voyage, becoming the first, and perhaps most famous, mysterious, and elusive, shipwreck on the Great Lakes. Since 1805, at least eleven discoveries of the *Griffon's* supposed relics have been reported,⁴⁵ and in the summer of 1992, the Province of Ontario contributed funds for a sidescan sonar search of possible shipwrecks, including the *Griffon*, in the waters just west of Manitoulin Island. The *Griffon* was the first and last European vessel built and sailed on the upper lakes for more than half a century.

The English captured control of the lakes in the 1760's and the establishment of a string of forts and trading posts necessitated the creation of a small fleet to supply these outposts with stocks and munitions. Even though the Americans took charge of the Great Lakes posts within their new domains in 1796, it was not until after the War of 1812 that American shipping in the Great Lakes took a noticeable form.

Shipping activities along the St. Clair River began in 1814 with the government construction of Fort Gratiot at the mouth of the river, and, in 1818, the first vessel built

⁴³Emeline Jenks Crampton. "History of the Saint Clair River." A small publication "Written for the Centennial of the Founding of St. Clair County on May 8, 1821." Dated June 13, 1921: 1.

⁴⁴C. H. J. Snider. "Further Search for the *Griffon.*" Ontario Historical Society, Vol. XLVIII, No. 1, Winter, 1956: 1.

⁴⁵C. H. J. Snider. The Griffon. Illustrations by Rowley W. Murphy. (Toronto: Rous & Mann Press Ltd., 1956): 16-17.

along these shores, namely the so-called "Split Log," which measured 34 feet in length and nine feet in beam, displaced 34 tons, and functioned as a revenue cutter.⁴⁶

Samuel Ward and his nephew, Eber B. Ward, both of Newport (as Marine City, Michigan, was then called), combined to create a highly-profitable shipping company named after themselves. Their production of several first-class steamers from the mid-1840's until the mid-1850's made their names famous in every Great Lakes port as their vessels carried thousand upon thousands of new settlers, principally from Buffalo to Chicago, and the extent of their local marine enterprises soon created the impression that the water route between Port Huron and Detroit was their personal domain and monopoly.⁴⁷

The post-1850 rapid construction of railroad lines, however, seriously depressed passenger steamer traffic volume, and the emphasis on freight business increased. Ships' characteristics changed, as vessels were designed and constructed in consideration of the bulk trade. The St. Clair River became one of the Great Lakes arenas for a new creation called the steam tug, a small but immensely powerful vessel which could tow a string of half a dozen sailing vessels, each loaded with heavy bulk cargo, upstream into Lake Huron. This profitable business produced great rivalries along the river, as many of the strongest and fastest tugs were owned in Port Huron, Sarnia, Marysville, St. Clair, Marine City, and Algonac.

Few areas of the Great Lakes developed as great and efficient an interest in the construction and operation of wooden vessels, both sail and steam powered, as the American side of the St. Clair River region. Until late in the nineteenth century, the shores

⁴⁶William Lee Jenks. St. Clair County, Michigan, Its History and Its People. (Chicago and New York: The Lewis Publishing Company, 1912): 403.

⁴⁷¹bid., 403-404.

of the St. Clair River provided enough hardwood forests for both the construction of vessels and as a fuel source for steam-driven craft.

The great period of development...occurred in the period between 1850 and 1870. Before that, but small use had been made of the great natural resources of the [St. Clair] county --- its valuable pine and hardwood timber. Many saw mills [sic] were built until not less than fifteen were in operation along St. Clair and Black rivers. During the same time, boat building was going on at a rapid rate, nearly 250 boats being built during the twenty years. These two industries brought in a considerable influx of population, as the timber was cut off, the land was rendered more easy of clearing, and settlers came in with more rapidity than during any other equal period of time, so that the population increased from 10,420 to 26,604 between 1850 and 1860, and by 1870 to 36,661.⁴8

When steel and iron replaced wood as the primary construction material in shipbuilding at the turn of the century, the supremacy of the St. Clair River area declined and eventually disappeared.

The following compilation of commercial vessels built in Port Huron, Marine City, and St. Clair, along the shores of the St. Clair River, was derived mainly from J. B. Mansfield's (editor) two-volume *History of the Great Lakes*, Jenks' *St. Clair County*, *Michigan, Its History and Its People*, from the radio script of an Auld Lang Syne Talk given by H. A. Hopkins, Secretary-Manager of the Port Huron Chamber of Commerce on March 19, 1940, and from John O. Greenwood's *Namesakes* series of books for the years 1900-1909, 1910-1919, 1920-1929, and 1930-1955.

It is intended that this three-community compilation will give an idea of the magnitude of vessel construction along the United States shore of the St. Clair River. Of

⁴⁸W. L. Jenks. "History of St. Clair County." Saint Clair County Centennial and Home-Coming Celebration, 1821-1921, Souvenir Program: 9.

interest is the fact that, while most Great Lakes shipbuilding firms quickly made the transition to larger steam-powered vessels in the 1870's and 1880's, the St. Clair River interests remained with the production of large schooners, which were increasingly constructed with tow-barge use in mind. Marine City slid its final huge schooner down the launchramp in 1896. Shortly thereafter, new steam-powered vessels hit the 600-foot length, and the use of a string of wooden tow-barges (which were frequently former sailing ships, more often than not in dilapidated condition) towed behind one small steamer became financially inadequate and obsolete.

The only communities on the Canadian side of the St. Clair River to produce significant numbers of large, commercial vessels were Wallaceburg and Sarnia, but vessel production was a fraction of that of their Michigan counterparts. Although some vessels were constructed in the smaller communities along the Canadian shoreline, shipbuilding in these Ontario towns never came close to reaching the production volume and tonnage of places such as Algonac, Marine City, and St. Clair, Michigan.

In the 1800's, 127 sail-powered and 40 steam-powered commercial vessels were constructed at Port Huron:

In 1838, the sloop, *Temperance*, of 29 tons; in 1839, the schooner, *Key West*, of 20 tons; in 1842, the 53-ton schooner, *Henry Hubbard*, which capsized and was lost in Lake Huron three years later; in 1844, the schooner, *Freedom*, of 28 tons, which capsized in Lake Huron the same year with the loss of three lives, and the schooner, *Morning Star*, of 38 tons, which sank in Lake Erie in 1849; in 1845, the brig, *David Smart*, of 203 tons, which was wrecked near Chicago in 1857, and the small schooner, *H. Hopkins*, of 14 tons; in 1846, the seven-ton schooner, *Dolphin*, and the 215-ton schooner, *Amazon*, which was wrecked at Point Edward in 1864; in 1847, the steamer, *America*, of 600 tons, which was wrecked at Dunkirk on Lake Erie in 1854; in 1848, the 79-ton schooner,

Venus, the brig, Robert Burns, of 307 tons, lost with ten lives in the Straits of Mackinac in 1869, the 25-ton schooner, May, the 227-ton propeller, Petrel, the schooner, Mariner, of 68 tons, which was wrecked near Chicago in 1852, the eight-ton schooner, Hawk, and the schooner, *Industry*, of 19 tons; in **1849**, the 20-ton schooner, *Trader*, and the schooner, Dial, of 161 tons; in 1851, the scow, United, of 71 tons, and the scow, Ariel, of 45 tons; in 1852, the scow-schooner, Traveller, of 182 tons, which sank at Port Burwell on Lake Erie in 1855; in 1853, the schooner, *David Ferguson*, of 223 tons, which was abandoned for condition in 1908, the 54-ton schooner, Free Democrat, which capsized in Lake Michigan in 1868 with the loss of four lives, the 35-ton schooner, Maine Saw, the 27-ton scow-schooner, *Remittance*, the schooner, L. M. Mason, of 340 tons, the 64-ton schooner, *Fidelity*, which was abandoned only seven years later, and the scow-schooner, Weasel, of 41 tons; in 1854, the 93-ton schooner, F. G. Scott, the 56-ton scow-schooner, Enterprise, which sank in Lake Huron in 1861, and the 142-ton schooner, Helen Kent. which was abandoned in Lake Michigan in 1867; in 1855, the steamboat, Union, of 116 tons; in **1856**, the 107-ton scow, *Whittlesea*, which was abandoned at Cleveland in 1873, the 158-ton schooner, Fred L. Wells, the 136-ton schooner, William A. Chisholm, and the schooner, J. Hibbard, of 95 tons; in 1857, the 97-ton schooner, John S. Minor, the 186ton schooner, W. R. Hanna, which capsized in Lake Michigan in 1870, the 170-ton schooner, Gulielma, which was wrecked at Buffalo on Lake Eric in 1863, the schooner, Forest Rose, of 105 tons, the 23-ton schooner, Crenoline, and the schooner, Jim Moffat, of 25 tons; in 1859, the 21-ton scow-schooner, Wetzel, the 23-ton schooner, E. J. Sexton, and the 40-ton schooner, Emma, which was lost in 1869; in 1860, the 32-ton schooner, Mahala, the 123-ton steamer, Sarnia, the 59-ton schooner, Morning Lark, which sank near Detroit in 1875, the 48-ton scow Morning Star, the 34-ton scow, Triton, and the propellor, Belle, of 235 tons, which burned in Lake Michigan in 1869 with the loss of two lives; in **1861**, the 41-ton scow-schooner, *Spray*, which capsized off South Haven on Lake Michigan in 1875, and the schooner, Garibaldi, of 167 tons; in 1862, the 57-ton

scow, Rival, which was lost in 1869; in 1863, the 58-ton scow, Uncle Sam, the 93-ton scow, Lizzie, and the 410-ton brig, Lucy J. Clarke, which was wrecked on Lake Michigan in 1883 with the loss of three lives; in 1864, the 68-ton scow, Senator, the 61-ton scow *Evergreen*, the 235-ton steamer, *Kate Moffat*, which burned in Lake Huron in 1885, the 46-ton schooner, Idaho, the 92-ton scow, Mayflower, which sank off Kelly's Island in Lake Eric in 1875, the 107-ton schooner, Elisha C. Blish, which was lost on Lake Huron later that year with all hands, and the bark, Huron, of 378 tons; in 1865, the 144-ton scow. Home, which was abandoned in 1897, and the bark, St. Clair, of 350 tons; in 1866, the 210-ton schooner, Kewaunee, which was renamed the Mary C. Daryaw in 1921, wrecked on Simcoe Island in Lake Ontario in 1922, and finally burned off Kingston in 1927, the 87-ton scow, Maple Leaf, the 45-ton scow, Henry Young, which was wrecked on Lake Erie in 1870, the 121-ton schooner, E. M. Carrington, the 26-ton tug, Ida S. Botsford, the 80-ton scow, Curlew, which sank in Lake Michigan in 1890, the 104ton scow, Maria, which foundered in 1883, the 62-ton scow, Iris, and the barge, Erie, of 230 tons; in 1867, the 418-ton barge, Hattie Johnson, which sank in Lake Huron the next year, the 40-ton scow, Rozilee, the 411-ton steamer, City of Port Huron, the 146-ton schooner, Topsy, which was lost in Lake Michigan in 1891, the 36-ton scow, Clipper Vision, the small, eight-ton scow, Two Brothers, the 132-ton scow, C. G. Meisel, which was abandoned off Lexington, Michigan, in Lake Huron in 1883, the 291-ton schooner, Hattie Wells, which was swamped by heavy seas in a storm on Lake Michigan in late 1912, the 82-ton scow, Emma Leighton, the 261-ton steamer, Henry Howard, which burned off Harsen's Island in the St. Clair River in 1884, the 164-ton steam tug, George E. Brockway, the 86-ton scow, E. T. Gain, which was stranded at Point Pelee the next year, the 32-ton scow, Mary Miller, and the schooner, Winnie Wing, of 200 tons, which was abandoned in 1923 at Kingston; in 1868, the 85-ton scow, Juno, which sank in the St. Lawrence River in 1873, the 62-ton scow, Adain, the 60-ton scow, H. B. Moore, which was lost in Lake Michigan in 1894, the 273-ton schooner, Hattie Howard, the 40ton scow, Maggie, the 30-ton scow, Melissa, the 350-ton schooner, Groton, which foundered in Lake Eric in 1897, and the 88-ton scow, *Kitten*, which was wrecked in Lake Erie two years later; in 1869, the 211-ton schooner, William G. Keith, the 470-ton schooner, Carlingford, which sank in a collision on Lake Erie in 1881, the schooner, David A. Wells, of 310 tons, which foundered in Lake Michigan in 1880, the 195-ton scow, Thomas S. Skinner, and the tug, Frank Moffat, of 122 tons, which exploded and was a total loss in the St. Clair River in 1885; in 1870, the 289-ton schooner, Wyoming, the schooner, Fannie Neil, of 451-tons, which was abandoned in 1912, the 25-ton scow, Christina, the 297-ton schooner, E. Fitzgerald, which was wrecked at Long Point, Lake Erie, in 1883, with the loss of seven lives, and the schooner, L. W. Perry, of 253 tons; in 1871, the 220-ton tug, Gladiator, the 68-ton barge, Ark, the huge steamer, Vanderbilt, of 1,302 tons, the schooner, George H. Ely, of 648 tons, which became a total loss near Detour in Lake Huron in 1882, the 834-ton schooner, Harvey H. Brown, which was wrecked on the coast of Maine in 1898, and the schooner, James Couch, of 843 tons, later renamed the Tasmania and lost with all hands off Point Pelee in Lake Eric in 1905; in 1872, the schooner, *Elizabeth A. Nicholson*, which was lost in Lake Michigan in 1895, the 319-ton schooner, I. N. Foster, and the steamer, Montana, of 1,535 tons, which burned to a total loss near Alpena on Lake Huron in 1914; in 1873, the 817-ton steamer, Oscar Townsend, which burned on Lake Huron in 1891, the 736-ton schooner, Emma C. Hutchinson, which was abandoned due to age in 1913, the 273-ton scow, Fred J. Dunford, which was abandoned due to condition in 1911, the 341-ton schooner, America, the steamer, Mocking Bird, of 142 tons, the 349-ton schooner, Pulaski, and the tug, Saginaw, of 350 tons; in 1874, the 334-ton schooner, Mary Lyon, the 332-ton schooner, Jennie Mathews, the 776-ton schooner, Edward Kelly, which stranded and broke up near Port Colborne on Lake Erie in late 1911, the 52-ton steamer, Mary, the steamer, Crusader, of 198 tons, which burned at the Sault in 1894, and the barge, Belknap, of 46.21 tons, which sank and was abandoned in the East Passage of the Snye River on August 1,

191649; in 1875, the schooner, Lizzie A. Law, of 747 tons, which sank in a collision off Point Pelee in 1893, the 328-ton schooner, Frank C. Leighton, which was scrapped in 1909, and the sloop, Belle Stevens, of 88 tons; in 1876, the schooner, Essex, of 25 tons; in 1877, the tug, Red Ribbon, of 20 tons; in 1878, the 282-ton steamer, Saginaw, and the 74-ton schooner, Hanna Moore, lost in Lake Michigan in 1894; in 1880, the 14-ton scow, Ernest, the 111-ton scow, Aunt Ruth, the schooner, Home, of 125 tons, the 176-ton schooner, R. J. Gibbs, which foundered off Bar Point in western Lake Erie in 1893, and the 203-ton propellor, Mackinaw, which burned on Lake Huron in 1890; in 1881, the 13ton schooner, Ed Volley, the schooner, Jeremiah Godfrey, of 653 tons, and the steamer, City of Stiles, of 98 tons; in 1882, the 23-ton sloop, Oscar Wilde, the 13-ton schooner, H. A. Benson, the 15-ton scow, George Davis, and the 199-ton steamer, Omar D. Conger, which exploded in the St. Clair River in 1922; in 1884, the scow, Tinker, of eight tons; in 1885, the 760-ton schooner, Homer Alverson, which sank in the St. Lawrence River in 1898; in 1886, the 20-ton scow, L. B. Forester, and the 277-ton schooner, E. B. Palmer, which was wrecked in Lake Huron in 1893; in 1890, the steamer, D. N. Runnels, of 83 tons; in 1891, the steamer, O. O. Carpenter, of 364 tons, which was scuttled off the East Coast in 1931; in 1892, the steamer, Desmond, of 456 tons, which sank in a Lake Michigan storm off Chicago in 1917 with the loss of all seven hands; in 1893, the 91-ton steamer, C. D. Thompson, the 536-ton steamer, Lloyd S. Porter, which sank in the St. Lawrence River in 1898, the 84-ton steamer, W. G. Harrow, and the steamer, H. E. Runnels, of 862 tons, which was driven ashore and destroyed at Grand Marais, Michigan in Lake Superior in 1919; in 1894, the steamer, C. L. Boynton, of 103 tons; in 1895, the 27-ton steamer, F. J. Haynes, the 89-ton steamer, B. B. Inman, and the steamer, Linden, of 894 tons, which was destroyed by fire at Tawas City, Michigan in 1923, and scrapped in 1930; in 1896, the 60-ton steamer, Fred A. Lee, which was lost with five lives in Lake

⁴⁹Alan Mann. "Wallaceburg Shipping Register, 1879 to present." Unpublished document, circa 1985.

Huron in 1936, the 47-ton steamer, *James T. Martin*, and the steamer, *Vigilant*, of 372 tons; in **1897**, the steamer, *Black Rock*, of 1,646 tons, which was scrapped on the East Coast in 1925; and in **1898**, the 99-ton steamer, *W. G. Mason*.

In the 1800's, 92 sail-powered and 114 steam-powered commercial vessels were constructed at Marine City:

In 1824, the 27-ton schooner, Sam Ward, and the 28-ton schooner, St. Clair, which sank in 1855; in 1825, the schooner, *Isaac E. Pomeroy*, of 54 tons; in 1827, the schooner, Grampus, of 30 tons; in 1830, the 73-ton schooner, Marshal Ney, and the schooner, Albatross, of 20 tons; in 1833, the 65-ton schooner, Elizabeth Ward, which capsized in 1845; in 1835, the schooner, General Harrison, of 115 tons; in 1838, the schooner, Trader, of 19 tons; in 1839, the 147-ton steamboat, Huron, which was dismantled in 1848, the 29-ton schooner, Eagle, and the 350-ton steamboat, Detroit, which sank in Saginaw Bay after a collision with the *Nucleus* in 1854; in 1842, the 67-ton schooner, Vermont, which was lost off Grand Haven in Lake Michigan in 1855; in 1843, the steamboat, *Champion*, of 266 tons; in **1845**, the 781-ton steamboat, *Oregon*, which burned at Chicago in 1849; in 1846, the 352-ton steamboat, *Detroit*, and the schooner, Mary Ann Larned, of 79 tons; in 1847, the 433-ton schooner, Samuel Ward, which was converted to a barge; in 1848, the 192-ton steamboat, *Franklin Moore*, which was broken up in 1862, and the 462-ton steamboat, Pacific, which was lost in Lake Michigan in 1867; in **1849**, the 1,155-ton steamboat, *Atlantic*, which sank in a collision with the propeller, Ogdensburg, at Long Point in Lake Erie in 1852 with the loss of 250 lives; in 1850, the 1,052-ton steamboat, Ocean, which was converted to a barge in 1857; in 1851, the 251ton steamboat, *Pearl*, which was broken up in 1869, the 251-ton steamboat, *Ruby*, which was broken up in 1865, the 861-ton steamboat, Arctic, which was stranded in Lake Superior in 1860, and the 921-ton steamboat, Caspian, which was wrecked at Cleveland in

1852; in 1852, the 574-ton steamboat, Cleveland, which was wrecked in Lake Superior in 1864, the 603-ton steamboat, Traveller, which burned at Eagle Harbor, Lake Superior, in 1865, and the steamboat, Huron, of 348 tons; in 1853, the 665-ton propeller, Challenge, the 942-ton steamer, E. K. Collins, which burned at Malden on the Detroit River in 1854 with the loss of 23 lives, but was eventually raised and made into the Ark; in 1854, the 284-ton schooner, Forester, the 254-ton steamer, R. R. Elliott, and the 503-ton steamer, Forester, which was converted to a barge in 1865 and lost in 1869; in 1855, the 462-ton steamboat, Forest Queen, the 1,164-ton steamboat, Planet, which was converted to a barge in 1866 and renamed Northwest, and which was lost in a collision on Lake Erie, the 442ton propeller, Mary Stewart, which was wrecked at Grand Haven on Lake Michigan in 1866, the 327-ton schooner, Colonel Cook, which stranded in 1894, the 411-ton schooner, Torrent, which sank near Port Stanley, Lake Erie, in 1863, and the 482-ton barque, Pacific, which sank that same year; in 1856, the 452-ton schooner, Wyandotte, the 925-ton steamer, Montgomery, the 50-ton steamboat, Gem, and the 426-ton barque, Marquette, which sank in a collision in Lake Michigan in 1862; in 1857, the 102-ton scow-schooner, Forest, and the 308-ton barge, Ark, which was wrecked in Lake Huron in 1866; in **1858**, the 422-ton steamboat, *Gazelle*, which was wrecked at Eagle Harbor, Lake Superior, in 1860, with all hands except the wheelsman; in 1859, the 535-ton steamboat, Sea Bird, which burned in Lake Michigan in 1868 with the loss of 72 lives; in 1860, the 146-ton schooner, John Rice, and the steamer, Comet, of 385 tons; in 1861, the 600-ton steamer, Antelope, which foundered in 1897, and 198-ton scow schooner, William Kelly, and the scow schooner, R. N. Brown, of 236 tons; in 1862, the 36-ton steamer, Sea Gull, the 378-ton schooner, E. Kanter, the 410-ton schooner, Yankee, the 369-ton propeller, Waterwitch, which foundered in 1863 in Lake Huron with the loss of 28 lives, the 715-ton propeller, B. F. Wade, and the scow, Forest Maid, of 60 tons; in 1863, the 270-ton schooner, Otter, which was wrecked near Sturgeon Bay in 1895, the 602-ton schooner, Stephen Clement, the 278-ton schooner, George W. Bissell, the 451-ton schooner, Favorite, and 378-ton schooner, Saginaw, and the schooner, Frances Adah, of 62 tons; in 1864, the 153-ton steamer, Wave, the 193-ton brig, St. Joseph, the 199-ton scow, Eureka, and the tug, Mayflower, of 127 tons; in 1865, the 150-ton steamer, Trader, which exploded in 1866 with the loss of three lives, the 98-ton propeller, C. J. Clark, the 187-ton schooner, Carrier, and the tug, George N. Brady, of 165 tons; in 1866, the 59-ton scow, Lizzie Bell, which was lost on Lake Ontario, the 68-ton steamer, River Oucen, which burned in 1868, the 277-ton schooner, Sophia J. Luff, the 212-ton steamer, Salina, which burned at St. Clair in 1896, the 235-ton steamer, East Saginaw, which was lost in Lake Huron in 1883, the 369-ton bark, F. Morell, the 267-ton steamer, Marine City, which burned on Lake Huron, the 259-ton steamer, W. R. Clinton, the 635-ton steamer, Keweenaw, the 707-ton steamer, Saginaw, which was condemned in 1910, the 617-ton steamer, Alpena, and the schooner, Kewanaw, of 493 tons; in 1867, the 152-ton tug, M. I. Miles, the 298-ton schooner, Tailor, the 262-ton steamer, Bay City, which burned in 1891, the 280-ton steamer, J. S. Estabrook, the 238-ton schooner, S. Gardner, the 384ton schooner, Guiding Star, which was abandoned in 1892, and the schooner, William Brake, of 318 tons; in 1868, the 258-ton steamer, D. F. Rose, the 265-ton schooner, Florence Lester, which was lost in 1889, the 208-ton steamer, William Cowie, which burned at Cheboygan, Michigan, in 1890, the 131-ton steamer, George S. Frost, which burned in Lake Erie in 1879, the 560-ton schooner, *Francis Palms*, which sank in Lake Michigan in 1889, the 909-ton steamer, St. Paul, which burned on Lake Superior, the 122ton schooner, William E. Barnes, and the schooner, H. P. Merry, of 170 tons; in 1869, the 354-ton schooner, A. Gebhart, the 376-ton schooner, Edward Dean, and the 268-ton schooner, Keepsake, which foundered in Lake Eric in 1898; in 1870, the 378-ton steamer, P. H. Birckhead, which burned at Alpena, Michigan, on Lake Huron, the 332-ton schooner, C. H. Johnson, which was wrecked in 1895, the 544-ton steamer, Milton D. Ward, and the 867-ton propeller, Coburn, which sank in 1871 in Saginaw Bay with the loss of 32 lives; in 1871, the 356-ton steamer, Annie Laura, which burned on the St. Clair

River in 1922, the 38-ton scow, L. C. Larned, the 412-ton schooner, Katie Brainard, the 462-ton schooner, Dayton, the 75-ton steamer, Carrie H. Blood, the 429-ton schooner, Emma A. Mayes, the 280-ton steamer, George W. Wesley, the 302-ton steamer, D. W. Powers, the 257-ton steamer, Porter Chamberlin, the 1,214-ton steamer, Northerner, and the ten-ton steamer, Rose; in 1872, the 480-ton schooner, Troy, the 362-ton schooner, C. L. Young, the 412-ton steamer, Tempest, the 339-ton steamer, Robert Holland, the 473ton schooner, *Planet*, and the scow, *Sunnyside*, of 35 tons; in 1873, the 306-ton schooner, *Charles Spademan*, which was sunk by ice in Lake Erie in late 1909, the 770-ton steamer, Jarvis Lord, which sank in Lake Michigan in 1885, the 897-ton schooner, J. H. Rutter, which ended her days on the Atlantic coast, the 324-ton schooner, Charles H. Weeks, which sank in a storm at the mouth of the St. Clair River in 1889, the 400-ton schooner, *Elma*, which was wrecked in Lake Superior in 1895 with the loss of one life, the 400-ton schooner, Hattie, the 567-ton schooner, Nellie Gardner, which was wrecked in Thunder Bay in 1883, and the 1,072-ton steamer, *Minneapolis*, which was lost in Lake Michigan; in 1874, the 532-ton steamer, George King, the 260-ton steamer, Abercorn, the 1,100-ton steamer, City of Duluth, the 980-ton steamer, N. K. Fairbank, which burned in 1895, and the steamer, V. H. Ketchum, of 1,660 tons; in 1875, the 337-ton steamer, Gladys, the 263-ton steamer, Germania, the 80-ton steamer, City of New Baltimore, and the 290-ton propeller, Northern Belle, which burned on Lake Huron in 1898; in 1877, the 371-ton schooner, Bay City, which burned at Detroit in 1891; in 1879, the 55-ton schooner, Agnes, the 521-ton steamer, James P. Donaldson, the 869-ton steamer, Morley, which had its named changed to Grand Traverse and sank in a collision in Lake Erie in 1896, the eight-ton schooner, *Centennial*, and the 91-ton steamer, *Isle Royale*, which sank in 1885; in 1880, the 629-ton schooner, Grace Holland, and the 756-ton propeller, A. L. Hopkins, which foundered in 1911; in 1881, the 564-ton schooner, Nelson C. Holland, the 410-ton schooner, Minnie E. Orton, the 548-ton schooner, Isabel Reed, the 594-ton schooner, Teutonia, the 865-ton steamer, Kate Butteroni, which underwent a name change to Falcon, and stranded in 1909, the 548-ton schooner, T. S. Fassett, the 186-ton steamer, R. J. Gordon, and the 548-ton steamer, Sylvanus J. Macy, which was lost in Lake Eric; in 1882, the 170-ton steamer, Mary, the 400-ton schooner, G. K. Jackson, the 44-ton schooner, R. H. Brown, the 891-ton steamer, J. M. Osborn, which sank in a collision in 1884 near Owen Sound, Ontario, and the steamer, C. F. Curtis, of 502 tons; in 1883, the 435-ton schooner, J. R. Edwards, the 434-ton schooner, William A. Young, the 739-ton schooner, Plymouth, the 136-ton steamer, Pickup, the 522-ton schooner, J. W. Westcott, and the stteamer, Edward Smith, of 523 tons; in 1884, the 212-ton steamer, M. Sicken, and the 38-ton steamer, C. W. Wells, which burned at Amerherstburg on the Detroit River in 1897; in 1885, the 1,457-ton steamer, New Orleans, the 88-ton steamer, Roy, which was crushed by ice in 1895, and the steamer, Alice May, of 27 tons; in 1886, the 76-ton steamer, Harry Cottrell, which foundered in 1897; in 1887, the steamer, Louisiana, of 1.753 tons; in 1888, the 1,478-ton steamer, W. B. Morley, the 228-ton steamer, Miami, and the steamer, Pawnee, of 639 tons; in 1889, the 684-ton schooner, Toltec, the 834-ton steamer, Aztec, the 964-ton steamer, P. J. Ralph, the 1,304-ton steamer, Cherokee, and the propeller, Italia, of 2,036 tons; in 1890, the 260-ton steamer, Tempest, the 906-ton steamer, Newaygo, which burned on Georgian Bay, the 1,290-ton schooner, Chippewa, the 770-ton schooner, Miztec, the 811-ton schooner, Zapotec, and 1,437-ton steamer, St. Lawrence, and the steamer, F. W. Fletcher, of 495 tons; in 1891, the 974-ton steamer, John J. Hill, which went to the Atlantic Ocean; in 1892, the 300-ton steamer, Harvey J. Kendall, the 1,469-ton steamer, Iroquois, and the schooner, Alex Anderson, 738 tons; in 1893, the 886-ton steamer, Wotan, the 982-ton steamer, Santa Maria, the 712-ton schooner, Mingo, and the steamer, Mohegan, of 1,216 tons; in 1894, the 1,324 schooner, Biwabik, and the steamer, Unique, of 381 tons; in 1895, the steamer, George Farwell, of 977 tons; in 1896, the schooner, Connely Bros., of 751 tons; in 1898, the steamer, Isaac Lincoln, of 376 tons; and in 1899, the steamer Maud, of 98 tons, which burned on the St. Clair River in 1917.

In the 1800's, 32 sail-powered and 17 steam-powered commercial vessels were constructed at St. Clair, Michigan:

In 1825, the schooner, Grand Turk, which was lost in Lake Michigan in 1869, and the schooner, *Pilot*, of 34 tons; in 1828, the sloop, *Betsey*, of 24 tons; in 1834, the schooner, *Esther*, of 45 tons; in 1838, the schooner, *Mink*, of 25 tons, in 1842, the 101ton schooner, Uncle Tom, which was wrecked in Lake Erie in 1848; in 1846, the 279-ton propeller, *Goliath*, which was wrecked in 1848 with the loss of 18 lives; in **1848**, the 1,691-ton steamer, *Empire State*, which was converted to a dry dock at Buffalo in 1858; in 1849, the 270-ton brig, F. C. Clark, which was wrecked at Manitowoc on Lake Michigan in 1856; in 1853, the 43-ton steamer, *Traffic*, which was wrecked in 1868; in 1855, the 161-ton schooner, E. K. Gilbert, which sank in Lake Erie in 1868; in 1857, the 20-ton schooner, Twilight, which was lost in Lake Ontario in 1859; in 1858, the 118-ton schooner, H. B. Steele, which was wrecked in Lake Michigan in 1870, and the 54-ton schooner, *Island City*, which sank with the loss of two lives in Lake Michigan in 1894; in 1862, the 26-ton schooner, Hazzard, and the schooner, Margaret R. Goffe, of 278 tons; in 1863, the schooner, *Maid of the Mist*, of 145 tons; in 1864, the bark, *Hemisphere*, of 397 tons; in **1865**, the 59-ton scow, *Liberty*, and the scow, *Mary Amelia*, also of 99 tons; in 1867, the 243-ton schooner Amoskeag, renamed the Horace L. Taber in 1883, and wrecked in a storm on Lake Ontario near Kingston in 1922; in **1869**, the scow, *Growler*, of ten tons; in 1870, the schooner, Agnes L. Potter, of 279 tons; in 1871, the sloop, Myrtle, of 13 tons; in 1873, the 12-ton steamer, Milton Courtright, which burned to a total loss on the St. Clair River the same year the vessel was launched, and the 757-ton steamer, D. M. Wilson, which foundered in Lake Huron in 1894; in 1874, the 16-ton scow, Light Guard, and the steamer, Chauncy Hurlburt, of 1,009 tons; in 1875, the 458ton schooner, Justin R. Whiting, and the schooner, John W. Hanaford, of 326 tons; in **1878**, the steamer, *Oscoda*. of 529 tona: in **1880**, the schooner, *Melbourne*, of 510 tons; in **1881**, the 628-ton steamer, *Ogemaw*, which burned on the St. Clair River in 1922, and the schooner, *Rambler*, of 26 tons; in **1882**, the 16-ton steamer, *Transfer*, the 1,090-ton steamer, *D. C. Whitney*, and the schooner, *Wayne*, of 965 tons; in **1883**, the schooner, *Nipigon*, of 626 tons; in **1884**, the schooner, *Kalkaska*, of 555 tons; in **1885**, the scow, *Tyler*, of 28 tons; in **1886**, the steamer, *Simon Langell*, of 845 tons; in **1887**, the 1,941-ton steamer, *Kaliyuga*, which was lost with all hands in Saginaw Bay in 1907; in **1888**, the 1,163-ton schooner, *Fontana*, which sank in a collision on the St. Clair River in 1900, and the schooner, *Arenac*, of 521 tons; in **1889**, the 823-ton steamer, *Oscar T. Flint*, which burned in Lake Huron, near Alpena, in 1909; in **1890**, the steamer, *Langell Boys*, of 387 tons; in **1892**, the 54-ton steamer, *Penelope*, which burned in Lake Erie in 1909; and, in **1894**, the steamer, *Welcome*, of 212 tons.

On the Canadian side of the St. Clair River, the production numbers pale by comparison to the United States. Most of the shipbuilding focused on the town of Wallaceburg, where there were constructed, in **1862**, the large, 135-foot-long schooner, *Minnie Williams*, of 359 tons, and the 138-foot schooner-barge, *Selkirk*, which remained active until abandoned in 1908; in **1863**, the 190-ton scow, *Fenton*, with a length of 111⁴, the 64-ton scow, *Oriental*, and the 92-foot scow, *John Bruce*, of 107 tons; in **1864**, the 80-foot scow, *Brandywine*, of 61 tons, and the scow, *Commerce*, of 106 tons; in **1865**, the 126-foot, two-masted schooner, *Serepta*, which became the *Mary Everett* in 1880, and was converted to a three-masted schooner in 1887, but sank in Lake Ontario on November 18, 1903; in **1866**, the 62-foot scow, *Faith*, of 47 tons;⁵⁰ in **1867**, the 117-foot paddlewheel steamer, *Dominion*, which burned near Chatham, Ontario, in the summer

⁵⁰"List of Vessels on the Registry Books of the Dominion of Canada, 1874." (Ottawa: Ministry of Marine and Fisheries, 1875): pages not numbered.

of 1875.⁵¹ and the 40-ton scow, *Flamingo*, measuring almost 65 feet in length;⁵² in 1868, the 54-foot, 31-ton tug, Shamrock, renamed Reindeer in 1871, burned to a total loss in 1875;53 in 1869, the 97-foot, 136-ton steamer, P. E. McKerral, which burned in September, 1878, at Collingwood,⁵⁴ and the 35-ton steamer, *Reindeer*, with a length of 72. feet;55 in 1870, the small, 22.26-ton steamer, J. B. Newman, built by Isaac Dolson, and dismantled in 1891, and the 90-foot-long propeller-driven steamer, Alexander Watson, which burned to a total loss on the St. Clair River a year later⁵⁶; in 1871, the 86-foot, 119ton steamer, Coral, which foundered in 1887 on Lake Huron;⁵⁷ in 1872, the 36-ton steam barge, W. S. Ireland, built by Captain Steinhoff and broken up 37 years later; in 1873, the small, 17-ton paddlewheel steamer, J. B. Newman, with a length of 60 feet;⁵⁸ in 1874, the 312-ton, 123-foot steamer, J. W. Steinhoff, which was broken up in 1909 after 35 years of service;⁵⁹ in 1875, the 16.78-ton steam tug, Harry Sewell, which sank at the sugar company slip in Wallaceburg on December 16, 1907; in 1876, the 59.34-ton sailing vessel, Eddy, which wrecked on Lake Erie in late 1893; in 1877, by John Lee, the diminutive 1.48-ton steam tug, *Dodger*, which was broken up in the St. Clair Flats thirteen years later; in 1878, the sail barge, Kent, of 73.93 tons, launched on June 1 and abandoned in 1885; in 1880, the 31.10-ton steam tug, William F. McRae, built by W. J. McDonnell and dismantled at Sorel, Quebec, 43 years later, and the four-and-a-half ton

⁵³Mills, op. cit., 110.

⁵⁴Ibid., 90.

⁵⁷*Ibid.* 31.

58"List of Vessels...1874," op. cit.

⁵¹John M. Mills. Canadian Coastal and Inland Steam Vessels, 1809-1930. (Providence, Rhode Island: The Stramship Historical Society of America, Inc., 1979): 35.

⁵²"List of Vessels...1874," op. cit.

^{55&}quot;List of Vessels...1874," op. cit.

⁵⁶Cris Kohl. *Shipwreck Tales: The St. Clair River (to 1900).* (Chatham, Ontario: published by Cris Kohl, 1987): 63.

⁵⁹Kohl. Shipwreck Tales: The St. Clair River (to 1900). op. cit., 60.

steam tug, Uncle John, built by William McDonnell, owned by William C. Lee, mastered by Daniel Huff, and broken up in 1894; in 1881, the William McDonnell-built sailing ship, Minnie, of 63.35 tons, the 78.84-ton sail barge, Endeavour, built by William Taylor and dismantled at Amherstburg only six years later, and the sailing ship, Gondola, of 91.06 tons; in 1882, the large, 168.86-ton steamer, Byron Trerice, built by William R. Peck and burned at Learnington, Ontario, in December, 1893, and the steamer, Beatrice, of 45.06 tons, built by William McDonnell and burned four scant years later at Port Stanley on Lake Erie on July 15, 1886; in 1883, the steamer of 70 tons, *Energy*, built by William Taylor and dismantled at Amherstburg on January 12, 1915, and the sailing ship, Collina, of 62.09 tons, built by Fred Harris, but burned on Lake St. Clair in 1891; in 1884, the sailing ship and tow barge, Rover, built by William Taylor and sunk at Marine City, Michigan, twenty years later, the small, 18-ton steam tug, *Grace Darling*, built by William Taylor and dismantled in 1902, and the steamer, A. T. Kelly, of 26.32 tons, built by William McDonnell and burned only a year later on the St. Clair River on November 14, 1885; in **1885**, the steamer, Ariadne, of 36 tons, built by William McDonnell, but which was beached and abandoned at Point Pelee, Lake Eric, on November 23, 1916, and the steamer, Juno, of 210 tons and 140-foot length, which was abandoned as a breakwall near Cobourg, Ontario, in 1914, in Lake Ontario;⁶⁰ in 1887, the tow barge of 63.91 tons, built by William McDonnell and named the Active, but which became inactive when she was broken up in 1909, and the Arbutus, a steamer of 33.65 tons built by William McDonnell;⁶¹ in 1888, the 52-ton, 61-foot steam tug, John Lee Sr., which burned in August, 1913, at Port McNichol, Ontario, after having been lengthened to 86 feet in 1896.62

⁶⁰Cris Kohl. Dive Ontario! (Chatham, Ontario: published by Cris Kohl, 1990): 63.

⁶¹Kohl, Shipwreck Tales: The St. Clair River (to 1900), op. cit. ⁶²Mills, op. cit., 63.

At Sarnia were built the 200-ton brigantine, Christina, in 1846; the 180-ton, three masted schooner, Globe, in 1847; the 198-ton schooner, Christiana, the 300-ton, threemasted schooner, Sinbad, and the 60-ton scow-schooner, Sarnia, in 1848; the 200-ton, three-masted schooner, C. C. C., and the 165-ton schooner, Lochiel, in 1853; the 134foot steamer, *Colonist*, of 341 tons, in **1854**, but wrecked near the Straits of Mackinac in November, 1869; in 1859, the 154-foot steamer, Michigan, which was rebuilt as a barge in 1884; in 1861, the 123-ton schooner, Garabaldi, bearing a length of just over 95 feet; in 1864, the paddlewheel steamer, W. J. Spicer, measuring 154 feet in length; in 1865, the 43-foot, 16-ton pocket schooner, Mary; in 1866, the small schooner, Mina, measuring slightly over 50 feet in length, registering 33 tons; in **1870**, the schooner, Admiral, with a length of 60 feet; in 1873, the 138-foot schooner, Wawanosh, of 370 tons, which was dariven ashore and destroyed on December 6, 1906; in 1875, the huge Huron, a 239-foot steamer; in 1881, the 126-foot steamer, Wales, which was abandoned in 1904; in 1882, the steamer, United Empire, measuring 253 feet in length, but which, renamed the Saronic. burned at Cockburn Island in August, 1916 and was rebuilt as a barge;⁶³ and in **1890**, the 2,017-ton, 240-foot steamer, *Monarch*, which was lost at Isle Royale in Lake Superior in late 1906.

At Wilkesport, Ontario, just south of Sarnia, were built, in **1862**, the scow, *Kent*, measuring 90 feet in length and 102 tons, and the 97-foot scow, *Lady Samson*, of 85 tons, in **1873**.⁶⁴

At Sombra, Ontario, were constructed, in **1858**, the 28-ton schooner, *Lucks-all*, measuring almost 57 feet in length, in **1867**, the 90-foot scow, *Echo*, of 110 tons, in

⁶³*Ibid.*, 120.

^{64&}quot;List of Vessels...1874," op. cit.

1869, the 56-foot scow, *Philamine*, of 32 tons,⁶⁵ and, in **1871**, the 85-foot steamer, *Elijah Windsor*, which foundered near Port Huron thirty years later,⁶⁶

At Port Lambton were built, in **1872**, by James D. McNulty, the steam barge, *Messenger*, of 11.87 tons, and which was dismantled in May, 1900, and the 68-foot scow, *Champion*, of 36 tons; in **1873**, the 52-ton scow, *Samson*, with a length of 81 feet, and the 72-foot scow, *Etta*, of 49 tons;⁶⁷ and, in **1875**, the sailing ship, *Relief*, of 49.66 tons, launched on July 20.

At Walpole Island, the 90-foot-long steamer, *Ada E. Allen*, slid down the launchramp in **1872**, but burned at Amherstburg, Ontario, in September, 1887.⁶⁸

The nineteenth century maritime losses in the St. Clair River deserve a brief examination. Of the 116 commercial vessel sinkings where a cause could be ascertained, 46 involved sailing or towed vessels, while 70 related to steam-driven ships. It is no surprise that only three of the sailing or towed vessels burned in a fiery demise, since they did not utilize engines or boilers that required fire power. On the other hand, 34, or nearly half, of the steam-driven vessels that ended their histories on the St. Clair River did so by burning. Similarly, no sail or towed vessel exploded, whereas five of the steam-powered ships sank after the pressure in their boilers became too great, causing explosions. With the high volume of maritime traffic and the narrow nature of the St. Clair River, it is not surprising that 19 sailing or towed vessels sank in collisions, and that 16 of the powered ships sank that way. Eighteen of the sailed or towed vessels sank because their hulls leaked, indicative

⁶⁵*Ibid*.

⁶⁶Mills, op., cit., 38.
⁶⁷"List of Vessels...1874," op. cit.
⁶⁸Ibid., 4.

of advancing vessel age, poor construction, or poor maintenance; eleven of the stearnpowered ships sank when their hulls sprang leaks. Finally, in the 1800's, three commercial sailing vessels were abandoned along the shores of the St. Clair River due to age and condition, whereas only one steamer met that fate, statistics which are indicative of the fading age of wind-powered water transportation, and an emphasis on maintaining and improving artificially and independently created power sources at the turn of the century.⁶⁹

In the twentieth century, shipbuilding along the shores of the St. Clair River declined dramatically from that of the previous century. Much larger vessels slid down the launchramps than ever before, and because their sizes had incredibly increased, their numbers proportionately decreased. The transition was complete in the twentieth century, when wood as a shipbuilding material was replaced by steel. Expansive forests conveniently situated for vessel construction had once solidly covered the St. Clair River area, but raw materials for building steel ships were absent here, and had to be transported to the shipyards at considerable expense.

Proportionately fewer, but inversely larger, vessels were constructed in the St. Clair River region in the twentieth century:

At Port Huron, in **1900**, were built the 2,402-ton steamer, *Ravenscraig*, the 4,719ton steamer, *Captain Thomas Wilson*, and the 992-ton steamer, *Charles S, Neff*; in **1901**, the 2,183-ton steamer, *Kennebec*, and the 4,719-ton steamer, *Henry Steinbrenner*, which sank in a collision in 1909; in **1902**, the 2,182-ton steamer, *Kanawha*, the 4,731-ton steamer, *John B. Cowle*, which sank in a collision in 1909 with the loss of 15 lives, and the steamer, *Hyacinth*, of 677 tons; in **1903**, the ill-fated steamer, *Eastland*, of 1,961 tons,

⁶⁹Kohl, Shipwreck Tales: The St. Clair River (to 1900), op. cit. Statistics were compiled from material throughout the book.

which caused the greatest single loss of life maritime disaster on the Great Lakes when it capsized in Chicago harbour in 1915, killing 812 people, and the steamer, *F. B. Squire*, of 4,583 tons; in **1907**, the 510-ton barge, *Alfred E. Hunt*, and the 160-ton scow, *Cuilene Rhu*.

Built at St. Clair, Michigan, in 1900, was the steamer, Alfred Mitchell, of 1,751 tons; in 1903, the 1,090-ton steamer, Winnebago, and the 1,244-ton steamer, John C. Howard, both vessels ultimately lost in the Pacific Ocean; in 1905, the 4,978-ton steamer, George H. Russell, and the steamer, Frank J. Hecker, of 4,978 tons, and which was scrapped in 1961; in 1906, the steamer, Ashtabula, of 2,690 tons; in 1907, the 4,478-ton steamer, John Mitchell, and the steamer, William B. Davock, of 4,468 tons, which sank in Lake Michigan with all hands in a 1940 storm; in 1908, the steamer, Normania, of 4,871 tons and the steamer, Adam E. Cornelius, of 4,900 tons; in 1909, the 3,849-ton steamer, North Star, and the steamer, North Lake, of 3,861 tons; in 1910, the 6,077-ton steamer, Harry Yates, and the steamer, Theodore H. Wickwire, Jr., of 6,077 tons.

The Marine City yards built even fewer ships: in 1900, the steamer, Alva C. Chisholm, Jr., of 435 tons, which was scuttled in Lake Erie in 1937; in 1902, the steamer, Edward P. Recor, of 368 tons; in 1906, the seven-ton steamer, Gas Gem; in 1909, the 44-ton barge, Kenyon, and the barge, Ruth, of 14 tons; in 1913, the steamer, Welcome; in 1918, the McLouth shipbuilding yards contracted to build nine tugboats for the United States Shipping Board, probably for the war effort, but only three were launched, none was completed, and six were not even started, presumably because the war ended by year's end. Of the three that were launched as bare hulls, one was sold to Canadian interests (hull number 2415, tentatively named the Seafarer before being sold) and two (hulls number 2416 and 2417, tentatively named Adventure and Protector respectively) were made into barges, Peerless No. 1 and Peerless No. 2. Numerous

rebuilds of existing, aging vessels kept the Marine City builders solvent between 1919 and 1921.⁷⁰

In 1878, Canada had actually ranked fourth among the shipowning nations of the world,⁷¹ buoyed largely by the success of the Cunard transoceanic service established on the east coast. Great Lakes vessel construction played a significant role in Canada's rise to that global position. However, in the final decades of the nineteenth century, Canada fell behind in shipping and shipbuilding participation, mainly due to a failure to keep up with technology and education. Steel and engineering skills, which Canada lacked, became vital for a successful shipbuilding industry by the turn of the century.

Consequently, vessel construction on the Canadian side of the St. Clair River in the twentieth century was considerably more modest than on the United States side: the 122foot oak-hulled bulk freight steamer, *D. A. Gordon*, was launched at Wallaceburg in **1902**, but fire destroyed it there on April 20, 1909, the 81-foot steamer, *Earl Bess*, was built at Wallaceburg in **1904**, but was dismantled in 1949,⁷² while the 105-foot tug, *Sarnia City*, was launched at Sarnia in **1909**, only to be relocated to Newfoundland in 1941.⁷³ The 99-ton tug, *Jean Fraser*, was launched at Wallaceburg in **1926**, only to be broken up 25 years later.⁷⁴

Although it enjoyed dizzying heights of success in the 1800's, particularly on the United States side of the border, commercial shipbuilding as a St. Clair River activity died out in the early part of the twentieth century as the need for larger shipyards and wider

⁷⁰Untitled, undated, and anonymous mimeographed sheet from the Marine City Public Library, listing the maritime construction and rebuilding activity in the community in the early twentieth century; acquired in 1986.

⁷¹The Canadian Encyclopedia. Second Ed. (Edmonton: Hurtig Publishers, 1988): s.v. shipping industry.

⁷²Mills, op. cit., 36.

⁷³ Ibid., 109.

⁷⁴*Ibid.*, Supplement No. 2, 1983.

tributary rivers for launching huge steel ships grew. Places like Wyandotte, Michigan, and Cleveland, Ohio, became the ideal locations for launchings of the twentieth-century super-vessels.

CHAPTER IV

Dredging and the Installation of Aids to Navigation

Following World War II, wrecking and salvage work dropped off sharply; by the 1980's, such work was virtually non-existent. Great Lakes marine historian, Frank Prothero, quipped in 1987 that, "The fastest way to go bankrupt is to set up a salvage company on the Great Lakes."⁷⁵

Among the causes for the rapid decline in salvage work were the retirement of many older, smaller ships, the operation of more effective rescue and safety equipment and vessels by the Coast Guard, and the widespread use of modern aids to navigation.

The St. Clair River developed its navigation safety measures over a gradual length of time, dependent upon factors such as increased traffic on the river and improved electronic technology in the areas of radio, lighting for buoys and lighthouses, and radar. Even though shipwrecks and marine disasters reflect some of the most colourful aspects of nautical life, humanity has aimed at developing preventative measures.

The first aid to navigation installed in the St. Clair River area was the Fort Gratiot lighthouse, just above the river at Port Huron, Michigan. Erected in 1825 and lighted for the first time on August 25th that year, this structure was 32 feet tall, with an 18-foot diameter at the base and a 9.5-foot diameter at the crown, which was topped by a copper

⁷⁵Frank Prothero, to the author, at St. Thomas, Ontario, November, 1987.

dome equipped with a smoke ventilator and wind vane. The cupola housed ten Lewis patent lights and their associated reflectors.⁷⁶

This lighthouse, Michigan's first, certainly proved useful in guiding ships downbound on Lake Huron to the safety of the mouth of the St. Clair River, but its haphazard construction spelled its downfall. The building contract called for the lighthouse to be constructed of quarried stone, but the finished product consisted of beach cobbles cemented together with ordinary mortar, which crumbled increasingly with each storm. To top it off, the lighthouse sat on a foundation of log timbers! The lighthouse keeper, who was paid the sum of \$350 a year for his services, anticipated the collapse of this lighthouse, built just three years earlier at a cost of \$6,000, in severe weather in late November, 1828.⁷⁷

In April, 1829, a contract for the construction of a new lighthouse for the sum of \$4,445 was signed. This structure, placed 400 yards north along the lakeshore, is still standing today.⁷⁸ With a height of 69 feet and a diameter of 25 feet on the ground, and its solid brick construction on firm foundation, it was bargain-priced compared to its predecesor. Today, its green light, flashing every six seconds, stands atop the lighthouse at a height of 82 feet above the lake, with a visibility range of 16 miles.

The northern entrance to the St. Clair River is also marked by a set of ranges, first constructed in 1891 and rebuilt in 1899 and 1916, on the west side of the river, in this case consisting of two fixed green lights on the Port Huron shore which, when lined up, one behind the other, guide vessels into the mouth of the river under the Bluewater Bridge.⁷⁹

⁷⁶Bruce Hawkins. "A Miserable Piece of Workmanship." *Michigan History*, July/August, 1989, Vol. 73, No. 4: 41.

⁷⁷Ibid., 42.

⁷⁸Ibid.

⁷⁹Coast Guard Light List, Great Lakes, United States and Canada. (Washington, D.C.: U.S. Government Printing Office, 1982): 79.

In 1963, just upstream from the Bluewater Bridge, a red navigation light was positioned 29 feet above the water on a white, circular tower, on the east side of the river.⁸⁰

Besides the north end of the river being marked by an easily noticed light, the south entrance would be even more difficult to locate for mariners if the correct tributary in that watery maze were not marked by aids to navigation.

The first of the important St. Clair Flats lights was established in 1889, one light on the north side of the South Channel, a set of range lights on Harsen's Island, and another set of range lights on Russel Island to assist the upbound navigator. In 1913, several more lights were established, one on the south end of the St. Clair Flats Canal pier, another at the Southeast Bend light opposite Joe Bedore's wharf, yet another Southeast Bend light at the entrance to Little Bassett Channel, and a light on the south side of Squirrel Island.⁸¹ By 1913, traversing the St. Clair Flats, even by night, had become a relatively simple exercise thanks to the installation of these aids to navigation.

Originally, the St. Clair River emptied into Lake St. Clair through seven principal mouths, or passes, and while each of these passes often afforded good water, especially the North, Middle, and South passes, all were seasonally obstructed by marly and sand deposits forming bars in Lake St. Clair, thereby reducing the available depths at the channel entrance: from two to six feet.⁸² Getting stuck in the Flats was a common experience for passing craft until late in the 19th century.

The channel ordinarily used by vessels previous to the construction of the present canal was known as the North Channel, and saw improvement from 1855 to 1858 to a

⁸⁰Ibid.

⁸¹*Ibid.*, 76-77.

⁸²Annual Reports of the War Department, Chief of Engineers, U.S. Army, (Washington, D.C.: Government Printing Office, 1896): 2882.

depth of 11 feet. The Secretary of War in 1857 announced some good news for the St. Clair River area:

I have the honor to acknowledge the receipt of the resolution of the Senate..."that the Secretary of War lay before the Senate any additional information that has been received about the St. Clair Flats, and a copy of the chart of said flats, and to state the amount of any additional appropriation, if any, that may be required for said work."⁸³

The report was signed by the Secretary of War, the Honorable Jefferson Davis, who was soon distracted by concerns more vital than the St. Clair River.

The South Channel was also deepened, to a depth of 11 feet in 1858, increased to 13 feet in 1871, to 16 feet in 1874, and to 20 feet in 1887.⁸⁴ By the end of the century, this was the channel of choice for commercial vessels.

By the summer of 1893, a double row of sheet piling had been driven along the dike; the decayed wooden superstructure was also replaced. The canal now maintained a minimum depth of 18 feet.

By the turn of the century, the canal was bounded on each side by a dike 7,221 feet long. These dikes consisted of timber cribs resting upon piles driven into the original bottom of the shoal, the crib pockets being filled with material dredged from the channel and the crib backed with dredged material.

Rather than describe each bucket of mud, marly, and sand that was dredged from the St. Clair River, although the details of each excavation are quite accessible and the temptation is great, I will list the appropriations for improving the St. Clair Flats Canal:

⁸³Senate, 34th Congress, 3d Session. (Washington, D.C.: Government Printing Office, 1857): 1.

⁸⁴Ivan Walton. "Developments on the Great Lakes, 1815-1943." Michigan History Magazine, Winter, 1943: 121.

August 30, 1852	\$20,000
July 8, 1856	\$45,000
June 23, 1866	\$80,000
March 2, 1867	\$150,000
July 25, 1868	\$86,000
April 10, 1869	
July 11, 1870	\$16,500
March 3, 1871	\$1,500
June 10, 1872	\$4,000
March 3, 1873	\$100,000
June 18, 1878	
March 3, 1879	\$3,000
June 14, 1880	\$2,500
August 5, 1886	\$18,750
August 11, 1888	\$75,000
September 19, 1890	

These were incredible sums of money for Congress to be spending, indicative of the importance of not only maintaining the commercial accessibility of the St. Clair River waterway, but also for improving it to allow increased traffic.

What sort of work was being done on the St. Clair Flats waterway? Besides the major expense of annual dredging to remove the build-up of sand at the mouth of the channel, the operating and care also involved paying someone to do

the routine work of watching traffic through the canal and reading water gauges....The pile revetment of dikes was slightly damaged on several occasions by passing vessels, and the necessary repairs were made. Other minor repairs were made, such as securing loose revetment timbers or plank, and the trees on the dike were trimmed.⁸⁶

⁸⁵Annual Reports of the War Department, Chief of Engineers, U.S. Army. ... 1896. Op. cit.,: 2886.

⁸⁶Annual Reports of the War Department, Chief of Engineers, U.S. Army. (Washington, D.C.: Government Printing Office, 1901): 3189.

The 1901 Report of the Chief of Engineers, U.S. Army, makes this explosion in marine traffic clear: "For each ton of freight then [in 1871, 30 years earlier] passing through the canal, we now have at least 14 and possibly 15 [tons]."⁸⁷

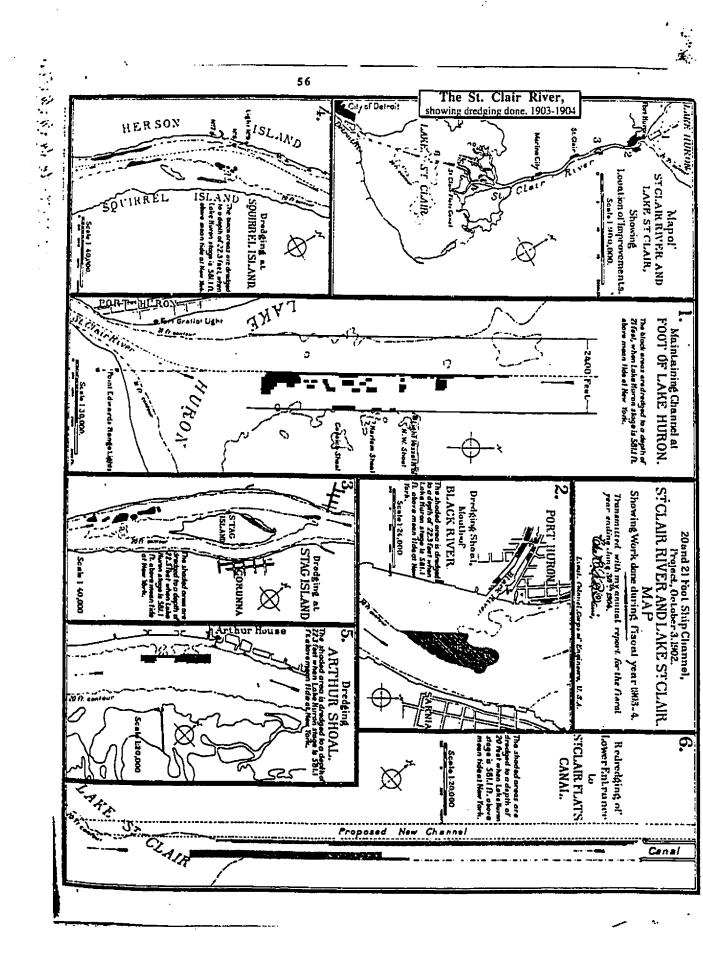
The gradual, but determined, increase in tonnage passing through the St. Clair River at the turn of the century can be seen in this chart:

Year	Tons	Value
1891		
1898		
1899		
1900		n.a.
1901	48,000,000	n.a.
1902	41,773,998	n.a.
1903	42,000,000	n.a.
1904	38,044,929	\$403,276,247
1905	51,359,071	\$483,802,449
1906	60,589,441	\$629,524,292
1907	66,271,962	\$648,802,508
1908	50, 586, 560	n.a.
1909	62,895,134	n.a.
1910	68,965,947	\$723,452,784
1911	61,498,884	\$684,482,579
1912	72,871,432	\$795,756,037
1913	78,857,492	\$856,392,403
1914	63,799,286	\$731,139,818
1915	76,990,239	\$953,139,159
1916	95,370,752	\$1,010,929,971
1917	88,738,438	\$1,182,883,379
		\$955,920,199
		\$924,045,923
1920	75,602,648	\$1,067,509,39088

The tonnage of freight passing through the St. Clair River in the 30 years between 1891 and 1920 quadrupled, so it was logical that expenditures would be made to maintain

⁸⁷ Ibid., 3188.

 ⁸⁸Compiled from the Annual Reports of the War Department, Chief of Engineers, U.S. Army. (Washington, D.C.: Government Printing Office, 1892, 1899, 1900, 1901, 1902, 1903, 1904, 1905, 1906, 1907, 1908, 1909, 1910, 1911, 1912, 1913, 1914, 1915, 1916, 1917, 1918, 1919, 1920, and 1921.)



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that important navigable river. As it was, most of the expenditures were for dredging of the Flats area, in the never-ending struggle against Mother Nature in that delta.

Even during the Great Depression, government, realizing the economic importance of maintaining open thoroughfares for the transportation of goods, added public works funds to their regular funds for the continuation of the necessary annual dredging of the St. Clair River. Of the total 1934 St. Clair River dredging expenditure of \$1,016,550.01, \$865,744.00 came from Public Works funds.⁸⁹

The major changes to the St. Clair River in mid-twentieth-century included a 1930 authorization to deepen the St. Clair Flats Channel to 26 feet, a widening of the channel at Southeast Bend to 700 feet in 1945, the widening and deepening of the Southeast Bend Channel and improving the outlet of the old North Channel for small craft in 1946, and, in 1956, deepening the St. Clair River to a minimum of 27.1 feet to provide safe navigation by vessels with drafts of 25.5 feet, and constructing a cutoff channel in Canada at Southeast Bend in order to abandon the old Southeast Bend Channel.⁹⁰ Government expenditures for work on the St. Clair River alone amounted to over \$19,000,000 in 1971-1972.⁹¹

Of the dozens of aids to navigation along the St. Clair River, the most vital ones, namely those at each end of the river, have already been described. For an idea of the most important mid-river representatives of these silent nautical assistants early in this century, the following 1921 excerpt gives a factual account:

⁸⁹Annual Reports of the War Department, Chief of Engineers, U.S. Army. (Washington, D.C.: Government Printing Office, 1935): 1268.

⁹⁰Annual Reports of the War Department, Chief of Engineers, U.S. Army. (Washington, D.C.: Government Printing Office, 1972): 31-42, 31-43.

⁹¹*Ibid.*, 31-34.

[There are] many lights on the St. Clair River to help the sailor....There are range lights at Point Edward, a gas buoy at the head of the middle-ground at Port Huron, also one at the head of Stag Island. There are ranges at Corunna, a beacon at Marysville, Stag Island lighthouse, gas buoy at St. Bernard's Point, one at the head, middle, and end of the bar at St. Clair, lighthouse at Recor's Point, gas buoy at each end of Faron [sic; this should read "Fawn"] Island, and one at the head of Harsen's Island. There are ranges at the mouth of the Snye Cart [sic; this is the "Chenal Ecarté"] and at Harsen's Island, two beacon lights on the shore of Walpole Island and on Squirrel and Russell Islands. The south east bend shows seven lights and lower ranges on Russell's Island. There is a lighthouse on the center pier of the St. Clair Ship Canal, a gas buoy and lighthouse in the center of the pier at the south end of the canal.⁹²

As long as people sail the Great Lakes, and regardless of the size of their vessels, or the extent of their navigation and safety equipment, and how skilfully they can use them, there will always be risk and danger. In fact, the Great Lakes offer us a box seat from which to view the panorama of life itself ---- the struggle of humanity against the forces of nature. The best seat in the house is along the shores of the St. Clair River.

⁹²Emeline Jenks Crampton. *History of the Saint Clair River*. (Written for the Centennial of the Founding of St. Clair County on May 8, 1821. Dated June 13, 1921): 16.

CHAPTER V

Insurance and Great Lakes Maritime Losses

A 1919 treatise entitled "St. Lawrence and Great Lakes, Marine Insurance Possibilities" by Henry Timmis of the the New York City Insurance Broker firm of O'Keefe and Lynch, perhaps best summarizes the magnitude of shipping traffic on the St. Clair River early in this century:

> We now proceed up the St. Clair River...to reach the cities of Port Huron, Michigan, and Sarnia in Ontario. It is at one of these four points [the other two being the previously mentioned cities of Detroit and Windsor] that one comes to realize the magnitude of the transportation business on the Great Lakes. Vessels of all kinds, but chiefly cargo carriers, are passing up and down during the season of navigation in a continuous stream. There is undoubtedly more marine traffic passing this point than any other place in the world. It has been stated that during the period of navigation on an average a vessel passes the city of Detroit every minute of the day and night during the entire open season.⁹³

Marine traffic increased significantly on the Great Lakes in the mid-1800's, and underwriters were there from the beginning, utilizing a system of vessel evaluation based upon age and condition. Canada, such as it was in 1854, used the British system: vessels wishing insurance were inspected annually at the owner's expense, and the ship's rating duly registered with the underwriters, who published the results. A First Class registration was identified by the symbols "*A.1." or "A.1.," which meant that the vessel had no

⁹³"Live Articles on Marine Insurance." A series of articles reprinted from "The Weekly Underwriter," 1918-1919. (New York: The Underwriter Printing and Publishing Company, 1919): 93.

difficulty obtaining insurance at the standard rate because it was either a new ship or had recently been rebuilt and overhauled. A Second Class registration used the symbol "Æ." in the registration book; for all vessels bearing this mark, five per cent was added to the insurance premium on vessels and cargoes. These carriers were considered relatively safe insurance risks on an individual trip basis, but for the owner of such a vessel wishing to purchase coverage for the entire season, a ten per cent additional fee was levied. A Third Class registration, "presented by the symbol "E.," was considered a poor risk, with ten per cent being added to the premium of insurance on all vessels and cargoes shipped by them bearing this mark; no season policy could be issued on a vessel classed "E." The "scarlet letter" in Canadian Great Lakes marine insurance registration was "Z." No insurance could be taken on any vessel bearing this mark, or upon any cargoes shipped by them.⁹⁴

Some examples of these various classifications are in order. Most vessels listed in 1854 were classified as First Class; undoubtedly, the underwriters' records do not list all of the vessels operating on the Great Lakes out of Canadian ports at that time, since owners who knew their ships would fail to make that grade declined inclusion in an annual inspection, and risked operating their vessels with no insurance safety net. Similarly, any business they won likely came their way knowing that an uninsured vessel operated as such; cargo owners had to decide if the cheaper rate was worth the risk of utilizing an uninsured hull to convey their goods.

Iron as hull construction material was relatively new in 1854, but it was recognized as being much stronger than wood, and, hence, less of a risk for an insurance company. For example, the 300-ton steamer, *Peerless*, built at Niagara in 1853, appraised at £15,000 and rated the highest, "A.1*," for both hull and cargo, earned the impressive remarks,

⁹⁴"Register of British Shipping, Inland Waters, 1854." (Toronto: George E. Thomas & Co., 1854): pages not numbered.

"Built of iron. Engine 200 horsepower." Many wooden vessels also earned top rating; the 800-ton wooden propeller, *Brantford*, built in St. Catharines in 1851 and deemed to have a value of £5,000 in 1854, earned the "A1*" classification, with the remark, "Good engine." The small, wooden, fore & aft schooner of 120 tons, *Paragon*, built in Oshawa in 1853, was described as "well built" and valued at £2,000; it, too, earned the "A1*" rating.

Among the vessels rated " \mathcal{A} " was the 1847, Chatham-built brigantine, W. D. *Eberts*, appraised at having a value of £1,500, but with the remark that the vessel had been strained with a load of railroad iron in 1853, which presumably had weakened her hull integrity and knocked her down a notch in insurance ratings.

The *Isabella*, a fore & aft schooner built at Kingston in 1835 and rebuilt at Cobourg, Ontario (or Canada West, as it was known then), in 1844, was valued at only £300 in 1854, classified "E" for both hull and stores, with the remark that she was "fit only for lumber" (meaning operation in the lumber-transporting trade only.) Similarly, the 110-ton scow-schooner, *Square Toes*, built in Chatham, Canada West, by W. Eberts & Company in 1850, rated an "E" category, with a value of £350 and described as "only fit for staves."

In the entire 1854 rostrum, only one vessel earned a "Z" rating, much to the probable embarrassment of her owner. The small scow-schooner, *Flying Dutchman*, built in 1845 and registered at Port Rowan, was valued at only £150 and declared "only fit for lumber."⁹⁵

In the United States, by the mid-1860's, a "Lake Vessel Register" detailed a system of classification that stayed in use until well into the twentieth century. This annual register made it clear that this information was the "Private Property of the Board of Lake

95Ibid.

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Underwriters, designed exclusively for the use of its Members in effecting Insurance, and for no other purpose whatever."⁹⁶

This system of classification, adopted by the Board of Marine Inspectors in August, 1856, and approved by the Board of Lake Underwriters in February of the following year, divided vessels into three classes --- A, B, and C --- with each class further divided into two grades, namely, A1 and A2, B1 and B2, and C1 and C2. Barges, being low-priority vessels, were classed simply by number; No. 1 and No. 2 were eligible for grain cargoes, while No. 3 was for lumber and similar freight.

In accordance with the rules of the Board, vessels built of wood were entitled to the A1 classification for five years, at the expiration of which time, if the ship was sound and in good order, she was classified A2 for a period of three years, B1 for two years, B2 for two years, before sliding automatically into Class C.⁹⁷

New vessels that, for whatever reason, were classed as A2, were entitled to remain in that grade for five years, B1 for three years, B2 for two years, and from there, proceeded into Class C.

> At any time, however, vessels are liable to be surveyed, and if from any cause whatever, such as stranding, collision, dry rot, or deficiencies in material, &c., a vessel be found unworthy to remain in her Class, she shall be placed in the grade to which she is entitled. But if the damage or deficiencies be promptly made good to the satisfaction of the Inspector, she may remain in her Class.⁹⁸

⁹⁶"Lake Vessel Register." (Buffalo, New York: The Board of Lake Underwriters, 1866): title page.
⁹⁷Ibid.

981bid.

The Board of Lake Underwriters took into consideration vessels that were rebuilt, or which received extensive repairs. These vessels had the potential of having their grade either continued or raised. But in no case could any vessel continue in the A1 classification longer than five years, or be raised to that grade after that age.

Again, ships built of iron gained status and time. If built of proper thickness and strength, was well-fastened and divided into three or more watertight compartments, these vessels were entitled to the A1 rating for ten years, followed by six years in A2, four years in B1, four years in B2, and then into Class C. Iron vessels were always subject to the same exceptions and rules that governed the classification of sail vessels and propeller-driven steamers constructed of wood.

Lastly, flat sail vessels without good "bilge pumps and bilge limbecs," or sail vessels rated B2 or lower, or scows of whatever grade, were not, generally, considered desirable for carrying grain or other similar cargoes.⁹⁹ Undoubtedly, this ruling reflected the concern for the safety of the wooden vessel and crew should the grain cargo get wet and expand.

The constant threat of explosion on board steam-powered vessels prompted their mandatory inspection by government inspectors.¹⁰⁰

By the early 1880's, Great Lakes underwriters who were members of "The Inland Lloyds" were given lists of vessel classifications for use "in the prosecution of Lake Insurance."¹⁰¹ The "C" rating had been replaced by "00" (cyphers), a class that was not insurable. The "A" and "B" classifications had also been altered; their subdivisions now included A1*, A1, A1¹/₂, A2, A2¹/₂, B1, B1¹/₂, and B2. Vessels marked with a "*" had

99Ibid.

¹⁰⁰The Cleveland Herald, Sept. 20, 1883.

^{101&}quot;Vessel Classification of The Inland Lloyds, Canadian Hulls, 1882." (Buffalo, New York: Printing House of Matthews, Northrup & Company, 1882): title page.

added strength build into them in the form of diagonal iron strapping on the vessel frames before the planking was attached. Another factor that increased the insurance rating of a vessel was the existence of iron banding, referring to a band of iron that was run around the vessel at the heads of the frames, to which diagonal strapping was riveted.¹⁰²

Rates for insuring grain cargo varied. The following list of vessel trip rates on grain cargoes moving out of Chicago appeared in 1883, a year in which marine insurance agents argued that there was no money being made in business because rates were so low:

From Chicago (rates are on each \$100)	A1.	B1.
To all ports on Lake Michigan	\$0.10	\$0.20
To all ports on Lake Superior	\$0.20	\$0.22
To all ports on Lake Huron, to the Detroit River	\$0.10	\$0.20
To all ports on Georgian Bay	\$0.10	\$0.20
To all ports on Lake Erie	\$0.10	\$0.25
To all ports on Lake Ontario	\$0.25	\$0.27 ¹ / ₂
To Montreal	\$0.40	\$0.44 ¹⁰³

In marine circles, the talk was that these extremely low rates would not last very long. The following year, in order to survive, the Chicago marine insurance pool hiked its rates dramatically. The press provided an update on the war on hull insurance:

> Vessel owners are still protesting against the rates of hull insurance....The Vessel Owners' Association of Chicago are preparing a plan of action which they think will render ineffective the tariff made by the pool. They are also sending circulars to owners at other ports asking their cooperation. It has been reported that several Eastern companies not bound by the agreement will go into the lake business and write straight A hulls at 4 per cent....¹⁰⁴

102*Ibid*.

¹⁰³The Cleveland Herald, May 18, 1883.

¹⁰⁴The Cleveland Herald, April 2, 1884.

On October 28, 1884, the Chicago Board of Marine Underwriters adopted the following rates on grain cargo insurance, effective October 31, 1884:

From Chicago (rates are on each \$100)	"A" Vessels
To all ports on Lake Michigan	\$0.75
To all ports on Lake Superior	\$1.50
To all ports on Lake Ontario	\$1.30
To Buffalo	\$1.00
To all ports on Georgian Bay	\$0.90
To Sarnia	\$0.80
To Montreal	\$2.00
To Montreal (special)	\$2.25
••	Add 10% on "B1" voceale 10

Add 10% on "B1" vessels.¹⁰⁵

In late 1884, the loss of three vessels, all older, all "B" classification, and all loaded with grain, caused an uproar in Great Lakes marine insurance circles. The barque, *Arabia*, sprang a leak and sank near Tobermory in Georgian Bay, the schooner, *Golden West*, foundered nearby, and the *Fillmore* ran on Waugoschance Reef. While vessel owners claimed that "B1" vessels were not any more liable to run on a reef than "A1" vessels, prominent marine insurance men raised objections to insuring cargoes shipped in "B1" class, attempting to have such vessels tabooed in the future. One of them stated,

But for the competition which has existed between the companies doing marine business, no B1 vessels would have been engaged in carrying grain this season. Last fall's record shows that more B1 vessels, loaded with grain, were lost than any other class. Why is it so? In the first place, a B1 vessel is generally pretty well advanced in years, and needs a pretty thorough rebuilding. She is classed B1 because there is rot of four inches in frames, either forward or aft, for an average of ten frames. Of course, there are other defects which I will not mention. There is no use to talk about the matter; these B vessels cannot carry grain as safely as A1 or $A1^{1}/_{2}$, vessels, and

¹⁰⁵The Cleveland Herald, Oct. 29, 1884.

I believe that grain cargoes will be written only on A vessels in the future.¹⁰⁶

A month later, the Chicago Tribune, printing a list of disasters to lake shipping for the year 1884, including estimated losses and insurance, concluded, "It has been clearly demonstrated that a vessel rating lower than A2 is not suitable for the grain-carrying trade, and the owners of low-grade craft will doubtless have to confine their boats to cargoes that will float."¹⁰⁷

In the early 1880's, insurance companies on the Great Lakes also became aware that vessel owners were assuming that, if they insured the hull and cargo of their steamer, the engineless barge being towed behind that steamer was covered by this insurance. This loophole was quickly plugged:

> Insurance agents have announced that hereafter double premiums will be charged on cargoes in boats that run in couples --- that is, steamers and consorts, either pushing or towing. Several accidents have lately occurred to such boats, the agents deem it necessary to charge extra premiums. Boat owners, who have to pay these premiums out of their freights, are rather indignant over the increase.¹⁰⁸

Late season insurance became a controversial topic in the mid-1890's, when vesselowners attempted to squeeze the most out of the shipping season in their efforts to insure both their steamers and their towbarges beyond the usual December 1st cut-off date. One insurance agent stated,

¹⁰⁶The Cleveland Herald, Oct. 30, 1884.

¹⁰⁷The Chicago Tribune, Nov. 27, 1884.

¹⁰⁸The Cleveland Herald, June 5, 1883.

I cannot see much danger in navigating the lakes in December, but when barges are put behind them, they are in no shape to meet ice fields. In my opinion, every tow barge should be laid up by December 1. As it is now, with boats fully insured, the risk falls entirely on the underwriters. If the boats get through all right, the owners make a good freight, but if they do not, the underwriters pay for it. 109

By 1895, steel vessels were insured at from $2^{5}/_{8}$ to 3 per cent of their value on yearly policies, covering not only losses to which they may have been subjected, but also for liability for collisions, in which they were held liable for the ioss of the other ship. Wooden steamers in the "A1" class were charged about 1 per cent more, largely on account of the increased fire risk. For lower classes (the "B's," for example), the insurance rates varied from 6 to 15 per cent.¹¹⁰

By the beginning of the twentieth century, vessel classification took more factors into consideration, although fewer categories existed; the B1¹/₂ and B2 classifications had been eliminated. Additional selling points were listed for each vessel possessing them, namely things like "S. S. C." ("Smoke Stack Cased"), "S. P. W." ("Steam Pump Well"), "Dou. Bo." ("Double Bottom"), "E. L." (Lighted by Electricity"), "B. S." (Bows Sheathed with iron at Light Line"), "B. S. L." ("Bows Sheathed with iron at Load Line"), "B. S. L." ("Bows Sheathed with iron and Light and Load Line"), and under the heading of "Construction," "S" for Steel, "I" for Iron, "W" for Wood, and "C" for Composite, which was a combination of iron and wood hull construction.¹¹¹

A few examples of the insurance history of vessels that sank in the St. Clair River will illustrate the rating system in use. The schooner, *Charles Spademan*, built in 1873 at

¹⁰⁹ The Detroit Free Press, Dec. 14, 1895.

¹¹⁰The Detroit Free Press, Dec. 26, 1895.

¹¹¹"Vessel Classification of The Inland Lloyd's, Canadian Hulls, 1902." (Toronto: Dudgeon & Thornton, 1902): title page.

Marine City, Michigan, near the shores of the St. Clair River, sank after being holed in a collision in that river in July, 1903. Even though this ship was described as being "of the type now rapidly disappearing from the lakes,"¹¹² she was salvaged, repaired, and returned to service for another six years before becoming a total loss when ice cut through her hull near Put-in-Bay, Ohio, in Lake Erie in December, 1909. The *Spademan* began life as a low-category vessel, being a "B1" insurance risk by the age of two in 1875 when her value was listed as \$10,000. By 1882, she had slid down to "B1¹/₂" and to "B2" by 1885, when she had an appraised value of only \$3,000. Early in 1889, the *Charles Spademan* needed some major repairs; her insurance classification fell steeply to "00," meaning that she was no longer insurable. That spring, her aft timbers and centreboard case were recaulked, which elevated her to "B1¹/₂" again, with an appraised value of \$4,000. By 1894, she was worth only \$2,500 and rated "B1." Her deck was completely replaced in 1896, which raised her insurance classification to "A2" and her value to \$5,000. More repair work was performed in 1906, resulting in an "A2" classification again, with a value of \$3,500.¹¹³

The wooden steamer, *Robert C. Wente*, measuring 141 feet in length and valued at \$40,000 at her first inspection on June 7, 1888, was launched that year at Gibraltar, Michigan. Seven years later, this vessel was still appraised as an "A1*" ship with a value of \$25,000. By 1899, she rated $A11/_2$, valued at \$18,000. In 1906, repairs kept the vessel at her 1899 rating, but her value could not be maintained, and it slid to \$12,000. By the time the *Robert C. Wente* burned in the St. Clair River on July 1, 1927, she was quite an old vessel, no longer insurable.¹¹⁴

¹¹²The Port Huron Daily Times, Friday, July 17, 1903.

¹¹³"Ship Information and Data Record" on the *Charles Spademan*. The Herman G. Runge Collection. Milwaukee Public Library, Milwaukee, Wisconsin.

^{114&}quot;Ship Information and Data Record" on the Robert C. Wente. The Herman G. Runge Collection, Milwaukee Public Library, Milwaukee, Wisconsin.

A year after the three-masted schooner, *J. Maria Scott*, was launched in 1874, her value was placed at \$20,000 and she rated "A1." When she burned at Port Huron, Michigan, on March 9, 1901, she had been renamed *White Star* and converted to a propeller-driven steamer, but she was worth only \$7,000, and her insurance classification had dropped to "B1."¹¹⁵

Early in the twentieth century, an analysis of the insurance companies' records of losses would show that the most dangerous part of the Great Lakes lay between Lake Huron and Lake Eric (meaning the St. Clair River, Lake St. Clair, and the Detroit River). The financial losses due to collisions and groundings in these areas was duly compared to the Soo passage between Lake Superior and Lake Huron, which, until the late 1890's, furnished an appalling list of disasters. Then, at the request of vessel owners, the government stepped in and undertook the regulation of matters. Ships no longer cascaded past each other out of control at full speed in the narrow channels of the St. Mary's River; with the rigid enforcement of rules came safety. The resulting fewer accidents in that onceperilous passage prompted similar government regulation in the waters between Lakes Huron and Erie:

> ...It is the prevailing opinion among vessel owners that some such action must be taken in regulating traffic in the narrow channel between Lake Erie and Lake Huron....The question will be brought up at the meeting of the Lake Carriers Association in Detroit next month, and if a way to regulate navigation without being too onerous in the loss of time can be found, it will doubtless receive the sanction of that body....¹¹⁶

¹¹⁵"Ship Information and Data Record" on the *White Star*. The Herman G. Runge Collection, Milwaukee Public Library, Milwaukee, Wisconsin.

¹¹⁶The Duluth Weekly Herald, Dec. 12, 1900.

A year later, in a summary of the losses during the season of shipping on the Great Lakes, the treachery of the St. Clair and Detroit Rivers again featured predominantly in the media:

The one item of 133 losses to ships in the crowded channels between Lakes Huron and Erie the past season of navigation has called the attention of vessel owners and underwriters to the dire need of government protection in the handling of vessel property in that, the most important waterway on this continent, if not in the world. Through no other channels anywhere is as much freight carried as through the Detroit and St. Clair rivers. Although the procession of boats is a constant one, every captain is for himself and vessel owners and underwriters pay for the liberty or licence...¹¹⁷

Lastly, a brief look at the marine insurance characteristics of the year 1918 will bring us further into this century.

The rate of insurance on steel vessels on the Great Lakes remained fixed, unlike that on ocean vessels; in 1918, the rate was $3\frac{3}{4}$ per cent. On wooden vessels, the rate, of course, varied according to the age of the vessels and their navigation limits. In 1918, there were 551 losses reported, of which 216 constituted claims to underwriters; 52 resulted from ice damage (it was not until the middle of June that year that ships were able to sail without danger of sustaining damage from ice.) Claims resulting from vessels striking docks, bridges, etc., numbered 40. There were 39 collisions, 26 groundings, and 23 strandings.¹¹⁸

Another form of vessel insurance was becoming popular on the Great Lakes in 1918, namely "detention earnings" insurance, universally charged at $41/_4$ per cent, which committed the underwriting company to pay so much per day to the vessel owner,

¹¹⁷The Detroit Free Press, Dec. 15, 1901.

¹¹⁸"Live Articles on Marine Insurance." Op. cit., 97.

according to the amount of his policy, for each day in excess of seven days, but not exceeding 26 days, that his vessel was detained by casualty from performing her service, other than by total loss.¹¹⁹

The year 1918 was an especially bad year in that the number of partial losses exceeded those of other years. However, when one considers the small premium that was being charged on these vessels in comparison to the amount being insured, it could be easily seen that one loss could tear quite a hole in the premium account.

After 1918, the Great Lakes marine insurance business continued essentially to follow the structure already in place, varying only such things as, for example, the fluctuating rates per unit of the cargo's value. The specific St. Clair River losses that are detailed and examined in Chapter Seven will revive the topic of marine insurance.

119 Ibid., 96.

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CHAPTER VI

The Legalities of Great Lakes Salvage

The evolution of a practical and blissful cooperation in Great Lakes navigation policies between the United States and Canada may insinuate, to the optimist, that a similar situation exists in other areas. Unfortunately, such is not the case. The yellow brick road to an idealistic Great Lakes Compact is a long one, particularly in the topics of salvage and the laws.

For the purposes of this thesis, a simple definition of "salvage" would be the preservation of life or property from some of the many dangers that may be encountered by shipping on the Great Lakes. Prior to World War Two, the common acceptance of the term would have been in reference to the recovery, as soon as possible after a maritime mishap, of a ship and/or its cargo. In more recent times, this would, more often than not, mean the recovery, legal or otherwise, of artifacts or other items from submerged cultural resources. Once the sole realm of hardhat divers and their crews struggling with the elements to overcome the challenge of snatching back, from the clutches of an environment neither natural to humans nor conducive to their survival, property of contemporary value, salvage today includes the concern of maritime archaeologists over the activities of commercial and sport scuba divers.

Since 1679, the Great Lakes have nurtured a burgeoning, subaqueous graveyard for literally thousands of the non-aboriginal watercraft which have dared to venture thereon. LaSalle was certainly more concerned about the monetary value of the beaver pelt cargo and his vessel when the *Griffon* sank than he was in leaving any physical evidence of his failed venture for future archaeologists and historians. Since his day, if a shipwreck was not salvaged, it was simply because it could not be located, or it was in an unsalvagable condition e.g. too deep, too badly broken up, or otherwise too inaccessible, and hence abandoned, or it was abandoned for not being valuable enough to warrant the cost of salvage. It is particularly for this abandoned or unclaimed property that complicated new legislation has emerged since the development of recreational scuba diving after World War Two.

Because the subject vessels of this thesis sank beneath the waters of a connecting Great Lakes waterway, their legal status and disposition are influenced by the doctrines of maritime law. The admiralty laws existing in the United States and Canada have, in large part, been inherited from principles derived from Old English common law and the English statutes derived thereto. Consequently, where controversies arise over the ownership of sunken vessels, frequent reference is made to the Statute of Westminster:

> Concerning Wrecks of the Sea, it is agreed that where a Man, a Dog, or a Cat escape quick out of the Ship, that such Ship nor Barge, nor any thing within them, shall be adjudged wreck; but the Goods shall be saved and kept by view of the Sheriff, Coroner, or the King's Bailiff, and delivered into the hands of such as are of the Crown, where the Goods were found; so that if any sue for those Goods, and after prove that they were his, or perished in his keeping, within a Year and a Day, they shall be restored to him without delay; and if not, they shall remain to the King....¹²⁰

This assertion of ownership over the abandoned or unclaimed property recovered within the King's territorial jurisdiction was an example of what has been termed a royal or

¹²⁰Statute of Westminster, 3 Edward I, ch. 4, (1275). "In case of salvage, the time was extended to a year and a day, in accordance with the Norman law of 1234, during which the owner might sue for his goods." (Frederick C. Hamil. "Wreck of the Sea in Medieval England," a chapter in A. E. R. Boak, ed. University of Michigan Historical Essays. (Ann Arbor: University of Michigan Press, 1937): 16.

sovereign prerogative. That is, included within the inherent and sovereign authority of the Crown is the right to claim ownership to those items which are without a known owner.

The interpretation and scope of the maritime laws existing in Great Britain at the time of the American Revolution have subsequently been given slightly different construction by the United States. Both the English and American rules agree that the original owner of a sunken vessel does not forfeit his property interest therein unless it be established that the vessel has been abandoned, that the original owner has relinquished all legal claim to the item. It is also well recognized that such a divestiture may be expressly or constructively demonstrated, as by disclaimer or by a lapse of time coupled with no recovery efforts. In admiralty law, while a vessel may not be abandoned in the sense that its owners have intentionally relinquished all claims thereto, the vessel may still be what is termed a "derelict," and therefore subject to salvage or recovery. To constitute a derelict in the law, it is sufficient that the ship or cargo is found deserted or abandoned upon the seas, whether it arose from accident or necessity, or voluntary dereliction, without intention to return or hope of recovery.¹²¹ In such instances, although the original owner may retain his property interests, the salvor may have a lien against the vessel for services rendered.

A salvor, therefore, who meets the conditions of success, danger, and voluntariness in carrying out his service on a

¹²¹Joseph N. Gores, Marine Salvage, the Unforgiving Business of No Cure, No Pay. (New York: Doubleday & Company, Inc., 1971): 493. Mr. Gores also gives some interesting definitions and distinctions regarding other salvage terms: "wreck" is limited to those portions of ship or cargo that have been stranded upon the land. This includes anything that previously was part of the vessel, its apparel, or cargo. The courts have held, for instance, that rigging, gear, nets, buoys, and floats from tishing boats...are legally "wreck" (hence subject to salvage) if cast upon the shore; "flotsam" is goods from a ship that has been sunk (or otherwise perished) that float upon the shore; "flotsam" is goods from a ship in danger of being sunk that have been cast overboard to lighten the ship. This applies only to these goods if the ship subsequently actually sinks. No definition seems to exist, under admiralty law, for such goods if the ship does not sink; but popular usage includes under the term "jetsam" all jettisoned goods no matter what the vessel's subsequent fate; "lagan" is goods that, like jetsam, are cast into the sea from a ship that subsequently sinks. Since these goods are themselves so heavy that they also will sink, however, the mariners, before throwing them overboard, "to the intent to have them again, tie to them a buoy, or cork, or such other thing that will not sink, so that they may find them again."

recognized subject of salvage, is legally entitled to remuneration unless negligence or misconduct on his own part precludes such remuneration. If a legal and binding agreement of the amount to be received has not previously been reached between the salvors and the salved vessel's owners or representatives, the court will also fix and assess the amount to be received. In admiralty court, twenty-six separate classifications of salvage service to a ship in danger are recognized.¹²²

It should be pointed out that the salvor who failed to accomplish his "no cure, no pay" salvage job did not always lose everything he spent in the attempt. The salvager could recover, on a contractual basis established before salvage began, expenses, losses, or damage to his equipment incurred during the unsuccessful operation.

This situation of derelict is not without complications:

Since the term DERELICT depends in its application upon the *intentions and expectations* of the captain and crew when they desert their vessel, a court attempting to determine whether a ship has been legally abandoned often has a very sticky time of it. Obviously a ship does not become derelict because the men were forced to flee her for fear of their lives, or in search of aid, or to turn her over to a salvor. On the other hand, a crew abandoning a vessel with no intention of returning, but who then are blessed with a weather change that permits their return, do not by the act of returning render the ship *not* derelict.¹²³

Thus far, the British and American treatment of sunken vessels which are recovered by one other than the original owner are consistent. However, where the claims of the original owner are not in issue, where the contest is between the sovereign and the finder, the harmony ceases. The American rule has generally held that, absent a valid claim from the original owner, title to the recovered vessel shall vest in the finder. The British, and, by way of heritage, the Canadian, version declares that the sovereign shall hold the items

122*Ibid*.

123*Ibid.*

recovered from the sea. The United States has never statutorily asserted its intention to exercise whatever sovereign power it may possess over the proceeds of derelict property, except to the extent that certain rights are reserved with respect to sunken vessels which constitute obstacles to navigation, a definite problem in narrow, shallow rivers with high volumes of shipping traffic, such as the St. Clair River, where sinkings resulting in navigation blockage were common.

In the United States, federal sovereignty, whether tested or not, is sometimes challenged by state sovereignty. An individual state may choose to exercise its own sovereignty and an express state statute may validly claim ownership for the state, as in the case of <u>Murphy versus Dunham</u>, discussed later. It has been argued in Michigan, for example, that sunken vessels lying upon the subaqueous bottomlands of the Great Lakes bordering Michigan have, when derelict, adhered to Michigan in her sovereign capacity, for these bottomlands are owned in fee by the state.

Numerous Federal court cases have established precedents regarding ownership and salvage of sunken or otherwise wrecked property.

The first case, <u>Mason versus Ship Blaireau</u>, occurred in 1804 in the Atlantic Ocean trade route between the United States and Europe, and presents some interesting facts. Captain Mason of the British ship, *Firm*, investigated a distress signal from a mariner alone aboard the French ship, *Blaireau*. The latter vessel had been run down by a Spanish 64-gun ship called the *St. Julien*, and sustained damage which put about three feet of water in the *Blaireau's* hold by morning. The Spanish commander, not being able to wait for an attempt to repair the *Blaireau*, took the crew and passengers on board his ship, excepting one man, an Irishman named Thomas Toole, who could not be found. Toole, realizing he was left alone on a sinking ship, raised a distress flag, which was sighted by Mason the next day, at which time the water in the hold had increased to the point where the vessel had an estimated 12 hours of life left. Mason made repairs to the French ship and set up a pattern

of regular pumping after having transferred six of his crew to the *Blaireau*, where they joined Toole, and both vessels sailed the great distance to Chesapeake Bay over the next nineteen days. A salvage claim was then filed in United States District Court by involved parties for the *Blaireau* and its cargo. Mason had retained for his own use a large portion of the cargo removed in his efforts to save the vessel, and the French consul, on behalf of the owners of the *Blaireau*, charged Mason with embezzlement to the amount of almost \$2,000.00. Claims were appealed to the United States Supreme Court.¹²⁴

This was the case of a French ship saved by a British ship and brought into a port of the United States. The question of whether or not a court of the United States had jurisdiction was easily resolved; an admiralty court may have jurisdiction by submission, and the United States Supreme Court ruled that all parties legally submitted to U. S. admiralty jurisdiction.

The court made some interesting rulings: Vessels derelict are droits of the admiralty, and in these cases, the crown is liberal in its rewards of the salvors. No fixed rate of salvage has yet been adopted in cases of this kind, but that it depends upon the sound discretion of the court applied to the circumstances of each particular case. About two-fifths of the value of the *Blaireau* and its cargo was awarded to the salvors.¹²⁵ The six crew who had tranferred to the sinking Blaireau were awarded vast sums for the times; William Stevenson, the first mate, for example, received "the sum of two thousand two hundred and sixty-nine dollars, eight cents, and nine dimes."¹²⁶ His nineteen days of labour netted him many years' worth of first mate's salary. Another man transferred to the *Blaireau* was identified only as "Negro Tom," and the district court had earlier decided:

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¹²⁴Decisions in the Supreme Court of the United States. "William Mason and Others, Libellants, versus Ship Blaireau." (Washington, D.C., February, 1804): 240-241.

¹²⁵ Ibid., 267.

¹²⁶ Ibid., 246.

...that there be retained a...sum of eleven hundred and thirtyfour dollars and fifty-four and three quarters cents in this court, to and for the benefit of such person or persons as may hereafter make title to the same as owner or owners of the said Negro Tom. 127

A later circuit court, as well as the Supreme Court, agreed with the above ruling regarding Negro Tom, and a Reverend John Ireland, formerly from Maryland but living in England, came forward as Tom's owner. Reverend Ireland agreed that, upon receipt of his salvage money, he would "manuwit [that is, free from slavery] the said Negro Tom, according to the law of the state of Maryland, and will pay the said Negro Tom one fifth part of the said salvage money....^{"128} For Tom, the *Blaireau* case became a double windfall.

Captain Mason fared the least; his confiscation of a portion of the *Blaireau's* cargo for his personal use was not viewed lightly, and, although the charges of embezzlement were dismissed, his sole reward for the salvage was the property which he had taken, amounting in value to less than what his first mate had been awarded by the court, which was summarized thusly:

> Salvage is grounded as well on the trust which the salvors have taken upon themselves, as on their risk and labour. Should they, after saving the thing, wantonly destroy it, or even suffer it to be lost by gross negligence, they would make themselves liable to the owner. Hence a duty and trust is imposed upon them by the situation in which they have placed themselves; and if, regardless of that duty, and in violation of that trust, and of the principles of moral rectitude, they attempt to plunder, to rob, to embezzle the property, they lose the character of salvors, and approach towards that of robbers and pirates. In such a case they cease to be meritorious; they forfeit whatever right they

¹²⁷ Ibid., 244.

¹²⁸ Ibid., 247.

might have had, and to award them salvage would be to reward their crimes. They ought not to receive salvage upon that which they did not mean to save for the benefit of the owners, but to appropriate to their own use. Salvage is given, upon principles of public policy, to encourage enterprise, honesty and humanity....

While the general interests of society require that the most powerful inducements should be held forth to men to save life and property about to perish at sea, they also require that those inducements should likewise be held forth to a fair and npright conduct with regard to the objects thus preserved.¹²⁹

The court concluded that \$21,400 (two-fifths the value of the *Blaireau* and its cargo) was sufficient retribution for the salvage performed, allowing a disbursement of one-third of the whole amount to the owners of the vessel, *Firm*, and her cargo, and the remaining two-thirds to be divided among those who navigated both ships, the *Firm* and the *Blaireau*, excluding Captain Mason, in the proportions previously directed by the circuit court.¹³⁰

The next Supreme Court precedent took place in 1851, in <u>The Propeller Genesee</u> <u>Chief versus Fitzhugh</u>. The propeller-driven vessel, Genesee Chief, collided with the schooner, *Cuba*, during the night of May 6, 1847, on Lake Ontario. The *Cuba* quickly sank with all cargo aboard. Both 50-ton vessels were registered in the state of New York, and the incident occurred in U. S. waters, so it was not an international matter. The *Cuba* carried almost 6,000 bushels of wheat from Sandusky, Ohio, towards Oswego, New York, while the *Genesee Chief* was light, i.e. empty of cargo. The owners of the *Cuba* filed for libel against the *Genesee Chief* and her master.¹³¹

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¹²⁹*Ibid.*, 261, 267.

¹³⁰ Ibid., 271.

¹³¹Decisions in the Supreme Court of the United States. "The Propeller Genesee Chief, her Tackle, Apparel, and Furniture, William L. Pierce, master, Alexander Kelsey, William H. Cheney, William Hunter, Lansing B. Swan, George R. Clark, and Elisha B. Strong, Appellants, versus Henry Fitzhugh, DeWitt C. Littlejohn, and James Peck." (Washington, D. C., 1851): 471-473.

The matters of who was on watch at the time of the collision or which vessel strayed from its course are of little consequence, as the case became a political issue. The defendants claimed that United States admiralty jurisdiction on the Great Lakes was unconstitutional, but the lower courts found in favour of the plaintiffs, Fitzhugh, et al. The Supreme Court ultimately agreed.

The defendants had argued that the collision had occurred within the terrritorial boundaries of New York state, and not on the high seas or any other body of water where the tide ebbs and flows, and therefore, they argued, the icderal court had no jurisdiction over the matters of the case.¹³² They felt that the authors of the Constitution limited the admiralty power's jurisdiction to tide-waters, clearly not a Great Lakes area of concern.

...These lakes are in truth inland seas. Different states border on them on one side, and a foreign nation on the other. A great and growing commerce is carried on upon them between different states and a foreign nation, which is subject to all the incidents and hazards that attend commerce on the oceans....

...one of the great objects of the framers of the Constitution: that is, a perfect equality in the rights and the privileges of the citizens of the different states; not only in the laws of the general government, but in the mode of administering them. That equality does not exist, if the commerce on the lakes and on the navigable waters of the West are denied the benefits of the same courts and the same jurisdiction for its protection which the Constitution secures to the states bordering on the Atlantic....

The jurisdiction is here made to depend upon the navigable character of the water, and not upon the cbb and flow of the tides. If the water was navigable, it was deemed to be public; and if public, was regarded as within the legitimate scope of the admiralty jurisdiction conferred by the Constitution.¹³³

1321bid., 472.

¹³³¹bid., 482, 483, 486.

The Supreme Court ruled that admiralty and maritime jurisdiction granted to federal courts under the United States Constitution is not limited to tide waters, but extends to all public navigable lakes and rivers, where commerce is carried on between states or with a foreign nation. Admiralty jurisdiction thereby includes the Great Lakes as inland seas. This principle reflects differing conditions found in the United States as compared with Great Britain, which allowed admiralty jurisdiction only over waters affected by ebb and flow of tides. Congressional acts extending U. S. District Court jurisdiction to lakes and other navigable waters are consistent with this ruling. This power is not derived from the U. S. Constitution commerce clause. Concurrent jurisdiction remains in some matters of state commerce and common law. In conclusion, evidence showed fault with the propeller, *Genesee Chief.*

In 1870, a case originating in San Francisco established, among other things, that, in a salvage situation where there is more than one salvor, if one set of salvors does not claim salvage, that claim enures to the owners of the property that was saved, and not as additional reward to the other set of salvors.

On August 24, 1867, the British ship, *Blackwall*, at anchor in San Francisco harbour, was discovered to be ablaze. The San Francisco Fire Department firemen responded by placing two water-laden engines from their department aboard the private tug, *Goliah*. Meanwhile, the officers and crew of the *Blackwall*, having found all attempts to subdue the flames abortive, left the vessel with their effects in small boats, in effect, abandoning ship and leaving it derelict. The firemen on the tug, working with great skill and energy and the fire department pumps placed aboard the *Goliah*, extinguished the fire within a little more than half an hour. The *Goliah* then towed the *Blackwall* to a safe anchorage. The firemen, working in conjunction with the tug, accomplished their goal.

The owner of the tug and her master filed a libel against the ship and cargo, even though the tug was not the sole salvor. Without her assistance, the fire engines and men

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would have been powerless to save the *Blackwall*, but, on the other hand, without these men and the two engines, the tug's aid would have been just as ineffectual. The fire department was no party to the libel, claiming that it was simply operating in the discharge of its public official duties. No compensation by way of salvage could have been made to the fire department if it had made a claim for it, since all persons who are under any legal obligation, express or implied, to render assistance, are not entitled to salvage. The owners of the tug in their libel, claimed that their boat, its master and crew performed the entire salvage service.¹³⁴

The Supreme Court handed down this decision:

Salvage is the compensation allowed to persons by whose assistance a ship or her cargo has been saved, in whole or in part, from impending peril on the sea, or in recovering such property from actual loss, as in cases of shipwreck, derelict, or recapture. Success is essential to the claim; as if the property is not saved, or if it perish, or in case of capture if it is not retaken, no compensation can be allowed. More than one set of salvors, however, may contribute to the result, and in such cases all who engaged in the enterprise and materially contributed to the saving of the property, are entitled to share in the reward which the law allows for such meritorious service, and in proportion to the nature, duration, risk, and value of the service rendered.

Salvors are not deprived of a remedy because another set of salvors neglect or refuse to join in the suit, nor will such neglect or refusal benefit the libellants by giving them any claim to a larger compensation, as the non-prosecution by one set of salvors enures, not to the libellants prosecuting the claim, but to the owners of the property saved.¹³⁵

The owners, master, and crew of the *Goliah* were entitled to a salvage reward, but that reward was reduced to reflect the work done by the San Francisco firemen. Since these

¹³⁴Decisions in the Supreme Court of the United States. "The Blackwall." (Washington, D. C., 1870): 15. ¹³⁵Ibid., 12.

firemen did not prosecute a claim, their share of the salvage work enured to the owners of the *Blackwall*.

Salvage situations have yielded to international laws, regardless of how insignificant the latter may seem by comparison. In the late summer of 1883, for example, Canadian authorities at Sarnia seized the tug, *Michigan*, which had been working on the salvage of the stranded vessel, *Richard Winslow*, in Canadian waters of lower Lake Huron. While pulling on the *Winslow*, the *Michigan* had damaged her tow-posts, and the tug went to Port Huron, Michigan, and had new ones installed. She returned to the wreck without reporting her repair bill to the Collector of Customs in Canada, even though, being a Canadian tug, it was mandatory for her to make such a report. Other excuses were also invoked in order to seize the *Michigan*:

It is also said that she was seized for working on Sunday, but Canadian tugs have often worked on Sunday without being seized. Several other excuses are offered, but notwithstanding all of them, the opinion is very general that somebody made a complaint against her for a small infraction of the law, which would have passed over under ordinary circumstances. After making the seizure, the Collector of Customs at Sarnia at once notified Mr. Murphy [the *Michigan's* owner] that be might continue the work on the Winslow with any of his tugs, but having no further tug near, the privilege was of no value. The Michigan is still in custody, as Mr. Murphy was in Chicago when the seizure was made, and will not be back until this morning. In the meantime, the Richard Winslow remains in an exposed position, liable to be destroyed by the waves should a storm come up.¹³⁶

It seems pertinent to examine one case which has appeared within the courts seated in Michigan and which concerns the ownership of sunken derelict. The court in <u>Murphy</u>

¹³⁶ The Cleveland Herald, Sept. 19, 1883, quoting an article from the Detroit Free Press. The Richard Winslow was released from her stranded position and returned to service, until she ran aground on a rocky reef and broke up on shoals in northeastern Lake Michigan in 1898.

<u>versus Dunham</u> (1889) adamantly forbade the assertion of sovereign ownership in the absence of a state statute expressly so providing. In recent years, arguments arose for the <u>Dunham</u> rationale no longer being permissible precedent. The common law, as adopted by Michigan, did vest a sovereign prerogative in the sovereign, and that prerogative was exercised in the common law even in the absence of statute; the Michigan Constitution of 1963 has declared the common law to be its own; and in so doing, it acquired for Michigan those perquisites which, at common law, had been the prerogative rights of the Crown. Consequently, sunken vessels resting within the territorial boundaries of the State of Michigan, since they are within the purview of the common law, belong to the State of Michigan in her sovereign capacity.

The drawn-out case of <u>Murphy versus Dunham</u> began in the spring of 1883 and concluded six years later. On May 18, 1883, the schooner, *Wells Burt*, loaded with 1,375 tons of coal from Buffalo, arrived off Evanston, Illinois, where she was last seen at anchor. That night, a heavy storm swept the lakes, and when the sun rose the next morning, the vessel had disappeared, sunk with all hands. The schooner was partially insured, with the uninsured portion totalling at least \$8,000. The main owner, Dunham, abandoned all title to the underwriters who had insured his vessel, except the right to "benefit of salvage." The cargo, which was insured by the Continental Insurance Company, was also abandoned to the underwriters immediately after the loss. Continental, on June 30, 1883, sold the coal cargo to Murphy for \$1,500. At this time, neither Murphy, nor Dunham, nor Continental knew the whereabouts of the wreck. During the summer of 1883, Dunham's hired hardhat diver located the shipwreck in 40 feet of water approximately where she was last seen at anchor. No attempt was made to raise the

schooner or its cargo that season, since Dunham had expressed the opinion that the cargo could not be saved except at a cost exceeding its value.¹³⁷

Dunham, on January 31, 1884, sent a letter to the underwriters of the vessel and to Murphy, in which he said:

> Please take notice that I, as part owner of the schooner Wells Burt, am desirous of raising and restoring said vessel, and saving her cargo. You, having an interest in said vessel, have a right to determine whether you will rescue said vessel and cargo or abandon the same to whomever may attempt it. I will proceed to save said cargo if you will, within thirty days, let me know what your wishes are in the premises; and, unless I hear from you in writing at the expiration of said time, I shall infer that you abandon the same as a total loss, and that I am at liberty to save what I can.¹³⁸

The underwriters responded evasively, and Murphy replied, on February 15, 1884:

In reply to your favor of Jan. 31st, would say that I do not abandon my interest in schooner Wells Burt and cargo, nor authorize you nor any party to save what you can from same, but hereby give you due notice that I have already begun preparations for rescuing the same.¹³⁹

Shortly thereafter, Murphy visited Dunham in Chicago and attempted to buy his interest in the *Wells Burt*. Nothing else was done, and in the middle of June, 1884, Dunham began his unsanctioned salvage, without license or authority, express or implied, from either Murphy or the underwriters. In 28 days of salvage, he raised a total of 981 tons of coal, which he sold in Chicago for the best price obtainable, \$4,515.25. The original

¹³⁷The Federal Reporter: Decisions in the Supreme Court of the United States. "Murphy versus Dunham." (Washington, D. C., 1889): 504-505.

¹³⁸*Ibid.*, 505.

¹³⁹*Ibid*.

consignee of the coal cargo refused to receive the salvaged goods at Chicago, since he had been paid for their loss by the underwriters. However, as Dunham had calculated the previous year, his was not a sound business venture, since the expenses amounted to \$5,487.27, for a loss of \$527 upon the expedition.

Neither the underwriters nor Murphy, who was aware of his rival's activities in June of 1884, made a move towards claiming Dunham's salvaged coal until almost a year later, when, in May, 1885, Murphy filed suit in court for damages, claiming title to the cargo.

Four years of legal and political wrangling produced several Supreme Court statements, among them:

The cargo of a vessel sunk in forty feet of water and abandoned to the underwriters is the proper subject of a sale by such underwriters to a third person....

Such cargo is not by the common law a wreck of the sea. Wreck of the sea is confined to goods cast upon the shore, or to jetsam, flotsam, and lagan....

The United States has no title to property sunk in the bottom of Lake Michigan, as the proprietorship of the state extends to the center of the lake, subject only to the right of congress to control its navigation....

It seems that the title of the owner to property lying at the bottom of the sea is not divested, however long it may remain there, and that no other person can acquire such title except by a condemnation and sale in admiralty.¹⁴⁰

Since Illinois did not, in the 1880's, have a statute vesting title to such property in the state, title to property lying on the bottom of Lake Michigan thereby remains with the owner except through transfer "by condemnation and sale in admiralty." The owner can make a claim to salvaged property a year and a day from the day the goods are actually

¹⁴⁰*Ibid.*, 503-504.

taken and seized by the finder. Since Murphy had made legal claim to Dunham's salvaged coal within "a year and a day," the court found in his favour and awarded him damages equal to the value of the coal, less the expenses of salvage. This was surely "Murphy's Law" at work, since it had cost Dunham more money to raise the coal than he received for it at market. The court tried to give Murphy some satisfaction:

I think the true measure of damages in this case is the value of the coal in Chicago, less the necessary expenses of raising it and carrying it ashore by the use of the most approved appliances for that purpose, and that the case should be referred to a commissioner to make such estimates upon the best evidence he can procure. If the court is satisfied that such expense could not have been less than the value of the coal, the decree will be entered for nominal damages only.¹⁴¹

All indications point to Murphy winning the court case, but losing his money.

Another precedent-setting court case established the fact that the United States could not claim sovereign rights to abandoned property under English common law. In 1901, money was found on a body floating on the high seas, out of the territorial jurisdiction of any particular state and of the United States. The only thing which might have lead to identification of the body was a scrap of paper in one pocket bearing the name "H. Selrahe," but this proved a failure. The body and the money were brought into Gloucester, Massachusetts, by the salvors, two local men named William Gardner and William Parsons, who libeled for salvage and were awarded a percentage of the total money. The

¹⁴¹Ibid., 512. The political implications of these court decisions are still reverberating in Illinois in the 1990's, particularly with the case of salvage diver Harry Zych's claims to the Lady Elgin shipwreck in Lake Michigan off Chicago. Zych is challenging Illinois state law by claiming ownership under federal legislation.

remaining sum of \$411.31 became the basis for a fight between the state and the federal government.¹⁴²

Under Massachusett statutes, when an estate has been fully administered by the public administrator, he shall deposit the balance of it with the treasurer of the state, who shall hold it for the benefit of those who may have legal claims thereon. These statutes also provide that at any time within six years after the fund is so paid to the treasurer, any person, legally entitled, may receive the money thus deposited. Theodore H. Tyndale was the public administrator who received the \$411.31 for deposit into the accounts of the public administration or into the treasury of the commonwealth of Massachusetts.

Thereupon, the United States appealed, claiming that it had a superior right to the possession of the funds under English common law which gave it sovereign rights to abandoned property. However, there is neither any statute nor any settled practice which requires the treasurer of the United States to receive funds derived from such a source or in such a way. Speaking generally about lost property, in England and in many other countries, the king is viewed as the new owner. The sovereignty of the United States failed to work similarly, since the final court decision was to pay the money over to the state statutory public administrator. The court decision left no doubts about the issue:

While there can be no question that the sovereign peoples in Anglo-Saxon America, whether the various states or the United States, did, in some way, succeed to all the rights of the English king and of the English people, yet, until some recognized line of procedure or some action of congress intervenes, it is not within the province of the courts to determine that the treasury of the United States represents any particular royal prerogative.¹⁴³

¹⁴²The Federal Reporter: Decisions in the Supreme Court of the United States. "United States versus Tyndale et al." (Washington, D. C., 1902): 820-821.

¹⁴³*Ibid.*, 823.

This issue of United States sovereignty came to the fore again in 1976, in the case of <u>Treasure Salvors</u>, Inc. <u>versus Abandoned Sailing Vessel</u>,...Believed to be the <u>Nuestra</u> <u>Senora de Atocha</u>. Treasure Salvors, Inc. filed for confirmation of title and action for possession to an abandoned shipwreck in U. S. District Court, under admiralty law. A sunken Spanish galleon was located on the continental shelf, outside Florida submerged lands jurisdiction. The United States counterclaimed for title under the Antiquities Act and the Abandoned Property Act.¹⁴⁴

The court determined that, since the Antiquities Act applies to any object or antiquity situated on lands owned or controlled by the Government of the United States, and because the Abandoned Property act embraces property within the jurisdiction of the United States, the property of the wreck involved in this case was neither within the jurisdiction of the United States nor owned or controlled by the U. S. Government.¹⁴⁵

Treasure Salvors, Inc. asserted that, where a vessel has been abandoned, the finder in possession becomes the owner of the vessel. The court conceded that such a claim was properly within the scope of salvage action. General principles of maritime and international law dictate that an abandonment constitutes a repudiation of ownership, and that a party taking possession under salvage operations may be considered a finder under the doctrine of "animus revertendi," i.e., the owner has no intention of returning.

The United States countered with the contention that objects of antiquity recovered by persons subject to the jurisdiction of the United States are taken in the name of the sovereign and are the property of the people of this country as a whole, not the finders alone. The foundation of this argument was the concept of the sovereign prerogative, a

¹⁴⁴The Federal Reporter: Decisions in the Supreme Court of the United States. "Treasure Salvors, Inc. versus Abandoned Sailing Vessel...Believed to be the Nuestra Senora de Atocha." (Washington, D. C., 1976): 907.

¹⁴⁵*Ibid.*, 908, 910.

common law notion derived from the right of the king of England to objects recovered from the sea by his subjects.¹⁴⁶

The court concluded that "Congress has not exercised its sovereign prerogative to the extent necessary to justify a claim to an abandoned vessel located on the outer continental shelf."¹⁴⁷ Possession and title were conferred upon the finder of the shipwreek.

In another court action two years later involving the same key characters, the United States government argued that one of the elements of a salvage action, namely the existence of a marine peril, was absent from the *Atocha* controversy, and that the district court erred in applying the law of salvage. The court found that

The government's argument that no marine peril existed ignores the reality of the situation. Marine peril includes more than the threat of storm, fire, or piracy to a vessel in navigation. In <u>Thompson versus One Anchor and Two Chains</u>, "the 'marine peril' consisted in the fact that the anchors and chains were actually lost. If they had been resting on a reef, where they could be seen, they would undoubtedly have been in 'peril' of being lost, and the 'marine peril' certainly was not diminished or extinguished by the fact that they were actually lost." There is no dispute that the *Atocha* was lost. Even after discovery of the vessel's location, it is still in peril of being lost through the actions of the elements.¹⁴⁸

The Supreme Court also determined that the district court had correctly applied the law of finds in this case, in view of the fact that the disposition of a wrecked vessel whose very location had been lost for centuries as though its owner was still in existence would be stretching fiction to absurd lengths. Under the "law of finds," title to abandoned property

¹⁴⁶*Ibid.*, 909.

¹⁴⁷ Ibid., 911.

¹⁴⁸The Federal Reporter: Decisions in the Supreme Court of the United States. "Treasure Salvors, Inc. versus Abandoned Sailing Vessel...Believed to be the Nuestra Senora de Atocha." (Washington, D. C., 1978): 337.

vests in the person who reduces that property to his or her possession. The main difference between the "law of finds" and "salvage law" is that under "salvage law," the claim of the finder of abandoned property is satisfied by proceeds from the sail of that property paid into the court. The "law of finds" relinquishes the property itself to the finder, the disposition of which becomes his personal matter.¹⁴⁹ The court concluded that

Although at least one state has invoked English common law to award ownership of a sunken vessel to the sovereign [<u>Ervin</u> <u>versus Massachusetts</u>, 1957], the "American rule" vesting title in the finder has been widely recognized by courts and writers.¹⁵⁰

Treasure Salvors, Inc had just begun to fight. In the well-publicized <u>State of Florida</u> <u>versus Treasure Salvors</u>, Inc. in 1980, the facts began with the company's original contracts with the State of Florida, made in 1971-1974, for salvage of the *Atocha* shipwreck, which originally was believed to be in Florida territorial waters. Later it was found that the wreck lay outside Florida submerged lands, on the continental shelf. Treasure Salvors, Inc. then filed an admiralty claim for title to the sunken Spanish galleon in U. S. District Court. The United States counterclaimed for ownership in 1976 and appealed in 1978 (see earlier descriptions). The State of Florida supported U. S. claims, but federal courts awarded title to Treasure Salvors, Inc. The District Court then issued an order for the return of "treasure" held by the State of Florida. This "treasure" was obtained by the state through the prior contracts, which gave Florida 25% of any artifacts found. The court directed the state to deliver the involved artifacts to District Court. Florida refused and appealed.¹⁵¹

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¹⁴⁹*lbid.*, 331,337.

¹⁵⁰*Ibid.*, 343.

¹⁵¹The Federal Reporter. Decisions in the Supreme Court of the United States. "State of Florida, Department of State versus Treasure Salvors, Inc." (Washington, D. C., 1980): 1343-1344.

Florida asserted ownership of the disputed artifacts, declaring that the District Court's "attempt to adjudicate ownership is, in essence, a suit against the state."¹⁵² Such suits are barred by the U. S. Constitution Eleventh Amendment.¹⁵³ The U. S. Court of Appeals held that the Eleventh Amendment protections did not apply to Florida in this case, because there was a controversy over title. The prior Florida contract with Treasure Salvors, Inc. was rescinded because of "mutual mistake."¹⁵⁴ The wreck was found to be on continental shelf lands, not Florida submerged lands. The District Court orders were upheld and Florida was not found to have ownership of the involved artifacts.¹⁵⁵

The state has jurisdiction over its waters to a three-mile limit; beyond that, the federal government has jurisdiction to the twelve-mile line, where the waters become international. The question of jurisdiction over certain waters was put to the test in the case of <u>Subaqueous Exploration & Archaeology</u>, Ltd. versus <u>Unidentified</u>, <u>Wrecked and Abandoned Vessel</u>, et al. in 1983. Subaqueous Exploration & Archaeology, Ltd. located three shipwrecks on Maryland submerged lands of the Atlantic Ocean. The company invoked admiralty jurisdiction in U. S. District Court, for title to the vessels or, alternatively, "full and liberal salvage awards to compensate them for their efforts to recover vessels and their cargo."¹⁵⁶ The sunken vessels were then "arrested" by U.S.

¹⁵²*Ibid.*, 1345.

¹⁵³The precise wording of the Eleventh Amendment (ratified on February 7, 1795) is, "The Judicial power of the United States shall not be construed to extend to any suit in law or equity, commenced or prosecuted against one of the United States by Citizens of another State, or by Citizens or Subjects of any Foreign State."

¹⁵⁴*Ibid.*, 1349.

¹⁵⁵*Ibid.*, 1351.

¹⁵⁶The Federal Supplement. Decisions in the Supreme Court of the United States. "Subaqueous Explorations & Archaeology, Ltd., versus Unidentified, Wrecked and Abandoned Vessel." (Washington, D. C., 1983): 597.

Marshals.¹⁵⁷ Maryland filed motions to dismiss the suit because these shipwrecks were property of the state and the Eleventh Amendment barred plaintiff actions.

The Eleventh Amendment of the U. S. Constitution bars suits against a state unless the state waives sovereign immunity or consents to the suit. Since no Maryland state official acted outside his scope of statutory authority and sovereign immunity was not waived, the federal District Court could not assert jurisdiction. Maryland title to abandoned shipwrecks on state submerged lands was supported by the federal Submerged Lands Act, authority of state police powers, and state statute regulating historic and archaeological resources. "Cultural or aesthetic interests are proper objects of public welfare which the state may protect pursuant to its police powers."¹⁵⁸ The rights of state management and development over submerged lands under the federal Submerged Lands Act includes historic or archaeological objects.

The federal District Court lacked jurisdiction in this case, so the state of Maryland's motions to dismiss were granted.¹⁵⁹

One recent state court case, the <u>State of Michigan versus Massey</u>, must be described regarding the unauthorized removal of artifacts from Great Lakes shipwrecks. Massey removed two wooden stock anchors from the Straits of Mackinac on August 24, 1981, believed to be from the sunken wreck, *Richard Winslow*, which sank in the late 1800's and which was the first four-masted sailing vessel on the Great Lakes. He was later convicted by a jury for "recovering and concealing state-owned stolen property valued at over \$500"¹⁶⁰. Massey's actions were illegal under state statute. State District Court ruled that

¹⁵⁷ Ibid., 600.

¹⁵⁸*Ibid.*, 609.

¹⁵⁹*Ibid.*, 614.

¹⁶⁰North Western Reporter, State of Michigan. "People of the State of Michigan versus Mark Alan Massey." (Lansing, Michigan; 1984): 615.

the involved state statute was unconstitutional and in conflict with federal admiralty law. The case was appealed by the State of Michigan.

The findings indicated that states retain significant autonomy in unpreempted areas, and the federal government has traditionally deferred to authority of state police powers in unpreempted matters. Abandoned shipwreck resources on Great Lakes bottomlands represent an unpreempted area. State statutes do not conflict with federal admiralty and maritime laws. State statutes, in fact,

> supplement the state's control over Great Lakes bottomlands granted to it by the Great Lakes Submerged Lands Act and the federal Submerged Lands Act, so as to include items of historical and recreational value located on or contained therein.¹⁶¹

Preservation and regulation of historical, cultural or recreational resources are matters within traditional authority of state police powers.

The Michigan statute, unlike the contested Florida statute, conforms to traditional maritime principles in that it does not purport to limit exploration itself to certain licensees without regard to their diligence or success. Rather, the waters of the Great Lakes remain open to preliminary exploration by all, and permits must be sought only by those who seek to bring up particular items already discovered.¹⁶²

The court ruled that the statute declaring abandoned property of historical or

recreational value found on Great Lakes bottomlands to be state property is constitutional.

It does not "impermissibly interfere with federal maritime or admiralty law."163

The specific cases that follow in Chapter Seven mirror aspects of this legislation,

including the Canada Shipping Act, in effect at the time of loss in the St. Clair River.

^{[61}*Ibid.*, 619.

¹⁶²Ibid.

¹⁶³*Ibid.*, 620.

CHAPTER VII

Specific St. Clair River Marine Losses Detailed and Examined

a) The Joliet (September 22, 1911)

The St. Clair River fog late in 1911 mutely caused the demise of a large steel freighter named the *Joliet*. This vessel, 266' x 38'2" x 19'8", with a gross tonnage of 1,935 and 1,596 net, slid down the rampways of the Cleveland Ship Building Company on February 20, 1890 as hull number seven,¹⁶⁴ official number 76873,¹⁶⁵ and, 21 years later, sailed proudly as part of the 112-vessel fleet of the Pittsburgh Steamship Company, known then simply as "the Steel Trust."¹⁶⁶

In the course of her 21 years, the *Joliet* had always hauled iron ore for the Great Lakes steel industry. Owned from 1890 until 1900 by the Superior Iron Mining Company of Ishpeming, Michigan,¹⁶⁷ the *Joliet* was purchased by Henry W. Oliver, who also acquired the three other vessels that comprised the small Superior Iron Mining Company fleet, plus three other freighters, to establish the seven-vessel fleet of Andrew Carnegie's first Pittsburgh Steamship Company. This enterprise was bought out a year later by J. Pierpont Morgan and his partner, Elbert H. Gary, who formed the United States Steel

¹⁶⁴"Master Sheet" on the *Joliet*. Institute for Great Lakes Research, Bowling Green State University, Ohio.

¹⁶⁵"Ship Information and Data Record" on the *Joliet*. The Herman G. Runge Collection, Milwaukee Public Library, Milwaukee, Wisconsin.

¹⁶⁶Van Der Linden, and the Marine Historical Society of Detroit. Great Lakes Ships We Remember (Cleveland: Freshwater Press, 1979): 233.

¹⁶⁷Master Sheet" on the Joliet, op. cit.

Corporation,¹⁶⁸ and, for the next ten years, the *Joliet*, newly registered at Duluth, Minnesota, sailed under their company flag.

The vessel, *Joliet*, however, was not actually sailing on her final night afloat. By 2:00 A. M., Friday, September 22, 1911, the *Joliet* had been lying at anchor with a cargo of iron ore for three hours already in Canadian waters opposite Miller's Coal Dock in Port Huron near the mouth of the St. Clair River. Her 900 horsepower, triple expansion steam engine and twin boilers¹⁶⁹ rested that night. Capt. H. F. Clegg, the ship's master, cycing the fog-shrouded river and realizing the inherent risks in sailing through the St. Clair Flats into the shallows of the likely-equally-bemisted Lake St. Clair, had decided against taking his charge any further until the next day's sunshine dissipated the haze.

It was at that time, in the middle of the night, that another Steel Trust ship, the steel steamer, *Henry Phipps*, at almost 600' long, one of the largest steel hulls on the lakes, collided with the *Joliet*, sinking her within minutes. Distress signals emanated from both vessels, awakening all 23 people on board the doomed *Joliet*, as well as most of the crew of the *Phipps*, and many people on shore.

Charles D. Beard awoke abruptly at his home in Port Huron to the sudden sounds of the river clamour, and he immediately telephoned Dan Lynn, who operated the Lynn Marine Reporting Agency, telling him about the emergency. Lynn directly left his house, jumped into a small boat, and pulled out into the foggy river, hoping to rescue the victims whose cries for help could be heard from shore. Meanwhile, Beard, using a megaphone from the embankment, called out that help was on its way, and instructed the victims to continue their shouts in order to guide the rescue boat.¹⁷⁰

¹⁶⁸Van Der Linden, et al., Great Lakes Ships We Remember, op. cit., 233.¹⁶⁹"Ibid.

¹⁷⁰ The Port Huron Times Herald, Sept. 22, 1911.

At the time of the collision, the steamer *Ontario* cruised upbound on a course which would take her right into the *Joliet*. Due to the dense fog, the *Ontario* could not see the danger ahead, including the humans struggling for survival in the water. Lynn, shouting as loudly as possible, and Beard, using his megaphone to the utmost, communicated to the *Ontario* to stop, a feat which she barely accomplished in time.

Lynn first found two sailors, the mate and the second engineer, clinging exhaustedly to the rigging of the sunken ship. He took them on board and left them on the Canadian shore on one of the Reid Wrecking Company's tugs. At that point, the tug also disembarked in search of survivors.

Before the *Joliet* sank, one of her lifeboats had quickly been launched, and many of the crew, including the one woman on board, found escape in that. The *Phipps* had managed to stop her engines, drop anchor, and launch two yawlboats to effect the rescue of the remaining crew. Since the *Phipps* was only slightly damaged, she proceeded down the river, where she continued to have a bad night. "....A few minutes after she started, she collided with the passenger steamer *Alpena*.... Both boats were somewhat damaged but not enough to prevent them from continuing their voyages....^{*171}

One crewmember had an exceptionally dramatic rescue, as the local press reported:

MAN SAVES SELF WITH BARREL

....Miraculous indeed was the escape of First Engineer Gustave C. Deoska, of...Chicago, who made the effort to save his clothing when the Joliet was hit. He went back into the cabin, immediately after the Joliet was struck. The boat was sinking when he reached deck, and an explosion from some source occurred almost immediately. Deoska was hurled about 10 feet through the air into the river. For several minutes he struggled in the water without anything on which to cling.

¹⁷¹Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #2.

Finally, just as he was near giving up hope, he happened to clutch a passing barrel and he floated on down the river with it as a sort of life preserver. After being in the water about a half hour he was picked up by the small boat.¹⁷²

All members of the crew were saved, although this fact was not immediately ascertained; it was several hours before officials could relax the crew's tension with this good news. Meanwhile, the four-year-old *Phipps* was only slightly damaged, and she proceeded downriver, politely taking the remaining crew of the sunken *Joliet* with her.¹⁷³ Wreckers were summoned immediately to determine the possibility of salvaging the *Joliet*, or of removing her from her present menacing position. Having sunk in 40' of water, only her smokestack and a portion of her cabin were visible above the water's surface.

Warning lights were immediately placed on the *Joliet*, and the Reid tug, the *City of Sarnia*, remained within 20 feet of the wreck all night long to warn passing ships of the danger.¹⁷⁴ Four days later, hopes of salvage were fading:

JOLIET MAY BE DYNAMITED

THOUGHT THAT IT WOULD COST MORE TO RAISE BOAT THAN IT IS WORTH

...As there is a strong current at this point in the river with 14 feet of water above her deck, it would no doubt cost the Pittsburg Steamship company more money to raise and float her than she is worth....it would not be a big surprise to some of the people here if some of these days, they should happen to

172*Ibid*.

¹⁷³The Port Huron Times Herald, Sept. 23, 1911. ¹⁷⁴Ibid.

hear a loud report which would come from the blowing up of the Joliet.¹⁷⁵

Three days later, it again looked as though the Joliet would be raised:

WILL RAISE JOLIET

Work is to Be Done by the Pittsburgh Steamship Company.

According to a statement given out yesterday by Capt. J. W. Westcott, Detroit representative for the Pittsburgh Steamship company, the work of raising the wreck of the steamer Joliet will be done entirely by the Pittsburgh Steamship Co. He stated that it was not policy of the company to allow the government to remove obstructions in the channels for which the company is responsible.

...Marine experts say that it will be almost impossible to build a cofferdam as the current at this point is too swift, while the boat is also lying in a narrow portion of the channel.¹⁷⁶

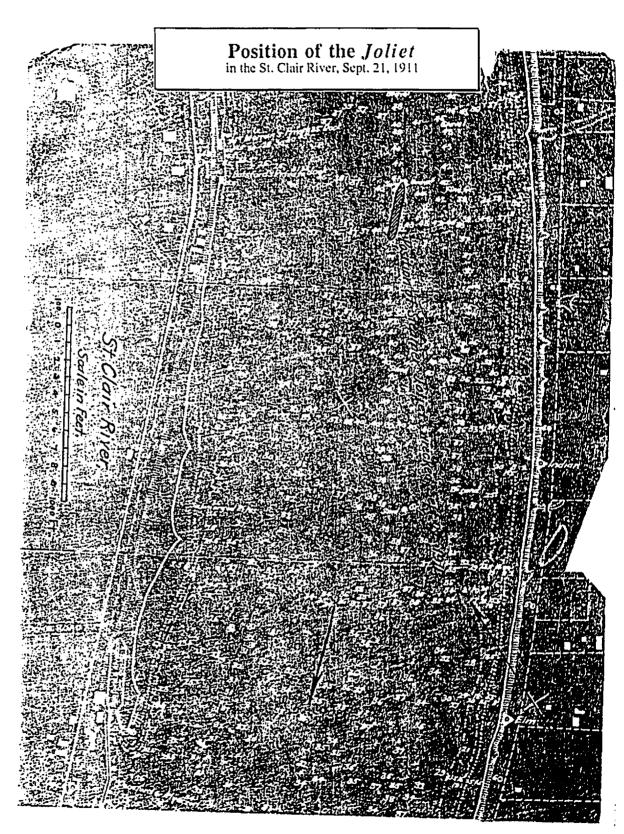
Two days later, Captains Baker and Reid, local Wrecking Masters, refused to commence work on raising the shipwreck, citing the heavy current running over the *Joliet's* submerged decks and the fact that it looked as though the sunken vessel had been cut right in two, complicated by a large hole in her starboard side near the number four hatch.¹⁷⁷

The *City of Sarnia* resumed her ferry duties, replaced at the direction of the Lake Carriers Association by the lightship, *Kewaunee*, which was stationed immediately above the wreck of the *Joliet*. William Livingstone, President of the Lake Carrier's Association, the real watchdog overseeing the smooth operation of commercial shipping interests on the

¹⁷⁵ The Port Huron Times Herald, Sept. 27, 1911.

¹⁷⁶ The Port Huron Times Herald, Sept. 30, 1911.

¹⁷⁷ The Port Huron Times Herald, Oct. 2, 1911.



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Great Lakes, issued from his office in Detroit a "Notice to Mariners" bulletin to all ships' masters, warning of the danger in the St. Clair River caused by the *Joliet*, and describing the lights used to mark this hazard to navigation.¹⁷⁸ The bulletin clearly spelled out the traffic pattern for shipping: all downbound vessels were ordered to "pass on the American side of the wreck and all upbound vessels on the Canadian side."¹⁷⁹

On September 29, 1911, a week after the sinking, Robert MacAdam, Sarnia's Harbour Master, belatedly¹⁸⁰ notified A. J. Johnston, the Deputy Minister of Marine and Fisheries in Ottawa, describing the collision as occurring "under almost exactly the same circumstances as those of the *Gilbert-Genoa* collision [in the St. Clair River] of a month ago."¹⁸¹ His letter indicated the urgency of the situation, considering the shipwreck's position:

...She went down about five hundred [sic; presumably "feet"] from the Canadian shore, consequently in Canadian water, and lies with twelve feet of water over her main deck, and with the spars and tops of the deck houses only showing....

The owners of the Joliet [this was incorrect; it was really the Lake Carriers Association] have placed a light ship alongside of her and maintain it there. It is not yet known what they propose to do about raising her. She is in a bad place, being in the middle of the navigable channel, and the current, being at that point very

¹⁷⁸Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #20. The warning arrangement of lights on the lightship *Kewaunee* were: "Three lights on her spar arranged perpendicularly five feet apart, the top light being red and the two lower lights being white. The red light is thirty-five feet above the deck. There is also a white light on the after flag pole and a white light suspended in the rigging on each side. During thick and foggy weather the fog whistle on the *Kewaunee* will sound five short blasts at one minute intervals and during the intermissions the fog bell will be sounded..." The portions of the *Joliet* that showed above water also served as light bases: "The *Joliet* has one white light in the rigging on the port side twelve feet above the water; also one white light in the fore rigging thirty feet above the water; also one light in the after rigging six feet above the water."

¹⁷⁹*lbid*.

¹⁸⁰MacAdams explained the delay of his correspondence: "I have been away from town for some days, which is the reason why I have not reported to you sooner."

¹⁸¹Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #2.

swift, and the water being forty feet deep, the work of raising her promises to be one of considerable difficulty....¹⁸²

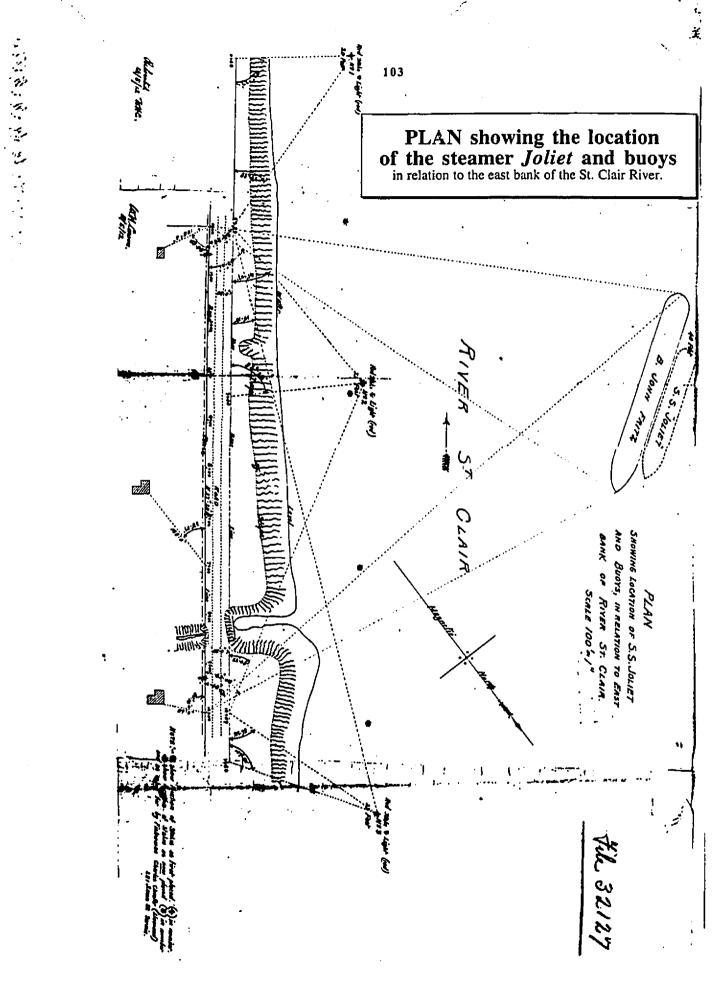
At the same time, Col. C. McD. Townsend, of the Corps of Engineers office in Detroit, Michigan, sent a blueprint of the *Joliet's* position in the St. Clair River to Colonel Wm. P. Anderson, the Chief Engineer with the Department of Marine and Fisheries in Ottawa. His brief note indicated that "...This wreck is apparently in Canadian waters, and 1 should therefore be glad to hear from you before taking any action with reference to its removal."¹⁸³ Anderson immediately acknowledged receipt of Townsend's letter, with the understanding that the Canadian Department of Marine and Fisheries would be calling upon the owners of the *Joliet* to remove the obstruction.¹⁸⁴

Commercial diver examination of the *Joliet's* hull was delayed by "the fact that the water is not clear at this point."¹⁸⁵ Waiting three or four days for the water to become "absolutely clear" did not seem out of the ordinary, nor did the delay detract from the commonly-held belief that hardhat diving was limited to brave, muscular men who felt at home in even the most hostile environment.

On October 11, 1911, hardhat divers who were making an examination of the *Joliet* verified that she was broken in two, and that she was so badly damaged that it would be impossible to refloat her. Captain W. W. Smith, in his official capacity as marine superintendent of the Pittsburg Steamship Company (a subsidiary of the United States Steel Corporation), immediately relayed this information to William Livingstone. This news meant that the *Joliet* had to be removed as an obstruction to navigation, but it was not clear

¹⁸²*Ibid*.

¹⁸³Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #3.
¹⁸⁴Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #4.
¹⁸⁵The Port Huron Times Herald, Oct. 6, 1911.



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whether she would be removed by her owners, in spite of their determined statement to raise the vessel just two weeks earlier, or abandoned to the Canadian government.¹⁸⁶

It was cheaper and more expedient for the owners to take the latter route. On October 12, 1911, Livingstone in Detroit sent a telegram to Johnston in Ottawa, indicating that "...the owners [of the *Joliet]* have abandoned all their rights, title, and interest in the steamer and disclaim further ownership in connection with it."¹⁸⁷ He also admonished that, "As the boat is a menace to navigation and should be removed, I respectfully call your attention to the matter,"¹⁸⁸ which was an acceptably discrete way of letting the Canadian government know that the shipwreck was now their problem.

Needless to say, Ottawa was incensed. On October 13, 1911, a livid Johnston responded curtly to Livingstone with only three sentences:

Owners JOLIET cannot abandon responsibility under Canadian law. We shall remove wreck if they neglect but will collect cost from them first opportunity. Am sending engineer.¹⁸⁹

Equally curt was Johnson's letter to the United States Steel Corporation in Cleveland, dated the same day, with the blunt warning to "Take steps to remove her [the *Joliet*] immediately or we shall do so at your expense."¹⁹⁰

¹⁸⁶The Port Huron Times Herald, Oct. 12, 1911.

¹⁸⁷Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #5. 188*Ibid.*

¹⁸⁹Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #6.
¹⁹⁰Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #7.

Johnston immediately received a reply from the Pittsburg Steamship Company office in Cleveland in reference, as they put it, "to our steamer Joliet,"¹⁹¹ indicating that "We have abandoned the ship and cannot authorize you to incur expense for our account."¹⁹² The gauntlet had been cast, and, for the Canadian government, the challenging situation became uncomfortable. The wreckage absolutely had to be removed because it was a menace to navigation, but at whose undertaking and expense would this be done? Would the Canadian government become an international laughingstock if the Pittsburg Steamship Company ignored their threat? Johnston immediated bared his teeth by wiring the Pittsburg Steamship Company that "Under Canadian law you cannot evade responsibility for removal JOLIET. We shall remove and collect from you unless you act immediately."¹⁹³

Meanwhile, Colonel Wm. P. Anderson, the Chief Engineer with the Canadian Department of Marine and Fisheries, empowered his assistant, Mr. B. H. Fraser, on behalf of the Canadian government, to take and study the government file on the *Joliet*, and "to proceed immediately to Sarnia and ascertain for what price and in what way the wreck can be most promptly removed."¹⁹⁴ Colonel Anderson made it clear that Mr. Harris was not to conclude any contract with any salvager until he was certain that the owners of the vessel would not undertake the wreck's removal. "If necessary, you might communicate with the owners while in Sarnia,"¹⁹⁵ Anderson concluded.

On October 16, 1911, Fraser checked into the plush, "absolutely fireproof" Hotel Pontchartrain in downtown Detroit, and immediately consulted with Livingstone and

¹⁹¹Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #8.
¹⁹²*Ibid.*

¹⁹³Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #9.
¹⁹⁴Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #32.
¹⁹⁵Ibid.

Townsend, concluding that "The removal of the *Joliet* is not an easy job....hope to reach some definite decision today."¹⁹⁶ Fraser felt that his hands were tied, since Livingstone indicated that he could not possibly obtain until the next week a decision from the owners regarding the removal of the *Joliet*. In his gloom, Fraser, who was familiar with various nuances and precedents of maritime law, suggested.

...there is nothing to do but invite tenders for the removal to a clear depth of thirty feet [a depth recommended by Townsend]....At the same time I think we should wait till we have a definite reply from Cleveland before taking final steps. The boat is not a dangerous obstruction, she is well lighted and there is a good channel on each side.

I may say that there is probability that while the owners of the Joliet may not desire to take advantage of being an American Corporation they will claim exemption from liability under a decision of the English House of Lords.

Particulars can be found in Aspin-Walls (sic) Maritime Law cases, Vol. 7, page 513 and Vol. 8, pages 122, 134 & 290....¹⁹⁷

¹⁹⁶Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #21. This is a letter from Fraser to Anderson, dated October 17, 1911.

¹⁹⁷Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #15. Fraser meant "Aspinall's Maritime Law cases," the complete title being "Reports of Cases Relating to Maritime Law; Containing all the Decisions of the Courts of Law and Equity in the United Kingdom, etc." Volume VII, edited by James P. Aspinall and Butler Aspinall, published in London by Horace Cox in 1896, covered cases between 1890 and 1895; specifically, the 1894 court ruling from Volume VII referred to the case of the steamship, *Crystal*, which, becoming a total toss in the river Tyne in England, was at once abandoned by her owners. There was no evidence that the loss was caused by their default. The wreck lay in such a position as to be an obstruction to the harbour of the respondents, and was removed by them at a cost of almost 800 pounds. They then brought an action against the appellants to recover the expenses of such removal. Reversing the judgment of a lower court, the Court of Appeal in England held that the appellants were not liable, for the reason that section 56 of the Harbours, Docks, and Piers Clauses Act of 1847 (which stated that "the harbour master may remove any wreck or other obstruction to the harbour...and the expense of removing any such wreck...shall be repaid by the owner of the same.") applies to ownership at the time that the expense of removing the obstruction is incurred, not to ownership at the time that the obstruction is created.

The Volume VIII page references are found in "Reports of the Cases Relating to maritime Law; Containing all the Decisions of the Courts of Law and Equity in the United Kingdom, etc." edited by J.P. Aspinall and Butler Aspinall, covering court cases from 1895 to 1899, published in London by Horace Cox in 1900. Specifically, these page references deal with various court decisions regarding the sinking of one vessel, the steamship, J. M. Lennard, which had capsized and sunk in the river Ouse in England on the night of August 20, 1894. Again, litigation revolved around the term, "owner," with the court holding that "owner" means the person who was the owner of the vessel at the time when the expenses of removal were incurred, and not the person who was the owner when the vessel sank, and

Fraser made an agreement with Livingstone that the Canadian government would delay steps in the removal of the wreck for a week or so to give the Pittsburg Steamship Company more time to consider the question of accepting liability.¹⁹⁸ However, the plan failed.

By October 27, 1911, ten days after Fraser's agreement, no word had been received in Ottawa from either the President of the Lake Carriers Association or the United States Steel Corporation regarding the fate of the *Joliet*. A disheartened Fraser issued a memorandum stating

...I would recommend that tenders be invited immediately for the removal of the wreck to a clear depth of 30 feet to the satisfaction of the Department [of Marine and Fisheries]; tenderers to state time of completion and give the usual sureties for satisfactory performance. Tenderers to have the option of removing the wreck bodily or cutting her down to the required depth, in the latter case regulations for the disposal of material removed would have to be made by the Department.¹⁹⁹

In early November, 1911, as the navigation season on the Great Lakes was drawing to a close, foul weather set in. This did not so much affect the wreck of the *Joliet*, since its removal was delayed by the slow process known as a call for tenders. However, vessels that were still active on the lakes, scampering from port to port in an effort to squeeze yet one more cargo into transit and earn a few more dollars before the season

consequently that, where the owner of a vessel which had sunk had completely abandoned all ownership in the vessel before the expenses of removal were incurred, he was not liable for such expenses. It also established that the owner of a vessel at the time when she was sunk, who has abandoned the vessel to underwriters before the expenses are incurred, is not liable.

¹⁹⁸Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #13. These documents in government files in Ottawa are not numbered in perfect chronological order, probably due to haste in filing.

¹⁹⁹Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #17.

ended for the winter, sometimes found themselves scurrying for the safety of sheltered waters.

Such was the case with the steamer, *Cherokee*, and its two towbarges, the *Holland* and the *Brainerd*, all owned by J. C. Garry of Saginaw, Michigan. The three vessels, all coal-laden, headed north out of the St. Clair River into the open waters of Lake Huron on November 1, 1911, when, confronted by a heavy snowstorm, they turned back into the river. There, while attempting to face all three of the vessels into the current before dropping anchor, the captain of the steamer, prevented by the snowstorm from seeing the lights on or near the wreck of the *Joliet*, encountered serious difficulties. The towbarge, *Brainerd*, collided with and carried away the light upstream from the wreck (by this time, the lightship had been replaced by a smaller lightbuoy.) The other towbarge, the *Holland*, however, struck the wreck of the *Joliet* and sustained such injuries that it just barely made it to the Michigan side of the river before sinking. The *Cherokee* was uninjured.²⁰⁰

Sarnia Harbour Master, Robert MacAdam, reported the incidents in a letter to the Minister of Marine and Fisheries, indicating that "several vessels have struck the wreck of the *Joliet*, sustaining more or less injury,"²⁰¹ and he warned that, with the winter season of frequent snowstorms upon them, the possibility of a serious disaster resulting from the wreck of the *Joliet* was very real.

The desperate owner of the damaged vessels sought recompense from A. Johnston, the Deputy Minister of the Department of Marine and Fisheries in Ottawa. J. C. Garry's succinct, 35-word telegram, dated November 4, 1911, concluded with the lamentation and

²⁰⁰Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #22.
²⁰¹Ibid.

call for action, "...causing about twenty thousand dollars loss and I should be reimbursed by some person."²⁰²

Johnston was not willing to be that person. On November 6, 1911, his ten-word letter closed the book on the case: "Telegram received. Will assume no responsibility for damage your [sic] vessel."²⁰³

At the same time, the Deputy Minister of Marine and Fisheries went ahead with a call for tenders with the following notice sent out to the different wrecking companies²⁰⁴:

Tenders by wire will be received up to noon sixteenth instant [November 16, 1911] for removal of wrecked steamer "Joliet" now lying sunk in St. Clair River, off Sarnia. Wreck to be removed to a clear depth of thirty feet to satisfaction of this Department. Contractor to become possessor of material when work completed. Tenderers to have option of removing wreck bodily or cut her down to required depth. Material removed must be placed where it will not become an obstruction to mavigation. Work to be started immediately after acceptance of tender and proceeded with continuously and tenderers must state time of completion.

Accepted cheque of five hundred dollars to be forwarded by mail which will be forfeited if Contractor refuses to proceed with work or does not complete it within specified time.

Lowest or any tender not necessarily accepted.²⁰⁵

Ten wrecking companies, all in Ontario, were contacted by the Purchasing and Contract Agent's Office of the Canadian Department of Marine and Fisheries: the Trotter Wrecking Company of Amherstburg; J. E. Johnston, Esq., Wiarton; W. L. Horton, Esq., Goderich Dredging Company; John Harrison and Sons, Owen Sound; the Kastner Lumber Company, Wiarton; A. M. Hackett, Esq., Hackett Towing and Wrecking Company,

²⁰²Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #33.
²⁰³Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #34.
²⁰⁴Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #25.
²⁰⁵Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #23.

Amherstburg; the Reid Wrecking Company, Sarnia; Jas, Playfair, Esq., Midland Towing and Wrecking Company; the Ganley Tug Line, Sault Ste. Marie; and the Owen Sound Tug Liner and Barge Company.²⁰⁶

Simultaneously, Johnston cabled the Pittsburg Steamship Company with the news that his department had invited tenders for the removal of their wrecked vessel, and that the Pittsburg Steamship Company would be responsible for the cost of the work.²⁰⁷

The President of the Pittsburg Steamship Company, H. Coulby, responded quickly on November 7, 1911: "...our examination of wreck convinces us it cannot be raised and is a total loss, and will have to be blown up. Are you asking bids for blowing up? Kindly answer."²⁰⁸ Johnston's immediate response was a telegram stating

> Am inviting tenders from all wrecking companies to remove the wreck to clear depth thirty feet. Tenders to be in on sixteen instant. Condition of tender being that wreck belong to party removing same.²⁰⁹

At this point in time, it can safely be assumed that the Pittsburg Steamship Company engaged in a flurry of activity discussing their options regarding their sunken vessel. It is one thing for a company to incur expense in removing their unfortunate ship after it has sunk, but it is quite another thing to incur expense by having someone else remove their unfortunate ship after it has sunk, with that someone else being told he can keep any portion or all of that vessel that he is capable of salvaging. That way, the original owner still pays the bill, but hasn't so much as a scrap of the vessel that was formerly theirs.

 ²⁰⁶Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #24.
 ²⁰⁷Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #18.
 ²⁰⁸Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #36.
 ²⁰⁹Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #36.

By November 15, 1911, the Pittsburg Steamship Company had hired an attorney,

G. W. Cottrell, to handle the Joliet case. He wrote to Johnston in Ottawa:

...we beg to say that we have carefully considered the matter and we believe that by inviting tenders at the present moment for removing this wreck at an early date, the cost will be unduly high. The Pittsburg Steamship Company is prepared to remove the wreck under conditions satisfactory we believe to your Department, next season, if we can come to an agreement. We do not believe that the delay will be a hardship to navigation. There is a good channel on both sides of the wreck, and we are prepared to arrange with the President of the Lake Carriers Association for the maintenance of proper lights and safe-guards as long as the wreck remains an obstruction.

We therefore submit the following proposition:

We will start work at the earlist possible moment not later than the opening of navigation next Spring, with our own equipment, and prosecute the removal of the wreck to completion in accordance with the best wrecking practice and with reasonable dispatch; the completion to be to the satisfaction of your Department. We have the necessary equipment to do this work in our possession [sic], and anticipating a favourable [sic] reply from you, we have already begun the assembling of such a plant as will be necessary, at Sarnia, to enable the work to be started without delay in the Spring. We will need from your Department assistance in regulation navigation [sic] in the vicinity of the wreck while the operations are being carried out. The current is strong, the water is deep and large boats passing at a high speed will be dangerous to the successful carrying out of the undertaking and might cause heavy damage to property as well as loss of life.

We should be glad to have a reply from you at an early date as our preparations will depend on your attitude.

We understand that you will take no steps to place the work in the hands of any other parties until you have fully considered our proposition and given us a chance to consult further with you provided it is not accepted.²¹⁰

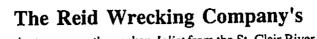
²¹⁰Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #69.

It was, certainly, the response for which Ottawa had hoped. Besides simplifying the matter enormously by having the wreck's owner removing it at his expense, rather than paying someone else to do it and then sending the bill to the owner and hoping for payment, the government call for tenders had not been very successful. John Harrison and Sons from Owen Sound acknowledged receipt of the call for tenders, but were unable to quote a price at the present time. They did, however, send Ottawa a photograph of their tug, *Harrison*, with particulars as to power and size, and hoped that Ottawa would keep it on file for future reference.²¹¹

The Goliath of Great Lakes wreckers, the Reid Wrecking Company of Sarnia, had submitted the only tender. Their plan was to bulk-head (that is, seal off most open portions) and pump air into the two sections of the sunken *Joliet* to displace the water inside the vessel and float up the remains. They were quick to add that if conditions did not permit this, "it would be necessary to dynimite [sic]."²¹² For their work, they requested \$35,000.00 plus the salvaged material. Unfortunately, by not stating the time of completion of this proposed undertaking, they did not completely comply with the tender request , but this omission might have been conveniently overlooked or remedied by Ottawa had the government not been courting the Pittsburg Steamship Company.

On November 18, 1911, two days past the deadline for submitting tenders, B. H. Fraser submitted a memorandum to Colonel Wm. P. Anderson in Ottawa, stating, "...I would strongly recommend that the proposal of the owners be accepted."²¹³ His reasoning was that the Pittsburg Steamship Company had a history of reliability, there would be no cost to the Department of Marine and Fisheries, and "the fact of a company of this kind

²¹¹Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #37.
²¹²Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #28.
²¹³Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #30.



tender to remove the sunken Joliet from the St. Clair River.

JAY EID, PHEN



A. Johnston Deputy Minister of Marine & Fisheries. Ottawa.

Dear Sir:-

Complying with your request of November 6th, regarding the removal of the wrecked Str JOLIET, sunk in the St.Clair River, off Sarnia; we hereby tender to remove this Steamer to the clear depth of Thirty feet (30'), to the satisfaction of your Department, with the understanding, that, should we be awarded the contract, that all sal-wage from this Steamer be awarded to us: In consideration of the above, we hereby agree to complete the removal to the depth above specified including the salwage, for the net sum of Thirty Five Thousand Dollars (\$35,000.00), this amount to be paid upon the com-pletion of the removal.

It is our plan to bulk-head and pump out, if possible, the two sections of the Steamer, so that the channel will be entirely clear, but should we find that the conditions will not permit this, then it would be necessary to dynimite, or remove the parts to the required depth.

Hoping that this tender will be addeptable, and that we will be awarded the contract, we remain,

Very Respectfully Yours.

THE REID WRECKING CO., LTD MLS

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accepting full responsibility under the circumstances is of great value to us."²¹⁴ His conclusion faulted the one omited item, namely the time of completion, in the single tender submitted by the Reid Wrecking Company of Sarnia.

Colonel Anderson, a man of few words, scrawled on the memorandum, "I concur."²¹⁵

On November 21, 1911, Ottawa informed the Pittsburg Steamship Company that their proposition, as contained in their recent reply, had received the consideration of the Department of Marine and Fisheries, and that "the proposition as submitted will be satisfactory."²¹⁶ Four days later, the *Joliet's* owner acknowledged receipt of their offer's acceptance.²¹⁷

Curiousity possibly overcame legalities when, on December 1, 1911, the Pittsburg Steamship Company's Insurance Agent, A. H. Langell, wrote a letter to Ottawa requesting the amounts of the bids made by the wrecks for the removal of the Joliet.²¹⁸ His reaction to the Department of Marine and Fisheries' honest reply ("..the only offer received was for the sum of \$35,000.00, and that offer was made with the understanding that the Contractors should be allowed to retain all material removed")²¹⁹ was not recorded, nor was any official reason ever given for this information request being made in the first place.

The winter of 1911-1912 passed quietly on the St. Clair River. If the amount of correspondence and other paperwork pertaining to the *Joliet* is any indication, government offices on both sides of the river hibernated. When spring arrived and the business of

²¹⁷Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #33.

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²¹⁴*Ibid*.

²¹⁵*Ibid*.

²¹⁶Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #31.

²¹⁸Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #34.

²¹⁹Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #35.

clearing the wreck of the *Joliet* had to be confronted with renewed energy, William Livingstone, the President of the Lake Carriers Association in Detroit, wrote a letter to J. G. McPhail, the Commissioner of Lighthouses, a branch of the Department of Marine and Fisheries in Ottawa. Livingstone briefly reviewed background information on the case, and outlined how the owners planned to raise the wreckage by using two large barges, acting as huge pontoons, one on each side of the wreck. The barges would have two huge anchors with long cables running out towards either bank (with there being 400 feet of clear water on the Canadian side, and 600 feet on the American side.) The traditional navigation format remained the same, namely that upbound vessels would use the Canadian side of the river, while downbound, the American side. The gist of Livingstone's letter was a request:

Our Committee on Aids to Navigation suggest that there should be four stakes with lamps to show captains just how close they can go to the Canadian Bank. And I am asked if I will not try and get the approval of the Canadian Government to put them in and take charge of them.

And for these reasons I am taking the matter up with you to see if you will not kindly arrange in some way to have these stakes put in.... 220

One can only chuckle with amusement on contemplating the look on Livingstone's face when he received a telegram from J. Johnston, the Deputy Minister of Marine and Fisherics in Ottawa, providing approval for the suggestion to place stake lights between the *Joliet* wreck and the Canadian shore, but concluding with the perplexing line, "Understand you will make arrangements."²²¹ Livingstone, concluding that the problem in Ottawa was financial, offered to furnish the stakes and lights, but made it clear that he preferred one of the government officers to position the stakes in their proper locations on the Canadian

 ²²⁰Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #37.
 ²²¹Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #39.

shore. Hinting at impatience, Livingstone asked "Can you not do this without much inconvenience?" He closed by making it clear that the Lake Carriers Association wanted lights that would be recognized as regular Canadian government lights.²²²

B. H. Fraser, Acting Chief Engineer in the Marine and Fisheries Department, appointed W. H. Carson as Engineer-in-charge responsible for arranging the lights near the *Joliet*. Fraser informed Livingstone that Carson could be reached at the Vendome Hotel in Sarnia.²²³

Fraser's complete instructions to Carson before the latter's departure for Sarnia included arranging for stakes to mark the Canadian side of the river "as requested by Mr. Livingstone."²²⁴ Carson was ordered to send full particulars to Ottawa immediately so that they could be included in the latest Notices to Mariners, and to similarly advise Mr. Livingstone so the equivalent could be published in the United States. Fraser, having mastered the frugality of government office regarding public expenditures, ordered Carson to "Try and arrange with the owners of the *Joliet* [the Pittsburg Steamship Company] to provide the buoys and maintain the lights."²²⁵ Carson's final assignment was to report fully to the Marine and Fisheries Department on the work being done to the *Joliet*.

Carson proved to be outrightly eloquent and detailed in his responsible fulfillment of this latter instruction. Writing his first report from the Vendome Hotel in Sarnia, Ontario, on May 11, 1912, he described the undertaking:

...The wreck at present lies completely submerged in 40 feet of water....The deck cabins and wheel house, masts, etc. have all

²²²Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #40.
²²³Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #42.
²²⁴Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #41.
²²⁵Ibid.

been carried away or crushed with the ice coming down the river in the spring, so that nothing is visible above water.

On the east side of the S. S. (Steam Ship] "Joliet" is moored fore and aft, the barge, "John Fritz," 436' x 50' and at present drawing 9 fect of water. Immediately on the other side of the wreck is moored the barge, "James Rasmyth," 385' x 45'6", loaded down with a cargo of coal and water and drawing 20 feet of water. This was done for the purpose of giving protection to the two divers from the very swift southerly undercurrent, while carrying the drilling operations out, below the surface. As soon as the drilling is completed this barge will be withdrawn. Further west from the "James Rasmyth" is moored fore and aft the third barge, "John Smeaton," 446' x 50' and drawing 9 feet of water at present.

Through the gunwale plates of the wreck, holes are being drilled by compressed air drills and into these holes, U-shaped bolts are being placed and bolted up, making 30 on each side of the vessel. Attached to the U-bolts are heavy chains whose upper ends are in turn caught, by what is termed, a devil's claw, turnbuckle, and a hanger, that clasps upon and over the gunwale angle irons.

The wreck will thus be supported by 60 heavy chains and an additional 2 inch steel cable will be carried under the stern and caught up in a similar way to the other fastenings. The two large barges which will be on either side of the wreck are being prepared in their two centre bulkheads in a special manner. Each barge at present holds about 5 and a half feet of water in their bottoms from stem to stern, but additional storage of water is to be secured by adding 6 feet more in the following manner.

The two interior bulkheads are divided up longitudinally by a wall 6 feet high from the floor of the hold, formed of two thicknesses of heavy planking, between which is inter--?-- a sheet of canvas. The plank walls are all carefully strutted with heavy timbers and all joints at sides and floor are made tight with cement. Captain W. W. Smith intends to pump water into the two pontoons till a depth of 11 and a half feet of water is obtained in the holds of each, when each vessel will then draw about 20 feet. The 60 chains will be made fast to the wreck and adjusted with the turnbuckles till everything is tight. The water will then be pumped out of the longitudinal 6 foot half sections of each vessel next the wreck and the result expected is, that the wreck will be lifted up with the buoyancy of the pontoons. The water in the outer half section of the pontoons will secure their stable equilibrium until the whole outfit is towed to a safe berthing place.

Operations are now well advanced, the chains are almost all in position and most of the bolts bolted down. The bulkhead divisions are completed and only require caulking and tightening up before the pumping in of the water, which will take place in a few days when everything is in readiness. The bow of the "John Smeaton" is securely held in position with two large anchors, also by a 2" steel cable about 1800 feet long carried over to the American shore and anchored there. When lifting operations begin any lateral movement caused by the current will only tend to move the wreck parallel to the Canadian shore. The whole work is being carried out under the personal supervision of Captain W. W. Smith with a gang of from 28 to 30 men and is being done in a thoroughly efficient manner and I have every reason to believe the result will be successful and satisfactory. The lightship "Kewaunce" which was moved above the wreck has been removed and instead, the "John Smeaton" and "John Fritz" each carry at night, forward, on the forestay, one anchor light and two harbour lights on the bows, while aft, each carry (sic) one stern light and two harbour lights on the main stays of the funnels.²²⁶

Four days later, Carson, again writing from the Vendome Hotel in Samia to his superior, Fraser, in Ottawa, described his success in arranging, or rather, wrangling, satisfactorily the provision of the buoys and maintenance of the lights with the owners of the *Joliet*. He also painstakingly surveyed the Canadian bank and submitted a plan showing its location in relation to the wreck. That plan also indicated where the light buoys were first set, and where they were now. Carson had set four stakes, after which a fisherman named Charles Chester, of 251 Queen Street, Sarnia, confronted him with very strong objections, arguing that the foreshore opposite the wreck of the *Joliet* was leased by him for fishing purposes from the Canadian government, and that the stakes interfered with the dragging of his nets and other fishing business. Even in 1912, it didn't take too much to create bureaucracy --- or to cripple it! Carson was forced to relocate three stakes (the fourth was considered superfluous by then), an arrangement that left both fisherman Chester and Mr. Lynn, Livingstone's Lake Carriers Association representative, satisfied.²²⁷

²²⁶Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #51.
²²⁷Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #48.

Carson had painted the three stakes red for easier daytime awareness, and at night, each stake showed a red light. The numbered stakes were placed near the Canadian shore, in about 21 feet of water, with the distance between stake number one and number two being about 680 feet, and between number two and number three about 880 feet. This technical information Carson conveyed to both Fraser in Ottawa and Livingstone in Detroit.²²⁸ Notice of the establishment of the barges to mark the wreck site of the *Joliet* appeared in the official "Notices to Mariners" publication.²²⁹

Weeks went by, and the remains of the *Joliet* refused to budge. Finally, on June 8, 1912, Coulby, the President of the Pittsburg Steamship Company, wired Fraser in Ottawa that "...We have made two attempts but find it impossible to lift her off the bottom....we are satisfied the only way it can be done is with explosives...."²³⁰ With that, Coulby requested that Ottawa send a representative as quickly as possible to the wreck site in order to determine the next course of action.

Fraser himself appeared at the Vendome Hotel in Sarnia by June 11, 1912, and after an inspection of the site and discussion with Captain Smith, the wreck master for the Pittsburg Steamship Company, requested that a meeting be held in Detroit between himself and a representative of the company to prepare a new course of action for the *Joliet*, since removal was impossible.²³¹

In Detroit on June 18, 1912, Fraser met with Mr. Cottrell, a company representative, and took the stand that the company was bound by its offer of November 15, 1911. Fraser argued that a change in plans, since that company had abandoned all hope of removing the wreck by pontoons as originally intended, necessitated their submission of

- ²³⁰Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #57.
- ²³¹Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #62.

²²⁸Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #46.
²²⁹"Notice to Mariners," (Ottawa: Dominion of Canada): No. 29 of 1912, dated May 8, 1912.

another proposition for the approval of the Department of Marine and Fisheries before they could be released from the original undertaking.²³²

With the change in modus operandi, another complication presented itself:

The [Pittsburg Steamship] Company expected to meet with objections from the company controlling the Sarnin tunnel should they undertake blasting operations. They wish the Department [of Marine and Fisheries] to take some steps towards protecting them in this matter but I [Fraser] stated that this was entirely out of the question. They wish to know if the Department would provide an inspector to see that any agreement that they might make with the tunnel company was adhered to. I thought there could be no objection to this and consequently made the following conditions to be included in their offer:

The wreck to be removed to a clear depth of 30 feet low water.

Any debris to be deposited only in immediate vicinity for convenience in sweeping.

All responsibility for damages of any kind to be assumed by the Pittsburg Steamship Company.

Definite date for completion to be stated.

The proposed method of clearing away the wreck to be described.

The completion of the work to be to the satisfaction of the Department of Marine and Fisheries of Canada.

If required by the company an inspector will be supplied by the Department during the progress of the work.²³³

The local press clearly indicated that, "As the wreck lies in Canadian waters, the Dominion authorities have jurisdiction, but the Pittsburgh Steamship Company, owner of the *Joliet*, will conduct the wrecking operations."²³⁴

²³²Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #70.
²³³Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #75.
²³⁴The Samia Observer, June 25, 1912.

Efforts to raise the wreck using barges as pontoons had been abandoned earlier that spring, but there was once again talk of building a type of cofferdam to break the current and raise the wreck that way.²³⁵

Commercial shipping was informed that the wrecking barges above the *Joliet* had been removed, and that the lightship, *Kewaunee*, returned, moored directly over the wreck, and "will continue to mark it until it is finally disposed of."²³⁶

By June 26, 1912, the decision to dynamite the wreck was formally proclaimed in the press.²³⁷ Coulby announced, on July 3, 1912, that his company was ready to do the dynamiting, since that was evidently the only way in which the obstruction could be removed. Desirous that all possible precautions be taken, Coulby requested that a representative of the Department of Marine and Fisheries be present to offer suggestions during the progress of the work.²³⁸

By early July, 1912, offers to help destroy the remains of the *Joliet* reached the Department of Marine and Fisheries. From famed hardhat diver William Baker, of 10 Butler Street, Port Huron, came a brief note casually stating, "I understand you folks have some work on the steamer *Joliet* for a Diver and as I have done some work for you people on Colchester Light under Mr. Egan would like to do some on *Joliet*."²³⁹ From Austin Powder Company of Michigan, Detroit, arrived a letter indicating,

...we understand bids are to be opened soon for [the Joliet's] destruction by dynamite. Now we are looking for an opportunity to furnish the explosives. Would it be asking to [sic] much of

²³⁵¹bid.

²³⁶"Notice to Mariners," Dominion of Canada, No. 46 of 1912, dated June 26, 1912.

²³⁷The *Toledo Blade*, June 26, 1912.

²³⁸Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #77.
²³⁹Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #80.

you to give us the name of the successful bidder? If so we would thank you. 240

Ottawa politely and noncommitally informed both volunteering parties that the work was being done by the owners, the Pittsburg Steamship Company, so the Department of Marine and Fisheries was in no legal position to hire them or use their products,²⁴¹

Johnston, the Deputy Minister of Marine and Fisheries, appointed one of the Department's engineers, Mr. Emile M. Longtin, as inspector during the work of removing the wreck of the *Joliet*. Longtin, who left for Sarnia on July 8, 1912, to meet with Captain Smith on the morning of the ninth, had received instructions from Ottawa to see that the company's terms were adhered to, to keep the Department informed of the progress, and to represent the Department in assisting the company with their work, while at the same time having no authority to assume any responsibility that properly rested with the company.²⁴²

Coulby, meanwhile, was quite concerned about one situation:

I particularly desire, for our protection, and to avoid any confusion or difficulty in the future, that the inspector...be instructed to make a thorough inspection of the Grand Trunk Tunnel, running under the St. Clair River, before the work of destroying the wreck begins, and I would also appreciate it, if this inspector would, from time to time, examine the condition of the tunnel as the work progresses, so that no damage is being done by the operation of destroying the wreck.

My own opinion is that it would be impossible to do any damage to this tunnel in removing the wreck of the Joliet, and I am confirmed in this opinion after having discussed the matter with men who have had a great many years of experience in doing this kind of work. The only thought that occurred to me was that after the wreck had been removed it might be claimed

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²⁴⁰Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #83.
²⁴¹Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #89.
²⁴²Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #82.

that the removal had caused damage, which had existed before the Joliet was sunk.²⁴³

Unfortunately, Johnston's department had no authority whatsoever to make such an inspection of the twenty-year-old railroad tunnel, and consequently could not instruct their engineer to do so.²⁴⁴ In fact, Longtin was specifically ordered not to inspect any tunnel without direct orders from Ottawa. "Do not commit yourself in any way as to the effect of blasting operations on this tunnel," Fraser commanded.²⁴⁵

Longtin's first written report, dated July 13, 1912, was a three-page letter written on the smallish stationery of the Hotel Vendome in Sarnia. Longtin stated that an inspection of the St. Clair Tunnel was made by Captain Smith and some officials of the Pittsburg Steamship Company, but that he himself had declined to join the party and had successfully evaded all questions they posed regarding blasting effects on the tunnel. His description of the actual work, as well as some details of daily life, is best reported firsthand:

> ...Blasting began last friday [sic], 25 lbs. of 70% nitroglycerin and someone reported no vibration into tunnel (I expected this on account of soft bottom and swift current). Work is still going on as I can plainly hear the shots from my hotel (sunday [sic] afternoon). I was in the lightship saturday [sic] morning and noticed a couple blasts. Water is raised about 20 ft. with very little wreckage, no other perceptible effects.

They began blowing the stern, down river.

I am sure Captain Smith will rush the work as I am told that a steamer struck last night during foggy hours....

This blasting may last for weeks.

Boarding on the American side is exorbitant. I have arranged with the Vendome of [sic] \$12.50 a week which I consider a very decent price....

²⁴³Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #85.
²⁴⁴Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #87.
²⁴⁵Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #86.

Every morning the ferry takes me across the river and the streetcar down to a wharf opposite the wreck where Capt. Smith is good enough to send his launch to get me over.... 246

Eight days later, Longtin reported that work was progressing satisfactorily and that Captain Smith expected to have the channel cleared up within two weeks, at which time, sweeping operations could begin to ensure a clear 30-foot depth of water above any portions of the dynamited shipwreck. Longtin remembered that the government vessel, *Lambton*, had been suggested to him before he left Ottawa as being the perfect vessel for such an operation, and he now requested the vessel for a few days at the beginning of August, as "an outsider would be very expensive in this particular place."²⁴⁷ In this modern age of apparently irresponsible fiscal policies, it is indeed difficult to picture a government worker who was concerned about minimizing government expenses!

The tunnel had no problem with the dynamiting of the *Joliet*, but domiciles across the river apparently did. The eminent member of the U. S. House of Representatives, Henry McMorran, wrote to the Minister of Marine and Fisheries in Ottawa on July 24, 1912:

> I have a letter from my home city, Port Huron, Michigan, where I have a brick home located on the American side, almost directly opposite the wreck of the Steamer Joliet which they are now attempting to blow up with dynamite. My folks write me that they are shaking our house badly with the explosions, and I do not know whether it is in your power to change the situation by inducing the people to put in lighter amounts of dynamite and save injuring.our homes or not, but I would appreciate it very much if it does not come within your Department if you would kindly take it up with the proper Department, and if possible arrange for some modification. I have a nice home there

²⁴⁶Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #93.
²⁴⁷Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #96.

on the bank of the river and do not want to see it destroyed or weakened in any way by dynamite if it can be avoided.²⁴⁸

Longtin received a copy of this letter, and concluded, upon careful investigation of the matter, that he could not find any substantial reasons for the complaints from the McMorran household. He noted that the McMorran residence stood several hundred feet away from the riverfront and across the public highway, and was by no means the nearest dwelling to the area of operation. Longtin spoke with Dan Lynn, whose residence was quite close to shore immediately opposite the wreck site and who reported that although vibrations were felt, they were not strong enough for concern about danger to the surrounding buildings. Longtin concluded his report by sidestepping the issue and stating that "Mr. McMorran's folks had the impression that work in progress was under Canadian Government control. After a few explanations on my part they decided to take the matter up with the U. S. Corporation."²⁴⁹

Johnston in Ottawa, upon hearing Longtin's report, responded formally to the Honourable H. McMorran, and in a way that was politically correct in light of the agreement which the government had made with the Pittsburg Steamship Company, in a letter which stated that

...I may say that the owners are undertaking the work and this Department will assume no responsibility for damages of any kind. Our inspector is not directing the work in any way but is protecting the interests of navigation in the vicinity. As the Pittsburg Steamship Company will be liable for any damages no doubt the receipt of your letter will cause them to moderate the size of the charges.²⁵⁰

²⁴⁸Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #97.
²⁴⁹Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #100.
²⁵⁰Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #98.

Mr. McMorran politely acknowledged this response from Ottawa's Deputy Minister of Marine and Fisheries in a brief note, dated August 6, 1912, stating, "I desire to thank you for your courtesy in the matter, and can assure you I appreciate it very much."²⁵¹

Not everyone was dismayed by the regular rounds of dynamiting in the St. Clair River. One local vesselman recalled watching the blasting operations from the shore and seeing Indians from the Sarnia Reservation rowing out to gather fish stunned or killed by the blasts!²⁵²

By August 3, 1912, work was still behind schedule. Longtin reported to Ottawa that "Captain W. W. Smith and his crew are still hard at work blowing up the remains of the wrecked *S. S. Joliet.*"²⁵³ Citing adverse weather conditions resulting in muddy water as the main reason for delay, Longtin quoted Captain Smith as predicting that another ten or twelve working days would probably finish the project. To date, 6,000 pounds of dynamite had been used, divided into 240 explosions set off during twelve full working days, with the average of "twenty shots a day" being considered "very good."²⁵⁴ Longtin also sent a sketch of his proposed "sweeping rig" which would determine the depth of water over the wreck remains; "...As we have to be thoroughly satisfied that the channel is absolutely cleared of all obstructions we can't be to [sic] carefull [sic] in selecting the proper method of doing the work...."²⁵⁵ This sweeping rig consisted of a square grid of small diameter gas pipes. Longtin's description of this device was simple, yet practical and detailed, right down to the precise, minimal cost, the future capability of his device, and the personnel who would be building his contraption:

²⁵¹Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #107.
²⁵²The Port Huron Times Herald, Oct. 19, 1963.

²⁵³Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #102.
²⁵⁴Ibid.

²⁵⁵Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #101.

Steamer or scow to be anchored 50 feet above wreck (upstream). Rig to be held with one-half inch rope and let down with the current till entirely past above wreck then brought back and floated again say 20 feet sideway [sic]. Operation repeated until ground under search is thoroughly well covered. If obstacles are met the 6 ft. pieces above water will take a slant and thus show their existence. The existing strong current will greatly help operations.

Method is simple and I think it will prove very effective. Anchored craft to be shifted when required.

If S. S. Lambton is at my disposal her crew can build the above machine in a very few hours right on the upper after deck of their boat.

Material outside of a coil of rope will cost \$12.00. Later it could be taken apart in 15 ft. lenghts [sic] and stored away for further use.²⁵⁶

In a less confident, more desperate tone of voice, Longtin indicated that he was running short of funds: "<u>Will you please kindly see that I am sent some more money by</u> return mail?"²⁵⁷ (underscored as in original).

For all his efforts to impress his superiors in Ottawa with his original design of a "sweeping rig," Longtin was informed on August 8, 1912, that it would not be necessary for him to remain at Sarnia to do the sweeping at that point. L. E. Cote, representing the Chief Engineer in the Department of Marine and Fisheries, took the liberty of "having a sweeping apparatus constructed from the same design as used by the United States Government in that vicinity and this will be attached directly to the steamer *Lambton*."²⁵⁸ The obedient servant, Longtin, was ordered to return to Ottawa as soon as Mr. Carson

²⁵⁶Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #104.

²⁵⁷Op. cit., Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #101.

²⁵⁸Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #105.

reached Sarnia to relieve him. Perhaps Longtin's blatant request for money made his Ottawa colleagues uneasy.

By August 14, 1912, Longtin had become restless in Sarnia awaiting both the government vessel, *Lambton*, and his replacement, W. H. Carson. Captain Smith had indicated that he wanted to remove the lightship, implying that the work on the *Joliet* was completed.²⁵⁹ Longtin, with a tinge of resentment aimed at his replacement, wrote to Ottawa:

...Capt. Watt, who has been replacing Cap. |sic| W. W. Smith lately, removed away, this afternoon, the Lightship which was moored close to the sunken vessel Joliet, after sweeping the channel to his satisfaction.

Cap. [sic] Watt told me that the old boat was blown flat down to the bottom gravel.

It is now up to our Mr. Carson to verify his report.

I told Cap. [sic] Watt that I thought it was advisable that he should notify the Lake Carriers Association of Detroit of his doings and I understand he wired his message immediately.

I am now awaiting Mr. Carson's arrival and as soon as he comes in I shall proceed to Ottawa as per instructions dated Aug. 8 - 12.

> I have the honour to be, Sir, Your obedient servant, Emile M. Longtin²⁶⁰

Both Carson and the steamer, *Lambton*, were waiting at Parry Sound; the vessel had been delayed by rough weather while charging gas buoys near Byng Inlet.²⁶¹ Both arrived at Sarnia on August 16, 1912, when an examination of the wreck site was made.

²⁵⁹Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #109.
²⁶⁰Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #112.
²⁶¹Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #114.

The next day, sweeping operations commenced. Carson, for some unknown reason, swept the region to a depth of 25 feet and found no obstruction of any kind. Since the contract called for a clear depth of 30 feet, a second test was made. An obstruction in the vicinity of the starboard quarter of the wreck's stern caused an outcry; the Pittsburg Steamship Company, so confident of the success of their demolition, had smugly and completely removed their wrecking plant from the scene of operations and gone home! Carson observed that it will be necessary to have the company and its equipment recalled and the obstruction removed, at which point he would make a final test. Meanwhile, news that the *Joliet* wreck was cleared to a depth of 25 feet and that all danger to navigation had been removed was certified by Carson.²⁶² The next "Notice to Mariners" announced the 25-foot clear depth, and the small obstruction that would be removed soon to clear the depth to 30 feet.²⁶³

Rather than bearing the expense of returning with all its equipment to the scene of its lost vessel, the Pittsburg Steamship Company hired Captain William McCullough, a hardhat diver from Port Huron, Michigan, "to remove this obstruction and to take any scrap for himself he could pick up."²⁶⁴ However, McCullough was engaged with other contract work all season, and the obstruction had not yet been removed by November 26, 1912, when ice was due to set in shortly. His plan to "attend to this small removal" over the winter prompted Carson to write that the final sweeping test would be made the following spring.²⁶⁵

Once again, a long, quiet winter buried the St. Clair River area in inactivity. As it turned out, there was too much inactivity that winter.

²⁶²Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #115.
²⁶³"Notice to Mariners," Dominion of Canada, No. 64 of 1912, dated August 20, 1912.

 ²⁶⁴Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #117.
 ²⁶⁵Ibid.

On June 3, 1913, William Livingstone, President of the Lake Carriers Association in Detroit, again wrote to Colonel William P. Anderson, the Chief Engineer in Ottawa's Department of Marine and Fisheries. The news was not good.

> ...On the 22nd of May the steamer OGLEBAY, in rounding to for fuel at Miller's Coal Dock, collided with her barge TYRONE in this vicinity. It is stated that the tow line caught on an obstruction, supposed to be a portion of the wreck of the JOLIET....

> It seems to be the understanding of some of our captains that a portion of the wreck was cleared to 30 feet and a portion left at 25 feet clearance, with the understanding that it would be removed later.²⁶⁶

Simultaneously, the law firm of Holding, Masten, Duncan & Leckie in Cleveland, Ohio, representing the owners of the *Oglebay* and the *Tyrone*, asked Ottawa to "please advise us when, if at all, and in what manner, the owner of the Steamer *Joliet* which was sunk in the St. Clair River opposite Sarnia, was abandoned by the owner. [sic] "²⁶⁷ Ottawa replied that "...the wreck of the steamer *Joliet* was not, so far as we are aware, ever abandoned by the owners, the Pittsburg Steamship Company. The removal of the wreck was made by that company at their own expense...."²⁶⁸ The *Joliet's* owners had another legal battle on their hands.

Emile Longin was asked by his superiors to provide a belated formal report on the method of using explosives and their effect in the work of blowing up and removing the wrecked steamer from the boat channel of the St. Clair River during the summer of 1912. Dated July 10, 1913, it stated in part,

²⁶⁶Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #119.
²⁶⁷Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #118.
²⁶⁸Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #121.

...An old lightship was anchored fifty feet from the wreck, up stream for the purpose of locating the sunken vessel to passing steamer [sic] and also to accomodate [sic] divers, helpers, etc.

A fifty foot flat scot rigged with a long ladder was used as a platform to store tools, a few boxes of dynamite and permit divers to go down conveniently.

Compressed air was furnished from a steel tank with a steam compressor, all on board the old lightship.

The scow was drifted down with a charge and when this was in position and the diver up, the scow was hauled back alongside the lightship and the explosive fired.

Dynamite used was No. 70, that is containing 70% of [sic] Nitro glycerine. The method of using it was as follows: Eighteen sticks weighing about 25 lbs. altogether were fired at a time. A piece of old 2" rubber hose was cut open and the sticks were inserted two by two. The wrapper of the middle stick was punched with a sharp piece of hard wood and the cap or exploder on its long wire was forced into the dynamite. Then the hose was closed with strings and the diver would go down with it. As soon as the diver was back and the scow out of the way, the wires were connected to the batteries.

The Siemens Magneto-electric blasting apparatus was used to furnish the required electric current.

As no parts of the sunken ship were visible from above, her upper works, funnel, mast, etc., having been carried away in the Spring by floating ice, the effect of an explosion of dynamite could not be seen except by a Submarine diver and we had to go by his reports.

The work was begun at the down stream end of the boat and was gradually carried up, a charge being fired about every half hour.

The main deck was flattened down [sic] and sides blown out. The hardest part to destroy was the machinery in the engine and boiler room.

The first few charges brought up the remaining parts of the wooden deckhouses and from then on nothing was seen to come up.

In all, 9000 lbs. of explosive were used during twenty working days.

Progress of work was delayed a few days on account of muddy water caused by storm on Lake Huron, also by neighboring dredging operations. Vibrations were felt but slightly on shores opposite wreckers. It was feared for a while that the St. Clair tunnel some 3000 feet away would be in danger from vibrations but the fear soon disappeared when it was ascertained that no vibration whatever was felt in the tunnel.

The total number of men employed on the job was 12, counting cook and gasoline launch crew.

Reports from divers were rather meagre; all we could get out of them was that the ship was being steadily flattened down. [sic]

To a certain extent the blowing of the ship was a success but we have now laying in the channel an old steel carcass with ribs sticking in all directions ready to stop a loose tow line and cause considerable damage, [sic] it wouldn't be safe also to drop an anchor in that mass of wreckage.²⁶⁹

Chief Engineer Anderson asked Carson to inquire whether Captain McCullough of Port Huron had removed any scrap from the wreck,²⁷⁰ as he had been contracted to do by the Pittsburg Steamship Company in 1912. McCullough's revealing telegram to Carson, dated July 15, 1913, stated simply, "Have not yet removed all scrap from *Joliet* will soon."²⁷¹

McCullough did not get around to removing any of the *Joliet* scrap during the winter of 1912-1913, and he removed only a small quantity in the spring of 1913, planning to remove more as he found opportunity. Since the episode with the *Oglebay* and the *Tyrone* in late May, 1913, McCullough made another examination and removed what he believed was the obstruction, even though the whole wreck still cluttered the river bottom between three and four feet above the bed of the river. This situation was impossible to remedy without patient, painstaking removal of every broken scrap.²⁷²

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²⁶⁹Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #125.
²⁷⁰Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #126.
²⁷¹Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #127.
²⁷²Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #127.

Carson, in an August 7, 1913, memorandum to the Chief Engineer, indicated that a towline in the river shall not be longer than 500 feet, but the vessels in question had a towline almost twice that length, a common, but dangerous practice, with the result that "on slackening speed, the tow line sags considerably and anything at all in the bed of the river in the nature of a snag is liable to be caught on to by line, causing trouble."²⁷³ This information, coupled with the fact that the Canadian government had recognized 25 feet of clear water over the wreck site by the time of the mishap in the spring of 1913, ended the lawsuit against the Pittsburg Steamship Company.²⁷⁴ As Colonel Anderson summarized to William Livingstone, "I am sure that you will not claim that we are bound to protect tow lines, if they are allowed to drag along the bottom of the river."²⁷⁵

Carson also certified that his final test over the site of the *Joliet*, which he swept five times as a precaution in early August, 1913, showed a clear 30 feet of water.²⁷⁶

Since discretion did not permit the use of more than 25 pounds of dynamite at any one time as a precaution against damage to the St. Clair River Tunnel, it took two summers of work to level the *Joliet* to a safe height.²⁷⁷ One report states that the dynamite charges had been so ineffectual that, during World War II, when soundings were made in the river by the United States War Department, the old wreck was found to be almost intact and still a potential menace to navigation.²⁷⁸

²⁷³ Ibid.

²⁷⁴Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #132 and #133..

²⁷⁵Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #131.

²⁷⁶Public Archives of Canada, Ottawa, R. G. 42, Series II B1, Volume 194, File #32127, document #129.
²⁷⁷The *Port Huron Times Herald*, Oct. 19, 1963.

²⁷⁸The *Port Huron Times Herald*. Oct. 4, 1959, Dorothy Mitts, "A Night of Excitement and Bravery," part of the "Where the Wild Goose Flies" series.

For years, the steel wreckage lingered and decayed on the bottom of the St. Clair River. Scuba divers in the 1950's and early 1960's explored the remains regularly, observing the large anchor amidship that had been lost from another vessel when it became entangled in the wreck. However, in October, 1963, the U. S. Corps of Engineers removed the vast majority of the steel wreckage of the *Joliet* because low water levels had again made her a hazard to navigation.²⁷⁹

One can question what might have transpired had the Pittsburg Steamship Company not offered to bear the responsibility of removing or clearing the wreck of its vessel, the *Joliet*, from the shipping channel on the Canadian side of the St. Clair River. The Dominion government would likely have accepted the tender from the sole respondent, the Reid Wrecking Company, which, based on the company's reputation, would have succeeded in doing the job. The responsibility of paying Reid's would have sat with the Canadian government, which, in turn, would have had the ugly and challenging task of collecting the salvage fee from a company in a foreign country. An unwilling and defiant Pittsburg Steamship Company would have found its vessels and their cargoes threatened with confiscation upon entering Canadian waters and harbours. The potential dent in international relations on the Great Lakes, had it reached that point, would likely have found early remedy from William Livingstone, the revered President of the Lake Carriers Association, an honest, no-nonsense figure who knew the value of maintaining open and positive lines of communication with all commercial and government interests utilizing and affecting the lakes.

In spite of the eventual solutions, legal complications, government bureaucracy, costs, and human nature had combined to retard the development and implementation of a speedy solution to the sudden sinking of the steamer, *Joliet*.

²⁷⁹*Ibid.* This article also contains an interesting photograph of the enormous scrapyard of steel that was deposited onto a barge when the wreck was finally removed.

b) The Walter R. Pringle (May 6, 1920)

The 251.49-ton wooden propeller, *Superior*, (later to become the *Walter R*. *Pringle*) slid down the launch ramp at the Cleveland Dry Dock Company on Saturday, September 13, 1890, measuring 98' in length, 29'9" in beam, and 10' in draught.

Constructed for the Duluth-Superior Steamship Company of Duluth, Minnesota, and working for them for the first five years of her existence as a passenger ferry on the short run between Duluth, Minnesota, and Superior, Wisconsin, the *Superior* spent most of her lifetime registered at Cleveland, Ohio.

From 1895 to 1900, the Euclid Beach Park Company owned the *Superior*, operating her 425-horsepower steam engine in that transportation of passengers between Cleveland and Euclid Beach Amusement Park. Then came two years of private ownership by an individual from Cleveland with the memorable name of J. A. Smith, who sold the vessel to the Pittsburgh Steamship Company in 1902; for the next 15 years, the *Superior* operated at Sault Ste. Marie as a grocery boat, locally nicknamed a "garbage boat."²⁸⁰

Finally, the Pringle Barge Line of Cleveland purchased the ship in 1917, spent the winter of 1917-1918 having her converted to a tugboat of 199 gross tons by the Wolverine Dry Dock Company of Port Huron, Michigan, changed her name in honour of family, and operated the vessel in the towing of coal barges from Lake Erie ports to ports mostly on the Detroit and St. Clair Rivers, until her demise on the St. Clair River in the spring of 1920.²⁸¹

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²⁸⁰"Master Sheet" on the Superior. Institute for Great Lakes Research, Bowling Green State University, Ohio.

²⁸¹ "Ship Information and Data Record" on the Walter R. Pringle, the Herman G. Runge Collection, Milwaukee Public Library, Milwaukee, Wisconsin.

In 1920, at the age of 30, the *Walter R. Pringle* was an aged vessel by Great Lakes standards.

On May 6, 1920, while the vessel was docked in Port Huron, some repairs were being effected in the *Pringle's* boiler room. Flames suddenly shot out from that area and spread quickly. The three crewmembers on board the *Pringle* worked hard to extinguish the flames, but ended up having to make haste to escape with their lives. Fearing for the safety of the *Golden Age*, the vessel tied off ahead of them, the *Pringle's* crew cut their vessel's ropes and cast her adrift.

With flames streaming from her cabin and decks, the Walter R. Pringle was loosened from her moorings at the dock of the Morton Salt company Friday morning and allowed to drift with the current of the St. Clair river, no efforts to quench the fire being successful.²⁸²

The *Walter R. Pringle* drifted to the shallows at the head of Stag Island, and burned to her waterline, a complete loss.

When the *Superior* was three years old, in 1893, she ranked "A1" in terms of marine insurance, with an appraised value of \$28,000. Two years later, she still rated "A1," but had depreciated to \$18,000. In 1897, the *Superior* still managed to maintain both of those figures, but by 1906, she had slipped to an "A2" rating, with an appraised value of only \$6,500.²⁸³ By 1920, the vessel had been converted to a tug, and she was still insurable, as later events indicated.

Within a month of the *Pringle's* conflagration, and with the Pringle Barge Line authorities anticipating a request to remove the wreckage of this U.S.-registered vessel

²⁸²The Port Huron Times Herald, May 8, 1920.

^{283&}quot;Ship Information and Data Record" on the Walter R. Pringle, the Herman G. Runge Collection, Milwaukee Public Library, Milwaukee, Wisconsin.

from Canadian waters (which was, incidentally, not in the way of river navigation), a small display ad appeared in the Detroit Free Press, offering the tug, *Walter R. Pringle*, "for sale as she now lies sunk about 1/4 mile above Stag Island, St. Clair River. The purchaser to guarantee removal of the vessel to the satisfaction of the navigation authorities."²⁸⁴ There were no takers.

On June 24, 1920, a Canadian named F. P. Dawson, through the law firm of Hanna, Lesueur & McKinley of Sarnia, contacted the Department of Marine and Fisheries in Ottawa to complain about this shipwreck. In that letter, Dawson expressed concern for the environment, arguing that the wreck "makes a most unseemly blot on an otherwise pretty and beautiful spot in the St. Clair."²⁸⁵ He continued:

There has been for a number of years an old boat lying immediately to the South end of the Island and while this was of course undesirable, still no comment has been forthcoming as nothing further in the way of allowing other ships to lie there has happened. However, this year an old hull [the Walter R. Pringle] drifted into the North end of the Island...

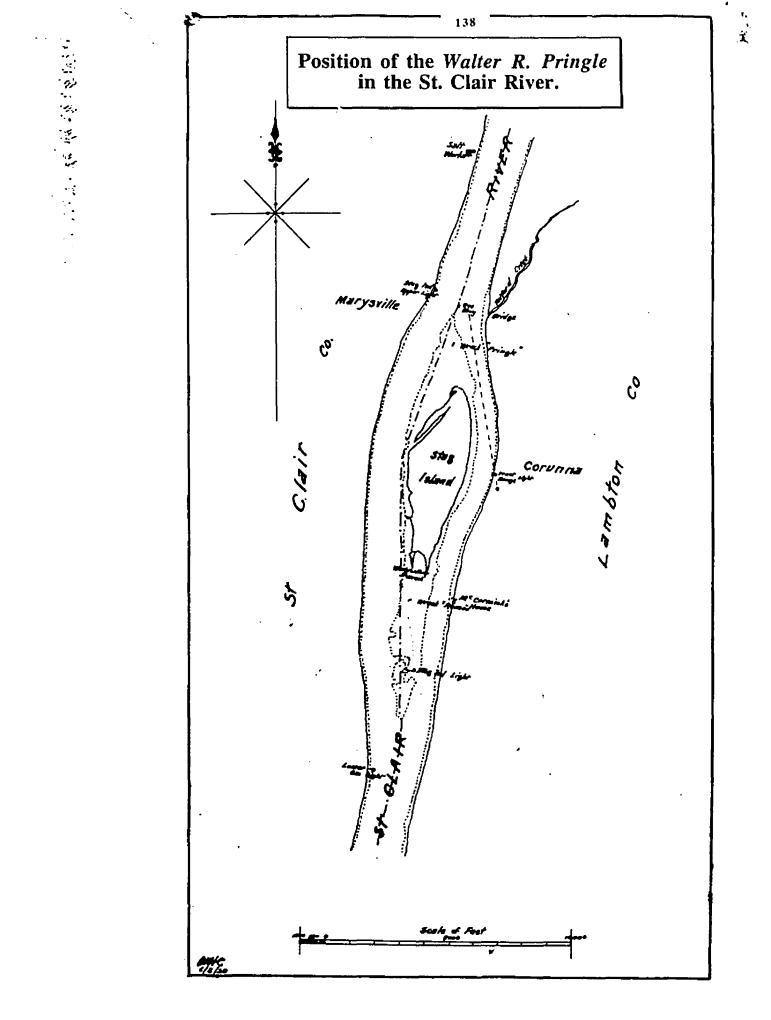
The particular district around the spot where these boats are is fast becoming a favorite summer resort. The writer is interested in, and lives on a piece of property immediately opposite the hull first mentioned in this letter....On behalf of myself and other interested parties, I would ask that some action be taken to have these hulls removed....²⁸⁶

E. Hawken, the Assistant Deputy Minister of the Department of Marine and Fisheries, responded immediately by mail, indicating that the District Engineer for Ontario would examine this matter and report on it at an early date.²⁸⁷

²⁸⁴The Detroit Free Press, June 9, 1920.

 ²⁸⁵Public Archives of Canada, Ottawa, R. G. 42, Series II C1, Volume 379, File #24-2-88, document #1.
 ²⁸⁶Ibid.

²⁸⁷Public Archives of Canada, Ottawa, R. G. 42, Series II C1, Volume 379, File #24-2-88, document #2.



A month later, William Carson, the District Engineer writing from Amhersburg, Ontario, sent a report of the examination he made on July 22, 1920, complete with a map and several photographs of the abandoned shipwrecks off Stag Island, to his superiors in Ottawa:

> Dealing with the wreck on the north of Stag Island, this appears to be the steam tug "Pringle" American register which was burned and drifted down on to the shoal below Stag Island gas buoy. I fixed the bow with a round of sextant angles, also taking sounding at bow and stern, which shows (sic) 14'6" and 13'6" of water respectively. The wreck lies practically up and down stream or about northeast and southwest. Boiler, piping, funnel, etc. stand about 10 feet out of the water while the upper iron plating of hull shows above water on the east side....The owners are believed to be The Pringle Barge Company, Cleveland, U.S.A.²⁸⁸

Carson gave his opinion that, while the wreck was not in the way of navigation, it was certainly possible that large freighters at anchor in a thick fog ran the danger of swinging round and hitting it, suffering damage. A concern for the safety of the ferry vessel operating between the east side of Stag Island and Marysville, Michigan, since this vessel manoeuvered past the wreckage every day, in season, was also expressed. His conclusion was "I consider that this wreck is an obstruction to navigation and recommend that the owners be asked to remove the wreck at once...."²⁸⁹

Carson also commented on the other wrecks around Stag Island, utilizing this opportunity to proudly, if laughably, display his navigation skills:

With reference to the wooden hull of an old boat recently placed on the bar at the south end of Stag Island, I located the stern of this wreck with a round of angles. The stern is in 10' 9"

²⁸⁸Public Archives of Canada, Ottawa, R. G. 42, Series II C1, Volume 379, File #24-2-88, document #8.
²⁸⁹Ibid.

of water and the bow 10' 6" while the hull lies at an angle of 62 deg. from magnetic north. The wreck stands about 7 feet above water at stern [and he needed "a round of angles" to "locate" this?!] and tapers to nothing at bow. As far as I could learn from Captain Reid of Reid Wrecking Company, Sarnia, this is believed to be the old "Romeo" sunk in Black river, raised by Port Huron Sand and Gravel Company and towed to its present site by the Thomson Tug Line to be abandoned. This wooden hull is 145 feet long, and 25 feet beam, being an American barge.

About north-west from this there are other two [sic] wrecks lying near one another with a pontoon between them....These have apparently been there a long time and I could get no information as to their identity. The rib sticks [sic] up above water and present a very unsightly appearance on the landscape. Their location is such that they are not an obstruction to navigation but it is not right that this locality be made a dumping ground for old wrecks.

There is valuable property on shore immediately opposite to these wrecks which is not improved by their presence, so removal is recommended.²⁹⁰

Then, in an unexpected passing of the buck, Carson concluded, "It appears to me that this is in the jurisdiction of the Department of Public Works and the matter might be referred to them for action."²⁹¹

It was likely this latter recommendation, complemented by Carson's mutilation of the English language, that compelled his superiors in Ottawa to "pass the buck" to the Department of Public Works.

Two years later, H. B. Craig, the District Engineer with the Department of Public Works in London, Ontario, contacted Ottawa regarding "the question of setting aside suitable areas" for the purpose of placing wrecks:

Concerning the matter of suitable areas in the St. Clair River for placing wrecks, I would state that, while I believe the

²⁹⁰*Ibid*.

²⁹¹*Ibid*.

area at the foot of Stag Island would serve as a proper place for this purpose, I think it would be well to discuss the matter further....I would expect that objections would be made by the owners of Stag Island or residents in that vicinity to any definite setting aside of the proposed area for placing wrecks and I believe that similar objections would be raised regarding any other area set aside for such purpose....²⁹²

Carson added a memo to the letter sent by District Engineer Craig, agreeing wholeheartedly with him about Stag Island being a suitable depository for abandoned wreeks, and adding that local residents would surely oppose such a move. Carson ended his endorsement with, "It seems to me the matter might stand for further investigation and consideration."²⁹³

Nine years later, the matter arose again.

B. F. Gillham, the Stag Island Ferry operator, from Corunna, Ontario, wrote to the Department of Marine and Fisheries in Ottawa on April 6, 1931, expressing his concern over "the wreck of the Tug 'Pringle' which lies at the head of Stag Island."

...For some years past, the Hull of the Tug has been a foot to two feet under water with the boiler sticking up, which especially at night was a menace to all small craft, but the ice this winter has carried the boiler away so that it is imposible [sic] to see the hull untill [sic] you right [sic] on top of it. Now Sirs I know this wreck is not in the navigation channel, but I am afraid that one of these speed boats that are rushing around all over is going to pile up on it, and, well, it makes good newspaper copy....²⁹⁴

²⁹²Public Archives of Canada, Ottawa, R. G. 42, Series II C1, Volume 379, Fil. 24-2-88, document #9.

²⁹³Public Archives of Canada, Ottawa, R. G. 42, Series II C1, Volume 379, File #24-2-88, document #10.

²⁹⁴Public Archives of Canada, Ottawa, R. G. 42, Series II C1, Volume 379, File #24-2-88, document #12.

Then the real reason for Gillham's concern surfaced: "As for ourselves, we have our course laid out to & from Marysville that we keep away from it [the wreck] but one always has a fear of it especially with a boatload of people."²⁹⁵ Gillham suggested that Ottawa apply some pressure on "the Pringle people" for the removal or the dynamiting of the wreck.

Two weeks later, Ottawa sent a registered letter to the Pringle Barge Company in Cleveland, explaining that their wrecked property was a menace to navigation and that it should be removed.

> As you are the original owners of this tug, you are entirely responsible for any damage that may be done by vessels striking the wreck so under the provisions of the Navigable Waters Protection Act, you are responsible for the removal of this wreck...advise me at once what steps you propose taking to have this obstruction marked and lighted and removed without delay.²⁹⁶

Perhaps the shock of receiving this official letter from Ottawa, eleven years after the *Pringle* burned and sank, caused a delay in the Pringle Barge Company's response. Two weeks after sending their first registered letter, Ottawa sent a second one, dated May 6, 1931, again requesting similar action.²⁹⁷

Robert C. Pringle, the president of the Pringle Barge Line Company, responded personally, citing his absence from the city as reason for the delay. After his assurance that he was fully insured through mostly Canadian and British companies, Pringle guaranteed

²⁹⁵Ibid.

²⁹⁶Public Archives of Canada, Ottawa, R. G. 42, Series IJ C1, Volume 379, File #24-2-88, document #14.

²⁹⁷Public Archives of Canada, Ottawa, R. G. 42, Series II C1, Volume 379, File #24-2-88, document #15.

that he would pay anything for which he was responsible. He continued on the topic of liability:

...I abandoned to the underwriters and they accepted the abandonment so the title to the property or anything that was left of the property together with liabilities were transferred to the underwriters as of the date of the disaster. I was not, therefore, the owner of the boat at the time she drifted on the head of Stag Island but the underwriters were. Will you, therefore, please take the matter up with their representative, Mr. R. Parry-Jones, London Salvage Association, Rockefeller Building, Cleveland, Ohio?²⁹⁸

Pringle also stated that, as he understood it, under Canadian law, after two years have elapsed, a wreck is considered abandoned and nobody's property. Then he strongly pointed out that the *Walter R. Pringle* had been abandoned for eleven years.

Ottawa's response to the Pringle Barge Company was curt: "Action must be taken."²⁹⁹

The Pringle Barge Line Company's answer was as blunt, if not as short: "We do not feel that there is any liability on our part as we were not and have not been the owner of the wreck for eleven years."³⁰⁰

E. Hawken, the Acting Deputy Minister of the Ministry of Marine and Fisheries, invoked Canadian law in his response, sent by registered mail:

...In reply I have to advise you that under Chapter 115 Part II of the Revised Statutes of Canada, Navigable Waters

²⁹⁸Public Archives of Canada, Ottawa, R. G. 42, Series II C1, Volume 379, File #24-2-88, document #16.

²⁹⁹Public Archives of Canada, Ottawa, R. G. 42, Series II C1, Volume 379, File #24-2-88, document #17.

³⁰⁰Public Archives of Canada, Ottawa, R. G. 42, Series II C1, Volume 379, File #24-2-88, document #18.

Protection Act, the original owners at the time of the wreck are liable and any subsequent action whether by abandonment to the underwriters or otherwise does not in any way relieve you of your obligation.

I have therefore again to request you to not only have the wreck marked and lighted but have the obstruction removed without further delay.³⁰¹

The Pringle Company did not respond, so Ottawa sent them another registered letter three weeks later, making the same requests,³⁰² but in even fewer words, since tempers seemed to be getting shorter. Simultaneously, concerned over the Pringle Company's hardnosed stand on their detachment from any responsibility for the wreck of the *Walter R*. *Pringle*, Ottawa contacted Mr. R. Parry-Jones, the Pringle Company's underwriter representative in Cleveland. Since the Company had declared that it had abandoned all interests in their vessel to the underwriters, it was a logical step for Ottawa to attempt to have the underwriters shoulder the burden of the responsibility, thereby covering all bases. The Acting Deputy Minister openly asked "what the underwriters propose doing with regard to the removal of the wreck."³⁰³

On July 8, 1931, the Pringle Barge Line Company revealed another entirely new aspect in the case by claiming that an individual had purchased the remains of the *Pringle* from the underwriters.

...Your demand on us, therefore, that we remove the wreck leaves us in the dilemma that if we do not comply, we may be in some sort of trouble with you, whereas if we do comply, we will

³⁰¹Public Archives of Canada, Ottawa, R. G. 42, Series II C1, Volume 379, File #24-2-88, document #20.

³⁰²Public Archives of Canada, Ottawa, R. G. 42, Series II C1, Volume 379, File #24-2-88, document #22.

³⁰³Public Archives of Canada, Ottawa, R. G. 42, Series II C1, Volume 379, File #24-2-88, document #21.

be involved in a lawsuit with the present owner as we have no right to disturb his property.... 304

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One doubts that such a purchaser of the *Pringle's* remains existed, for, a week after the Pringle Company communicated this dubious information to Ottawa, it sent another letter, indicating that "the underwriters are now taking steps to light and remove this wreck...."³⁰⁵ Parry-Jones, representing the underwriters, had written Ottawa, informing Hawken that the matter was under consideration with the former owners, and that they would soon authorize a call for tenders for the removal of the wreck.³⁰⁶ It sounded as though Ottawa was going to accomplish its purpose.

Nowhere in the remaining correspondence among Ottawa, Parry-Jones, and the Pringle Barge Line Company of Cleveland was this unidentified "purchaser" mentioned again.

Before long, Ottawa received notice from the Sullivan Dredging Company of Detroit that they had been awarded the contract to remove the wreck of the Pringle. This company also requested that Ottawa "have a representative...at the site of the work...to approve of the work." and to kindly write their company "a letter stating that the work has been done to your [Ottawa's] entire satisfaction, so that we [the Sullivan Dredging Company] may receive payment from the owners."³⁰⁷

The Pringle Company signed a contract with Mr. Sullivan's Dredging Company to have the latter remove the wreck for the sum of \$3200.00, on condition that "the removal

³⁰⁴Public Archives of Canada, Ottawa, R. G. 42, Series II C1, Volume 379, File #24-2-88, document #23.

³⁰⁵Public Archives of Canada, Ottawa, R. G. 42, Series II C1, Volume 379, File #24-2-88, document #24.

³⁰⁶Public Archives of Canada, Ottawa, R. G. 42, Series II C1, Volume 379, File #24-2-88, document #25.

³⁰⁷Public Archives of Canada, Ottawa, R. G. 42, Series II C1, Volume 379, File #24-2-88, document #26.

of this wreck shall be made to the complete satisfaction of the Dominion of Canada, the Minister of Marine,..." and that no payment would be made to the dredging company until the Canadian government approved the work done by Sullivan.³⁰⁸

The Pringle Company, in its determination to settle the matter,³⁰⁹ also requested that Ottawa have "a man on the job to see that this work is done satisfactorily."

Ottawa sent William H. Carson to oversee the removal, and on August 7, 1931, he telegrammed the Department of Marine that the wreck was "completely and satisfactorily removed today by the Sullivan Dredging Company using dynamite."³¹⁰ He had also swept a clear depth of nine feet over the entire area where the *Pringle* had rested, and concluded that two lighters would remove the wreckage to Lake Huron,³¹¹ where it would be scuttled in deep water.

When the Pringle Company was notified by Sullivan Dredging that the mission was accomplished, it asked Ottawa to corroborate that the work had been satisfactorily done before it paid the bill.³¹² Sullivan also telegrammed Ottawa asking them to verify the work he had done so that he could get paid.³¹³This Ottawa quickly did.³¹⁴

³⁰⁸Public Archives of Canada, Ottawa, R. G. 42, Series II C1, Volume 379, File #24-2-88, document #27.

³⁰⁹Public Archives of Canada, Ottawa, R. G. 42, Series II C1, Volume 379, File #24-2-88, document #28.

³¹⁰Public Archives of Canada, Ottawa, R. G. 42, Series II C1, Volume 379, File #24-2-88, document #29.

³¹¹*Ibid*.

³¹²Public Archives of Canada, Ottawa, R. G. 42, Series II C1, Volume 379, File #24-2-88, document #31.

³¹³Public Archives of Canada, Ottawa, R. G. 42, Series II C1, Volume 379, File #24-2-88, document #32.

³¹⁴Public Archives of Canada, Ottawa, R. G. 42, Series II C1, Volume 379, File #24-2-88, document #33.

In his report to Ottawa, dated August 18, 1931, William Carson described the removal of the *Walter R. Pringle:*

Work was begun on 3rd. August and completed by the M. Sullivan Dredging Company on 6th. August, using dynamite and clamshell to clear away the wreckage. The boiler and cylinders of engine, also the rudder had been previously removed, apparently by some other wrecking firm, but all the rest of the wreck was removed by the above Contractors, including the propeller, shaft, engine foundations, thrust bearing, inner and outer smokestack, the bow and all stern sides and planking also forefoot, keel in two 18-foot pieces and another 20 ft. length. The anchor was recovered and all that was left on the bottom of the entire wreckage were small wood splinters that could not be grabbed up except by bringing along with them large quantities of gravel.

When I sounded around the wreck in 1920 there was between 13' 6" and 14' 6" of water, but since then, gravel had accumulated on the shoal around the wreck until there was about 9 feet of water. I swept all over the site of the wreck and found a clear depth of 9 feet which was the greatest depth I could set my "sweep" for. I hereby certify that the wreck has been completely and satisfactorily removed....³¹⁵

Carson concluded with the fact that two scow loads of wreckage had been taken to Lake Huron and dumped in deep water.³¹⁶

It took over eleven years to resolve the three-way conflict in the case of the *Walter R. Pringle*, a case which saw an unholy trinity of the owner, the underwriter, and the government clash over responsibility for shipwreck removal. The Canadian government chased the *Pringle's* owners with dogged determination, while the Pringle Barge Line Company tried to squirm out of accepting responsibility by conjuring up incredible excuses, e.g. "I was not the owner of the boat at the time she drifted on the head of Stag

 ³¹⁵Public Archives of Canada, Ottawa, R. G. 42, Series II C1, Volume 379, File #24-2-88, document #34.

³¹⁶*Ibid*.

Island," "after two years have elapsed, a wreck is considered abandoned and nobody's property," "an individual purchased the remains of the *Pringle* from the underwriters."

It took over eleven years for the *Pringle* to become a problem; as long as large portions of the wreckage showed above water each year, this nuisance to navigation could be avoided by vessels easily enough. However, once the river's ice succeeded in toppling the boiler and eliminating any surface landmarks, the obscured location of this threat to navigation prompted one concerned boater, namely the Stag Island Ferry operator, to respond by complaining to Ottawa.

Had the Canadian government carried through its initial response to the problem back in 1920, instead of allowing eleven years to transpire before bringing up ownership questions and pulling a mouldy skeleton out of the Pringle Company's closet, the matter would have been quickly resolved. However, quick solutions from slow-moving bureaucracies cannot be expected.

d) The Wallschiff (October 2, 1953)

The German mini-freighter, *Wallschiff*, was on her maiden voyage through the Great Lakes in the early autumn of 1953, carrying 325 tons of steel to Muskegon.³¹⁷ With a gross tonnage of 882, and a length of 205 feet, this brand new steel vessel (she was launched on February 25, 1953, at Lauenburg, Germany)³¹⁸ was ready for the far corners of the world.

³¹⁷ The Detroit Times, Oct. 5, 1953.

³¹⁸"Master Sheet" on the *Wallschiff*, Institute for Great Lakes Research, Bowling Green State University, Ohio.

Unfortunately, her rather tender, young crew was not ready for the currents, or the signal system used, in the St. Clair River.

A clear, mild evening blessed the St. Clair River valley as the *Pioneer*, a bulk carrier belonging to the Cleveland-Cliffs Company, eased silently beneath the Bluewater Bridge and into the narrow St. Clair River. She carried 9,000 tons of iron ore in her holds. Captain Timothy O'Leary's 43 years of experience on the Great Lakes did not make him any less cautious; he maintained a steady firsthand watch on the bridge himself, despite the lateness of the hour. The veteran sailor knew that this was one of the three dangerous bottlenecks in the Great Lakes system, so he watched cautiously as his vessel negotiated the treacherous currents where Lake Huron tried to drain itself into the narrow St. Clair River.

While still out in the lake, O'Leary had noticed the green running light of a vessel off his starboard bow, quite close in toward the American side, and still considerably downstream from the *Pioneer's* position. That vessel was approaching in what could be termed "the wrong lane," or at least not the side of the river usually occupied by upbound traffic.

As the two vessels drew closer, Captain O'Leary gave a two-blast signal, indicating his intention to direct his course to port, since the approaching vessel was hugging the American side of the river too closely for the customary port-to-port passing. No response was received within half a minute, so O'Leary blew a danger signal to alert the captain of the other ship. He followed this with another two-blast signal. Again, no answer was received, and the ships continued to approach each other.

When the vessels were within 1,200 feet of each other, the upbound craft suddenly swung to starboard, heading across the river, in an apparent attempt "to get into the right lane." Unfortunately, this vessel, the *Wallschiff*, placed itself right across the path of the *Pioneer*.

In what must have been a terrifying sight for these strangers in a strange land, the immense *Pioneer*, with a length of over 500 feet, bore down upon the pocket freighter. The collision occurred near mid-stream, in Canadian waters. The *Pioneer's* bow ripped a huge hole in the port side of the confused vessel. Following the impact, Captain O'Leary displayed remarkable presence of mind by keeping the bow of the *Pioneer* embedded in the side of the stricken ship, pushing it out of the shipping channel towards the Canadian shore, where the *Wallschiff* settled in 60 feet of water some 200 yards out from the Sarnia shore.³¹⁹

As it turned out, the only man on board the *Wallschiff* with any St. Clair River experience prior to that night was Captain Harold Patterson, the 72-year-old Canadian pilot who had boarded the *Wallschiff* at Kingston, Ontario. Tragically, Captain Patterson died of a heart attack during the collision. He was this mishap's only loss of life.

The *Wallschiff's* group consisted of 16 crewmembers and one passenger, all German nationals, and most of whom were rather young. Indeed, the wheelsman at the time of the collision was the 15-year-old cabin boy, with very little sailing experience (this was his second time at sea, the first being a recent trip to Sweden.³²⁰ "Manpower is scarce on a freighter, and [the cabin boy] was taking his turn at the wheel when the ore ship, *Pioneer*, bore down on the *Wallschiff* in the darkness."³²¹ As frightening as the moment may have been, the cabin boy rushed below deck immediately after the impact to warn the sleeping men below.

The Wallschiff filled with water rapidly; she sank in seven minutes.322

³¹⁹The Port Huron Times Herald, Oct. 3, 1953.

³²⁰The Detroit News, Oct. 3, 1953.

³²¹ The Detroit Free Press, Oct. 3, 1953.

³²²The Detroit Times, Oct. 3, 1953.



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Capt. Harold Patterson, 72. Toronto, who was piloting the ill-fated ship on its journey through the river to Lake Huron for the German captain, was killed in the tragedy.

The sunken vessel, the 880-ton DIFG Wallschiff, of Lubeck, Germany, went down in seven minutes after a huge hole was ripped amidships on its port (left) side in a collision with the 9,600-ton Pioneer, of the Cleveland-Cliffs fleet. Captain Patterson was on the *Wallschiff* to guide her through "One of the world's trickiest waterways."³²³ Immediately after the collision, the pilot ran below to get his luggage. His body was later found in the river.³²⁴

The German captain of the *Wallschiff* stated that he had been proceeding along the Canadian side of the river just prior to the collision, and that he exchanged blast signals with the *Pioneer*. Conflict arose when the German captain's version of events were loudly contradicted by several witnesses who had viewed the accident from the shore.³²⁵ Understandably, much confusion existed on the bridge of the *Wallschiff* in the seconds prior to the collision, undoubtedly fanned by the communication problem posed by the different languages, as well as the unfamiliarity of the foreigners with the nature of these waters.

Both Canadian and United States agencies debated who would make the official inquiry into the crash that took the life of one man, and slightly injured five others.³²⁶ The United States Coast Guard stated that it would hold an interrogation within a few days aboard the *Pioneer*, which was not seriously damaged, and which was moored in Lorain, Ohio.³²⁷ The hearing scene shifted to Port Huron within two days in order to be closer to question the crew members of the *Wallschiff*.³²⁸ The *Pioneer's* captain, Timothy O'Leary, testified for over six hours in Lorain, and his crew members also testified to seeing the German ship appear unexpectedly in front of them in the St. Clair River.³²⁹

³²³*Ibid*.

³²⁴The Detroit News, Oct. 3, 1953.

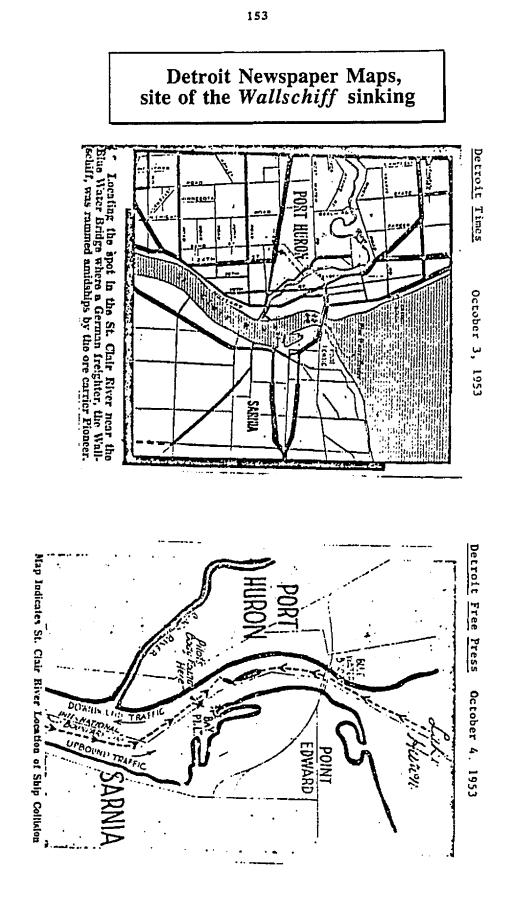
³²⁵*Ibid*.

³²⁶The Detroit Free Press, Oct. 4, 1953.

³²⁷The Detroit Free Press, Oct. 5, 1953.

³²⁸The Detroit News, Oct. 7, 1953.

³²⁹Ibid.



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Twenty days after the *Wallschiff* sank, Captain J. Earl McQueen of Amherstburg, Ontario, stated that he was given the contract to salvage the German motor ship. He anticipated the job requiring at least 30 days, using derricks and tugs and 60 to 75 men.³³⁰

The *Wallschiff* was raised on December 8, 1953, and taken to the Great Lakes Engineering Works, Ecorse, Michigan, for repairs.³³¹In 1954, her name was changed to *Warendorp* until 1966, and she made several return trips to the Great Lakes under that name. She then spent two years under Panamanian ownership, before moving to new owners in the Philippines, where she has been since 1968.³³²

Canada may have won the salvage right, but the American courts decided the guilt. The judge in the United States District Court accepted the *Pioneer's* version of the story, since it was backed by the testimony of independent and probably impartial witnesses. However, some of the blame did fall upon the *Pioneer*, when the judge ruled that the captain of the *Pioneer* had acted in violation of Rule 26 of the Great Lakes Pilot Rules:

> If the pilot of a steam vessel to which a passing signal is sounded deems it unsafe to accept and assent to said signal, he shall not sound a cross signal; but in that case, and in every case where the pilot of one steamer fails to understand the course or intention of an approaching steamer, whether from signals being given or answered erroneously, or from other causes, the pilot of such steamer so receiving the first passing signal, or the pilot so in doubt, shall sound several short and rapid blasts of the whistles; and if the vessels have approached within half a mile of each other both shall reduce their speed to hare steerageway, and, if necessary, stop and reverse.³³³

³³⁰The Detroit Free Press, Oct. 22, 1953.

³³¹Master Sheet" on the Wallschiff, op. cit.

³³²Ibid.

³³³George J. Joachim. "The New York Rule." Inland Seas, Summer, 1985, Vol. 41, No. 2: 132.

In other words, as much as the master of the *Wallschiff* was in the wrong, the captain of the *Pioneer* had contributed to the accident because he had violated this rule stating that if a master is in doubt as to the intention of the other ship, he must slow down or even come to a full stop. It was discussed that, in everyday life on the Great Lakes, very few, if any, captains would bring their vessels to a halt simply because an approaching ship did not return their signal.

The case of the *Wallschiff* and the *Pioneer* clearly shows that, sometimes, the rules of the road are learned by accident.

e) The Sydney E. Smith, Jr. (June 5, 1972)

Shortly after the midnight hour on Monday. June 5, 1972, the Canadian steamer, *Parker Evans*, loaded with grain and downbound on Lake Huron, neared the Bluewater Bridge. Just after 1:00 A.M., as she entered the approaches to the St. Clair River, she reduced speed to adhere to the limits demanded of navigators in these confined and meandering waters.

Upbound at that moment was the 66-year-old steamer, *Sydney E. Smith, Jr.* The night was clear, with excellent visibility, so the two vessels had no difficulty seeing each other's display of proper lights. In exchanging single whistle blasts, they indicated that they would pass in "the usual lane of traffic," namely port side to port side.

As the vessels neared each other, Captain Thomas David, of the *Parker Evans*, noticed that the *Smith* was having difficulties making the usual turn around that last bend

leading to the open lake, so he ordered his helmsman to steer the *Evans* closer towards the American shore to their starboard in an effort to give the other vessel more room.³³⁴

Meanwhile, the *Sydney E. Smith, Jr.* was pushing upstream at her full speed of about nine miles per hour, which was the maximum allowable speed. The Second Mate, Henry Gaskins, was on watch, and he felt that the *Smith* was heading too close to the Canadian shoreline. After a few moments, the old vessel, having moved beyond the managable backwash current close to shore right into the main downstream force, failed completely to respond to her helm

The *Smith's* bow was caught by the strong current, and the vessel was heading more and more towards the American shoreline, right across the bow of the approaching *Evans*.

Gaskins could see both the red port light and the green starboard light on the *Parker Evans*. This meant that her bow was heading straight for the *Sydney E. Smith, Jr.* He immediately blew the danger signal, followed, as a hasty afterthought, two blasts of the whistle to indicate a starboard-to-starboard passing.

Captain Davis on the *Parker Evans* threw his engines hard astern,³³⁵ but the fast current and the vessel's momentum plowed the *Evans* forward into the *Smith's* starboard bow. Then an unusual thing occurred: the *Evans* separated from the *Smith* as in a rebound, and struck the *Smith* again about 50 feet astern of the first point of impact.

Now Davis ordered his ship full steam ahead, in an effort to pin the *Smith* against a nearby dock, but the forceful current swung the *Smith* in such a way that the manoeuvre failed. The *Evans* hastily dropped anchor and tied off some lines to that nearby dock.

³³⁴The Port Huron Times Herald, June 5, 1972.
³³⁵The Samia Observer, June 12, 1972.

Captain Kristensen of the *Smith*, who had temporarily gone below, quickly returned to the pilot house. His attempts to radio the Coast Guard failed. The engine was put on forward, but the vessel was developing a list from the water flowing into it, so the captain gave the command to abandon ship.

Meanwhile, another master, Captain Campbell, who had been relaxing in the pilot office on the Canadian shore, quickly activated the pilot boat to render assistance. From the *Smith*, Campbell managed to remove 31 of the 34 crewmembers. Campbell's courage carned him the U.S. Coast Guard Life-Saving Medal.³³⁶ It was initially feared that the missing three were trapped below deck and would drown, but in fact, they had launched the *Smith's* work skiff and taken themselves to shore and safety.

The Sydney E. Smith drifted for a short time before sinking onto her starboard side in the main channel of navigation. Thus began a partial blockade that affected navigation for weeks to come.

Salvage was not attempted by the owners, and the vessel was declared abandoned.³³⁷

As in the case of the *Wallschiff* almost twenty years earlier, the spectacle of a shipwreck, so close to home no less, attracted thousands of curious people to both sides of the riverbank.

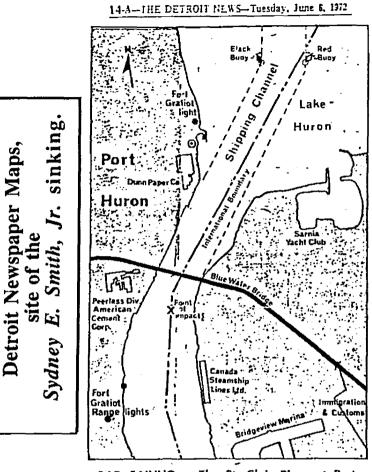
Several American and Canadian agencies immediately pushed for the recovery of the fuel on the *Smith* to prevent pollution.³³⁸

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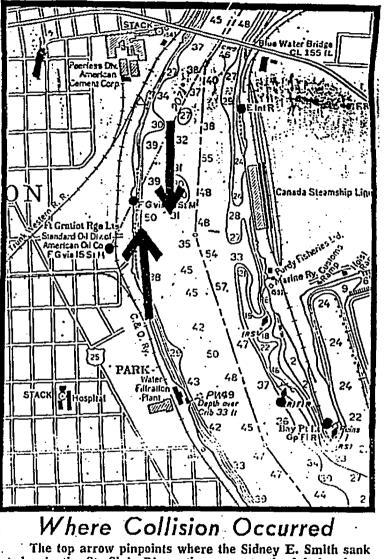
³³⁶The Samia Observer, June 26, 1973.

³³⁷"Ship Information and Data Record" on the *Sidney E. Smith, Jr.* The Herman G. Runge Collection, Milwaukee Public Library, Milwaukee, Wisconsin.

³³⁸The Port Huron Times Herald, June 7, 1972.

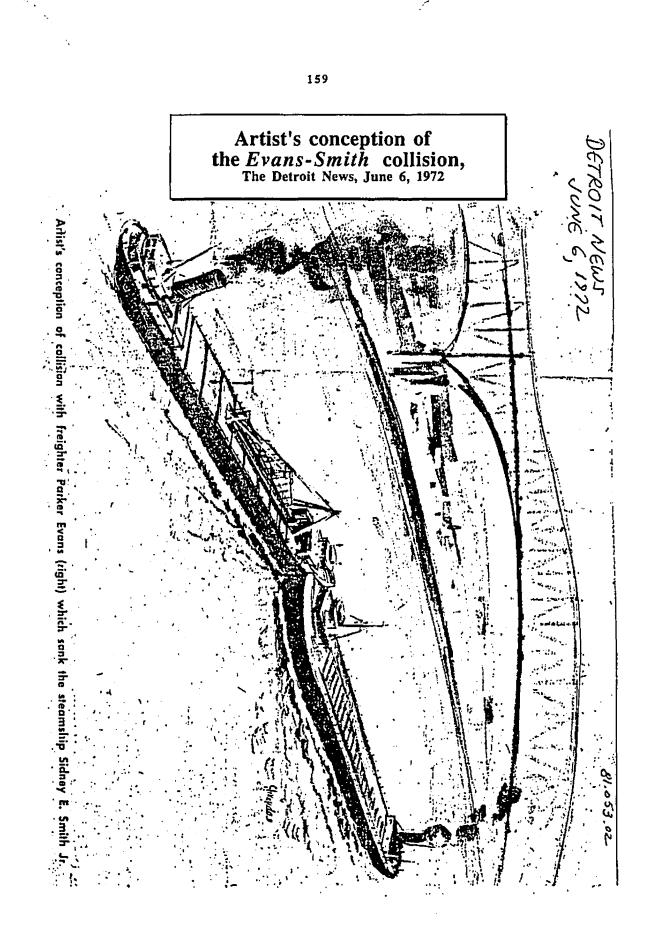


BAD SAILING — The St. Clair River at Port Huran where two freighters collided yesterday has been labeled as one of the "taughest
stretches of water to navigate anywhere on the Lakes" by veteran Great Lakes seamen. They say that the current in the channel, which flows from Lake Huron to Lake St. Clair, makes steering difficult under the present "slow speed limits."



today in the St. Clair River, the arrow to the left is where the Evans tied up.

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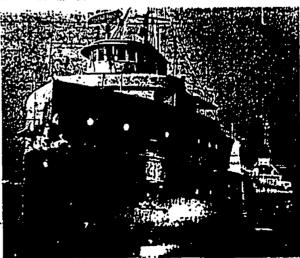
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Two Yiews Of Ships Involved In Today's Collision Near The Blue Water Bridge

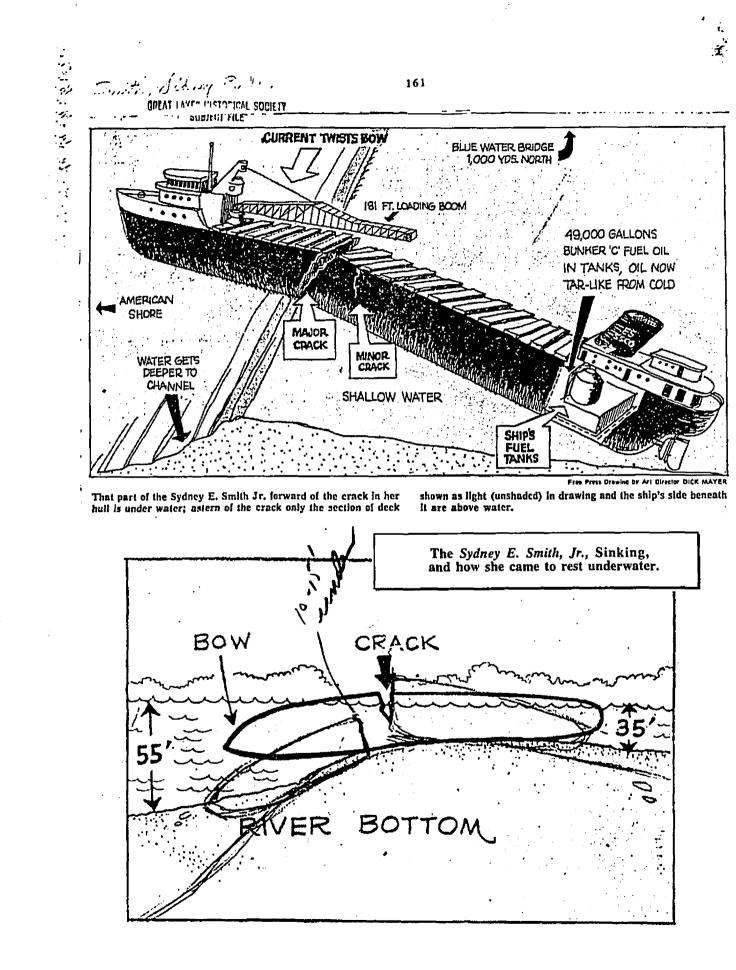
'No Disagreements' **Davis Jury Die** Was Cast Early



A full page of pictures on today's ship occident near the Blue Water Bridge is an tures on pages 7A and 48.

Рđ an Part Ib of the U.S. te tale

The Sydney E. Smith, Jr., Sinking, Port Huron Times Herald front page newstory.



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The Coast Guard's more immediate problem was establishing traffic control. With the *Smith* lying so close to the middle of the river, two-way traffic was impossible; downbound vessels could use the river by day, while only upbound ships could pass at night. Vast numbers of vessels congregated just upstream or downstream of the Bluewater Bridge each day or night, depending upon their heading. In an era when "time means money" was a popular catchphrase, this was definitely an economic setback.

The removal of the Smith's oil supply commenced on June 7, 1972,³³⁹ and was completed by June 12, 1972 without any major spillage.³⁴⁰

The Sydney E. Smith, Jr. rested on a drop-off, and a huge crack soon appeared in her hull. With the unrelenting current providing added pressure, the Smith soon split in half, with the bow section breaking off. Now the salvage job encompassed retrieving not one, but two huge pieces of steel wreckage from the dizzying swirl of unfriendly water.

The Coast Guard undertook the removal of the wreckage, and they called upon a Philadelphia firm, the Lucker Manufacturing Company, to provide the heavy-duty hydraulic equipment necessitated by such a demanding venture. Wire ropes would be attached to each section of the shipwreck, and gradually pull it out of the river by dragging it along the bottom towards the shore. Concrete anchors had to be firmly embedded ashore as a brace, or foundation, for these hydraulic pulling machines. Flotation foaming was pumped into the wreck in an effort to provide some buoyancy before the "wreck pull."³⁴¹

The larger section, the stern, was removed first, on November 11, 1972³⁴²; it ultimately became a dock on the Canadian side at Sarnia. The smaller bow section followed

³³⁹The Port Huron Times Herald, June 8, 1972.

³⁴⁰ The Sarnia Observer, June 13, 1972.

³⁴¹The Port Huron Times Herald, July 29, 1972.

³⁴²"Master Sheet" on the W.K. Bixby (later renamed the Sydney E. Smith, Jr.) Institute for Great Lakes Research, Bowling Green State University, Ohio.

quickly enough. Normal vessel traffic was resumed on September 26, 1972, almost three months after the mishap.

Federal Judge Damon K.J. Keith signed a final decree on November 28, 1973, approving an out-of-court settlement of the collision between the two steamers. Under this agreement, Erie Sand Steamship Company, the owner of the *Smith*, paid the federal government \$3,218,084 for the removal of their property, while the Hindman Transportation Company, Ltd., owners of the *Evans*, paid \$318,084. The cost of raising the *Smith* had been \$5,277,000, so taxpayers indirectly paid the difference. Hindman also agreed to drop their suit of \$70,268 against Erie Sand Steamship for repair costs to the *Evans*. The companies, in reaching this agreement, neither admitted nor denied negligence.³⁴³

Captain Davis of the *Parker Evans* seriously suggested that the Bluewater Bridge portion of the St. Clair River permanently adhere to one-way shipping traffic.³⁴⁴ His suggestion was not accepted.

If any lesson can be learned from the sinking of the *Sidney E. Smith, Jr.*, it has to be one based upon the unpredictability of Mother Nature. A powerful man-made vessel will not always react in a hitherto established manner when it attempts to place some controls or restrictions or demands upon nature. Once we go too far, or make the mistake of losing respect for nature, it could kill us.

³⁴³ The Detroit News, Nov. 29, 1973.

³⁴⁴The Samia Observer, June 13, 1972.

CONCLUSION

One of the most dangerous sections of the overall Great Lakes-St. Lawrence River system is the St. Clair River; it is one of three respected and feared bottlenecks on this major transportation route (the other two being the Detroit River and the St. Mary's River, which are just as crowded, shoal-riddled, and, in parts, narrow as the St. Clair River).

The establishment of the St. Clair River as an international boundary added to the usual complications of marine losses; the position of the sunken vessel determined which nation had jurisdiction over the matter, and often, as in the case of the steamers, *Joliet*, and *Walter R. Pringle*, the political wrangling proved time-consuming and potentially dangerous.

The maritime and shipbuilding history of the St. Clair River established the fact that the river is part of the life of this area, and has provided employment to its residents in the form of shipbuilding in earlier times, and recreational opportunities more recently.

The characteristics of Great Lakes shipping were changing rapidly at the turn of the century, with the main focus being on ships' lengths and tonnage-carrying capacity. For example, the largest steamer built on the Great Lakes in the year 1891 was the 355-foot *E.C. Pope*, capable of carrying just over 4,000 tons of ore. In 1896, the largest vessel constructed was the 426-foot *George Stephenson*, with a tonnage-carrying capacity of 6,844. The 500-foot-mark for vessel construction was achieved in 1904 with the launching of the 560-foot *Augustus B. Wolvin*, which could carry 9,877 tons of ore. The year 1906

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saw the 600-foot-mark broken by the 602-foot *E.Y. Townsend*, with a carrying capacity of 11,100 tons. In 1914, the largest steam vessel built on the Great Lakes was the Canadian freighter, *W. Grant Morden*, with a length of 625 feet and a capacity of 14,200 tons. Over a period of 23 years, from 1891 to 1914, the lengths of these huge vessels had almost doubled (from 335 feet to 625 feet), while their tonnage capacity had more than tripled (from 4,053 to 14,200 tons).³⁴⁵ Vessel sizes stayed consistent for a long time after this; older sailors concluded that maximum dimensions and capacities had been reached.

In the latter part of the twentieth century, however, these ships' figures skyrocketed to new heights, or, more aptly, lengths. With the launching of the *Edmund Fitzgerald* in 1958, the Great Lakes freighters attained a length of 729 feet, with a tonnage capacity of 40,000. By 1972, the first of 12 "Maximum Lakers," the *Stuart J. Cort*, with a length of just over 1,000 feet and a cargo tonnage capacity of 64,000, was constructed for use on the upper Great Lakes.³⁴⁶What had been deemed impossible earlier in the century was now regularly plying the lakes' waters. Vessels almost tripled in length between 1891 and 1972, while the tonnage capacity increased an incredible 15-fold!

Dramatic changes occurred simultaneously along, and on, the St. Clair River. Commercial shipbuilding changed, from the quick production of smaller, wooden, lowtonnage ships, to fewer, but larger vessels seeing construction. Marine losses also reflected changes. Of the ship sinkings in the years 1900 to 1909, 12 were sail vessels or barges,

³⁴⁵Beeson's Marine Directory of the Northwestern Lakes. (Chicago: Harvey C. Beeson, 1918): 58.

³⁴⁶ Jacques Lesstrang. Cargo Carriers of the Great Lakes. (Boyne City, Michigan: Harbor House Publishers, 1985): 51.

while 34 were steamers; from 1910 to 1919, five were sail or barges, and 14 were steamers; the 1920's witnessed the sinking of five more sailing ships or barges, while the number of steamers that went to the bottom jumped to 26. Only one sailing vessel sank in the St. Clair River in the 1930's, with that same number in the 1940's (and none since then), while four steamers sank in the 1930's, five in the 1940's, three in the 1950's, two in the 1960's, and only one in the 1970's, with none since then. The total elimination of commercial sailing vessels and smaller, steam-powered freighters by the 1940's showed them to be the maritime equivalent of the "horse-and-buggy"; their time had passed, and huge, steel behemoths replaced them.

The success of the initial and regular river dredgings, the aids to navigation, such as lighthouses, lighted buoys, ranges, daymarks, etc., and advances in electronic technology such as radio, radar, and position-finding devices have all reduced the natural dangers and threats to marine transportation on the St. Clair River. It seems that, today, complications are human rather than natural.

Contemporary newspaper accounts detailing shipping losses at the turn of the century invariably identified the insurance rating of the unfortunate vessels, and the amount for which each ship was insured. An explanation of these ratings and their significances, with a few examples of the underwriting history of several St. Clair River vessels, is vital for an understanding of the economic aspect of Great Lakes commercial shipping.

The study of the salvage laws of not only the State of Michigan and the Province of Ontario, but also the United States and Canada, also indicated evolution; "wrecking" moved from the status of respectable occupation working within established guidelines and laws at the turn of the century to being virtually non-existent at the present day, and with salvage laws being redefined and expanded as needed to cover the illegal removal of shipwreck parts, often merely as tokens of accomplishment, by the increasing number of sport scuba divers.

Over 100 vessel sinkings, of varying intensities, complications, and significances, occurred in the St. Clair River in this century; all of them are listed and described in the survey, with four of the more pronounced examples studied in detail.

People seem to have an inordinate fascination with disaster stories and, as unfortunate as these events are at the time for the people involved, disasters at sea, whether caused by accident, weather, or military action, provide one of the few sources of primary material available to historians. In effect, time can stand still on the riverbed. Such is certainly the case with the St. Clair River.

APPENDIX A

Survey of the St. Clair River Marine Losses, 1900-1972

The thumbnail descriptions of the five St. Clair River marine losses for the year 1900 are condensations of a chapter (pages 155-174) in the author's earlier work, "Shipwreck Tales: The St. Clair River (to 1900)", published in 1987. The remaining marine loss sketches, beginning with the year 1901, were written specifically for this thesis.

FONTANA (August 3, 1900): The huge, graceful schooner, *Fontana*, built in St. Clair, Michigan, in 1888,³⁴⁷ sank in the busy mouth of the St. Clair River after a collision with the schooner, *Santiago*.³⁴⁸One life was lost. It took several weeks of debate to determine the method of removal and the jurisdiction (the wreck lay 100' inside the United States boundary.)³⁴⁹ Meanwhile, the *Fontana* wreck caused the sinking of the

³⁴⁸The Port Huron Daily Herald, Aug. 4, 1900.

349 The Port Huron Daily Times, Aug. 9, 1900.

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³⁴⁷Rev. Peter Van der Linden, ed., and the Marine Historical Society of Detroit. Great Lakes Ships We Remember II, (Cleveland: Freshwater Press, 1984): 117.

schooner, *John B. Martin*, with the loss of four lives, seven weeks later. The *Fontana* was then pulled to pieces by a tug utilizing dynamite.³⁵⁰

- EUREKA (September 11-12, 1900): The barge, *Eureka*, sank while fully loaded at Jenkinson's coal dock in Port Huron. Built in 1872, the *Eureka* was lightered of her cargo, and pumps were used to raise her.³⁵¹ This vessel, returned to service, sank a year later in a fall storm between Port Huron and Tawas City, Michigan, with the loss of one life.³⁵²
- JOHN B. MARTIN (September 21, 1900): The schooner, *John B. Martin*, sank at the head of the St. Clair River after a direct collision with the steambarge, *Yuma*, and indirectly because the shipwreck, *Fontana*, hindered safe navigation. Four lives were lost. The *John Martin*, lying in about fifty feet of water,³⁵³ delayed shipping traffic temporarily. Great Lakes vesselmen were incensed by this second shipping disaster at that site.³⁵⁴ The government authorized clearing the wreck of the *John Martin* to a depth of 25 feet, so that even the deepest draft vessels could pass over the wreck.³⁵⁵

³⁵⁰The Port Huron Daily Times, Sept. 5, 1903.

³⁵¹ The Port Huron Daily Herald, Sept. 12, 1900.

³⁵²David Swayze. Shipwreck! A Comprehensive Directory of Over 3,700 Shipwrecks on the Great Lakes. (Boyne City, Michigan: Harbor House Publishers, Inc., 1992): 83.

³⁵³More accurate depth measurements done later indicated a depth of 62'.

³⁵⁴ The Duluth Evening Herald, Sept. 22, 1900.

³⁵⁵ Ibid.

- SWALLOW (October 5, 1900): The 133-foot wooden propeller, Swallow, built in Trenton, Michigan, in 1873,³⁵⁶was struck, due to an error in signals, by an unidentified upbound steamer two miles below Marine City.³⁵⁷ She sank in eighteen feet of water near shore,³⁵⁸ but was rebuilt that winter in Detroit. However, a year later, the Swallow sank in a gale on October 19, 1901, about ten miles off Lake Erie's treacherous Long Point, her elever,-man crew being rescued by her tow.³⁵⁹
- ELIJAH WINDSOR (November 12, 1900): The 85-foot steamer, *Elijah Windsor*, was built in 1871 at Sombra, Ontario.³⁶⁰ This ship waterlogged and capsized near Port Huron, grounding on the Canadian shore.³⁶¹ The undramatic, but fortunate, important fact is that no lives were lost when this \$2,000 ship sank.
- FOSTORIA (May 10, 1901): The 237-gross-ton schooner-barge, *Fostoria*, built at Black River, Ohio, in 1865,³⁶² sank in the St. Clair River, taking two lives with her. The *Fostoria* went down just abreast of the Grand Trunk elevator on the Canadian side of the river channel. The ship and its cargo were regarded as total losses,³⁶³ the latter

362Mansfield, op. cit., 826.

^{356&}quot;Master Sheet" on the Swallow, op. cit.

³⁵⁷The Port Huron Daily Herald, Oct. 6, 1900.

³⁵⁸The Port Huron Daily Times, Oct. 6, 1900.

³⁵⁹The Port Huron Daily Times, Oct. 21, 1900.

³⁶⁰Mann, op. cit., p. 4.

³⁶¹The Port Huron Daily Herald, Nov.13, 1900.

³⁶³The Port Huron Daily Herald, May 11, 1901.

because there was little profit margin in salvaging something as inexpensive as coal, and the former because of her advanced age and condition.

- GEORGE STAUBER (August 21, 1901): A small ferry boat running between Port Huron and Point Edward, the *George Stauber*, built in 1883, disappeared beneath the swift waters at the mouth of the St. Clair River after a collision with the *McDougall*. Nine people from the ferry frantically floundered to keep alive while they floated in the fast stream.³⁶⁴ Miraculously, all of them lived to tell this tale. The *George Stauber* was not carrying any lights at the time of the accident, and the vessel carried only fire insurance, but no marine. She was valued at \$2,500.³⁶⁵
- T. S. FAXTON (October 20, 1901): This 120-foot vessel, built in Clayton, New York in 1874, was finally abandoned in 1931.³⁶⁶ The T. S. Faxton burned to the water's edge at Marine City. Alex Anderson started rebuilding this ship as a barge, using the original machinery from the ill-fated Faxton. When this ship was re-launched in 1902, she had a new name, the Edward P. Recor,³⁶⁷ and, as such, saw another 29 years of service.
- GEORGE H. WAND (April 17, 1902): The 140-foot schooner-barge, *George H. Wand*, launched at Buffalo, New York, in 1866,³⁶⁸ was under tow in the St. Clair River when

³⁶⁴The Sarnia Observer, Aug. 22, 1901.

³⁶⁵ The Port Huron Daily Herald, Aug. 22, 1901.

³⁶⁶"Master Sheet" on the T. S. Faxton, Institute for Great Lakes Research, Bowling Green State University, Ohio.

³⁶⁷The Port Huron Daily Times, Dec. 6, 1901.

³⁶⁸John Greenwood. Namesakes, 1900-1909. (Cleveland: Freshwater Press, 1987): 112.

it sank in a collision with the steamer, *Lagonda*. Over two months later, the government steamer, *Hancock*, using, dynamite, cleared the wreck for navigation.³⁶⁹

- KITTIE M. FORBES (May 21, 1902): The 209-foot, wooden steamer, *Kittie M. Forbes*, launched at West Bay City, Michigan in 1883,³⁷⁰ caught on fire while on the St. Clair Flats.³⁷¹ The crew quickly headed the ship to the nearest dock and escaped to shore. Meanwhile, the dock caught on fire and the *Forbes* was cast adrift. By midnight, only the burning hull remained. The hull was eventually towed to Algonac, where the vessel was abandoned.³⁷²
- GLENIFFER (June 2, 1902): Two people died when an unidentified steel freighter (later ascertained to be the *Admiral*)³⁷³ collided with the *Gleniffer*, at the St. Clair Flats. The 135-foot *Gleniffer*, built at Port Robinson, Ontario, in 1873,³⁷⁴ swung out into the course of the downbound freighter in an effort to avoid the wreck of the *Kittie Forbes*. The steamer smashed off the stern of the schooner, causing her to sink within minutes; the freighter, meanwhile, continued on her course as though nothing had happened.

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³⁶⁹ The Port Huron Daily Times, June 25, 1902.

³⁷⁰Greenwood. Namesakes, 1900-1909. Op. cit., 32.

³⁷¹The Port Huron Daily Times, May 23, 1902.

³⁷²The Port Huron Daily Times, June 28, 1903.

³⁷³The Samia Daily Observer, June 6, 1902.

^{374&}quot;Master Sheet" on the *Gleniffer*, Institute for Great Lakes Research, Bowling Green State University, Ohio.

The female cook and a sailor sleeping below were drowned. The wreck was dynamited by the U. S. Corps of Engineers on June 27, 1902.³⁷⁵

- IDA (November 28, 1902): The wooden barge, *Ida*, loaded with sugar beets, sank at the Sichen dock, but was quickly raised and returned to service.³⁷⁶This 120-foot vessel, launched at Milwaukee in 1867, sprang a leak and capsized in Lake Michigan on September 29, 1908, with her crew reaching shore safely.³⁷⁷
- THOMAS D. STIMSON (June 30, 1903): The Virginius, a wooden schooner launched at Mount Clemens, Michigan, in 1881, was converted to a 160'6" propeller in May, 1887, and renamed the *Thomas D. Stimson*.³⁷⁸ While on the St. Clair River Flats, crewmembers observed that the ship was on fire. Quickly heading her for the shore near the Star Island House and scuttling her there, the crew escaped unharmed.³⁷⁹ The *Thomas D. Stimson* was never rebuilt, her final enrollment being surrendered at Port Huron on September 29, 1903.
- CHAMPION and CHARLES SPADEMAN (July 13 and 16, 1903): The steel steamer, *Robert W. E. Bunsen*, was downbound when it collided, near Algonac, with a small, wooden vessel, sinking her. After unloading at a Lake Erie port, the *Bunsen* was

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³⁷⁶The Port Huron Daily Herald, Nov. 29, 1902.

³⁷⁷"Master Sheet" on the *Ida*, Institute for Great Lakes Research, Bowling Green State University, Ohio.

³⁷⁸"Master Sheet" on the *Virginius*. Institute for Great Lakes Research, Bowling Green State University, Ohio.

³⁷⁹The Port Huron Daily Times, June 30, 1902.

upbound on her return voyage when it again hit a small wooden vessel near Algonae, again sending her to the bottom! In the first incident, the schooner-barge, *Champion*, was upbound when she was struck by the *Bunsen* at the head of Russell Island. The crew was removed from the sinking vessel. Efforts were made to shift the wreck of the *Champion* over to the Canadian bank where she would be out of the way,³⁸⁰ but these attempts failed. A day later, the *Champion* was formally abandoned by her owner as a total wreck, and the government stepped in. The wreck was dynamited to piecemeal,³⁸¹ Three days after the first incident, upbound this time, the *Bunsen* hit the 134'2" schooner, *Charles Spademan*, built in Marine City, Michigan, in 1873. The *Bunsen* had struck again, literally! No lives were lost and no injuries were sustained, the *Spademan's* crew having been rescued by local fishermen. The schooner was soon raised and repaired, but on December 10, 1909, ice cut through her hull when she was off Put-in-Bay, western Lake Erie, and she sank to a total loss, with no loss of life.³⁸²

GEORGE W. SIGISON (July 25, 1903): The 40-foot tug, *George W. Sigison*, built in 1873 at Buffalo, New York, caught fire at her Port Huron dock and sank. Three days later, when the tug, *Watson*, raised her, her owners announced that the *Sigison* would be rebuilt,³⁸³ but by the spring of 1904, her owners had second thoughts. A new

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³⁸⁰The Port Huron Daily Times, July 29, 1903.

³⁸¹ The Port Huron Daily Times, Sept. 5, 1903.

^{382&}quot;Master Sheet" on the Charles Spademan, Institute for Great Lakes Research, Bowling Green State University, Ohio.

³⁸³The Port Huron Daily Times, July 29, 1903.

owner rebuilt and re-enrolled her, and let her ply the waters of the St. Clair River for several more years. By 1914, the *George W. Sigison* was no longer in registry,³⁸⁴ probably having been abandoned along some backwater wharf.

JOHN N. GLIDDEN (October 9, 1903): The barge, *Magna*, upbound, collided with the 221'7" wooden propeller, *John N Glidden*, built in Cleveland in 1879, downbound in the St. Clair Flats ship canal. The latter sank immediately, beginning what was later referred to as the "Great Blockade." By the next morning, thirty ships waited upstream from the wreck, not quite certain if they could risk wriggling past the sunken *Glidden*.³⁸⁵ One expert felt that dynamite would be impossible to use because of the threat to the walls of the canal, being in such close proximity. Tugboats arrived from several ports, and were busy doing business towing larger lake vessels cautiously past the slightly-shifted remains of the *Glidden*. Five days after she sank, her bow section was dynamited off.³⁸⁶ The *Glidden's* stern half soon broke the surface using pontoons, and her remains were towed to Detroit, where her boilers were removed and she was scrapped.³⁸⁷ The St. Clair River was once again open for business.

³⁸⁴The Great Lakes Register, 1904.

³⁸⁵The Port Huron Daily Times, Oct. 9, 1903.

³⁸⁶The Samia Daily Observer, Oct. 21, 1903.

^{387&}quot;Master Sheet" on the John N. Glidden, Institute for Great Lakes Research, Bowling Green State University, Ohio.

- VALLETTA (August 9, 1904): The Valletta, a small wooden propeller 50'8" long, 10'2" wide, and with a draft of 4'2", was built in Syracuse, New York. On August 9, 1904, she burned to a total loss on the St. Clair River.³⁸⁸
- GERMANIC (November 6, 1904): The 216' wooden propeller, *Germanic*, built at West Bay City, Michigan, in 1888, dropped anchor in a severe fog and waited for daylight, but the anchor dragged, and she was soon hard aground at the head of Stag Island. Tugs were summoned, but they failed to pull her off, and the slow, difficult job of "lightering" her³⁸⁹ (unloading her heavy cargo so she would not draw as much water) began. A lamp in the engine room of the *Germanic* exploded, and the entire vessel was soon ablaze. The fourteen men aboard quickly evacuated. The *Germanic*, valued at \$40,000, was insured for that amount, and her cargo of coal was also insured.³⁹⁰ After U.S. authorities dynamited the wreek, it was pointed out that the *Germanic* lay entirely in Canadian waters, and was thus outside U.S. jurisdiction. The *Germanic's* final enrollment was surrendered at Cleveland on December 21, 1904. Her burned out hull was eventually raised by Tom Reid of Sarnia and sold in 1908 to Manley Chew, of Midland, Ontario, who rebuilt her. The *Germanic* was renamed the *Reliever* and

³⁸⁹The Sarnia Daily Observer, Nov. 7, 1904.

³⁹⁰The Detroit Free Press, Nov. 8, 1904.

³⁸⁸Master Sheet" on the Valletta, Institute for Great Lakes Research, Bowling Green State University, Ohio.

relaunched in 1909 under Canadian registry. Later that year, on November 3, 1909, the *Reliever* burned at Methodist Point, Georgian Bay, to a total loss.³⁹¹

- J. C. CLARK (May 13, 1905): The propeller tug, J.C. Clark, was built in 1865 at Marine City, Michigan. She operated on the ferry run between Sarnia and Port Huron when she burned at Port Huron.³⁹² Her registry was closed on May 20, 1905.
- GEORGE T. BURROUGHS (May 31, 1905): The 109-foot *George T. Burroughs* was a steam propeller built in 1881 in Chicago. Used as a sandsucker, she proceeded with a load of gravel down the St. Clair River towards Windsor from Port Huron.³⁹³ At Southeast Bend, the *Burroughs* was jarred from stem to stern when a much larger freighter struck her, crushing her hull. This mystery freighter was believed to have been the 291' wooden bulk cargo vessel, *C. F. Bielman*,³⁹⁴ towing a barge. With her value set at \$4,000, the *Burroughs* was abandoned.
- YAKIMA (June 12, 1905): The 279-foot *Yakima* was a huge wooden propeller, built in 1887 at Cleveland.³⁹⁵ Bound down with a load of iron ore, the *Yakima's* rudder chains parted and she grounded at the head of Stag Island on Saturday, June 10, 1905. After

³⁹¹"Master Sheet" on the Germanic, Institute for Great Lakes Research, Bowling Green State University, Ohio.

³⁹²The Port Huron Daily Herald, June 3, 1905.

³⁹³The Port Huron Daily Herald, June 1, 1905.

³⁹⁴According to the *Detroit Free Press*, the *Bielman* passed Detroit at 5:00 that morning, which would have placed her at the scene of the collision earlier that night.

³⁹⁵"Master Sheet" on the Yakima, Institute for Great Lakes Research, Bowling Green State University, Ohio,

two days of tugs yanking to free her, the *Yakima* caught on fire and burned nearly to the water's edge.She was insured for nearly her full value of \$40,000.³⁹⁶ Salvage work commenced immediately, but the damage was too extensive, so she was towed to Sarnia Bay, stripped of most of her machinery, and abandoned at the bottom of the bay. In 1928, her hull was raised, towed into Lake Huron and scuttled.³⁹⁷

LINDEN and CITY OF ROME (June 23, 1905): The *City of Rome* and the *Linden* both sank in the collision with each other off Tashmoo Park. The *Linden* sank almost immediately, taking to their deaths the steward and his wife.³⁰⁸ The *City of Rome* sank off the Tashmoo Park dock. The *Linden* was a menace to navigation, but the *City of Rome* sank in a remote part of the river. The 268'2" *City of Rome*, valued at \$45,000, was built in Cleveland in 1881. The 206-foot *Linden*, built in Port Huron in 1895, had a value of \$35,000 and was partially covered by insurance. The *Rome* was soon floating again, and she lasted another nine years on the Great Lakes, until, on May 7, 1914, she caught fire and was run ashore near Ripley, New York, on Lake Erie, with no lives lost.³⁹⁹ The *Linden* sat at the bottom of the St. Clair River for three years before her salvage was accomplished. Fifteen years later, the *Linden* burned and sank

³⁹⁶The Sarnia Daily Observer and the Port Huron Daily Herald, June 13, 1905.

397 The Port Huron Times Herald, Oct. 16, 1928.

³⁹⁸The Port Huron Daily Herald, June 24, 1905.

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^{399&}quot;Master Sheet" on the City of Rome, Institute for Great Lakes Research, Bowling Green State University, Ohio.

1,800 feet southeast of the Water Works City Dock, Tawas, Michigan, on November 28, 1923.⁴⁰⁰

- JOSEPH DUVALL (December 5, 1905): The 103-foot wooden schooner, Joseph Duvall, was constructed at Manitowoc, Wisconsin, in 1874. The Duvall's final encounter came on December 5, 1905. She was struck by the large, downbound whaleback steamer, the James B. Colgate, loaded with ore. Her crew escaped in a small boat.⁴⁰¹
- HATTIE (January 14, 1906): The small American steamer, *Hattie*, having burned herself loose from the dock at Courtright, Ontario. She had been engaged in ferrying between that town and St. Clair across the river. The *Hattie* was a total loss, but was insured for only a small amount of her \$5,000 value.⁴⁰² Built in 1882 at Fair Haven, Michigan, the *Hattie* measured 84'1" x 18'8" x 6'4".⁴⁰³
- ERIN (May 31, 1906): The 174-foot *Erin* was cut nearly in half in a frightful collision with the 420-foot *John B. Cowle*.⁴⁰⁴ All but five of the fourteen members of the *Erin's* crew managed to reach shore safely. The *Cowle* evidently was confused as to the number of boats approaching. The *Erin*, which was constructed in 1881 at the famous Shickluna Shipyards of St. Catharines, rested in 50 feet of water. She was valued at

⁴⁰⁰"Master Sheet" on the *Linden* Institute for Great Lakes Research, Bowling Green State University, Ohio.

⁴⁰¹The Port Huron Daily Times, Dec. 7, 1905.

⁴⁰²The Port Huron Daily Times, Jan. 15, 1906.

⁴⁰³"Master Sheet" on the *Hattie*, Institute for Great Lakes Research, Bowling Green State University, Ohio.

⁴⁰⁴The Port Huron Daily Herald, May 31, 1906.

\$16,000 at the time of loss.⁴⁰⁵ Capt. Montague was exonerated after the investigation vindicated the *Cowle* and her crew.⁴⁰⁶

- JOHN H. PAULY (August 10, 1906): Fire broke out in her hold while she was tied up at the Sickens stave dock at Marine City.⁴⁰⁷ The disquieting cacaphony of steam whistles quickly summoned hundreds of curious and excited townspeople to the river's edge. The flames spread until the shed and dock began to smolder. In an effort to save them, the *Pauly* was cut adrift towards the Canadian side, entertaining the crowd. The ship grounded in the shallows about two miles downstream just off the Canadian shore, where she burned herself out, a total loss. This \$10,000 ship was insured for only \$4,000. Built in 1880, she was a 197-tonner.⁴⁰⁸
- ALICE M. (September 1, 1906): The Alice M., a small steam yacht measuring 45' x 15' x 3.04', was destroyed by fire at Algonac on September 1, 1906. Numbered 202413 and built in Detroit in 1894, she registered nine gross tons.⁴⁰⁹
- NELSON MILLS (September 6, 1906): About three miles below St. Clair, the steel steamer, *Milwaukee*, plowed her bow into the 164'4" *Nelson Mills* with a deafening crash, virtually splitting her in two.⁴¹⁰ Two of the *Mills*' crew perished. The

⁴⁰⁵"Ship Information and Data Record" on the *Erin* from the Herman G. Runge Collection, Milwaukee Public Library.

⁴⁰⁶ The Port Huron Daily Herald, Aug. 6, 1906.

⁴⁰⁷The Duluth Evening Herald, Aug. 10, 1906.

⁴⁰⁸The Port Huron Daily Herald, Aug. 10, 1906.

⁴⁰⁹"Computer List," Institute for Great Lakes Research, Bowling Green State University, Ohio.

⁴¹⁰The Port Huron Daily Herald, Sept. 7, 1906.

Milwaukee proceeded to Buffalo, but the *Nelson Mills*, built in 1870 at Vicksburg (now Marysville), Michigan, was a total loss. Inland Lloyds placed her value at \$12,000, while her owners claimed a value of \$20,000. In February, 1907, Judge Humphrey of Chicago, found both ships to be at fault. The losses were calculated to be about equal, the *Mills'* loss set at \$16,000 and the damage to the steel ship to be the same amount. Judge Humphrey suspended, for six months each, the first mates of both vessels, who were in active command at the time, for cross-signalling and failure to reduce speed or reverse the engines.⁴¹¹

- HIAWATHA (September 20, 1906): The 92'7" *Hiawatha* was a wooden propeller, built in Dresden, Ontario, in 1874, and worked as a ferry vessel operating between Sarnia and Port Huron.⁴¹² The ship ran too close to the American shore and struck a submerged pile about 75 feet from the river bank. The passengers escaped in the lifeboats. With the stern submerged in a depth of about 25', and with the vessel lying about 75' from shore,⁴¹³ she was easy to salvage and return to service. In 1930, she was sold to the Little Current Ferry Company for service on Georgian Bay, but once the *Hiawatha* arrived at Little Current on Manitoulin Island, she was abandoned.
- ARGONAUT and HATTIE WELLS (October 12, 1906): The 213-foot, propeller, Argonaut was launched on April 12, 1873 at Detroit. The schooner, *Hattie Wells*,

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⁴¹¹The Sarnia Daily Observer, Fcb. 26, 1907.

⁴¹²"Master Sheet" on the *Hiawatha*, Institute for Great Lakes Research, Bowling Green State University, Ohio.

⁴¹³The Sarnia Daily Observer, Sept. 21, 1906.

measuring 135'1" in length, was also an old vessel, having been built in 1867 at Port Huron. She was lengthened to 164'5" in 1885. ⁴¹⁴While the *Argonaut* and the *Hattie Wells* were docked end to end at Marysville, fire broke out in the aft apartments of the latter vessel and spread quickly to the *Argonaut*. The *Argonaut* burned to the water's edge and was totally destroyed, while the schooner, where the fire had originated, was towed away and the fire aboard her was extinguished. The *Argonaut* was valued at \$10,000. The *Hattie Wells* had \$8,000 worth of damage, had insurance, and was rebuilt; the *Argonaut*, which had none, was not.⁴¹⁵ The permanent demise of the *Hattie Wells* came on November 9, 1912,when her cargo shifted and the vessel swamped and sank off St. Joseph, Michigan, in Lake Michigan, with no lives lost.

JAMES FISK JR. (November 14, 1906): When the old wooden steamer, *James Fisk Jr.*, passed through the St. Clair Flats, the helmsman discovered flames, origin unknown, bursting out of a section of the pilot house in the forward part of the boat. The crew beached their vessel on the American side and came safely ashore in a small lifeboat.⁴¹⁶ The 216'3" *James Fisk Jr.*, built in Buffalo, New York, was launched on July 15, 1870. Deemed a possible nuisance to navigation, this hull was removed in 1920 by the U. S. Corps of Engineers.⁴¹⁷

⁴¹⁴"Master Sheets" on the Argonaut and the Hattie Wells, Institute for Great Lakes Research, Bowling Green State University, Ohio.

⁴¹⁵The Port Huron Daily Herald, Oct. 12, 1906.

⁴¹⁶The Port Huron Daily Times, Nov. 15, 1906.

^{417&}quot;Master Sheet" on the James Fisk, Jr., Institute for Great Lakes Research, Bowling Green State University, Ohio.

- SEGUIN and I. L. BELL (November 14, 1906): A collision occurred between the Canadian steamer, Seguin, and the barge, I. L. Belle, in the rapids between Point Edward, Ontario, and Port Huron. Michigan. Both vessels sustained large holes in their sides, and both of them sank, the former doing so at Sarnia, and the latter abreast of Point Edwards.⁴¹⁸ The cause of the collision was the steamer, Rockefeller, crowding the Seguin too close to the shore, not allowing her room enough to pass clear of the Bell. The Bell was pumped out and refloated. The 843-net-ton Seguin, built in Owen Sound in 1890, was rebuilt and returned to duty, until she was broken up in 1944.⁴¹⁹
- MARYLAND and TUSCARORA (July 11, 1907): The steel propellers, the *Maryland* and the *Tuscarora*, collided head on! The *Maryland* drifted stern downward to a point opposite the Sarnia oil refinery, where she settled on the middle ground.⁴²⁰ She was later pulled by a tug into shallow water. Both vessels were lightered and taken into drydock for repairs. The *Tuscarora* was 291'4" x 40'4" x 22', while the *Maryland* was 316'4" x 42' x 20' 4", both were built in the same year, 1890, the former in Cleveland and the latter in Wyandotte, Michigan, and both experienced similar demises. During World War One, both ships were sent to the East Coast for military purposes. The *Tuscarora* sailed from Montreal on December 6, 1917, on a trans-Atlantic voyage, and was never heard from again. Her entire crew of 30 was lost, presumably to enemy

⁴¹⁸The Marine Review, XXXV, March 28, 1907.

⁴¹⁹Mills. Op. cit., 110.

⁴²⁰The Port Huron Daily Times, July 12, 1907.

submarine action. The *Maryland*, bound from Philadelphia for London, England, was lost off Nantucket Island on December 26, 1916, with all 34 hands lost, also quite likely the victim of an enemy submarine! ⁴²¹

- FRED PABST (October 18, 1907): The 287'3" wooden freighter, *Fred Pabst*, launched at Milwaukee in 1890, sank in the St. Clair River opposite Point Edward after a collision with the steamer, *Lake Shore*. The *Pabst's* steering broke, and she sheered into the other steamer.⁴²² Her final enrollment was surrendered at Milwaukee on December 13, 1907, and endorsed "vessel wrecked." Raised by the Reid Wrecking Company on February 1, 1908, she was towed into Sarnia with plans to convert her to a lighter. When these plans fell through in 1910, she was allowed to sink at the dock. In the fall of 1920, she was raised and converted to a floating dry dock for the Wolverine Dry Dock Company at Port Huron.⁴²³
- WILLIAM E. REIS (November 1, 1907): Owned by the Mitchell Company, the steamer, William E. Reis, went to the bottom of the St. Clair River near Algonac in the fall of 1907,⁴²⁴ but was quickly salvaged.
- H. P. McINTOSH (July 8, 1908): The huge, 520-foot, steel steamer, H. P. McIntosh, launched on March 27, 1907, at West Bay City, Michigan, sank when she was struck

⁴²¹"Master Sheets" on the *Tuscarora* and the *Maryland*, Institute for Great Lakes Research, Bowling Green State University, Ohio.

⁴²²The Sarnia Observer Weekly, Oct. 18, 1907.

⁴²³"Master Sheet" on the *Fred Pabst*, Institute for Great Lakes Research, Bowling Green State University, Ohio.

⁴²⁴The Detroit Free Press, July 8, 1908.

by the steamer *M. A. Hanna* in the St. Clair River about a year later. The *McIntosh* had run aground on a shoal near Sarnia. When she succeeded in freeing herself, she ended up broadside in the path of the approaching *Hanna*. The *Hanna*, built in 1899;⁴²⁵ suffered only a twisted stem and two or three broken steel plates; her bow was temporarily patched and she proceeded up the lakes with her load of coal. The sunken *McIntosh* she was in harbour for repairs within a week. She served the lakes diligently until 1973 (under the name *Edward S. Kendrick*, which she had received in 1934), when she was towed to Castellon, Spain for scrapping, arriving there on May 19, 1973.⁴²⁶

- WANEKA (August 23, 1908): The small, wooden steam yacht, Waneka, measuring 55' in length, 10'7" of beam, and 5' 6" of draft, with a gross tonnage of 22 and a net tonnage of 12, burned at the St. Clair Flats on August 23, 1908. She had been built in 1889 at West Bay City, Michigan.⁴²⁷
- D. A. GORDON (April 20, 1909): The seven-year-old, oak-hulled, bulk freight steamer,
 D. A. Gordon, caught fire while at Wallaceburg, where it had been launched in 1902.
 The fire destroyed the young vessel to the waterline. With a length of 122', a beam of 23'2", and a draft of only 7', this pocket freighter had been ideal for the narrow

⁴²⁵The Samia Observer Weekly, July 10, 1908.

⁴²⁶"Master Sheet" on the *H. P. McIntosh*, Institute for Great Lakes Research, Bowling Green State University, Ohio.

⁴²⁷"Computer List," Institute for Great Lakes Research, Bowling Green State University, Ohio.

waterways and shallow areas of the St. Clair River and its tricky adjoining water routes.⁴²⁸

- LACKAWANNA (September 18, 1909): The steel package freighter, *Lackawanna's* steering cable parted while opposite the Point Edward iron ore dock. The vessel took a sheer across the tow line, crashing into the *Chieftain*, which tore a hole in the steel vessel about 20 feet long, sinking her in about 14 feet of water.⁴²⁹ The next day, two hardhat divers placed a patch over the hole in the *Lackawana*, and the lighter, *Manistique*, busily unloaded her cargo. Before long, the sunken vessel was raised and repaired. The 260-foot *Lackawana* had been launched at Cleveland on April 7, 1888. She continued to ply Great Lakes waters until 1916, finally being abandoned in Boston in 1929.⁴³⁰
- BADGER STATE (December 6, 1909): The 213-foot wooden package freight steamer (and one-time passenger carrier), *Badger State*, was launched on April 17, 1862 at Buffalo.⁴³¹ The *Badger State* caught fire, so her lines were cut and she drifted towards the Canadian side, stranding just below Fawn Island and burning to the water's edge, a total loss. The remains of this ship were conveyed into the North Channel of the St. Clair River and left in the shallows off the northwest part of Harsens Island.

⁴²⁸Swayze, op. cit., 99.

⁴²⁹The Samia Daily Observer, Sept. 18, 1909.

^{430&}quot;Master Sheet" on the Lackawanna. Institute for Great Lakes Research, Bowling Green State University, Ohio.

^{431&}quot;Master Sheet" on the Badger State, Institute for Great Lakes Research, Bowling Green State University, Ohio.

- RELIANCE (December 10, 1909): The sandsucker, *Reliance*, was an ice victim while in the St. Clair River. While opposite the Rushmere Club, this ship turned turtle and began to sink! Four members of the nine-person crew decided to swim the half a mile in the icy waters to the club while the other five held on to the overturned vessel. All four of the swimmers miraculously made it to shore, where they were refused admission to the club building! They waited outside fully 15 minutes before the steamer, *Haywood*, came to their assistance. The heavy ice had punctured the wooden part of their boat, abreast of the engine room.⁴³²
- NELLIE LYON (April 9, 1911): Launched in 1880 as the H. C. Sprague at South Rockwood, Michigan, this ship was converted to a sandsucker during the last year of her life and renamed the *Nellie Lyon*, apparently after the eleven-year-old niece of the vessel's owner, Mr. O. E. Fleming. Flames destroyed this old, 152-foot, wooden ship on April 9, 1911, near Algonac, Michigan.⁴³³
- CITY OF GENOA (August 26, 1911): The 301-foot, wooden freighter, the *City of Genoa*, dropped her anchor in the channel at the mouth of the St. Clair River due to fog. The steel steamer, *W. H. Gilbert*, rammed the *City of Genoa*, sinking her in 30' of water in 15 minutes, about 100' from Sarnia's Grand Trunk wharf. The captain of the *Gilbert* brought his boat to a stop and, turning around, proceeded to pick up the crew of 18 men on the sinking boat. The vessel was raised and towed to Reid's dock, where it

 ⁴³²The Port Huron Daily Herald, Dec. 11, 1909.
 ⁴³³Greenwood. Namesakes, 1910-1919. Op. cit., 162.

again sank. The *City of Genoa* was built in 1892 at West Bay City, Michigan. Endorsed as "sold alien," meaning that a Canadian purchaser was found, the ship was stripped of her engine and boilers, and reportedly burned at Sarnia on October 9, 1915. The 301-foot hull was later towed into Lake Huron and scuttled.⁴³⁴

- MAINE (July 16, 1911): This vessel once again burned, this time to a total loss, on the St. Clair River near Marine City. Captain William Booth ran his flaming vessel ashore, and no lives were lost, although the crews' personal effects were destroyed.⁴³⁵ She is the same ship described as burning in the year 1880 in the earlier volume on the St. Clair River shipwrecks. Four years after her destruction, the burned hulk was raised and scuttled in deep water.⁴³⁶
- JOLIET (September 22, 1911): See the detailed examination of this loss in Chapter Eight of this thesis.
- BOTHNIA (June 26, 1912): This 190-foot, wooden bulk freighter, launched as the Jack in 1895 at Garden Island, Ontario, near Kingston, was renamed the Bothnia a year later.⁴³⁷ The Bothnia was moving quickly down the St. Clair Flats, almost abreast of the Star Island House, when suddenly the upbound 432-foot, steel steamer, S. S. Currie, laden with coal, collided with her due to a rudder disablement. Cutting the

⁴³⁴"Master Sheet" on the City of Genoa, Institute for Great Lakes Research, Bowling Green State University, Ohio.

⁴³⁵The Toledo Blade, July 17, 1911.

⁴³⁶John Greenwood, *Namesakes*, 1910-1919. (Cleveland, Freshwater Press, 1986): 304.

⁴³⁷Greenwood, Namesakes, 1910-1919, op. cit., 323.

Bothnia nearly in two and sending her to the bottom immediately, the *Currie* rendered assistance to the crew, all of whom were saved except for the new man on board, Roy Williams.⁴³⁸ Valued at \$15,000, the *Bothnia* was a total loss.

- MARION (August 18, 1912): The small wooden propeller, *Marion*, ran as a ferry across the St. Clair River between Sombra and Marine City. She had been built at Sombra by George Whale in 1905, and her dimensions were 34'7" x 10' x 3'8". The *Marion* exploded and burned at her dock at Sombra. However, no lives were lost and she was quickly repaired and returned to service. She was still documented in 1923, but her ultimate disposition is unknown.⁴³⁹
- IRON CITY (May 3, 1913): The 187'3" three-masted, wooden schooner, *Iron City*, sank in a collision with the 580' downbound steamer, *Thomas F. Cole*, at the head of Harsen's Island. No lives were lost, the schooner's entire crew escaping safely in lifeboats.⁴⁴⁰ At the time of the collision, the *Iron City* was already an old vessel. Built in Toledo in 1874, she was originally launched as the *Daniel E. Bailey*; her name was changed to the *Iron City* in 1887. This vessel was dynamited shortly after her sinking as a menace to navigation.⁴⁴¹

⁴³⁸The Detroit Free Press, June 27, 1912.

⁴³⁹Master Sheet" on the Marion, Institute for Great Lakes Research, Bowling Green State University, Ohio.

⁴⁴⁰ The Port Huron Times Herald, May 3, 1913.

⁴⁴¹Greenwood, Namesakes, 1910-1919, op. cit., 491.

HENRY S. SILL (May 6, 1913): The 62'8" wooden tug, Henry S. Sill, had been built in Buffalo in 1875, so she was considered a very old vessel. She burned to a total loss at Marine City on May 6, 1913.⁴⁴²

- SWEETHEART (July 6, 1913): The Sweetheart was an ancient schooner-barge built in Detroit in 1867 by Campbell, Owen & Company. She sprang a leak while anchored at the White Star Line dock in Algonac one Sunday afternoon and sank 200 feet off shore. The loss was \$10,000.⁴⁴³
- ATIKOKAN (August 17, 1913): The 362-foot, steel, whaleback, or "pigboat," *Atikokan*, launched on May 1, 1895 at Superior, Wisconsin, as the *John B. Trevor*, was travelling downbound at about fifteen miles an hour when her steering gear broke. The crew dropped anchor, but that did not help. A large barn, several sheds, and a dock were seriously damaged, and the vessel landed on the bank. Fortunately, no one was injured or killed in this mishap. The vessel was finally scrapped at Halifax in 1935.⁴⁴⁴
- ROBERT L. FRYER (April 28, 1914): The 281'1" wooden freighter, Robert L. Fryer, was launched on May 26, 1888, at West Bay City, Michigan. This vessel caught fire at Marine City, and was declared a total loss.⁴⁴⁵ She was then sold to interests at Fort

⁴⁴²Master Sheet" on the Henry S. Sill, Institute for Great Lakes Research, Bowling Green State University, Ohio.

⁴⁴³The Port Huron Times Herald, Mon., July 7, 1913.

⁴⁴⁴Master Sheet" on the John B. Trevor, Institute for Great Lakes Research, Bowling Green State University, Ohio.

⁴⁴⁵Greenwood, Namesakes, 1910-1919, op. cit., 312.

William-Port Arthur (present-day Thunder Bay, Ontario), who converted her to a floating grain dryer and used her until she was burned for public spectacle in 1930.⁴⁴⁶

- GLADSTONE (abandoned 1915): Built in 1888 in Cleveland, the 283-foot, wooden propeller, *Gladstone*, had her keel quite badly twisted and broken in the St. Clair River ice jams of 1919.⁴⁴⁷ The wreck was left idle after being stripped. In 1923, the hull was sold to a gravel company from Windsor, Ontario, and towed to the Sarnia area to be sunk as a dock just off present-day Canatara Park. Fire broke out in 1936 and put an end to the *Gladstone's* use as a pier.⁴⁴⁸
- MAURICE B. GROVER (Abandoned 1915): Built in Cleveland in 1887, the 272-foot, wooden freighter, *Maurice B. Grover*, was abandoned in the Pine River, St. Clair, Michigan, in 1915, her final enrollment was surrendered at Cleveland on March 24, 1915 and endorsed "abandoned."⁴⁴⁹ In late 1962, the *Maurice B. Grover* was dynamited by the U. S. Corps of Engineers, after the St. Clair City Council and many residents petitioned to have the shipwrecks removed.⁴⁵⁰
- MAUD (October 16, 1915 and November 25, 1917): The wooden steambarge, *Maud*, built in Marine City in 1899, was a 98-gross-ton vessel measuring 95' x 23' x 6'7".

⁴⁴⁶Kohl. Dive Ontario!, op. cit., 287.

⁴⁴⁷Van Der Linden, et. al., Great Lakes Ships We Remember, op. cit., 202.

⁴⁴⁸Humphries, op. cit., pages not numbered.

⁴⁴⁹"Master Sheet" on the *Maurice B. Grover*, Institute for Great Lakes Research, Bowling Green State University, Ohio.

⁴⁵⁰ The Port Huron Times Herald, Dec. 5, 1962.

She was sunk by the propeller, *Hilton*, in a collision while docked during fog at Courtright on October 16, 1915.⁴⁵¹ The *Maud* was raised on October 22, 1915. On November 25, 1917, she was destroyed in a fire while frozen in the ice at St. Clair.⁴⁵²

- MAJESTIC (December 15, 1915): The 209-foot, wooden passenger and freight steamer, *Majestic*, was totally destroyed by fire originating in her engine room while at her winter quarters at Point Edward. She was valued at about \$100,000, and was covered by insurance.⁴⁵³ The *Majestic*, launched at Collingwood on April 23, 1895, was raised from Sarnia Bay in July, 1916, by the Reid Wrecking Company, towed into Lake Huron, and scuttled.⁴⁵⁴
- EDNA (July 15, 1916): The small, 53-gross-ton, wooden schooner, *Edna*, official number 7909, burned at Algonac on July 15, 1916. She had been built 50 years earlier, in 1866, in New Liverpool, Michigan.⁴⁵⁵
- MELVINA (January 24, 1917): The schooner-barge, *Melvina*, was built in the Edward Stokes Shipyard at Sheboygan, Wisconsin, in 1863.⁴⁵⁶ Her enrollment was surrendered on January 24, 1917, at Port Huron, "Abandoned as unfit for service."

⁴⁵¹Old Newsboys Newspaper, Marine City, Michigan, Dec. 7-8, 1973.

⁴⁵²"Master Sheet" and "Casualty Report" on the *Maud*, Institute for Great Lakes Research, Bowling Green State University, Ohio.

⁴⁵³The Port Huron Times Herald, Dec. 15, 1915.

⁴⁵⁴"Master Sheet" and "Casualty Report" on the *Majestic*, Institute for Great Lakes Research, Bowling Green State University, Ohio.

⁴⁵⁵Computer List, Institute for Great Lakes Research, Bowling Green State University, Ohio.

⁴⁵⁶ John Greenwood. Namesakes, 1920-1929. (Cleveland: Freshwater Press, 1984): 169.

Precisely where in the Port Huron area she was abandoned is unknown. The 270gross-ton *Melvina* measured 134'6" x 28'5" x 11'3".⁴⁵⁷

- TOKIO (October 8, 1917): The schooner-barge, *Tokio*, sank in 20 feet of water after she hit the sandsucker, *Homer*, at anchor about 1,000' below Recor's Point between the towns of St. Clair and Marine City.⁴⁵⁸ The *Tokio* was not raised. She was reported abandoned March 31, 1918.⁴⁵⁹ The old hull was demolished by underwater blasting after she was considered a menace to navigation in a recent low-water year (1963).⁴⁶⁰
- IVY (September 1, 1918): The wooden *Ivy* started life as a gas yacht launched at Detroit in 1901. Two years later, she was changed to a steam yacht and lengthened from 62' to 80'6".⁴⁶¹ While at anchor at Algonac, the *Ivy* burned to a total loss, the eight persons on board escaping in a lifeboat. The fire was believed caused by the explosion of an oil signal lamp. Mrs. W. H. Oades owned the vessel at the time of her loss.⁴⁶²
- CONSTITUTION (March 25, 1920): The tugboat, *Constitution*, sank in 18 feet of water in Sarnia Bay while at the end of her winter tie-up. Presumably heavy ice, which had formed around the hull, had pulled some of the oakum caulking from her seams,

⁴⁶²The Duluth Herald, Sept. 2, 1918.

⁴⁵⁷Computer List, Institute for Great Lakes Research, Bowling Green State University, Ohio.

⁴⁵⁸ The Port Huron Times Herald, Oct. 10, 1917.

⁴⁵⁹"Ship Information and Data Record" on the *Tokio*. Herman G. Runge Collection, Milwaukee Public Library, Milwaukee, Wisconsin.

⁴⁶⁰*Ibid*.

⁴⁶¹"Master Sheet" and "Casualty Report" on the *Ivy*, Institute for Great Lakes Research, Bowling Green State University, Ohio.

causing her to leak.⁴⁶³ The *Constitution* was refloated and returned to service as soon as the retreating ice and weather permitted.⁴⁶⁴

- WALTER R. PRINGLE (SUPERIOR) (May 6, 1920): See the detailed examination of this loss in Chapter Seven of this thesis.
- WILLIAM H. WOLF (October 20, 1921): This huge, 285-foot wooden steamer created such a violent tidal wave when it was launched at Milwaukee in 1887 that three spectators were killed. This foreshadowed numerous groundings and sinkings in the vessel's relatively long life. On October 20, 1921, she caught fire while loaded with pulpwood for Port Huron, Michigan, and was beached just south of Fawn Island, opposite Marine City, Michigan. Two lives were lost in this mishap.⁴⁶⁵
- OMAR D. CONGER (March 26, 1922): This wooden steamer operated as a ferry boat between Port Huron and Sarnia. Built in Port Huron in 1882, the 92-foot *Conger* was 40 years old when, on March 26, 1922, her boiler exploded and she burned in the Black River at Port Huron,⁴⁶⁶ just before taking on the first load of Sunday morning passengers. Four of the crew perished. The Reid Wrecking Company raised the hull in two sections and scuttled them in Lake Huron.⁴⁶⁷

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⁴⁶³The Port Huron Times Herald, March 27, 1920.

⁴⁶⁴The Detroit Free Press, March 27, 1920.

⁴⁶⁵The Sarnia Canadian Observer, Oct. 20, 1921.

⁴⁶⁶The Port Huron Times Herald, March 27, 1922.

⁴⁶⁷"Master Sheet" on the Omar D. Conger. Institute for Great Lakes Research, Bowling Green State University, Ohio.

- A. R. COLBORN (April 28, 1922): A regular lumber steambarge, the A.R. Colborn, built at Saugatuck, Michigan in 1882, measured 130 feet in length. She had an enormous carrying capacity of 300,000 board feet of lumber. She was abandoned at Port Huron, michigan, in the spring of 1922, declared unfit for service.⁴⁶⁸
- ANNIE MOILES (May 12, 1922): This 86-foot, wooden tug, engaged in towing sand and gravel barges along the river,⁴⁶⁹ sank in a collision with the *J.T. Hutchinson* near Algonac. The 43-year-old mate on the tug died of a heart attack just before being put on shore by the *Hutchinson*.⁴⁷⁰ Built in East Saginaw, Michigan, in 1867, this vessel was raised and returned to service for another six years, before burning in the Detroit River.⁴⁷¹
- ANNIE LAURA (August 10, 1922): This 51-year-old, 133-foot, sandsucker fell victim to fire just above the St. Clair Flats, and burned to a total loss.⁴⁷² Built at Marine City, Michigan, in 1871, the wooden steamer had worked a long time on the river.
- MAUD (October 24, 1922): This small fishing tug sprang a leak in the St. Clair Flats, and her two crewmen were removed by a passing steamer just before their vessel sank.

⁴⁶⁸"Master Sheet" on the A.R. Colborn, Institute for Great Lakes Research, Bowling Green State University, Ohio.

⁴⁶⁹The Sarnia Canadian Observer, May 12, 1922.

⁴⁷⁰ The Port Huron Times Herald, May 13, 1922.

⁴⁷¹"Master Sheet" on the Annie Moiles, Institute for Great Lakes Research, Bowling Green State University, Ohio.

⁴⁷²The Port Huron Times Herald, August 11, 1922.

They reportedly had 500 cases of Canadian beer on board,⁴⁷³ which might have been destined for illicit consumption.

- OGEMAW (December 4, 1922): The 170-foot wooden bulk freight steamer, built in 1881 at St. Clair, Michigan, burned to the water's edge off Harsen's Island, a total loss. Fortunately, her 13 crewmembers escaped without injury.⁴⁷⁴
- TAMPA (1923): The large, 291-foot wooden propeller sank in a collision in the Detroit River in 1911, was raised in 1914, and towed to Marine City, Michigan, where it lay abandoned until her hull was broken up in 1923.⁴⁷⁵
- TRENTON (May 2, 1923): This sandsucker capsized unexpectedly in the North Channel of the St. Clair River and sank in 40 feet of water. All 15 of the crew were saved.⁴⁷⁶ This 133-foot vessel, built in Buffalo in 1905, was raised, rebuilt, and returned to service, still operating out of Sandusky in 1988.⁴⁷⁷
- WILLIAM DICKINSON (September 16, 1923): After 30 years of service on the Great Lakes, the 78-foot tug, *William Dickinson*, built at Benton Harbor, Michigan, in 1893,

⁴⁷⁶The Algonac Courier, May 4, 1923.

⁴⁷³ The Wallaceburg News, Nov. 2, 1922.

⁴⁷⁴The Port Huron Times Herald, Dec. 4, 1922.

⁴⁷⁵"Master Sheet" on the *Tampa*, Institute for Great Lakes Research, Bowling Green State University, Ohio.

^{477&}quot;Ship Information and Data Record" on the John R. Emery (formerly the Trenton). Herman G. Runge Collection, Milwaukee Public Library, Milwaukee, Wisconsin.

burned to a total loss at Marine City, Michigan. She was cut loose from her dock to prevent damage to other vessels and dock buildings.⁴⁷⁸

- PROVINCE (Sept. 27, 1923): The 162-foot wooden sand-and-gravel barge, *Province*, capsized and sank while under tow in the St. Clair River, with the loss of two lives.⁴⁷⁹ The vessel was raised, towed to Sarnia, and abandoned for a number of years until raised and scuttled in Lake Huron in 1936.
- AZTEC (November 9, 1923): The *Aztec* burned to the water's edge while moored at Marine City, Michigan, where she was built in 1889. No lives were lost.⁴⁸⁰ This 180-foot wooden steamer was long a familiar sight along the St. Clair River.
- R. P. FITZGERALD (1924): This 37-year-old wooden steamer, launched at Detroit in 1887, was 256 feet in length. It hauled bulk cargoes, such as grain, coal, and iron ore in its lifetime.⁴⁸¹ This ship was forgotten at its mooring in the Pine River at St. Clair, Michigan, with her enrollment surrendered, endorsed as "abandoned."⁴⁸²
- ALEXANDER MAITLAND (December 9, 1924): When the old Grand Trunk grain elevator in Port Huron caught on fire, the steel barge, *Alexander Maitland*, was

481 Greenwood, Namesakes, 1920-1929, op. cit., 204.

⁴⁷⁸ The Port Huron Times Herald, Sept. 17, 1923.

⁴⁷⁹The Port Huron Times Herald, Sept. 28, 1923.

⁴⁸⁰The Port Huron Times Herald, Nov. 9, 1923.

⁴⁸²"Master Sheet" on the *R.P. Fitzgerald*, Institute for Great Lakes Research, Bowling Green State University, Ohio.

destroyed with it.⁴⁸³ The remains of this 366-foot vessel, built in Buffalo in 1902, were sold to Canadian interests, who rebuilt her and renamed the ship *Glenbogie*. It operated out of Midland and Toronto until scrapped in 1966.⁴⁸⁴

- PENOBSCOT (August 19, 1925): This 140-foot sandsucker, launched at Manitowoc, Wisconsin, in 1880, burned to a total loss near Roberts Landing.⁴⁸⁵The crew had to flee quickly just after midnight, and by 5:00 A.M., the boat settled to the bottom.⁴⁸⁶
- JAMES BEARD (April 15, 1926): This was a very old passenger ferry vessel running between Port Huron and Sarnia. Built at Au Sable, Michigan, in 1873, the ship sank while lying at her dock in Port Huron;⁴⁸⁷ on June 21, 1927, her enrollment was surrendered, citing "Abandoned as unfit for service."⁴⁸⁸
- AUBURN (August 6, 1926): This was the date that the *Auburn* was abandoned above Marine City, Michigan, ending a career that spanned almost half a century. Built at Cleveland in 1878, this 272-foot barge was worked at Great Lakes construction jobs, her last one being revetment work in the St. Clair Flats.⁴⁸⁹

⁴⁸³ The Port Huron Times Herald, Dec. 9, 1924.

⁴⁸⁴"Master Sheet" on the Alexander Maitland, Institute for Great Lakes Research, Bowling Green State University, Ohio.

⁴⁸⁵The Marine City News, August 21, 1925

⁴⁸⁶The Port Huron Times Herald, August 19, 1925.

⁴⁸⁷The Samia Canadian Observer, April 15, 1926.

⁴⁸⁸Port Huron Enrollments.

⁴⁸⁹Greenwood. Namesakes, 1920-1929, op. cit., 130.

- HENRY HOUGHTON (November 20, 1926): Launched at West Bay City, Michigan in 1889, the 135-foot bulk freighter was converted to a sandsucker in 1920. Six years later, the ship caught fire in the North Channel of the St. Clair Flats, with the entire crew of 13 taking to the lifeboats.⁴⁹⁰ Quite representative of the times, this vessel was used mainly in the lumber and coal trades, but when this small ship became uneconomical to run, it was converted for short-haul sand trade work.
- WHALE (1927): This huge (264-foot) wooden steamer was abandoned in the St. Clair
 Flats Channel after sinking in a collision with the steamer, *William E. Corey*. The
 Whale was built in Toledo in 1892.⁴⁹¹
- GEORGE W. PARKER (May 8, 1927): This 105-foot steamer, later converted to a sandsucker, was constructed at Marine City, Michigan, in 1903. She became a total loss in a blaze, sinking in mid-channel, six miles south of Algonac, Michigan, while her crew escaped to safety in the yawl boat.⁴⁹²
- UNITED STATES (June 6, 1927): This 18-year-old steel steamer and once the "palatial yacht of Hetty Green, wealthy New York woman,"⁴⁹³ caught fire at Sarnia, turned over onto her port side, and burned to an empty shell. Launched at Manitowoc,

492*Ibid.*, 262.

⁴⁹⁰The Port Huron Times Herald, Nov. 22, 1926.

⁴⁹¹Greenwood. Namesakes, 1920-1929, op. cit., 357.

⁴⁹³The Port Huron Times Herald, June 7, 1927.

Wisconsin, in 1909, the 193-foot hull was raised and repaired in the province of Quebec, where she was rebuilt and where she worked for another 17 years.⁴⁹⁴

- ROBERT C. WENTE (July 1, 1927): No lives were lost from the seven that were on board when this smart-looking little steamer vessel burned in the St. Clair River. This 141-foot wooden propeller was built in 1888 at Gibraltar, Michigan, and was abandoned in place where she sank.⁴⁹⁵
- J. R. EDWARDS (1928): This old schooner was abandoned along the St. Clair River. The J.R. Edwards, built at Marine City, Michigan, in 1883, measured 175 feet in length. She had been purchased by Canadian interests in 1920.⁴⁹⁶
- DAYTON (1928): This large, 184-foot schooner was abandoned at Marine City,
 Michigan, after nearly 60 years of service, always as a tow barge and always in the
 lumber trade. She was built at Marine City in 1871.⁴⁹⁷
- MARYSVILLE (June 25, 1928): This wooden steamer, measuring 160 feet in length, burned and sank at the mouth of Belle River, Marine City, Michigan. Built in 1894 at

⁴⁹⁴"Ship Information and Data Record" on the *Batiscan* (formerly the *United States*). Herman G. Runge Collection, Milwaukee Public Library, Milwaukee, Wisconsin.

⁴⁹⁵"Ship Information and Data Record" on the *Robert C. Wente.* Herman G. Runge Collection, Milwaukee Public Library, Milwaukee, Wisconsin.

⁴⁹⁶"Master Sheet" on the J.R. Edwards, Institute for Great Lakes Research, Bowling Green State University, Ohio.

⁴⁹⁷"Ship Information and Data Record" on the *Dayton*, Herman G. Runge Collection, Milwaukee Public Library, Milwaukee, Wisconsin.

Green Bay, Wisconsin, she, like so many others, had been converted to a sand boat in the latter years of her life.⁴⁹⁸

- MARTHA (September 5, 1928): The 352-foot steel barge, *Martha*, which went aground at Stag Island, was returned to a long and varied service, being owned in places such as Duluth, Cleveland, Fort William, Goderich, and Toronto, and finally getting scrapped at Wheatley, Ontario, in 1980.⁴⁹⁹
- SACHEM (October 8, 1928): The 187-foot Sachem burned to a total loss near Robert's Landing, Michigan, before drifting down and across to Canada, settling at the mouth of the Chenal Ecarté. She was raised, taken to Sarnia, and scuttled in lower Lake Fluron. She was built at Grand Haven, Michigan, in 1889.⁵⁰⁰
- HAMILTON and BETTY L. (November 6, 1929): Two ancient ships were destroyed together while at dock in Wallaceburg, Ontario. The 190-foot iron-hulled barge, *Hamilton*, was built in Scotland in 1847, while the 74-foot wooden tug, *Betty L.*, slid down the launchramp at Cleveland in 1863.⁵⁰¹ Fire claimed both of these vessels

⁵⁰⁰The Detroit Free Press, Oct. 10, 1928.

⁴⁹⁸"Master Sheet" on the *Marysville*, Institute for Great Lakes Research, Bowling Green State University, Ohio.

⁴⁹⁹"Master Sheet" on the *Martha*, Institute for Great Lakes Research, Bowling Green State University, Ohio.

⁵⁰¹"Master Sheet" on the *Betty L*, Institute for Great Lakes Research, Bowling Green State University, Ohio.

simultaneously. The remains of the Hamilton were supposedly towed to the East Passage of the Chenal Ecarté, where it was abandoned.⁵⁰²

- LANSING SHOAL (1932): The so-called Lansing Shoal started life in 1891 at Toledo as Lightship #55. This 90-foot, wooden steamer was stationed as a lightship at a place named Lansing Shoal from 1906 to 1921, when she was purchased by Clarence Monroe, of Bay City, Michigan, who renamed her the C & M, after his own initials. This ship was abandoned in the St. Clair River in 1932.⁵⁰³
- KALKASKA (September 15, 1932): Built in 1884 at St. Clair, Michigan, the 178-foot propeller, *Kalkaska*, was part of the old, wooden fleet that in recent years had been in the coal and sand trades on the Detroit and St. Clair Rivers. She was destroyed by fire near Marine City, Michigan.⁵⁰⁴
- JOHN FRANCOMB (1934): The 180-foot schooner, built in 1889 at West Bay City, Michigan, is supposedly one of the two abandoned vessels lying close to shore and just below the water's surface immediately north of Marine City, Michigan.⁵⁰⁵
- MONARCH (July 6, 1934): Built at Sheboygan, Wisconsin in 1889, the 63-foot wooden tug, *Monarch*, foundered in the rapids at Point Edward, Ontario, just below the

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⁵⁰²Greenwood. Namesakes, 1920-1929, op. cit., 135.

⁵⁰³"Master Sheet" on the *Lansing Shoal*, Institute for Great Lakes Research, Bowling Green State University, Ohio.

⁵⁰⁴"Ship Information and Data Record" on the *Kalkaska*, Herman G. Runge Collection, Milwaukee Public Library, Milwaukee, Wisconsin.

⁵⁰⁵"Master Sheet" on the John A. Francomb, Institute for Great Lakes Research, Bowling Green State University, Ohio.

present-day Bluewater Bridge.⁵⁰⁶ She had been towing the hulk of the woodem freighter, *C. F. Bielman*, on too short a towline, and the tug was a victim of the current. Of the eight on board, four drowned.⁵⁰⁷

- PEARSON (January 28, 1939): This ship was built in 1921 at Detroit. She sank in Black River at Port Huron,⁵⁰⁸ where she stayed for most of 1939, during which time, her machinery was removed so that she could be converted to a club house. However, she caught fire on Feb. 3, 1940, at the foot of Balmy Lane, and burned to a complete loss.⁵⁰⁹
- WILLIAM BREWSTER (June 15, 1943): This 250-foot steel ship, built at Superior,
 Wisconsin, was on her maiden voyage when she sank in a collision with the freighter,
 W.D. Calverley, near Algonac, Michigan.⁵¹⁰ She was raised by the Reid Wrecking
 Company of Sarnia, and returned to service before being scrapped in India in 1967.⁵¹¹
- CITY OF PORT HURON (December 27, 1943): The opening of the Bluewater Bridge in 1938 wiped out the ferry vessel business. This 98-foot ferry sank at her dock on April 1, 1939, with her final enrollment being surrendered on July 29, 1941. Her hull, raised

⁵¹⁰The Port Huron Times Herald, June 16, 1943.

^{506&}quot;Ship Information and Data Record" on the W.H. Simpson, Herman G. Runge Collection, Milwaukee Public Library, Milwaukee, Wisconsin.

⁵⁰⁷The Port Huron Times Herald, July 7, 1934.

⁵⁰⁸The Port Huron Times Herald, Jan 28, 1939.

⁵⁰⁹"Master Sheet" on the *Pearson*, Institute for Great Lakes Research, Bowling Green State University, Ohio.

⁵¹¹"Master Sheet" on the *William Brewster*, Institute for Great Lakes Research, Bowling Green State University, Ohio.

by the Reid Wrecking Company of Sarnia, was stripped and sold to Kincardine interests. While being towed there, she sank off Port Franks with a deckload of equipment. The *City of Port Huron* was built at Cleveland in 1890.⁵¹²

- CITY OF SARNIA (1945): This 107-foot wooden steamer, built in 1880 at Detroit, sank at her dock at Port Huron in 1945, after sitting idle for years because the completion of the Bluewater Bridge in 1938 had sounded the death knell for vessel traffic across the river. The *City of Sarnia* was raised in 1946 and dismantled in 1947.⁵¹³
- HAMONIC (July 17, 1945): This popular passenger cruiser, built at Collingwood in 1909, burned at Point Edward, Ontario, at a warehouse.⁵¹⁴ One life was lost. After the fire, the 350-foot-long ship was sold as junk and arrived at Hamilton, Ontario, for scrapping.⁵¹⁵
- UNIDENTIFIED BARGE (May 7, 1948): A loaded mud scow being towed by a tug into Lake Huron where it was to dump its cargo nosed under the fast waters of the St. Clair River just beneath the Bluewater Bridge and sank, about 100 feet from shore. One man aboard the scow swam quickly to shore.⁵¹⁶

⁵¹⁶The Port Huron Times Herald, May 7, 1948.

⁵¹²"Master Sheet" on the City of Port Huron, Institute for Great Lakes Research, Bowling Green State University, Ohio.

⁵¹³"Master Sheet" on the City of Sarnia, Institute for Great Lakes Research, Bowling Green State University, Ohio.

⁵¹⁴The Sarnia Observer, July 17, 1945.

⁵¹⁵"Master Sheet" on the *Hamonic*. Institute for Great Lakes Research, Bowling Green State University, Ohio.

- GEORGE L. (September 2, 1949): This 34-foot, steel fish tug, built at Sebewaing,
 Michigan, in 1945, burned and exploded while in the Black River at Port Huron.
 Fortunately, no one was injured or killed, but the vessel was a complete loss.⁵¹⁷
- AMERICA (February 9, 1952): The 56-foot wooden propeller, America, was built in 1915 at Manitowoc, Wisconsin. After numerous useful years in the southern Great Lakes region, the vessel sank at her dock at Port Huron and, when salvage attempts failed, was surrendered to the Corps of Engineers. They raised the ship in sections, which were trucked away for destruction.⁵¹⁸
- WALLSCHIFF (October 2, 1953): See the detailed examination of this loss in Chapter Seven of this thesis.
- A. M. BEYERS (April 19, 1956): This ship sank in the St. Clair River as the result of a collision with the *Emory M. Ford*. The 504-foot *Byers*, built in 1910 at Cleveland, was removed three weeks later. The ship was cleaned up and returned to service until 1974, when she arrived in Spain for scrapping.⁵¹⁹
- EMSSTEIN (October 6, 1966): This German freighter sank after a collision with the freighter, *Olympic Pearl*, on the St. Clair River about 15 miles south of Sarnia.⁵²⁰ The

⁵¹⁷The Port Huron Times Herald, September 2, 1949.

^{518&}quot;Master Sheet" on the America, Institute for Great Lakes Research, Bowling Green State University, Ohio.

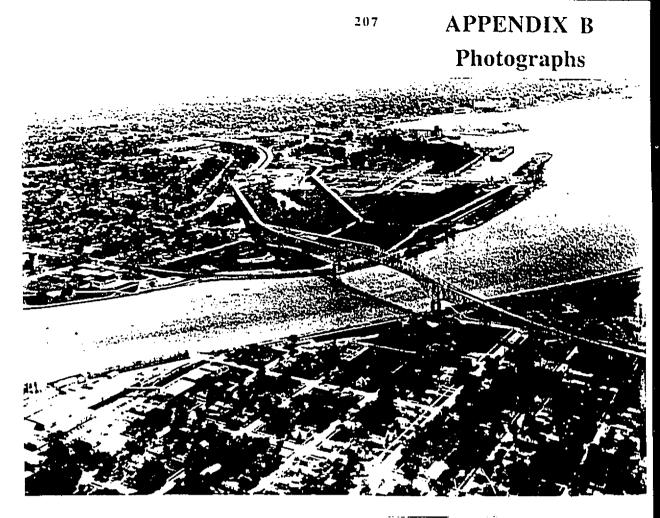
⁵¹⁹"Ship Information and Data Record" on the A.M. Byers (Jack Wirt), Herman G. Runge Collection, Milwaukee Public Library, Milwaukee, Wisconsin.

⁵²⁰ The Port Huron Times Herald, Oct. 7, 1966.

Emsstein settled and grounded and was later raised and had hull repairs carried out in Quebec.

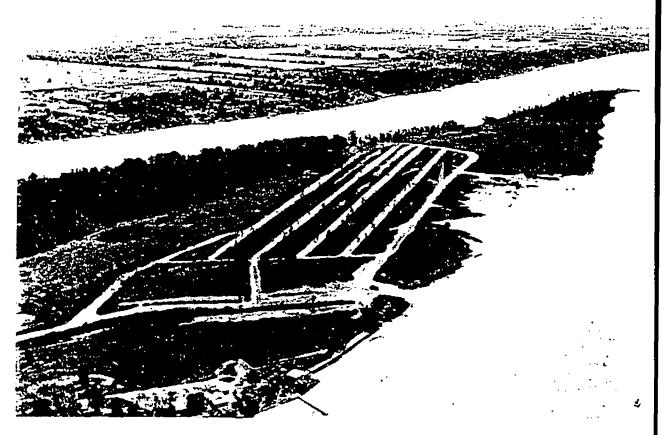
- SYLVANIA (June 1, 1967): The old (1905) steamer, built at West Bay City, Michigan, measured 504 feet in length. The freighter, *Renvoyle*, struck the *Sylvania* while the latter was unloading limestone cargo just below the Bluewater Bridge. The *Sylvania* settled in shallow water, but was raised for repairs in two weeks.⁵²¹
- SIDNEY E. SMITH, JR. (June 5, 1972): See the detailed examination of this loss in Chapter Seven of this thesis.

⁵²¹"Ship Information and Data Record" on the *Sylvania*, Herman G. Runge Collection, Milwaukee Public Library, Milwaukee, Wisconsin.



Above: Aerial view: the mouth of the St. Clair River, looking south (Photo by Cris Kohl). Below: Aerial view: the Bluewater Bridge at the river's mouth (Photo by Cris Kohl).





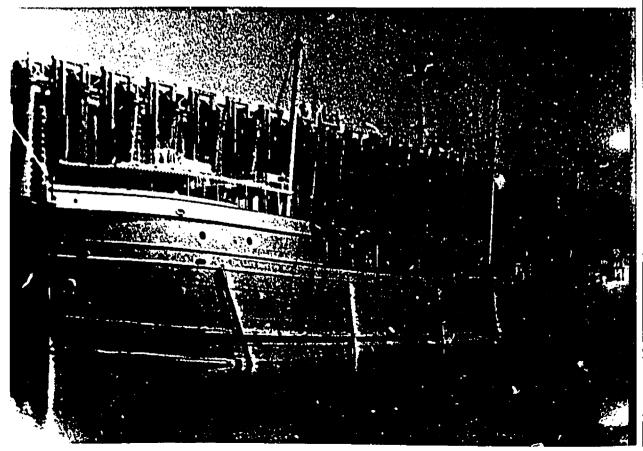
Above: Aerial view: Stag Island, the St. Clair River, looking south (Photo by Cris Kohl).Below: Aerial view: Fawn Island, the St. Clair River, looking northeast. Both islands are on the Canadian side of the main body of the river. (Photo by Cris Kohl).

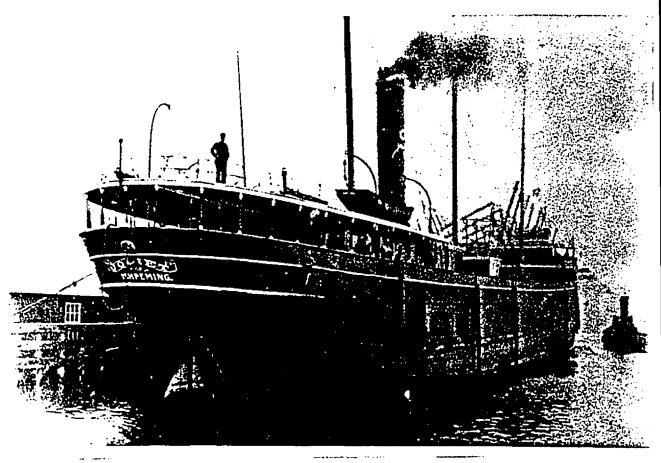




Above: Aerial view: the St. Clair River and the mouth of the Chenal Ecarté, looking east into Canada (Photo by Cris Kohl).

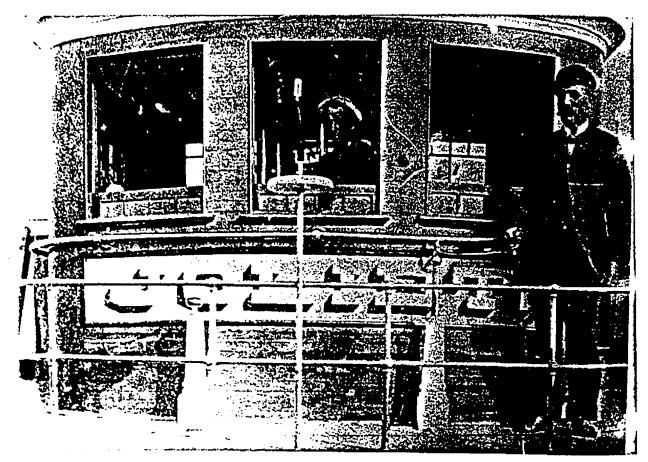
Below: The wooden steamer, *Joliet*, at dock, Marquette, Michigan, Lake Superior.(Photo courtesy of the Institute for Great Lakes Research, Bowling Green State University, Ohio).

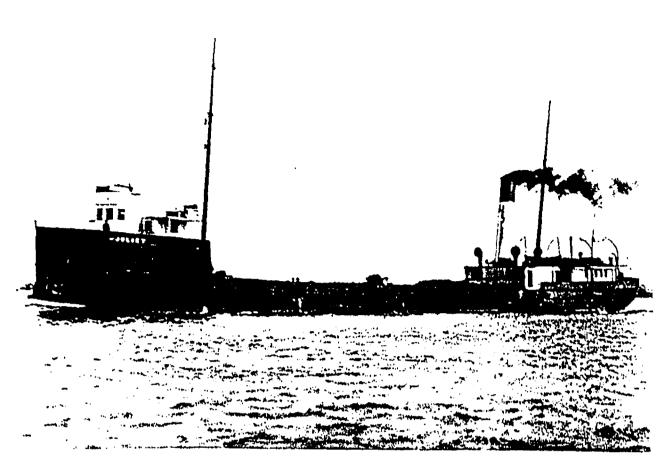




Above: Stern view of the steamer, *Joliet* (Photo courtesy of the Institute for Great Lakes Research, Bowling Green State University, Ohio).

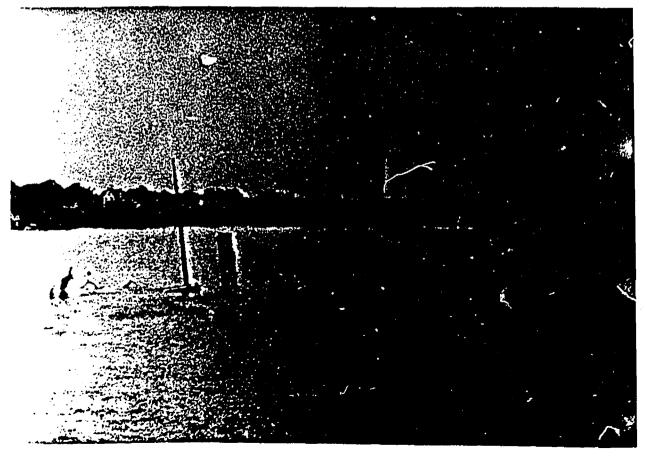
Below: Close-up of the *Joliet's* bridge, captain at right and crewmember at helm. (Photo courtesy of the Institute for Great Lakes Research, Bowling Green State University, Ohio).

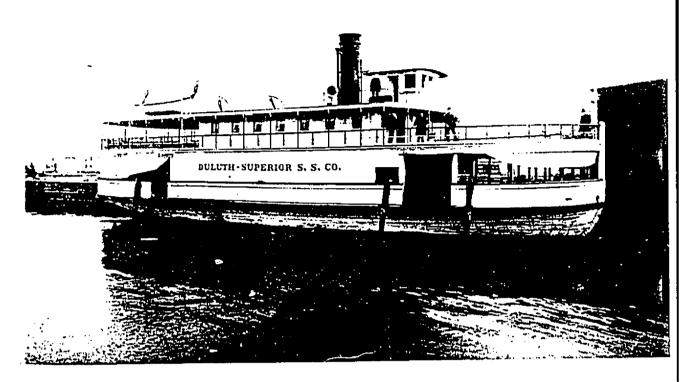




Above: The steamer, *Joliet*, underway (Photo courtesy of the Institute for Great Lakes Research, Bowling Green State University, Ohio).

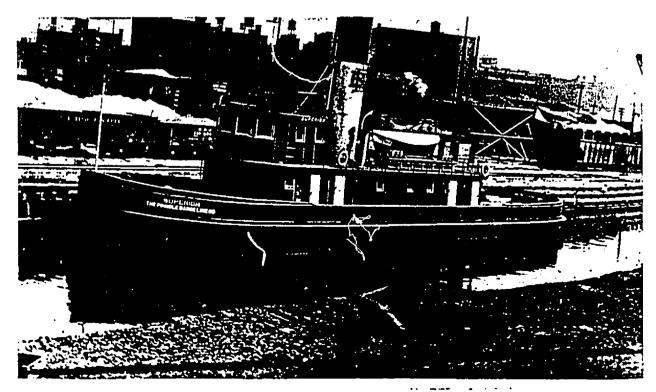
Below: The sunken *Joliet*, in the St. Clair River, late September, 1911. (Photo courtesy of the Institute for Great Lakes Research, Bowling Green State University, Ohio).





Above: The Superior, later the Walter R. Pringle, in 1890 at Duluth (Photo courtesy of C. Patrick Labadie, curator, Canal Park Visitor Center Collection, Duluth, Minnesota).

Below: The Superior, soon to be renamed the Walter R. Pringle, in 1917 at Cleveland, Obio, shortly after conversion to a tug. (Photo courtesy of the Institute for Great Lakes Research, Bowling Green State University, Obio).



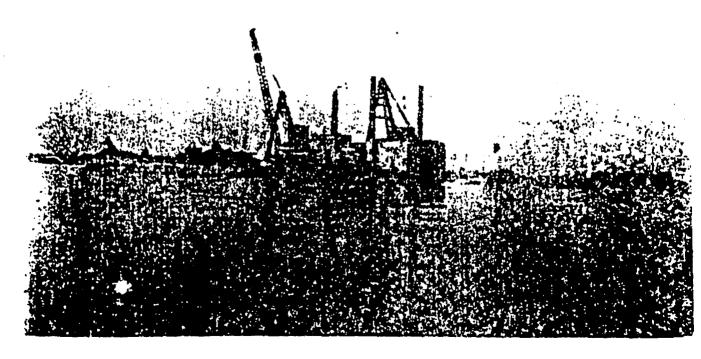


- Above: The remains of the wrecked *Walter R. Pringle*, Stag Island, St. Clair River (Photo courtesy of the Public Archives of Canada, Ottawa, RG42IIc1, Vol. 379, File #24-2-88, photo #35883).
- Below: The remains of the wrecked *Walter R. Pringle*, Stag Island, St. Clair River (Photo courtesy of the Public Archives of Canada, Ottawa, RG42IIc1, Vol. 379, File #24-2-88, photo #35884).

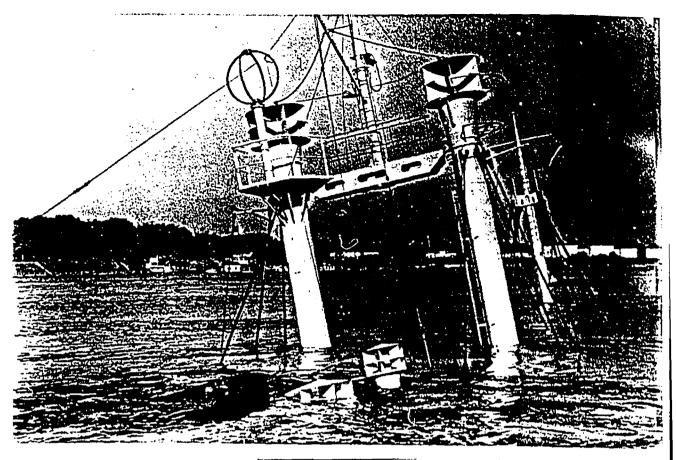




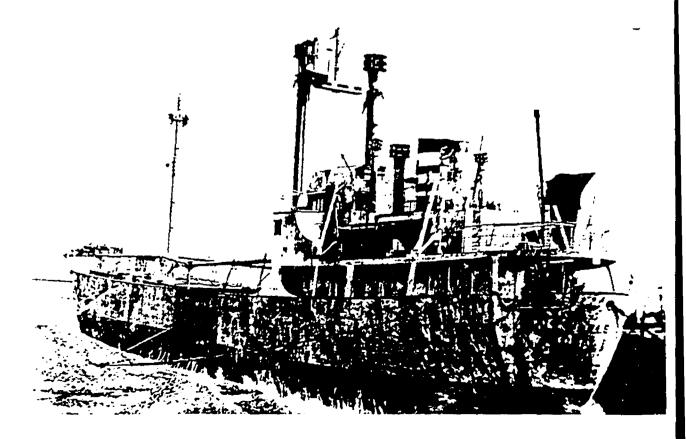
- Above: The remains of the wrecked *Walter R. Pringle*, Stag Island, St. Clair River (Photo courtesy of the Public Archives of Canada, Ottawa, RG42IIc1, Vol. 379, File #24-2-88, photo #35885).
- Below: Dredge and scow removing wreckage of the *Walter R. Pringle*, Stag Island, St. Clair River (Photo courtesy of the Public Archives of Canada, Ottawa, RG42IIe1, Vol. 379, File #24-2-88, document #35, photo not numbered).

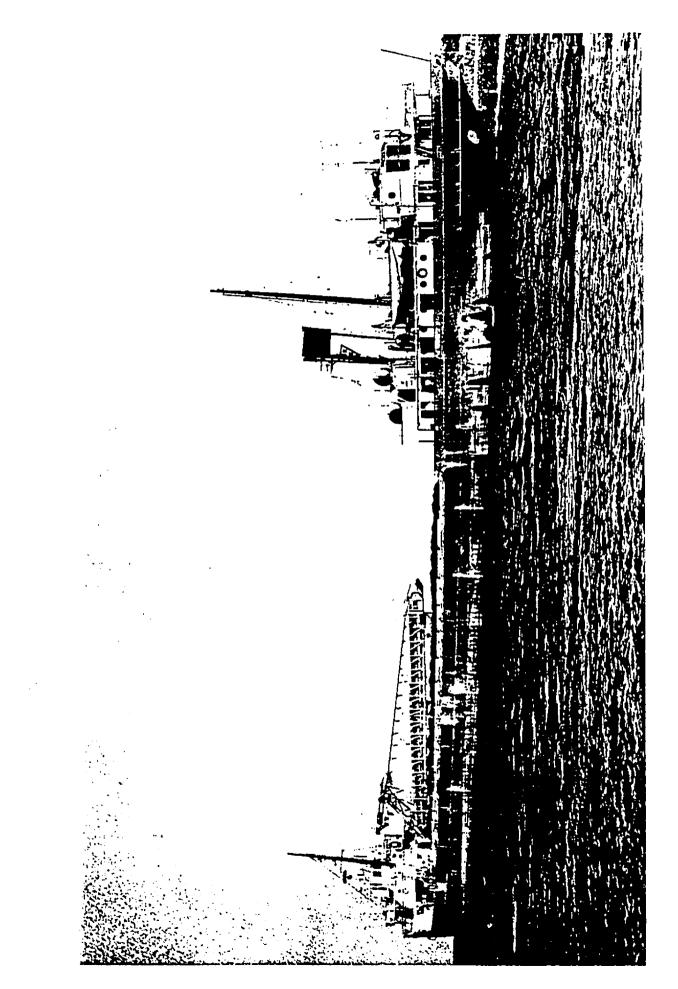


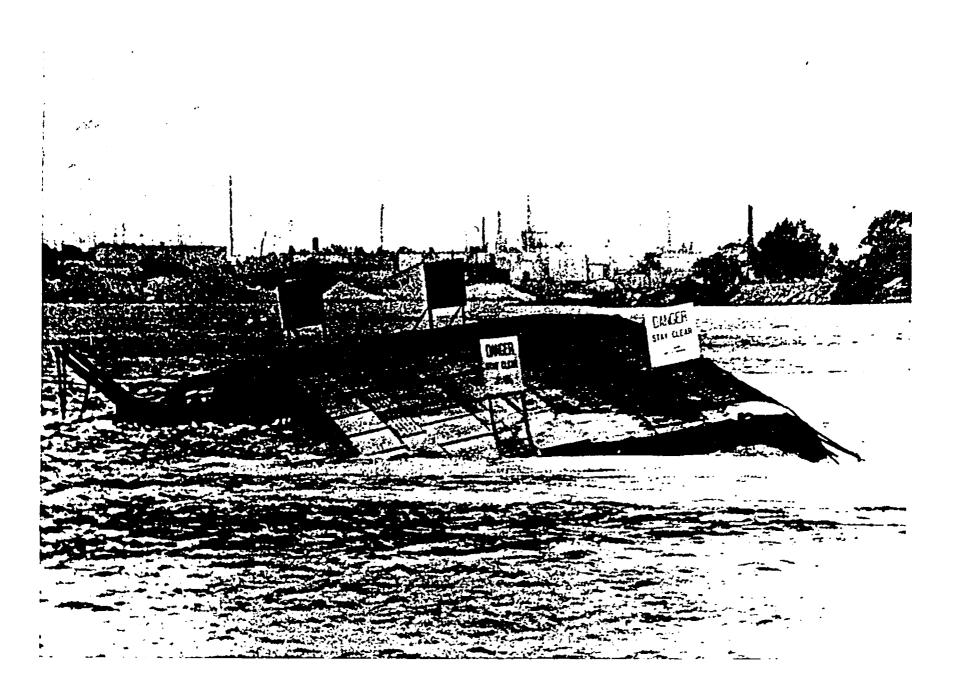
Seew removing Watter Pringle Dredge



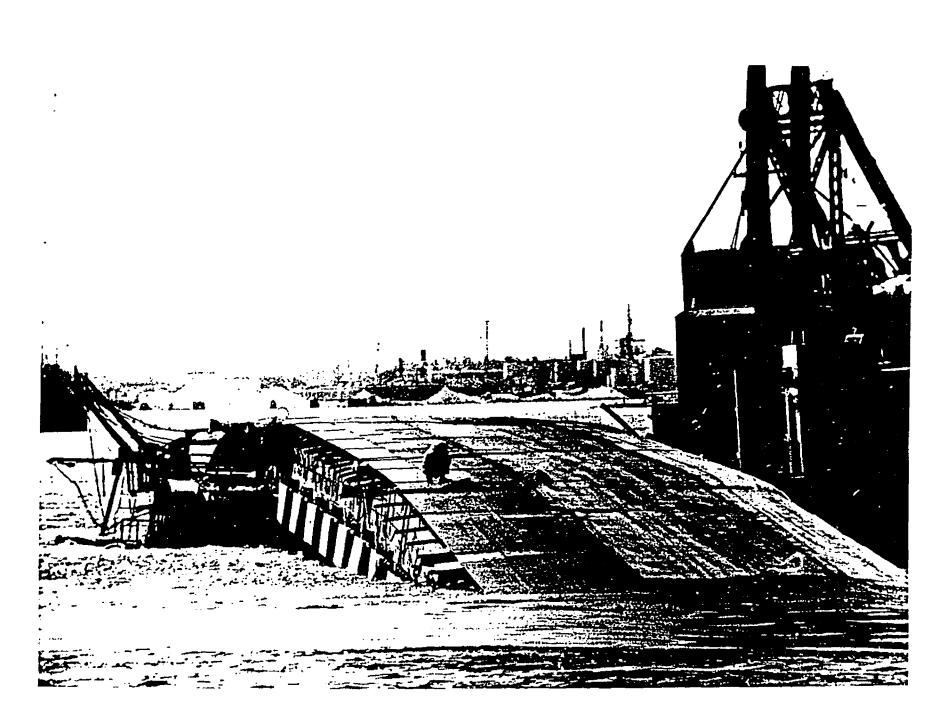
- Above: The sunken German freighter, *Wallschiff* (Photo courtesy of Ralph Polovich, Port Huron Times Herald, Port Huron, Michigan).
- Below: The newly-raised German freighter, *Wallschiff* (Photo courtesy of the Institute for Great Lakes Research, Bowling Green State University, Ohio).



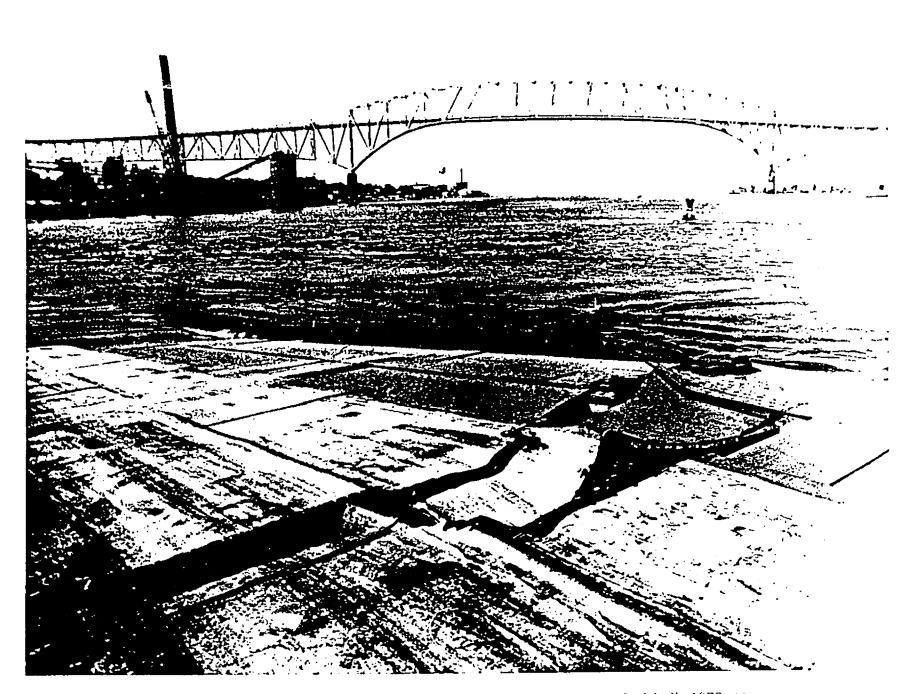




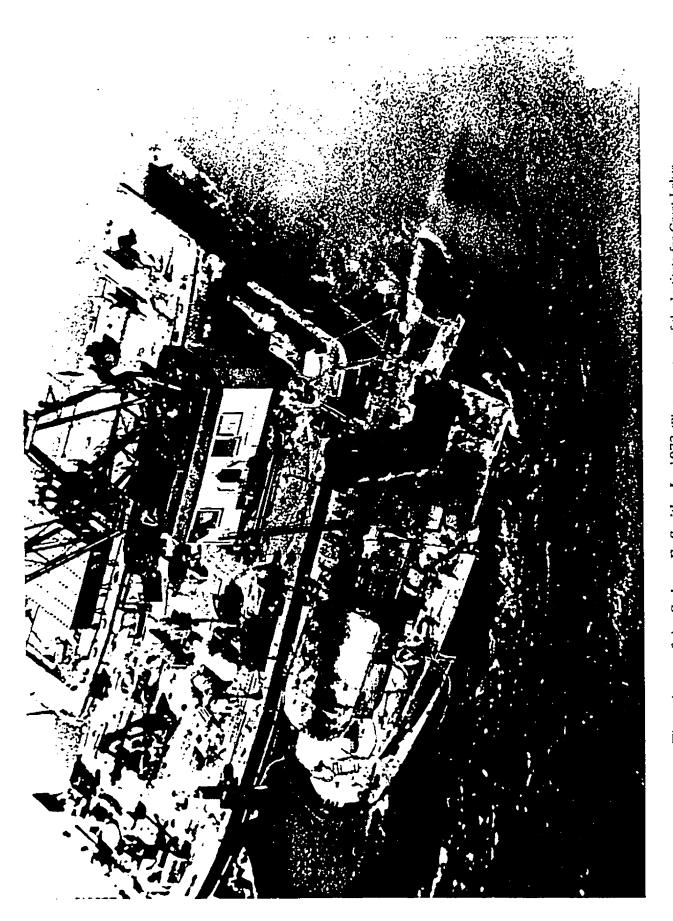
The sunken steel freighter, Sydney E. Smith, Jr, at the mouth of the St. Clair River, 1972 (Photo courtesy of the Institute for Great Lakes Research, Bowling Green State University, Ohio).

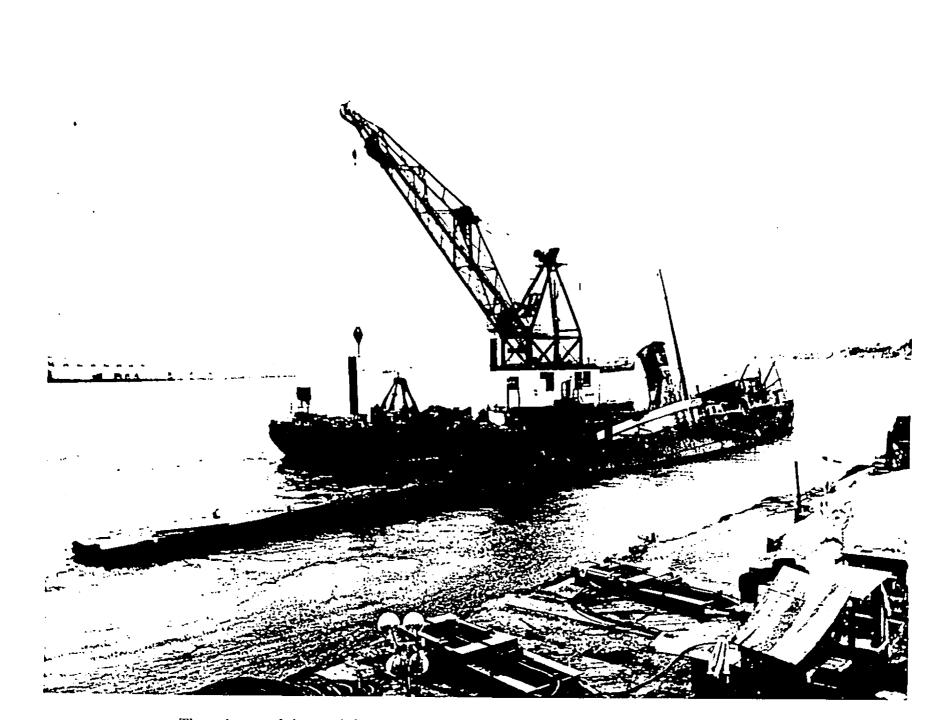


The sunken steel freighter, Sydney E. Smith, Jr, at the mouth of the St. Clair River, 1972 (Photo courtesy of the Institute for Great Lakes Research, Bowling Green State University, Ohio).

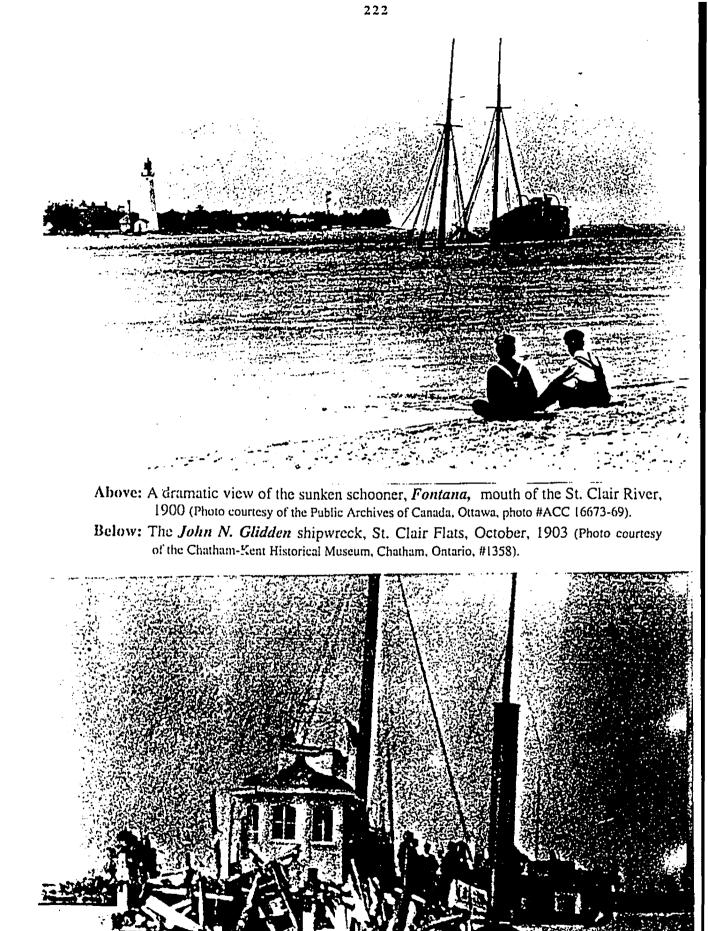


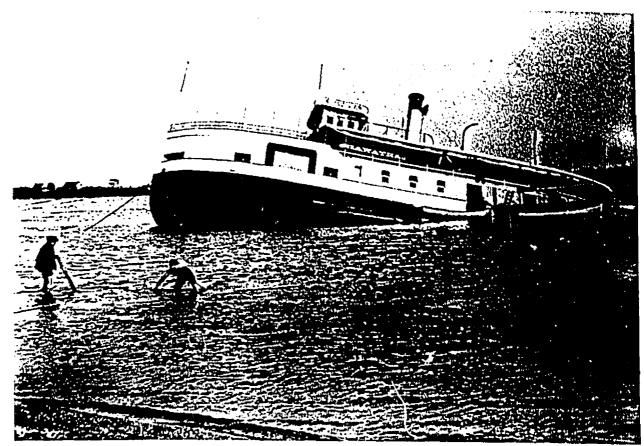
The sunken steel freighter, Sydney E. Smith, Jr, showing cracked hull, 1972 (Photo courtesy of the Institute for Great Lakes Research, Bowling Green State University, Ohio).





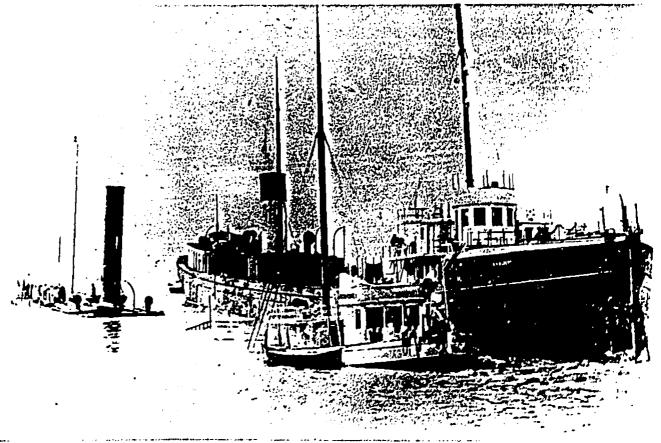
The salvage of the steel freighter, Sydney E. Smith, Jr, St. Clair River, 1972 (Photo courtesy of the Institute for Great Lakes Research, Bowling Green State University, Ohio).





Above: The sunken passenger ferry, *Hiawatha*, September, 1906 (Photo courtesy of the Institute for Great Lakes Research, Bowling Green State University, Ohio).

Below: The sunken wooden steamer, *City of Genoa*, with her sinker, the steamer, *Gilbert*, in the background, August, 1911 (Photo courtesy of the Institute for Great Lakes Research, Bowling Green State University, Ohio).

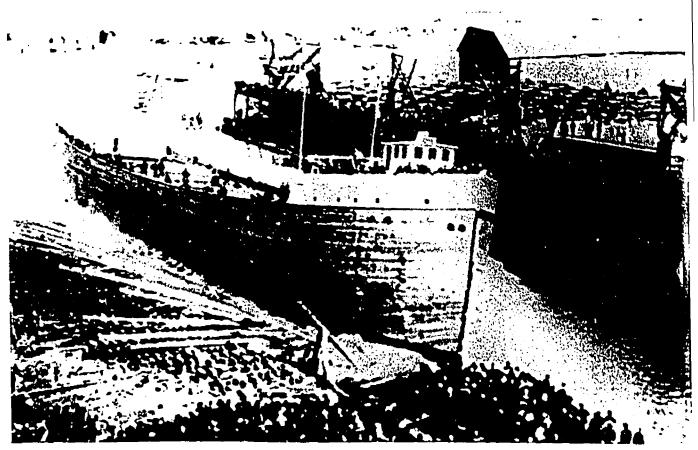


S.S. ATIKOKEN FORMERLY JOHN B. TREJOR BUILT AN WEST SUPERIOR 1895 FOR CAPT. ALEXANDER MEDOUGAL. WRECKED ON ISLE ROYALE 1911 SALUAGED AND REHAILS IST PT. ARTHUR 1912, OPERATED ON THE LAKES UNTIL 1918 THEN CUT (A) JUIC AND TAKEN TO SALT WATRE BURNT AT NALIFAX IN 1922. JOHN NURPEN 1813

A view of the dramatic grounding of the whaleback steamer, *Atitkokan*, at Marine City, St. Clair River, 1913 (Photo courtesy of the Public Archives of Canada, Ottawa, photo #\$13094).

OKEN ATMARINE CITY, BUITIS

S 1309/



Above: The launch of the wooden steamer, *William H. Wolf*, at Milwaukee, 1887. Three people were killed from the resulting wave (Photo courtesy of the Institute for Great Lakes Research, Bowling Green State University, Ohio).

Below: The smoldering hull of the steamer, *William H. Wolf*, October, 1921 (Photo courtesy of the Institute for Great Lakes Research, Bowling Green State University, Ohio).

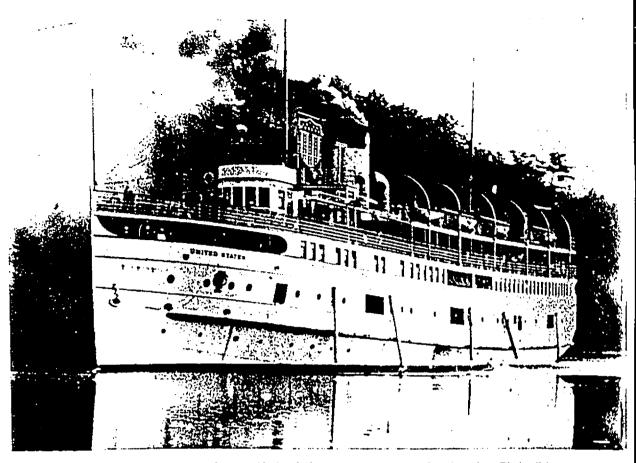




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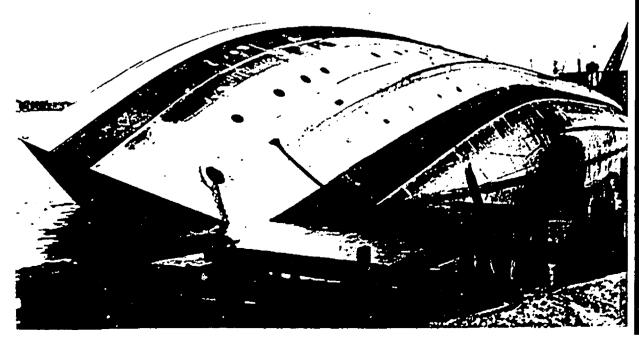
- Above: The passenger ferry, *Omar D. Conger*, underway in the St. Clair River (Photo courtesy of the Public Archives of Canada, Ottawa, photo #S17573).
- Below: An aftermath view of the exploded steamer, *Omar D. Conger*, 1922 (Photo courtesy of the Institute for Great Lakes Research, Bowling Green State University, Ohio).

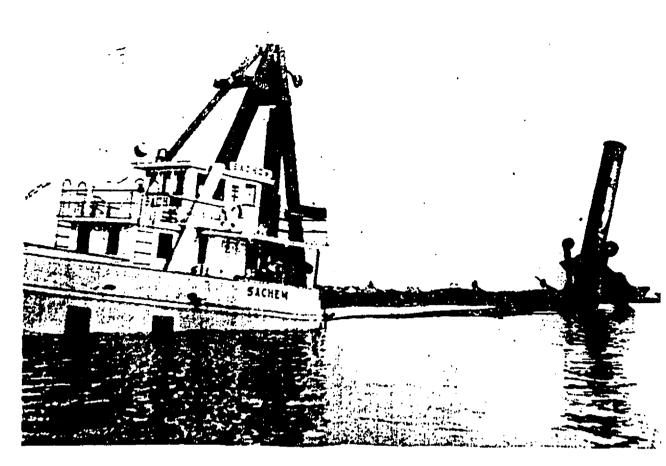




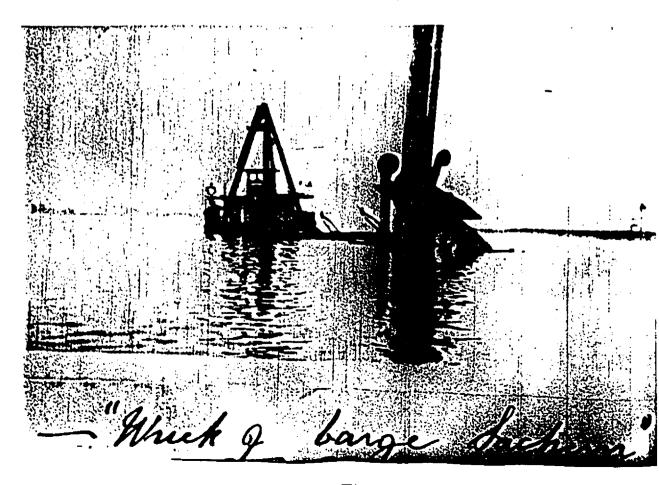
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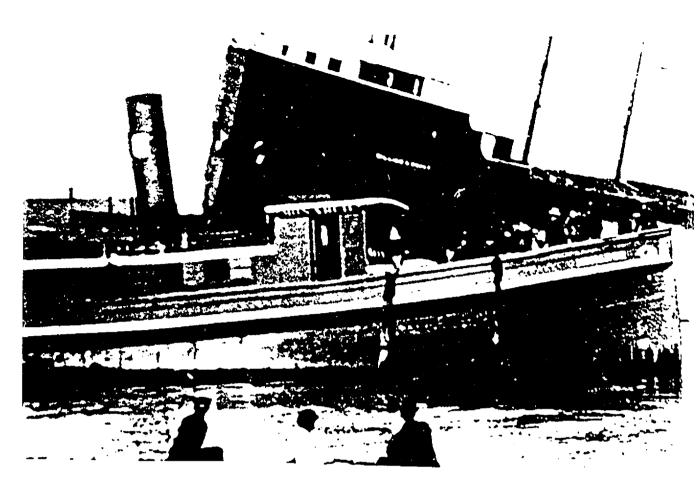
Above: The passenger ferry, United States, underway in the St. Clair River (Photo courtesy of the Institute for Great Lakes Research, Bowling Green State University, Ohio).
 Below: The burned and capsized steamer, United States, June, 1927 (Photo courtesy of the Institute for Great Lakes Research, Bowling Green State University, Ohio).



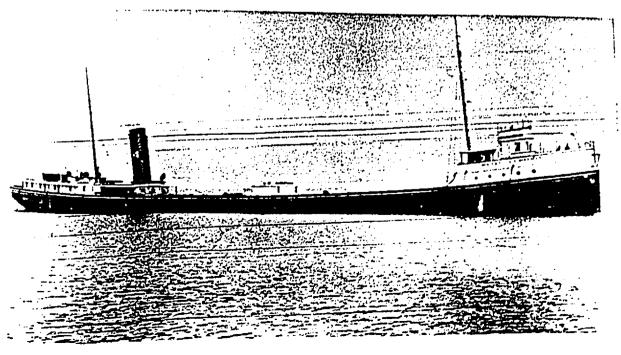


Above and Below: The remains of the wrecked Sachem, near Walpole Island, St. Clair River, Oct, 1928 (Photo courtesy of the Public Archives of Canada, Ottawa, RG42IIc1, Vol. 379, File #24-2-49, document #22, photo not numbered).





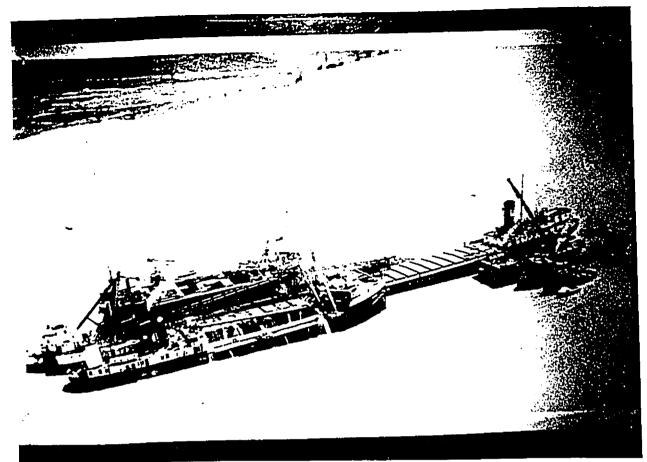
- Above: The tug, *Monarch* (Photo courtesy of the Institute for Great Lakes Research, Bowling Green State University, Ohio).
- Below: The old hulk of the steamer, C. F. Bielman, pictured in better days, was being towed by the tug, Monarch, at the time of the tragedy (Photo courtesy of the Institute for Great Lakes Research, Bowling Green State University, Ohio).



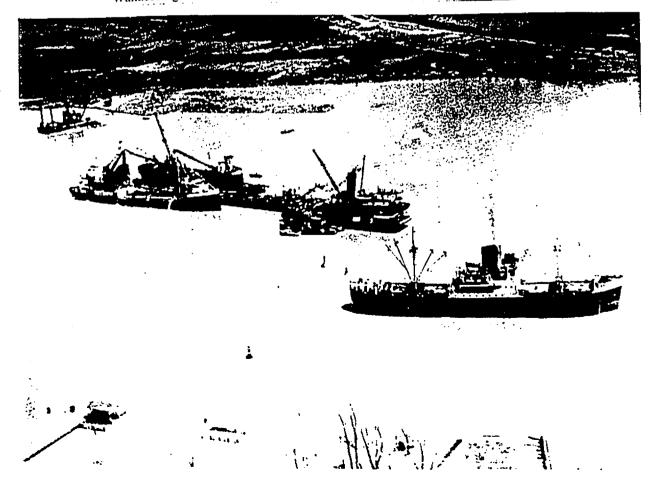
C. F. BIELMAN in 1903

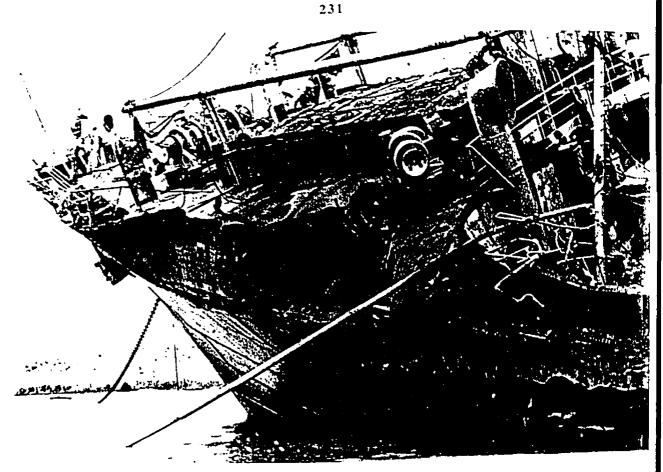
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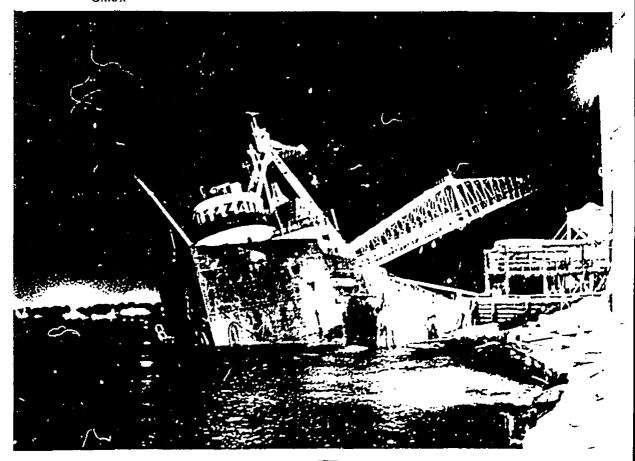


Above and Below: Aerial views of the salvage operations of the freighter, A. M. Byers, in the St. Clair Flats, 1956 (Photos courtesy of Mann Historical Files, Wallaceburg, Ontario).





Above: The sunken German freighter, *Emsstein*, October, 1966, in the St. Clair River (Photo courtesy of Ralph Polovich, Port Huron Times Herald, Port Huron, Michigan).
 Below: The freighter, *Sylvania*, resting on the bottom of the St. Clair River, June, 1967 (Photo courtesy of the Institute for Great Lakes Research, Bowling Green State University, Ohio).



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