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**Dossin Great Lakes Museum,
Belle Isle, Detroit 7, Michigan**

CURATOR'S CORNER



by
ROBERT E. LEE, *Curator*
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This issue of *Telescope* completes Volume 18, and we sincerely hope you have been pleased with the effort. We could add, parenthetically, that we've received far more compliments than brickbats of late, and this helps to make the effort worthwhile. The final compliment, of course, is your renewal of your membership, and we urge you to send in your dues as soon as possible.

However, don't fall into the bad habit of allowing this one prime requirement of membership to be your only affiliation with the Institute and its programs. *Telescope*, for instance, is *your* magazine. Realizing full well that not all members are writers, we can't expect all to contribute first-hand articles they have themselves written, but how about contributions of news items? When you see something published that you think will interest other members, don't assume that *they'll* see it anyway...clip it, send it in, and be *sure* they do.

The same rule applies to articles you might read in old publications. Often, these are limited in availability to those fortunate enough to be able to visit libraries and collections and are denied all others. *Telescope* can provide the means of sharing such material with *all* of our membership, if you only take the trouble to make it available.

So, you see, you *can* provide a valuable assistance to the editors of *Telescope*, and you don't have to be a talented writer, or an expert, to do so. All it takes is an eye for the things *you* enjoy reading and seeing. Chances are there are a good many other members who share your same interests, for, as a matter of fact, if they didn't they would not share the same membership in the Institute.

The membership has been generous with its assistance during this past year, and for this we give heartfelt thanks. All we ask is that some who may have felt they have little to offer will give the matter *another* thought. Perhaps there is more to offer than was at first realized.

As we close the year, the staffs of the Museum, and of *Telescope*, join to wish for you and yours all of the best of the Holiday Season, and may 1970 be your best year yet!



W. H. HEARDING
...an early surveyor

Recalling Some Early LAKE SURVEYS

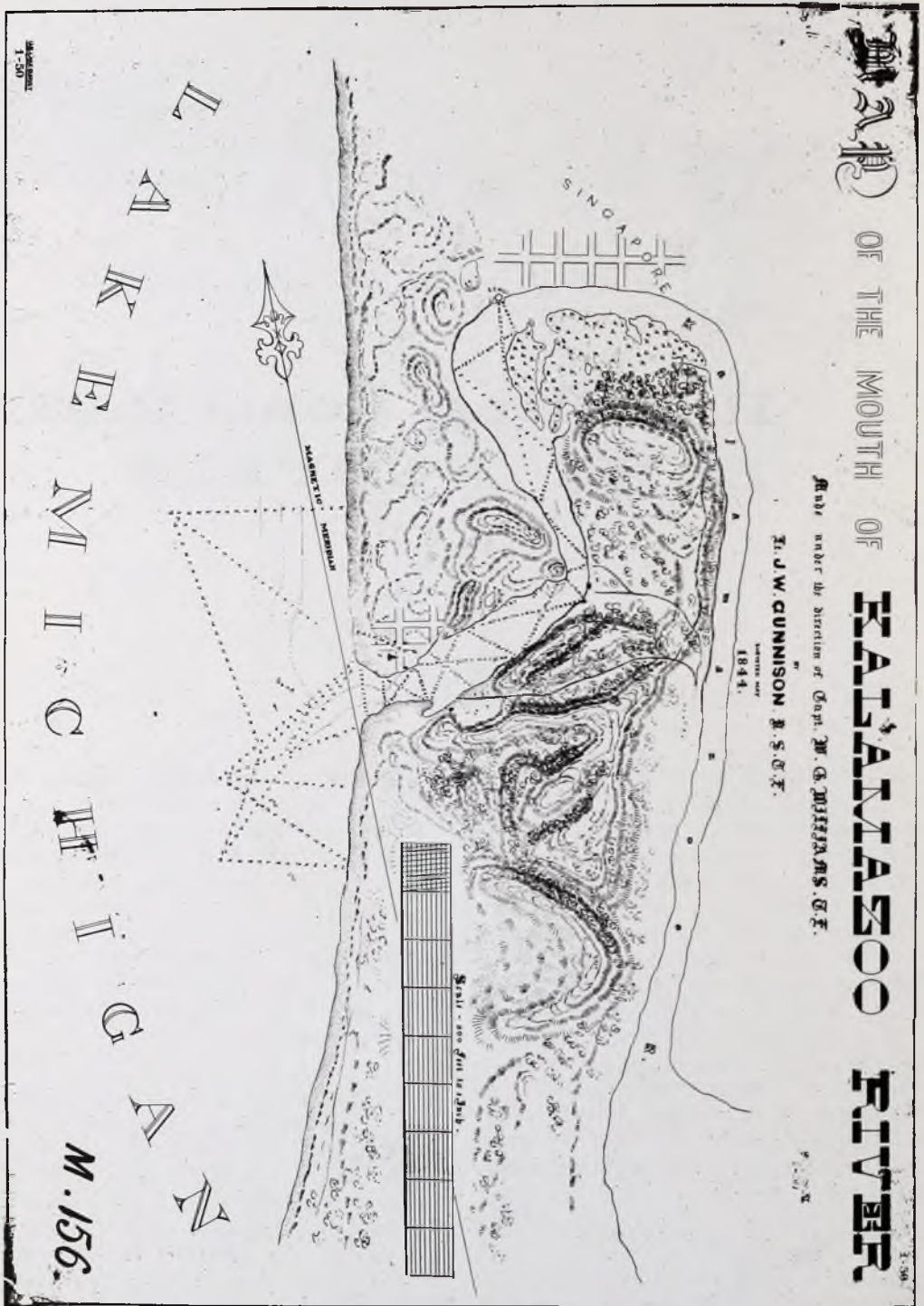


The United States Lake Survey, an arm of the U. S. Corps of Engineers, is a unique and interesting government agency. Its value is monumental, yet save for the familiarity of the charts it publishes, little is known of its past. In the year 1865, Mr. W. H. Hearing presented a report to the Houghton County (Michigan) Historical Society in the form of a talk in which he outlined the Lake Survey activities to that time. A copy of his text has been made available to Telescope by Mr. Clyde Tyndall, and we are pleased to pass it on as an interesting footnote to Great Lakes history.

At the time Mr. Hearing gave this talk it had not yet been 30 years since the attention of Congress had been particularly directed to the vast developments being made in the great Northwest, bordering immediately upon the Lakes, and but little had been done to assist the

navigator in laying his course, that he might avoid the dangers of reefs, shoals, and sunken rocks, and it was not until 1845 that an appropriation of sufficient magnitude was made to defray the expense of commencing the important work, although a small portion of the shoreline of Lake Erie had been surveyed in 1839. At this point we join Mr. Hearing to tell his own story.

Similar surveys were made in Green Bay, Lake Michigan, and the Straits of Mackinac, by Capts. Howard Stansbury and W. G. Williams, and Lt. Webster in 1841. The lamented Capt. I. W. Gunnison also made surveys in Green Bay in 1846-7. The horrible massacre of this highly cultivated and experienced officer and his party by Indians, in the fall of 1853 sent a thrill of horror throughout the country. He was engaged in the survey of one of the Pacific rail-



Kalamazoo River mouth charted in 1844 under direction of Capt. Williams by J. W. Gunnison, later an Indian massacre victim.

Courtesy U. S. Lake Survey

road routes, having a guard of soldiers with him for protection; he was an indefatigable worker, and had gone on with his surveying party, ahead of the troops. It seems that a party of whites crossing the plains had killed an Indian and, to be revenged, the Indians attacked the next party coming after them; this was the surveying party. Capt. Gunnison was occupied in his morning devotion when he heard of the attack upon his camp. He immediately ran out of his tent and begged the Indians to desist, as he was their friend, but he was ruthlessly and instantly killed, pierced by fourteen arrows in different parts of his body. When the chief of the attacking party found that he had murdered his friend, *The Great White Chief*, he was inconsolable. He cut off the right hand from the body; dried it, and kept it as a sacred relic.

The surveys so far made were nothing more than what is termed *meandering* the shoreline. As no soundings were taken, nor corrections made by triangulation or astronomical observations, they were nothing more than a reconnaissance, and were afterwards put to one side as valueless. When the first appropriations were made, great hopes were entertained by Congress that the survey of at least *one lake a year* would be accomplished, but as far as I am aware these great expectations were never realized. The most rapid work in the way of surveying of which I have any knowledge was performed by Captain Bayfield of the British Navy, who spent three seasons on Lake Superior with one assistant and a crew of 20 men. His results, with such means far surpass anything within my knowledge in that line, for his charts give a very correct delineation of the shoreline, and there are but few shoals which he has not noted and plotted in positions approximately correct.

The Chief of the Topographical Bureau in 1845 was Col. Abert, an

experienced officer, with Capt. Williams acting as superintendent of the survey, who made a requisition for the assistance of a steamer in furthering the prosecution of the work. A steamer was constructed of iron, 94 feet in length, and appropriated to the work, with horizontal wheels at the sides. She was called by the name of the chief of the Bureau. No great assistance was realized through her until the wheels were changed to a vertical position, as in a good strong head wind she did not make more than a knot an hour (*sic*) and that was astern. The name of this steamer was changed from *Abert* to *Surveyor*, and although she has been several times high and dry upon the rocks, she is about as seaworthy as she was at the time she was built; it is the same little steamer we have seen in our harbor the past summer. Before this steamer was in commission, the flag ship of the survey was a kind of barge, Lt. J. N. Macomb in charge, called the *Ark*, possibly from the fact of his using her in surveys of Maumee and Sandusky Bays, and mooring her in the bullrushes which abound thereabouts.

The war with Mexico breaking out, Capt. Williams was ordered there, and was killed at Monterey while leading his men in conflict. I have always heard him spoken of as a most estimable gentleman and a fine officer.

In the year 1848, Congress made an appropriation of \$25,000 for the furthering of the work. Lt. Col. James Kearney acted as superintendent with Capt. J. N. Macomb as his deputy. The survey of the Straits of Mackinac was recommended, and a handsome amount of work accomplished. The next year Congress failed to appropriate money, and the assistants were discharged with the exception of one.

In 1850, another \$25,000 was appropriated and Macomb was appointed superintendent, Kearney having been assigned another duty. This officer

remained in charge until the year 1857, during which time a slight increase was made in appropriations by the Congress. This increase was not at all adequate to effect the desired results, but even so, charts of the Straits of Mackinac, the Beaver Island group, St Marys River, Kelley's and Bass Islands, and a general chart of Lake Erie were issued, showing a correct delineation of the shore, and the shore topography, with all the shoals, reefs, channels and harbors, within their fields of respective limits. Even though the old Lake captains ridiculed the idea of looking at one of them for information, they nevertheless thought they might as well have them aboard, seeing they cost nothing more than asking, and it is a remarkable thing that there has not been a shoal discovered by the officers of the Lake Survey, and laid down on the charts with bearings to it from different points, but that

from the office in Detroit, and there is scarcely a vessel of any consideration on the lakes which has not a full set on board.

Perhaps the nomenclature of the points indicated upon them may have had something to do with their prejudice against them. I have no doubt it was difficult to make Bois Blanc into *Bob-lo*, Waugoshance into *Wab-blehanks*, Chenal about Rond into *Sni-borey*, and Ile aux Calets into *Skillagallee*. I may here state that until the chart of the Straits of Mackinac was issued all the steamers and vessels going around to Chicago, went to the north of Bois Blanc Island, or through the north pass. Since the publication of that chart, all vessels bound up or down, to or from any Lake Michigan port take the south channel, thereby saving a distance of over ten miles, and as it is much wilder, it is easier for vessels to beat up against a head wind.



Typical camp-site scene as sketched in the field book of an early survey team.

Courtesy U. S. Lake Survey

some of the old fellows have *known of that shoal* years ago! They have, however, learned to appreciate the value of the charts, for during the year 1859 more than 5000 were issued

The position of Spectacle Reef, lying about 11 miles east of Bois Blanc was not accurately known to Lake navigators until laid down on this chart, and the steamer *Sultana*

was barely saved from a wreck on a stormy night by a tripod which Capt. Macomb had placed upon it. The Captain of the *Sultana*, seeing the object ahead, just in time to change his course, was able to pass between the two *glasses* of the spectacle! Had the captain of the steamer *Garden City* had one of these charts on board he could not have lost his boat except through gross negligence but unfortunately he was not provided one. The *Garden City* was lost on the shoal off Albany Island. It was the schooner *Albany*, lost some years earlier at the same spot that gave her name to the island. This shoal is in a direct line from Mackinac to the mouth of the St. Mary's River.

The positions of Graham Shoals, the Manitou-paunon Shoal, Simmons' Reef, Hat Island Reef, Gray's Reef, the White Shoals, the shoal west of St. Helena Island, Hog Island Reef, and Isle au Gablets, in Lake Michigan; and the Martins', Tobins', Surveyors', and Spectacle Reefs, and Goose Island Shoal in Lake Huron, are all laid down accurately on the chart of the Straits of Mackinac.

The Wagoshance Lighthouse was constructed in 1852 by Capt. Canfield. Before that time a lightship was anchored at this connecting point of the Straits with Lake Michigan. There is a good channel between this lighthouse and the point, and since the publication of the chart, many vessels run between the lighthouse and the shore, saving quite a distance in the run. I have heard it said, that in the fall of the year, when all the vessels are freighted with grain, the fishermen living on the Island of Mackinac pray for heavy winds so the vessels may run on Graham Shoals. There is seldom a season passes without two or three of them doing so, and if they are not completely wrecked, are obliged to lighter off, either by throwing overboard a portion of the grain, or selling it at ten or so cents a bushel to these fishermen-wreckers. It is said some of them

are yet to purchase their first barrel of flour since living on the island, having always been supplied by this system of wrecking.

On the 29th of May, 1851, your reporter left the city of Detroit as assistant to one of the parties sent into the field. The forest at that time covered the ground where we met tonite, and although the north shore of Lake Huron is much nearer to the more settled portion of the country, we were for several weeks at a time without mail, and saw no people from the civilized world until the middle of September when we were encamped on point Detour. While there we were visited by Messrs. E. J. Hulbert, John Chipman, and Mr. Whitney, who were coasting to Sault Ste. Marie.

It was the summer of 1853 when the survey of the St. Mary's River and the south shore of Drummond Island was commenced by Capt. E. P. Scammon which brought the improvements in the channels of the East Nebish Rapids and Lake George which are now in contemplation of being made, and for which appropriations have been made. In 1854 the survey of the river as far as the Sault was completed, at the same time the canal was being constructed. The survey of the different channels of the river took in over 270 miles of shoreline, and over seventy thousand soundings were taken to ascertain the depths of water. It also involved the computation of over 400 triangles.

In the summer of 1855 the survey was extended to the westward of Weaisky Bay, and surveys were also made by Col. W. F. Reynolds of Ontonagon River, Eagle River, Eagle Harbor, and the approaches to them. The latitudes and longitudes of these different points were obtained by astronomical observation, and the preliminary charts of these surveys have been published.

During the same season I was engaged in the survey of King Strang's dominions in the Beaver Group, Lake Michigan, and I often look back on

that period of my life with the greatest pleasure; not that we derived any particular pleasure from the fact of our being situated where polygamy was lawful. I say we, when I suppose I should only speak for myself. While expressing my sentiments upon this subject, I may say that as far as my observation goes, I imagine that one wife is a few too many in some particular instances.

Of all the Mormons we saw in the King's dominions, I do not think there was one that could be considered in the slightest degree attractive, and the King's four wives were no exception to the general rule. Tastes, however, differ upon this particular point, and we will not discuss it further. In 1856 Strang was shot by one of his subjects whom he had caused to be publicly whipped and the dispersion of the Mormon settlement followed soon afterward.

From the year 1855 until 1860 the whole of the west coast of Lake Huron, and a portion of the Canada shore at the south end of the Lake was surveyed; also the south shore of Drummond Island and the false Detour channel, taking in a portion of Cockburn Island. Also surveyed were Marquette Harbor, Grand Island in Lake Superior; the St. Clair Flats, Maumee Bay and the mouth of the river as far up as Toledo in Lake Erie. The Fox and Manitou Islands with Little and Grand Traverse Bays in Lake Michigan, charts of which have also been published. That of Saginaw Bay is perhaps as well executed as any chart ever published either by the U. S. Coast Survey or the Ordnance Department of England.

The greater part of this work was done by Capt. George G. Meade (now General Meade) who succeeded Capt. Macomb in 1857. This General Meade is the same who commanded the Army of the Potomac during the late war, and who achieved victory at Gettysburg.

About the time General Meade assumed the superintendence of the

work, the appropriations were increased by Congress. An additional steamer was built of iron, larger than the *Surveyor*, and appointed to the service, named *Jefferson Davis*, that noted individual being Secretary of War at the time. Her name was changed upon her arrival at Detroit to *Search*, as being more appropriate to her use. With this addition to the force employed, and two more parties in the field, Meade was able to accomplish the results I have already enumerated in so short a time. The energy he displayed, and his systematic method of conducting affairs were the motive power which produced these satisfactory results.

The rebellion breaking out in 1861 made it doubtful whether the surveys would be continued. The parties did not get into the field until late in the season, and the force was considerably reduced. On the 18th of June three parties left Detroit for Lake Superior, and they were somewhat astonished to find an extensive field of ice in the west end of the lake, which proved to be almost impenetrable. On the 27th of June a berg, six or eight feet above the water's surface, was aground off the mouth of the St. Louis River. It disappeared the morning of the 28th.

During this season a survey was made of the St. Louis River as far up as Fond du Lac, which is the head of navigation. A portion of the west end of the lake was also surveyed, and a preliminary chart of this survey has also been published.

In the fall of 1861 Col. J. D. Graham was appointed superintendent of the work. In 1862 a few minor surveys were made during the summer, and in September three shore parties were sent, along with an astronomical party, to Green Bay, but as it was so late in the season not much progress was made.

In 1863 the survey of Green Bay was resumed and quite a large portion of the shoreline was surveyed, with in-shore and deep sea soundings

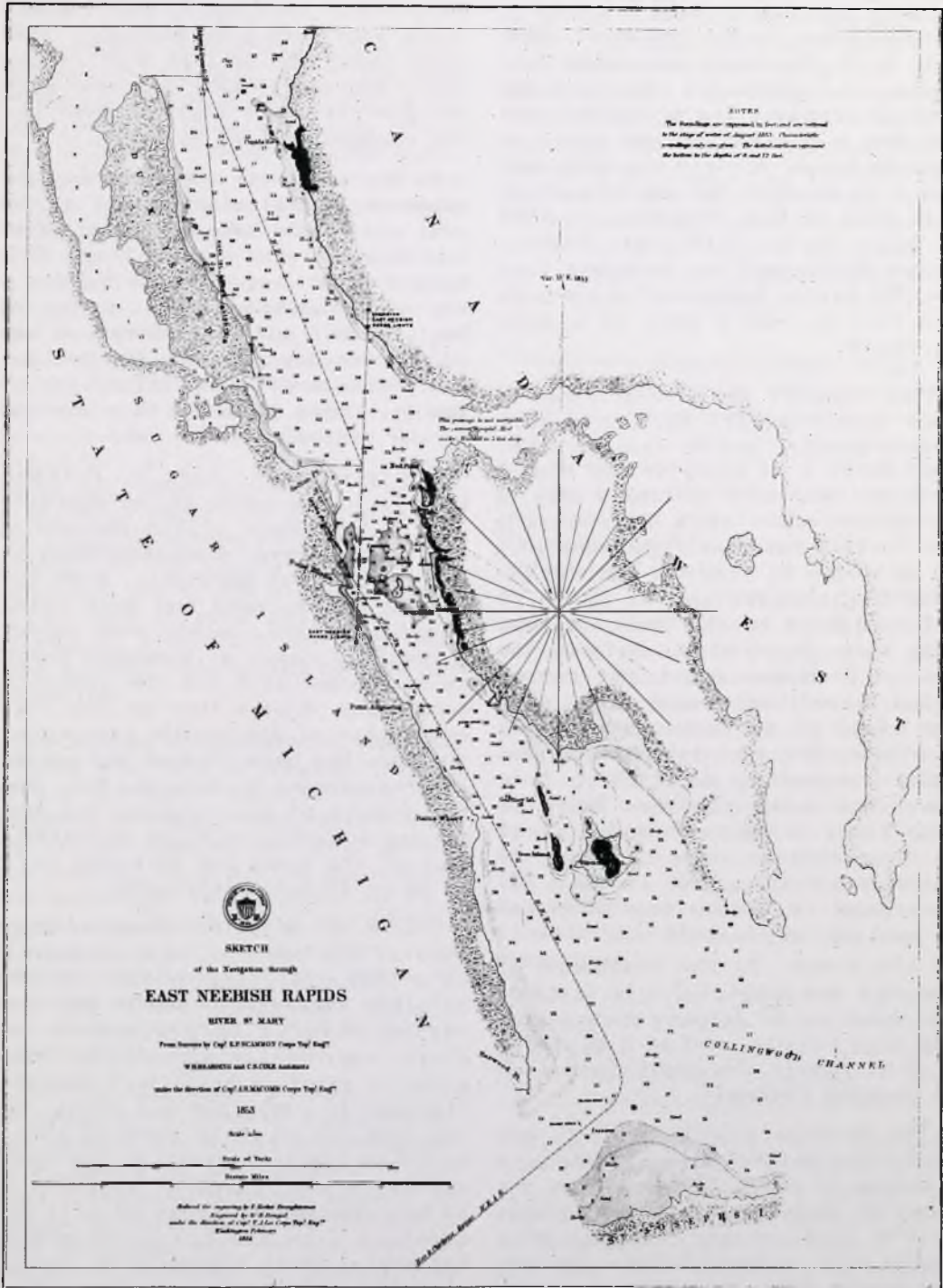


Chart of East Neebish Island of 1853, one of the charts produced from surveys in which Mr. Hearding participated.

Courtesy U. S. Lake Survey

taken. A party was also dispatched to Lake Superior to make a survey of Portage Lake. In the spring of 1864, Col. W. F. Reynolds succeeded Col. Graham in command and the force was sent to complete the Green Bay survey and a portion of the coast of Lake Michigan. A party was also detached to connect the surveys which were made by Col. Reynolds in 1855 of Eagle River, with Eagle Harbor, Copper Harbor and the Ontonagon River. The hiatus between these points was filled, and a part of L'Anse surveyed.

Your reporter was also directed to take soundings off the coast near Copper Harbor, and to examine Standard Rock. I am sorry to say that I have not been able to find a copy of my report upon this interesting point. If I remember right, the rock is SE by E $\frac{1}{4}$ E, from the Manitou Island Lighthouse, and is 22 to 23 miles distant by the *Search's* running time. It is also nearly on the course from Manitou Light to the Grand Island Lighthouse, but I will not swear to the accuracy of this statement. The rock is about 25 feet square, standing about three feet above the water surface. There is deep water between it and a shoal which covers an area of about 40 acres, and bearing from it about NW. This shoal is perhaps more dangerous to navigation than the rock itself on its crest. To the eastbound of the rock and about $\frac{1}{3}$ mile distant, the water is 40 fathoms deep with a red clay bottom, and at a distance of $\frac{1}{4}$ of a mile the depth increases to seventy fathoms.

The deepest sounding which has been taken on Lake Superior was at a distance of about 12 miles from the shore of Eagle River, of 166 fathoms or 996 feet. Undoubtedly greater depths will be found before the survey of the lake is completed. (*Note: Mr. Hearing's prediction was indeed valid, for a new deep of 1333 feet was located 35 miles north of Munising, Michigan, in recent years; RL*)

In 1865 the surveys in Lake Superior were continued, and a small force sent into Lake Michigan. 1866 also found the greater part of the force engaged in Lake Superior with two parties and a small steamer being engaged in Lake Michigan.

As the result of work done in Lake Superior, a preliminary chart of the east end of the Lake embracing Waiskey Bay and the head of the St. Mary's River has been published, a map of Marquette Harbor, a map of Eagle Harbor and Eagle River, a map of the Ontonagon River, and preliminary charts of Grand Island and of the St. Louis River, with a portion of the west end of the lake.

A preliminary chart of Portage Lake is in the hands of the engraver and as the whole of the shoreline has been surveyed from Ontonagon to the eastward of Marquette, with the minute hydrography and deep water soundings taken, we may soon expect a complete chart of Keweenaw Point to be issued with all the interior topography. A base line for the triangulation of the middle section of the lake has been cleared and graded for measurement in Keweenaw Bay, and the points of observation for the triangulation carefully selected. Some of the lines for this work will be 60 or 70 miles in length.

Col. W. F. Reynolds, Corps of Engineers, the present superintendent is a thoroughly scientific officer of great experience, and if his untiring efforts to produce these charts rapidly are seconded by Congress in granting sufficient appropriations to carry out his plans, we may look for an early issue of them. He takes great interest in his work and has a good corps of assistants in his command. I trust he will be supplied with the requisite means for making these surveys with satisfaction to himself, and for the benefit of those directly interested in them. I might recount here the advantages which have been, and which may be derived from this valu-

able work, independent of its value to lake navigation.

The object of making these surveys and issuing the results in the form of charts is, of course, to give the positions of shoals, reefs, etc., the course of channels, approaches to harbors, the character of the bottom for selecting sure anchorages in harbors or on the roadsteads, the selection of the most favorable sites for lighthouses, and showing where improvements can be made in the navigation of the lakes or on the streams emptying into them. But aside from all of these, from the information imparted good fishing grounds have been selected; large quantities of pine and agricultural lands have been purchased from the government where the approaches to the shore have been shown to be favorable for the construction of the necessary piers; saw mills have been built, and in some instances, the growth of towns and villages has been greatly accelerated by this information.

The number of assistants employed during the winter season in the office is about twenty. They are occupied in making computations from the notes taken in the field during the summer; in plotting soundings, and points of delineation on the shoreline; drawing in the shoreline and interior topography, and making computations from notes of astronomical observations, etc. In the summer season a few more are employed as recorders.

During the past season, three steamers have been in commission; the *Search*, in charge of assistant D. F. Henry on Lake Superior; the *Ida*, a captured blockade runner, in charge of assistant O. N. Chaffee on Lake Michigan; and the *Surveyor*, in charge of assistant A. Lamson, also on Lake Superior. Besides the assistants employed in making these surveys, and the astronomical parties which are constantly at work, the Superintendent has also a corps

of meteorological observers stationed at different points on all the lakes who make monthly reports of their observations. From the diagrams plotted from these reports and other data, it has been decided that the rise and fall of the tide in the lakes is as regular in its undulation as in the ocean, although the elevations and depressions of the water are not quite so great. I believe the tide in Lake Michigan is estimated at about a tenth of a foot.

What are termed *sieches* might be made an interesting subject for report by someone who had made it a specialty. I have witnessed the water rise or fall at least a foot in the space of half an hour without any apparent cause, the atmosphere being perfectly calm. Whether the effect was caused by currents of air or winds at a distance from the point of observation, or whether the pressure of the atmosphere at different temperatures and different points occasioned the phenomenon, I am not prepared to say. I have frequently marked the rise and depression of the water during heavy gales and have been surprised at the effect from this cause. I would make an observation in connection with this report that it would be well for the directors of the projected canal at the head of Portage Lake to examine

into the effects of northerly winds on the Lake Superior shore, both north and south of Keweenaw Point, before deciding upon a plan for the construction of the canal.

With this warning, Mr. Harding closed his talk. In the light of our present sophisticated knowledge of the lake terrain, his remarks prove to have been highly introspective, and they cast something of a much neglected light of recognition upon the heroism of the survey crews that pioneered, against all the odds of nature, in charting our unsalted seas.



A SELECTION FROM THE MUSEUM'S FILES... The *Minnie M*, of the Arnold Line at dockside behind the *A. C. Pierce*, as tug *Clayt* eases the *State of Michigan* out of her berth in a long past port scene at Cheboygan, Michigan.

Photo: W. A. McDonald Collection - Dossin Museum

*The Curiosity of an artist
and some solid research effort
clears up some questions about the
unclear history of*

the Elusive **PRINCE ALFRED**

by

FRANK R. CREVIER

The Honorable Bernadette Devlin's recent so-called *miniskirt invasion* of Detroit brings to recall the troubles with the Irish along the St. Clair River frontier of a hundred years ago. A star-performer then was another *she*, the Survey and Gunboat No. 29, *Prince Alfred*.

The early life of the *Prince Alfred* is somewhat cloudy. The late Fred Landon, writing in *INLAND SEAS* in 1963, says:

Of the vessels acquired locally, the best remembered is the Prince Alfred. She was built as a tug at Sarnia, Ontario, in 1859, by Robert Steed and first bore the name Michigan. Her dimensions were 154 x 27 x 9 feet, tonnage 271. She was of wood construction. Her engines, direct acting, were built at Montreal by Bartley and Gilbert. The first owner of the vessel was John Fridgeon of Detroit, who operated her between Sarnia and Green Bay, Wisconsin.

Acquired by the Government of Canada on July 30, 1866, she was rebuilt at Goderich, Ontario by Henry Marlton and commissioned as Survey and Gunboat No. 29; 479 tons, with British officers and crew. At this time she was renamed Prince Alfred. She was sold out of service in 1876 to John Stewart Nesbit, Windsor, and a year later came into the ownership of Alexander Crawford, also of Windsor. She was finally broken up and her register closed May 25, 1885.

This writer, in making a line drawing of the *Prince Alfred* from what may be a contemporary painting of the ship, questioned from the hull form that she was originally a tug. The following contemporary newspaper articles tend to indicate that she was not originally a tug.

1859 - *THE MICHIGAN* - We understand that the company are about to commence the building of a passenger ferry boat to be used at Point Edward. It will be built on the spot, under the supervision of Mr. Robert Steed. There will be no contract.

Oct. 6, 1859 - A laborer by the name of Lapine was killed in transferring the cylinder of the Grand Trunk ferry from the car in which it came to the Great Western Wharf, preparatory to shipping it to Point Edward, by a plank breaking and hitting him in the head.

Nov. 25, 1859 - *THE MICHIGAN* - The Grand Trunk ferry Michigan - This fine vessel, the construction of which has been going on at Point Edward for the past three months, was launched yesterday. Tickets of invitation to the launching and the lunch were sent to a few notables, ourself among the rest, by Mr. Jamieson, the company paymaster for this section, but previous engagements kept us from attending. The launching was successful.

June 16, 1860 - An advertisement for *Stmr. Michigan* running in connection with trains from the Customs House

Wharf and Point Edward.

April 12, 1861 - FOR SALE - The screw steamer Michigan, launched last year, 166' long, 28' breadth, 9' hold. Engines built by Bartley & Gilbert, Montreal. It has 75 horsepower.

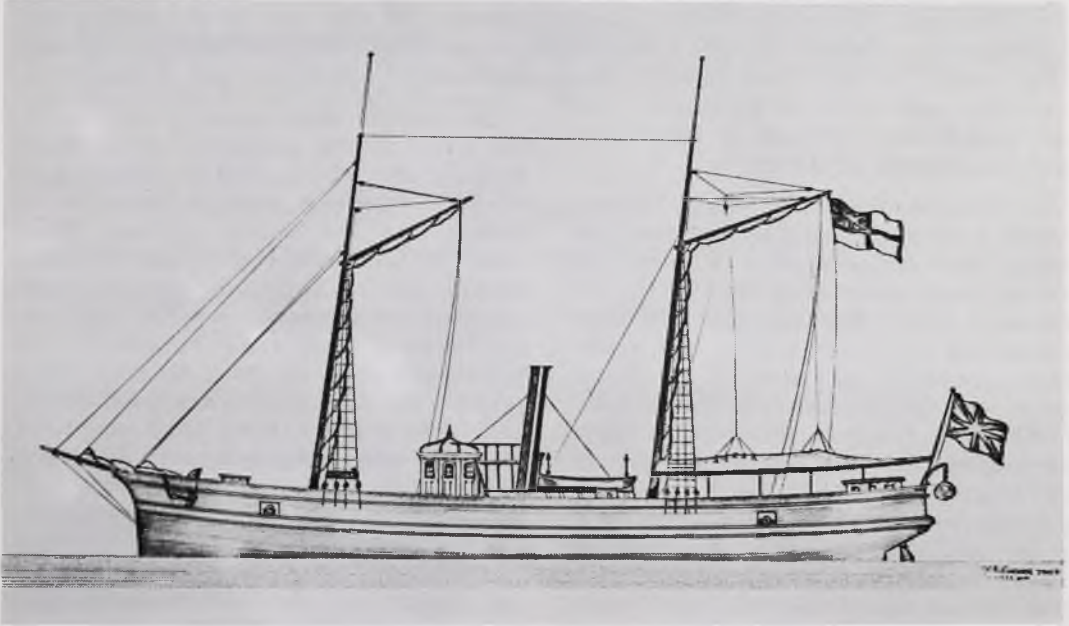
December 27, 1861 - We learn the Grand Trunk Company propeller Michigan took on board 60 cords of wood on Saturday last. Left this port at 4 A.M. Sunday for the purpose of proceeding to Collingwood where she will be boarded by General Williams, whom she would convey along the shores of Georgian Bay and Lake Huron, on a surveying trip, having in view the selection of suitable points for the erection of forts in case of invasion.

June 8, 1866 - Gunboat Rescue, checking Fenian incursions, 2 screws, 2 Armstrong Guns, 50 tars from H.M.S. Aurora left Goderich today. She was received by the Sarnia Infantry as guard of honor.

June 22, 1866 - Volunteers depart Point Edward

October 19, 1866 - The Canadian Gunboat Prince Alfred arrived at this port on Thursday last, and anchored out in the river, a short distance from shore, where she now lies. She has been undergoing slight repairs, and she will start today on her voyage up the lakes. Her crew consists of 5 officers and 47 men, part of the crew of H.M.S. Aurora, now lying at Quebec.

March 17, 1871 - The Gunboat Prince Alfred will soon be free of ice in the bay. Improvements have been made on the deck and bulwarks, and also on the interior by Mr. Robert Steed, who was the original builder of the boat. She is now fitted with platforms to carry six guns, one stern, one bow and four amidship, two of them being Armstrong's. (This may date the painting as the two midship gun ports are plainly visible; FEC) This heavy armament, with the great



Author's drawing of the *Prince Alfred*.

speed the *Prince Alfred* possesses, makes her a very efficient boat for frontier protection. The alterations were made under the superintendence of Capt. Wyatt, gunboat inspector. We are glad to see that Capt. Fraser is still sailing master.

May 1, 1874 - The steamer *Ontario* of the Lake Superior Line was nearly stuck on the sandbank in Lake St. Clair near the lighthouse at the mouth of the Thames. She was accompanied by the *Prince Alfred*.

June 12, 1874 - The Gunboat *Prince Alfred* left Kincardine, towing the steam dredge *Challenge*, scow and steam tug, launched at Sarnia two weeks ago, from the shipyard. Some of the stringers in the dredge were 70 feet in length and were obtained in Sarnia Township. When the gunboat returns she will be laid up in the bay.

December 17, 1875 - At a government sale the Gunboat *Prince Alfred* brought \$3,750. It was 20 years old, a ferryboat for nine years, and a tug later, before being purchased as a gunboat.

May 18, 1877 - *Prince Alfred* is owned by J. Nesbit of Mooretown, who sold to Windsor interests and she will be converted into a wrecker.

June 21, 1871 - The Canadian wrecker *Prince Alfred* is being raised from the bottom of the river. It is in bad condition.

The foregoing news items were furnished this writer by Mr. George Smith of Bright's Grove, Ontario, and all were from Sarnia papers. Mr. Smith has a voluminous amount of historical material on Lambton County, Ontario.

Dr. Richard J. Wright in an article entitled *Green Flags and Red-coated Gunboats*, in *INLAND SEAS*, throws further light on *Prince Alfred*. Dr. Wright says:

To combat possible future Fenian uprisings, the Canadian Government purchased two of the 'improvised gunboats' of the 1866 incursions. The *Rescue* was purchased from Cook Brothers for \$21,000, and the *Prince Alfred* (ex-Michigan) from Pridgeon & Muir for \$16,787.50.

The Prince Alfred continued to patrol Lake Huron in 1867...the Canadian Government found, however, that naval defense was costly, and in 1868 ordered the gunboats laid up; the Prince Alfred at Goderich, and the Rescue at Kingston.

In October 1869, as Fenian reports again filtered into Canada, the gunboats were ordered to be fitted out. As no naval guns were available, the Toronto Field Battery and the Goderich Artillery Company, all under the command of Lt. Col. A. M. Ross, were ordered to man the Prince Alfred. The Toronto Battery brought with them two 9-pounders. These were subsequently replaced by two 12-pounder Armstrongs and two howitzers, a 24- and a 12-pounder obtained 'on loan' from the British Government. The vessel was found to leak badly, but was caulked, and within three days was ready for service. She patrolled the St. Clair Frontier from October 22 until laid up at Goderich on November 23, 1869. Col. P. Robertson-Ross, Adjutant General of Malitia, said of her:

'The Prince Alfred is a good, strong, and useful steamer, and can acquire a good speed of 14 knots an hour, and as soon as the necessary alterations and repairs...having been effected, she will form a suitable and effective gunboat for the police service on the St. Clair Frontier; and doubtless will act as a preventative measure against Fenian attempts at invasion. Previous to the Prince Alfred going into winter quarters, she rendered good and humane service by rescuing two vessels in distress, which but for her assistance would have been shipwrecked.'

Dr. Wright gives a clue as to why it could have been reported that the Gunboat Prince Alfred might have been built as a tug. He states; On May 25, 1870, Lt. Col. W. H. Jackson of the 8th Brigade Division was ordered to go from Prescott to Brockville to inspect the tug Prince

Alfred (not to be confused with the gunboat of the same name) and report on her capabilities as a patrol and gunboat.

Dr. Wright continues with more on the life of the gunboat; One element lacking during the Fenian incursions of 1870 was the gunboat service of Rescue and the Prince Alfred. They were in fact ordered to patrol duty during the episode but were already engaged in connection with the expedition being sent to quell the Reil Uprising at Fort Garry, Manitoba. During the winter of 1869-1870 (this appears to vary one year with the newspaper account; FEC) the Prince Alfred was considerably rebuilt. Her deckhouse was removed, berths provided for seven officers and 65 men, masts and sails added, oak topgallant bulwarks raised, iron plating installed all around the hull above the deck, platforms added fore and aft, also guns with protecting iron shutters. She was fitted to carry four Armstrong guns and two howitzers, along with a large magazine, and had room enough for a seven-day supply of fuel.

The Prince Alfred was engaged in patrol duty along the St. Clair and Lake Huron Frontier from April 22 until May, at which time she was ordered to Collingwood. From there she was used to carry troops and supplies and tow vessels intended for use on the expedition from Collingwood to Prince Arthur's Landing (Port Arthur) in preparation for the Red River Expedition.

Thus did we lay to rest, at least in our own mind, questions of conflict that came out of differing statements dealing with the origin, ownerships, and history of the Gunboat Prince Alfred. Granted this knowledge had little to do with our drawing of the vessel, but we like to know all we can about a subject before we commit her to the drawing board!

And for this, we thank the Irish!



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*July 31...*The German tugs *Fairplay X* and *Fairplay XII* tow the *J. E. Upson* down the Welland Canal and anchor her off Port Weller, Ontario.

...The crew of the Indian freighter *Jalazard* were taken off the ship, and the vessel sealed and fumigated today at Ashtabula, Ohio. Inspectors of the Agriculture Department had found Khafra beetles on board. This is a pest that for many years has devastated grain crops in India. The crew was put up at a motel for the night.

*Aug. 1...*The Great Lakes bulk carrier *Merle M. McCurdy*, named for the late U. S. District Attorney at Cleveland, Ohio, will be christened today at Dock 28, on the Stadium Pier at the foot of West 3rd Street, Cleveland. She is owned by the Kinsman Marine Transit Company, and will go into service tomorrow.

...An increase in vessel rates on iron ore and coal, effective today, was announced by Pickands Mather & Company, operator of the Interlake Fleet.

*Aug. 2...*The Columbia Fleet of Oglebay Norton Company became the second on the Great Lakes to raise iron ore and coal rates.

...Tugs *Fairplay X* and *Fairplay XII* towed the *Peter Robertson* down the Welland Canal and tied her up next to the *J. E. Upson*.

...The Norwegian freighter *Bente Brovig*, in Seaway service, has been renamed *Gala Taring*, while in Vickers Dry Dock in Montreal, Quebec.

*Aug. 4...*The *Philip Minch* was brought down the Welland Canal by the tugs *Fairplay X* and *XII* and tied up to the *Upson* and *Robertson*.

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...At Cheboygan, Michigan, a 47-foot fish tug has been reported sunk in 22-feet of water adjacent to the Durocher Van Antwerp dock in the Cheboygan River. The wreck extends approximately 15-feet from the dock, and there is ten feet of water covering her.

...Oil slicks were spotted in Lake Erie a mile off Point Pelee, Ontario. They were spotted by a U. S. Weather Bureau aircraft. The Coast Guard dispatched a helicopter on the chance that a ship had sunk, but determined that the oil, bubbling to the surface in a froth, was from another source.

Aug. 5...Canadian authorities sent a diver under the waters of Lake Erie in an attempt to locate the source of the oil slick. There are three slicks, each originally 2,000 yards long, and a half mile wide, which had diminished to one slick 150-feet in diameter today. They believe the oil is coming from one of the many underwater wells that have been drilled in the area, and quite possibly from one that had failed to produce at the time it was drilled.

...Wilson Marine Transit announced it would increase transportation rates for iron ore and coal, effective immediately.

...Hall Corporation's newest vessel *Ottercliffe Hall* arrived at Conneaut, Ohio. She cleared Lauzon, Quebec for Port Cartier



Ottercliffe Hall, Hall Corporation's latest, in the Iroquois Lock on her maiden voyage, August 3, 1969.

Photo by George Ayoub

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on July 29; cleared there bound for Conneaut with cargo on the night of July 30; cleared Iroquois Lock 7 on August 3, and Port Weller on the 4th, arriving at Conneaut at 2:35 PM. Here are her vital statistics: No. 329351 - M/V - Bulk carrier; built at Lauzon by Davie Shipbuilding, Ltd.; hull number 667. Registered dimensions and tonnage: 712.2 x 75.2 x 36.2 - 17,908 gross; 13,506 net. Registered at Quebec City, May 8, 1969.

...The Danish freighter *Atlantic Skou*, 9,150 tons, and in Seaway service, which went aground last week was towed to Batiscan Quebec for a preliminary check of the damage. The grounding took place in the St. Lawrence River, about 40 miles SW of Quebec City, near Grondines.

Aug. 6...The captain of the Somali Republic freighter, *Fontevivo* was fined \$500 for oil pollution in the St. Lawrence River while enroute to Montreal. The cause was attributed to seepage of oil from a break in the deck equipment being washed overboard during a downpour of heavy rain.

...The *Fitzgerald* has again broken her own record, this time loading 27,338 gross tons of iron ore pellets at Silver Bay for Toledo, Ohio.

...M/V *Port Alfred II*, built at Pictou, N. S., by Ferguson Industries, Ltd., with an all aluminum structure, for Saguenay Terminals, Ltd., went into service recently at Port Alfred, Quebec, to handle the ever-increasing traffic at that port.

Aug. 7...The Lake Erie oil slick which raised concern earlier this week has disappeared with no one yet certain of its cause.

...The *Buckeye Monitor* grounded near the mouth of the St. Clair River, just above Port Huron, Michigan. She was upbound light at the time, and was pulled free later in the day by the tug *Amherstburg*. She apparently suffered no damage and continued her trip to Lake Huron.

Aug. 8...James A. Gregg, 25, a seaman on the *Thomas E. Millsop*, drowned at Escanaba, Michigan, when he missed his footing on a ladder to the ship. He was from Superior, Wisconsin.

...Pickands Mather has applied for permission for its Interlake Fleet to operate the *C. H. McCullough, Jr.*, as a barge under tow of a tug of the Roen Steamship Company. She would carry taconite pellets between Escanaba, Michigan and Indiana Harbor. She is currently laid up in the Erie harbor and has not sailed

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in two years. Conversion to a barge would be effected by removal of her propeller, and she would carry a crew of nine men. If approved she could sail as early as August 12.



C. H. McCullough, Jr.

Dossin Museum Collection.

...The British freighter *Manchester Miller*, while leaving Cleveland harbor late August 7, hit the west outer light on the breakwall and grounded. A tug freed her after about 20 minutes and she proceeded without apparent damage.

...On August 7, the largest cargo ever to pass through the Soo was recorded when the *John G. Munson*, self-unloader of the U.S. Steel Fleet locked through with 22,220 tons of limestone for Duluth, Minnesota. The previous upbound record had been set, earlier the same day, by the *Saguenay* of Canada Steamship Lines, with 21,240 net tons of coal. Captain Paul Stone is Master of the *Munson*.

Aug. 10...The Greek freighter *Rythme* bound for Montreal from Philadelphia went aground off Cape Sable, N. S.

...The *Harry W. Croft* is towed down the Welland Canal and taken straight through to Quebec City- (Anyone know what tug? Ed.)

Aug. 11...A barge has sunk at its moorings in Lake Calumet, one fourth mile north of Continental Grain Company Elevator C slip.

...The *Edmund Fitzgerald* locked through the Soo with 30,690 net tons of pellets from Silver Bay. This load, also destined for Toledo, breaks her former record by 15 tons.

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...David W. Oberlin was sworn in as Administrator of the St. Lawrence Seaway Development Corporation by Transportation Secretary John A. Volpe in Washington, D. C.

...The *Arthur B. Homer* of the Bethlehem Fleet has been certified by the Coast Guard for two-man engine room operation.



Arthur B. Homer

Massman Photo - Dossin Museum.

Aug. 12...The speed limit in the St. Marys River has been lowered from 12 to 9 miles-per-hour over the ground, due to the unusual high water condition.

...Capt. Thomas E. Turbett, 48, of Lorain, Ohio, died in hospital after collapsing at Burke Lakefront Airport in Cleveland, Ohio. He had been with the Wilson fleet for 24 years, and was currently with the Lake Pilots Association

Aug. 14...A huge oil slick in the St. Lawrence River, extending from Millhaven, near Kingston, Ontario, into Lake Ontario, and covering an area of about six square miles was still spreading a week after first sighted. Booms were being rushed from Toronto to trap a large patch which had broken off near the shore line. A tanker refuelling at the Millhaven oil depot was believed to be the source of the leak. Present evidence does not indicate damage to either waterfowl or drinking water.

...A small shipyard owned by Marine Industries, Ltd., located at Paspebiac, Quebec, faces shutdown unless new contracts can be obtained. The yard, built in 1961, had flourished until 1968.

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...The car ferry *Grand Rapids* bumped a railroad bridge over the Kinnickinnic River, putting the bridge temporarily out of service. The swing bridge, which turns on a swivel in midstream to allow passage on either side, was knocked off-center and its main gear and electrical system were damaged. Any damage to the *Grand Rapids* appeared to be negligible.

Aug. 15...Owners of the Greek ship *Orient Exporter* were fined \$100 today for dumping raw sewage into Lake Michigan at Navy Pier in Chicago.

...The speed limit in the St. Clair River has been set at nine miles per hour over the bottom between the Blue Water Bridge and Stag Island and ten miles per hour over the bottom between Stag Island and the St. Clair Flats Canal Light No. 2.

...The British freighter *Manchester Commerce* which grounded on August 14 in the Fighting Island channel of the Detroit River was pulled free early today by the Canadian tug *Amherstburg*. The ship had dropped her anchor close to the waste conduit that the Wyandotte Chemical Company maintains between their mainland plant and Fighting Island. To assure against damage to the pipe the ship slipped her anchor before being permitted to move. The anchor was recovered by divers and returned to the ship the following day.

...The long strike at the ore loading port of Sept Iles ended today when the bulk carrier *Oswego Liberty* loaded 51,500 gross tons of pellets for Baltimore. Next in line waiting for a load was *Lake Winnipeg* and *V. W. Scully* (ex *Don De Dieu*). At Pointe Noire, a similar port nearby, mediation has broken down and the strike continues.

...About 450 workmen are on strike against American Ship Building Company in Lorain, Ohio, plus 350 in Toledo and 100 in Chicago. A three year contract expired at midnight.

Aug. 17...Canada Steamship Lines' *Black Bay*, in Lauzon drydock since May 25, cleared port bound for Sept Iles to pick up ore.

...Traffic on the St. Lawrence Seaway was tied up for about 10 hours when a fender boom at Eisenhower Lock was damaged by the French freighter *Jean L.D.* The accident happened about 1 PM.

...A salvage crew brought ashore a 15-foot chunk of a U. S. Navy plane that they found in Lake Michigan in 55-feet of water, about 10 miles off Chicago. They were searching this area for the remains of a four-masted wooden schooner that went down

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there 60 years ago. The plane was equipped with an arresting hook which was extended as if for a landing on an aircraft carrier. A hydraulic tail wheel was also extended, and the wreckage contained what appeared to be charred human bones. The crew speculated that the plane might have crashed while trying to land on one of the two training aircraft carriers, *Sable* (ex-*Greater Buffalo*) and *Wolverine* (ex-*See-and-Bee*) which were stationed off Chicago in World War II.

...At Pascagoula, Mississippi, hurricane Camille blew the *Mormacsun*, a Seaway visitor, ashore. She was at Ingalls Shipyard on the Pascagoula River. There was no damage to the bow and stern sections of Bethlehem's jumbo lake freighter being built at the yard.

Aug. 20...Early this morning in the Chicago River the self-unloader *Hennepin* was caught beneath the State Street bridge when an electric lock on the Dearborn Street bridge failed to work. The *Hennepin*, loaded with rock salt, was trapped for an hour and a half. A tugboat kept the ship from drifting until necessary repairs were made to the bridge.

...The *Peter Robertson* breaks loose from the *J. E. Upson* in high winds and drifts westward for four miles before grounding near Jordan Harbor, Ontario. No one was on board at the time.

Aug. 22...The 47-foot fish tug that was reported sunk earlier this month at Cheboygan, Michigan, has been refloated and removed.

...The barge previously reported sunk at the Continental Grain Elevator has been refloated and removed.

...U.S.S. *Runner* (submarine) passed westbound at Iroquois Lock at 0640, in tow of Navy tug USS *Keywadin* and lake tug *Laurence C. Turner*. The submarine is bound for Chicago.

...Divers are inspecting damage to the propeller of the *A. E. Nettleton*, sustained as the vessel was backing her engines at the Otis Dock of Jones & Laughlin Steel Corporation, on the Cuyahoga River, Cleveland, Ohio. The wheel apparently struck a large submerged object, probably a log. The *Nettleton* had one tug on her bow when she hit the object at about 7 AM.

Aug. 23...The *Peter Robertson* is still stuck on a sandbank at Jordan Harbor, Ontario, today, following unsuccessful attempts to pull her off. Two Canadian tugs, *Lak Manitoba*, from Hamilton

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and the *James E. McGrath*, from Port Weller, made a number of attempts to free the vessel. The *Robertson* is 50 feet from the shore.

Aug. 24...Two McAllister tugs pull the *Peter Robertson* free and take her through to Quebec City, while the tugs *Fairplay X* and *Fairplay XII* tow in the *J. E. Upson*.

...Norfolk & Western Railway has completed a \$150,000 emergency project to clear Huron, Ohio harbor of flood damage that followed the July 4th storm. Huron harbor is the only commercial port on Lake Erie not maintained by the U.S. Army Corps of Engineers. Following the ten-inch rainfall in the area, the Huron River reached record heights. Tons of silt and other debris were washed to the mouth of the river, forming a bar across the harbor that blocked lake vessels from the port for three weeks.

Aug. 26...Great Lakes Towing Company tug *Maryland* sank in Lake Huron, six miles east of Sturgeon Point, Michigan, in 35 feet of water, while being towed by another tug, *Laurence C. Turner*. The Coast Guard received a call from the *Turner* saying that the *Maryland* was taking on water, but that she did not need help. A short time later they received another call saying the *Maryland* had sunk.

Aug. 27...Capt. Elif Knudsen, 67, a retired master of Cleveland Cliffs Iron Company ships, died in North Olmstead, Ohio. He sailed 34 years for Cliffs. When retired in 1964, he was Master of the *Walter A. Sterling*.

Aug. 28...The U.S.S. *Runner* (476) reached Chicago Navy Pier along with Navy tug *Keywadin*. The *Runner*, which had been kept operational in the Atlantic until last year was brought to Chicago to replace the U.S.S. *Silversides* (236), a World War II submarine which has been tied at the pier since 1947. The Navy took the *Silversides* out of service on June 30.

...In Chicago, the Coast Guard ordered the freighter *Verdale*, out of Glasgow, Scotland, intercepted for an investigation into the ship's spilling of between 500 and 1,000 gallons of oil into Lake Michigan at Navy Pier. The *Verdale*, which sailed yesterday for Korea with a load of scrap iron, will be stopped when she reaches Detroit. A statement will be taken from the captain and samples will be taken from her bilges to see if the

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oil in her bilges matches the oil that coated the water at the south side of the pier.

*Aug. 30...*The Norwegian freighter *Donita* went aground in the St. Lawrence Seaway in heavy fog off Ogden Island. The incident occurred at approximately 5:55 AM.

...The tug *Herbert A (Susan Hindman)* towed the *Portadoc* from Marine Salvage yard at Port Colborne where she has been for two years. She was taken to Port Maitland, where an old floating oil rig will be broken up and put on her deck. *Protadoc* will then be towed down the Seaway, reportedly to Trois Rivieres, Quebec.

*Aug. 31...*A 36 year old Chechoslovak woman was taken from the waters of Lake Ontario after she had failed in an attempt to swim to Toronto from Niagara-on-the-Lake, Ontario.

*Aug. 31...*A boat crew laid a cable across the 4½ mile South-Channel of the Straits of Mackinac to provide telephone service to Bois Blanc Island. The cable was laid on the bottom of the channel from Pointe Nipigon, between Cheboygan, Michigan and Mackinaw City on the mainland, to the south shore of the isle.

*Sept. 11...*Special to *TELESCOPE* from William Warrick...The newest port on the Great Lakes, the Port of Indiana, otherwise known as Burns Harbor, took in its first payload today.

Just after dawn, the Bethlehem Steel Corporation's *Lehigh* lined up for the harbor entrance to become the first of what is expected to be a long line of long ships to use the new port facility. (See cover picture, courtesy of Bethlehem Steel.)

It was a historic occasion, and it was late. The harbor at Burns Ditch, east of Gary, on Lake Michigan's southern shore had first been planned in the 1930's. After years of trying to get the Federal Government to pay for it, Indiana finally went ahead on its own.

The fight with 'save the dunes' people delayed the port and the two steel mills on either side of it, and further delay was experienced last year when a strike against dredging companies prevented dredging.

Even with the arrival of the *Lehigh*, the dredging was not completed, and she came in with less than a capacity load; only 15,700 tons of iron ore pellets from Taconite Harbor, Minn. The

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first load should have arrived at the port two days earlier, but the *Steelton* arrived off the harbor mouth in heavy seas and a cross-harbor-mouth northwest wind. The *Steelton* lost her bid to make history as Capt. Thomas J. Connelly veered away...the *Steelton* rolling in the trough of the waves. She was diverted to South Chicago to unload.



The S.S. *Steelton* rolls in the heavy seas until her hatches show. She was off Burns Harbor, supposed to make first landing at the new dock, but was diverted because of weather conditions, September 9, 1969.

Photo courtesy Michigan City News-Dispatch.

The arrival of the *Lehigh* was in calm weather, and the traditional launching of sailors over the side to handle lines was made before a small group of steel men and reporters. Capt. Loren A. Falk then watched as the crane operators started to unload this first cargo.

Iron ore, limestone, and the makings for steel manufacturing will be the first cargoes into Burns Harbor. Bethlehem Steel's iron making facilities, including the largest blast furnace in the Western Hemisphere, are to be activated around the first of the year. It is the hope of the steel firm that their boats can pile up enough iron ore to last the winter.

On the western side of the harbor, across from the Bethlehem docks are those of Midwest Steel. In the center, or along the southern part of the harbor, facilities for exchanging coal, grain, and package freight are to be built by the State of Indiana.

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The building of breakwaters and dredging, along with some first facilities, cost \$25 million. The Bethlehem Steel plant on the east side of the harbor, already operating a rolling mill, will cost just short of \$1 billion when the steelmaking facilities are completed in the next year or so. They'll include a basic oxygen furnace so the ore and limestone now being brought down the lakes to the Port of Indiana will be turned into steel and rolled right in the sand dune country. This operation, along with those of other steel firms at Indiana Harbor and South Chicago, will combine to make the Chicago steel-making district the largest producer in the world.

The first ship into Burns Harbor was more than 600-feet long and 60-feet wide. But larger boats are coming...Bethlehem now has in construction, the *Laries*' largest ore carrier; a thousand foot vessel, a hundred feet wide. That vessel will serve the new port with as much as 51,000 tons of ore per trip, probably beginning in 1971. *The long ships only get longer!*



Norfolk & Western Railway tugboat *S. P. Reynolds* at Nicholson Terminal in Detroit, being adapted to the former carferry, now barge, *Detroit*. (See *Telescope*, Vol. 18; No. 4 - Page 109.)

Photo by Karl Kuttruff.

The GREAT LAKES MARITIME INSTITUTE, Inc., promotes interest in the Great Lakes; preserves memorabilia, relics, records and pictures related to these lakes; encourages building of scale models of lake ships, and furthers programs of DOSSIN GREAT LAKES MUSEUM repository of the Institute's holdings. The Institute was organized in 1952 as the Great Lakes Model Shipbuilders' Guild. It is incorporated as an organization for no profit under the laws of the State of Michigan. Donations to the Institute have been ruled deductible by the Internal Revenue Service. No Institute Member receives any remuneration for services rendered.

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