

Issue Theme: Explorers and Surveyors

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Prologue

The sun awaits its birth o'er quiet Lake
A glow behind the night, yet to dispense the dark.
The lightening hills, still ghostly, anticipate the dawn
But peace still reigns; no discontent lies within my heart.

And as I stroll along the rippled sands
Peace walks with me – I wait and sigh
For that beckoning voice beneath the ripple of the waves
To tell me, "Be ye still, for God is neigh".

And so, yet lovely Lake, I pour out forth to you
This message from my soul. No longer ache
Forever after me as I depart this life.
Remember calm and stormy inspiration, Crystal Lake.

-- Dr. Stacy Leroy Daniels, 29 Aug 1937 - (), *“The Comedy of Crystal Lake”*, 2015.

“If any young man is about to commence in the world with little in his circumstances to prepossess him in favor of one section above another, we say to him publicly and privately, ‘Go to the West; there your capacities are sure to be appreciated and your industry and energy rewarded.’”

“We are more than friendly, as every constant reader knows full well, to the great and growing West. We rejoice in its prosperity, delight in exhibiting its advantages—its fertile soil, glorious rivers, unrivalled lakes, and other channels of commercial intercourse; its democratic social system, and ready reward of talent, energy, and worth, in whatever capacity developed; and we take pleasure in doing all in our power to accelerate its giant progress to unequaled greatness.” – Horace Greeley, *New Yorker*, 25 Aug. 1838.

“I went west, and west again, and west still yet again.” – “A.J.”

Historical Reflection: Travels Though the Northwestern Regions of the United States

[(*) Schoolcraft, Henry Rowe, Narrative Journal of Travels Through the Northwestern Regions of the United States: Extending from Detroit Through the Great Chain of American Lakes to the Sources of the Mississippi River, performed as a member of the expedition under Governor Cass in the year 1820, Albany, E. & E. Hosford, Albany, 1821, 432pp. Esp. Chap. XV. Journey, from Chicago, through Lake Michigan, to Michilimackinac. pp 388-408, 31 Aug 1820 – 12 Sep 1820.

[http://memory.loc.gov/cgi-bin/query/r?ammem/lhbumbib:@field\(NUMBER+@band\(lhbum+01453\)\)](http://memory.loc.gov/cgi-bin/query/r?ammem/lhbumbib:@field(NUMBER+@band(lhbum+01453))) ;
Map of the Northwestern Territories of the United States, Showing the Track pursued by the Expedition under Gov. Cass in 1820. <http://www.raremaps.com/gallery/enlarge/18304>]

In 1820, Gov. Lewis Cass, together with Henry Schoolcraft (*), led an expedition into the western part of Michigan Territory to survey geography and topography, flora and fauna, and Indian tribes; prepare maps; select sites for forts; evaluate minerals; and search for the source of the Mississippi River. The party left Detroit and travelled up Lake Huron to Michilimackinac, then to Sault Ste. Marie and across the southern shore of Lake Superior, portaging across the Keweenaw, and on through a series of rivers to the Mississippi R. The party split along the way into side trips with the main group down the western shore of Lake Michigan to Chicago. Cass returned to Detroit on horseback via the Indian trail, while others traveled up the eastern shore of Lake Michigan to Michilimackinac which took them past many rivers including the R. aux Betsie with wild and forbidding scenery devoid of civilization.

“CVI. Day.--(September 6th.)--The distance from Sandy, to Manistic river, is seventeen miles--thence thirty, to the river Au Betsie, and two to Gravelly Point (Pt. Betsie), where we encamped, after proceeding forty-five miles. We were detained a couple of hours in the morning, by rain, which continued, with short intermissions, during the day (*). There is a great uniformity in the appearance of the coast, which is characterized by sand banks, and pines. In some instances, a stratum of loam, is seen beneath the sand, and the beech and maple are occasionally intermixed with the predominating pines of the forest; but our impressions in passing along the coast are only those produced by barren scenery or uncultivated woods.”

“No hamlet smoking through the mists of dawn, No garden blushing with its fostering dew, No herds wild browsing on the dasied lawn— No busy village charms the admiring view.” (**)

“CVII. Day.--(September 7th.)--The weather still remained cloudy.--We embarked at early daylight. In going thirteen miles, we passed a small stream called Plate river; and nine miles beyond reached a noted point, on the east shore of the lake, called the Sleeping Bear. The shore of the lake here, consists of a bank of sand, probably two hundred feet high, and extending eight or nine miles, without any vegetation, except a small hillock, about the centre, which is covered with pines and poplars, and has served to give name to the place, from a rude resemblance it has, when viewed at a distance, to a couchant bear. There are two islands off this part of the coast, in plain view from the shore, which are called the Sleeping Bear islands.”

[(*) Crystal Lake, the large inland lake just over the hill from Pt. Betsie, was not described by the Cass party, who sat in the rain for awhile, and went on to explore the Sleeping Bear sand dunes.]

[(**) The poem is attributed to Rev. William Gillespie, The Progress of Refinement, an Allegorical poem; with other poems; The Scots Magazine, and Edinburgh Literary Miscellany, Being A General Repository of Literature, History, and Politics, for 1805, Vol. LXVII, pp 534-535 (1805).

Kathleen Stocking (“Letters from the Leelanau”, UM Press, 1990, p127), offered a more mundane explanation: “This is the poem of a man (implying Schoolcraft) who sat in the bottom of a canoe too long waiting out rainstorms too often, a man who probably would have given a great deal for a hot cup of tea in a hamlet”.

Current Perspectives: The Surveyors Arrive

Archibald Jones, as he accompanied the other early settlers (who had begun to travel to and settle in Northwest Lower Michigan by the mid-19th Century) would have found pristine inland lakes surrounded by high hills covered with primeval forests, all on morainic highlands overlooking Lake Michigan. This myriad of watershed environments began to be described from myriad viewpoints.

At about the same time that Greeley's article was published in 1838, the southern two-thirds of present Benzie County (Twps. 25 and 26 N, Ranges 13-16 W) were being surveyed by the two Burt brothers, Alvin and Austin (*), sons of William Austin Burt, a famous surveyor and inventor of the solar compass.

[(*) The Survey Records series contains 30 undated records for the Michigan Territory, which include latitude and longitude calculations and comments on trees and soil for various areas of the territory.

A brief narration by Leonard Case describes the field notes of the original survey(**):

[(**) (Leonard L. Case, Benzie County: A Bicentennial Reader, Benzie County Bi-Centennial Commission, Cadillac Printing Co., 1976, 96pp, page 11.)]

"In the autumn of 1838 the government surveyors arrived at the southeast corner of Town 25 North, Range 13 West, which is now the southeast corner of Colfax township. And thus the area of what is now Benzie county, after having been originally the land of the Indians, then the French, then the English, then of the United States and the State of Michigan, at last got on the map as a properly surveyed and recognized portion of the United States of America."

"The field notes of the surveyors are very interesting indeed. In addition to establishing township and section lines, the topography of the land, the forest growths, types of soil, streams, lakes, swamps, the species of growing timber, water power potential and other physical features of the area being surveyed were all very carefully noted and recorded. From their notes one learns that the surveyors did not find here in Benzie county in 1838 a great deal to be enthusiastic about. Time and again in the summary of their findings they note the quality of the soil is second or third rate and sometimes very poor."

Further narration is more hopeful, however, concerning the clear and transparent waters:

"Almost without exception the waters in lakes and streams were clear and the bottoms sandy or gravelly. Some of the lakes and streams had apparently been named by the time the surveyors arrived. There was the Aux Becs Scies (the Betsie River), Platte River, and the (Big) Platte Lake. Crystal Lake was "Cap Lake" by reason of the almost ever present white-caps on its surface. Other lakes and streams were at that time altogether nameless so far as the surveyors were concerned. Crystal Lake, then, of course, was at its original level, and high banks rose just at the water's edge nearly the whole distance around the lake except at the Round Lake depression, (and) at the place where the outlet stream left the lake on its way to the Betsie river and at the eastern extremity about half a mile back from the shore of the lake. The water of the lake was termed by the surveyors as being 'very transparent'."

[(*) The surveyors labelled the River Aux Betsies (sic) as Betsey's River, but did not label its mouth as Betsey's Lake. Round Lake was still an unnamed bay of Cap Lake. Long Lake, Rush Lake, Mud Lake, Loon Lake, and Little Platte Lake were shown, but unnamed. Resurveys to refine the original surveys were undertaken well into the 1850s. Cap Lake still appeared on some maps in the 1860s.]

People: The Burt Brothers and Their Field Notes

The Field Notes include a series of maps of twelve fractional townships with section lines (*).

[(*) Township / Section lines were surveyed by Alvin and Albert Burt, with help from John Hodgson.
T27N R16W. Surveyed 2nd $\frac{1}{4}$ 1839 shows NW part of Cap Lake, with Round Lake, not named as a bay of Cap Lake, plus the western tip of unknown lake west of Platte Lake;
T27N R15W. Surveyed 2nd $\frac{1}{4}$ 1839, does not apparently include much of Cap Lake, but shows N portion of unknown lake west of Platte Lake and another unknown lake east of Platte Lake);
T26N R16W. Surveyed 4th $\frac{1}{4}$ 1838, shows West end of Cap Lake & future site of Pt. Betsie lighthouse, and Round Lake as a bay of Cap Lake;
T26N R15W Surveyed 4th $\frac{1}{4}$ 1838, shows East end of Cap Lake, & outlet, and also S portion of unknown lake west of Platte Lake.]

The field notes for the four fractional townships surrounding Cap Lake, as they appeared in the eyes of the land surveyors, are factual in describing soil and timber resources, but other than the quality and quantity of the waters, the true value of the viewshed is still left for future inhabitants to ponder. The following excerpts are transcribed from copies of the field notes found in the Register of Deeds Office at the Benzie County Government Center, Beulah, MI. The original field notes and survey contracts are found elsewhere.

T27N R16W. (Summary for "Lake" Township.)

This township is hilly and third rate Land and Soil poor and sandy. Timbered with a heavy growth of Beech, Hemlock, Sugar (Maple), Lyme (Basswood) & Blk Oak Aspin Some pine. A Sand Bank on Lake Michigan (John Hodgson, D.S., 27 Jul 1839). (Field Notes, p399)

T27N R15W. (Summary for "Lake" Township.) "General Description. This fractional Township is generally very poor land hardly worth resurveying. The South western portion of it is nearly all swamp and barren sand ridges. The Middle and Eastern and South Eastern portion is mostly poor Pine plains with Aspen and Scrubby Oak intermixed and in the North eastern portion there is no Section (1) one and (12) twelve a small tract of high rolling good land timbered with Sugar tree Beech and Hemlock. Along the Lake Shore and from $\frac{1}{4}$ of a mile to three quarters of a mile back the land is generally barren sand hill." (Alvin Burt D.S., 18 Oct 1838) (Field Notes, p344)

T26N R16W. (Summary for "Crystal Lake" Township.) "The Bank of Lake Michigan in this Township is high sand hills. The Small Lake at the mouth of the River Aux Betsies (sic) is deep and would make a commodious harbor for Lake vessels should the mouth of the River be improved. On the North Side of this Lake is a beautiful Situation for a Small Town. (Alvin Burt, D.S., 18 Oct 1838). (Field Notes p387)

T26N R15W. (Summary for "Benzonia" Township.) "General Description. This Township is high dry rolling and broken except along the River Aux Betsies (sic) in the South and Platte Lake and its tributaries in the North parts. The soil is generally sandy. Cap Lake has a gravelly beach and high banks, except at the easterly end which is swamp about $\frac{1}{2}$ mile back. The inlets are small, the outlet also, and the water very transparent. Platte and other small lakes in the North part of this Township are bordered with Swamp, but have high banks in the rear. The Aux Betsies River is bordered with Swamp but has high banks in the rear. It has a gentle current. The timber is mostly Beech, Sugar (Maple) & Hemlock." (Alvin Burt, D.S., 30 Jun 1939).(Field Notes, p309)

The portfolio of original survey maps around Crystal Lake were later refined to include subdivision into government lots and also other topographical features within the surrounding watersheds.

Places: The Chronology of Early Maps

Benzie County and the Crystal Lake Watershed gradually emerged into places recognized in the known world of the early 1800s and were described in written accounts of the explorers traversing the waters along the eastern shoreline of Lake Michigan (the northwestern coastline of Michigan). As time progressed, maps appeared, sometimes accompanied by field notes descriptive of the terrain as described by the surveyors.

Initially the descriptions were limited to early sightings of conspicuous landmarks, such as Grand Traverse Bay, the Sleeping Bear dunes, Platte River, Gravelly Point (Pt. Betsie), and the Rivere aux Bec Scies (Betsie River). Many of the drowned river mouths flowing into Lake Michigan were miscounted and/or misidentified with ever-changing names and locations up and down the coast.

“Crystal Lake” began appearing as an unnamed “blob” taking many amorphous shapes, and often misnamed as Lake aux Bec Scies, Lake Betsy, Betsey’s Lake, etc., i.e. the small drowned river mouth lake at Frankfort. Early sketches by the surveyors, however, correctly showed both the inlet of Crystal Lake and its branches, and its outlet to the Betsie River

Phenomena: The Vagaries of Surveying

The lures, promises, expectations, and realities of migration to the climes of the Midwestern United States in the early 1800s were described in inspiring, and sometimes derogatory, terms. In a letter postmarked 11 Oct 1815, from Benjamin Hough, surveyor, to Edward Tiffin, Surveyor general, respecting Surveys in Michigan &c:

"I found thus far exceeding bad ground to run lines over, being very thick of under brush, and in many places swamps for a great distance almost impassable ... (C)ame to an extensive lake, which was in many places bordered by swamps almost impassable, which detained me upwards of one day in getting round it, and even then the swamps impeded my progress very much, ...(I) came to another large lake, which detained me another full day in going round it - This last lake is from half a mile to $\frac{3}{4}$ of a mile wide, and about 3 or 4 miles long, but the difficulty in meandering round these lakes is beyond any thing you can conceive - From what I have seen this country is in no ways inviting - It is true there is some good spots but a large proportion is either useless swamps or poor and barren."

Surveyor General Edward Tiffin further noted with some truth that:

"None but Men as hard as a Savage who is always at home in Woods and Swamps (and who) can live upon what they afford (if occasions so require), who can travel for days up to the knees in mud & mire, can drink any fluid he finds while he is drenched with water also and has a knowledge of the lands (and) who are equally patient and persevering under similar hardships can make anything by surveying the kind of Country we have to Survey."

It is no wonder that the settlement of the Michigan Territory was delayed when such poor opinions of the region were publicly reported by the disgruntled and underpaid deputy surveyors who faced the rigors and hardships as they trudged through such rugged terrain with heavy chains, a sturdy ax, and a directional compass, in inclement weather, whilst being attacked by devouring mosquitos.

The vagaries of surveying of the Crystal Lake Watershed went from extremes of being a small part of a vast unknown and seemingly forbidding and undesirable wilderness containing numerous impassable swamps and hidden inland lakes of some magnitude, to being part of an emerging conglomeration of new settlements in a period of some fifty years leading up to and including the Civil War and its immediate aftermath.

An Act of Congress in the year 1838 (the same year as the land survey of Cap Lake by the Burt brothers) ordered : "A Survey of the North and Northwestern (Great) Lakes including Lake Superior", putting the work under the charge of the U.S. Army Corps of Topographical Engineers, which included many engineers who later became famous generals during the Civil War, to make a delineation of the shoreline and conduct minute topographical and hydrographical surveys of the offshore waters. Some 300 miles of coastline survey, including Pte. Aux Bec Scies and the Grand Traverse Bay region, were described in reports of 1859-1861. (*)

[(*) Meade, George Gordon (1815-1872), Report of the Survey of the North and Northwest Lakes, Being Appendix B of the Report of the Chief Topographic Engineer, Accompanying Annual Report of the Secretary of War, 1859, Daily Free Press Steam Print, Detroit, 1859, 48pp. at page 17.
<http://catalog.hathitrust.org/Record/003106787>]

Alexander Winchell, first director of the Geological Survey of Michigan, used results of the Lake Survey work and added results from his own geological survey but cautioned about false reports (*):

"I cannot suffer the opportunity to pass without warning our citizens against lending too credulous an ear to the representations of the self-styled "geologists," ... (who) prowl around the frontiers of civilization, and live upon the falsely excited hopes of a people too ready to believe that every gravel hill conceals a mine of wealth. This class of men lead their deluded followers over mounds of drift materials, they explore clay banks, they dredge the lakes, and if perchance a stray nodule of kidney ore is found, they proclaim the discovery of a mine of hæmatite; a piece of black shale turns up, and the country is rich in coal; they discover a green streak upon a fragment of limestone, and lo! copper is promised to be forthcoming in unlimited quantities."

[(*) Winchell, Alexander (1824-1891), First Biennial Report of the Progress of the Geological Survey of Michigan, Michigan. Geological Survey, Embracing Observations on the Geology, Zoology and Botany of the Lower Peninsula, Made to the Governor, 31 Dec 1860, Hosmer & Kerr, Lansing, 1861, 839pp.]

Winchell's detailed report included a very detailed map (**) labelling many features described by the earlier land and lake surveys. These included: accurate outlines and names for Crystal Lake, Frankfort, (Frankfort) Harbor, Benzonia (but no Beulah!), Herring Lakes (unnamed), River aux Bec Scies, Platte Lake, Little Platte Lake (unnamed), Point Aux Bec Scies, Lighthouse (separate), Sleeping Bear Point, Glen Lake, Glen Arbor, Carp Lake (Lake Leelanau), Pine Lake (Torch Lake).]

[(**) Winchell, Alexander, "Map of the Grand Traverse Region, To Accompany a Report on Its Geological & Industrial Resources, Drawn by H. G. Rothwell, C.E., Detroit, Mich., 1865, Lithography Sage & Sons, <http://seekingmichigan.contentdm.oclc.org/cdm/ref/collection/p129401coll3/id/1385> ; Henry G. Rothwell worked for the Lake Survey before entering private practice with especial attention in the Improvement of Rivers, Canals, Railroads and other Roads, Pine Lands Surveyed, etc. ; the naming of Crystal Lake in the Winchell map is predated only by a contemporary map by John Sage, "Map of the Harbor Town of Frankfort, Lelanau County Mich., with Adjoining Lands", Buffalo, N.Y., 1860. (Both maps are found at the Benzie Area Historical Museum and have been digitized by SLD.)]

Images of Crystal Lake shown in both the Winchell and Sage maps closely resemble the map drawn for the Benzie County River Improvement Company by B.C. Hubbell in 1873, which will be featured in a future issue of "**Crystalana**"!

So by the mid-1860s, some of the worst misconceptions of northern Michigan, generally, and of Northwestern lower Michigan, specifically, had been dispelled, and the attractive features of the region were becoming better known and more attractive to new settlers.

Potpourri: The Happy Marriage of Survey Maps and Field Notes

The serendipitous discovery in the late 1990s by your humble saunterer of a portfolio of the original Survey Maps of Cap (*né* Crystal) Lake (*sans* field notes) inspired him to seek out the Field Notes (*sans* maps). This happy marriage of the Survey Maps (*) long separated from their Field Notes (**) began first a casual, then a persistent, and eventually, a relentless pursuit of the biography of Archibald Jones and compilation of an extensive Annotated Bibliography of the Environmental History of the Crystal Lake Watershed, and, finally, to the writing of "*The Comedy of Crystal Lake*"!

[(*) Michigan Department of Natural Resources, Michigan State Land Office Board Records, 1816-1924, 101 Vols. & 69 Outsize Fls., Tract books by Township & Range (Cap Lake in Vol. 47), Plat books by County name, Benzie. (Bentley Historical Library, University of Michigan).

The composite map of Cap Lake was prepared by Jim Stamm, ATI Consultants, in 2014.]

[(**) Alvin and Austin Burt, Government Survey of Benzie County, Field Notes, 1838-9. Register of Deeds, Benzie Co., MI. The field notes were reassociated with the pastel maps of the four fractional townships by Dr. Stacy Leroy Daniels in 1997.]

In Reality: The naming 'Cap, (*né* *Whitecap*), appears on the original survey (1838-9) and continues on several maps up through the Civil War. William Case makes mention ("*The Tragedy*" , p 6).

"On the early maps of the region indeed, the lake was called "Cap Lake", probably so named because of the prominence of the whitecaps upon its surface, even with but moderate wind." "Nearly a mile from Beulah on this road is situated a stone dwelling known as the Wilson home. Here in 1838, came and camped the first government surveying party (the Burt brothers). Evidently a 'blow against' was in action, causing the waters to kick up thereby inspiring these early campers to christen this body of water Cap Lake."

-- John Steele, Benzie County History, BCP 41(34), 7 (20 Aug 1936).]

"Most of the lakes in the county were unnamed at the time of the survey. Someone has given Platte Lake its name before that time and Crystal Lake had been given a name. Some of the early records designate it as Cap Lake, other records call it Carp Lake. Just when, how and by whom it was given the name it now bears is a matter that would be a good research project for some one interested in the early history of Benzie County." (*) (emphasis added)

-- Leonard L. Case, *The Crystal Gazer*, Benzie Area Historical Society, Benzonia, 1985, 243pp. p9.

[(*) The "mystery" of the naming of Crystal Lake will be unveiled in a future issue of "*Crystalana*" .]

Epilogue

**The sun has set, and o'er the quiet lake
His light still lingers, reluctant to depart.
The darkening hills draw close, and over all
Peace reigns, but discontent still fills my heart.**

**But as I stand alone upon the shore
Peace also comes to me - I seem to hear
A voice amongst the murmur of the waves
Saying. "Be still and know that God is near."**

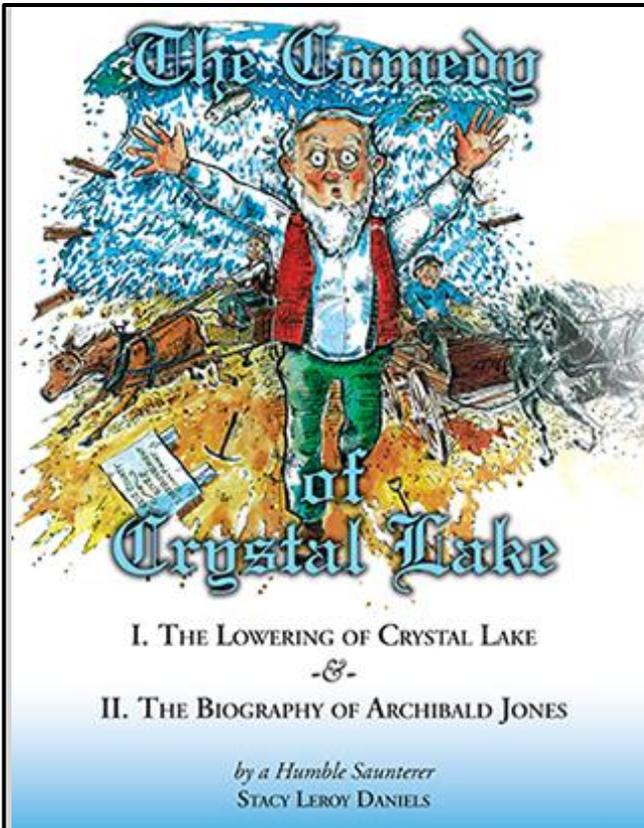
**And so, O lovely lake, you gave to me
A message straight from God. And I still take
That message with me as I wander far.
And hope once more to see you, Crystal Lake.**

-- Walter F. Case, 04 Feb 1895 – 06 Mar 1923, "*The Tragedy of Crystal Lake*", 1922.

References:

Daniels, Stacy Leroy, **“The Comedy of Crystal Lake”** , I. The Lowering of Crystal Lake; II. The Biography of Archibald Jones, Being a Summary Chronicle with Many More sidelights, written in Two Parts, of a seemingly Ill-Fated Historical Event, so epochal in its nature as to have had a permanent bearing upon the development and future of Benzie Co., Northwest Lower Michigan, together with myriad viewpoints of its diverse characters and sundry locales, &c, &c., Flushed With Pride Press, ©2015, 496pp. ISBN 978-0-692-21715-3 www.CrystalLakeComedy.com

Case, William L., **“The Tragedy of Crystal Lake”** , “with Some Sidelights, By a Survivor”, 1st Ed., J.W. Saunders, Beulah, MI, 1922, 17pp. (A copy of the 2007 reprint is included in **“The Comedy”**.)



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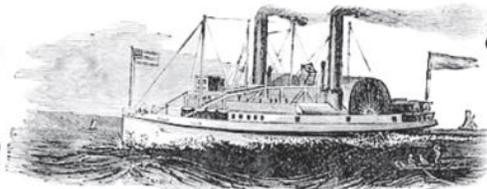
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