

## Jefferson Quick, Timely Reads

### **It's a small, small world: *Crossley Net-Pullers, Fredrick Wakefield, and Tobermory***

By David Frew  
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*This article features James and Deborah Fallows who literally flew their airplane into Erie a few years ago on their cross-country tour of America. The Fallows are national correspondents for The Atlantic and authors of the New York Times best-selling book, "Our Towns." Deb, a Vermilion, Ohio native, sent a note to the Jefferson's Ben Speggen who forwarded it to me. The note made mention of a little-known connection between Erie's fish tug industry, one of Vermilion's most influential leaders, and my favorite Georgian Bay port: Tobermory, Ontario. Thanks to Deb Fallows and Ben Speggen for inspiring this trip into Erie and Great Lakes history.*



*Fredrick Wakefield with his wife and family*

Fredrick Wakefield was born in England in 1863 and moved to Cleveland in 1876. He went to work in a family brass light fixture company as a young man and rose to executive and ownership levels before he was 30. In Cleveland, he fell in love with Lake Erie, purchased a series of motor yachts, and regularly served as crew in Lake Erie sailing races. He eventually became an officer in the Interlake Yachting Association (ILYA) and a leader of its race committee.

Sailing and motor-yachting eventually helped him to become familiar with every port town on the lake and, in 1903, he took his family on a Lake Erie vacation cruise where they discovered the Port of Vermilion. Wakefield immediately fell in love with the charming Ohio town and decided it would be the perfect place to build a new business and to move his family. In 1905, he resigned from his firm in Cleveland and launched the F.W. Wakefield Brass Company, which eventually became the largest employer in town. He quickly became a town leader and eventually served two terms as mayor.

Like many Great Lakes yachtsmen, Wakefield discovered the beauty and allure of the Port of Tobermory, Ontario at the entrance to the Georgian Bay and began traveling there regularly with his family. To enhance his annual late summer cruise, Wakefield purchased a large, wooden Matthews motor cruiser. Matthews was one of the premier motor yacht builders of the era and, when he commissioned it, Wakefield insisted on equipping it with a diesel engine so that he could carry enough fuel for the long trip up the Detroit and St. Clair Rivers, and across Lake Huron.



*The first Tobermory at Vermilion is shown in about 1920, looking a bit top-heavy and narrow.*

The Matthews boat company produced beautiful, well-designed boats but at the time that Wakefield was commissioning his new yacht they were not experienced with diesel engines. Diesels were in their infancy in small boat applications. As a result, Wakefield's new yacht, which he named Tobermory after his favorite port, was fitted with a semi-diesel, which had to be "primed" with a mixture of gasoline and oil to start. Then it had to run on that mixture until it had risen to operating temperature. The new yacht proved more than adequate for the boating that Wakefield did in and around

Vermilion but there were problems on the annual long-distance trips to Tobermory and the North Channel. The engine was quirky and not powerful enough to easily ascend the currents of the Detroit River. More troublesome was the boat's high profile and relatively narrow beam, which made it roll uncomfortably in the open water and high cross-waves of Lake Huron. By the early 1920s, Wakefield decided to commission a larger and more seaworthy personal yacht, and he knew exactly what he wanted.

Vermilion was a fishing port like most towns on Lake Erie, and Wakefield had seen dozens of fish tugs moving in and out of the harbor. After watching them negotiate Lake Erie waves and learning how powerful they were, he was convinced he would have a fish-tug builder create a specialized tug design and he would finish it himself, using company employees and his own very high quality brass fixtures to add the interior touches needed to bring a work tug up to "fine yacht standards." It was a brilliant strategy. After consulting with several tug captains, he learned that Erie was the epicenter of fish-tug building and he began visiting to arrange to have the personal tug of his dreams built for the 1924 boating season. Sadly, the established boat yards in Erie were unable to help. They were more than willing to build Wakefield's tug but too busy with repairs and new commissions for large fleet owners to be able to commit to a 1924 schedule. That was when Fredrick Wakefield was referred to the Crossley Company.



*Tobermory II, about 1928, appears with a ghosted image of Wakefield and his son.*

Erie's Crossley Lead and Machine Company was located near the corner of Fifth and State streets, adjacent to both local ship chandlery companies (Brebner and Beckman). The "lead" in the company title referred to the standard net-sinking weights that Crossley sold to gill netters. Each net was fitted with lead weights along its bottom that made it sink, and floats on the top to help suspend it in the water. Crossley made standard-sized lead weights and then cleverly developed and patented (in 1919) the net-pulling (lifting) machines that fish tugs would need to lift the huge gill nets up and out of the water automatically. The lower edge of the net was threaded into the Crossley machine using the lead weights. The Crossley net-puller, which was a brilliant fishing innovation, was designed to accept only the specially designed lead weights that they sold to fishermen.

The Erie company began by selling weights and net-pullers in 1916. By 1924, however, almost every fish tug had a net-puller (which would last for decades) and a lifetime supply of lead weights. Crossley had effectively cannibalized their market. They were interested in expanding their commercial fishing services and, when Wakefield approached them, they agreed to build his new tug-type motor yacht. Their decision was made easier because Wakefield insisted on doing the interior work with his own employees and planned to provide the diesel engine and running gear. All Crossley had to do was to lay out the keel, frame and build the tug; a seemingly doable project, even though they had never attempted such a task.

The keel was laid out in a vacant lot adjacent to the company during late winter, lead was added for ballast, and workers began attaching ribs and bulkheads in early spring. Plans called for the new tug to be 50 feet long with a beam of 13 feet and 35,000 pounds of displacement, an ambitious size for the time. Crossley workers emulated traditional techniques that they had watched other Erie builders employ for wooden tugs and found several experienced local laborers for the project. The most significant difference was that they were planning to follow Wakefield's specifications by using steel instead of wood for the hull. It was a futuristic building approach that tug builders in both Erie and Port Dover were just beginning to talk about. But Wakefield was an innovator and insisted on a metal as opposed to wooden hull. It was strange that a company with almost no direct boat building experience was serving as the pioneer in the new technology. The 1927 fish tug, Lasharoo, built in Port Dover by the highly experienced George Gamble Yard, used the same general technique as did several other mid- to late-1920s fish-tug builders.



Fig. 6-12: Using a Crossley net puller to retrieve a gill net on the Conneaut fish tug "Joetta" circa 1950

(Dan Schmidt Collection)

*Fishermen lead a gill net into a Crossley net-puller.*

The Crossley Company's experience in lead helped to create a keel that was more than adequate and would, according to Wakefield's specifications, prevent his new motor yacht from being top-heavy or rolling in cross-seas. The exact methods used for attaching the galvanized steel sheeting to the wooden structural members are not known but it is likely that it was both riveted and welded. Continuous-seam welding had not yet been fully developed but Wakefield's time in Cleveland had familiarized

him with Lincoln Electric and their advances in welding technology which were about to revolutionize steel tug construction. Wakefield brought early versions of welding technology to Erie and his project. George Gamble used welding exclusively on the groundbreaking Lasharoo project a few years later with Lincoln Electric as the technology company. He often credited innovations from Erie as his inspiration but was never clear about who the actual builders were. It now seems that it might have been Crossley.

The choice of a diesel engine was also orchestrated by Wakefield, himself. He used a supplier that he had worked with at his Vermilion factory, where stationary diesel engines drove many of the assembly processes. Wakefield, who imagined himself to be the macro-designer of his new yacht, ordered a smaller version of one of the factory engines and had it delivered to the builders in Erie. By late spring, Tobermory II was completed, moved to the west slip and launched. Fredrick Wakefield drove it to Vermilion, tied it up in the harbor, and ordered his company staff to drop everything and begin the task of finishing the interior.

As planned, Tobermory II was completed in time for the much-anticipated trip from Vermilion to the Port of Tobermory in August 1924. There were a few details to be added later but there would be plenty of time for that the following winter. For the first time in a decade, Wakefield had a boat that was large and powerful enough to ascend the difficult river currents and carry his family to his favorite Great Lakes vacation destination. The 50-foot yacht could easily make 12 or 13 knots and was perfectly stable in Lake Huron's cross waves.

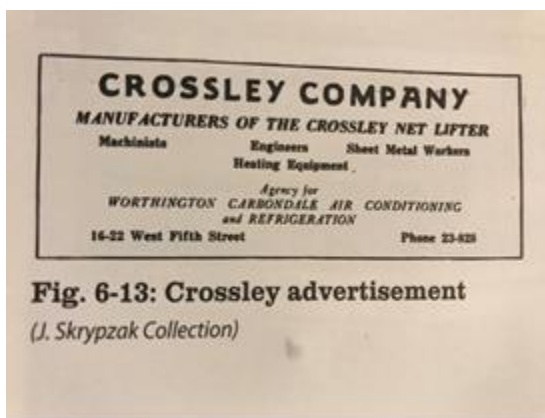


*Flower Pot Island near Tobermory*

Tobermory, Ontario is one of the Great Lakes' most stunningly, beautiful port towns. It is on the northern tip of the Bruce Peninsula, a long narrow body of forested land that separates Lake Huron from the Georgian Bay. The Bruce is the northern end of the Niagara Escarpment, the geological formation that Niagara Falls drops over. Tobermory is gifted with two natural harbors, geologically carved out of granite and named "Big Tub" and "Little Tub" by early settlers. Thus the name Tub-Of-Mary, or Tobermory. The granite lake floor, unlike the sandy bottom common to Lake Erie, creates crystal clear water. In most places it is possible to see 50 or more feet down. For divers, fishermen, and nature lovers, Tobermory is one of North America's premier

paradise locations, providing vistas that do not occur in any other place. It also serves as the gateway to the North Channel with its thousands of square miles of beautifully forested granite mountains, cliffs, and inlets. A yachtsman's dream.

Wakefield continued to take his beloved yacht to Tobermory each summer until just before he passed away in 1933. While his oversized, powerful "tug-yacht" seemed perfect for the trip, it was not without problems. Observers noted that the diesel engine was too big and powerful for its wooden framing and that running it at high RPMs constantly loosened hull connections, causing stress leaks. A fastidious boat maintenance person, Wakefield was able to compensate for the leaks by installing powerful bilge pumps and having the sheeting repaired each winter when the boat was hauled for the season. But such expensive maintenance would have been beyond the capabilities of most ordinary owners. A few years after he passed away and Tobermory II languished in the Vermilion harbor, it was sold. Eventually, it was moved to Detroit and then to Monroe, Michigan, where it was converted to a work boat. Tobermory II eventually foundered and sunk near Sault Ste. Marie, Michigan during the early 1980s without loss of life.



**Fig. 6-13: Crossley advertisement**  
(J. Skrypzak Collection)

*An ad from the 1930s reflects attempts to expand services and to promote sheet metal work.*

The Crossley Lead and Machining Company never built another boat. It continued as a peripheral maritime business through the 1920s but disappeared during the Great Depression. Fredrick Wakeford's wife continued at their beautiful waterside family home until she passed away in 1951. A few years later, the children donated the home to Bowling Green University, which in turn provided it as a headquarters for the Great Lakes Historical Society. Since the society moved to Toledo several years ago, the future of the old family home is uncertain. The Port of Tobermory continues as a wonderful, if remote, tourist attraction. Because of the large number of nearby shipwrecks (caused by the unforgiving granite bottom) and the clarity of the water, the Province of Ontario has established an underwater dive park there called "Fathom Five."



*Big Tub Harbour at Tobermory*

**Photos:**

Wakefield Family: [https://www.morningjournal.com/news/lorain-county/influential-industrialist-remembered-in-vermilion/article\\_7fa82378-dd38-11e8-9676-37aefd4b410d.html](https://www.morningjournal.com/news/lorain-county/influential-industrialist-remembered-in-vermilion/article_7fa82378-dd38-11e8-9676-37aefd4b410d.html)

First Tobermory: <http://www.vermilionohio.org/vermviews/vermviews-105.htm>

Tobermory II: <http://www.vermilionohio.org/>

Crossley Net-Puller: Don Schmidt Collection

Flower Pot Island: <https://www.todocanada.ca/city/toronto/event/tobermory-flowerpot-island-bus-tour-from-toronto/>

1930s ad: J. Skrypzak Collection

Big Tub Harbour: <https://escapetogreybruce.ca/bruce-peninsula/>

## ABOUT THE AUTHOR

*Historian and author David Frew, Ph.D., is an emeritus professor at Gannon University, where he held a variety of administrative positions during a 33-year career. He is also emeritus director of the Erie County Historical Society/Hagen History Center and is president of his own management consulting business. Frew has written or co-written 35 books and more than 100 articles, cases, and papers.*

