

COLLINGWOOD SHIPYARD HAD TWO DRYDOCKS - H. David Vuckson

This story originally appeared in the former Enterprise-Bulletin newspaper on Friday, September 12, 2014 on the 28th Anniversary of the closing of the Collingwood Shipyard. This is a much-expanded version.

Many people know that the Collingwood Shipyard had a drydock but not everyone understands that for 49 years there were actually two drydocks. Various Collingwood history books record the grand opening of the original drydock in line with the foot of St. Paul Street in May 1883. It was named The Queen's Drydock because the official opening occurred on May 24, 1883, Queen Victoria's birthday. The new facility was 325 ft. long and 60 feet wide—and was a marvel in its time. The drydock was claimed to be "the largest and the finest in the fresh waters of Canada". It was a great convenience for ship repairs and an immense source of pride for Collingwood. In the 1880's and 90's smaller wooden vessels were built beside this drydock and then launched into it. Larger wooden passenger vessels like the 209 ft. long Majestic of 1895 and the 184 ft. long Germanic of 1899 (see pg. 121 in Reflections) were constructed in the empty drydock then "launched" by letting the dock fill with water. Side launching large wooden vessels like these two was not within the scope of the available technology at that time. Just imagine launching into a narrow basin a large wooden ship with drag chains which would have pulled the wooden hull apart when the chains reached the extent of their travel.

The business was reorganized in late 1899 to begin building steel ships. In 1901-02 plans were put in place to enlarge the drydock (longer, wider, deeper) and there were already discussions about turning the Hurontario St. slip into a second drydock. On July 11, 1901 the Barrie *Northern Advance* reported:

The Collingwood Shipbuilding Co. made propositions to the town[on June 29, 1901], asking for a renewal for a term of 21 years with consent to enlarge and improve the present dry dock, as the bonus may require, also consent to use, improve or enlarge or make into dry dock as may be required the present ship slip. Freedom from all municipal taxation...Dry Dock Co. to enlarge and improve drydock and ship slip as business may require, and to operate dock for term of said years on renewals. And in case of failure to do so for eighteen months the Corporation can assume the land, buildings and appliances of the said company on payment to them on the value of same, including the additional value put on dry dock by said company and in case of disagreement the value thereof shall be fixed by arbitration.

The portion of the above relating to the request for "consent to use, improve or enlarge or make into a drydock the present ship slip" (at the foot of Hurontario St.) was wise because it allowed ship building to continue while the original drydock was expanded. The first steel ship, the *Huronic*, (321 feet Overall Length, 308 ft. Between Perpendiculars) was launched into the Queen's Drydock on September 12, 1901. One week later the account of this titled "Collingwood's Big Day" in the Barrie Northern Advance stated that immediately after the launch of the *Huronic*, the keel was laid for a large steel barge 376 feet long and then luncheon was served in the moulding loft of the company with about 400 gentlemen present. This keel was for Hull #2 the Agawa. Note that the Agawa was too long for the Queen's Drydock and even if it had been short enough to fit, there was also the impracticality of laying a new keel amid all the wreckage of timber, etc. on the building berth immediately after the launch of the *Huronic*. The Shipyard did not even have a crane until 1907—all heavy lifting prior to that was done with homemade hoists. Former shipyard workers know well the task involved of cleaning up the building berth following a launch before a new keel laying ceremony can take place. The *Agawa*, therefore, was actually built on the

east side of the Hurontario St. Slip and launched in a westward direction on July 19, 1902 while the Queen's Drydock was undergoing its expansion.

In February 1902, John J. Long, President of the Shipbuilding Company, "waited on" the Minister of Public Works in reference to expanding the drydock and to what amount the federal government would contribute to this work. The answer from the Privy Council came a few months later in April indicating "provision to be made for payment to Collingwood Shipbuilding Company of a subsidy of 2% per annum on \$500,000.00" to lengthen the dock.

Respecting the Town of Collingwood and the Collingwood Shipbuilding
Company, Limited Assented to 17th March, 1902, comes the following: ...since the making of the said last mentioned agreement [between the Town of Collingwood and the Drydock Company, November 14, 1889]it has become evident that in order to carry on the steel ship building industry successfully in Collingwood, and provide the necessary facilities for repairing damaged vessels of the class now in use, it will be imperatively necessary to entirely re-construct the present dry dock and make it not only longer and wider, but also deeper, at an expense that will largely exceed the amount of the said bonus, and in order to make the present ship slip [i.e. at the foot of Hurontario St.] useful for the said purpose, further very large expenditures will be required...

The end result of this was that It shall be lawful for the Municipal Corporation of the Town of Collingwood to exempt from all municipal rates and taxes, except school taxes, the Collingwood Ship Building Company, Limited, and the said dry dock...during the currency of any lease granted by the said municipality to the said company, of the said dry dock property...

In 1902 work began to lengthen the 1883 drydock in the direction of Huron Street; in fact they had until the end of June 1903 to do the work before another ship (Hull #3, W. D. Matthews) would be launched. On May 14, 1903 in the House of Commons Debates, Official Report, Volume 2, the Minister of Finance stated that the dock was nearing completion. In order to do the lengthening it was necessary to move the Grand Trunk Railway tracks from their original east-west

alignment farther south closer to Huron St. (to their location throughout the 20th Century until the tracks were removed). In the House of Commons on the same date, a Mr. Charlton stated that he had been in Collingwood the previous week and saw this dry dock. It is a creditable work. The company had to buy land right in the heart of the town to extend their dock landward. They have got an enormous plant there. In connection with the ship-building, they had to take up a railway track and move it landward, they had to destroy buildings to find room for their excavation, and they have gone on here and built a dry dock of a first-class character... He also stated that it had not been possible to use the walls of the existing dock and that they had to be torn down [and rebuilt—hence the seven layers of fancy stone on the walls before they angled in closer to the bottom]. All that really remained of the 1883 dry dock was the scope of the original excavation and the end product "to all intents and purposes...is a new drydock".

The original location of the railway tracks can be seen in the 1875 Bird's Eye View of Collingwood. As it turned out, the drydock was lengthened southward as far as it could possibly go while leaving room for the new right-of-way of the railway tracks which passed between the Boiler Shop on one side and the Machine Shop and Globe Hotel on the other. In retrospect, the drydock should have been extended northward through its entry slip toward the harbour at the same time instead of 70 years later when it was extended but the location of the gate remained the same and the dock was provided with a new steam-powered pump house on the west side of the gate. Those were the dimensions of the drydock as I knew it in my shipyard messenger days in the 1960's. During those years a number of aging rustbuckets came into drydock for routine inspection and/or repairs. Some of them were 60 years old and well past their prime. In one case, the boilers were shot and fifty-five steel plates in the hull needed replacing. This particular ship and others like it were worth less than the cost of repairs and were subsequently retired and scrapped.

The maximum keel length that could be accommodated at that time, as explained to me by one of the foremen, was 519 feet (some accounts say 518 feet). This was accomplished by removing with a mobile crane the steel road bridge over the south end of the drydock so that the ship's bow could fit right into the narrow

pointed end of the dock and then turning the ship's rudder "hard-over" at the north end so that it would clear the stepped sill on which sat the drydock gate. The ship would have an overall length longer than 519 feet simply because the overhang of the stern went beyond the rudder and the bow went beyond the keel. Ships have a "keel length" or "length between perpendiculars" as well as an "overall length" (see below regarding the ship *Westmount*).

The No. 1 drydock had its pump powered by steam for many years right from the beginning in 1883, the original Pump House being a wooden building on the east side of the dock. The new brick and stone Pump House of the 20th Century had an impressive and massive brick chimney. Sometime between 1912 and 1914 when more steam capability was needed (perhaps because of the second drydock), a much taller metal smokestack took the place of the brick chimney, coming out through a different part of the roof. In later years there was a tall hopper on the outside of the building to feed the massive boilers. The hopper was kept filled from a huge coal pile by the Yard's Caterpillar crane with a clamshell bucket and the coal pile was replenished by a self-unloading ship that also topped up the large piles of coal near the Sheer Leg. George Gomme, one of the Pump House stationary engineers, told me that Frank Courtice, when he first came to the Shipyard as a young man in 1902, designed the machinery to pump out the drydock. About 1914 Courtice became the Chief Engineer at the Shipyard. When Frank E. Courtice died at age 80 in Collingwood on January 7, 1957, his obituary described him as the oldest Professional Engineer in the Canadian shipbuilding industry. He had graduated from McGill University in the 1880's as a Mechanical Engineer. The original steam engine he designed for the Pump House is on display on Heritage Drive, but the machinery in the basement of the Pump House was left in the ground and filled over when the buildings were demolished. Frank Courtice's greatest lasting legacy to the Town of Collingwood is the Town Hall clock and bell that he and his wife donated in 1950, with the actual installation taking place in 1951.

The magazine *Canada: An Illustrated Weekly Journal*, in its June 15, 1907 edition, had a story about the Collingwood Shipyard entitled, **SHIPBUILDING ON THE GREAT LAKES, AN IMPORTANT INDUSTRY AT COLLINGWOOD.** ... *Today there are*

seven hundred men at work in the Collingwood shipyard. The drydock—five hundred feet long—is the largest dock on the Canadian shores of the [Great] Lakes. But large, new, and complete as the equipment at Collingwood is, it is inadequate to the new tonnage and repair work offering for the shipbuilding company, and at the present time work is in progress for a duplication of practically the entire equipment of the yard. There is to be a new drydock, six hundred feet long, and new shipways are to be added at which vessels six hundred feet long can be constructed...Still, another shipyard is being organized at Port Arthur; but for some years to come Collingwood is likely to be the most famous of these Canadian shipyards, and the yard from which visitors from Great Britain, interested in shipbuilding, must visit if they are intent on realizing how far steel shipbuilding has progressed in Canada.

This story refers to what would become, in 1909, Drydock No. 2 at the foot of Hurontario St. As built, it would turn out to be nowhere near 600 feet long, even though that may have been the original intention. The story also refers to the new building berth with a gantry crane that would be constructed alongside Drydock No. 2, where the largest ships of the era, 550 feet long, were built and launched starting in 1910 with the *Emperor*. If the second drydock had been 600 feet long, its east wall would have had to be built right out into the open harbour for some distance. This, of course, did not happen whether through lack of funds or for more practical reasons, such as the engineering that would have been required. In Christine Cowley's book Butchers, Bakers And Building The Lakers, on page 307 there is a photo of the harbour taken from high up on the Grand Trunk grain elevator at the beginning of the navigation season on April 20th, 1909. In the photo can be seen the beginnings of work on Drydock No. 2. A large temporary pipe laid over the ground from the Pump House goes down into the water of the "Hurontario St. Slip" to pump it out to enable excavation. The ship in the foreground of the photo is the Wexford which perished in the Great Storm of November 1913.

On September 2, 1909, the Barrie Northern Advance reported: The Collingwood Shipbuilding Co. will be able to fulfill their contract with the town to have the second drydock ready for business this fall. The abutments, sills, etc., have been

completed for some time. The west wall is almost complete, and is a substantial cement structure. The east wall is well underway and excavating is proceeding rapidly, over two-thirds of the rock having already been removed. This week the gates [sic—there was one gate] are being built of heavy square timbers, and when completed will be the widest on the great lakes. The new dock is an exceptionally fine one, and large enough to dock a small fleet of the ordinary class of vessels.

I had never seen a statistic for the length of Drydock No. 2 until re-writing this story in February 2020. Knowing that the information must exist somewhere in an old publication relating to ship repairs, I spent hours Googling endless pages about drydocks until I found it. A 1942 publication: *Great Lakes—St. Lawrence Basin* by the United States Congress House Committee on Rivers and Harbors, Vol. I has, on page 164, a section detailing all the drydocks on the Great Lakes. In the section "Canadian Shipbuilding And Repair Yards On The Great Lakes" we find the following:

COLLINGWOOD SHIPYARDS, LTD. COLLINGWOOD, ONTARIO

5 Berthing Docks—(no dimensions)

2 Drydocks: 518 feet, by 56 feet at entrance

412 feet, by 95 feet at entrance

Limiting Condtions: 16 foot draft. [i.e. Collingwood's harbour is shallow]

The article goes on to list shipyards in Kingston, Midland and Port Arthur, all of which, like Collingwood, would in a few years after this publication, become part of Canada Steamship Lines.

[Believe it or not, the main purpose of this publication was to discuss what would, 18 years later, become the St. Lawrence Seaway. When these hearings were held in June and July of 1941, the United States had not yet entered World War II and the Korean War was not even on the horizon. In 1941 they talked about moving rail lines, highways, even houses along the St. Lawrence River (as it then existed) that would be flooded when the dams, locks, and power houses were complete. Part of the agenda in these hearings was the joint defense of North America.

They talked about being able to ship munitions to Great Britain through waters that were protected all the way from the Great Lakes to Labrador and being able to build naval ships on the Great Lakes that were longer than about 260 feet which was the limit of the old Lachine Canals in the Montreal area.]

To create Drydock No. 2 a cofferdam was built to close off the Hurontario St. slip from the harbour so the water could be pumped out to permit construction. It was then excavated, a concrete sill and stone abutments for the gate were created and the walls and gate were built. When completed, using all of the available real estate, Drydock No. 2 was 412 feet long, considerably shorter than Drydock No. 1, but much wider. The entrance to it between the gate abutments was 95 ft. wide, the distance between the actual walls being 105 feet. Despite its shorter length, the second drydock held a lot more water than the first one because of its width. Between its concrete walls two ships of that time could be accommodated side by side with room for additional smaller ones in front of them if need be. At least one vessel was built *in* this drydock—Hull #86, a gate lifter for the Welland Canal was "floated" on Oct. 7, 1930, saving the expense of a "launch" during the Depression. My uncle Reginald Hewson was a draftsman in the Yard and had a hand in designing #86.

Collingwood's longest ships, starting in 1910 with the *Emperor*, "Largest Ship Ever Built in Canada or a British Colony", were all built, by necessity, on the west building berth at the end of Hurontario St. Since these ships were longer than the No. 2 Drydock, their length extended well past the gate abutments. On a 550 ft.-long ship, nearly 140 feet of its length would extend beyond the gate abutments out into the open harbour. The Barrie *Northern Advance* announced the beginning of steel ship construction at the foot of Hurontario St. on March 17, 1910:

BUILD BIGGEST BOAT. Collingwood Shipyards Close Contract For Steel Freighter.

The Collingwood Shipbuilding Co. have closed the contract for a large steel freighter for the Playfair Co., says the Enterprise.

The new freighter will be the largest yet built by the Collingwood Shipbuilding Co., being 525 feet in length, with 60 foot beam, and will be put together on the west

side of the new drydock, the keel blocks extending from the south end of the dock right up to the end of the town dock. The building of the vessel will employ several hundred men, and preliminary work alone will entail a large expenditure. Work has already been commenced on a new electric crane for the west drydock and as soon as the frost is out of the ground the west yard will be prepared for the keel blocks of the new freighter. The new dock is 100 feet wide, and the gates 96 feet between abutments, which enables the company to launch a vessel of any length.

When the *J. H. G. Hagarty* was launched from this location in 1914 as a replacement for the ill-fated *James Carruthers*, the *Hagarty* suffered damage in the launch and, when completed, she had to sail to a large drydock in Detroit for repairs. One account says that "22 hull plates were in need of repair". In 1917 when the *Westmount* was launched from that same location, Shipyard General Manager John S. Leitch was relieved that "*We managed to keep her clear of the [gate] abutment on the east side of the dock..."* The *Westmount* was 536 ft. between perpendiculars, 550 ft. overall length and 58 feet wide and was the first 550 foot ship since the *Hagarty* three years earlier. A different arrangement of drag chains was used on the *Westmount*. The gate abutment on the east side of the entrance to Drydock No. 2 was hazardous to large ships because it also had wide steps going down into the dock. In retrospect, it appears to have been a poor decision in 1909 to put the steps right at the gate instead of at the south end.

There is an excellent aerial view of the Shipyard in 1919 showing the two drydocks (filled) with their gates in place on pg. 242 of Charles Cooper's book *Hamilton's Other Railway* published in 2001.

When Drydock No. 2 was inaugurated in 1909, it too was pumped out by steam pressure from the boilers in the Pump House. Down in the basement I saw valves labelled "Dock No. 1" and "Dock No. 2" where the stationary engineers could select which drydock to pump out. By the time coal was phased out around 1960 or so, Drydock No. 2 had been decommissioned and now there was just Drydock No. 1 to be pumped. Without steam from coal-fired boilers, the drydock pump was now operated by compressed air from one of two enormous compressors in

the Power House on the ground floor of the adjacent Electricians' Shop. These compressors were not the type you could buy at Canadian Tire, but rather they were massive—the size of a ship's engine. The smaller one ran all the time to provide compressed air throughout the yard to operate pneumatic tools such as Chippers' guns, paint nozzles, winches and anything else that required air. The larger compressor would be brought into use when pumping out the drydock was required and even then, Joe Mason, the Shipyard's Chief Electrician, had to make some calculations to see if running this enormous machine would negatively affect the Shipyard's power factor/hydro consumption for the month.

The gates for both Collingwood drydocks were not hinged like the lock gates are on the Welland Canal. Rather, they were floating caissons that were winched into place against massive stone abutments on each side of the dock and then the upper hollow body was filled with water to make them settle firmly on the concrete sill 14 feet below the surface. As the water was pumped out of the drydock, the pressure of about 16-17 feet of water in the harbour also aided in keeping the gate firmly in place. When the gates were not needed in place, such as during a ship launching, they were towed out of the way and parked elsewhere along the Shipyard shoreline. Sometimes they were left in place and used as a crosswalk to get from one side of the dock to the other.

When I worked in the Yard during my high school and university summers, I had hands-on experience with the drydock. One of my daily duties was to go down the stairs into the basement of the Pump House to check the water level over the sill at the entrance to the drydock and then record it in a log book in the Administration Building (the water level was displayed in a large glass tube marked off in feet and inches). This was critical information for when a ship came in for inspection and/or repairs because it would indicate the depth of water needed for a ship to clear the drydock gate's concrete sill which was several feet higher than the bottom of the drydock.

In addition to Frank Courtice's big steam (and later air)-operated pump, there was an electrically-operated pump they called the "Stripper Pump". This was needed because the old drydock gate, which was largely wood below the water line,

constantly leaked and there had to be a way to "strip off" the water flowing in without running the big pump. A large steel grate on the bottom of the drydock opposite the middle of the gate conveyed this water to the electric pump for discharge back out into the harbour. One summer when I worked in the Yard, we had an old freighter in drydock and one night there was a deluge of rain of biblical proportions. The next morning, Blair Wright, the Foreman for the Power House and Pump House, told me that between the overnight rain and the usual leakage of the gate, if the stripper pump had not be running all night he thought the ship might have floated.

When it was known that a ship was coming in for its regular 5-year inspection and/or for repairs, the drydock would have to be pumped out before the ship arrived in order to "set the blocks". The bottom of the drydock was lined with moveable wooden keel blocks, similar to those used on the building berth, which the workers would move into position in accordance with the shape and size of the hull of the ship that was coming in to afford it ample support once it was no longer floating in water. These blocks held the ship off the very bottom of the drydock so that the underside of the hull could be inspected. Once the blocks were set, five hatches in the gate below the harbour water level would be cranked open and the dock would fill with water in readiness for the next customer.

Each time the drydock was pumped out, there were plenty of fish that had become trapped behind the gate and, as the water level got down to the main pump intake grate near the bottom of the metal stairs, workmen with pails would go down to collect the fish, carry them up the stairs and pour them out into the water on the harbour side of the drydock gate.

[Readers can see a series of multiple photos of the Chi-Cheemaun being drydocked at Thunder Bay in 2001 for its 5-year inspection by Googling: <u>Chi-Cheemaun – BoatNerd.Com</u>] or by Googling the images for "*Chi-Cheemaun* In Drydock at Thunder Bay, Oct./Nov. 2001".]

The availability of two drydocks for repairs worked well for many years but as new ships grew longer, wider and heavier, the abutments for the No. 2 drydock gate

and the sill just 14 feet below the surface of the water became a hazard during launchings. This became very evident in August 1949 when the *Hochelaga* was launched. This ship, the first post-war bulk carrier and the largest of its kind at the time (639 ½ feet long and 67 feet wide) is said to have hit the gate abutment on the east side of the dock and possibly struck the sill as well and was damaged. The photo of the launching of the *Fort York* in January, 1958 shows that the abutments were still there but with the opening of the St. Lawrence Seaway looming the following year and ships 730 feet long and 75 feet wide to be built, the No. 2 drydock had to be reinvented. In 1958 its south end was excavated by the Rayner-Atlas Company of Niagara Falls to extend it 75 feet farther toward Hurontario St. to enable lengthening of the adjacent building berth. This necessitated taking a corner off the Boiler Shop to leave room for a road around the Boiler Shop for workers, Shipyard trucks, etc. to access both sides of the basin (that is why the southeast corner is angled). The gate abutments and the sill were removed to accommodate launching the largest ships then permissible. My father told me they dynamited the sill to break it up after which the Yard's Caterpillar crane with a clamshell bucket could fish the debris from the bottom of the harbour. The decayed gate languished wallowing in the water for a time near the Pump House coal pile and was eventually towed out into the harbour and sunk upside down where it remains to this day. The Caterpillar crane was wellexperienced in removing things from the bottom of the harbour because during the years when there was a huge coal pile for the Pump House, every launch from the main building berth washed coal overboard and the crane retrieved it in the days following the launch.

1958 was a year of major transition for the Collingwood Shipyard. Drydock No. 2 came to the end of its days as a drydock in preparation for launching the largest size ships allowable through the new locks of the St. Lawrence Seaway. The *Fort York* was the only ship launched into that basin in 1958. Twenty days after the *Fort York* was launched and the building berth cleaned up, the Shipyard laid the keel for the *Menihek Lake*. This left the balance of the good weather months of 1958 to lengthen Drydock No. 2 before removing the gate abutments and sill. On the east side of the Yard, the final ship to be built and launched into Drydock No.

1, a small tanker, the *Tyee Shell*, was launched on July 3rd, 1958. It was the end of an era going back to 1883 of building ships in this original location at the foot of St. Paul St. and the beginning of a totally new era of building massive new ships on the west side at the foot of Hurontario St. Almost a year to the day from the launching of the *Fort York* (January 15, 1958), on January 12, 1959, Collingwood's first Seaway size freighter, the *Menihek Lake*, 715 ft. long, was launched and from that date Drydock No. 2 was known as the "Launch Basin".

In 2008 an airplane flying over Collingwood's harbour to take photos of the redevelopment of the Shipyard property captured an interesting sight during a time of low water levels. One photo showed what looked like a sunken ship in the water west of the former building berth. My friend Christine Cowley sent me a copy of the photo to see if I knew anything about it. It was then that I realized that the sunken "ship" was the gate from the No. 2 drydock. I knew this because during one of my summers as an Office Boy/Messenger in the Shipyard, I asked one of the engineers, George Williams, at the Pump House what had become of the gate. He waved his hand toward the harbour and said, "They took it out and sank it!" This information is recounted in Christine's article in On The Bay magazine, Summer 2011. Since the 1986 closure of the Collingwood Shipyard, the No. 2 drydock has now come full circle and is once again the slip at the end of Hurontario Street, similar to its function in the 19th Century. Confusing the nomenclature is the fact that by the 1960's the launch basin was officially referred to in the "Job Orders" delivered to all Foremen as "Dock No. 1" and the drydock was referred to as Dock No. 2. These designations related to the placement of ships arriving for repairs and are totally opposite to how the two drydocks were labelled when they both functioned. Some ships were parked in the launch basin (or Dock No. 1) for above waterline repairs or conversions. An example of this is when the E. B. Barber spent the winter of 1963-64 in the launch basin being converted to a self-unloader.

Like Collingwood, Midland had a (originally) locally-owned Shipyard which also came under the ownership of Canada Steamship Lines in 1945. Midland's final ship—the *T. R. McLagan*—was launched in November 1953 and after her completion in the spring of 1954, the Midland Yard closed forever and one crane

and other equipment were transferred to Collingwood. In the post-war era C. S. L. did not need the capacity of these two shipyards. The Midland Yard, in its last few years of operation, had built four large ships including the *Coverdale*, a sister ship to the *Hochelaga*, a duo of sister ships, the *James Norris* and the *Gordon C. Leitch*, both just over 663 feet in overall length. Their last one, the *McLagan*, was almost maximum Seaway size at 714 ½ ft. long. They were side-launched right out into the wide open harbour with just cables and maybe a tugboat to keep them from running too far out. Although Collingwood side-launched into drydocks and had to use a formidable, expensive and labour-intensive system of drag chains and drag boxes to keep the ships from hitting the other side, in its favour Collingwood had two drydocks (in 1954), whereas Midland had none.

The No. 1 drydock was extended about 50 feet or so in a northerly direction near the end of the 1970's, enough that it could accommodate the *E. B. Barber*, 574 ft. overall length, 560.5 ft. between perpendiculars. This was accomplished by building a cofferdam to close off the harbour from the drydock, pumping it out and then removing the original sill and excavating the drydock floor out to the edge of the slip that led to the original gate location. Here, a new sill was poured and a new steel gate was built. In the main photo on pg. 208-9 in *Butchers*, *Bakers & Building The Lakers* showing the lengthening of the drydock, the original gate from the early 1900's can be seen lying on its side in the bottom of the dock near the forward end while, on the ground above, its replacement is under construction. The photo also shows the cofferdam that was built to close off the harbour to enable the excavation. The newly-lengthened drydock received its first ships in the Fall of 1981. It seems rather ironic that it took 70 years from the time that Collingwood first built ships 550 feet long before the Yard could drydock a ship of similar or slightly longer size.

From the advent of the St. Lawrence Seaway and the need to renew the fleets of Great Lakes freighters, the Collingwood Shipyard was predicted to have 20 years of work. As it turned out, this prediction was quite accurate. Many reasons were given for the Shipyard's closure in 1986, including the lack of a large drydock to accommodate Seaway-size ships, but, in retrospect, the Yard ironically had also signed its own death warrant as a shipbuilding facility with this period of

prosperity because fewer ships (but much larger than the older ones they replaced) were needed; Collingwood ships were so well-built that a saturation point was reached—in fact, many ships were idle at the time—and the excellent skills of the Collingwood shipbuilders were no longer needed. So ended more than a century of shipbuilding and repairing and, with it, the use of the town's waterfront as it had been known for many generations.

It is interesting to speculate about whether some portion of the Shipyard could have survived if there had been a large drydock in place. The original 1883 drydock was a phenomenon in its time, and, when it was enlarged at the beginning of the 20th Century it was still a marvel. But only nine years later, when Collingwood started to build ships 550 feet long on the building berth at the foot of Hurontario St., the Shipyard could not drydock those large ships. Granted, the No. 1 Drydock at the foot of St. Paul St. was able to accommodate many smaller ships right up to the time the Yard closed, but with the trend to St. Lawrence Seaway-size ships of well over 700 feet long starting in 1959, there was a need for a facility that could handle these ships for inspections and repairs. Time had passed and the Collingwood drydocks remained old. When Drydock No. 2 was decommissioned in order to build the big Seaway lakers, Drydock No. 1 soldiered on but even with its increased length just a handful of years before the Yard closed, it was too little, too late.

As Fred Crew, General Superintendent told me back in the 1960's, if you have a [marine] highway 2038 nautical miles long from the Atlantic coast to the far reaches of Lake Superior at Duluth, Minnesota, you need to have a few "service stations" along the way. In my youthful enthusiasm for all things "Shipyard", one summer when I was based at the Administration Building, I took out a blueprint of the entire Yard and drew a 1000 ft. drydock which was a massive expansion of the existing No. 1, (irrespective of water depths) because freighters 1000 feet long would soon be built on the American side of the Great Lakes starting in 1972 (these ships were limited to trading on the upper lakes because they could not pass through the Welland Canal into Lake Ontario). Ralph Christie, the Expediter, suggested to me a new channel going right out through the Hen & Chickens Islands out toward Nottawasaga Island where, he said, there was 25 feet of water.

This revised drawing I showed to Alex Webster, the Shipyard General Manger, and asked him what he thought of it. He replied that my scheme was too expensive—about 7 million dollars he estimated—and suggested I try to reduce it to 5 million. In retrospect, my proposal seems to have been a bargain considering that, as reported by the Barrie Examiner on June 24th, 1978, the Shipyard was asking the federal government for 12 million to build a new 1000 foot drydock. By 1979, the cost had risen to 14 million and Collingwood was still waiting for funding that never came.

Another reason given for the closure of the Shipyard in 1986, in addition to the lack of a large drydock, was that Collingwood was about twelve hours sailing time off the main navigation routes on Lake Huron. This wasn't an issue in the 1950's when Georgian Bay was a major navigation route because there were multiple grain elevators around its shoreline, shipyards in both Collingwood and Midland and two drydocks in Collingwood. The advent of the St. Lawrence Seaway changed all of this and gradually Georgian Bay was no longer a major shipping lane.

So today we have a large drydock at Thunder Bay, the site of the former Port Arthur Shipyard. The drydock there—747 feet long—can accommodate seaway-size freighters. Alongside the drydock is the Colby Crane, formerly the workhorse of the Collingwood Shipyard. The nearest drydock for ships that size on the Canadian side of the Great Lakes is far away in southern Ontario at Port Weller with two drydocks, 750 and 807 feet long respectively on the Welland Canal. The drydocks at Thunder Bay and Port Weller are operated by Heddle Shipyards headquartered in Hamilton, founded in 1987, the year after the Collingwood Shipyard closed. If Collingwood had kept up with the times and had a large drydock, perhaps it could have been an intermediate location for ship repair and inspection between these other two locations but it was not to be. The big ships need to make money and time is money. The south end of Georgian Bay being some twelve hours sailing time from the major shipping routes on Lake Huron could not justify a large drydock at Collingwood. That many hours sailing time does not produce any revenue for an empty ship. In addition, the 99-year lease

(dated from 1888 with the Grand Trunk Railway) of the east side of the Shipyard was due to expire and was also a factor in the closure of the Yard.

For further information on the history of Collingwood's drydocks, with multiple vintage photos including the entrepreneurs who started it all, readers are encouraged to look up on YOUTUBE.COM the video of a presentation given by Melissa Shaw, Museum Supervisor at the Collingwood Museum, on January 6, 2020 at the Collingwood and District Historical Society monthly meeting.

David Vuckson is a great-grandson of pioneer Collingwood merchant R. W. O'Brien. His roots in town go back to 1875. David's uncle Reg Hewson worked in the Shipyard in the late 1920's and early 1930's, his father Dan Vuckson worked there for 33 years(1947-1980) in the Sheet Metal Shop and David himself attended multiple ship launchings in the 1950's and '60's and worked in the Yard as an Office Boy/Messenger for six summers in the 1960's. He and his wife Pamela live in Victoria, B.C.