The County Historian

News from the Ontonagon County Historical Society

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Summer 2020

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WHAT'S HAPPENING

Greetings everyone. I delayed the publishing of this issue of *The County Historian* with the hope that we would have definitive news about the post-COVID-19 opening of our museum and lighthouse tours. Alas, we are still closed as of July 4. We have reassessed the possibility of opening each month. At this point, the odds are not looking good for opening at all this year, though if the virus status miraculously becomes safe, we will react accordingly.

We haven't held any monthly dinner meetings since February, as large group meetings were not allowed. Also, our group is mostly in the high-risk category for the virus. We may have to wait for the vaccine before restarting our monthly dinner meetings.

In the last issue of this newsletter, you had read about a Facade Improvement Project for OCHS this summer, funded by the Michigan Economic Development Corporation through our local Downtown Development Authority. Alas, the Corona Virus Plan for the MEDC shut down all Facade Improvement Grants. The future is uncertain at this point, but for this year we are most definitely on hold.

In the spring/summer issue of The County Historian, I usually write about the Keweenaw National Historical Park's Local History Smackdown for high school students, including a photo. This year, the virus shut down the local history trivia competition, of course, but the worst part is that it had been slated to be the final Smackdown. There is talk of doing the final Smackdown next spring instead, but again, the future is uncertain. In any event, teams from Ontonagon will have more Smackdown wins than any other school. Ontonagon's teams were very well-trained by our own Bruce Johanson.

Speaking of Bruce Johanson, his seat on the board would have expired in August, but he decided to resign a couple months early. Bruce had 36 years with OCHS, and he will be sorely missed. He volunteered prodigiously for us.

Our Secretary, Tom Hawley, also resigned, and we will miss his

Do you recognize the contraption next to John Doyle in this photo? See "Fish Houses" on Page 2 for an explanation.

services as well. Sally Berman will be our acting Secretary until the new board is seated in September.

Anyone interested in serving as a board member should contact the museum and leave a message, or send an email.

Museum Manager Coriane Penegor is checking phone messages as a volunteer. She is also working for us through a Keweenaw Heritage Grant, as is Ryszard Olszewski. Last summer, Ryszard had been working with our IT volunteer, Steve Maass, and input the vast majority of our accessions records into the Past Perfect program on the computer. That task will be completed this summer.

Our Acquisitions Committee will continue the work of inventory and organization of the museum artifacts. Committee Chairperson Carol Maass had written the Keweenaw Heritage Grants. We're also moving to a web-based version of Past Perfect collections management software, which will allow for multiple users and working from home.

Our Mural on the exterior museum wall facing RICC Pocket Park will also be completed this summer. Artist Sue Martinsen from Ashland has been working on the mural panels, and expects to complete them by late July. We expect to have the brightly-colored mural installed by the end of summer.

FISH HOUSES

The Village of Ontonagon owns two Fish Houses on Rose Island across from the marina -- the Wilson and the Keranen Fish Houses, remnants of the once-thriving commercial fishing industry in Ontonagon. By the way, Earl Doyle's booklet on Ontonagon Fishing History is a very interesting read, and is available in our Gift Shop.

Anyway, OCHS has been using the Fish Houses for storage for a few decades now, courtesy of the Village. At this point, the Village is going to accomplish much-needed reconstruction work on the Fish Houses and a new business will open in the Wilson Fish House. Fortunately, the Village has provided a room for OCHS in the Old School.

In June, John Doyle, Dave Bishop, and Carol and Steve Maass took on the challenge of moving our usable items from the Fish Houses to the Old School, with extra muscle help from Ryszard Olszewski and Steve Lindstrom, and the Guilbault Brothers' forklift. In just a couple of days, the deed was done.

One of the more interesting artifacts we had out there was an iron lung, which you can see in the photo with John Doyle on page 1 of this newsletter. Since the Fish Houses are a rather damp storage location, the iron lung apparatus has rusted. However, John Doyle now has it at his house, and he will refurbish it, whereupon we will find a way to display it in our museum.

Also, we have an old motorized ice saw with a circular blade, which the Guilbault Brothers are refurbishing. This type of saw was often used to cut wood, and it was known as a man-killer. We expect it was a bit less dangerous for cutting ice.

We did discover treasure in a Fish House drawer. We now have century-old photogravure copperplate images. We are querying the Keweenaw National Historical Park archivist regarding the best way to clean them up.

RIEGER PROJECT

Back in 1970, Dr. Jon Rieger, a sociologist from the University of Louisville, KY, began a repetitive photographic survey of businesses and events in Ontonagon County to document change over time. Dr. Rieger soon adopted Ontonagon County, and returned every summer, and by 1985 he had settled upon a five-year cycle for his summer photo shoot of the businesses and scenes, always from the same perspective.

REQUEST

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Now, 50 years later, Dr. Rieger has retired; however, to continue the study of Ontonagon County into perpetuity, he created a foundation to enable the Ontonagon County Historical Society to hire a professional photographer for each quinquennial photo project.

For the summer of 2020, you will see photographer Nathan Miller of Chassell making his rounds to every corner of Ontonagon County. He will be building upon what Dr. Rieger had established.

In 1970, about 100 sites were documented. By 2015 the number was closer to 600. And this summer, Nathan Miller might push the number of photos as high as 700.

In the beginning, all photos were shot with film of course, and now they will all be digital. OCHS will add the photos to their collection, and they will be available for the public. Photos will also be offered to the archives at Michigan Tech and Finlandia.

Regarding this lifetime project, Dr. Rieger writes, "The objective is to document the principal public buildings, businesses, commercial streets, community institutions, a representative selection of residential streets, and other significant scenes and activities of interest around the county."

Dr. Rieger also noted that one of the more interesting sequences of photos shows how incredibly quickly the former Ontonagon Valley Creamery in Bruce Crossing disappeared after it ceased operations in November of 1979. Likewise for the paper mill in Ontonagon in recent years.

Nathan Miller plans to give presentations on the project after his 2020 work is completed and the COVID-19 virus plan allows for large indoor gatherings.

NEW MUSEUM

We have a new museum in Ontonagon County. Rick McKay of Mass City bought the old Town Hall building on the corner at the flashing light. Rick has long held a collection of antique cars, and he thought it would be fun to share. He learned that if you open both of the double doors to the old Town Hall, you can just barely squeeze old cars in, and onto the robustly-built dance floor. Rick has a collection of pre-1930 vehicles in there. Call Rick at 906-883-3353 if you'd like to schedule a museum tour. Photo follows:

LIGHTHOUSE NEWS

While our Lighthouse is not open for tours at this time, the lawn is looking good. Ralph Workman and John Doyle have been tending to it.

After storms last fall, we had a pile of rocks and debris which had washed up out of the river and onto our lawn. This is not a normal occurrence for us, but the extremely high Lake Superior level made it possible. Fortunately, the Guilbault brothers volunteered to come in with their skid steer and a street sweeper attachment, and they swept the bulk of the detritus back into the river.

Our weather in April, May, and June has been quite dry, so the Lake Superior level has actually receded a few inches.

As always, if you are interested in being a lighthouse philanthropist, we still have the following gleaming rooms or structures available for sponsorship.

28 Spiral Steps
$300 ea.

Master Bedroom
$5,000

1st-flr 1890's kitchen
$6,000

UPCOMING DINNER MEETINGS

All dinners are on Thursdays at 6:30 p.m.

July 16 -- Canceled

August 20 -- To Be Announced

September 17 -- To Be Announced

October 15 -- To Be Announced

PAST PROGRAMS

February:
(Don Chastan responsible)

Don Chastan and Mike Rebholz spoke on the Old School in Ontonagon, and told us about the Village's plans to repurpose it. They'll start with the Annex and the 1938 section of the building. The old 1912 section will be a future project. The Village has an Old School Committee which is guiding the efforts.

March, April, May, and June dinners were canceled due to COVID-19.

Editor's Note: The following is a wonderful note from Tom Crooker in response to a caption in the previous issue of *The County Historian*, which explained the Gillette Polar Bears in our museum, and that Penetred Tires were said to be manufactured by Gillette.

Tom Crooker writes:

The reference to my father contains a minor historical inaccuracy.

My father and his father owned the Ford dealership in Ontonagon from 1918 until 1934. Ford introduced the V-8 engine in 1932 and for the first few years the failure rate of new engines was 100%. There were no factory warranties back then. The full cost of repairing or replacing defective engines was the responsibility of dealers. In 1934 my father and grandfather gave up on Ford and sold the dealership to two longtime employees, Harold Labyak and Harold ("Dutch") Roehm.

Their next venture was to obtain the distributorship for Gillette tires across the U.P. Gillette may have been the first company to produce "snow tires" known as "knobbies." They had big round knobs protruding from the tread. Actually, they were of limited value for traction and wore poorly on dry pavement.

Gillette tires were not a familiar product in the U.P. and, circa 1935, my father had a biplane with a sign painted on the fuselage reading "Gillette Tires, U.P. Dist'r., C. J. Crooker and Son, Ontonagon." The plane may have been owned and flown by Norman Shafer. Anyway, it was used to barnstorm throughout the U.P. one summer in an effort to introduce the Gillette name to the public. I have a photo of my brother, David, sitting in the plane. He appears to be about age eight.

The Gillette venture ended soon. There was a dynamite factory located somewhere in the Copper Country to serve the mines. [Atlas Powder Co, in Senter, which was between Dollar Bay and Dreamland.] A truck loaded with dynamite had a front-tire blowout approaching a bridge and collided with the bridge. It was a Gillette tire. The truck did not explode, but it led to a lawsuit against my father and grandfather. They learned that they were legally responsible for the performance of Gillette tires. Blowouts were common back then and that business quickly soured.

After that, my grandfather and several other local business owners joined together and started the Gitche Gumee Oil Company with my grandfather as manager. [Gitchee Gumee Oil Co was founded in 1926 with C. J. Crooker as Secretary/Treasurer.] In 1938, my father acquired the Buick and Pontiac dealership, adding GMC trucks after the war.

My father began to experiment with placing steel coils in tire treads for winter traction before World War II. He began to accumulate patents on the concept. But, at the start of the war the federal government withdrew all patents and my father had to start again after the war.

Most tires using his "ice tire" treads were retreads which were in common use until the 1950s. None were ever made by Gillette before the war.

Penetred Corporation was founded in the late 1940s by my father and Lloyd Felker, a businessman from Marshfield, Wisconsin. It was based in Marshfield.

For several years in the 1950s, Goodyear made both truck and passenger car tires using my father's patents. However, production line rubber workers were paid by a piece rate and inserting

the steel coils slowed their work. It became an issue with the workers' union and Goodyear stopped production of the tires rather than fight the union over a minor issue for the company.

The studded tires that were widely sold in the 1960s were based on a European design. The metal studs were damaging to pavement. My father's steel coils were not damaging. However, the use of steel in tire treads was outlawed across the nation and that ended Penetred Corporation. About that time Lloyd Felker died.

So, to make a short story long, that's my recollection of family history.

Thanks for the mention in the OCHS newsletter.

Best wishes, Tom Crooker

Editor's Note:

The following is the third installment of a research paper written by SHIP Intern Ryszard Olszewski in the summer of 2018. In our last issue, you read about the construction of the Taylor Hydraulic Air Compressor which powered the Victoria Mine.

The next installment in the story of the Taylor Hydraulic Air Compressor will be published in the Autumn Edition of *The County Historian.*

Why an Air Compressor?

At the time that the air compressor was constructed, there were several forms of power that mines used at the time. The most common in the Upper Peninsula was using coal. In fact, all of Victoria's neighboring mines used coal. With this information, the question of why Victoria went with a compressor instead of the more common coal method arises. There are several major factors for why the Victoria mine used compressed air.

One of the most important, or most crucial, reasons for why the Victoria mine ran on compressed air instead of other methods of power is because they were not serviced by railroad. They had been promised several times that a railroad would be built to the mine. The promised railroad never was built however, because it was not feasible due to the impossible grades and the winding path that was caused by the Ontonagon River and its branches. Consequently, the coal had to be hauled by a team of horses. A round trip taking copper ore from the mine, and coal to the mine took 2 days, and the cost of the haul was five and a half dollars per ton. The railroad would have allowed the mining company to purchase and transport coal cheaply and had the railroad been built, there is a possibility that the mine would have used coal just as all of the other mines and would have diverted from the use of compressed air.

Another prominent factor that led to the use of an air compressor was the valuable resource of the river and Glen Falls right on the property. The river allowed for the air compressor to leave out one of the steps in the energy cycle. Instead of having electricity to turn the air compressors, the mine would be able to use the water itself to make the compressed air, and use it directly into steam engines to operate the hoist and pneumatic drills.

Finally, the use of the river would have resulted in minimal moving parts. This meant that fewer workers would be needed to run the plant and the compressor would be almost entirely self-regulated. Without many moving parts, maintenance was never really an issue. The only maintenance required would have to be done very infrequently to make sure that everything was working just right.

The fact that Victoria was never serviced by railroad and that they had the valuable asset of a river and waterfalls right on the property made the choice for an air compressor very logical. It was the only way that the Victoria mine could ever hope to make a profit in their specific situation.

Now that the reason for the compressor and the construction timeline has been covered, one must go into how it was made, and how it worked.

Details of Original Construction

The working of the compressor started at the river. Water was collected from the river by the use of a dam, which was 300 feet long and 10 feet high. The diverted water flowed to a canal, which conveyed the water 4,000 feet downstream. The sectional area of the canal was 350 square feet. This means that if one took the vertical area of one section of the canal, the area would be 350 square feet.

The canal led to three vertical shafts. These shafts, smoothly cemented, were sunk 330 feet down, and were five feet in diameter, terminating in the roof of a large underground chamber. From there, conical steel tubes continued another 16 feet into the chamber and flared out, ending with a diameter of seven feet and four inches. Right underneath these tubes were concrete spreading-piers that were built on the chamber floor. These concrete piers were used to spread out the water and to prevent the erosion of the base of the chamber that would have been caused by the many pounds of water falling onto one spot.

The three shafts led into the underground chamber that was 57 feet wide and 22 feet high. After 50 feet, the chamber narrowed to a width of 18 feet and a height to the center of its arched roof of 25 feet. The chamber continued with these dimensions until the total length of the chamber was 282 feet. At this point, the chamber became a tunnel with a height of 10 feet. It remained like this for another 40 feet, and then became an incline shaft that carried the water back to the surface and into the river. The resulting drop of elevation from where the water leaves the river to where it rejoins was 71 feet.

It is in the chamber that the air compression took place. The waterline in the chamber remained no more than 10 feet above the base of the chamber and the rest became filled with air. The volume of the chamber between the waterline and the roof was 80,264 cubic feet.

At the upper end of the chamber, a tunnel was run to the surface at a 30 degree incline. In this tunnel were placed the air main and the blow-off. The air main was 24 inches in diameter and carried the compressed air to the mine and the mill. The blow-off was 12 inches in diameter and was used to regulate the air pressure in the chamber. After the two pipes were put in the tunnel, the rest of it was filled with concrete. The blow-off opened at the water level in the chamber 12 feet below the roof, and led to an opening five feet above where the water re-entered the river.

How Did It Work?

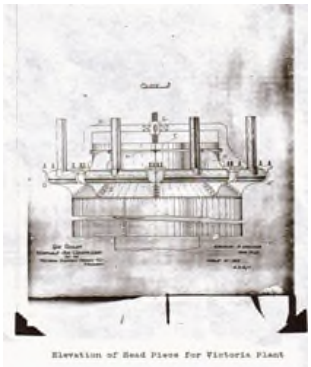
At the end of the canal, on the upper ends of each of the three shafts, was a steel tube rising about six feet above the base. This tube was telescoped an additional length so that it was able to be in any depth of water, or so high that no water could flow over it. Above this pipe was an angular pipe, or header, which was meant to be below the water level when the plant is in operation.

The header, which had an average diameter of 10 inches, was directly connected to two sets of tubes. One of these tubes is composed of eight seven-inch verticals. The upper ends of these verticals were above the water line. These were the atmospheric intakes. There were also 1,800 three-eighths-inch tubes pointing inward horizontally from the header in a radial arrangement. Over these tiny tubes, water flowed downward and because of venturi action (which will be described/ explained in detail in a separate chapter) pulls down air through the atmospheric intakes. The air went through those small tubes and into the column of water which went down into the compression chamber in the form of air bubbles, which were pushed down the shafts due to the weight of the water and were compressed to 117-½ pounds per square inch in the underground chamber.

Once the water filled with air bubbles got to the end of the shafts, the water was dissipated by the concrete on the bottom and slowly flowed along the separating chamber to the outlet tunnel and shaft. The air rose through the flowing water and accumulated at the top of the chamber, and forced the water down until it reached the lower end of the 12 inch escape pipe. This unseals the pipe and allows the air to rise and mingle with the water in the pipe. The water then becomes too light to resist the air pressure that was built up and is forced out of the upper end at the surface. This would result in an artificial geyser. The surface air would then keep on escaping. This would prevent the water from being forced any lower in the chamber by the further accumulation of air.

If the air was drawn off through the 24-inch air main at the full capacity of the compressor, the water would rise in the chamber until it would seal the lower end of the escape pipe. This would result in the pipe filling with water and preventing the air from escaping. It would remain like this until a new surplus of air was accumulated. Once the new surplus of air was built up, the process would be repeated. The water, then free from air on reaching the end of the chamber and entering the tunnel, flows up the inclined shaft and emptying back into the river.

The air compressor was also automatically regulated. This was done by the use of a small pipe in the side of the shafts from the chamber below. The base of the pipe was placed in such a way that when enough air was compressed, the air pressure went through the pipe and lifted the lower conoid casting and prevented the further flow of the water over the atmospheric feed pipes. This would result in no more air coming in and compression would stop. As soon as the pressure would be relieved, the casting is dropped back and the water flow resumes, resulting in the rebuilding of the compressed air.



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