Born September 14, 1847, in Pittsburgh, Pennsylvania, John Tyler Jones, was the third of eleven children and the oldest son born of Thomas J. and Margaret (Williams) Jones. John’s father Thomas was a mechanical engineer, and later a master mechanic, first at Pittsburgh, and then at Sharon, Mercer County, Pennsylvania.
John attended school until 1859, when he was twelve years old, and then commenced work in the rolling mills as an apprentice to the trade of millwright and engineer. He also worked with his father, under whose instruction he became a skilled mechanic.

A millwright originally was a specialized carpenter who had working knowledge of driveshafts, bearings, gearing and mechanical belt. The "mill" in millwright refers to the genesis of the trade in building flour mills, sawmills, paper mills and fulling mills powered by water or wind.

Taken in 1876, this photograph shows Frank Fuller, 19 years old (born in 1857), working on a gear wheel for either a water mill or a windmill with the man training him to become a millwright.
In 1869, Samuel Kimberly & Co. built the Keel Ridge blast furnace near the rolling mill in Sharon, Mercer County, Pennsylvania. Known as the Keel Ridge Iron Company, the firm was in charge of this new blast furnace which had the capacity of producing thirty-five tons of pig iron daily.

In 1873 the firm of Kimberly, Carnes & Co. bought the Keel Ridge blast furnace and added it to their mill. The firm name became P.L. Kimberly & Co.

On October 19, 1870, John married Rachel Ann Milligan, daughter of John Milligan, probably in Pittsburgh, Pennsylvania. Rachel was also a native of Pittsburgh.

John went to Sharon, Pennsylvania, in 1874 to set up machinery for the Keel Ridge blast furnace, and was employed there, at Middlesex and other furnaces until 1881.

The above diagram shows how a blast furnace works, introducing iron ore, limestone and coal, resulting in slag and molten iron as the process is completed.
While living and working in Sharon, Pennsylvania, at least two and possibly four children were born to John Tyler and Rachel Ann Jones: Albert Graham was born in July, 1876, and Elmer William was born in October, 1879, according to census records. Two other children – Harry and Margaret – had died prior to 1895 and may have been born in Pennsylvania.

In June, 1881, John arrived on the Menominee Iron Range, locating at Keel Ridge, where he served as the superintendent of mines for the P.L. Kimberly Company, of Sharon, Pennsylvania, overseeing operations at the Emmett Mine, Waucedah; Keel Ridge Mine, near Quinnesec and Iron Mountain; the Ludington Mine and the Hamilton Mine, Iron Mountain; and the Iron River Mine, Iron River.

On Tuesday, April 10, 1883, while preparing to abandoned the Keel Ridge Mine which was considered to be worked out, there occurred the most terrible mining disaster to date on the Menominee Iron Range. John Tyler Jones was superintendent.

This bird's-eye view of Sharon, Mercer County, Pennsylvania, published in 1901, shows the city, located on the Shenango River near the Pennsylvania-Ohio line. Pittsburgh was located south and slightly east of Sharon, and Lake Erie was not far to the north. Cleveland, Ohio, also located on Lake Erie, was a primary destination for many shipments from iron mines in the Upper Peninsula.
Dating about 1880-1881, this view of the east side of Quinnesec Avenue looking north in the village of the same name encompasses the area between Pine Street on the south and Brule Street and beyond on the north. The Chicago & North-Western Railway tracks are in the foreground. The Quinnesec Hotel was managed by A. Clement around this time. A bit further up the street was the Commercial Dining Hall which was run by W.W. Felch. Wright Brothers, a general store run by Jason K. and Anson W. Wright, was just up the block. The two-story brick building on the north side of Paint Street was Buell’s Opera House. [Alice (Massie) Riekkola]
John Lane Buell’s opera house in Quinnesec, considered one of the finest in the Upper Peninsula, was located on the northeast corner of Quinnesec Avenue and Paint Street (now U.S. 2). The opera house opened to the public Tuesday, December 30, 1879, and served as the social and cultural center of the village for many years. The second story contained a large dance floor and auditorium with a stage. In this photograph, probably taken in the summer of 1880, a sign in the left store front window notes the Menominee Mining Company general offices were located within. In the window to the left of the right store front is the sign for Joseph Schaller, druggist, while the sign for Charles E. Steller’s jewelry shop appears in the right window of this same store front. Under the awning on the side is a restaurant, and next-door is the office of The Menominee Range, the county’s first newspaper. This photograph dates no later than the spring of 1881 when the newspaper was moved to Norway. The opera house burned August 23, 1925. [Alice (Massie) Riekkola]
A Monster Grave.

EIGHT MINERS BURIED ALIVE IN THE CAVING IN OF THE KEEL RIDGE MINE.

SIX WIDOWS AND THIRTEEN ORPHANS.

The most terrible calamity that has visited the Menominee Range occurred a little after 1 o’clock Tuesday afternoon last, the Keel Ridge iron mine, owned and operated by the Emmett Mining Company, caving in and burying alive eight miners, six of whom were married and had in all thirteen children. As follows:

William Henderson, wife and four children.
William Pollard, wife and four children.
John Morrish, wife and one child.
William Jeffery.
Thomas James, wife and child.
Alexander Helman.
Patrick Eagan, wife, [sic]
Richard Williams, wife and three children.

The mine was considered worked out and the eight men, with one more named Edward Wicks, were engaged about the mouth of the shaft on the surface taking out the pumps, pipes, landers, etc., preparatory to abandoning it, when, without warning of any kind, the whole face of ground covering the underground workings fell in engulfing them and the boiler house near by, and forming a huge sink hole sixty feet deep, one hundred wide, and one hundred and fifty in length. A re-echoing crash that shook the settlement, a cloud of dust that for an instant obscured the sun, and all was over.
The whole village frantic with apprehension were [sic – was] out in a twinkling and there was an awful cry, “The mine! The mine! – it has fallen in!” In a moment the brink of the yawning abyss was lined with terror-stricken men, women, and children, whose white, anxious faces, peering into the depths, told of awful fear and agony. Of the nine only one struggling victim could be seen, striving to free himself from the weight of earth and rock, which had broken one of his legs and ribs. He was Ed. Wicks. Somehow he had been thrown up from the immense mass, and men were lowered down to him by ropes and carried him up in their arms, and he was laid down crushed and bleeding, but thankful. Not a vestige of his eight companions was discernable [sic – discernible] anywhere, and even the boiler house with its great boilers was nowhere visible, and only a few splinters and a small jet of steam issuing from the debris told it was there.

The alarm spread quickly and within an hour or two there were nearly a thousand people at the scene of the disaster, among them the entire force of miners of the Chapin, the Menominee Mining company…

…ordering the suspension of work at this mine in order its men might assist its ill-fated neighbor. The work of erecting derricks and setting up hoisting machinery brought from the Chapin was speedily commenced. It is calculated that a month or more will be consumed hoisting the mass before the first body will be uncovered, even allowing that the remains lie but midway in the great heap and not nearer the bottom as may be the case. There is practically nothing on which to base a calculation as to how deep the bodies lie buried.

When visited by a reporter of the NEWS Thursday, the huge grave presented a distracting sight. The widows and orphans stood about weeping and wailing for their dead pitifully, while two hundred men were solemnly, even reverently, engaged in the necessarily slow work of resurrection. The wife of one of the victims, Mrs. Thomas James, had become crazed at her loss compelling her friends to provide for her safe keeping, while three other of the widows were confined to the house being about to become mothers.
JOHN TYLER JONES – KEEL RIDGE MINE DISASTER – 3
September 14, 1847 – May 4, 1928

All the families are left in almost destitute circumstances, and suffering for the wants of life will occur soon in their midst unless arrested by the hand of charity.

The Keel Ridge mine was discovered in 1879 by John McKenna, and was developed by him in company with John O’Callaghan, at which time it was known as the “McKenna Mine.” In 1880 it was purchased by Wm. McCartney for a consideration of $35,000, who in the next year disposed of it to the Emmett company, its present owner, for $75,000, who changed its name to the Keel Ridge. It comprises the south half of section 32, town 40, range 30. It was worked underground at a depth of nearly 300 feet. In 1880 the mine produced 11,445 gross tons, in 1881 19,011 and in 1882 28,000. J.T. Jones is agent, and John Wicks captain.

The Florence Mining News, Florence, Florence County, Wisconsin, Volume III, Number 16 [Saturday, April 14, 1883], page 1, column 6

AS WE go to press we learn that the prospect of being able to recover the bodies in the Keel Ridge mine has become almost hopeless owing to the heavy rains occurring [sic – occurring] since the disaster, which have washed in tons upon tons more earth and rendered the work of raising it almost impracticable. It is now thought the remains can not be resurrected in two months. In view of this state of affairs the company have submitted a proposition to the widows of the victims offering them $4,000 each if they will consent to let the dead remain in the almost unfathomable depths, and release it from its hopeless search. The proposition meets with the endorsement of all acquainted with the terrible situation and will no doubt be accepted by the widows.
The work of searching for bodies at the Keel Ridge mine is carried on vigorously by a large force of men. None have yet been recovered. It was reported on yesterday that a coat was found in the debris but investigation proved the rumor false. The search is carried on under great difficulties arising from the spring thaw and rains, and it is altogether probable that many days will yet pass away before the remains of any of the victims are recovered.

With all due respect to the brave dead who lie buried in that huge grave, the NEWS suggests that the company give the money that the monument [sic – monument] might cost to the needy widows and orphans. We believe in having as much respect for the living as for the dead.

The Menominee Herald learns that the Emmet [sic – Emmett] folks will cause a monument to be raised to the Keel Ridge dead.

As anticipated by the NEWS the search for the victims of the Keel Ridge disaster proved futile, and after ten days and nights was abandoned. It would have been much better in the beginning to have given the money thus uselessly spent in the hopeless task of resurrection to the needy families of the dead, but mistakes will be made by the best of communities. There is the consolation for the friends of the departed, however, that ghouls can not rob the grave.
THE monument which it is intended to erect over the unfortunate victims at Keel Ridge, will probably be of red granite and cost in the neighborhood of $1,000. Several designs have already been subjected to the management, but no final choice has yet been made.

THE total of the local subscription to the Keel Ridge relief fund now foots up to nearly $750. The amount should be swelled to $1,000 at least. The last can be found at the Menominee Mining Company’s store. – Range.

“Now they won’t get a darned cent,” was the reply made by Samuel Kimberly, the good-natured president of the Emmett Mining Co., to a MINING NEWS reporter, who inquired of him about the Keel Ridge damage suits. He continued: “We would have done well by them, not given them a fortune, but seen that they did not come to want, if they hadn’t commenced troublesome litigation. Now we won’t give them a cent. They commenced the fight and it is cheaper for us to fight them than take care of them. We would have given each of the widows a house and lot in Iron Mountain and more; not in the furtherance of justice, but through generosity. I don’t believe they ever would have commenced suit if it hadn’t been for the bad advice of some shyster…
JOHN TYLER JONES – KEEL RIDGE MINE DISASTER – 6
September 14, 1847 – May 4, 1928

…They can’t collect a cent, because legally they are not entitled to one. I have had men hurt in my employe [*sic – employ*]; one fell down a shaft, another broke his leg. It wasn’t my fault, but I paid their wages right along, paid all their doctor bills and saw that their families were cared for.” In response to the query as to whether the company would erect a monument over the wholesale grave at Keel Ridge, Mr. Kimberly answered in the negative.
Sometime shortly after the Keel Ridge Mine disaster, the John Tyler Jones family moved to Iron Mountain.

Two more children were born in the 1880’s, as follows: Caroline “Carrie”, born in February, 1883; and Rachel Ann, born September 3, 1888.

In 1888, John was superintending the construction of a blast furnace at Iron River.

In 1890, John moved to the Mesaba Range in Minnesota, where he opened up the Bewabik Mine, and also the Adams Mine at Eveleth, Minnesota.

Another daughter, Ruth, was born October 17, 1890, in Iron Mountain.

With a growing family, John and Rachel built their residence on a 140-acre tract on Lake Antoine in 1890 at a cost of $7,000.

J.T. Jones’ Residence built in 1890, by N.B. Parmelee & Son, who also furnished the plans and specifications. Advertisement in the March 26, 1891 Issue of The Menominee Range, Iron Mountain’s first newspaper.
The camera is facing north on Stephenson Avenue in the mid-1880’s in this view of the east side of the 200 block where the First National Bank is now located. William H. Jenkins opened his hotel at the corner of South Stephenson Avenue and East Ludington Street in early November, 1881. The three-story frame hotel was considered the city’s finest, rooms renting for $2.00 per day in 1885. A fire broke out at the other end of this block January 21, 1883, resulting in considerable losses to businesses located there. The fourth building from the corner in this photograph, advertising dry goods and clothing, was probably Charles E. Parent’s store. [Menominee Range Historical Museum]
Taken in the last half of the 1880’s, this photograph, looking south, shows buildings on the east side of the 300 block of South Stephenson Avenue. The sign on the first building on the left, located at the southeast corner of the intersection with East Ludington Street, reads City Hotel. A small sign between this building and the next advertises a dressmaker. The second store, at 305 South Stephenson Avenue, was a general store run by Charles Schuldes and Emil Carriere between 1885 and 1889. Their advertising banner stretches across the street. The tall pine at the right stands near where the intersection with East A Street would be today, and beyond is forest and swamp. [Menominee Range Historical Museum]
An early Iron Mountain band posed in front of Rundle Bros. Hardware and Seibert’s Drug Store on the east side of the 300 block of South Stephenson Avenue during the mid-1880’s. George F. Seibert took over as sole manager of the Schaller & Co. Drug Store on the northeast corner of South Stephenson Avenue and Hughitt Street in mid-March, 1884. Thomas and Alfred J. Rundle were selling hardware and mining supplies from their two-story frame building by 1885. By the end of the decade the Rundle brothers had moved to their opera house building at 105-107 West Ludington Street, where the Iron Mountain Post Office now stands. The opera house was on the second floor and the hardware store below. [Gene Derwinski/Dick Ferris]
Hoping to intercept the Chapin and Ludington deposits, the ill-fated Emmett Mining Company had obtained a lease on 80 acres in Section 30 owned by the Hamilton and Merryman Company. Within three months following the Keel Ridge tragedy, Superintendent John Tyler Jones was supervising the diamond drilling operations at this exploration, where the deposit which was to become the Hamilton Mine was discovered just 40 feet from the Ludington property line. The company also began platting an addition to the village of Iron Mountain on this tract and moved 29 buildings from the abandoned Keel Ridge location to this site.

By August, 1883, plans for sinking a shaft had been completed with full knowledge that the ore body was located at least 600 feet below the surface. A shaft house was under construction in late October, and boilers and an engine from the Keel Ridge were used to facilitate the work, then down 110 feet. The 215-foot level had been reached by late January, 1884, and the completed shaft house was acclaimed as the finest on the range.
With the buildings surrounding the Chapin Mine in the background at the foot of Iron Mountain’s Millie Hill serving as a reference point, this view, looking east, shows the Hamilton Mine shaft under construction. This photograph documents early mining construction techniques before steel replaced timber. The photographer probably captured this scene in the late fall of 1883 when the shaft house and tramway were being erected. Notice how few pine trees adorn the crest of Millie Hill. [Menominee Range Historical Museum]
MENOMINEE RANGE IRON MINES CONNECTED WITH JOHN TYLER JONES

**KEEL RIDGE MINE**

SE ¼ of SW ¼ and S ½ of SE ¼ of Section 32, T40N, R29W.

Opened in 1880. Iron Mountain.

*Formerly the McKenna Mine.*

<table>
<thead>
<tr>
<th>Year</th>
<th>Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1880</td>
<td>11,496 tons</td>
</tr>
<tr>
<td>1881</td>
<td>19,511 tons</td>
</tr>
<tr>
<td>1882</td>
<td>23,425 tons</td>
</tr>
<tr>
<td>1883</td>
<td>5,033 tons</td>
</tr>
<tr>
<td>1892</td>
<td>5,997 tons</td>
</tr>
<tr>
<td>1893</td>
<td>3,298 tons</td>
</tr>
<tr>
<td>1895</td>
<td>19,441 tons</td>
</tr>
<tr>
<td>1899</td>
<td>4,900 tons</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>93,101 tons</strong></td>
</tr>
</tbody>
</table>

**HAMILTON MINE**

NW ¼ of SW ¼ of Section 30, T40N, R30W.

Opened in 1886. Iron Mountain.

*Part of Chapin Mine after 1894.*

<table>
<thead>
<tr>
<th>Year</th>
<th>Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1886</td>
<td>872 tons</td>
</tr>
<tr>
<td>1887</td>
<td>600 tons</td>
</tr>
<tr>
<td>1888</td>
<td>8,801 tons</td>
</tr>
<tr>
<td>1889</td>
<td>8,347 tons</td>
</tr>
<tr>
<td>1890</td>
<td>17,072 tons</td>
</tr>
<tr>
<td>1891</td>
<td>58,197 tons</td>
</tr>
<tr>
<td>1892</td>
<td>2,183 tons</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>96,072 tons</strong></td>
</tr>
</tbody>
</table>
The Hamilton Mine was owned by the Hamilton Ore Company, of Sharon, Pennsylvania, and was located on the N½ of the SW¼ of Section 30, Township 40, Range 30, a tract which contained 80 acres leased from the Hamilton & Merryman Company. John Tyler Jones prospected in the area in 1883 and discovered the mine that year by using a diamond drill. This early photograph, probably dating between 1886 and 1890, shows the shaft housing at the right and the trestles and tramways where the ore cars dumped the iron ore onto the stockpiles on the left. [Menominee Range Historical Museum]
HAMILTON MINE, IRON MOUNTAIN

Rock Drilling, Twelfth Level, Hamilton Mine.

The Menominee Iron Range by Walter R. Nursey, 1891, page 63
The Menominee Iron Range by Walter R. Nursey, 1891, page 64
PUMPS, THIRTEENTH LEVEL—HAMILTON MINE.

The Menominee Iron Range by Walter R. Nursey, 1891, page 98
By mid-December, 1884, the shaft was down 530 feet; six months later the 650-foot mark was reached. Having announced they would strike clean ore within 30 days, the company was very disappointed when a jasper deposit was encountered at 680 feet, but a diamond drill core indicated clean ore 70 feet below. This 9 x 12 foot shaft reached a depth of 960 feet from the collar and was on the list of producers in 1886, shipping 872 tons. By then the corporate name assumed by the company was the Hamilton Ore Company, of Sharon, Pennsylvania, with P.L. Kimberly, an iron manufacturer, the principal stockholder.

Although a force of only 30 men was originally employed at the Hamilton exploration, by 1891 over 300 miners comprised the work force.

During the fall of 1891, No. 2 shaft was being sunk at the Hamilton. Noting unusual commotion at the shaft’s collar on October 22, Superintendent Jones investigated, arriving just in time to witness miner James Biddick being brought to the surface, blinded and nearly dead.
Biddick had just about finished the last hole in a series prior to blasting when he struck a water-filled cavity, and the released pressure tossed him like a ball. At least a portion of the water came from the Ludington’s A shaft sump, and continued rising in the Hamilton’s No. 2 shaft to within 90 feet of the collar.

Since a 10-ton hoisting plant was then being installed at this shaft, plans were modified to incorporate bailers to dewater the mine. Installation was still in progress on December 31, 1891, when the Ludington’s hanging wall moved and water began entering that mine at the 11th level of A shaft at a rate of 6,000 gallons per minute. The Ludington was soon filled to the 9th level, and the Hamilton’s No. 1 shaft, connected to the Ludington’s A shaft by drifts, was also filling. The water level at the Hamilton’s No. 2 shaft was lowered by 182 feet by this second flooding!

The Ludington immediately reduced its labor force from 500 to 150 men, while the Hamilton, with both shafts flooded, laid off all its miners and most of the surface men.
JOHN TYLER JONES – HAMILTON MINE – 4
September 14, 1847 – May 4, 1928

A month after the flooding, the Ludington’s bailing operation had succeeded in lowering the water level only 10 feet. The management, losing tremendous sums daily, abandoned the mine February 6, 1892. Superintendent Bankes tendered his resignation, and the remaining 150 employees were discharged. Once the bailing operations ceased, the water in the Ludington rose at the rate of a foot an hour, reaching the 6th level by February 11.

Shortly thereafter negotiations were unsuccessfully initiated to have the two companies handle the dewatering jointly. Eventually Kimberly bought controlling interest in the Ludington Mine, and an agreement with the stockholders was reached.

Before bailing operations could begin, the 1,325-foot level of No. 1 Hamilton had to be connected with No. 2 Hamilton because No. 2 had a bailing capacity of 2,560 gallons in each of its two large bailers, while the two bailers in No. 1 only had the capacity of 500 gallons each. The dangerous work of driving the 313-foot drift which would connect these two shafts began in the winter of 1893 under the supervision of Captain Frank Carbis.
The drift, averaging 18 feet in width and 12 feet in height for its entire length, was made this size to facilitate handling the long drills with which exploratory holes were bored. These long drills were used as a precautionary measure to keep the men well away from the work area, since they anticipated encountering more water which, at that level, is under 600 pounds of pressure to the square inch, or 43 tons per square foot. The remaining 140 feet were driven in May, 1893, and when the connection was finally completed on June 1, compressed air was encountered instead of water. However, No. 2 Hamilton filled rapidly with water once the hole was made, while the water in the Ludington shafts receded 75 feet at the rate of 15 feet per hour.

By then the Ludington’s three shafts and the two Hamilton shafts were all equipped with bailers, and negotiations to begin the joint dewatering operation were completed. Captain Robert Flaherty supervised the bailing operation which began June 19, 1893. By July 14, the bailers had raised 87,017,954 gallons of water, lowering the water level by 896 feet in the Ludington and 1,325 feet in the Hamilton. The flow was then normal, and in six weeks the water was out of both mines.
When the successful dewatering of the Hamilton and Ludington shafts was accomplished in the summer of 1893, the full impact of the financial panic [economic depression] was just beginning to spread across the nation. With the depressed iron market, these mines remained closed, and General Manager John Tyler Jones had to allow them to again fill with water.

Following its sale in 1894, the Chapin continued to mine and ship ore, and began increasing its work force in the spring of 1895. In early June, The Range-Tribune exclaimed:

*It seems like old times now with the Chicago & North-Western hauling between six and seven hundred cars to Escanaba daily from this range, and the cry being heard all along the line for more cars...Thirty-two trains are operated, sixteen each way, and the daily movement of ore is over 10,000 tons.*

Beating all the Chapin’s previous records, the steam shovel loaded 113 cars in 13 hours one day in August.
The newspapers noted a verbal agreement had been made by which the Hamilton and Ludington mines would both come under the Chapin management in their late November editions. The merger became official after a meeting in Cleveland on January 6, 1896, and plans were rapidly made to dewater the two new properties. Hampered by a series of accidents to the equipment, bailing finally began May 4, and a month later the task was completed with 122,464,787 gallons of water raised.

The management soon placed an order for a Reidler pumping plant for these two mines which was installed at the 12th level of the Hamilton No. 2 shaft in a room cut into the limestone measuring 53 x 35 feet with an 18-foot ceiling. Work soon began to connect the Chapin’s D shaft with the Hamilton No. 2 shaft, and was completed in late fall, 1897.

All of the old buildings at both the Hamilton and Ludington properties were torn down as these improvements were being made, and the connection between the Chapin and Ludington mines was completed early in May, 1898.
The steam shovel was an expensive and vital piece of machinery, particularly for the larger mining companies, and was used to load stockpiled iron ore into the railroad cars. The steam shovel and crew of the Hamilton Shaft of the Chapin Mine are pictured here near the turn of the century. [Menominee Range Historical Museum]
When the Oliver Iron Mining Company rebuilt the Hamilton shaft between 1912 and 1914, electric centrifugal pumps were installed at the twelfth and then the sixteenth levels, ending the era of the Cornish pumping engine and the age of steam at the Chapin Mine. The smokestack pictured here still stands (2012) on Iron Mountain’s North Side. [Menominee Range Historical Museum]
MENOMINEE RANGE IRON MINES CONNECTED WITH JOHN TYLER JONES

LUDINGTON MINE

S ½ of SE ¼ of Section 25, T40N, R31W.

Opened in 1880. Iron Mountain.

Part of the Chapin Mine after 1894.

1880...........................................8,816 tons
1881...........................................3,374 tons
1882...........................................52,152 tons
1883........................................102,632 tons
1884........................................101,165 tons
1885.......................................124,194 tons
1886.......................................74,454 tons
1887.......................................101,653 tons
1888.......................................61,883 tons
1889.......................................116,297 tons
1890.......................................97,355 tons
1891......................................141,303 tons
1892......................................15,777 tons
1893.......................................109 tons
1894.......................................354 tons
TOTAL.....................................1,001,518 tons
These mining officials from Iron Mountain’s Ludington Mine posed for H.S. Emory, an Appleton, Wisconsin, photographer, between 1883 and 1890. They are identified as follows: (back row) William B. Catlin, surface boss; Robert Bankes, cashier and later superintendent; A.D. Moore, superintendent; Harry McDermott, master mechanic; Francis A. Brown, chief chemist; Sam Spear, bookkeeper; (front row) Captain Grey; Captain Sam Langdon; Captain Henry Shields; Morris Danielson, blacksmith; Tom Hancock, carpenter. [Menominee Range Historical Museum]
LUDINGTON MINE, IRON MOUNTAIN

Rand Drills—4th Level Ludington Mine.

The Menominee Iron Range by Walter R. Nursey, 1891, page 47
Taken by George S. Van Stone between 1893 and 1895, this view of the Ludington Mine shows a shaft house at the far left and another shaft house at the right, as well as a brick building, probably an engine house, to the left of center, and another brick or sandstone engine house to the right of the shaft house at the left. [Keen S. Scott]
Looking southeast, the Ludington Mine Location can be seen in this turn-of-the-century photograph with various mining buildings, stockpiles and the airpipe. In 1881, the Hydraulic Power Company was organized to harness the water power at the Upper or Little Quinnesec Falls with the Menominee Mining Company taking four-fifths of the corporate stock, while the Lumbermen’s Mining Company, owner of the Ludington Mine, subscribed to the remainder. By January, 1884, the Hydraulic Power Company was supplying compressed air for the Chapin Mine’s drills. A 12-inch pipe, seen here, led from the Chapin Mine to the Ludington Mine, supplying the Emmett exploration (Hamilton Mine) and the Ludington Mine with air to drive their hoisting and pumping machinery.

[Menominee Range Historical Museum]
Taken by Jorgen J. Eskil, pioneer Menominee Range photographer, in 1899 from the Ludington Mine Location looking southeast, the stores of the 200 block of East Fleshiem Street and the 100, 200 and 300 blocks of South Stephenson Avenue show Iron Mountain’s growing business district. Note the Hulst School in the upper left corner on Madison Avenue. The two-story, light-colored Sheerin House at 218 East Brown Street, just above the three stores on the 200 block of East Fleshiem Street, was operated by Frank Sheerin in 1892. At the far right the three-story structure was the Fisher Block, built by Hiram D. Fisher in 1891 on the 100 block of East Ludington Street, which housed the Commercial Bank. The buildings in the foreground were used by the Chapin Mine which at this time also encompassed the Ludington Mine and the Hamilton Mine. Note the stacks of logs on the extreme left. [Keen S. Scott]
JOHN TYLER JONES
September 14, 1847 – May 4, 1928

In the 1894 Michigan State Census, the John Tyler Jones household, living in Iron Mountain, Dickinson County, Michigan, was listed on page 270, family number 343, beginning on line number 8, as follows:

John T. Jones, male, 47 years of age
Rachael [sic] Jones, female, 41 years of age, spouse
Albert Jones, male, 17 years of age, son
Elmer Jones, male, 14 years of age, son
Carrie Jones, female, 11 years of age, daughter
Rachael [sic] Jones, female, 5 years of age, daughter
Ruth Jones, female, 3 years of age, daughter
Louisa Vielmetto, female, 15 years of age, servant
Walter Allen, male, 25 years of age, hired man

J.T. Jones’ Residence built in 1890, by N.B. Parmelee & Son, who also furnished the plans and specifications. Advertisement in the March 26, 1891 Issue of The Menominee Range, Iron Mountain’s first newspaper.
Two more children were born to John Tyler and Rachel Ann Jones during the last decade of the twentieth century. Arthur John was born November 27, 1894, and Leah Ardis – or Ardis Leah – was born in March, 1899.

Although not documented, John Tyler Jones supposedly took his family to the 1893 Chicago World’s Fair – the Columbian Exposition – to celebrate the dewatering of the Hamilton and Ludington Mines. Certainly the family would have been amazed at the immense Ferris Wheel, the invention of George Washington Gale Ferris, Jr., never suspecting that this marvel would play an important part in their lives within the next decade.

In June, 1894, John’s father, Thomas J. Jones, died in Sharon, Pennsylvania, being the oldest mechanic in that city at the time of his death.

Among the attractions at the Columbian Exposition – The Chicago World’s Fair of 1893 – was the immense Ferris Wheel, containing 36 cars, each equipped to hold 60 passengers.
MENOMINEE RANGE IRON MINES CONNECTED WITH
JOHN TYLER JONES

CLIFFORD MINE

S ½ of SW ¼ of Section 17, T40N, R30W.

Opened in **1895**. Iron Mountain.

*See* Antoine Mine/Traders Mine.

<table>
<thead>
<tr>
<th>Year</th>
<th>Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1895</td>
<td>27,931</td>
</tr>
<tr>
<td>1896</td>
<td>110,821</td>
</tr>
<tr>
<td>1897</td>
<td>98,847</td>
</tr>
<tr>
<td>1898</td>
<td>104,510</td>
</tr>
<tr>
<td>1899</td>
<td>93,025</td>
</tr>
<tr>
<td>1900</td>
<td>119,940</td>
</tr>
<tr>
<td>1901</td>
<td>63,429</td>
</tr>
<tr>
<td>1902</td>
<td>110,993</td>
</tr>
<tr>
<td>1903</td>
<td>107,886</td>
</tr>
<tr>
<td>1904</td>
<td>81,164</td>
</tr>
<tr>
<td>1905</td>
<td>138,395</td>
</tr>
<tr>
<td>1906</td>
<td>195,855</td>
</tr>
<tr>
<td>1907</td>
<td>100,996</td>
</tr>
<tr>
<td>1909</td>
<td>103,626</td>
</tr>
<tr>
<td>1910</td>
<td>91,081</td>
</tr>
<tr>
<td>1911</td>
<td>74,138</td>
</tr>
<tr>
<td>1913</td>
<td>95,310</td>
</tr>
<tr>
<td>1914</td>
<td>66,329</td>
</tr>
<tr>
<td>1916</td>
<td>113,101</td>
</tr>
<tr>
<td>1917</td>
<td>115,823</td>
</tr>
<tr>
<td>1918</td>
<td>118,494</td>
</tr>
<tr>
<td>1920</td>
<td>128,490</td>
</tr>
<tr>
<td>1925</td>
<td>9,260</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>2,269,444</strong></td>
</tr>
</tbody>
</table>
With Lake Antoine in the background, this is probably a view of Traders Mine, taken by Jorgen J. Eskil in about 1895. John Tyler Jones was superintendent of the Antoine Ore Company’s mine. [Gene Derwinski]
Thought to be Traders Mine, located to the north of Lake Antoine and also known as the Antoine Mine and later the Clifford Mine, this exceptional view must have been taken shortly after the mine opened in 1895. The timbering process in evidence at the entrance was a method of supporting an excavation by the use of timber posts and caps, laced with cribbing (timber used as supports and to prevent rock falls) and lagging (small, split timbers placed over caps or behind posts to prevent fragments of rock from falling through). To the right of the tunnel entrance two men appear to be working with Rand drills which were run by compressed air carried to the equipment by rubber hoses. The small ore cars brought the ore out of the mine using a system of tracks and were pushed by men called trammers. [Menominee Range Historical Museum]
This shaft house was probably a part of the early workings of the Traders Mine, owned by the Antoine Ore Company, with John Tyler Jones working as superintendent. [Menominee Range Historical Museum]
In the 1900 United States Census, the John Tyler Jones household, living in Iron Mountain, Dickinson County, Michigan, was listed on page 1, family number 5, as follows:

**John T. Jones**, male, white, married, born September 1847 in Pennsylvania, married 29 years, approximate year of marriage 1871, father’s birthplace England, mother’s birthplace England

**Rachel H. Jones**, female, white, married, born November, 1851 in Pennsylvania, spouse, mother of 9 children, 7 of whom are living, father’s birthplace Ohio, mother’s birthplace Ohio

**Albert G. Jones**, male, white, single, born July 1876 in Pennsylvania, son, father’s birthplace Pennsylvania, mother’s birthplace Pennsylvania

**Elmer W. Jones**, male, white, single, born October 1879 in Pennsylvania, son, father’s birthplace Pennsylvania, mother’s birthplace Pennsylvania

**Carrie Jones**, female, white, single, born February 1883 in Michigan, daughter, father’s birthplace Pennsylvania, mother’s birthplace Pennsylvania

**Rachel A. Jones**, female, white, single, born September 1888 in Michigan, daughter, father’s birthplace Pennsylvania, mother’s birthplace Pennsylvania

**Ruth Jones**, female, white, single, born October 1890 in Michigan, daughter, father’s birthplace Pennsylvania, mother’s birthplace Pennsylvania

**Arthur J. Jones**, male, white, single, born November 1894 in Michigan, son, father’s birthplace Pennsylvania, mother’s birthplace Pennsylvania

**Leah A. Jones**, female, white, single, born March 1899 in Michigan, daughter, father’s birthplace Pennsylvania, mother’s birthplace Pennsylvania
Life was exciting at the end of the Victorian Era and the beginning of the Edwardian Era for the John Tyler Jones family. Three weddings occurred within the first six years of the new century, two of them probably celebrated in their Lake Antoine residence.

**Albert Grahan Jones** married **Cora Symons**, daughter of **Oliver H. and Elizabeth J. (Moyle) Symons**, on October 10, 1900, in Negaunee, Marquette County, Michigan.


**Caroline “Carrie” Jones** married **Edwin W. McDonell**, son of **Charles F. and Martha (Light) McDonell**, on June 16, 1906, in Iron Mountain, Dickinson County, Michigan.

**J.T. Jones’ Residence built in 1890, by N.B. Parmelee & Son, who also furnished the plans and specifications. Advertisement in the March 26, 1891 Issue of The Menominee Range, Iron Mountain’s first newspaper.**
JOHN TYLER AND RACHEL (MILLIGAN) JONES RESIDENCE ON GRAND BOULEVARD, IRON MOUNTAIN, CA. 1891-1900
The John Tyler Jones family posed in at the foot of the front porch at their residence on Grand Boulevard, Iron Mountain in about 1900-1905. Those identified include John Tyler Jones, seated at left, possibly with daughter Ardis Jones; Rachel (Milligan) Jones, seated at right, and son Arthur Jones, standing at far right. [Lori B. (Strang) Sorenson]
Apparently taken at the same time as the preceding family photograph, the Jones Family children prepared their pony cart for Fourth of July Parade in about 1900 to 1905. Ardis (Jones) Blenko mentioned the pony Lady in her story of Papa and the Ferris Wheel. [Lori B. (Strang) Sorenson]
Ardis Jones and Arthur Jones, children of John Tyler and Rachel (Milligan) Jones, were photographed on their pony Lady. Ardis (Jones) Blenko mentioned the pony Lady in her story of Papa and the Ferris Wheel. [Lori B. (Strang) Sorenson]
Arthur Jones, son of John Tyler and Rachel (Milligan) Jones, posed for Iron Mountain photographer Sophus H. Mortensen in about 1899 to 1900. [Lori B. (Strang) Sorenson]
This winter scene, dated 1908 on the back of the photograph, shows the John Tyler Jones family with their horse and sleigh. John Tyler Jones and his son Arthur Jones are standing in front of the sleigh. Ardis (Jones) Blenko mentioned her mother’s horse, “sedate old Dolly,” and the “high stepping team, Dixie and Dandy” in her story of Papa and the Ferris Wheel. [Lori B. (Strang) Sorenson]
Beautiful Home.

Probably the most beautiful country home in the upper peninsula is that of Mr. and Mrs. John T. Jones on the banks of Lake Antoine. It contains about twenty acres and embraces many natural advantages. Nature has been aided very materially in the work of beautifying by Mr. Jones. This spring Mr. Jones planted some fifteen hundred fruit trees and nearly all are flourishing. He is now engaged in building a large greenhouse. In this connection it is interesting to note that the glass used in the construction of the building was used for a number of years in the Ferris wheel, which was recently destroyed at St. Louis.

J.T. Jones’ Residence built in 1890, by N.B. Parmelee & Son, who also furnished the plans and specifications. Advertisement in the March 26, 1891 Issue of The Menominee Range, Iron Mountain’s first newspaper.

Iron Mountain Press, Iron Mountain, Dickinson County, Michigan, Volume 11, Number 7 [Thursday, July 5, 1906], page 1, column 2
This souvenir card was given to passengers who rode the Ferris. When the fair opened, it carried some 38,000 passengers daily, taking 20 minutes to complete two revolutions, the first involving six stops to allow passengers to exit and enter, and the second a nine-minute non-stop rotation, for which the ticket holder paid 50 cents. It carried 2.5 million passengers before it was finally demolished in 1906. George Washington Gates Ferris, Jr., died in Pittsburgh of typhoid fever on November 22, 1896.
Ardis (Jones) Blenko, the youngest of John Tyler and Rachel Ann Jones’ children, penned a poignant memoir of the link between the Ferris Wheel of the 1893 Columbian Exposition in Chicago and the St. Louis World’s Fair of 1904 and the Jones family home on the shore of Lake Antoine in 1972. The following are excerpts from her story – Papa and the Ferris Wheel.

For Midwesterners of my vintage, there may have been interest of a mild sort in the Seattle World’s Fair, or in the future one which is to rise in New York, but our hearts belong to the past. For us there will never be any World’s Fair but one. For us, THE World’s Fair will always be the great Columbian Exposition of 1893, which in youthful, turbulent Chicago commemorated the discovery of the New World by Christopher Columbus, with replicas of the Pinta, the Nina and the Santa Maria in a turquoise lagoon beside Lake Michigan.

The odd sequence of events which links my childhood to the Ferris Wheel came about most likely because George Washington Gale Ferris, who invented the wheel, and my father were both Pittsburghers.

Mr. Ferris was well known as an engineer and bridge builder, and was called upon, with a group of engineers and architects, to devise for the coming World’s Fair some structure or attraction which could surpass the Eiffel Tower which had brought great crowds to the Paris Exposition of 1889.
Mr. Ferris came up with the design for the first huge Ferris Wheel. The idea was too bold and venturesome for most of the men responsible for the affairs of the exposition, and the committee would have none of it. Their opposition stiffened Ferris’ determination and he persisted despite discouragement and financial difficulties. He finally got the parts constructed, loaded onto freight cars, and shipped them to Chicago. There he assembled and put into successful operation the world’s first Ferris Wheel. It was not only the sensation of the 1893 Fair, but has become one of the staple rides of carnivals and amusement parks all over the world. Mr. Ferris has joined the immortals.

It rose nearly three hundred feet into the air, and instead of bobbing, bench-like seats for two people, it carried cars, each seating forty passengers. There were thirty-six of these cars and each one was enclosed with plate-glass windows. For the duration of the Fair, which unfortunately collapsed into the financial debacle known as the Panic of ’93, the Ferris Wheel was the high spot, literally and recreationally for a whole generation of Americans.

The first Ferris Wheel was eventually torn down. It was sold to a junk dealer in Chicago, in June, 1903, for $1,800. Still outstanding against it at that time were bonds amounting to $300,000 and a floating debt of $100,000.
Later the wheel was resurrected and once again went into operation at another world’s fair. This time the year was 1904 and the place was St. Louis.

After the St. Louis Fair wound up its existence, the Ferris Wheel was once more dismantled. For the world at large it disappeared into limbo. The fact that it eventually came into the possession of our family, and became part of our home seems more and more incredible as each year rolls on. Without the old photographs and newspaper clippings, even I, who remember it so well, would find it difficult to believe that my mother grew palms, lemons, grapes and flowers in its shelter, and that the delirious delight I remember, of roller skating about its concrete floor, is not a trick of imagination.

My mother loved flowers and growing things, so when the house was built, she planned for herself a small, glassy cubicle on the south side, opening off the dining room, which she called the conservatory.

There came a time of change. The lilies died down and Mamma sat around looking at catalogs of Lord and Burnham greenhouses.

Papa started to put filing cases along one end of the little conservatory cubby-hole. Later he added a small desk brought home from the machine shop down by Chartiers Creek. (Not the Pittsburgh Chartiers Creek, but our Chartiers, the outlet to Lake Antoine.) Papa moved into the conservatory and now we called it his office.
As children do, we sensed that an exciting, glamorous time was ahead. It might be even more fun than going to Chicago. Chicago was three hundred miles south, but Papa often went there, and usually he would take Mamma along or some of us children.

Then, one time, Papa went to Chicago all by himself. The morning he came home, our world almost fell apart. Ruth and Arthur went down with the surrey to meet the morning train. I, the littlest one, was left at home. I was in the kitchen with Hildy when he arrived.

The sound of steps on the porch brought me in through the buttery and when I saw the front door open, I ran to meet my dear Papa. Instead of his familiar bearded face, an alarming apparition walked in. It was wearing Papa’s hard hat, flat on top like one of Winston Churchill’s, and Papa’s clothes, but the face! To me, Papa was whiskers first of all. This newly-shaved, completely naked expanse of lips, chin, jowls and neck was strange and terrifying.

Mamma’s calm voice quieted us, “Oh, John! Why did you ever!”

“Rachel, I bought the greenhouse. I thought if we’re going to have Florida in Michigan, I’d better start by not looking like an old plug. Who wears whiskers today but real old codgers!”

“That man Ferris was a wonder,” Papa went on. “He was from Pittsburgh, too. Nothing but the best Pittsburgh Plate in that wheel. Too bad the typhoid got him so young.”
“But John, what about the greenhouse? What’s Ferris got to do with it! Did you get the little plain one or that lovely one with the dome?”

“John – which one!” She took a deep breath. “Which one?”

“Which one – why it was the buy of a lifetime. To think it came from Pittsburgh too.” Papa beamed.

Mamma sagged. Slowly her head shook from side to side. “Oh, no! What are you saying!”

“Finest in the U.S.A. Rachel, you’re going to have the finest greenhouse in the whole U.S.A. Half the price of Lord and Burnham.”

Mamma scarcely breathed. She had the calm of catastrophe.

“Not – not Lord and Burnham! John, you can’t. I didn’t really care if it was the one with the dome. What ARE you saying?”

“You will love it.” His words came with a rush. “It’s just been wrecked from the St. Louis Fair. Think of having the original Ferris Wheel – first one in the world – right here. It was the buy of a lifetime.

I figure I’ll use the girders for the roof and the glass for the windows. Imagine having a real plate glass greenhouse. It’ll be the talk of the country.”
Mamma shuddered. “That will be huge! What will it cost to heat? Remember this is the Upper Peninsula of Michigan. I only wanted a little one.”

The greenhouse which rose at the tail end of our house, in size at least, was one to make Mr. Lord and Mr. Burnham shrink with envy. It must have been at least forty feet wide and sixty feet long. The floor and foundation were of concrete, as were the big box-like beds filled with earth for flowers. An aisle ran down the center, and in the middle diverged around a monumental four-sided aquarium, elevated upon a concrete platform. Each side of the aquarium was a sheet of plate glass, about four or five feet square, set into a metal framework. Inside was a scenic contrivance of open work towers, through which the fish could swim.

The first time the aquarium was filled with water, the weight was too much for the original glass. It cracked and all the water seeped out. Nothing daunted, Papa ordered new plate glass of fantastic thickness. Goodness knows what it cost. The second time, the glass held, and water plants and goldfish were added. We fed the goldfish with worms and they grew incredibly large.

Above the concrete flower bed divisions, the panes of glass from the Ferris Wheel cars were set into vertical, hinged windows. Many of these windows had initials and hearts scratched on them — mementos of somebody’s big trip to the Fair. Across the top, Papa contrived arched metal supports and struts of reinforcing girders from the rim of the big wheel itself, to support the glass roof.

In that cold northern town of wooden boardwalks and red iron-ore streets, where there was no paving for roller skating, the possession of that large floor area of smooth concrete under glass made the place a child’s paradise.
The steps coming down from the house into the greenhouse made an ideal spot for family group pictures, and from the last Christmas when all of us were in the old house, there is a picture which shows us as we were then. We have on our best clothes and are trying to give Mr. Mortensen, the photographer, our best smiles. There are grape vines festooning the high girders of Mr. Ferris’ wheel, and drifts of southern smilax and sweet peas climb strings at the windows. There is a leopard skin rug to hide the concrete, and palms, Azaleas and Norfolk pines sit about in wooden tubs. It was the last time we were all together.

As I climbed from the old stable up the slope to the spot where the old greenhouse had stood, the last Christmas was heavy in my memory. How fast it had all changed after that! Rachel, the frail sister named for Mamma, had died soon after. [Rachel Ann Jones died June 18, 1911, at 22 years of age.] Papa’s luck had somehow run out, and all his efforts with inventions, patents and experiments only exhausted all his resources. All the older children scattered to new places and new jobs. The bank foreclosed on the mortgage.

In a few years, Mamma and Papa suddenly became very old people, and the three of us left the house beside the lake forever.

Back on the knoll, overlooking Lake Antoine, I found nothing standing of the old greenhouse but the concrete walls and pillars which had supported the arched roof. All glass and wood were gone.

As I peered over the wall to see what desolation might be left in the interior, flowers and color surprised me. In the center, where I had roller skated around the old aquarium, was a sunken blue swimming pool.
John Tyler and Rachel Ann (Milligan) Jones posed in the conservatory built from the remains of the Ferris Wheel at their home on Lake Antoine between 1905 and 1910. Note the steps coming down into the conservatory from the main house. [Menominee Range Historical Museum]
John Tyler Jones relaxed in his favorite leather chair at the foot of the steps leading to the conservatory amid the palms and other plants at his home on Lake Antoine sometime between 1905 and 1910. [Menominee Range Historical Museum]
Rachel (Milligan) Jones was seated in wicker chair in conservatory with hydrangeas blooming and leopard skin rug at her feet over another fur rug at her home on Lake Antoine sometime between 1905 and 1910. [Lori B. (Strang) Sorenson]
In 1903 John Tyler Jones actively began to prove his theory regarding the metallization of lean ores. Between 1903 and 1909 he constructed several small furnaces to test out his metallization process. In 1908, John built this experimental blast furnace to test the Step Furnace Process he developed to extract iron from low-grade ore, naming it the “Ardis Furnace” after his daughter. The furnace was intended to produce a “more nearly pure pig iron from the ore than is obtainable by the usual smelting process as practiced” with less fuel usage, and was described in Jones's 1908 patent, number 890,234, “Method for treating iron ore.”
The furnace consisted of an 85-foot long steel tube eight feet in diameter and lined with firebrick which was placed on an incline and charged with ore. The whole device was rotated by electric motors. Iron suitable for mill use was discharged from the lower end of the tube. The Chartiers Mining and Manufacturing Company erected the furnace on the city’s North Side near Jones’ residence at Lake Antoine. [WJC Photo]
The Ardis Furnace was initially a huge success, and Jones turned down multiple million-dollar offers for his patent. Additional furnaces were built in Marquette, Michigan, and Republic, Michigan, with the belief that the on-site refining of ore would save tremendously in shipping costs. [WJC Photo]
This rare postcard view, taken by Albert Quade, an early Iron Mountain photographer, probably sometime between 1910 and 1912, shows the Ardis Furnace enclosed in a building. Mining men from across the nation and beyond came to see the furnace in operation, but the experiment was plagued with financial and mechanical problems.

[WJC Photo]
The firebrick lining the tube was unable to withstand the heat of the reaction. Jones brought in consulting engineers, and some improvements were made, but the fundamental heat problem was unsolved. Jones poured more money into the project, but within two years had exhausted his personal fortune, losing everything including his house. The furnace was dismantled and sold for scrap, and the project abandoned. Jones moved on to other mining projects as a consultant, and although the Ardis Furnace was unsuccessful, elements of the technology were incorporated into later operations which successfully extracted iron from low-grade ore. [WJC Photo]
In May, 1916, the large steel tube was sold to the Thomas Iron & Steel Company of Ohio, and little of value from the $100,000 expended in experimental work remained, as the buildings were already in ruins. John Tyler Jones had established the Chartiers Mining & Manufacturing Company prior to 1910, serving as president. In April, 1925, stockholders of the Chartiers Mining & Manufacturing Company elected officers and directors to conduct the sale of the remaining property of the company, located on the North Side, and authorized the conveyance of property to the City of Iron Mountain and settlement of an award in payment as allowed at the October term of circuit court. A few months earlier the City of Iron Mountain started a condemnation suit to obtain part of the company’s land for the new filtration plant. A jury awarded the Chartiers Mining & Manufacturing Company $4,750 for the land upon which the filtration plant already stood. This award was accepted at the stockholders’ meeting and the officers were ordered to offer for sale the balance of the land upon completion of which the company was dissolved. [WJC Photo]
In the early 1970’s, plans were made to demolish the remains of the Ardis Furnace. However, the Menominee Range Historical Foundation petitioned to save the structure, and the Hanna Mining Company bought it and presented it to the Foundation. The ruins of the abandoned experimental blast furnace, located at the northeast corner of Aragon and Antoine Streets in Iron Mountain and accessible from U.S. 2, were designated a Michigan State Historic Site in 1971 and placed on the National Register of Historic Places in 1972.
In the 1910 United States Census, the John Tyler Jones household, living in Iron Mountain Ward 1, Dickinson County, Michigan, was listed on page 1, family number 5, as follows:

**John J. [sic – T.] Jones**, male, white, married, 63 years of age, born in Pennsylvania, father’s birthplace Wales, mother’s birthplace Wales

**Racheal [sic – Rachel] Jones**, female, white, married, born November, 1851 in Pennsylvania, spouse, mother of 9 children, 7 of whom are living, father’s birthplace Ohio, mother’s birthplace Ohio


**Ruth Jones**, female, white, single, born October 1890 in Michigan, daughter, father’s birthplace Pennsylvania, mother’s birthplace Pennsylvania

**Arthur Jones**, male, white, single, born November 1894 in Michigan, son, father’s birthplace Pennsylvania, mother’s birthplace Pennsylvania

**Ardis Jones**, female, white, single, born March 1899 in Michigan, daughter, father’s birthplace Pennsylvania, mother’s birthplace Pennsylvania

**Emily Anderson**, female, white, servant, 21 years of age, born in Sweden and immigrated to the United States in 1909, father’s birthplace Sweden, mother’s birthplace Sweden
JOHN TYLER JONES
September 14, 1847 – May 4, 1928

Daughter Rachel Ann Jones died June 18, 1911, in Iron Mountain.

In 1913 the John Tyler Jones family, having lost their home, move to Marquette, Marquette County, Michigan, where Jon built a furnace in 1914.

John went to Salt Lake City, Utah, and built another experimental furnace. He then returned to Republic, Marquette County, Michigan, where he superintended the construction of his fourth experimental blast furnace for the metallization of low grade ores.

When America entered the World War in 1917, Jones devoted much of his time to experimental work for the United States government, concentrating on metal alloys. He pursued this experimentation later in Minnesota, and during the later months of the war at Knoxville, Tennessee.

In 1920 John returned to Marquette, retiring from active work and devoting much of his time to his private research and experimental studies.

John and Rachel returned to Iron Mountain in September, 1925, and spent their time between Marquette, Sharon, Pennsylvania and Iron Mountain.

On December 6, 1926, Rachel Ann (Milligan) Jones died at the home of her son Arthur J. Jones at 306 West C Street, Iron Mountain, having been in ill health for eight months.

Between 1927 to 1928, John spent his time in Marquette, Sharon, Pennsylvania, and Iron Mountain, but resided the greater part of the time with his son and daughter-in-law, Mr. and Mrs. Arthur Jones, 306 West C Street.

John Tyler Jones died May 4, 1928, at the home of his sister in Sharon, Pennsylvania. His body was shipped back to Iron Mountain, arriving on May 7, and taken to the home of Arthur J. Jones. John’s funeral was held May 8 at the Holy Trinity Episcopal Church in Iron Mountain, and he was buried in Cemetery Park.
JOHN TYLER JONES – GRAVES AT CEMETERY PARK
September 14, 1847 – May 4, 1928

LARGE FAMILY MARKER
JONES

FATHER
JOHN TYLER JONES
1847-1928

MOTHER
RACHEL MILLIGAN JONES
1852-1928

RACHEL ANN JONES
1888-1911

DOLSIE BERGAN JONES
1895-1934

ARTHUR J. JONES
1894-1969

RUTH JONES
1908-1997

ELIZABETH JONES SIMPSON
1903-1962

ALBERT GRAHAN JONES
1876-1953

CORA SYMONS JONES
1877-1950
THE CHILDREN OF
JOHN TYLER AND RACHEL ANN (MILLIGAN) JONES
Born in Sharon, Pennsylvania and Iron Mountain, Michgian

Albert Graham Jones – born July, 1876, in Pennsylvania; married Cora Symons, daughter of Oliver H. Symons and Elizabeth J. Moyle, on October 10, 1900, in Negaunee, Marquette County, Michigan; lived in Detroit, Michigan (children John I. Jones and Grace E. Jones)

Elmer William Jones – born October, 1879, in Sharon, Pennsylvania; married Gertrude E. Crowell, daughter of Joseph Addison Crowell and Leonora A. Schumacher, on September 5 (or September 2), 1903, in Iron Mountain, Michigan; lived in Marquette, Michigan (daughters Dorothy, Gertrude and Patricia)

Caroline “Carrie” Jones – born February, 1883, in Michigan; married Edwin W. McDonell, born in Kentucky in 1880, son of Charles F. McDonell and Martha Light, on June 16, 1906, in Iron Mountain, Michigan

Rachel Ann Jones – born September 3, 1888, in Iron Mountain, Menominee County, Michigan; died June 18, 1911, in Iron Mountain, Michigan

Ruth Jones – born October 17, 1890, in Iron Mountain, Menominee County, Michigan; married Paul J. Lewis; lived in Yakima, Yakima County, Washington (daughter Pauline)

Arthur John Jones – born November 27, 1894, in Michigan; married Dolsie Bergan; lived in Iron Mountain, Michigan; died in January, 1969, in Iron Mountain, Dickinson County, Michigan

Leah Ardis (or Ardis Leah) Jones – born March, 1899, in Michigan; married Walter J. Blenko, son of William Blenko and Sarah Balman, on September 21, 1921, in Marquette, Marquette County, Michigan; Mrs. Walter J. Blenko, lived in Pittsburgh, Pennsylvania; died May 20, 1996, in Allison Park, Allegheny County, Pennsylvania

Harry Jones – deceased by 1895

Margaret Jones – deceased by 1895
THE END
John T. Jones was born in Pittsburg, Pennsylvania, September 14, 1847, son of Thomas J. and Margaret (Williams) Jones, both natives of Wales.

Thomas J. Jones settled at Pittsburg when he was thirteen years of age.

Both Thomas J. and his father, John, were iron workers, as was also our subject’s maternal grandfather, Mr. Williams.

Grandfather Williams emigrated from Wales to this country and located at Pittsburg when his daughter, Margaret, the mother of John T. Jones, was four years old.

In that city the parents of our subject grew up and were married, and as the years passed by sons and daughters came to brighten their home, eleven in all, nine of whom reached maturity, John T. being the third born and eldest son.

The father died in Sharon, Pennsylvania, in June, 1894, at the age of seventy-seven years. At the time of his death he was the oldest mechanic in that city.

John T. Jones spent the first twenty-three years of his life in Pittsburg. He attended school until he was twelve years old and then commenced work in the rolling mills as an apprentice to the trade of millwright and engineer. His father being a master mechanic, young Jones came naturally to this work and ere long became an expert.
In 1869 he went to Sharon, Pennsylvania, where he had charge of the machinery and furnaces of the Keel Ridge Furnace of Sharon.

He remained there until June, 1881, when he came to the Menominee Range and located at Keel Ridge, as superintendent of mines, having under his supervision the Emitt [sic – Emmett], Keel Ridge, Iron River, and Ludington & Hamilton mines. He was the first to prospect for the last named mine.

He has also been connected with various other mines, and has done much to advance the mining interests of this section of the country, and is well and favorably known as an authority in his line of work.

Mr. Jones and his family occupy one of the finest and most elegantly equipped homes in Iron Mountain.

This residence was built by him in 1891, at a cost of $7,000. He was married, in 1871, to Miss Rachel A. Milligan, a native of Pittsburg and a daughter of John Milligan, of that city, the Milligans being a prominent Quaker family. They have had eight children, six of whom are living, viz: Albert, Elmer, Carrie, Rachel, Ruth and Arthur. Harry and Margaret are deceased.

Politically, Mr. Jones is in harmony with the Republican party, and has served as a member of the City Council. He is identified with Iron Mountain Lodge, F. & A.M.
In 1869, Samuel Kimberly & Co. built the Keel Ridge blast furnace near the rolling mill in Sharon, Pennsylvania. Known as the Keel Ridge Iron Company, the firm was in charge of the new blast furnace which had the capacity of producing thirty-five tons of pig iron daily.

In 1873 the firm of Kimberly, Carnes & Co. bought the Keel Ridge blast furnace and added it to their mill. The firm name became P.L. Kimberly & Co.

On October 19, 1870, John married Rachel Ann Milligan, daughter of John Milligan, probably in Pittsburgh, Pennsylvania. Rachel was also a native of Pittsburgh.

John went to Sharon, Pennsylvania, in 1874 to set up machinery for the Keel Ridge Furnace, and was employed there at Middlesex and other furnaces until 1881.

The Atlantic Iron Works began in 1867, under the management and proprietorship of Alexander, Ashton & Co. When first started they consisted of four boiling furnaces, one heating furnace and eighteen nail machines, with a capacity of eight tons of muck bar iron per day. In 1868 P. L. Kimberly bought an interest and the firm was known as Kimberly, Ashton & Co. Various improvements were made up to February 21, 1871, when Col. James Carnes bought Ashton’s interest. The firm name then was Kimberly, Carnes & Co., and so continued for more than ten years, when Carnes sold his interest to Kimberly and retired from the business. The firm name has been continued to the present day [1888] as P. L. Kimberly & Co., the individual partners being P. L. Kimberly, T. M. Sweeney, E. Roberts, R. F. Wolfkill and William Roberts.

In 1869 Samuel Kimberly & Co. built near the rolling-mill the Keel Ridge blast furnace, which has the capacity of producing thirty-five tons of pig iron daily. This firm was known under the designation of the Keel Ridge Iron Company. In 1873 the firm of Kimberly, Carnes & Co. bought this furnace and added it to their mill, and it is yet operated in connection therewith. The Atlantic Works have thirty-two puddling furnaces, eight heating furnaces, six trains of rolls and forty nail machines. They use natural gas for fuel, and produce bar, plate, hoop and rod inn, and nails.
SAMUEL KIMBERLY
November 25, 1817 – February 25, 1885

SAMUEL KIMBERLY, deceased manufacturer, was born near Salem, Ohio, November 25, 1817, and was a son of Amos E. Kimberly, also a native of the Western Reserve. Samuel was reared in Columbiana County, and spent his early manhood near Austintown, Ohio. About 1861-62 he became interested in the development of the coal fields near Sharon, removing to that town in 1862, and at once becoming one of its most prominent business men. With the late Henry Forker, of Sharon, and Myron Arms, of Youngstown, Ohio, he opened the Keel Ridge Bank in 1863, one of the most successful mines ever operated in Hickory Township. He was afterward interested with Enoch Filer and others in the Mount Pleasant, Hickory, Lackawannock and other mines. About 1865 he bought an interest in the Westerman Iron Company, which he retained several years. In 1860 he built the Keel Ridge Furnace, now owned by his son, F. L. Kimberly. He also, had large interests at New Castle, where, in 1872, he purchased the Etna Furnace, which he operated successfully for several years. At different times he was interested in the Wampum Furnace, the Eagle Furnace, at Youngstown, Ohio, and other enterprises. The great depreciation of property and securities following, the panic of 1873 compelled him to close out his interests here in 1878 and a year later he removed to the West, finally locating at Geneva, Ill. After leaving Sharon he gave his attention mostly to iron ore mining, and at the time of his death was president of the Emmett Mining Company, whose offices are in Sharon. Mr. Kimberly was twice married, first to Miss Minerva Lanterman, of Austintown, Ohio, who left at her death a family of three sons and one daughter: Amos E., German A., Peter L. and Mrs. Kate E. Murdock. He died February 25, 1885, at his home in Geneva, Ill., in his sixty-eighth year, where his widow still resides. Mr. Kimberly was a man of most active business habits, readily grasping at once the scope and details of large transactions, often involving many thousands of dollars. In politics he was an ardent Republican, and took a deep interest in the success of that party.