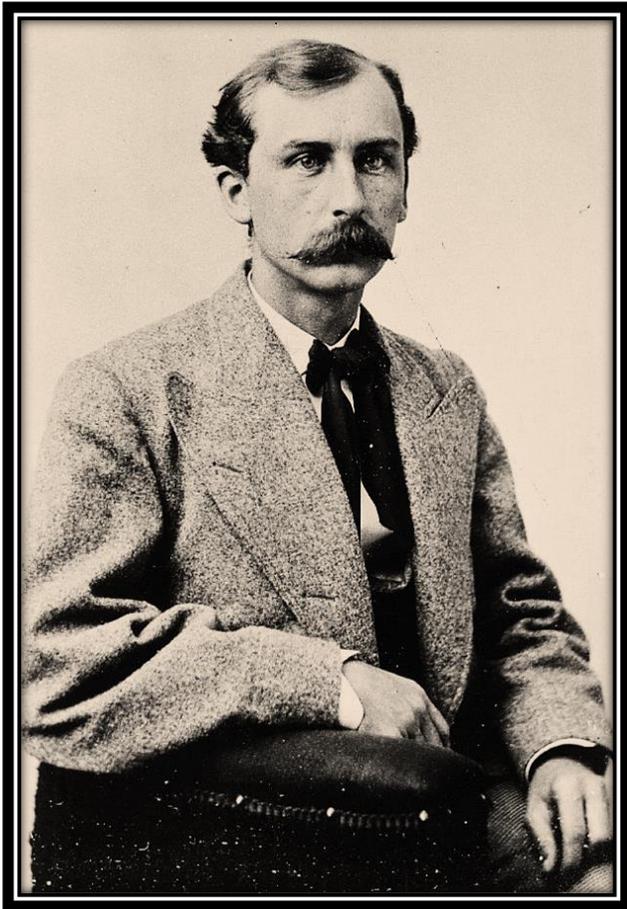


MENOMINEE RANGE MEMORIES 12: DR. NELSON POWELL HULST, MENOMINEE RANGE PIONEER

By William J. Cummings, Menominee Range Historical Foundation Historian

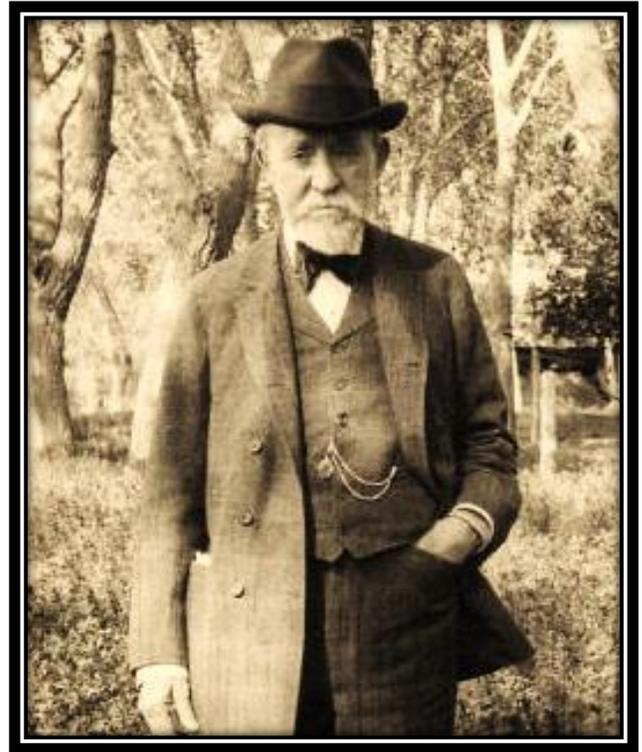


Dr. Nelson Powell Hulst (1842-1923)
[Menominee Range Historical Museum]

Dr. Nelson Powell Hulst (1842-1923), son of Garret and Nancy (Powell) Hulst, was born in East Brooklyn, New York, on February 8, 1842. When he died in Milwaukee, Wisconsin, on January 11, 1923, he was said to be the “greatest American authority on iron.”

Raised in Alexandria, Virginia, and Montgomery County, Maryland, Hulst entered Yale College in 1863, graduating in 1867. Two years later he completed the course in mine engineering at the Sheffield Scientific School. Continuing his studies at the same institution, he earned his doctorate.

In September, 1870, Hulst became a chemist and engineer for the Milwaukee Iron Company.



James John Hagerman (1838-1909)
[Internet]

Sometime in 1871, James John Hagerman (1838-1909), the Milwaukee Iron Company’s general manager, read a pamphlet describing the mineral and timber lands owned by the Portage Lake & Lake Superior Ship Canal Company in the western Upper Peninsula.

The Milwaukee Iron Company manufactured new iron rails out of worn out iron rails and other wrought scrap iron for the railroads which began expanding rampantly throughout the United States after the Civil War ended. Between 1865 and 1890, railroad expansion west of the Mississippi River alone amounted to 70,000 miles of track, each mile requiring 400 rails.

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England was producing a new type of rail made of Bessemer steel. These rails were eight to fifteen times as durable as iron rails, making the sudden network of railroads and steel railways practical.

Bessemer steel rails had to be imported, as nobody in the United States at the time knew how to build a Bessemer steel works.



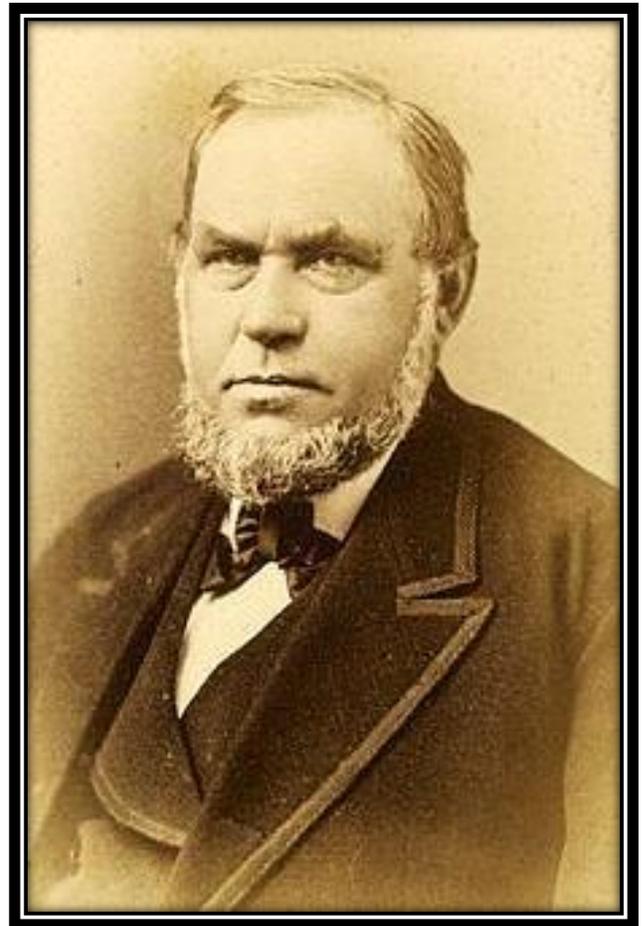
Captain Eber Brock Ward (1811-1875)
[Internet]

The Milwaukee Iron Company's president, Captain Eber Brock Ward (1811-1875), was able to convince congress to pass a \$28 per ton duty on Bessemer steel rails in the early 1860's. Once the tariff was passed, Ward and two other businessmen brought European technicians to

Wyandotte, Michigan, where they built a Bessemer steel works in 1864. Attempts to roll steel ingots into rails at the Wyandotte mill failed, as did the company, but many valuable lessons were learned.

Both Ward and Hagerman were aware that the days of iron rails were numbered, and that the soft, phosphorus-free iron ore necessary for successful Bessemer steel production was scarce.

Realizing that the future of the Milwaukee Iron Company depended on extensive supplies of this high grade ore, the two men decided extensive explorations needed to be undertaken to secure the necessary raw materials.



Harrison Ludington (1812-1891)
[Internet]

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In 1872, iron ore specimens from the Breen brothers' discovery at Waucedah on the Menominee Iron Range had reached Wisconsin's Governor Harrison Ludington, who forwarded the samples to the Milwaukee Iron Company, where Hulst's analysis proved them to be of exceptionally high quality.

Hagerman sent Hulst to Menominee County, Michigan, in June of that same year to determine the commercial value of the iron ore deposits in that relatively uncharted region. Thomas Breen served as Hulst's guide. In addition to examining the Breen brothers' exploration, Hulst found high quality ore at Section 10, which later became the Breitung Mine (later the Vulcan Mine), and also at John Lane Buell's exploration, which became the Quinnesec Mine.

Although he found no Bessemer-quality iron ore deposits on the Portage Lake & Lake Superior Ship Canal Company's land during this first exploration, he did find indications that iron ore deposits existed on those lands. When he reported his findings to Hagerman, Hulst concluded further explorations should be conducted.

None of the promising land could be purchased, but all of it could be leased on a royalty basis. Hagerman, along with John Henry Van Dyke (1823-1909), the company's vice-president, secured leases on these properties which gave the Milwaukee Iron Company the right to explore for one year, paying a royalty of fifty cents per ton for the first 10,000 tons extracted annually, whether or not that amount was extracted, or else forfeit the lease.

Hulst engaged Lewis Whitehead, of Negaunee, as chief of his party of explorers when he returned to the range in the fall of 1872. Whitehead left Negaunee with a twelve-man crew on September 18,

traveling by tugboat from Escanaba to Menominee, and then following the river by road for sixty miles to the Breen brothers' exploration. Whitehead's party arrived September 23, finding a camp large enough for twenty men had already been prepared by Hulst's men. Whitehead noted that of the few test pits which had been sunk by that time, one was in brown hematite.

Whitehead and his crew began erecting a forty-man camp at Breitung, later known as Vulcan, on October 15. At the same time, a supply road was cut between the Breen and Breitung explorations, and another supply road was cut to the mouth of the Sturgeon River, where a logging camp belonging to the New York Lumber Company and later acquired by the Menominee River Lumber Company was already established. All supplies, mail and the doctor came from Menominee to Breitung. Teams were allowed seven days to make the round trip of about 120 miles.

By New Year's Day, 1873, the Breitung camp consisted of a dining shack, a sleeping shanty, a blacksmith's shop, a supply shed and a 10 x 12 foot office, all built of logs caulked with moss and covered with cedar shakes. Since the camp was located in the midst of a dense forest and swamp, the men were plagued by tormenting flies and mosquitos during the warmer months.

Hulst sent exploring parties of five to ten men all over the range during the summer of 1873. Clark Roland was foreman at Section Ten, while Daniel Bundy worked as assistant explorer, dividing his time between Hulst and Whitehead as section lines were run, topography charted and new camps located.

A wagon road, known as the Iron Road, was surveyed and cut to Felch Mountain from the Breitung camp, a distance of 23 miles, at a cost of \$1,300. Camps were

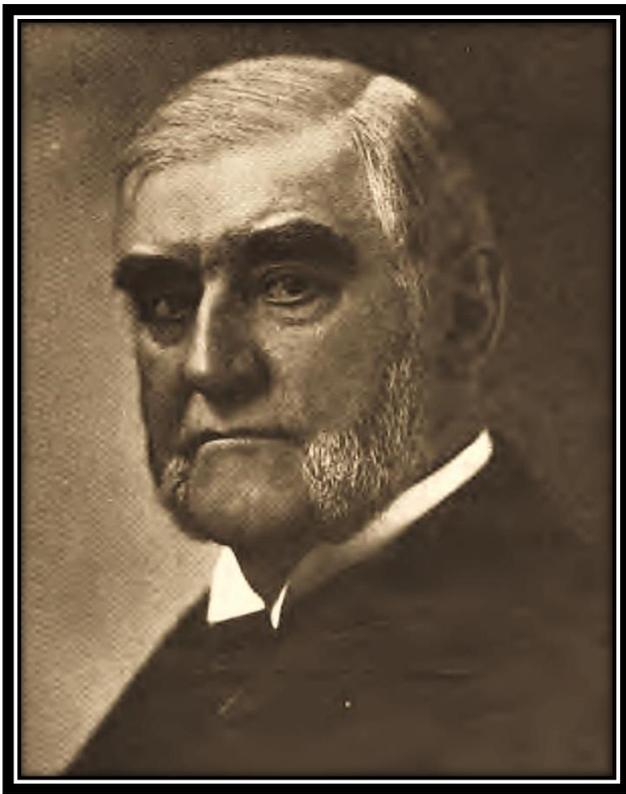
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constructed in this area, and, in the fall, shipping ore was found at what became the Metropolitan Mine.

Late that same year Hulst tested the Iron Mountain or Ludington property, Dickey's homestead west of Quinnesec and the Curry Mine property east of Norway. However, at this time, only three points on the range showed shipping ore: the Breen, the West Vulcan and the Metropolitan.

Hulst's explorations had proved iron ore deposits of sufficient quantity and quality existed to justify petitioning the Chicago & Northwestern Railway Company to deflect the railroad then under construction from Marinette to Escanaba to accommodate the new iron fields to the north. Hagerman and Van Dyke succeeded in convincing railway officials Albert Keep (1826-1907) and Marvin Hughitt (1837-1928) to do so.



Marvin Hughitt (1837-1928)
[Internet]

Plans for the immediate construction of a branch road to the Breen Mine were made in the fall of 1872, and six miles of right of way were soon cut from Powers Station westward. Whitehead noted that by November 1 this right of way extended two-thirds of the way to the Breen Mine, and construction camps had been built.

Throughout the first half of 1873 prices for commodities and labor continued to rapidly increase as the postwar inflationary bubble in the United States prepared to burst during General Ulysses S. Grant's second term as president. Signs of financial trouble appeared in the money markets of Vienna, Berlin, Paris and London.

On September 18, Jay Cooke & Company, a major component of the United States banking establishment, declared bankruptcy, setting off a chain reaction of bank failures nationally and temporarily closing the New York stock market. Factories began to lay off workers as the United States slipped into depression.

By November 1873 some 55 of the nation's railroads had failed, and another 60 went bankrupt within the year. Construction of new rail lines, formerly one of the backbones of the economy, plummeted from 7,500 miles of track in 1872 to just 1,600 miles in 1875. Some 18,000 businesses failed between 1873 and 1875. Unemployment peaked in 1878 at 8.25%. Building construction was halted, wages were cut, real estate values fell and corporate profits vanished.

When the Panic of 1873 struck, three Bessemer steel works were in operation in the East, and three additional mills were about to open in the Midwest. Since the demand for new railroads virtually disappeared following the Panic, these steel mills were able to supply the existing railroads, now interested in purchasing only

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steel rails. The death knell tolled for the iron rail business in the United States.

In the spring of 1874, Hulst's exploration crews were disbanded as the three companies which invested in these explorations withdrew their support. By then, the cost of these explorations totaled approximately \$80,000, the Milwaukee Iron Company's share amounting to \$32,000.

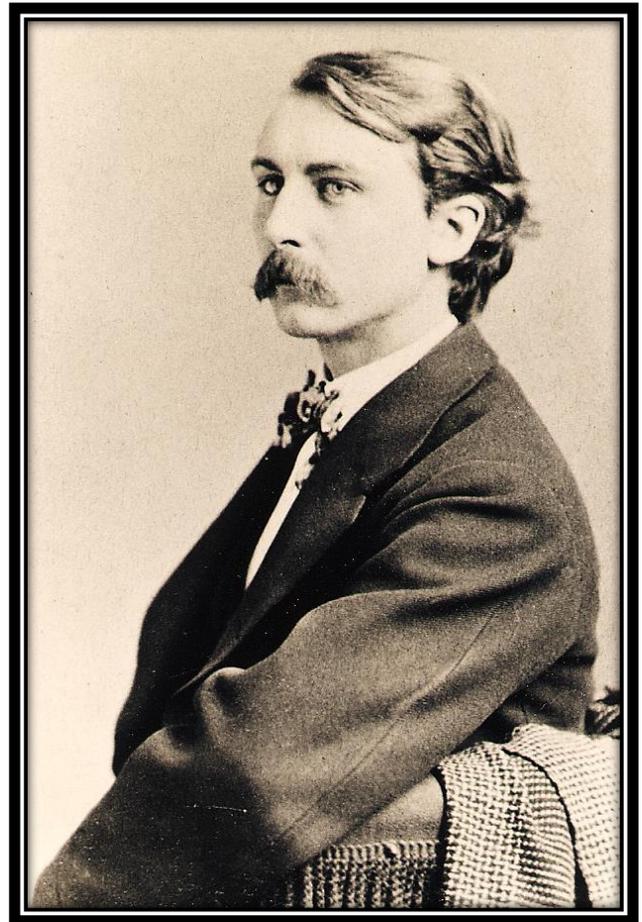
Although James John Hagerman (1838-1909) worked desperately to save the Milwaukee Iron Company, the sudden death of Captain Eber Brock Ward, president of the company, in January, 1875, complicated matters. At the first meeting of the company's stockholders following Ward's death, Hagerman strongly recommended maintaining the mining leases, stating he considered them the company's most valuable asset, provided the railroad was extended to the mines. The stockholders then appointed a committee to investigate the matter.

Hagerman notified the committee members that if the leases were allowed to expire, he and John Henry Van Dyke (1823-1909), the company's vice-president, would renew them for their personal benefit. Since the committee recommended risking no additional money in the venture, Hagerman and Van Dyke chartered the Menominee Mining Company in 1875, renewing the leases in its name.

The Milwaukee Iron Company defaulted September 1, 1876. About two months after the company went into receivership, arrangements were made for Hagerman, Van Dyke, and George L. Graves and W.H. Osborne, both brothers-in-law of Hagerman, to lease and continue to operate the company.

Until the North Chicago Rolling Mills Company purchased the Milwaukee Iron Company fifteen months later, Hagerman and his associates profitably ran the

business, netting \$115,000 – money which allowed Hagerman and Van Dyke to begin the Menominee Mining Company's operations.



Dr. Nelson Powell Hulst (1842-1923)
[Menominee Range Historical Museum]

In 1877, soon after the failure of the Milwaukee Iron Company, Dr. Nelson Powell Hulst (1842-1923) was named superintendent of mines for the Menominee Mining Company.

The first eighteen miles of the Menominee River Railroad were completed to Vulcan by June 17, 1877. A shipment of 25 carloads of ore was made from the Breen Mine September 2.

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On September 12 the first carload of freight, consisting in part of hay and bar iron, arrived in Vulcan, as did the following Menominee Mining Company officials: Dr. Nelson P. Hulst, general superintendent; Augustus C. Brown (1833-1890), business manager; Dr. Milton Chapin Belknap (1852-after 1940), of Negaunee, company physician; and Henry Fisk, bookkeeper.

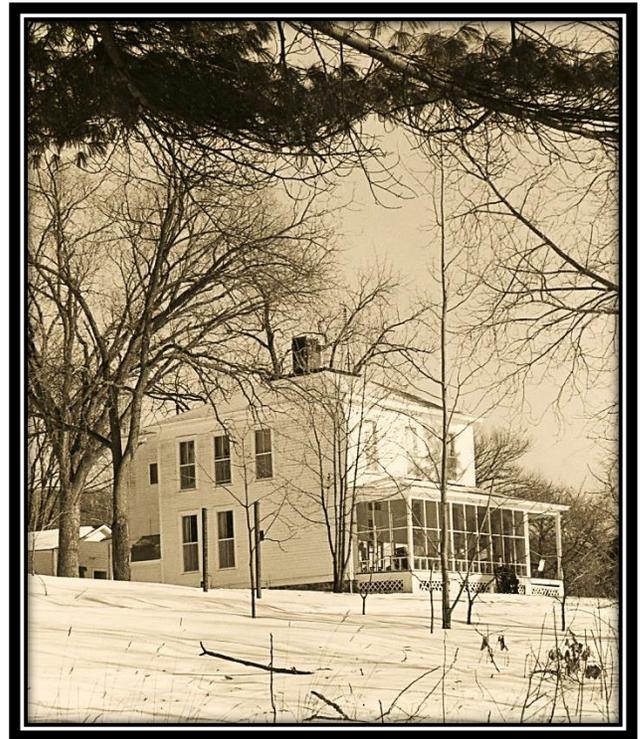


Florence (Terry) Hulst (1851-1942)
[Menominee Range Historical Museum]

On May 12, 1875, Hulst married Florence Terry, who was born in Hartford, Connecticut on August 16, 1851, the daughter of Mr. and Mrs. Frank H. Terry. The Terry family moved to Milwaukee in 1856, when that city was little more than a

village with unpaved streets, with cows and pigs roaming at large and Indians going door to door peddling fish.

In the spring of 1878 Hulst moved his family to Escanaba, where they lived until the completion of a house at the Vulcan Mine location. The house, built by the Menominee Mining Company, was "situated in a clearing in the pine forest, with giant trees of the first growth on three sides of us, and on the fourth a little lake [Lake Hanbury] below the slope on which the building was erected," according to Mrs. Hulst.



On December 1, 1878, Dr. Nelson Powell Hulst and his wife Florence moved into this residence with their two young sons, Henry and Clarence. Erected by the Menominee Mining Company, the home still stands on Central Boulevard, Vulcan. Joseph and Jacelyn Sade were owners when the booklet *Vulcan 1920 Revisited* was published in 2008.

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Florence (Terry) Hulst (1851-1942) recounted her experiences when living in Vulcan in 1878-1881 in an article entitled "Pioneer Life on the Menominee Iron

Range" which appeared in *The Wisconsin Magazine of History*, Volume VII, 1923-1924. Florence recounts her experiences in the following excerpts:



Construction on James John Hagerman's house in Vulcan was under way in May, 1880, in Vulcan. Hagerman, president of the Menominee Mining Company, occupied the west wing when they were on the range. The Franklin Copelands, seated here with their daughter Gertrude at the center of the porch, lived in the rest of the house. Captain Lewis Whitehead is seated at the far right and Dr. Nelson Powell Hulst is second from left. Others in the photograph are unidentified. The house was later the girlhood home of Charlotte Armstrong (1905-1969), daughter of Frank and Clara (Pascoe) Armstrong and an internationally recognized suspense novelist. Erica Judy was the owner when the booklet *Vulcan 1920 Revisited* was published in 2008. [*Menominee Range Historical Museum*]

About December 1, 1878, with the first fall of snow, Mrs. Hulst and their two little boys, Henry and Clarence, moved to

Vulcan. Their household goods had already been shipped, and Hulst, with the assistance of one or two of his men, "had

MENOMINEE RANGE MEMORIES 12: DR. NELSON POWELL HULST, MENOMINEE RANGE PIONEER

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got the new house in sufficient order so that we could begin to live comfortably from first arrival.”

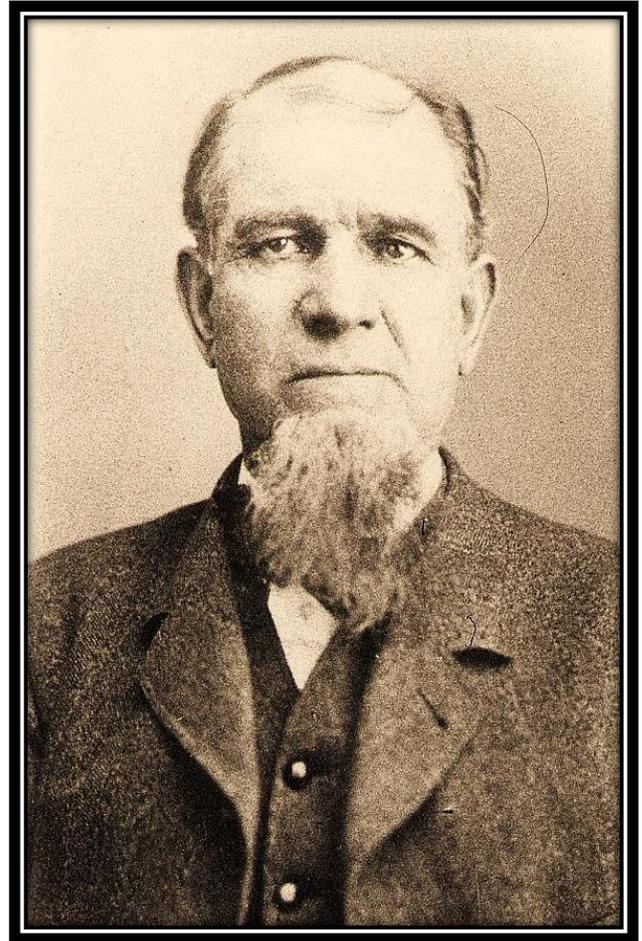
“All through that first winter at Vulcan the mining work progressed, becoming more and more interesting as new pits were opened and more shafts sunk. The Vulcan mine was getting deeper and deeper, the East Vulcan was discovered, and before summer the Norway, Cyclops, and Quinnesec mines became busy scenes of activity, while the ore trains were constantly getting longer and running more frequently. The spur track, or Menominee River Railroad as it was called, was a section of road extending west from Powers, on the main line of the Chicago and Northwestern, to Vulcan, a distance of twenty miles. Later it was built ten miles farther to Iron Mountain, the site of the Chapin mine.”

Iron Mountain’s Chapin Mine, considered one of the world’s great iron mines, could have long remained undiscovered without the determination of Hagerman and Hulst.

Hulst had been aware of the rock outcropping six miles west of Quinnesec at a place known as “iron mountain,” located on Section 30, for some time. Although some said this outcropping was iron ore, Hulst maintained it was only a pointer to where the ore ought to be.

Hagerman, trusting in Hulst’s scientific expertise, first attempted to buy, and finally succeeded in leasing the land from Henry Austin Chapin (1813-1898), of Niles, Michigan, in the spring of 1879. The ten-year lease allowed the Menominee Mining Company to make explorations on Chapin’s land until October 1, and to test the ore found thereon to determine whether the quality and quantity of ore was such as to be profitably mined. If results proved negative, the company was not bound by

the lease which actually went into effect August 1, 1880.



Captain John Wicks (1820-1908)
[Menominee Range Historical Museum]

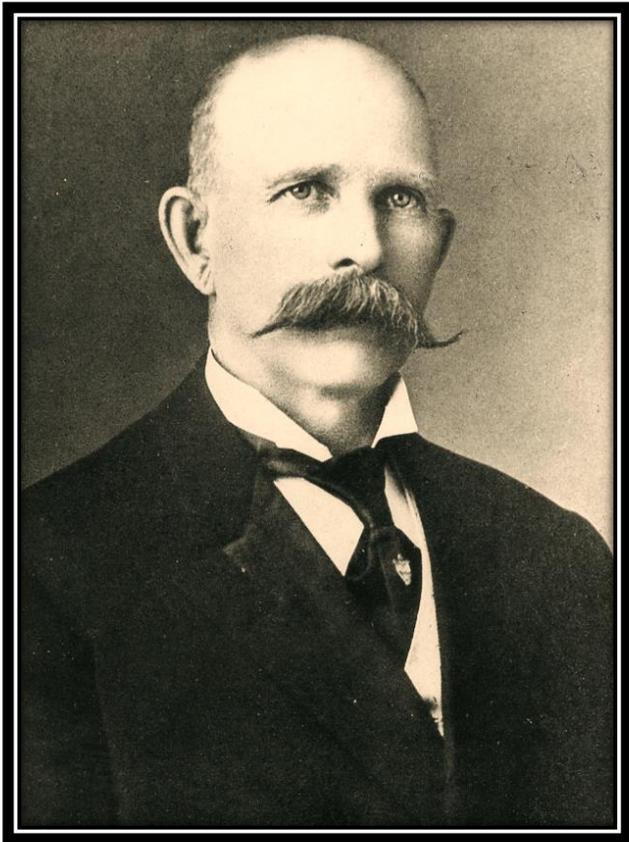
Under the leadership of Captain John Wicks, Hulst sent a crew of seven men, including Wicks’ son-in-law, Captain Elisha Morcom, John Fredricks and Charles J. Osterberg, to the Chapin site from Quinnesec. The contingent set out through the wilderness July 5, 1879, with a wagon loaded with tools, tents, boards and provisions pulled by four mules.

The crew began sinking shafts in the sandy slope of today’s Millie Hill which ran down to the cedar swamp upon which much of Iron Mountain’s business district was

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later built. Several unsuccessful shafts were sunk, and some Menominee Mining Company officials wanted to cease operations due to the expense involved. But Hagerman's faith in Hulst prevailed, and he bargained with these officials, agreeing to stop operations on Section 30 if, after one last shaft was sunk 200 feet west of the previous shaft, no ore was found. Ninety feet deep in sand, this last shaft took months to sink and was very costly, but it landed in the very heart of the great Chapin ore formation.



Charles J. Osberberg (1856-1944)
[William J. Cummings]

As winter approached, Captain Wicks' crew of pioneer miners often had to sweep the snow from the table before eating breakfast and continued to live in their

tents, anxiously awaiting the construction of a house where they could secure board. Building operations commenced both at the mine location and the newly-platted townsite in early winter. Just before Christmas their hopes were realized. Benjamin Marchand opened a boarding house which was crowded to the limit until Jerome Rayome opened another house two weeks later.

In a letter dated December 15, 1879 from James John Hagerman, president of the Menominee Mining Company, to Mrs. Hulst, she was praised for her willingness to live so far from the refinements to which she was accustomed and was duly honored for her many sacrifices, as follows:

The time is come when we must give a name to the new town in Wisconsin at the end of the Railroad now building, and to the new mine in the vicinity, now called the Eagle, but which name we do not wish to keep, as there is already an Eagle P.O. in Wisconsin. The Company owns all the land around the lake, where the town will be located. It will be a lively town. We shall put an anti-whiskey clause in all deeds and we expect it will be as much noted for its temperance and morality as for its – well, anything the future may develop. We all wish to call the new town and the mine Florence, to honor the first white woman who had courage enough to settle (for a while) in that rugged country. I mean the first white woman known to us. Will you permit your name to be used?

Thus the mine, town and later the county of this settlement in northeastern Wisconsin were named.

The first winter most of the work on the first seven shafts was completed under the supervision of Wicks and Morcom. The mining company brought an engine to the site in the early winter which Osterberg operated, continuing as stationary engineer

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for the company until 1884. By the end of 1880, eight shafts, numbered respectively from east to west, had been sunk, and shafts 3, 5, 6, 7 and 8 were active. By 1882 two additional shafts had been sunk.

In her reminiscences for the winter of 1880-1881, Florence Hulst noted:

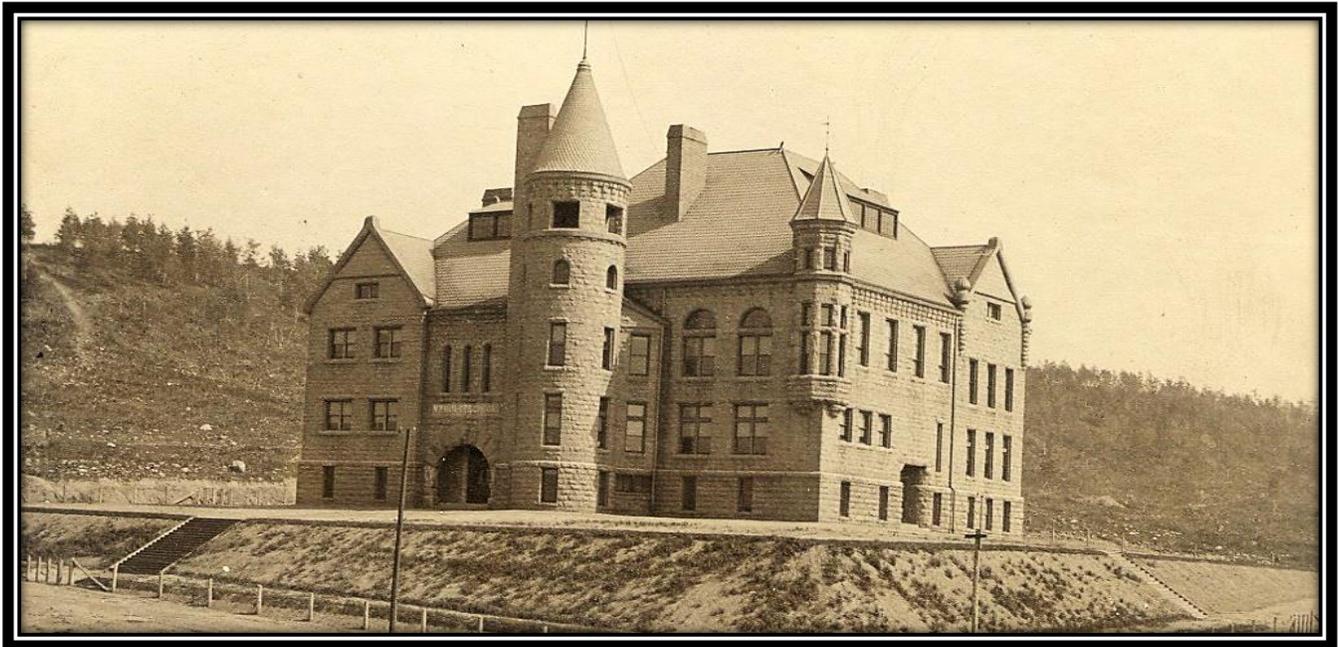
“The Florence mine, twenty-five miles distant, had been added to the company’s holdings and the work of the superintendent was too exacting for one man. Sleepless nights and frequent severe headaches made us feel that he must have rest and relief at least for a time. The doctor finally warned him that he must resign his duties for a year. With almost heart-breaking reluctance he handed in his resignation and we broke up the home in the pine forest

where we had spent nearly four happy, profitable, and interesting years. To part with the Chapin mine Mr. Hulst said was almost like giving up a child.

“The mine officers gave Mr. Hulst a banquet at the Quinnesec opera house, where he was presented with a silver service, and on a later date they invited him and his wife to a farewell reception at the same place.

In 1887, as manager of the Pewabic Mining Company, he opened up the Pewabic Mine in Iron Mountain.

The imposing granite high school built on Madison Avenue in Iron Mountain in 1891-1892 was named the N. P. Hulst High School, usually referred to simply as the Hulst School.



Construction of the Nelson P. Hulst High School on Madison Avenue at the top of East Ludington Street began in October, 1891. Each block of gray granite, quarried at Amberg, Wisconsin, was fitted and numbered at the quarry and reassembled at the Madison Avenue site. On May 10, 1892, the Iron Mountain School Board decided to name the new building in honor of the then general manager of the Pewabic Mine, recognizing the role he played in the development of the Menominee Iron Range mines. The school fell to the wrecker’s ball in April, 1949. *[Menominee Range Historical Foundation]*

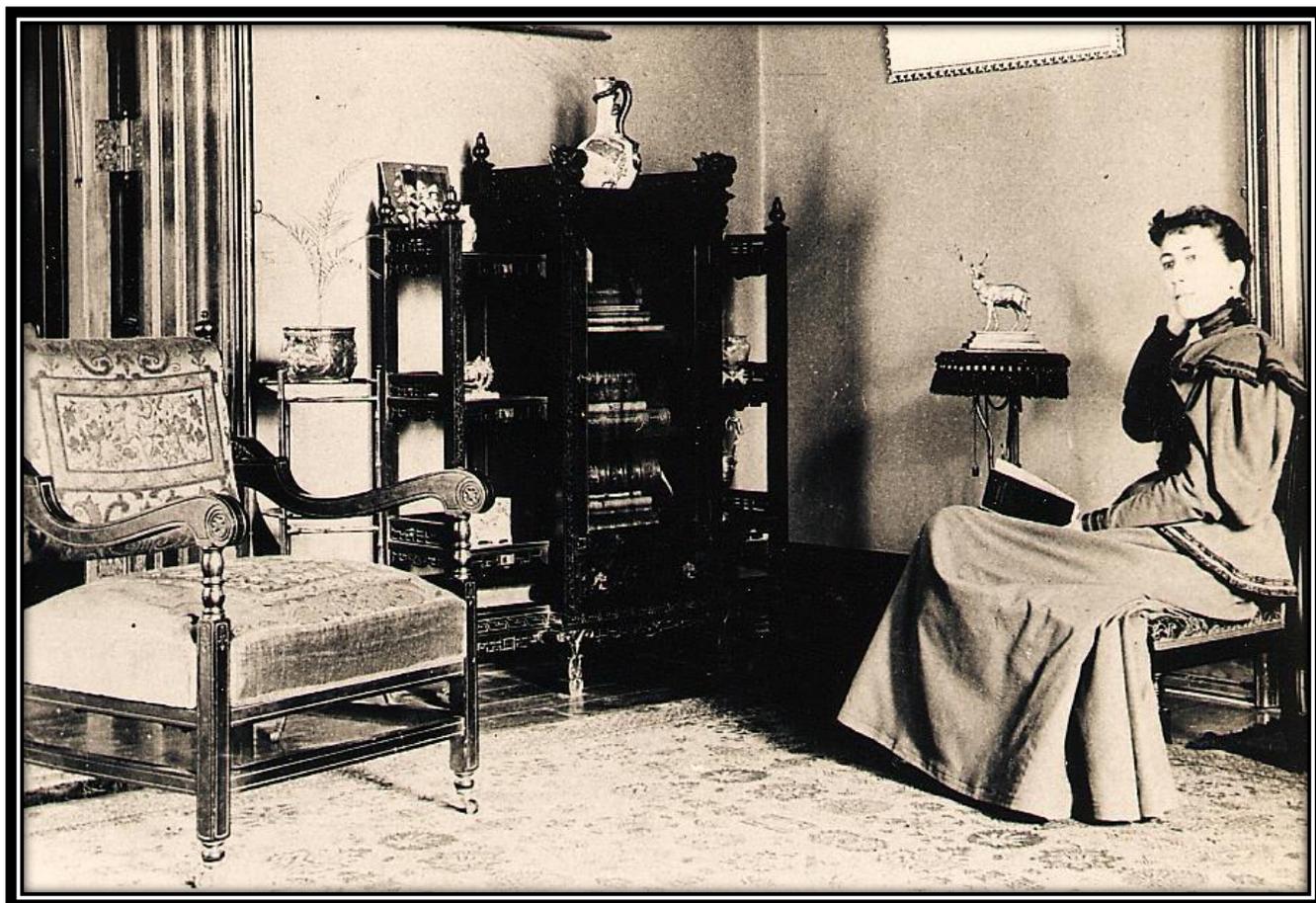
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By William J. Cummings, Menominee Range Historical Foundation Historian

In 1897 Dr. Hulst became manager of the Carnegie Steel Company's iron mining interests, having full charge of the

management of the Oliver Iron Mining Company.

The Hulsts resided in Milwaukee, Wisconsin.



Mrs. Nelson Powell (Florence Terry) Hulst posed in the parlor of their home on Knapp Street in Milwaukee, Wisconsin, where the Hulsts lived all of their married life except for the two years spent in Vulcan on the Menominee Iron Range from December, 1879 through 1881. In 1928, five years after the death of her husband, Mrs. Hulst sold the Knapp Street home and built a house on Newberry Boulevard, where she lived until her death in 1942. [Menominee Range Historical Museum]

At the foundation of the United States Steel Corporation in 1901 Hulst was made vice-president of its various mining companies, retaining that position until he retired.

Nelson Powell Hulst died January 11, 1923, in Milwaukee, Wisconsin. Florence

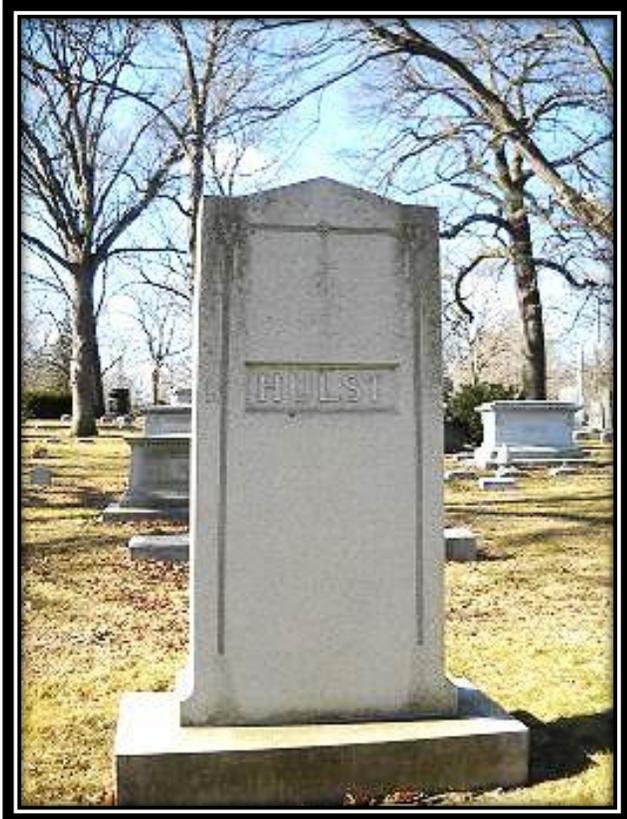
died June 4, 1942, in Milwaukee, Wisconsin. Both are buried in Forest Home Cemetery, Milwaukee, Wisconsin.

They had five children five children: Harry T., born in Wisconsin in 1876; Clarence Powell, born in 1878 in Wisconsin, died in 1962 in New York; Edith

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Ripley, born August 19, 1880, in Vulcan, Michigan; Alfred Nelson, born August 5, 1884, in Milwaukee, Wisconsin, died in 1980 in Massachusetts; and Alice Florence, born July 2, 1889, in Milwaukee, and died April 4, 1911, in Milwaukee.



The Hulsts are buried in Section 33, Forest Home Cemetery, Milwaukee, Milwaukee County, Wisconsin.

“Pioneer Life on the Menominee Iron Range”

by Florence Terry Hulst

The Wisconsin Magazine of History,
Volume VII, 1923-1924, pp. 406-416

It was in 1877, soon after the failure of the Milwaukee Iron Company, that Mr. Hulst accepted the position of superintendent of mines for the Menominee Mining Company. Beginning in 1872, he had explored to some extent the mineral lands of the Menominee Range and had brought in reports that warranted the establishment of a manager on the ground.

In the spring of 1878 he moved his family to Escanaba, where they lived until the completion of a house at the Vulcan mine location made it possible to have a home at his place of business. The house, built by the company, was situated in a clearing in the pine forest, with giant trees of the first growth on three sides of us, and on the fourth a little lake below the slope on



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which the building was erected. Between the house and the lake was the railroad, a branch of the Chicago and Northwestern, recently built for the transportation of ore to Escanaba, the port whence a large portion of the ore was shipped by the lakes to the various iron foundries and blast furnaces of the Middle West. About December 1, 1878, with the first fall of snow, we moved and settled with our two little boys in this home at the Vulcan mine. Our household goods had preceded us, and Mr. Hulst with the assistance of one or two of his men had got the new house in sufficient order so that we could begin to live comfortably from first arrival.

After months of separation from his family, Mr. Hulst's joy at having them with him once more was delightful to see. The morning after our arrival was bright and beautiful and he wanted to take his older boy, aged two and one half, up to Pit Two, an open working a little way up the hill from the house. The child was fascinated with the hoisting machine, the loud dumping of ore onto the pile, and the striking of the ore bucket to empty it, and the two stood for a long time watching operations. In the afternoon of that same day, from one of our windows I watched a slowly moving procession coming down the hill from Pit Two, carrying some burden. When Mr. Hulst came home he told me that a mass of rock had fallen and killed a man who was working where he, my husband, and our little boy had been standing in the morning. Thus our life in the mining country began with a sad demonstration of the dangerous nature of the work.

Winter began in earnest soon after our arrival, the thermometer in a few days registering fifteen to twenty degrees below zero; but the bright sun, dry air, and freedom from wind made it possible really to enjoy the low temperature, although at

times during our stay in that region it was hard to endure the extreme cold. One winter we had three weeks of continuous below-zero weather, and one week when the highest the thermometer marked was twenty degrees below zero at noon; from that to forty degrees below for an entire week. Mr. Hulst all through the cold winters drove from mine to mine, for, in a few months after his work on the range commenced, other mines were discovered and developed in quick succession, the most important being the East Vulcan, and the Chapin situated ten miles west of Vulcan. With a pair of good horses and a light sleigh he made the distance over an excellent road in an incredibly short time, and was so well protected by fur garments that he suffered no inconvenience from the frigid temperature.



**East Vulcan Mine looking northeast,
May, 1886**

The nature of the mines, deep underground, made it possible to work with a full force all winter, the men with their comfortable log houses and good pay living contentedly with their families directly at the mine locations. There were boarding-houses also constructed of logs, which took care of the unmarried men. No liquor was sold at either of the mine locations and

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absolutely no drunkenness was allowed. If intoxicating drinks were obtained or used in any way, the guilty man or men were discharged forthwith.

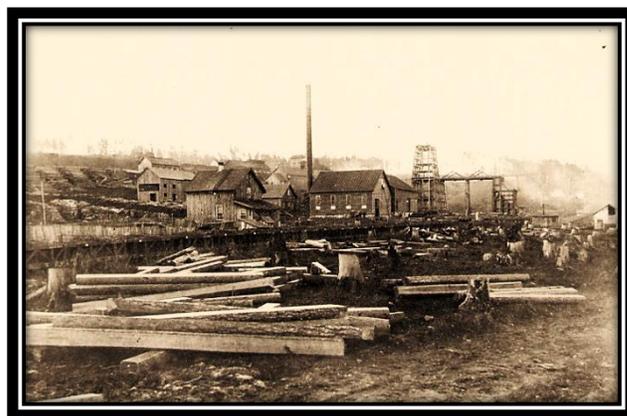
A physician was installed at Vulcan with an assistant at each of the other mines as soon as it opened. The men were required to pay a small sum each month to keep a doctor at hand, this sum (a dollar or less) covering all charges for medical and surgical services and all medicines for the entire month. But if a man was so fortunate as not to require a doctor's services for himself or family during the month, he grumbled at the fee and often at the end of that time went to the doctor's office for castor oil with which to grease his boots.

Speaking of good roads, the lumber companies had begun work on the range before the mining men arrived on the scene, and had cut roads everywhere through the forest. The drives were delightful, and Mr. Hulst often took his family with him on his trips to distant places where exploring was being conducted. One day as we drove along I noticed a flock of hens coming out of a low doorway, an entrance to a log building. I exclaimed, "What a very nice chicken house."

Mr. Hulst replied, "That's not a chicken house, but a human habitation – in fact, a company boarding-house." In winter these log buildings were banked with snow almost to the windows to make them warmer.

All through that first winter at Vulcan the mining work progressed, becoming more and more interesting as new pits were opened and more shafts sunk. The Vulcan mine was getting deeper and deeper, the East Vulcan was discovered, and before summer the Norway, Cyclops, and Quinnesec mines became busy scenes of activity, while the ore trains were constantly getting longer and running more frequently. The spur track, or Menominee River

Railroad as it was called, was a section of road extending west from Powers, on the main line of the Chicago and Northwestern, to Vulcan, a distance of twenty miles. Later it was built ten miles farther to Iron Mountain, the site of the Chapin mine. It was badly laid out with many twists and curves. We had one little passenger train consisting of a single coach and a baggage-car. This train plied between Powers and the mines once in twenty-four hours. An express office at Vulcan, opened almost immediately upon our arrival, made it possible to obtain provisions from Milwaukee, and a supply store near by managed by the company furnished us with the necessities of life.



**East Vulcan Mine looking northeast,
May, 1886**

The first summer of our residence at Vulcan was notable for the discovery of the Chapin mine, which, as shafts were sunk and diamond drill work progressed, showed so rich and extensive an ore body that the duties of the manager became too arduous to be performed without help. Accordingly, Jefferson D. Day, a mining man from Ishpeming, Michigan, was engaged for the position of assistant, and a chemist, also a surveyor for underground work, were added to the working force. But in spite of all this

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help, Mr. Hulst's days were long and often hard. His interest and enthusiasm, however, made him forget fatigue and his long hours, beginning in winter before dawn and ending long after sunset.



**Chapin Mine, Iron Mountain
fall of 1879 or spring of 1880**

In that northern country there is a short season of very hot weather, the thermometer registering occasionally a temperature of one hundred degrees. The mosquitoes arrive before the snow is gone and make life in the woods uncomfortable until August, when they entirely disappear. Even with all doors and windows screened it is impossible to keep a house free from the pests; one morning I counted twenty-seven of them under the netting of my bed.

One hot, still summer afternoon Mr. Hulst came home "to stay awhile," as he said. Soon I understood the reason for his return to the house. Heavy black and gray clouds came rolling up from the west; in a few moments it was dark as night and a tornado broke upon us with all its fury. The house rocked and trembled, window glass flew all about us, and huge pine trees came crashing to the earth until we thought the whole forest was to be laid low. We tried to get to the cellar, for we thought the house would be wrecked; but flying glass made it

dangerous to open the kitchen door, so there was nothing to do but watch and wait for the storm to spend itself. It was but a few minutes, possibly eight or ten, when the wind abated and we were safe. Terrific thunder storms were not uncommon, so the beautiful summer season in the northern woods was not without its drawbacks.

The young assistant engineer was a graduate of Yale, a man of frail physique, marked we believed for the "white plague," that had carried off all of his family. His poor health made him timid and one day he handed in his resignation, being unwilling to undertake the survey of a section of the mine which he was told to report upon. Mr. Hulst, learning from him the reason for his resignation, at once requested him to remain and himself did the work his subordinate dared not undertake. The mine laborers as a class were very superstitious, and not infrequently Mr. Hulst went to the spot where a man had been killed, took up the pick he had dropped, and did a little work with it before any of the dead man's associates dared touch it.

In spite of long hours and arduous duties Mr. Hulst found time to do much work at home to keep his family comfortable. We had no furnace in the house and he assumed the care of the stoves and fireplaces, clearing out ashes and bringing in fuel, considering such work too hard for a woman's strength. In the spring he planted quite an extensive vegetable garden, and many of the summer evenings he weeded and watered it, carrying the water by hand from a pump near the house. There seemed in those years no limit to Mr. Hulst's energy and strength.

Occasionally the president and vice-president of the company came up to inspect the work of their manager, and generally stayed at our house. This gave

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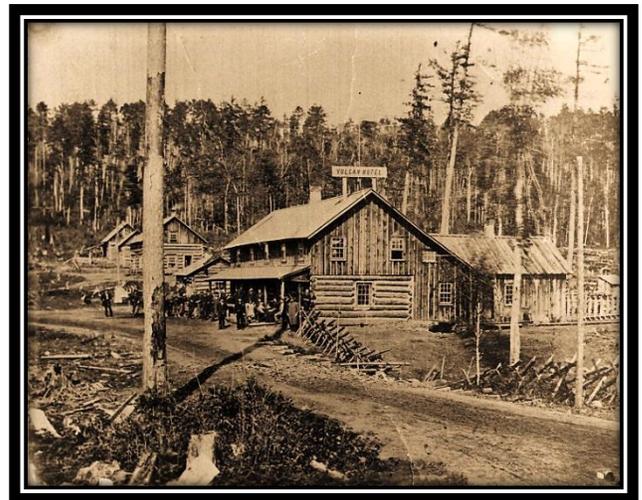
us the only bit of intercourse with friends we had the first year or more of our residence at Vulcan. Mr. Hulst felt the isolation keenly and it was a delightful event when Mr. and Mrs. Day moved into a house near ours, built for them by the company. At about the same time the mine doctor built a little home and brought his bride to Vulcan. The following summer J.J. Hagerman, president of the Menominee Mining Company, had a house erected next to ours and often came up with his family or friends to spend a week or so. The bookkeeper and his family lived in this house, which was consequently always ready for the owner and his friends. The advent of these neighbors made life much more natural and we realized after they came how necessary friendly companionship is.



John James Hagerman, the president of the Menominee Mining Company, had this house erected for his use in Vulcan in 1879.

The second year of our residence passed much like the first, except that now the hills and woods all about us were dotted with test pits so that wandering about in the dark was dangerous, so a high board fence around the house, enclosing about an acre, became a necessity, with our little children.

As the boys grew older all sorts of activities went on within this enclosure. A miniature mining outfit made in the blacksmith shop was set up near the house and afforded unending employment and delight to the little boys who with tiny picks and shovels dug a "mine," hoisted the "ore" with a tiny derrick, dumped it into a tramcar, and conveyed it by a track to the "stock pile." They had been about so much with their father and knew so well how the mining work was conducted, that they carried out in correct detail all the processes going on about them. Their only pet was a beautiful little fawn that some man found in a test pit and brought up to "the little Hulst boys." The children also fed and trained the squirrels and chipmunks that were so numerous in the woods, so they had many little playfellows.



This photograph of the Vulcan Hotel, located on the west side of Mission Street, was taken on October 1, 1880. Lewis Young Whitehead was the proprietor.

Forest fires were always a danger in dry seasons, sparks from locomotives frequently starting the burning of leaves and sometimes wood piles. One serious fire in

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the fall of 1879 will never be forgotten by those who witnessed it. There had been a long season of drought. As we walked in the woods the dry leaves and twigs would crackle beneath our feet, and Mr. Hulst said he must, for safety, spare men to rake and clear a larger area about the houses. The powder house, which was a quarter of a mile away, seemed too near the railway track in the woods west of our house. The first little blaze grew and spread with marvelous rapidity, until by the time the work of combating it began, it was a huge conflagration involving big dead trees, numerous wood piles, and all the dry underbrush in its wake. Mr. Hulst was in Escanaba that day, but the assistant and the mine captains gathered the miners together and quickly formed a bucket brigade from our well, which was the only water available, others digging trenches to confine the flames. It was no use – their puny efforts amounted to nothing, and Mr. Day in a panic came to the house and exclaimed breathlessly, “The fire has crossed the road and is spreading up the hill to the west with nothing to check it. To make matters more desperate, a strike is on at the Quinnesec mine [six miles west of us] and Mr. Hulst is not here.”

My husband arrived on the afternoon train, summoned by wire. At the scene of the strike an officer of the company had been storming up and down the platform at the store, swearing at and threatening vengeance upon the angry crowd, and had only made matters worse. The mine captain, a cool-headed man, had said to him, “Wait until Dr. Hulst comes, he will manage the men.”

“He can do nothing with them,” was the reply, “he doesn’t know how to swear.”

In the meantime, at once on his arrival at Vulcan, hearing how matters stood, Mr. Hulst ordered out his good horses and

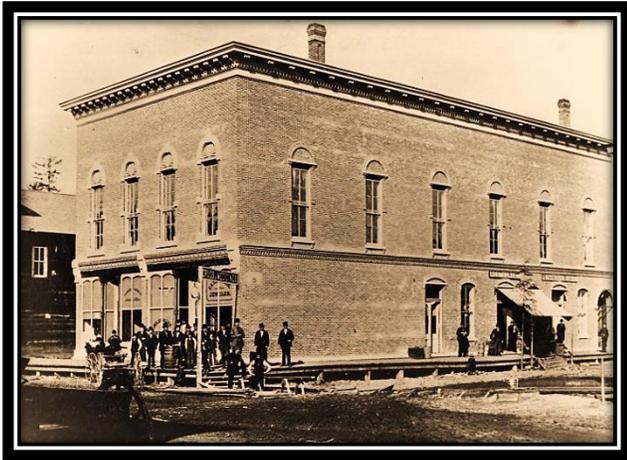
buggy and prepared to drive to Quinnesec. Mr. Day said, “It isn’t possible to get through the flames.” Mr. Hulst replied, “It must be done,” and it was done.

The horses were frantic with fright but they made the plunge and got through the fire. Mr. Day accompanied Mr. Hulst on this exciting ride and afterwards gave me his report of what happened at the Quinnesec mine. Mounting the store platform, Mr. Hulst held up his hand and instantly had a quiet audience. He told the men that he had carefully looking into the matter of their dissatisfaction, had earnestly considered it from their point of view, and had decided that they were in the wrong. Consequently he must refuse to grant their demands. He said they could take their choice of going back to work within twenty-four hours or losing their jobs. In a few words he stated the reasons for the stand he took, trying to make them understand his position. The men listened attentively, then quietly dispersed, and all but one man reported for work the next day. That one got his “time” and left, while the instigator of the strike was discharged. So the superintendent, without swearing at or browbeating the men and without any show of anger or impatience, quickly made an end of what might have been a serious situation. Mr. Day said it was because the men had unbounded confidence in the fairness and kindness of their chief. Mr. Hulst had known for some days that a strike was imminent at the Quinnesec mine and had made arrangements to supply the places of the men through an agency in Chicago. He reached home that evening, tired out, smoke stained, and greatly concerned as to what the morrow had in store, only to spend most of the night fire-fighting with his men. Although the flames had been held in check to some extent, new danger spots were constantly showing and no one who was

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able to help dared sleep that night. The fire was halted just short of the powder house. Good news from Quinnesec the next day assured us that the trouble at the mine was over.



Buell's Opera House, corner of Quinnesec Avenue and Paint Street, Quinnesec, ca. 1880

In the autumn of 1879 the Menominee Mining Company built an opera house at Quinnesec, where creditable entertainments were occasionally given and where also the miners and their families might assemble for dancing and other social purposes. As no saloons were permitted, it seemed to Mr. Hulst very necessary to provide some gathering place for the men, some place in which to spend their evenings. In the summer of 1880 this building was used as a banqueting hall for the American Institute of Mining Engineers. Entertainment at their annual gathering was furnished by the Menominee Mining Company. It was a most interesting meeting for the members of the institute, many of whom were geologists and metallurgists, and they were especially glad to examine the rock formations of the range and see what had been accomplished in three or four years. A caterer from

Milwaukee took charge of providing meals for the guests, bringing with him not only the refreshments but all the table furnishings and several waiters.

In the autumn of that year an outbreak of smallpox occurred in one of the larger company boarding-houses. Two men recently arrived came down with the disease and all in the house were, of course, exposed. In this emergency Mr. Hulst summoned all the mine carpenters from the different locations, and with his help and under his direction a building was erected and ready in thirty-six hours to receive the two patients and a man who had had the disease engaged to nurse them. The men who had been exposed were at once sent over to a log house across the lake, provided with food for ten days, and directed to remain there under pay for that length of time. The two cases recovered and went back to work, but one of the men who had been isolated came down with the disease the day after being released from quarantine. With facilities ready for his care this was not a serious situation and his case was a light one.

The winter of 1880-81 was a stormy one and will long be remembered by residents of that region, for the heaviest snowfall in the Upper Peninsula in years was experienced. It was some time after the Christmas holidays that the snow began to fall in great masses, day after day, until we were completely snowed in. Railroad traffic was impossible and telegraph wires were down, so that for two or three weeks we were cut off from all intercourse with the world. Underground work went on just the same, but each mine was isolated as the roads connecting them were impassable even for sleighs, so high were the snow drifts. At length one afternoon the cheering sound of a locomotive whistle was heard faintly, and we stationed ourselves at a

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window overlooking the track to watch for the hoped-for train. We had long to wait while nearer and nearer came the noise of the panting engines, and at last down the cut to the east two powerful locomotives came into view, slowly crawling along the track, laboring heavily and pausing frequently, halted by huge snow drifts, and at last drawing up to the station platform with two cars, a passenger and a freight car. The latter was especially welcome as the stock of groceries and provisions at the company store was running low. Mail was never more welcome, and the news that the telegraph wires had been repaired made us feel in the world again.

The Florence mine, twenty-five miles distant, had been added to the company's holdings and the work of the superintendent was too exacting for one man. Sleepless nights and frequent severe headaches made us feel that he must have rest and relief at least for a time. The doctor finally warned him that he must resign his duties for a year. With almost heart-breaking reluctance he handed in his resignation and we broke up the home in the pine forest where we had spent nearly four happy,

profitable, and interesting years. To part with the Chapin mine Mr. Hulst said was almost like giving up a child.

The mine officers gave Mr. Hulst a banquet at the Quinnesec opera house, where he was presented with a silver service, and on a later date they invited him and his wife to a farewell reception at the same place. It was a distinctly democratic affair, including the miners and their wives, the blacksmiths, carpenters, stablemen, etc. It was a most interesting gathering. The men stood in rows while we passed along shaking hands with and chatting with each man and his wife. Many of the men, good, honest fellows, had evidently much appreciated fair, kind treatment, for they told me with tears in their eyes that they "would never again have a boss like Dr. Hulst." Later in the evening there was dancing, which all seemed to enjoy and in which we took part as well as we could. So Mr. Hulst left his work and his many friends on the Menominee Range, with very sincere sorrow that he was obliged to leave his associates and his duties, that had filled his life with interest and pleasure.