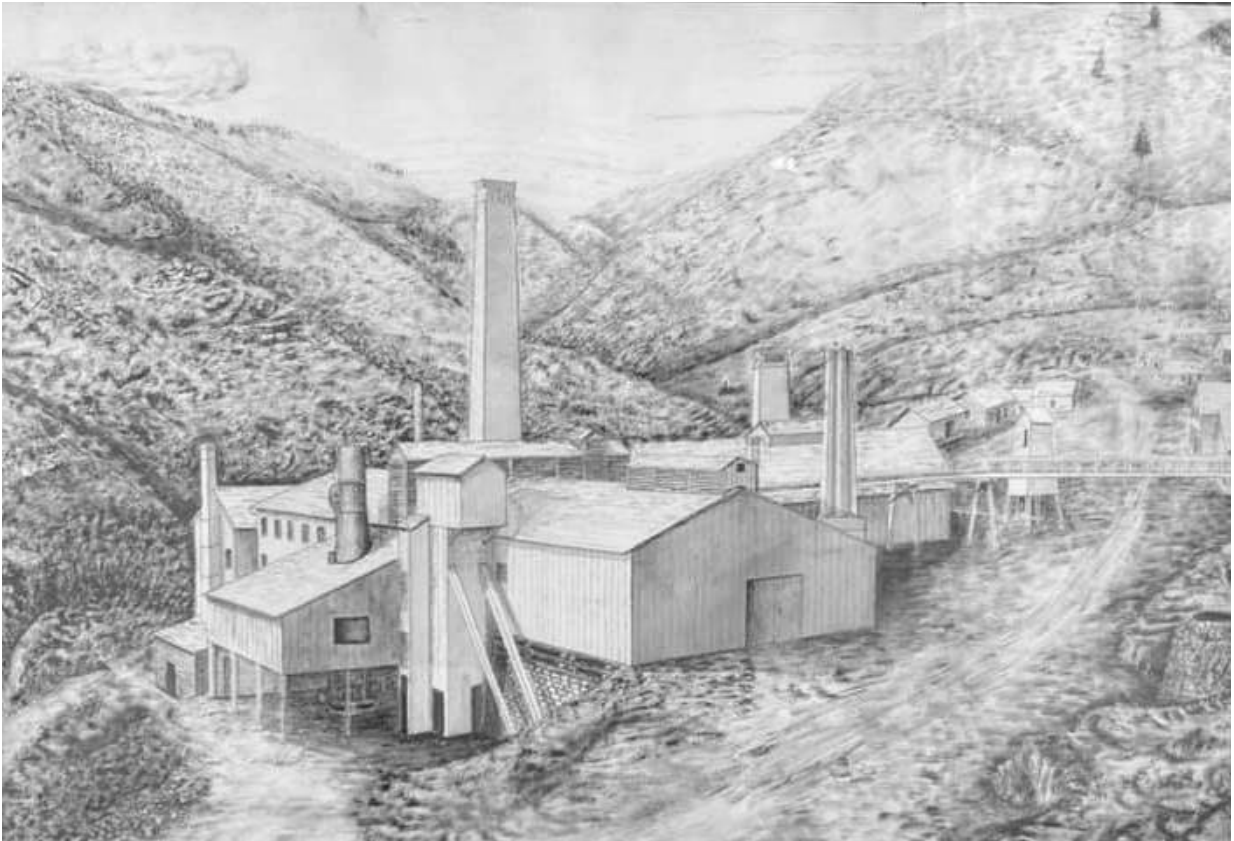


H. F. Brown: Mining Engineer, Disaster Magnet and Artist

Dustin Schillinger

Late last year I was contacted by my friend David Perlstein about two charcoal sketches that were in the collection of Stuart McKenzie. As many of you know, Stuart passed away last year, and with him went an irreplaceable amount of knowledge and passion about Montana history and documents. Two pieces which he coveted were these drawings. Shown in these large sketches are the Hecla Consolidated Mining Company smelter at Glendale Montana, and the mining works on the side of Lion Mountain at Hecla. David was able to purchase these on my behalf to add to my mining and Montana history collection.



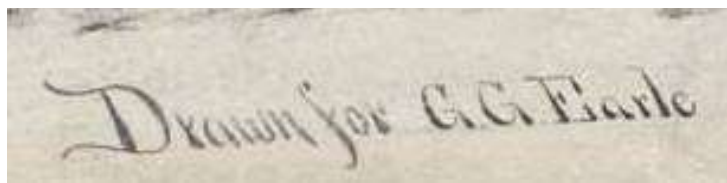
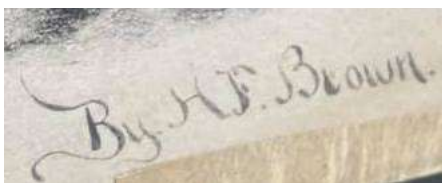
Hecla Consolidated Mining Company smelter at Glendale, Montana

Once again, David was able to let Stuart know that the drawings were go to another “forever home” at our house and so they stayed in Montana where they are appreciated the most. As always, I was curious about the drawing’s history, artist, and age. With Stuart passing away, I felt it was even more important to document what these pieces of paper that he felt were so special really were.



HECLA CON. MINES LION MT. MONTANA.

The artist signed one, H. F. Brown. With that, I dived deep into finding out who this man was, and let me say, it was a wild ride following this man's life! I am going to summarize this tale a bit, or this story would fill a volume. Although H. F. Brown had a very successful career and life prior to arriving in Montana Territory, I am going to focus on his years here, and all of his adventures, mishaps, and exploits. Note that the sketch above of the mines at Lion Mountain was drawn for G. G. Earle. The life of Mr. Earle is an entirely different road to travel on another day, but it is notable that G. G. Earle was the Superintendent of the Hecla Consolidated Mining Company smelter at Glendale. An article in the October 9, 1883, Butte Miner tells the story of 47 of Earle's former employees presenting him with a gold pocket watch and celebration. The watch was reported to be finely crafted and very valuable. The inscription inside said simply, "Presented to G. G. Earle by Smelter Boys".



Horace F. Brown

Mr. H. F. Brown, of Chicago, has charge of and is putting up the machinery. Having made a specialty of mining machinery for years, he is prepared to put up everything in that line on short notice and on bed rock prices. His rock drill is rigged to cut in any direction, a cut of which he intends to present to our patrons as an ad. as soon as he can get it ready. A. Ledoux is foreman of the Clive. Nearly 100 men are working in the Trapper mines, on the dumps and handling ore.

The first mention of Mr. H. F. Brown in Montana newspapers was on August 21, 1878. A "traveling correspondent" writing for the Helena Independent-Record visited the towns of Melrose, Divide, Glendale, Trapper City, and White Lion City to look over the properties of the Hecla Consolidated Mining Company. Brown was cited as being in charge of installing machinery for Hecla's New Atlantis mine on White Lion Hill [Mountain]. By this time the Hecla mines were very prosperous. They had just completed the installation of smelting

furnaces at Glendale and added a 10-stamp mill to their reduction works. The company employed over 500 men in many different capacities. Small towns sprung up further along Trapper Gulch as mining, logging, and refining progressed. In 1878 alone, the Hecla Mines shipped 1,080,000 pounds of bullion worth \$216,000 at the time. They also shipped 400,000 pounds of copper matte, according to the article.

The next mention of H. F. Brown's time in Montana comes in February of 1879. A large snow slide occurred at Trapper City, near the base of White Lion Mountain. Several avalanches had plagued the town and mining operations over the years, often making the area inaccessible for several months of the year. The slide occurred on the 27th of January. It swept away an ore shed and buried H. F. Brown, two other men and six horses. Men frantically shoveled away the snow and eventually found Brown and three of the horses alive. This was to be the first of Brown's many brushes with death in Montana.

Snow Slide and Loss of Life.

Mr. A. H. Foster arrived from Glendale last evening, and brings the particulars of a snow slide at Trapper on the 27th inst. The slide occurred at the Atlantis mine, swept away the ore shed and covered up H. F. Brown, engineer of the hoisting works, two teamsters and six horses. Brown and three of the horses were shoveled out alive, and the two teamsters, whose names we have not learned, and the other three horses were dead when found.

On Friday night Mr. H. F. Brown, principal machinist for the Hecla Co., at their works, in passing near the water wheel got caught by the shaft. Realizing his danger Mr. Brown grabbed hold of a post and held on while all clothing was torn from him. Fortunately he was not seriously injured, a few bruises about the head being all the damage. Mr. Brown, it will be remembered, had a narrow escape from death about this time a year ago by a snow slide.

In January of 1880, The New-Northwest newspaper of Deer Lodge published a story in which Brown danced with danger once again. While acting as the Hecla Company's principal machinist, Brown walked past a moving water wheel and was caught by the rotating shaft. Knowing he was in trouble, Brown grabbed a support post and held tight. His clothes were torn off and he sustained "bruising about the head" as a result. The article reminds readers that Mr. Brown had narrowly escaped death in the snow slide just a year before.

—Mr. H. F. Brown, for several years master mechanic of the Hecla mines at Glendale, has accepted a similar position at the Alta Montana Company's works, at Wickes. The company is to be congratulated on having secured the services of so valuable a man.

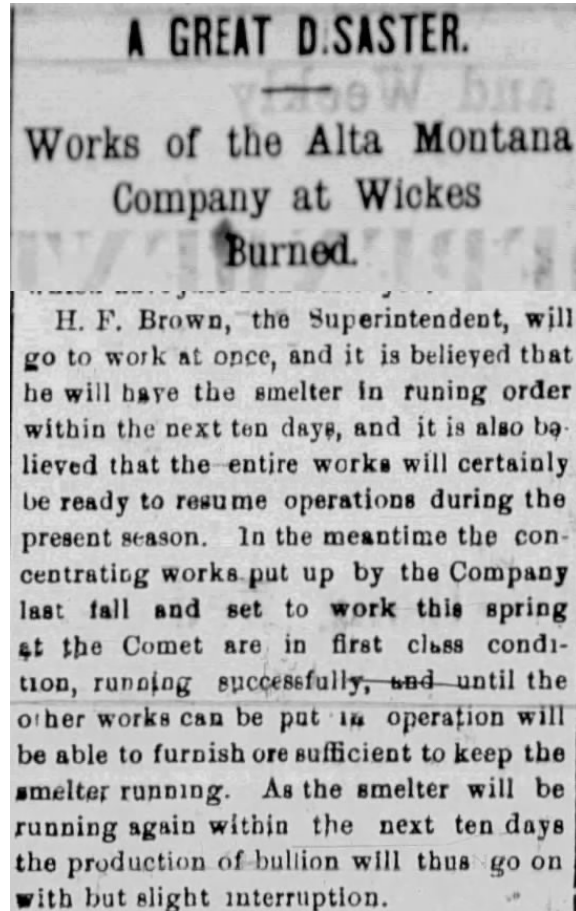
In August of 1880 H. F. Brown resigned from Hecla Company amid rumors that the mining company was to be sold. He didn't wait long to find a new adventure and took a position with the Alta Mining Company in Wickes. Prior to coming to Montana, Brown had worked for the Frasier & Chalmers Co in Chicago as an engineer and had designed the smelting furnace that was installed in Glendale. Seeing how well the furnace worked on Hecla's ore, the Wickes Company immediately ordered an exact copy for their works at Wickes. When it arrived, Brown put it together and had it operating withing 10 days. It seems that his quick turnaround in finding a job may have been months in the works. In May 1881, disaster struck again for Brown when the drying furnace caught fire at the Alta works. Within an hour, several buildings were burned to the ground. 150 men were out of work and the operation was at a standstill. He inspected the machinery and felt it could be saved. He immediately began reconstruction which would cost over \$200,000 dollars. Sadly, the company had only insured the property for \$75,000. While working in Wickes, he did a crayon sketch of the reduction works.

A Handsome Picture.

An important addition was made to the ornaments of the HERALD sanctum this morning, consisting of a large and well executed picture of the reduction works of the Alta Montana Company at Wickes. The photograph was taken from a crayon sketch made by Mr. Horace F. Brown, of Helena.

Helena Weekly Herald, November 2, 1882

In August of 1880 H. F. Brown resigned from Hecla Company amid rumors that the mining company was to be sold. He didn't wait long to find a new adventure and took a position with the Alta Mining Company in Wickes. Prior to coming to Montana, Brown had worked for the Frasier & Chalmers Co in Chicago as an



By 1883 H. F. Brown had once again moved along. At this point the reason was unknown, but it will be revealed later in the story. For his next adventure Brown moved to Missoula. He and A. J. Urlin formed the Montana Lumber Company and built a two-story mill complete with planing machines run by a 40-horsepower steam engine. But Mr. Brown was an accident waiting to happen. In May of 1883 bad luck struck Brown again when he was pinned under the engine he was setting in place at the sawmill. Brown received a dislocated shoulder, and "extensive damage" to his right ankle and knee. If that close call wasn't enough, fire once again put Brown's life at risk. In August of the same year the same engine that pinned him caught fire. Brown was living at the sawmill and was asleep when the fire broke out in the engine room. Brown's Newfoundland dog woke him up, but at first Brown did not see anything wrong. The loyal dog persisted, and Brown went to inspect the works and discovered the fire. He quickly put it out. Had he continued to slumber the entire mill and his living quarters would have been

HISTORY OF MONTANA.

An Enterprise of Merit Inaugurated.

Mr. H. F. Brown, artist, arrived from Bozeman a few days since and is engaged in sketching for Stewart's History of Montana, a quarto volume of 1,200 pages which Mr. Stewart and a corps of artists and writers are now compiling. The scope of the work will be extensive and the numerous lithograph illustrations with which it is designed to embellish it will make the work attractive as well as useful. It is the intention to take up in this volume as much of the early unwritten history of Montana as possible, and to supplement this with full statistical information from the Territorial and county records. The illustrations will include all public buildings of note, grouped to precede the sections devoted to the several counties and to the Territory. It will also contain views of private buildings and farms, and biographical sketches of prominent pioneers, illustrated with portraits. It is not possible to overestimate the desirability of getting now into imperishable print the early history of Montana locked up in the memories of a dozen or two men who one by one are dropping out of life and carrying with them knowledge it will after their death be impossible to obtain. The Montana Historical Society has done something, all it could, in this direction, but its funds have been too meagre to do what it should. Incidentally we urge upon the Legislature to appropriate a year's salary to a good stenographer whose duty it shall be to interview thoroughly such old-timers as the Historical Society may designate, and file with it a transcript of his notes.

Pending this, the work of Mr. Stewart, which it is designed to issue by mid summer, is worthy of encouragement. Mr. Stewart has followed this business for the past fifteen years and has published some fifty different volumes of county history from Maine to California. His experience justifies good anticipations. He has now two artists in the field and will soon have a third, while he and assistants look more particularly after the historical matter. Mr. Brown was in '78-'80 mechanical engineer of the Hecla works at Glendale, rebuilding them after the fire, and was in '80-'82 employed in like capacity at Wickes. Having been incapacitated for that service by mineral poisoning he has engaged in this work and his practical knowledge of Montana will greatly aid him in collecting material. We wish the enterprise success.

reduced to ash. In January of 1884 it was reported in a Helena newspaper that Brown had sold his interest in the Missoula operation and was coming to Helena to stay! But we know that couldn't possibly be true, Horace F. Brown was a man on the move.

Now peacefully living in Helena, Brown needed something to do. He had lived a lifetime in the few years that he was in Montana Territory, not to mention his highly successful mining engineering and inventing career that took place before he ventured west. In an article dated January 12, 1883 published in the New-Northwest Newspaper, Brown's arrival in Deer Lodge, MT was announced. But this time it wasn't mining or engineering he was doing, it was drawing.

D. J. Stewart of Anamosa Iowa had written over 50 county histories from the East coast to the West coast when he decided to take on the project of documenting the history of Montana Territory. His prospectus and pre order solicitation issued in 1880 stated that the book would be 600 pages long complete with sketches that were "replete with incident." In 1882, Stewart hired H. F. Brown to travel throughout Montana and complete sketches of some of the more notable towns, landscapes, and enterprises. Also, in this article the reason for H. F. Brown leaving his job as the Superintendent of the Alta - Montana Mining Company at Wickes was revealed. The article states that after working at Wickes from 1880-1882, Brown had become incapacitated due to "metal poisoning", and therefore was hired by D. J. Stewart to make sketches for his project. Several small announcements were made in Montana towns of Brown's arrival to sketch scenes. His sketches of Diamond City, Wickes, Deer Lodge, and Bozeman were described as "handsome."

In 1883 Stewart died of pneumonia at Red Rock in Beaverhead County, leaving the project's completion in question. An article in the Billings Daily Herald from April 25, 1883, announced that H. F. Brown would continue on and complete the work of the late D. J. Stewart. What happened next is unknown, but eventually the project was taken over by M. A. Leeson (Leyson) and the book was expanded to over 1400 pages. The "History of Montana 1739-1885" was published by the Warner, Beers, & Company in 1885. Today this book remains a valuable reference to the early days of Montana.

1884 and 1885 seem to have gone well for H. F. Brown. He returned to Helena and continued work on his patent for an improved smelter system. Several articles appear from around the area with opinions and examinations of mining districts. Brown visited Pony, Neihart, Wickes, Diamond City and Comet.

While Brown was at the Drum Lummon Mine in Marysville, 75 pounds of Giant brand explosives exploded at the entrance to the Cruse Tunnel killing one man. Brown called the Helena Weekly Herald by telephone to report the incident. Sometime during 1885 Brown went to work for the Helena Iron Works foundry. They specialized in castings, rock crushing machinery, and car wheels. All of which were perfected under the supervision of H. F. Brown the renowned engineer. In a theme that seems all too familiar with Brown, an accident was lurking. On April 22, 1886, the Helena Weekly Herald reported that Brown, the Superintendent of the Helena Iron works was injured when a piece of flying metal struck him in the face. The force was strong enough to break the lens of Brown's spectacle and fill his right eye with broken glass. But, with the use of cocaine an operation was performed and H.H. Wynne Oculist and Aurist said that he expected Brown to make a full recovery.

Powder Explosion.

By telephone to H. F. Brown from Marysville, we learn that the powder magazine of the Montana Company, Limited, which was situated at the mouth of the Cruse tunnel at the Drum Lummon mine, had exploded about noon to-day. From other sources we learned the following particulars: Shortly before noon to-day a box and a half (75 lbs.) of giant powder exploded accidentally at the mouth of the Cruse tunnel, killing one man, named John Ford, and blowing him to atoms. Parties telephoned to at Marysville are disposed to be non-committal on the subject until after the inquest, which will be held this afternoon, and we could obtain no further particulars.

—♦—
District Court.

Brown spent much of the later part of 1886 and the beginning of 1887 inspecting mining prospects for investors. Brown's engineering and ore processing knowledge were very useful in this endeavor. Several articles once again appeared announcing the arrival of Brown along with investors looking at mining claims and properties throughout central and western Montana. Brown's big move in 1887 was undertaking the development of the coal mines at Cinnabar, MT that were owned by Harry Horr and several investors from Butte and Helena. Given Brown's early experience in coal mining and producing coke, this seemed to be the perfect opportunity for him. He was quoted as saying that the coal veins were large and would produce enough coal to

supply the entire territory's needs. He designed and oversaw the construction of several coke ovens at Cinnabar, some of which remain today. H. F. Brown placed an ad in the December 1, 1887 Livingston Enterprise newspaper looking to hire 40 to 50 miners to work at the mines operated by the Park Coal and Coke Company. The ad said miners would be paid \$1.20 per ton. The ad also lists Brown's address as Gardiner, MT.

Laborers Wanted.

Horace F. Brown, manager of the Horr coal mines, writes us that owing to a largely increased amount of orders he wants a force of 40 or 50 miners, to whom he will give steady work. Apply in person or address Horace F. Brown, Gardiner, M. T. He is paying \$1.20 per ton for mining.

In August of 1889 Brown returned to Livingston from a trip to Butte with a load of coke for W. A. Clark's smelter. The coke was found to contain too much silica and unsuitable for use by Clark or the operators of the Parrot Smelter. The decision was made to set up a washing and concentrating plant to purify the coke. This was a major blow to the company and all the miners and laborers except those operating the coke ovens were discharged. Not much else appeared discussing Brown's involvement with the Park Coal & Coke Company, but the mines continued for many years and spawned the towns of Horr, Electric, and Cinnabar to be settled.

Brown was once again on the move and beginning another endeavor in 1890. This certainly may have resulted from the coke debacle the year before that shut down the mining operations in Cinnabar temporarily. An article in the April 29, 1890, Anaconda Standard stated that Brown had recently acquired the Lexington Foundry in Butte. The existing foundry was located on leased ground with the lease ending in July of that year. The property was deemed too small for the type of operation Brown

wanted to construct, so he bought a large tract of land near the Northern Pacific Railroad yards to build on. Brown said he planned to erect a 70 foot by 200-foot machine shop at the cost of \$100,000. Brown placed an ad in the Butte Daily Post in August of 1890 to announce he would be accepting bids for the construction of his operation. The new foundry would be called Western Iron Works and include pattern shops, a foundry, machine shops, and fabrication works. A certificate of incorporation had been filed in February of 1890 by Brown, Jared E. Gaylord, and Wallace D. Pinkston listed as officers. In 1891 Brown was granted a patent for his ore roasting furnace invention. What happened next is unknown, Brown's name disappears from letterheads and articles involving the Western Iron Works around 1892. In 1894 Wallace Pinkston was arrested in Missoula for embezzling \$15,000 from the Western Iron Works where he had replaced Brown as the General Manager. The business continued for over a century and a portion of the original building is still standing, and still in use as a metal fabrication and machinery repair company.

IT WILL BE A BIG AFFAIR.

Preparations Being Made for Erecting a Large Foundry in Butte.

By the Standard's Special Wire.

BUTTE, April 28.—H. F. Brown, who recently came into possession of the Lexington foundry, has found it necessary to increase his plant. The ground upon which the works are located is leased by him, the lease expiring some time in July. As the ground is too small to allow the erection of such works as Mr. Brown has in contemplation, he decided upon a new location and purchased a large tract of ground near the Northern Pacific yards. Some idea of the extent of the new plant can be formed when it is stated that it will cost fully \$100,000 and, and with the necessary yard room, will cover about two acres of ground. The machine shop will be 70x200 feet and a foundry of the same dimensions will also be erected. Both buildings will be equipped with the very latest and best machinery and appliances in use in those particular branches. Besides these two immense buildings, a pattern room and boiler shop of proportionate dimensions will also form a part of the plant. Work on the buildings will begin in a short time, as soon as a few preliminaries in connection with the ground are completed.

LOCAL ENGINEER DIES IN EAST

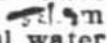
**HORACE F. BROWN, INVENTOR
OF COAL MINING MACHINE,
ETC., PASSES AWAY.**

Horace F. Brown, a well-known mining engineer, residing at 130 Ninth street, this city, and manager of the Pacific Engineering Company of San Francisco, died suddenly of heart failure last Sunday evening in Chicago.

Mr. Brown had but recently left San Francisco on a business trip and the end came most unexpectedly while he was visiting his niece, Miss Inez Verplank, of 3035 Prairie avenue.

The body was taken to the family home in Chicago by N. Sherman Carson, son-in-law of the dead man.

The deceased leaves a widow, Mrs. Mary Brown, who resides at 130 Ninth street, Oakland. She is at present, however, at the home of her daughter, Mrs. W. D. Pinkston, 1440 East Sixteenth street. Another daughter, Mrs. W. Sherman Carson, resides in Chicago.

Mining engineers who knew him regarded Mr. Brown as the originator of the first successful coal mining machine. Among other inventions which have gained for him prominence are a  of ore furnaces, the first successful water jacket smelting furnaces and working kilns for making carbonic gas from lime rock by heat instead of by use of acids and marble dust.

Coming to California in the early days of the gold fever, Brown eventually drifted to Butte, Mont., where he organized the Western Iron Works corporation. At his death he was manager of the Pacific Engineering Company of San Francisco.

The last item I could find on H. F. Brown that was published in Montana was his obituary. On April 16, 1906, while doing business in Chicago, he died of sudden heart failure. He was 66. His body was returned to Oakland, California where he had been living since 1901 while employed as the general manager of the Pacific Engineering Company. He left behind his wife, three daughters, and a son who was stationed as a surgeon in the Philippines.



I found several articles in mining and engineering publications announcing Brown's death. He had accomplished a great deal before his story even began in Montana Territory. As you have read, he was involved in several aspects of the early days of mining and ore processing in Montana. His inventions, businesses, and exploits were numerous. It is amazing to have these two drawings that were done by his hands hanging on my wall.

