

Lake George Gem & Mineral Club

Club News

January, 2021



LGGM Club Memberships

Applications for new memberships are available from January 1st through March 31st. To join the LGGM Club, go online to <https://www.lggmclub.org/> and on the left hand column, click on "Be a Member". Both members and non-members are welcome to attend the presentations at our monthly club meetings when the meetings resume, but only members may attend club field trips.

Due to the cancellation of so many club activities during the Covid-19 pandemic, LGGM Club memberships from 2020 will be rolled over to 2021 at no cost to the member. Please keep your 2020 membership cards for use in 2021. If you would prefer to have a refund of your 2020 membership fee, please contact our treasurer

Cathy McLaughlin, Treasurer
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Status of LGGM Club Activities:

The coronavirus pandemic has resulted in statewide emergency regulations and public health advisories against group gatherings. Cancellations include all **LGGM Club meetings**, and **programs**, as well as **classes** such as Rockhounding 101, Mineral Identification, and Basic Wire Wrapping. We will let you know when these events can be rescheduled.

COMING EVENTS OUTSIDE THE LGGM CLUB: (Nearby gem, mineral, fossil and geology events that you may enjoy.)

- **Cañon City Geology Club** <https://www.canoncitygeologyclub.com/> **January 11, 2021** Meeting location: via Zoom, 6:30 PM- Business Meeting; Program immediately following at approx. 7:00 PM - Program Speaker and Subject: TBA
- **Columbine Gem & Mineral** <https://rockaholics.org/> Meetings 2nd Thursday of every month at 6:30pm MT. Locations at Salida or Buena Vista (see flyers or website.)
- **Colorado Springs Mineralogical Society** <http://www.csms1936.com/> .
 - General Assembly – 3rd Thursday 7pm,
 - Fossil Group - 1st Tuesday 7pm
 - Crystal Group and Faceting Group – 4th Thursday, 7pm
- **Pueblo Rockhounds** <http://www.pueblorockhounds.org/> Cancelled until further notice.

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Online Events

- **Rocky Mountain Map Society** For further information see: <http://rmmaps.org/>
- **Western Interior Paleontological Society (WIPS)** See <http://westernpaleo.org/> for more info.

The following are cancelled until further notice: check the following links for information on lecture series when they resume:

Colorado Café Scientifique in Denver, monthly lectures on science topics see <https://coloradocafesci.org/>

Denver Region Exploration Geologists Society (DREGS) <http://www.dregs.org/index.html>

Florissant Scientific Society (FSS); see <http://www.fss-co.org/> for details and schedules.

Friends of Mineralogy, Colorado Chapter <http://friendsofmineralogycolorado.org/events/>

Golden Beer Talks, 2nd Tuesday, 6-8 p.m.), **At Home Editions** <https://goldenbeertalks.org/>

Nerd Night Denver is a theater-style evening featuring usually 3 short (20-minute) TED-style talks on science or related topics; held more-or-less monthly at the Oriental Theater, 4335 W. 44th Ave., Denver; drinks are available; for ages 18+. Admission is \$6 online in advance, \$10 at the door. See <https://www.nerdnitedenver.com/>.

LGGM Club News:

Newsletter Article Award:

Last month we reported that **Paul Combs'** article entitled Fake Fossils: Every Rockhound's Headache won the "Original Adult Articles Author" contest for the American Federation of Mineralogical Societies.

We would also like to announce that the American Federation of Mineralogical Societies awarded first place for the 2020 "Advanced Adult Articles Author" to **Steven W. Veatch** for his article entitled Pura Antiquior: A Nineteenth-Century Forerunner of Paleoart.

Congratulations to both Steve and Paul!

* * * * *

The latest installment of "**Bench Tips**" by **Brad Smith**: (www.BradSmithJewelry.com)

ADJUSTABLE CHUCK FOR DREMELS

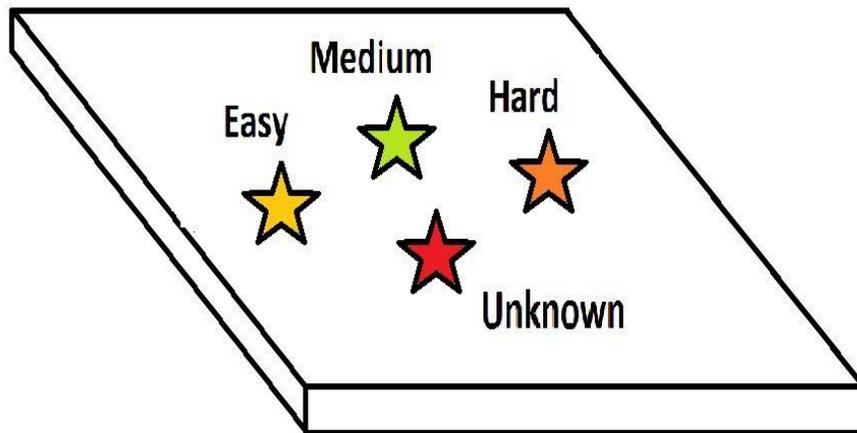
Many of us have a Dremel motor tool to use at home or when out to a class or workshop. The one thing that makes this tool much more productive is the addition of one inexpensive option, an adjustable chuck.



The basic motor tool as sold typically comes with a collet chuck. This means you have to use a wrench to change every tool bit, you have to switch collets to use different shaft sizes (3/32 or 1/8 inch bits), and you can't use ordinary drills at all - only the special ones that have a 3/32 shaft. A simple and inexpensive (\$12) adjustable chuck solves all of this. It's available in most large local hardware stores or modelmaking outlets. Tightening the chuck is done easily by hand to any size shaft. No key is required.

IDENTIFYING UNMARKED SOLDERS

There are plenty of ways to mark your sheet or wire solders, but suppose you forgot to mark them and have a couple that you can't identify. The answer is to compare the melting temperature of the unknowns with that of a known solder.



What I do is take a thick scrap of copper or nickel and arrange several solders on it. Ideally, I would have a sample of easy, medium and hard known solders surrounding the unknown solder. Then I heat the plate from the bottom and watch the order in which the solders melt.

Learn New Skills with Brad's "How To Do It" Books
www.Amazon.com/author/bradfordsmith

Happy hammering,
- Brad

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Walking Among Ghosts: Ironton, Colorado

By Steven Wade Veatch

Introduction

The secluded ghost town of Ironton, first known as Copper Glen, is between Silverton and Ouray along the so-called “Million Dollar Highway” (US Highway 550), in Colorado’s Red Mountain Mining District—the site of a silver boom that lasted from 1882 until 1893. Ironton’s historic townsite is in a beautiful park-like setting that can be accessed along County Road 20 and 20D east of US Highway 550. A once thriving supply and shipping point for the area mines, Ironton is now a scatter of crumbling wooden buildings among the pines and aspen. Spending time at this abandoned townsite and looking at the remaining structures is like walking among ghosts.



Figure 1 Ironton, in Ouray County, is eight miles south of Ouray and just north of Red Mountain. At an elevation of 9,800 feet, Ironton experiences heavy snows in the winter and pleasant days in the summer. The town’s name is derived from the low-grade iron ore of the area. Today, a few houses still stand at the south end of Ironton. Photo date 2020 by S. W. Veatch.

The Red Mountain Mining District

While searching for a bonanza, prospectors, located rich ore deposits that occurred in narrow, chimney-like structures in 1881 (Moore, 2004). Thanks to these and other subsequent silver strikes, the news spread like wildfire, and the rush to the eight-square-mile Red Mountain Mining District was on. Within a short time of these discoveries, six mining camps were established in the district: Ironton, Guston, and Red Mountain Town, along with several smaller camps: Congress (AKA Red Mountain City), Chattanooga, and Albany (Wolle, 1977). These settlements were established to support the mines.

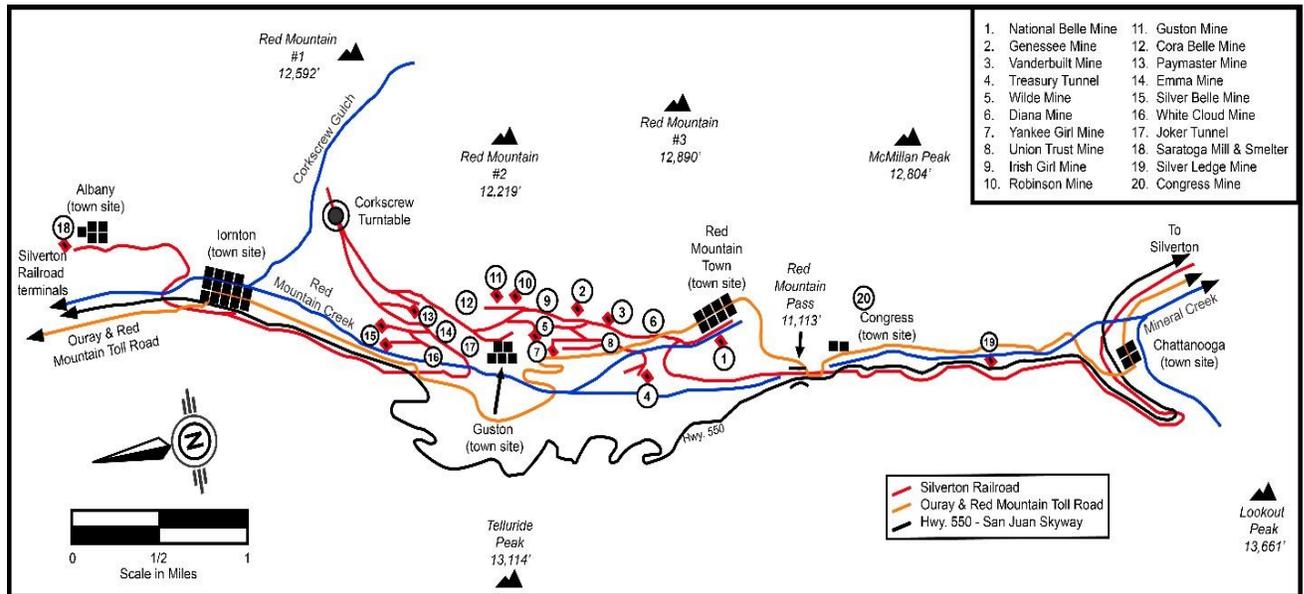


Figure 2 Map of the Red Mountain Mining District, Colorado. Modified from Legends of America (<https://www.legendsofamerica.com/red-mountain-mining-district/>)

The district quickly became the geography and geology of opportunity, as several important mines were developed. The Yankee Girl and the Guston mines were two of the most productive (Moore, 2004). By 1883, nearly 40 mines in the district were in operation.

The district's ore minerals included bornite, chalcocite, chalcopyrite, covellite, enargite, galena, pyrite, stromeyerite, sphalerite, and tennantite (Moore, 2004). Miners also found gold associated with some of the copper-bearing ore (Burbank, 1941).



Figure 3 Silver ore from the Yankee Girl mine. Courtesy of the Denver Museum of Nature & Science, DMNH EGM5479.



Figure 4 (left) Bornite. Specimen from the Yankee Girl mine. Courtesy of the Denver Museum of Nature & Science, DMNH EGM2329.

Figure 5 (right) The Yankee Girl mine started a rush to the Red Mountain Mining District. Developed to a depth of 1,050 feet, it was the most productive mine in the district. Photo date 2020 by S. W. Veatch.



Figure 6 (left) Fine small crystals of gold formed on quartz. Specimen from the Red Mountain Mining District. 48 mm wide x 57 mm tall. Courtesy of the Denver Museum of Nature & Science, DMNH EGM10953.



Figure 7 Red Mountain from Ironton Park, Ouray County, Colorado. The Ouray-Silverton stage road ran through here, serving the Red Mountain Mining District. Red Mountain is three separate mountains numbered 1, 2, and 3 (from north to south), north is to the left in the photograph. The red, yellow, and orange colors that cover these mountains come from the oxidation of pyrite. Photo date circa 1901 by Detroit Photographic Company. Library of Congress Prints and Photographs Division, Washington, D.C., LC-DIG-ppmsca-18010.

Ironton

Ironton (first known as Copper Glen) was started in the winter of 1882-1883 at the north end of the Red Mountain Mining District by prospectors and miners who slept in cotton tents and primitive cabins, some packed like sardines, on dirt floors (Eberhart, 1969). Several cabins had makeshift roofs of canvas.

By January 1883 there were no less than 300 tents pitched in the snow in Ironton (Wolle, 1974). At the edge of a wilderness, Ironton was pounded by endless winter storms. Only with heavy blankets and a blazing fire could the bitter cold be kept at bay in the Ironton cabins. Spring always seemed like a rumor. When it came, so did the mud, but it was home.

Permanent construction soon followed, replacing the tents. The town was surveyed on March 4, 1883 (Smith, 2007). On March 9, Ouray's *Solid Muldoon* announced: "Three miles north of Red Mountain Town . . . is the new town of Copper Glen, or Ironton, which was surveyed Sunday, and on Monday evening had thirty-two cabins underway" (Wolle, 1974, p. 446). Within a few weeks at least

100 buildings covered the flat spots. Merchants from Ouray and Silverton built branch stores (Smith, 2007). By spring, all the town lots were sold.

A special spirit existed in Ironton—a confidence to overcome the difficult physical environment that required a challenging set of adaptations of those who lived there. Tintypes of the period show faces of people who were determined, untrammelled individuals who faced hardships in this mountain setting, making it by gumption and by God. The residents were ready, and with a strong sense of community and family, Ironton was on its way to meet its future.

A post office was established on May 2, 1883. Watson Henderson Stuart served as the first postmaster (D. Griffiee, personal communication, 2020). Mail delivery was not always a regular event. Once an avalanche swept a rider, who was hauling the mail, off the road to Ironton. By summer, Ironton was the largest town in the district with over 200 houses, tents, and log cabins (Smith, 2007).

Newcomers, from rainbow chasers, carpenters, misfits, miners, and merchants to tinhorn gamblers—all driven by dreams and seeking their fortunes—continued to arrive in Ironton daily by stage, on foot, or on horseback. Most who came were men in their early thirties, and not married (Ninneman and Smith, 2006). Some of these new arrivals stayed at the Strayer House, one of the first hotels in the district (Smith, 2007).

By the summer of 1883, the town was going up faster than smoke through a chimney. Hammers were pounding nonstop. Because of Ironton's growth and constant building, the supply of lumber could not keep pace with the demand. Soon, several sawmills were established and became beehives of activity (Smith, 2007). Besides providing lumber for building, trees were cut for log cabins, mine timbers, and burned to heat mine boilers and keep homes warm (Smith, 2007). Trees quickly began to disappear from the mountainsides.

Many businesses lined Ouray Street, the graded, mile-long main street of Ironton. These establishments, crowded along wooden-plank sidewalks, included 12 saloons (which kept the miners happy), four busy restaurants, livery stables, and a bookstore that sold newspapers and cigars (Smith, 2007; Southworth, 1997). The general store carried a wide range of goods, but the choices were restricted to what was on the shelves (Smith, 2009). Ironton even published a newspaper (Smith, 2009). By 1885, there were 125 permanent residents in Ironton (Smith, 2007). An untold number lived nearby.

A Catholic mission, under the young Father J. J. Gibbons, guarded the souls of Ironton (Gibbons, 1898). The small, white, wood-frame church was near the railroad depot. Four windows ran along the length of the little church. A simple bell tower over the entrance rang out the call to worship (Sloan and Skowronski, 1975). Father Gibbons served three congregations: he alternated services in Ironton every other week with the church in Ridgway, and he also said mass at the Catholic church in Ouray each Sunday (Smith, 2007). Father Gibbons was assisted at the Ironton church by Paddy Commins, who was 80 years old. Commins was the sexton and maintained the church and its records (Gibbons, 1898). Commins had survived the Irish Potato Famine by eating grass that fringed the roads. He escaped those dire circumstances and came to America with only what he was wearing.

Churches were important in the mining camps. According to Father Gibbons, "It is customary for the miner to come to town at least three times a year, at Christmas, Easter, and the Fourth of July, and if he is a practicing Catholic, the church is one of the first places he visits" (Gibbons, 1889, p 28).

Ironton, like the other towns in the district, did not have a cemetery. There were no keepers of graveyards, there were no tombstones. The ground was frozen for long periods of time, and it was too hard to dig a grave (Smith, 2007). Those making their trip to glory went via a cemetery in Ouray or Silverton.

Records do not show any doctors, but death prowled around in the camp. Mining accidents, infections, disease, avalanches, and rockslides claimed lives. Home remedies and patent medicines were in high demand to treat health problems. Clean water was scarce. Nearby mines polluted the water, households dumped garbage outside, outhouses were everywhere, and horse and mule droppings were ubiquitous. All of these factors fouled the water and caused health problems (Smith, 2009).

Children grew up quickly in Ironton. They were packed into Ironton's schoolhouse for doses of discipline and the three Rs. During the winter, school closed due to the frequent snows, but it was in session all summer and fall (Wolle, 1977).

Miners worked twelve-hour shifts and sometimes went weeks without a day off (Smith, 2007). The work paid \$3.50 per day, was hazardous, difficult, and brutal on the body (Gibbons, 1898). Father Gibbons made this comment about miners: "The miner is nature's student. His special delight is to examine the various rocks and discuss the different formations. The geological knowledge he displays would do credit to some of our noted scientists" (Gibbons, 1898, p. 191).

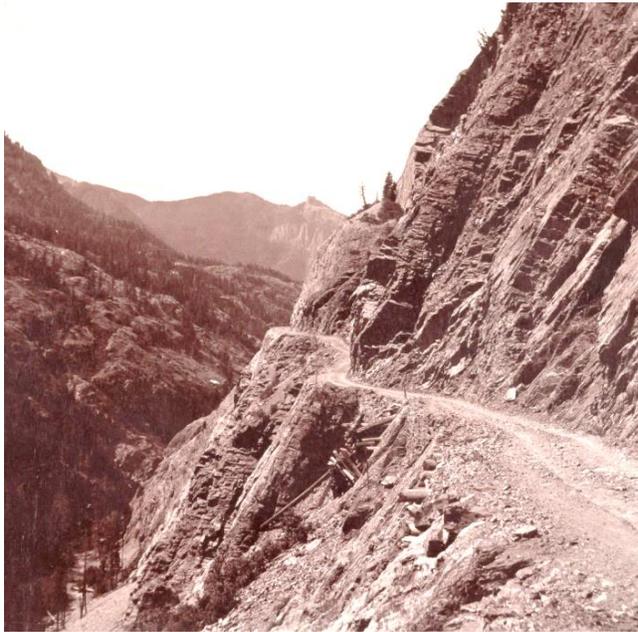
Father Gibbons wrote that miners came to Ouray to "enjoy its famous baths [hot springs] and get a box of Doctor Rowan's pills . . . for all diseases under the sun" (Gibbons, 1898, p. 16). Dr. William W. Rowan served the Ouray area in the early days; the local cemetery was known as "Rowan's Ranch" since he sent so many people there. Father Gibbons wrote this about Mother Buchanan's popular bath house in Ouray:

Here is a boiling spring, which is one of the sights of the town, and many an afflicted miner has had the rheumatism dislodged from his bones in the big swimming pool of hot water which bubbles fresh from the earth at Mother Buchanan's. The water is hot enough to boil eggs, so it always needs tempering with cold water which is provided in the bathing rooms (Gibbons, 1898 p. 124).

One of Ironton's famous stories was about two miners who lived in town and constantly feuded over mining claims. According to one version of the story, one of the miners, to resolve the dispute, put half a box of blasting powder under the other miner's cabin one night—while that miner was fast asleep—and set it off (Brown, 1984). The bomb's blast shattered the night, blew the cabin apart, and sent the sleeping miner and his mattress flying through the air. When the mattress landed, the miner only suffered a broken leg.

Recreation in Ironton was limited. Saloons and gambling took center stage in the lives of many Ironton miners. Baseball was a popular diversion, and most towns in the district had baseball teams that played against each other (Smith, 2009). Ironton had a fierce baseball rivalry going with Red Mountain Town. Holidays were moments of leisure from the endless round of toil. Thanksgiving, Christmas, New Year's Day, and the Fourth of July were the important holidays celebrated by Ironton residents (Ninneman and Smith, 2006).

Transportation in the district was key to its success, and Ironton played an important part in the development of transportation in the area. In 1882 Otto Mears, the "Pathfinder of the San Juan's," and Fred Walsen built a toll road (part of the route was blasted from the side of a mountain) from Ouray to Red Mountain Town (Sloan and Skowronski, 1975). After another year, they finished extending the road from Red Mountain to Silverton (Sloan and Skowronski, 1975). Horses had to be "well shod and the shoes sharp" to make it safely over the narrow parts of the toll road (Gibbons, 1898). This road stimulated the growth of Ironton as it kept its merchants busy supplying the district's mines and miners (Smith, 2007). Supply wagons arrived regularly from Ouray carrying mining supplies and equipment, lumber, hardware, merchandise, and food (Wolle, 1977).



Figures 8,9 Two horses pull a buggy and driver over the toll road from Silverton to Ouray, looking S.E. to Mt. Abrahams, Colorado. Photo date circa 1905. Library of Congress Prints and Photographs Division Washington, D.C., LC-DIG-stereo-1s11321.

A typical freight team consisted of three pairs of mules or horses that pulled heavy freight wagons as they scrambled up rough roads, bringing supplies into Ironton and ore out of the district on the return trip (Smith, 2007). In the winter, the snow was piled so deep along the road that hundreds of men worked to shovel it away. In the winter, wagon wheels were replaced with runners, turning the wagons into sleds (Smith, 2007). Avalanches were a constant threat.

Ouray and Silverton competed to be the principal supply center for the Red Mountain Mining District. Silverton won this contest when Otto Mears brought the 20-mile-long Silverton Railroad into the district in September 1888. The track to Ironton was finished in 1889. There was great excitement in Ironton when the train steamed into Ironton's newly built railroad platform and depot the first time (Smith, 2007). Two trains, winding their way up and over from Red Mountain Pass, pulled into Ironton daily from Silverton. Heavy winter snows closed the railroad between January and May. The stagecoach from Ouray continued to make several daily stops in Ironton. Ironton replaced the small town of Albany as the end-of-the-line of the Silverton Railroad, making Ironton a transportation and freighting center for the Red Mountain Mining District (Smith, 2007).



Figure 10 (above right) A stagecoach, pulled by six horses, carrying six passengers with baggage and mail in back, makes the daily trip between Ouray and Red Mountain Town, Colorado. Photo date circa 1901. Library of Congress Prints and Photographs, Washington, D.C., LC-USZ62-110840.



Figure 11 A view of Ironton's busy mile-long main street. A pack train of mules or horses is getting ready to leave town. A man stands next to his bicycle. A group of men gather in front of a building. Signs down the street read: "Livery & Feed Stable," and "Strayer House." Photo date circa 1893-1895. Credit: Denver Public Library, Western History Collections, X-9548.

The railroad was essential to the mining district; it reduced the shipping costs of ore to smelters in Silverton and Durango that processed the ore (Vendl and Vendl, 2015). The railroad also reduced the cost of supplies coming into the district.

The Silverton railroad, nicknamed the Rainbow Route, became a purveyor of scenery, taking passengers to the edge of the unbelievable where they viewed the scenic splendor of the Red Mountain Mining district. The Rainbow Route was known throughout the nation.

In addition to the train arriving in 1889, Ironton finished building its water works and electric plant (Smith, 2007). Ironton even had telephones, and by 1890, its population had peaked at 323 people (Smith, 2007).

Ruin came when the Panic of 1893 exploded across the district, causing the price of silver to plunge from 83 cents to 62 cents an ounce (Ubbelohde and others). This price drop forced the closure of many mines in the district, and mining never recovered. Economic conditions worsened in the Red Mountain Mining District over the next few years. The Silverton Railroad cut back service in 1897, and by December, the population of Ironton fell to 200. People continued to leave, and by 1900 there were only 71 people there. By 1910 the population dwindled to 48 and continued to decrease as residents left to follow their dreams somewhere else (Smith, 2007).

In 1904, the Joker Tunnel project began with the purpose of draining some of the mines closed by flooding. It was finished two years later (after extending 4,800 feet) and allowed some mines to

reopen and produce ore (Smith, 2007). The tunnel operated until the 1940s (Smith, 2007). During the early 1900s, the Barstow mine and its mill were the main employers in the area. The Barstow kept the town going during the first decades of the new century until it closed in 1917 (Weiser-Alexander, 2020).

The post office closed on August 7, 1920. Because its closure occurred during prohibition, a few people in Ironton tried to talk the departing postmaster into allowing a still to operate inside the old post office (Brown, 1984). They were not successful in this endeavor. Only a handful of people stayed in town until the railroad shut down in 1921 (Dallas, 1985).

Harry and Milton Larson worked the Beaver and Belfast mines, and were the last residents of Ironton (Smith, 2007). Harry Larson died in the 1940s while Milton stayed in the abandoned town alone. In 1963, Milton appeared on the CBS television game show "I've Got a Secret." His secret: "I am the entire population of Ironton, Colorado" (YouTube, 2020). Milton Larson died in the mid-1960s (Weiser-Alexander, 2020). The last mine in the district, the Idarado, closed in 1978 (Smith, 2007).

Windstorms and heavy, wet snows have leveled most of Ironton's houses and false-fronted stores. Paint has peeled away, the wood is split, and the shingles are mostly gone. Vandals have also taken their toll on the town by carting off pieces of it. Today, only a few homes remain. Through parting trees, a white house with bay windows comes into view while other buildings are hidden by overgrowth. The blue skies stretch into forever. The remaining structures are owned by Ouray County and protected by conservation easements.



Figure 12 The "White House" with its shuttered bay windows once belonged to a mine superintendent who lived in Ironton. Photo date 2020 by S. W. Veatch.

When mining closed down, the dreams ended, and the people of Ironton moved on. Time stopped; left behind were wounds on the land: a minescape of broken headframes, empty shafts, silent mills, tailings, and a deserted town that harkens back to a time when saloons, hotels, stores, and homes once stood. Ironton has largely faded away, leaving only a ghostly page in the annals of Colorado's mining history.



Figure 13 A miner's cabin and shed in Ironton. The roof of the shed has collapsed from the weight of many winter snows. Photo date 2020 by S. W. Veatch.

Acknowledgments

I thank Ben Elick for preparing and modifying the map used for this paper. I appreciate the help of Dr. James Hagadorn and the Denver Museum of Nature & Science for their help in providing photographs of their specimens from the Red Mountain Mining District. I thank Shelly Veatch and the Colorado Springs Oyster Club critique group for reviewing the manuscript, and Dr. Bob Carnein for his valuable comments and important help in improving this paper.

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Monthly Mineral Quiz

Last Month's Mineral. Hematite, Fe₂O₃.



The main ore of iron, hematite is one of the most abundant minerals on Earth. Although taconite, a mixture of hematite and quartz (commonly jasper) is the common iron ore of the upper midwest (Minnesota, Wisconsin, Michigan), much of the early iron industry in the eastern US was based on oölitic hematite, like the picture to the left. Large stratiform deposits occurred in Pennsylvania, West Virginia, and other areas. Fine crystals occur in Elba, Italy (right), where Napoleon underwent exile from 1814 to 1815.



In our area, hematite pseudomorphs occur after a rhombohedral mineral, probably siderite. Much of the "iron stain" seen on crystals of microcline feldspar and on the soil in amazonite "pockets" is hematite.

This Month's Mineral. This month's mineral also occurs locally, with nice specimens coming from Cripple Creek; near Cañon City; and the Crystal Peak and the Pikes Peak area. Believe it or not, all of the photos below are the same mineral! It has perfect octahedral cleavage, as shown on the specimen at the left in the first row, below. The color is very varied, from white to green, yellow, purple, and pink. Crystals are common and are usually cubes or octahedrons. It commonly fluoresces blue, but green, pink, and yellow fluorescence are known. It's softer than a knife blade. This is a mineral you should know. What is it?



This month's mineral (Carnein photos and collection)

Eckel, E.B., 1997, *Minerals of Colorado, Updated and Revised by R.R. Cobban, et al.*: Golden, Colorado, Fulcrum Publishing.



The Lake George Gem and Mineral Club is a group of people interested in rocks and minerals, fossils, geography and history of the Pikes Peak/South Park area, Indian artifacts, and the great outdoors. The Club's informational programs and field trips provide opportunities to learn about Earth science, rocks and minerals, lapidary work and jewelry making, and to share information and experiences with other members. Guests are welcome to attend, to see what we are about!

The Club is geared primarily to amateur collectors and artisans, with programs of interest both to beginners and serious amateurs. The Club meets on the second Saturday of each month at the Lake George Community Center, located on the north side of US Highway 24 on the east edge of town, sharing a building with the county highway shops. **In the winter, we meet at 10:00AM. From April through October, we meet at 9:00AM, to allow more time for our field trips.**

Our organization is incorporated under Colorado law as a nonprofit educational organization, and is a member of the Colorado, Rocky Mountain, and American Federations of Mineralogical Societies. We also sponsor an annual Gem and Mineral Show at Lake George, where collectors and others may purchase or sell rocks, minerals, fossils, gems, or jewelry. Annual membership dues (Jan. 1 through Dec. 31) are \$15.00 for an individual (18 and over), and \$25.00 for a family (parents plus dependents under age 18). New memberships and renewals are only accepted Jan 1 through March 31 each year.

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