PICK&PACK

THE BULLETIN OF THE COLORADO SPRINGS MINERALOGICAL SOCIETY Published Since 1960

Colorado Springs Mineralogical Society
Founded 1936
~ Lazard Cahn ~
Honorary President
"Pick & Pack"
Volume 62 No. 5
June 2022

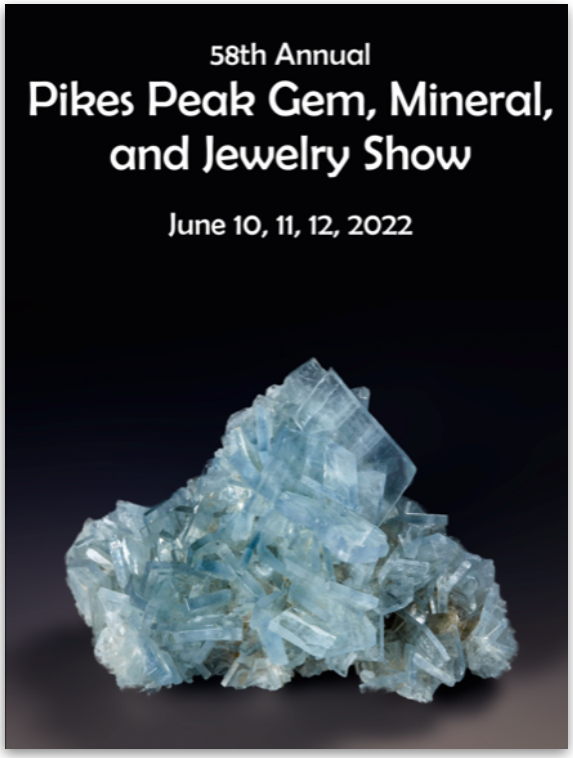
Pikes Peak Gem, Mineral and Jewelry Show

June 10-12, 2022
Norris Penrose Event Center
1045 Lower Gold Camp Rd
Colorado Springs

Fri 12 PM - 7 PM, Sat 10 AM - 5 PM, Sun 10 AM - 4 PM

In This Issue …

Pikes Peak Gem, Mineral and Jewelry Show, June 10-12, 2022



Muddy Creek blue **barite** from Rio Grande County CO. Collector: Marge Regel. Photo by Mark Jacobson. Modified by Bob Germano. **Barite** is the theme of the show.

CSMS Group Calendar

Jun '22	Jul '22						
7 Jun	5 Jul	Fossil Group	1st Tues	6:00 PM	East Library	Jerry Suchan	303-648-3410
CANX	7 Jul	Board Meeting	1st Thur	6:00 PM	Zoom	John Massie	719-338-4276
16 Jun	21 Jul	Pebble Pups	3rd Thur	5:30 PM	Mt. Carmel Center	David St. John	719-424-9852
CANX	21 Jul	General Assy	3rd Thur	7:00 PM	Mt. Carmel Center	John Massie	719-338-4276
23 Jun	28 Jul	Crystal Group	4th Thur	7:00 PM	Mt. Carmel Center	Kevin Witte	719-638-7919
By appt	By appt	Faceting Group	By appt	By appt		John Massie	719-338-4276
By appt	By appt	Lapidary Group	By appt	By appt	Sharon's House	Sharon Holte	719-217-5683

CSMS Club Events

June 10-12: Pikes Peak Gem, Mineral and Jewelry Show, Norris Penrose Event Center, Colorado Springs. Friday, June 10, Noon - 7:00 PM, Saturday, June 11, 10:00 - 5:00, Sunday, 10:00 - 4:00. Adults $5.00/ Multi-day $8.00/ 12 and under free. The theme of this year's show is **barite**.

July 22: Field trip to The Detroit City Mine. This is a tour only - no collecting - of the world class Rhodochrosite mine owned by Brian Lees. This was an outgrowth of the Sweet Home Mine. This field trip is only available on Friday July 22 - Limit of 10 people. if interested contact Frank Rosenberg 719-271-7440

Field Trip Schedule
June 25 - Club Claim
July 2 - Barite Claim
July 9 - Club Claim
July 16 - Smoky Hawk Mine
August 6 - Topaz Mountain
September 10 - Mt Antero
September 24 - Club Claim

For questions contact:
atkinson.kyl@gmail.com
(Kyle Atkinson)

Community Events (P. Modreski)

June 10-12: Pikes Peak Gem, Mineral and Jewelry Show, Norris Penrose Event Center, Colorado Springs. Friday, June 10, Noon - 7:00 PM, Saturday, June 11, 10:00 - 5:00, Sunday, 10:00 - 4:00. Adults $5.00/ Multi-day $8.00/ 12 and under free. The theme of this year's show is **barite**.

June 16: Victor Gem and Mineral Show // Thursday, June 16 - set-up; Show June 17 to 19, 2022. For additional information contact RuthZalewski,info@stcfg.com 719-689-2675 or 719-651-2714.

Secretary's Spot

John McGrath

2022 CSMS Officers

John Massie, President
Rick Jackson, Vice-President
John McGrath, Secretary
Ann Proctor, Treasurer
Adelaide Bahr, Membership Secretary
John Emery, Editor
Chris Burris, Member-at-Large
William Meyers, Member-at-Large
Sharon Holte, Past President

2022 CSMS Chairpersons

Rick Jackson, Program Coordinator
John Massie, Show Vol Coordinator
Kyle Atkinson, Field Trip Coordinator
Vacant, Science Fair Chair
Frank and Ellie Rosenberg, Librarians
Mark Schultz, Social Committee Chair
Ann Proctor, Store Keeper
Lisa Cooper, Show Chairman
Lisa Cooper, Webmaster
Lisa Cooper, Facebook Keeper
Mike Nelson, Federation Rep

CSMS General Assembly Minutes

Mt. Carmel Vet Center, Thur May 19, 2022 7:00 PM

Address: 530 Communications Circle, Colorado Springs CO 80905
Board Attendance: President: John Massie, Past President: Sharon Holte, Member-at-large: Bill Meyers, Treasurer: Ann Proctor, Editor: John Emery
Agenda:

1. Meeting was called to order by our President John Massie at 7:04 PM
2. The Pledge of Allegiance was led by President John Massie
3. Introduction of Guests
4. Introduction of New Members
5. Program Speaker introduced by Press Massie - David St John gave an excellent presentation on the new microscope CSMS purchased. It shows minerals and takes great pictures.
6. Meeting - There were 33 members in attendance and 6 minerals were given out.
7. Officer Reports
   - A. President - John Massie
     1. Pikes Peak Gem, Mineral, and Jewelry Show starts at 8:00 AM sharp on Thursday June 10 for set-up and starts at 12:00 noon on June 11. There will be no driving in available so make certain to bring a cart for moving your product. John still needs ticket takers.
     2. We are having a silent auction today. CSMS was donated a tool collection from Ralph Parks one of our life time members.
     3. John has found a faceting machine. He should have it shortly!
   - B. Vice - President - Rick Jackson - unavailable
   - C. Treasurer - Ann Proctor - nothing at this time
   - D. Secretary - Sharon Holte Acting Secretary
   - E. Membership Secretary - unavailable at this time
   - F. Editor - John Emery - unavailable at this time
   - G. Members-at-Large - C. Burris unavailable, B. Meyers nothing to report
   - H. Past President - Sharon Holte - nothing to report
8. Website Coordinator - Lisa Kinder; she has been updating the website as time permits
9. CSMS Show Chairman - Lisa Kinder; gave a brief update on how the show is coming together; things are going well
10. Satellite Groups
    - A. Crystal Group - Kevin Witte, meets on the third Thursday; this meeting is the last for the Summer; meetings resume in September.
    - B. Faceting Group - John Massie, nothing to report
    - C. Pebble Group - David St John, reports the pebble pups are enjoying the new microscope
    - D. Fossil Group - Jerry Suchan; resuming on the first Tuesday of the month
    - E. Jewelry Group - still in need of a Chairperson
    - F. Lapidary Group - Sharon Holte, by appt only please; call Sunday evening after 6:30 PM
    - G. Field Trip Leader - Kyle Atkinson; see the Pick & Pack for updated field trip list
11. Liaisons
    - A. Claims - Frank Rosenberg, all good
    - B. Social Coordinator - Mark Schutz, thanked everyone for all the goodies
    - C. Store Keeper - Ann Proctor, will have the store at the show
12. Unfinished Business
    - A. Pikes Peak Gem, Mineral and Jewelry show, covered previously
13. New Business
    - A. Door Prize Drawing - 6 minerals were given out
14. Meeting adjourned by President John Massie at 8:34 PM

Submitted by
Sharon Holte, CSMS Past President

President's Corner

John Massie
CSMS President

2022 Satellite Group Chairs

Kevin Witte/ Bob Germano, Crystals
John Massie/ Bertha Medina, Faceting
Jerry Suchan/ Joy Price, Fossils
Vacant, Jewelry
Sharon Holte, Lapidary
Vacant, Micro-mount
Vacant, Photography
David St. John/ Hair/ Elick, Pebble Pups

2022 Liaisons

Florissant Fossil Beds National Monument:
S.W. Veatch

Western Museum of Mining and History:
S.W. Veatch

Presidential Matters

A message from CSMS President John Massie:

I want to thank all the members who attended the fields trip to our claims on the 28th of May.

Do not forget the Pikes Peak Gem, Mineral, and Jewelry Show on June 10,11,12, with set up starting at 8 am on the 9th of June. We have a lot of volunteers, but can always use more. If you haven't signed up just show up at the hospitality table and we will find something for you to do. Members must pay to get into the show unless you volunteer.

There is another field trip to our claims on June 25, not the 22nd as was previously published. There is also a field trip scheduled for July 2, to the barite claim in Hartsel.

John Massie
CSMS President

Federation News Post

American Federation of Mineralogical Societies
Rocky Mountain Federation of Mineralogical Societies

American Federation Rockhound Information

- William Holland School of Lapidary Arts (Young Harris, GA)
- Wild Acres Retreat (Little Switzerland, NC)
- Bureau of Land Management
- Crystallography
- U.S. Geologic Survey Topographic Maps
- TopoZone - Topographic maps of the U.S. online

Local Club Shows

- Notify other clubs in our federation about your upcoming show, *email the editor*
- For Member Club Show general information go to the *RMFMS Club Lists* page and check the club or city you are interested in.
- Want to see the shows in your state? Visit the Rock and Gem Magazine's Show page and select the state you are interested in: *Rock and Gem Magazine's Show Page*
- Please use the following link to the RMFMS Editor Google Drive to download the Rocky Mountain Federation News: *RMFMS Editor Google Drive*
    - The RMFMS Newsletter is also available at *RMFMS.org*

About the AFMS - A non-profit educational federation of seven similar regional organizations of gem, mineral and lapidary societies. The purpose of AFMS is to promote popular interest and education in the various Earth Sciences, and in particular the subjects of Geology, Mineralogy, Paleontology, Lapidary and other related subjects, and to sponsor and provide means of coordinating the work and efforts of all persons and groups interested therein; to sponsor and encourage the formation and international development of Societies and Regional Federations and by and through such means to strive toward greater international good will and fellowship. Founded in 1947.

About the RMFMS - A non-profit educational organization. The purpose of the Rocky Mountain Federation is to have a close association of all clubs in the Society to promote the study of earth sciences, including the lapidary arts, the study of fossils and paleontology, and related crafts. The RMFMS was organized in 1941, and held its first annual convention at the Argonaut Hotel in Denver, Colorado. There were 16 organizations in attendance. The RMFMS became one of the original four founders of the American Federation of Mineralogical Societies when it was organized in 1947.

Alum Group Minerals, Elegant Trogons, and Shaving Cuts

Mike Nelson
csrockguy@yahoo.com

An Elegant Trogon. *Photo: Public Domain and courtesy of Dominic Sherony.*

Several years ago, I purchased a white mineral box of halotrichite crystals—or so I thought. I remember the specimen cost a buck (memory helped by a $1 label) and was covered with a thick layer of dust, so I brought it home but dared not blow away too much dust as the fragile crystals were mostly loose and on the surface of an unknown matrix. But in the last couple of years, I have been taking a second peek at many of my mineral specimens hidden away in the back of drawers or stored in larger boxes sort of stored in my cave. So, out popped this specimen labeled: *Halotrichite, Karshaw* [sic. Harshaw] *District, Chief Mine, Coll. 1971, FitsHue Collection*. I knew about the Harshaw Mining District mainly due to the Japan Law quartz crystals collected from Washington Camp mining area. In fact, the entire Patagonia and neighboring Santa Rita Mountains are chocked full of old mines and prospecting holes. I also have camped at Patagonia Lake State Park with two memories of the area: 1) I spotted my first and only specimen of the Elegant Trogon [*Trogon elegans*]; and 2) in asking directions to the Washington Camp I was warned by locals not to drive there alone, and to travel armed. It appeared that drug smugglers were in the area. So, I switched from minerals to bird watching and especially was interested in the trogon since the Audubon Guide to North American Birds noted "Since the 1890s the possibility of seeing a trogon has lured birdwatchers to southern Arizona. With its brilliant metallic colors and odd croaking call, the Elegant Trogon brings an exotic touch to the wooded canyons and stream-side sycamores where it lives. The observer who finds one may get to watch it at leisure: rather sluggish, the trogon may sit upright on one perch for several minutes." Trogons are tropical birds, but a few migrate north to breed (April-September) in the sycamore canyons of extreme southern Arizona, especially in the Patagonia, Huachuca (Ramsey Canyon), and Santa Rita Mountains (Madera Canyon). They are sort of a Holy Grail to dedicated bird watchers. I was honored to be *a chosen one* and stand under a tree and observe and chat with the fellow for 10 minutes until I quietly departed. It certainly has been the highlight of my meager birding career.

OK, back to the halotrichite, which really doesn't look like halotrichite--at least to me. According to MinDat halotrichite is not known from the Chief Mine although Anthony and others (1995) noted its presence. The polymetallic (but mostly copper) Chief Mine is located as one of a group of twelve claims crowded together in Alum Canyon. It was a

small mine and evidently has not been active in the last 100 years or so; no production records were located. Its next-door neighbor, the World's Fair Mine, also was in Alum Canyon and was a much larger producer (copper) and MinDat lists 56 valid minerals known from the Mine, including an isolated nodular specimen of halotrichite. However, there are other photos in MinDat of what is described as Alum Group minerals, a generic name for hydrated aluminum alkalic metal sulfate. A "dead ringer" photo in MinDat was a "white fibrous alum group mineral collected by Rolf Luetcke at a small tunnel off Alum Gulch"

Most of the mining in the Harshaw District is centered on copper minerals disseminated in a Tertiary rhyolite and/or lodes/veins of ore along fault fissures and breccia zones in limestones. What is really interesting is a statement by Schrader and others (1915): "In Alum Canyon, on the southwest, the weathered surface of the rock and the alluvial gravels derived from it are coated with efflorescence and incrustations of alum, some of whose constituents seem to be derived from the pyritic content of the rock through oxidation." This description would seem to indicate the alum formed post-mining. So, I am calling this specimen of white fibers from Alum Gulch (maybe, maybe not the Chief Mine) an Alum Group Mineral.

And, what are Alum Group Minerals? The generic chemical formula for Alum Group Minerals is $XAl(SO_4)_2$--$12H_2O$ where X is an alkali metal cation with an oxidation state of 1+, usually sodium or potassium but ammonia, titanium or even cesium are available. These cations bond with an aluminum cation with an oxidation state of 3+, or occasionally bond with 3+ chromium, cobalt, iron, or manganese. Together the cations then combine with the sulfate radical, SO_4, and lots of water H_2O.

All above: Photomicrographs (LED ~5600 Kelvin): Fibers of Alum Group mineral from Alum Gulch. Width FOV ~1 cm. *Photos: M. Nelson*

Alum minerals most common in nature are referred to as Alum-K and Alum-Na. It is really tough to distinguish between these two minerals without some electronic gizmos---at least for me. Both are soft at Mohs 2-3, form small, vitreous crystals, or fibrous mats, or are massive/granular. Some crystals are clear and transparent while others are white and opaque. Both are members of the Isometric Crystal System; however, MinDat noted that crystals are octahedral if they precipitate from pure water but are cubic if they precipitate from an alkaline solution. It appears most descriptions of mineral producing localities use the term Alum Group Minerals although the majority of these minerals are probably Alum-K.

There are a couple of different alum minerals that have better mineral names: 1) lanmuchangite, known from two localities, where titanium with an oxidation state of 1+ substitutes for sodium or potassium; and 2) tschermigite with ammonia, NH_4, acting as the monovalent cation.

Natural alum minerals are usually formed as a precipitate around volcanic fumaroles/vents, burning coal beds, or where iron sulfide and potassium/sodium minerals can oxidize.

A large number of “alum group” minerals are now produced synthetically and used in industry, and alum may be produced from rocks/minerals by adding sulfuric acid to leucite, alunite, bauxite ore, or kaolinite. We know refined alum for its place in the spice rack (alum-K) where my mother used it to crisp home-canned dill pickles. My father had his own use for alum for when he cut himself shaving, he dabbed the cut with a “styptic pencil” (alum-NH_4). Commercially, alum is used as a flocculating agent in water-purification plants, to size paper, as a binder in dyes, and as an ingredient in baking powder (among the many uses).

Parents of children needing a science project know about growing large, colored (food coloring), octahedral crystals of alum when seed crystals are tied to a thread and suspended in a saturated solution. They are quite beautiful!

I found USGS Bulletin 582 by Schrader and others (1915) to make fascinating reading, all 372 pages. One of the best sections is his quote about some of the items in a “prospector’s kit” that were used to test for the presence of alunite, an alum mineral:

“Boil the powdered sample with water or with hydrochloric acid for several minutes. After allowing the powder to settle pour off the liquid and repeat the operation to insure the removal of all soluble sulphates. Dry the powder and heat to a dull red. Again boil in water, and after settling pour off some of the clear liquid. To this add a small fragment or a solution of barium chloride. If the mineral is alunite a heavy white precipitate will form. To be sure that the water used in this test does not contain sulphates in solution it should be tested with barium chloride, and if it gives a marked precipitate it can not be used. For this test all that is required that is not included in a miner's or prospector's outfit is a little barium chloride, which can be carried in a small bottle or cartridge.”

Do modern rockhounds, or even prospectors, have their own chemical lab in their “prospector’s kit”?

REFERENCES CITED

Anthony, J.W., Williams, S.A., Bideaux, R.A., Grant, R.W., 1995, Mineralogy of Arizona, Third Edition: University of Arizona Press, Tucson, Arizona.

Schrader, F.C., Hill, J.M., 1915, Mineral deposits of the Santa Rita and Patagonia Mountains, Arizona, United States Geological Survey: Bulletin 582.

FOR THOSE INQUIRING MINDS

A styptic pencil is an antihemorrhagic agent — simply put, it helps constrict blood vessels, so they will stop bleeding. Most commonly styptic pencils are used to treat small wounds and cuts on the face, often caused by razors. The main ingredient in a styptic pencil is anhydrous (the NH_4 monovalent cation) aluminum sulfate.

And who are the inquiring minds? Ask Albert Einstein:

> *I have no special talents. I am only passionately curious. Children are such curious creatures, as are adults that retain an enquiring mind. They explore, question, and wonder, and by doing so, learn. When they are curious about something new, they want to explore it. And while exploring they discover. Through discovery, they learn. This positive cycle of learning is fueled by curiosity and the pleasure that comes from discovery and mastery.*

Pebble Pups
David St. John

CSMS Pebble Pups and Earth Science Scholars

May 19th meeting was a fun lesson on rockhounding the shores of the Great Lakes. We had a water tub with a shoreline of sand and pebbles that we could make the waves like the Great lakes. Also, we learned about all the different rocks, minerals, and fossils found at the lakes. We made so many contacts with fellow rockhounds and pups from this amazing place and were sent photos, samples, and stories on homemade tools used by the locals and the best places to hunt for these treasures. One our favorite samples were the Yooperlites (sodalite) UV rock that recently have become popular as well as the classic Lake Superior Agates and Petoskey fossil stones. Thank you to Sharon for donating Lake Superior agates as give aways to the kids.

Digital Microscope at the General Meeting

We showed off our new digital microscope that can take pictures and project on the big screen. We shared many examples of fossils, minerals, and more fun stuff. I thanked our special guests from Maryland and Lake George clubs that donated samples to our youth programs. The club was shown the great lakes lesson and were able to see our hands-on approach to learning. Thank you, club members, for all your donations that allowed us to purchase a lot of new items for our outreach programs.

A small sample rests under the lens of the new digital microscope acquired by Pebble Pups program.

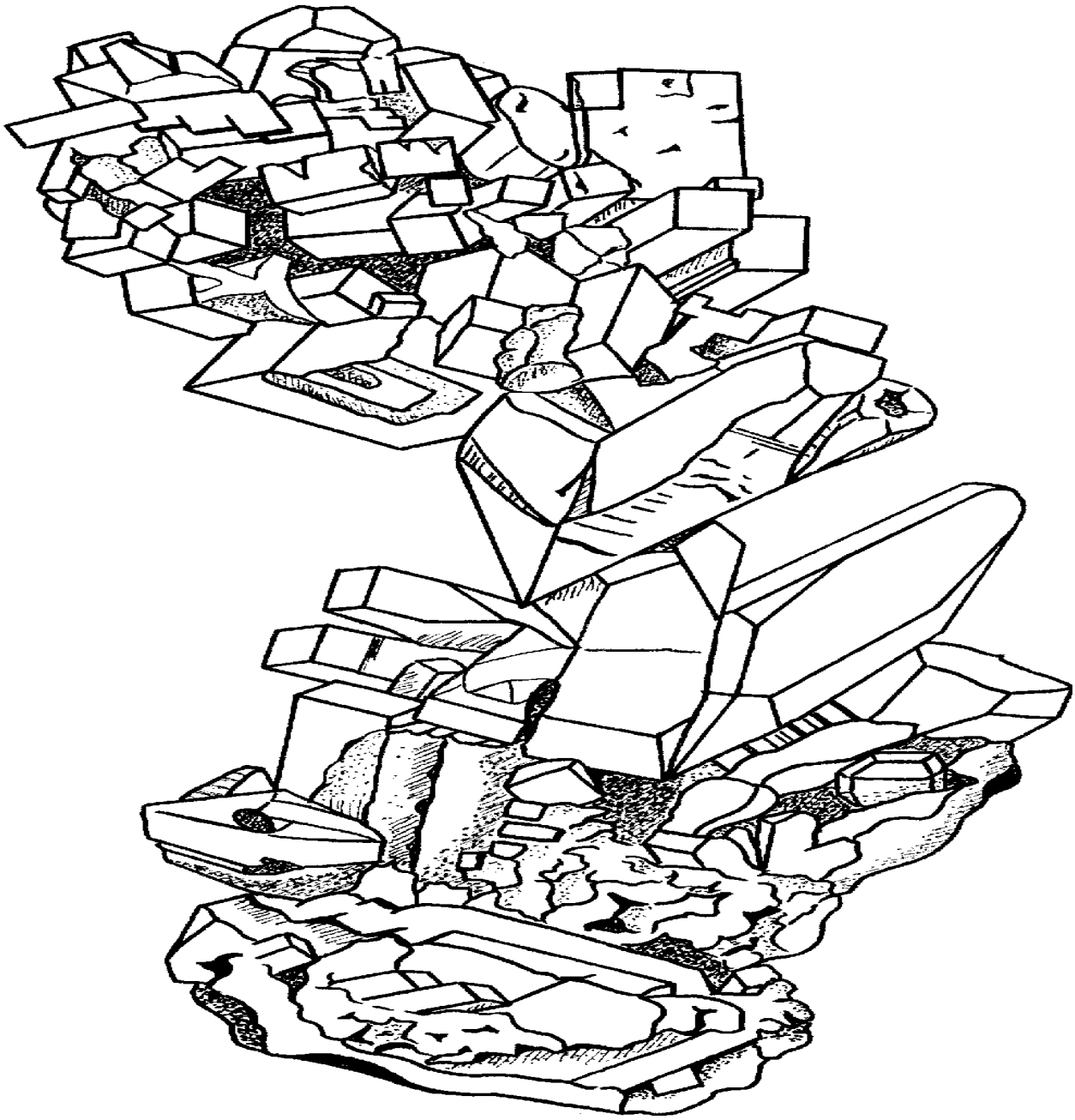
Stunning detailed images can be displayed on a monitor for shared viewing.

The Rock and Mineral show June 10,11,12

Look for are amazing booth this year at the show in June share free samples to kids 1-16 due to a limited supply this year. Steve will be here on Friday the 10th and Betty be here all three days supporting Lake George Club as well. A selfie wall, crafts, rockhound tool display, Our rockhound Bear, and other fun surprises. Tell your neighbors, family, and friends to check out amazing show. Please contact me if you can volunteer at our booth.

June Meeting is on the 16th

The theme of this meeting will be a “share and tell” focus and plan our summer field trips to The Morrison Natural History Museum, Coral Bluffs, and reading and art contest. We will meet every month this summer. Hope to see you all there.



Color me page from the Michigan Great Lakes Area. Copper Crystals

Independence: A Town of Troubles in the Cripple Creek Mining District of Colorado

Steven Wade Veatch

A troubled man, with a festering and poisoned mind, emerged from the shadows on a Saturday night, just five days before Thanksgiving, 1903. He went down the shaft of the Vindicator mine, a substantial gold producer in the town of Independence, one of more than a dozen camps in the Cripple Creek mining district of Colorado. While down in the mine, this man planted a device that would later explode, killing two men. He had hoped to kill more. This was not the last act of violence committed by the fanatic bomber known as Harry Orchard. He later planned another attack, one that would be more destructive and more lethal for the town of Independence. And there would be other incidents of mayhem: saloon fights, gunfights, railroad accidents, and injuries from mining. Independence was anything but a quiet town.

First known as Hull's Camp, the town was renamed by promoters after the storied Independence mine, which is 2.5 miles south of the townsite. According to *The Morning Journal*, Mr. W. S. Montgomery, one owner of the Hull City mine, said:

> *Yes, there will be a town at Hull's camp and it will be known as Independence. The site of the new town is an admirable one, with plenty of water and well sheltered by the surrounding hills. It is the center of the most productive section of camp. The streets are now being laid off and already several large business firms have signified their intention of locating in the new town* (The Morning Journal, Oct 28, 1894).

A group of town organizers formally platted Independence on November 11, 1894 (MacKell, 2016).

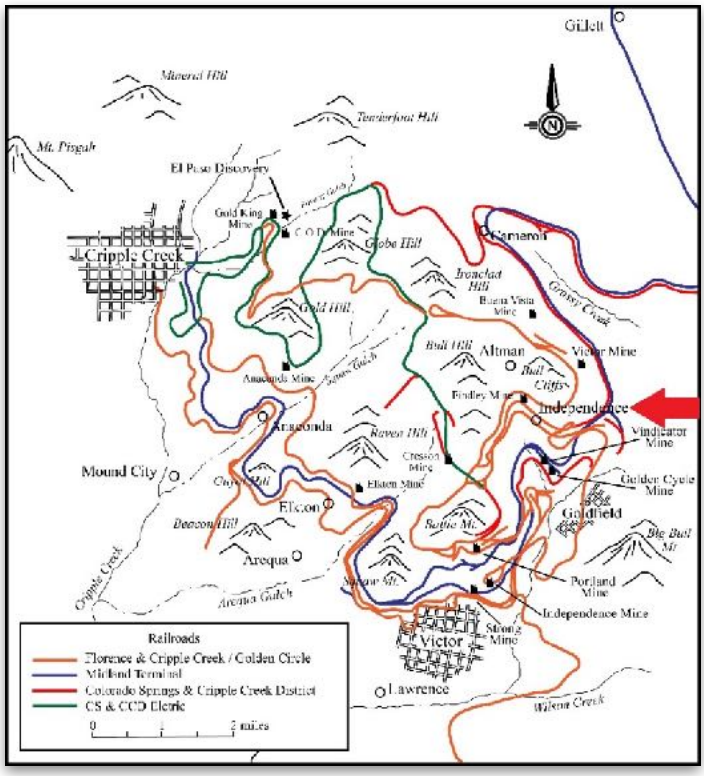


Figure 1: Map of the Cripple Creek mining district. A red arrow points to the town of Independence. The Vindicator mine is almost due south of the town of Independence. The Independence mine is northeast of Victor. *Modified from Jameson, 1998.*

Independence was a place where miners and their families lived, and by 1896, the population reached 500 (MacKell, 2016). An active business district along Montgomery Avenue included an assayer, jeweler, photographer, and one doctor (MacKell, 2003). There was a drugstore, grocery, meat market, bakery, barber shop, two saloons, and a lumber mill. According to the newspaper, Mrs. Marshall "set a good table" at her restaurant (The Morning Journal, February 27, 1895). Willard F. French ran an active assay office in town. Independence also had a boardinghouse and two hotels (MacKell, 2016). Mrs. Mamie Crook's Hotel Montgomery offered a "Nice home for miners, good board and clean rooms at reasonable rates" (MacKell 2016). *The Independence Retort* published a weekly newspaper.

The Midland Terminal Railway stopped at the modest depot on First and Montgomery to handle freight and passenger traffic (MacKell, 2003). While the railroad built the depot, the station agent lived in a nearby box car (The Morning Journal, December 13, 1894). While laying tracks toward the depot, the railroad made a cut in the ground on the property of the Longfellow mine number 2 and exposed a gold vein. The cut was near where the depot was to be built. Owners of the claim picked up some pieces of rock from the vein and threw them into the firebox of a nearby locomotive. The rock came out of the fire blistered with gold. Within five days, miners had dug a carload of ore (The Morning Journal, December 19, 1894). Station agent Jackson of the Midland Terminal depot at Independence later became a joint owner of the lease on the Longfellow number 2. Newspapers later reported of several gold strikes there. The Florence and Cripple Creek Railroad also had a depot in Independence (figure 7).

Accidents and injuries were not uncommon at the railroad depots in Independence. In one example, a moving train struck a Mr. Adams near the main Independence depot about 6:30 pm on Tuesday, June 20, 1899. Adams was from Pueblo and was on an excursion to the mining district. He was taken to the Sisters' Hospital in Cripple Creek and died that evening (The Morning Journal, June 20, 1899).

Saloons did a brisk business in Independence. *The Morning Journal* reported this unusual story: "John Lamb of Independence, commenced a suit in district court to recover money lost by him in an Independence gambling hall. The defendants in the case are Charles Zeigler and Charles Cunningham. Lamb alleges in this complaint that while on his way home from work he dropped into the gambling hall and saloon of the defendants and after being given a drink or two by them his brain was so stupefied by the drink and drugs that he did not know what he was doing. He alleges that the defendants then induced him to play a game of chance, and he lost $117.[1] Scott Ashton, of Victor, is the plaintiff's attorney" (The Morning Journal, August 15, 1899).

Independence was likewise the location of a large ore loading rail yard. Locomotives made it a noisy place, with their pistons chuffing, whistles blasting, and brakes screeching. Switch engines and crews traveled around to the various mines and mills and switched ore cars out—pulling the loaded ore cars away and replacing them with empty cars. The switch crew would then assemble loaded ore cars into a train that hauled the ore to a mill for treatment.

[1] Around $3,160 in today's dollars

People in town surely would have noticed the heavy rumbling of a train as it rolled by, pulling loaded ore cars. They watched locomotives that ran through the area, belching plumes of heavy black smoke, soot, and cinders. The air smelled of coal and hot valve oil, and the wooden railroad ties reeked of creosote.

Figure 2 shows the Midland Terminal Railway engine number seven, with its switch crew taking a break at the town of Independence in 1904. The photograph also reveals the dual gauge track and extra link-and-pin coupler socket on the engine, allowing it to handle either standard or narrow-gauge equipment. The coupler—for narrow gauge cars—was offset, while the standard gauge coupler was centered (the coupler can be clearly seen above the "cowcatcher" in figure 2). Both the Midland Terminal and the Colorado Midland were standard gauge, but other railroads in the district were narrow gauge.

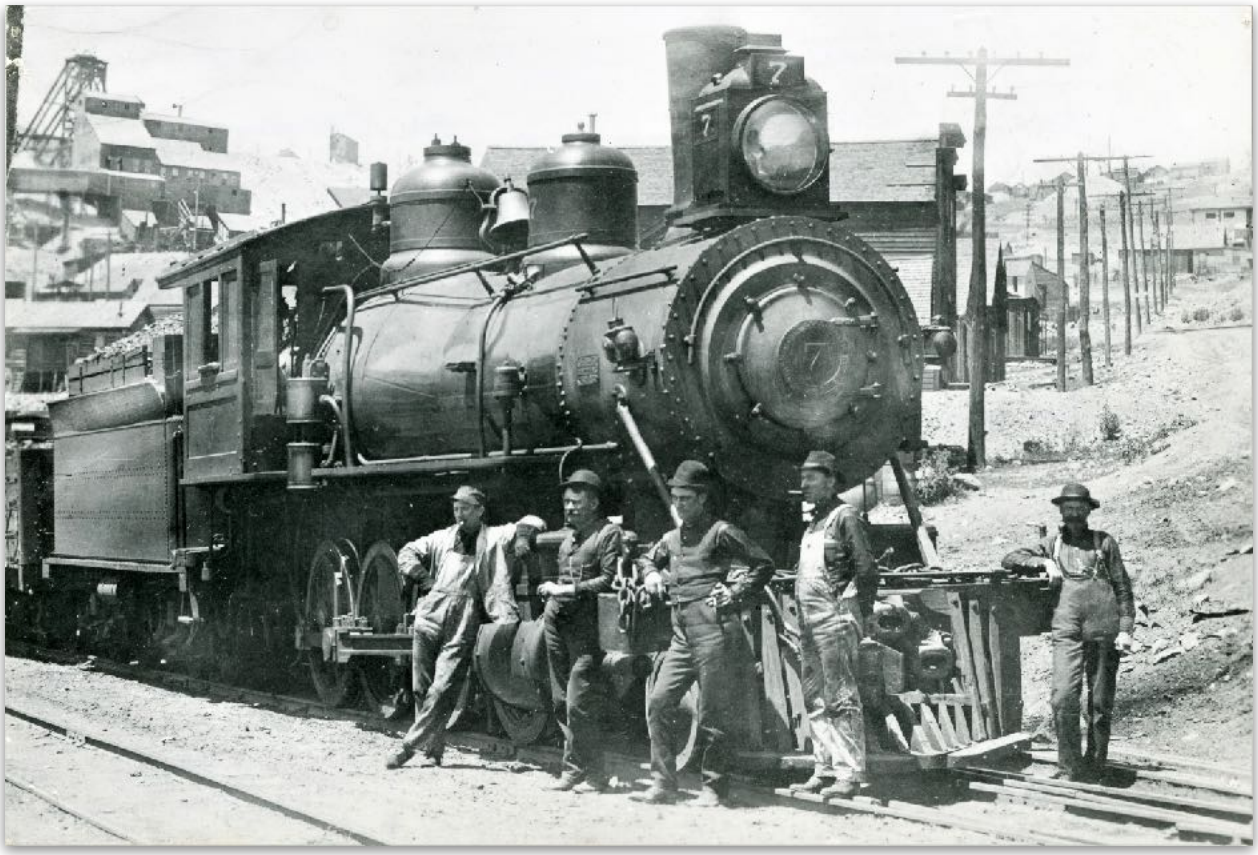


Figure 2: Switch engine and its crew in Independence, Colorado. Hull City mine in the background. *Photo date 1904 by an unknown photographer. From the Joata (Osborn) Bottcher collection. Courtesy of the Cripple Creek District Museum, CCDM A8524.*

Independence continued to grow, and by 1899, 1,500 people called it home (Sprague, 1953). The town crowded around two important mines, the Vindicator and the Hull City mine.

The Vindicator mine was in the Montgomery gulch section of this small gold-rush town. It was a steady producer, and by 1907, *The Mining Investor* reported the mine had almost 25 miles of underground workings and had distributed, in total, over $1.7 million[2] in dividends to

[2] Around $50,421,000 in today's dollars

stockholders (The Mining Investor, March 2, 1908). By 1910, the Vindicator was the fourth largest producer in the district, employing 350 miners who worked there.

Figure 3: The town of Independence, Colorado, looking northwest. *Photo date 1897. Webster and Yelton photographers. Courtesy of the Cripple Creek District Museum. CCDMA82. 329A.*

The rich Hull City mine, which covered an area of 39 acres, was within the town limits (Lindgren and Ransome, 1906). According to Lindgren and Ransome (1906) the "Hull City had a complex vein system where calaverite, the main ore mineral, coated narrow seams in these veins. Quartz and fluorite coated small vug holes." By the end of 1899, the mine had produced $900,193[3] in gold, and during the next three years (January 1, 1901 to January 1, 1904) generated gold worth $999,174[4] (Lindgren and Ransome, 1906).

By 1906, the Hull City's main shaft reached a depth of 1,265 feet, with 11 levels; a second shaft, the King shaft (sometimes called the Vaughn or Glorietta shaft) was 860 feet deep, with 12 levels. This King shaft was in operation near the southern boundary of the mine (Lindgren and Ransome, 1906).

The record of accidents and deaths miners suffered at the Hull City mine is incomplete. *The Aspen Weekly Times* reported that an explosion killed James Drury in the lower stopes of the mine on June 4, 1901. According to the reporter, "He was warned before going into one of the stopes that one of the shots had failed to explode but went on and drilled into the blast. The entire side of this head was blown away" (The Aspen Weekly Times, 1901). Another mine accident killed A. M. Mellon on the morning of April 5, 1902, as he rode in a cage in the Hull City shaft. When he carelessly stuck his head out from the cage, a passing timber crushed his

[3] Around $30,000,000 in today's dollars.
[4] Around $31,300,000 in today's dollars.

skull and snapped his neck. He had no relatives (The Telluride Journal, 1902). Records show

Figure 4: The town of Independence with the Hull City mine (foreground) and the Vindicator mine. *Photo: Library, The State Historical Society of Colorado. CCDM A82-132.*

that rocks from a bucket dropped on John Williams, killing him (Sherard, 2006). The nearby Vindicator injured and claimed the lives of an unknown number of miners. The true extent of these grim statistics for the Vindicator and the Hull City mines will remain largely unknown.

Figure 5: Early photo of Independence. Mining operations dot the landscape. *Photographer and date unknown. Courtesy of the Cripple Creek District Museum. CCV93GKCCM WA.*

Cripple Creek was a Western Federation of Miners union stronghold, and a crisis arose on August 8, 1903, when Cripple Creek union miners walked out in support of the striking smelter workers in Colorado City, Colorado (Taylor, 2003). The issue was over hours worked each day and pay. By August 11, at least 3,500 men had quit work in 50 of the district's mines (Jameson, 1998). The district soon became a battlefield, with confrontations between labor, employers, and the state of Colorado. About that same time, the district's labor wars spilled over into the town of Independence. The disputes resulted in injuries and loss of life. Harry Orchard, who resided in Independence, became embroiled in the district's labor strife, and committed several acts of violence. On November 21, 1903, a bomb set by Orchard exploded on the sixth level of the Vindicator mine, killing superintendent Charles H. McCormick and shift boss Melvin H. Beck, who were inspecting the mine (Orchard, 1907; Annual Report for the Vindicator, 1903).

Figure 6: Harry Orchard, whose real name was Albert Edward Horsley, lived in Independence and left behind a bloody trail in the Cripple Creek Mining District. *Photo courtesy of the Cripple Creek District Museum.*

About six months later, Orchard, with the help of Steve Adams, placed between 150 and 200 pounds of dynamite under a loading platform at the Florence and Cripple Creek Railroad depot in Independence (Jameson, 1998; Sprague, 1953). On June 6, 1904, at 2:15 am, while a crew from the Findley mine waited for a train, the bomb exploded. The blast blew one miner 150 feet away from the depot, killed 13 miners, and injured another 20. Orchard and Adams covered the soles of their shoes with kerosene, so the sheriff's bloodhounds could not track them, and disappeared into the darkness. Colorado's lieutenant governor declared the county in a state of insurrection and mobilized the National Guard (Jameson, 1989).

The strike lasted for fifteen months before finally coming to an end. Thirty-three people were killed, but organized labor lost out as a result of determined opposition by mine owners and the state of Colorado. With no further union representation in the district, miners worked under the tight control of mine owners (Taylor, 2003).

Harry Orchard was later convicted of blowing up the former governor of Idaho, Frank Steunenberg, in 1905. Facing the death penalty, Orchard confessed to the murder of the former governor and 16 other people. Orchard died in the Idaho state penitentiary April 13, 1954, at the age of 88.

More commotion would come to Independence on February 11, 1906, when two masked gunmen robbed the Silver Bell Saloon. A gun battle broke out that killed one robber, while the other outlaw fled packing $1,800 in cash (MacKell, 2016).

After the district's labor wars ended, Independence's population shrank. Records reveal that, in 1919, 500 people remained in town. The town's population continued to dwindle as gold mining declined. Its post office closed in 1954, and the Hull City mine ended operations in 1958. A handful of people remained for a few years after that, but then the town nearly disappeared—melting into thin air. Today, only a few ramshackle historic structures survive.

Figure 7: The Florence and Cripple Creek depot in Independence after Harry Orchard blew it up on June 6, 1904. *Courtesy of the Cripple Creek District Museum. CCDM 82 420.*

Acknowledgments

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General Assembly
May 19, 2022
Mt. Carmel Veteran Center

CSMS rockhounds gathered for their monthly meeting Thursday night, May 19 at the Mt. Carmel Veteran Center. Pebble Pup leader David St. John demonstrated the new digital microscope the club acquired for the Pebble Pups. He brought many samples of fossils and minerals to display on the big screen. The images were high resolution and beautiful. The pebble pups have already been using the new microscope to explore fossils and minerals up close. Six minerals were given away during the drawing and the club also auctioned off tools donated to the club by Ralph Parkes.

Classifieds and Announcements

John Emery
Editor

Thanks to our contributors. We encourage everyone to submit articles, photos, illustrations or observations.

Share your experiences, your new finds, or simply your enjoyment of our last field trip.

Handwrite it, type it, or email it. Format does not matter. All submissions are welcome. The DEADLINE for items to be included in the next Pick & Pack is the **last day of the month.**

To submit an item:
For hardcopy photos or articles, mail to the address below or bring them to the General Meeting. All hardcopy photos remain the property of the submitter and will be returned. Electronic photos can be submitted at resolutions above 200 dpi in ANY format.

Feature articles can be in MS Word or Mac Pages, preferably NOT pdf.

e-mail to the editor:
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Colorado Springs, CO 80901

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Junior Geologist Summer Day Camp

Through the Junior Geologist summer day camp program, kids learn all about geology and physical science through hands-on outdoor activities. Junior Geologists will explore and discover the natural world around them with projects, games, and short hikes near the Garden of the Gods. At the end of the 5-day camp, kids will earn their certificate as a full-fledged Junior Geologist!

Recommended for ages 8 - 12. Limited to 10 campers.

Dates and Times:
July 25th - 29th 2022
Time: 9 AM - 12 PM (Monday - Friday)

Location: Fields Park, Manitou Springs

Camp Schedule:
Monday: Rocks and Minerals
Tuesday: Dinosaurs and Fossils
Wednesday: Streams and Floods
Thursday: Earthquakes and Volcanoes
Friday: Geology Hike and Gold Prospecting

Registration Cost: $215.00
Registration includes all project materials including a rock geode, fossil, and a selection of minerals for each camper to take home. Healthy snacks and bottled water provided. Instruction by two camp instructors ensuring a safe, fun experience!

Camp Director:
Eric Billmeyer is a Senior Instructor in the Geography and Environmental Studies Department at UCCS and the owner of Trail Gems Geology Tours. He has over 15 years of experience teaching a variety of geology and physical geography classes to a diverse range of students. Eric is excited to share his knowledge and help budding young geologists gain a greater appreciation of our amazing natural world.

Please call or email Eric with questions about the camp and to register: 719-650-6659 or info@trailgems.com. This is not a CSMS-sponsored event, nor is there an affiliation between CSMS and Trail Gems Geology Tours.

Classifieds and Announcements

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Have aquired too many rocks !

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9:00-4:00pm

5309 Flintridge Drive
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A Headframe to the Sky

By Steven Wade Veatch

Empire Lee mine, Cripple Creek mining district. *Photo by Gene Mourning, courtesy of the Western Museum of Mining and Industry.*

Faint traces of a wagon road in backcountry
curve to a gold mine hidden in the trees.
The mine's headframe reaches to the sky—
a crown of confidence on unbreakable dreams.

The ore sorting house rusts through time
while moss invades stone foundations.
Blue pines rock and wild grasses tip in the wind.
Gray clouds nod in the distance.

Miners once made their way with burning candles
toward rhythmic clangs of hammers and drills,
while stepping aside for donkey-drawn ore cars
running on narrow rails deep underground.

Two men, with blistered hands,
pounded steel that drilled the rock
then packed dynamite in the holes they made.
A rattail of fuse detonated a round with a thundering blast.

Timbers in tight embrace held the Earth in place
as spectral Tommyknockers scurried and hid
in opaque blackness beyond the candle flame
while golden veins and rich ore wait discovery.

Now the gold mine is silent, the sheave wheel stopped.
The underground workings—still as held breath.
The mine a monument to how the West was won.
A progress secured by the lure of gold.

Evening shadows cover yellow spills of flowers
where deer dip down to browse nearby.
The mine still makes its claim on the land
Harkening to better days and simpler ways.

Established 1936
MINERALOGICAL SOCIETY

Pick & Pack
P.O. Box 2
Colorado Springs, CO 80901-0002

CSMS is an incorporated nonprofit organization with the following goals:

- To promote and disseminate knowledge of the earth sciences, especially as they relate to mineralogy, lapidary, and fossils.
- To encourage study, collection, and fashioning of minerals.
- To accomplish the same through social meetings, lectures, programs, displays, shows, and field trips.
- The Pick & Pack newsletter is published 10 times each year to assist and promote the above.

Joining the Colorado Springs Mineralogical Society (CSMS):

- Meetings are held the third (3rd) Thursday of each month, except January & August.
- 7:00 PM at Mt. Carmel Veterans Service Center; 530 Communication Circle, Colorado Springs, CO 80905
- Visitors are always welcome.
- Individuals—$30, Family—$40, Juniors—$15, Corporate—$100.
- Find the application at the web site: www.csms1936.com**.** If you are interested in joining CSMS or would like more information, we encourage you to attend our next General Meeting or visit our web site.

Meetings: CSMS also offers Satellite Group meetings that allow more focused attention in specific areas of our members' interests. Our current Satellite Groups consist of the following: Crystal Study Group, Faceting Group, Fossil Group, Lapidary Group, and Pebble Pups/ Juniors. For details on Satellite Group meetings, check out the calendars on page 2 and the web site.

Membership Benefits: Yearly dues include 10 issues of the *PICK & PACK*, all field trips (additional fees may be required on some field trips, and members are responsible for all transportation to and from), participation in all Satellite Groups (some groups may request additional fees to help cover resource costs), free admission to the *Western Museum of Mining & Industry* (carry your card), a year of learning and enjoyment, plus a lifetime of memories.

Colorado Springs Mineralogical Society is a Member of the following organizations:

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