



Summer 2010

Mining History News

Quarterly Newsletter of the Mining History Association

Turning Twenty at Silver City

Hooray for Silver City! Presentations, social functions, and tours highlighted the Mining History Association's annual gathering. A great thanks goes to conference organizers, Bob Spude, Terry Humble, Chris Huggard, and Susan Berry, and a special thanks goes to Cobre Mines for allowing us on their Bullfrog and Empire Zinc mine properties. It all added up to a wonderful MHA conference. This annual event is the focus of what the MHA does, and as we reflect on the conference, perhaps we should also think about what the MHA does.

The Mining History Association sponsored its first gathering in Virginia City, Nevada in 1990, and without much fanfare, the MHA celebrated its 20th anniversary at Silver City. Three of the six original "founding fathers" attended: Bob Spude, Ron Brown, and Duane Smith. Although these three men came from academic backgrounds, they envisioned an organization that would draw together people from a variety of backgrounds, with only an interest in mining history required, and an organization that would perpetuate the legacy of an older generation of mining historians, such as Rodman Paul. A brief review of the 2010 gathering shows that the MHA is succeeding admirably.

The Silver City participants demonstrated the diversity that Spude, Brown, and Smith desired. While a number of academics attended and did presentations, such as Richard Francaviglia and Jeremy Mouat, several people with mining industry connections also took the floor, including Bill Hawes, and many folks participated who are just interested in mining history, such as Rudy Davison and Sheila Kelly.



Terry Humble, 2010 conference co-organizer and Rodman Paul Award Winner, leads one of his memorable tours. (Photo by Mike Kaas.)

The connection across generations was also evident, as young scholars Brian Leech, Sarah Grossman and Eric Nystrom, presented their research at one of the sessions.

An important part of the conference and one of the founders' goals was to recognize people who are doing exemplary work in mining history. Perhaps, the MHA's highest award, the Rodman Paul Award for outstanding contributions to mining history went to Terry Humble of Bayard, New Mexico. Two MHA Distinguished Service Awards were given: one to long-time treasurer, Jay Fell, and the other to MHA founder and perhaps the organization's most ardent supporter, Duane Smith. Two authors won the Townley Award for the best essay in the MHA Journal, Terry Reynolds and L. Michael Kaas. Then finally, the Cherry Hunter Award for recording mining history through the graphic arts went to George Foote.

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"Turning Twenty..." (Continued from Page 1)

After twenty years, the Mining History Association is robust. It is fulfilling the goals of the founders, and only a few of those goals were mentioned above. But no organization can be successful without the active involvement of its members. While a number of people already volunteer on committees and on the council, there are always openings. Please consider getting involved. The jobs are not too difficult or very time consuming. Also, while a group may be successful today, it always needs to reevaluate what it does, and consider new ideas and new activities. Currently the MHA is centered around the annual meeting, with the annual journal and quarterly newsletter playing important parts. Is there something else that this organization should and could be doing? There must be other activities or ventures that we could undertake to expand our understanding of mining history, and to explain our interest to the uninformed.

I have been a member of the MHA since its inception, and it is an honor to serve as president. I thank you for the opportunity, and please contact me with your ideas or if you wish to volunteer.

David A. Wolff
Spearfish, SD
 David.Wolff@bhsu.edu

Attention MHA Authors!

Have you written a book on some aspect of mining history that you think your fellow members might find interesting? Starting with the next issue, **the MHA Newsletter will run an annual column in September with announcements of books on mining history written by our members** in the past year or two. This will supplement, not replace, our traditional list of publications and book reviews in the annual *Mining History Journal*, and will be an additional way to bring your work to the attention of our membership.

How to participate:

Send the complete bibliographic information plus a 100-120 word summary of the book (like you would use for a dust jacket) to Eric Nystrom, Newsletter Editor, at **eric.nystrom@rit.edu**. Works of popular history, academic studies, poetry, fiction, and art are all welcome, as long as they concern the broad themes of mining history of interest to our society. The Newsletter Editor reserves the right to edit all content. Submissions will be accepted throughout the year and printed in the September newsletter. **Authors must be members of the MHA.**

Submissions for the upcoming September newsletter will be accepted through the end of August, so send us your book details right away!

Mining History Association Dues Reminder

Please check the mailing label on the back of this newsletter. Your dues are up-to-date through the end of the year on the label. If 2009 is on the label, you have not paid your dues for this year -- please do so as quickly as possible. Please send your dues, payable to the Mining History Association, to Diane Dudley at the address below. Thank you!

General Membership:	\$25.00
International:	\$35.00
Sustaining Membership:	\$50.00
Patron Membership:	\$100.00
Corporate Member:	\$500.00

Diane Dudley, Membership Chair
Mining History Association
 P.O. Box 552
 Sedalia, CO 80135

Austrian House Reveals Story of Mining, Smelting, and Medicine in the 16th Century

Peter Siems

The copper and silver mining town of Schwaz in the Tyrol of Austria has a famous house named the *Orglerhaus* (Organ house). The house was built circa 1500 and was the home of a famous expert smelter master, Sigmund Fieger (or Fieger). Sigmund was one of three sons who inherited the Alte Zeche silver-copper mine and smelter in Schwaz from Anton Fieger the Elder in 1503. The *Orglerhaus* is now no. 15 on the south side of *Ludwig Penz Strasse*. This street borders the former graveyard, now an attractive park, of the Schwaz parish church. The 16th century court house of the mine judges was formerly on the east side of the *Orglerhaus*. An identical old house on the west side is adjacent to the *Orglerhaus*. Both houses have a large specimen of silver-bearing copper ore set into the wall above their Gothic front doorways. The positioning of a large specimen of ore above a main doorway in the 15th and 16th centuries was characteristic of the homes of mining and smelting officials in the towns of the Habsburg Empire.

The *Orglerhaus* is famous today because a late medieval genius named Paracelsus stayed here for several months in 1515-1516. Paracelsus was primarily a medical doctor. He was an original thinker who scorned the then-current traditional medical cures that were based on ancient Greek and Arab writings. Paracelsus believed in observation and experimentation. His interests were wide in medicine and chemistry. They included the medical use of minerals, alchemy, assaying, and diseases caused by mining and smelting. In pursuit of knowledge he traveled throughout Europe earning his way as a medical doctor, lecturer, experimentalist, author, and humanist.

Paracelsus was born in 1493 in Einsiedeln, Switzerland and was christened as Theophrastus Bombastus von Hohenheim. His father, Wilhelm von Hohenheim, was a German medical doctor trained at the University of Tübingen. Wilhelm educated young Theophrastus in pharmacopoeia, which in that time, included many minerals. Father and son in 1502 moved to Villach, in Carinthia, Austria after Switzerland became independent from the Germans in the Swabian war. Villach was close to the Bleiberg lead mines and had a smelter owned by the wealthy Fugger family of Augsburg. Theophrastus was sent to Germany in 1507 to study medicine. As was the custom, he attended many universities for short periods of time. In 1509-1511 he was at the University of Vienna; in 1512 at Wittenberg, then Leipzig and Erfurt. In late 1512 he was back with his father in Villach but soon left to



The Orglerhaus, built around 1500. The house has been considerably renovated in its 500 years of use but retains the copper ore specimen above the gothic doorway. (Photo by Peter Siems)

study at Italian universities. In Italy, Theophrastus changed his name to Paracelsus.

Paracelsus was interested in the work and experiments of the smelter master Sigmund Fieger and he stayed in Schwaz at least twice in 1515 and 1533. Sigmund had his own laboratories and was an expert in smelting, refining and assaying. The Fieger mining company was founded before 1470 by Hans Fieger the Elder who owned the rich *Alte Zeche* and other mines until his death in 1503. His three sons, Sigmund, Hans the Younger, and Christof, continued the mining and smelting until 1520 when Hans and Christof separated from the company. The production

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"16th c. Mining, Smelthing, and Medicine..."

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of the Fieger company was 200,000 kilograms of silver and 13,700 tons of copper from 1470 to 1529.

Paracelsus stayed in Schwaz for some time during 1515-1516 in order to study the smelting, alchemy and assaying methods used by Sigmund. During this stay Paracelsus lived in Sigmund's house -- now known as the *Orglerhaus*.

The ores of the *Alte Zeche* and Falkenstein mines at Schwaz are known as *fahlerze* in German. Separation of silver from the ores was complex and expensive because they contained copper, silver, lead, antimony, arsenic, and mercury. The *fahlerze* contained 35-38% copper and 0.4-0.6% silver. The separation of silver from copper by smelting was named the *seiger* or *saiger prozess* in German (liquidation process in English), and was discovered in the early to mid-1400s probably in the *Erzegebirge* (Ore Mountains) of Saxony. The process first required roasting the ore in an open furnace followed by smelting after the addition of considerable amounts of lead ore. The mixture of ores required as many as seven or eight smelts in succession. The smelts consumed large amounts of charcoal and required delicate control by observation of the furnace temperatures. The first tapped liquid from each smelt was lead and silver-rich and was carefully assayed for silver and lead. The amount of lead ore added to the smelts had to be changed to obtain the highest recovery of silver at the lowest cost, for each mining district and sometimes for each ore body in a single district. Cupellation was used after the smelting to separate the silver from the lead. The silver was sent to the Emperor's mints at the nearby towns of Hall and Rattenberg in the Inn Valley. Paracelsus was interested in the method of separating metals and semi-metals in the *saiger* process and possibly also in the mercury content of 0.4-8% in the Schwaz *fahlerze* because he believed that

weak compounds of mercury could be useful in treating syphilis, which was rapidly spreading in Europe.

Paracelsus revisited Schwaz and other mining towns of the lower Inn Valley sometime in the period of 1533-1534. He presumably renewed his friendship with Sigmund Fieger and wrote that Fieger was "the most noble and steadfast" friend. Shortly after 1534, Paracelsus went to the mining and smelting town of Sterzing in the South Tyrol (now Vipiteno, Alto Adige, Italy) where he worked on a memoir on the plague for the town council as a plague-doctor.

Paracelsus wrote voluminously but little was published during his lifetime due to the opposition of the conservative medical, religious, and university authorities. His manuscripts influenced only a small number of younger philosophers, termed "Paracelsians," during his lifetime. The number of followers greatly increased soon after his death in 1541, which caused book publishers to start publishing his writings. Paracelsus' book *On the Mine-Sickness and Other Mining Diseases* was written in 1537 and first published in 1567. This was the first publication on the subject of the lung diseases of mining people due to the inhalation of poisonous fumes, especially the arsenic-bearing smelter smoke. Another book on mineralogy by Paracelsus, titled *De Mineralibus*, was published in 1570 and contains the first description of zinc as a native metal.

Paracelsus' fame as a contributor to the advance of medicine and science has survived to the present day. The surviving evidence of the three Fieger brothers is official mining records and a monument in the Franciscan church of Schwaz. The Fieger family name disappears from mining history with the death of the "noble" friend and industrious worker Sigmund Fieger in 1543.

Newsletter Contributions Welcome

Do you have a piece of research that is interesting, but much too short for the Mining History Journal? News about an upcoming conference or event related to mining history? A tip about a "hidden gem" of an archive? Consider sending it to the Mining History News! We are always looking for information of interest to our fellow members.

Contact Newsletter Editor Eric Nystrom at eric.nystrom@rit.edu for further details.

Hall of Fame Website

The Mining Foundation of the Southwest has revamped its website, and of particular interest to MHA members, lists the American Mining Hall of Fame.

The website is: <http://www.miningfoundationsw.org>

--Bill Hawes

Call for Research Help on Candidates for Hall

Bill Hawes

The Mining Foundation of the Southwest has a long list of potential candidates we feel are worthy of recognition in the American Mining Hall of Fame, but need research done on them. This would be a perfect opportunity for Mining History Association members and friends to help get these important pioneers in mining history the recognition they deserve. Submissions should be on the order of 300-400 words long, with a photo of the candidate suitable for reproduction on a recognition plaque. One other thing needed is the year of the candidate's birth and death. Submissions can be made to Bill Hawes, Box 501, Humboldt, AZ 86329 or to hardrockhawes@msn.com. If you wish to make submissions to the Hall of Fame in Leadville, don't let your submission to the American Mining Hall of Fame deter you. Here are some of our most intriguing candidates:

Jack Findley and Burt Royal: Anyone who has worked underground and had the "pleasure" of hand mucking will immediately recognize the great debt owed these two gentlemen, who patented the compressed air powered overshot mucking machine. Some information is available from the ASME, but for the Hall of Fame nomination years of birth and death, a photograph, and any other pertinent or interesting information is needed for each.

William Otis: Inventor of the steam shovel, patented Feb. 24, 1839. Otis was 25 at the time, and died later in 1839. A limited amount of information appears in the Feb. 2009 issue of *Smithsonian* magazine, but more is needed.

A.B. Parsons: Longtime Secretary of the AIME, his two books on porphyry copper (*The Porphyry Coppers*, AIME, 1933 and *The Porphyry Coppers In 1956*, AIME 1957) are perhaps the best source of history on the major copper mines of the 20th century.

Lewisohn Brothers: The Lewisohns were important traders and financed several major mining projects -- the Old Dominion in Globe, Tennessee Copper, and Miami Copper, to list a few. They employed J. Parke Channing as their consulting mining engineer.

Roscoe Channing: Brother of J. Parke Channing, college football star, and one of Teddy Roosevelt's "Rough Riders." Channing was Superintendent of the Highland mine in Bingham Canyon, and later president (and founder?) of Hudson Bay Mining and Smelting.

Mining Museum Makes Magazine Top Ten

The Cripple Creek District Museum, located in the famous historic mining area of Cripple Creek, Colorado, was honored by *True West* magazine as one of the Top 10 Western Museums of 2010.

The museum rated #9 on the list, published in the May 2010 issue, right after Boot Hill Museum in Dodge City, Kansas. In Colorado, the Buffalo Bill Museum and Grave in Golden was rated #3, and New Mexico History Museum in Santa Fe took top honors. "We are so incredibly pleased to have been chosen for the list," said Director Jan Collins. "This is a pretty big deal for our little museum."

True West writer Johnny D. Boggs cited the Museum's acquisition of two historic cabins as a part of his selection process. The cabins were relocated to the Museum grounds last fall. Both have been furnished to reflect when they were occupied by a typical boomtown miner and retired prostitute French Blanche LeCoq, respectively. "Cripple Creek is a legendary Old West mining town," *True West* Executive Editor Bob Boze Bell said in a recent press release from the magazine. "The Cripple Creek District Museum does an outstanding job of telling its story and preserving its history."

The Museum is open for the summer from 10 a.m. to 5 p.m. seven days a week. For more information on group rates or special tours, call 719-689-2634 or email CCDMuseum@aol.com

Future MHA Meetings

Dillon, Montana
June 1-5, 2011

Prescott, Arizona
June 7-10, 2012

Galena, Illinois
June 2013

Call for Papers: 2011 Mining History Association Meeting at Dillon, MT

The Mining History Association will meet on the campus of the University of Montana-West in Dillon, June 2-5, 2011, near the historic gold rush towns and districts of Bannack, Virginia City and Alder Gulch. The Program Committee invites proposals for papers, presentations and panels on any aspect of mining history in any era or location around the world. Related fields may include science and technology, law and governance, labor and social history, industrial archaeology, business history, preservation, reclamation, and environmental history. **In celebration of the Idaho-Montana gold rush, 1860-1865, proposals on any mining-related aspect of that era are especially encouraged.**

Each proposal should be submitted by e-mail, and contain an abstract of no more than 500 words, along with a brief c.v. that includes the address, phone number, and email for each participant. If submitting an entire session, include an abstract that outlines the purpose of the session and lists names, addresses, phone numbers and emails of all participants. The Program Committee assumes all listed individuals in a session proposal agree to participate. Deadline for submissions is December 1, 2010.

Proposals and inquiries should be sent by email directly to each of the following members of the Program Committee:

Ronald H. Limbaugh: limbaugh@mcn.org
William W. Culver: william.culver@plattsburgh.edu
Corky Reinhart: corkyreinhart@gmail.com

MHA Nominating Committee Seeking Candidates

The MHA Nominating Committee is responsible for setting up MHA elections. We need your help! Are you, or someone you know, willing to serve the MHA as a member of the council or one of the standing committees? Do you want to propose the nomination of a fellow member for office? Many MHA positions require only modest amounts of time plus attendance at our annual meeting. Please email the Nominating Committee (care of Eric Nystrom, eric.nystrom@rit.edu), or write to us: MHA Nominating Committee, P.O. Box 552, Sedalia, CO 80135. Please have your suggestions for the upcoming year to the committee by October 15.

Nominating Committee Members

Noel Kirshenbaum (2008-2011)

Bill Wahl (2009-2012)

Eric Nystrom (2010-2013)

Nominate Books for 2009-10 Spence Award

The Clark C. Spence Award Committee of the Mining History Association is accepting nominations for the best book published on Mining History during 2009-2010. The committee considers books that meet the documentation and narrative standards set by the works of Clark Christian Spence, professor emeritus, University of Illinois, Urbana-Champaign.

To be considered, the book must focus on the history of a specific mining region, or a mining-related theme or topic, especially within the American West, or an individual or individuals prominent in the history of American mining. There are no temporal limits on subjects. The book must be published either in the year 2009 or 2010. A \$500 cash prize will be presented to the winning author or authors at the 2011 Mining History Association Annual Meeting.

Authors or publishers should send three copies of the nominated work to the Committee chair:

David Wolff
Attn. MHA Spence Award
Black Hills State University
1200 University St, Unit 9059
Spearfish, SD 57799

Fun Times and Old Friends at Silver City Meeting



Top Left: MHA President Karen Vendl is interviewed by a reporter from the Silver City News (Photo by Bob Spude). Top Right: Virgil Leuth prepares the group for his Geology Tour (Photo by Bob Spude). Bottom Center: Roger Burt examines the Empire Zinc headframe (Photo by Eric Nystrom).

Mining History Association
P.O. Box 552
Sedalia, CO 80135

First Class Mail

Upcoming Events

50th Western History Association Conference

October 13-16, 2010
Incline Village (Lake Tahoe), NV

22nd Mining History Association Conference

June 1-5, 2011
Dillon, MT
<http://www.mininghistoryassociation.org>

9th International Mining History Congress

August 15-18, 2011
Johannesburg area, South Africa

17th Australian Mining History Association Conference

Sept. 13-19, 2011
Hahndorf, South Australia
<http://www.mininghistory.asn.au>

23rd Mining History Association Conference

June 7-10, 2012
Prescott, AZ

The *Mining History News* is published quarterly by the Mining History Association. It is sent to MHA members who also receive the annual *Mining History Journal*. MHA is an organization of individuals interested in the history of mining and metallurgy. Submissions for the newsletter are encouraged and should be sent to Eric Nystrom at the MHA address or by email: eric.nystrom@rit.edu.

Deadlines: March issue: February 15
 June issue: May 15
 September issue: August 15
 December issue: November 15

Change of Address: Please send all address changes to Diane Dudley, Membership Chair, at:

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