# HISTORY NEWS

Volume 8 · December 1997 · Number 4

### Arizona's Copper Queen

Mark your calendar: Mining History Association Ninth Annual conference in Bisbee, June 4-7, 1998.

A road winds through the Mule Mountains. It comes from Tombstone, heading south through limestone hills it crosses a creosote bush-covered flat, then begins the ascent. At 6,000 feet the two-lanes cross the divide, cut through a tunnel, and drop into the narrow canyon above Victorian brick businesses blocks and simple shanties and into the home of the Copper Queen, Irish Mag, Superior & Pittsburgh, Calumet & Arizona, Shattuck-Arizona, some of the giants of the early copper mines of the West.

The most memorable image of Bisbee is a 1917 scene of herded miners, boarding cattle cars to be railroaded out of town. Wobblies.

Brewery Gulch is tamer now; a mini brewery provides a weak hint of the past. The brick and stone architecture of the gulch indicate one-time prosperity. New shops, jazz festivals and mountain bike clubs indicate the changed economy since the Queen closed in 1975.

The arrangements committee for the Bisbee meeting, June 4-7, 1998, have been busy. Chair Mason Coggin has arranged for the conference to begin in Tombstone, at the historic Cochise County Court House, with tours of the silver camp and environs. A reception at the Copper Queen Mine that evening opens the events in Bisbee.

We will tour the mine as well as be invited by director Carrie Gustavson to

tour the Bisbee Mining & Historical Museum located in the former Phelps-Dodge office building, a National Historic Landmark. A sunday field tour will take us to a barbecue at Cananea, Sonora, one of the world's largest copper mining operations and scene of events significant in the history of Mexico.

Early hotel reservations can be made with the Copper Queen hotel in the heart of town. 520-432-2216.

Since the MHA conference will be at Bisbee, just north of the Sonora border, individuals may want to tour and explore that northern Mexican state. For Sonora tourism information call 800-4-SONORA or visit their web site: http://www.sonora.gob.mx. Sonora is Mexico's biggest gold and copper producer.

Winter reading: Carlos Schwantes, ed., *Bisbee, Urban Outpost on the Frontier* (Tucson: University of Arizona Press, 1992) is a good, well illustrated start

# Museums Notes

The Arizona Mining and Mineral Museum is hosting a Mining History Rendezvous, which includes dealers of memorabilia and objects, books and periodicals, as well as an opportunity to tour the mining museum. The event will occur April 3-4, 1997 at the museum, 1502 W. washington St., Phoenix, AZ 85007. For their web page see www.miningrendezvous.com/ammm

The Reed Gold Mine State Historic Site will host its bicentennial celebration. In preparation the Gold History Corporation has been established to support research, archeology, education programs, and the acquisition of artifacts and equipment for display. The friends group is beginning its drive for memberships and donations. Membership is \$10 mailed to 9621 Reed Mine Road, Stanfield, NC 28163. For more information call Reed Gold Mine State Historic Site 704-721-GOLD.

The Black Hills Mining Museum, Lead, South Dakota have added an archeological exhibit, the result of extensive field work by Jeff Buechler and Rich Harnois of Dakota Research Services. They collected artifacts from the neighborhoods of lead, some 23,169 items, which tell the story of the early days of the camp. the items are on display thanks to a gift from the Joel K. Waterland (1921-1996) memorial fund.



# President's Page

As my term as president draws to a close, I want to invite everyone to the 1998 MHA conference in Bisbee, Arizona, to be held June 4-7, 1998. For those who have never been there, southern Arizona is a region rich in mining history. From the mining boom areas around Tombstone, Contention City, and Gleason, to the rich copper mines at Bisbee and the smelter city of Douglas, the area is honeycombed with mine sites. The conference promises to be one of significant interest to mining historians.

Plans are still being finalized by local arrangements chair Mason Coggin, but it can be reported that we expect to have registration available at a historic Tombstone site and as will information on touring both the town and the surrounding area. Once in Bisbee we'll visit the historic Copper Queen Mine, be treated to a reception hosted by Phelps Dodge, and be able to tour the city, which remains much like it was in the early part of the 20th century. An optional Sunday tour is planned to the Cananea mining operation in Mexico.

The program committee has already received a good number of paper proposals. We still need additional proposals, especially papers on topics outside the Southwest. If you have been thinking of presenting a paper at Bisbee, be sure to get your proposal in as soon as possible. Information will soon be on its way to MHA members regarding accommodations in Bisbee. It would be a good idea to make your plans soon.

Members of the MHA attending the Western History Association meeting in St. Paul in October gathered for the annual mining history breakfast. attendance was unusually good, with several people dropping in just to see what the MHA is all about. Malcom Rohrbaugh received the Rodman Paul Award and a good time was had by all.

Robert Trennert Tempe, Arizona

# Organization Notes

Thanks to Erik Nordberg, Homer Milford, and David Wolff for their work as the nominating committee. This issue contains the candidates for vice-president (president elect), the council, and the nominating committee.

Malcolm Rohrbough, author of *Days of Gold*, the best-selling history of the California gold rush, received the Rodman Paul Award for his contributions to mining history. His earlier works included a history of Aspen, Colorado. Rohrbough, Professor of History at the University of Iowa, has shared research experiences and travels to France at the annual mining history breakfast held during the Western History Association conference.

Visit the mining history web site: http://www.ex.ac.uk/~RBurt/MinHistet/

# Fourth International Conference

The organizers of the Fourth International Mining History Conference report that the former mining town of Guanajuato will be the site of the conference. They have yet to select a date, but we will keep members informed as plans develop.

# People News

Delores "Dee" Bailey, author and mining history advocate, recently was inducted into the Women in Mining Hall of Fame, Denver. She was the leading spirit in the drive to erect a statue and monument to Boulder County, Colorado metal miners. The statue was unveiled in July in the courthouse lawn, Boulder.

Ross Mainwaring, our Australia corespondent, sent word that gold miner Noel Rawlinson's offer to donate the gold for all the gold medals to be given at the Olympics in Sydney, Australia in the year 2000 has been accepted. Rawlinson operates the Gunadoo mine,

Australia's first paying mine and part of New South Wale's Ophir gold fields, discovered 1851.

Former Mining History Association president Stanley Dempsey of Royal Gold has been named life-time member of the Board of Governors of the National Mining Hall of Fame. Congrats Stan! Duane Smith, well-known mining historian, was keynote speaker at the recent induction ceremonies for the Hall of Fame, Leadville, Colorado.

The Postal service in 1998 will issue a stamp to commemorate the Alaska-Yukon Gold Rush. For a tour of the gold rush via the web, thanks to the Gold Rush Centennial Task Force, see http://Gold-Rush.org.

# More Museum Notes

Our friends at the Sterling Hill Mining Museum have been successful in their search for grants to enhance their education programs for children and teachers. The "Rock Discovery Center," a hit for kids, will be added to with a scientific lab thanks to the Merck Foundation. (They need donations as a match). Besides the museum and display equipment, the host a spring-time swap meet and then mineral auction. For more details write them at 30 Plant Street, Ogdensburg, New Jersey 80215.

# The Mining History Association Newsletter

Denver, Colorado

Distributed to association members; membership is open to all interested in the history of mining. Dues are \$25 per year. Please send dues to MHA, Post Office Box 150300, Denver, Colorado 80215.

Submissions for publication in the newsletter are welcome. Write to Robert L. Spude, Editor.

# CALL FOR PAPERS

# NINTH MEETING OF THE MINING HISTORY ASSOCIATION

at historic Bisbee, Arizona
June 4-7, 1998

The Program Committee for the Bisbee meeting of the Mining History Association invites proposals for individual papers or complete sessions (including chair and discussant) on any topic or aspect of mining in history. Sessions normally include two or three papers of twenty minutes each. There are no geographical or temporal limitations.

Given that the Association will meet in the Southwest, the program committee is particularly interested in papers on the following topics:

- 1) Mining in the Southwest and Northern Mexico
- 2) Comparative Studies, American and Mexican
- 3) The role of the Spanish tradition in the U.S.

Proposals should include title, an abstract (not to exceed one page) for each paper, plus biographical information about each presenter and session participant, including name, affiliation, addresses and FAX and e:mail address, if available. Please send proposals to the Program Committee chair before February 1, 1998.

# 1998 Program Committee:

Dr. Robert Trennert, Program Chair
Department of History
Arizona State University
Tempe, Arizona 85281

Homer Milford
New Mexico Mining & Minerals Division
Santa Fe, New Mexico

Erik Nordberg Michigna Tech University Houghton, Michigan

#### **Book Reviews**

Sally Zanjani. A Mine of Her Own: Women Prospectors in the American West, 1850-1950. Lincoln: University of Nebraska Press, 1997. \$32.50 hardback.

Sally Zanjani's readers expect a well-told story based on meticulous research. Her latest book is that and more: it contributes significantly to mining history, women's history, and Western history.

An arresting cover of Idah Strobridge, hammer in hand, clear-eyed, determined, feminine, sets the tome. The book opens with a simple declaration: "The wilderness envelopes the prospector." The prospector is a weather-beaten woman, and Zanjani analyzes the records of 77 of them (she believes that there were actually hundreds more) to support the conclusion that love of wilderness propelled them.

Most of the accounts are based on original research. The complicated life of Ferminia Sarras, "the Copper Queen," which is a full chapter, was reconstructed primarily from tax records. The exceptions are the obvious, such as Nellie Cashman, romanticized as the "Frontier Angel," "the Angel of Cassiar," or "the Angel of Tombstone." Zanjani does a masterful job of sorting out the probable authentic elements of the Cashman story.

graceful Zanjani's writing accomplishes the formidable task of organizing so much material to make the women come alive for the reader. The settling of the West, increasing acceptance of women in wider roles, and the use of the automobile distinguish the prospectors after 1919, although some women spanned both eras. Within these two chronological groups some general themes occur: women who always worked alone: who worked with their husbands; who worked with other partners.

They came from every conceivable background and level of society. They were Anglo, Hispanic, and AfricanAmerican. Almost half of the women identified in the study were forty or older when they began serious prospecting; more than half of these were over fifty. A striking finding is the large proportion of women prospectors whose husband or lover was from five to thirty years younger.

The reader of this book is led to conclude that a good number of mineral discoveries attributed to men may well have been made by a female companion (read about Matilda Wales of Chisana, Alaska). Women prospectors defy stereotyping or categorization apart from their decision to roam the wilderness looking for mineral wealth. author has steeped herself in the written record of this "lost piece of history" found in a very few personal memoirs. as well as once-lively boomtown newspapers and smalltown weeklies. She has interviewed women prospectors as well as descendants and associates of the prospectors. Above all she is intimately familiar with the same wilderness areas which drew women.

A Mine of Her Own is distinguished by the use of well-selected social and historical information as background for the very diverse individual stories of women prospectors. There are well-chosen illustrations, good maps, voluminous notes, and a twelve-page bibliography which includes the best sources in all three of the applicable fields of history.

Eleanor Swent Piedmont, California

Eugenia W. Herbert. Iron, Gender, and Power: Rituals of Transformation in African Societies. Bloomington: Indiana University Press, 1993. 277 pp. \$19.95 paper.

Although most mining historians tend to focus on commercially-oriented, industrially-based mining activity that typifies the last two centuries, mining and metallurgy have a rich distant past

that is evidenced in the archeological record and merges into folklore. Despite the sweep of industrialization, vestiges of this earlier mining technology can still be glimpsed here and there, for they remain part of village life in some places. What might be called proto-historic, preindustrial era mining-related history is the focus of *Iron*, *Gender*, and *Power*, a remarkable book that might otherwise escape the attention of mining historians.

Its author, anthropologist Eugenia Herbert, has a long-standing interest in both the artifacts and cultural patterns associated with mining and metallurgy in non-industrialized, agrarian societies. Whereas her 1984 landmark work. Red Gold of Africa, dealt with copper, this book deals exclusively with the more mundane but essential element iron. specifically how iron was/is mined and smelted in the villages of Africa. Through anthropological methods of fieldwork, interviews, and consultation of written archeological reports, Herbert identifies and describes a wealth of features including the iron furnaces that are shaped in the form of the female anatomy. Herbert went beyond simple description to speculate why these furnaces are so designed/gendered. To do so, she studied Africa's mining and smithing in relationship to the power wielded by men and women, noting that the iron industry there is not in the hands of females, but is rather controlled by males, despite the provocative female imagery associated with furnaces.

This is, to my knowledge, the first book to directly link gender, human sexuality, and mining, and it thus represents a major breakthrough in the literature. In the concluding section, Herbert observes that mining and metallurgy may be metaphors for conception, gestation, and birth, and that men control these processes to the exclusion of women (who oversee the real processes and symbolically, are active in pottery, rather than mining, throughout the world). If, as the author suggests, these observations may apply elsewhere, then *Iron, Gender, and* 

elsewhere, then *Iron*, *Gender*, *and Power* can provide a new perspective on a subject that has vexed and eluded mining historians for decades. After reading this book, one may be able to better understand, if not justify, why mining/metallurgy has been largely "man's work" historically -- and remains so into the late twentieth century.

Richard Francaviglia University of Texas, at Arlington

Ron Anglin. Forgotten Trails: Historical Sources of the Columbia's Big Bend Country. Glen W. Lindeman, ed. Pullman: Washington State University Press, 1995. 287 pp.

This well-written book deals with the early history of the "Big Bend Country" -- the vast, semi-arid region taking up the center of what is now the state of Washington. Like the Nile in the eastern Sahara, the Columbia River flows through what early visitors considered to be a desolate, even forbidding landscape. However, unlike the Nile, the Columbia encouraged no significant agricultural settlement here until mid-twentieth-century irrigation projects.

Forgotten Trails, as the title indicates, deals largely with the Big Bend's transportation history: fur-trapper trails, military wagon roads, and -- on the Columbia and Snake Rivers -- steamboat routes to gold mines located well to the east and north. One chapter, "Gold Rush Travelers," focuses on hopeful prospecting parties heading to the Fraser River and other strikes of the 1850s and details their routes and encounters with the Sinkiuse Indians across the Big Bend. The challenge of river and overland travel between 1855 and 1880 provides a context for the early mining history of northern Idaho, western Montana, and southern British Columbia.

Ron Anglin, a U. S. Fish and Wildlife Service refuge manager, deserves praise for producing a detailed account of a region he came to know

very well. His book will undoubtedly delight and educate a generation of central Washington readers.

Jeff LaLande U.S.D.A. Forest Service Medford, Oregon

Willard P. Fuller, Jr., Judith Marvin, and Julia G. Costello. Madam Felix's Gold: the Story of the Madam Felix Mining District, Calaveras County, California. San Andreas, California: Calaveras County Historical Society and Foothills Resources Ltd., 1996. 167 pp. \$21.91 paper. (Copies available from the Foothill Resources, Ltd., P. O. Box 2040, Murphys, CA 95247)

This narrative of a small California gold mining district's struggle for survival will sound familiar to mining historians: placer miners and prospectors in the 1850s, followed by the opening of hard rock mines, particularly the Pine Log in 1877, and a century of ups and downs.

The large disseminated ore bodies and the sulphide ores with limited high-grade pockets tempted many. As with other similar western gold mining regions, what the district needed was a highly efficient, large-operation, using the most modern technologies and economies of scale to earn a profit. The authors describe a series of such operations. J. C. Kemp van Ee, an American-born promoter with British financing is one example. He failed by 1905. Those that made any money usually resorted to high-grading the best ore in sight, forsaking long-term development for quick returns. With gold market prices soaring in the 1970s and 1980s a fully modern developer consolidated all the key properties and extracted 315,000 ounces of gold by open-pit. Even this operation failed to repay investment and the Royal Mountain King, probably the last major mine in the district, closed in 1995.

The collective authorship has produced a comprehensive narrative that thoroughly explores the many dimensions

of this mining community, from prehistoric times to the present. Frequent photos, maps, and line drawings provide a wealth of visual information that both supplement and complement the narrative. Technical details are relegated to footnotes, keeping the text simple and easy to follow. The result is a valuable and highly competent case study of this peripheral but representative western mining district.

Ron Limbaugh University of the Pacific

Helmut Waszkis. Mining in the Americas: Stories and History. Cambridge, England: Woodhead Publishing, 1993. 280 pp. \$89.95 hardback.

Waszkis' book is the first to cover the five centuries of European mining in the entire Western Hemisphere and helps to fill a major gap in the literature. Carlos Prieto's Mining in the New World (McGraw Hill, New York, 1973) only covered the hemisphere south of the U.S. and ended his coverage of mining history in the early 1800s. Both books have their strengths and weaknesses and I recommend you compare them.

A hemispheric one volume book must pick and choose what it covers, and each reader will feel that something should have been covered more extensively. Prieto has a better coverage of technological developments before 1800, but Waszkis covers the main developments such as Bartolomé de Medina's invention of the Patio process. Medina's process was the basis of the mid-16th century boom in silver mining, and in its modified form was the cornerstone of silver production until the late 19th century. Prieto has a Spanish bias, whereas Waszkis at times allows the Black Legend of his English homeland to darken his interpretation of Spanish institutions. This leads Waszkis to attribute to mining greater evils of exploitation and destruction of native A semi-world history of mining is more than a synopsis of each nation's mining history and shows the interactions of demand, production, and technology between nations. Waszkis is more successful at this in his coverage of the last two centuries than the first three.

Waszkis, in his long career in metals marketing, has dealt with the founders of many South American mining companies or their sons. The stories he relates of their lives and ventures gives this book enduring value. If your interest in mining history extends beyond the U.S. border, this book is one you should read, along with Prieto's.

Homer E. Milford New Mexico Mining & Minerals Division

John W. Anthony, Sidney A. Williams, Richard A. Bideaux and Raymond W. Grant. *Mineralogy of Arizona*. 3d. ed. Tucson: University of Arizona Press, 1995. 508 pp.

Since the first edition of Mineralogy of Arizona was published in 1977, 232 minerals new to the state have been identified, bringing the total Arizona minerals to 809. The wealth of knowledge about these minerals and their occurrence that is presented in the third edition makes this book an important reference for the serious mineral collector and mining historian alike.

The book is divided into several sections, the first of which describes the story of exploration in Arizona from minerals unearthed in Native American ruins to 1989, when new minerals were found in the Grand Reef mine, Graham County. The format of this section is a year-by-year account of the history of Arizona mineral deposits and mining, which underlines the importance of mining to the State's development.

The next discussion includes discussions on geology, mineralogy and history of classic Arizona porphyry copper deposits. The final and largest section contains an alphabetical

discussion of the minerals of Arizona. Under each mineral the chemical formula is given as well as a brief discussion of its general habits and occurrences. The known occurrences of each mineral are also listed.

Of interest to the mining historian are the county maps showing the locations of Arizona mining districts. The 240 old district names are little used in modern times, but may be useful when reading historical accounts of mining. The extensive bibliography included is also a useful reference for research in Arizona mining history.

The Mineralogy of Arizona also contains 60 plates of spectacular mineral specimens that are housed in various museums and private collections. The quality of the color reproductions is excellent, and displays the wide variety of color and mineral structure found in Arizona minerals.

This volume has been carefully researched, and its attention to detail is obvious. Though not primarily a historical reference, this publication contains a great deal of useful information for the mining historian. It is an important contribution to the mineralogy, geology, and history of Arizona mineral deposits.

Douglas Goold and Andrew Willis. *The Bre-X Fraud*. Toronto: McClelland and Stewart, 1997. Diane Francis. *Bre-X: The Inside Story*. Toronto: Key Porter, 1997.

The biggest mining story of the year --maybe the decade -- was the spectacular collapse of Bre-X. A penny mining stock listed on the Alberta Stock Exchange, Bre-X catapulted to fame on the basis of its work on the Busang gold deposit of Indonesia. At one point, the Calgary-based company claimed to have an ore-body with some 200 million ounces of gold. The big companies scrambled to buy into Bre-X. Freeport-McMoran was the eventual victor, beating out Placer Dome and Barrick Gold. Freeport's test failed to find the

gold Bre-X claimed was there; the "discrepancy" (scam) quickly brought bad news that was heard on stock exchanges around the world.

The story has already produced two books (others are rumored underway). Of the two, I would recommend Goold and Willis's. It is the more thoughtful, is better researched, and is better written. Francis -- editor of one of Calgary's major business papers -- is less informative and more gossipy. I guess the good news in all this is that there is likely to be plenty of mining history for future scholars in the field.

Jeremy Mouat University of Athabasca

R. E. Barclay. *Ducktown - Back in Raht's Time*. Commemorative reprint by Copperhill, Tennessee Kiwanis. Waynesville, North Carolina: Don Mills, Inc., 1996. 286 pp.

The Ducktown copper mining district, Tennessee, was the foremost of the Appalachian Region. The early period of mining activity beginning in the 1850s was often referred to by locals as "back in raht's time." For nearly a quarter century Captain Julius Eckhardt Raht had been the dominant figure in the Copper Basin.

Much of the history of Ducktown and Copperhill, Tennessee does center around Captain Raht, whose personal papers were a key source of detail concerning mining company operations and business. The book discusses social happenings, town development, smelter technology, feuds between buyers in the East and home producers, and, primarily, Captain Raht. This reprint of R.E. Barclay's 1946 book is a pleasure to read and I thoroughly recommend it. The 1996 reprint is available through the Copperhill Kiwanis Club, P. O. Box 443, Copperhill, TN 37317.

Johnny Johnsson Finksburg, Maryland

# **Book Notes**

A special edition of *Blue Mountain Shadows*, the magazine of the San Juan Historical Commission, Utah, focuses on the uranium boom in this part of southeast Utah. Gary Shumway guest edited the issue which includes essays on the boom, biographies of prominent players, and descriptions of individual mines. Copies of the issue, vol 16/winter 1995 are available for \$9.50 from BMS, 24 So 300 W, Blanding, UT 84511.

Three women who spent their first years in the mining camps of Nevada, Wyoming, and Colorado have written reminiscences. Shyrle Pedlar Hacker's A Gold Miner's Daughter, Memoirs of a Mountain Childhood (Boulder: Johnson Books, 1996) is an emotional tale of her childhood at marginal mining claims north of Tuscarora, Nevada during the The book is a well written account of the trials of isolation, winters, and the broken hopes of working mining claims that never panned out. She gives a child's view of life, thus the period is one of happy remembrances of the place and of living at Divide, while her parents strained to make ends meet. They gave up and moved to California and the abundant jobs during World War I. Hacker writes much about and reflects upon the emotional roller coaster she survived.

At about the same time in Colorado, Florence McCarty grew up in the mining camp of Creede. Her family history and reminiscence, To Catch a Star (Monte Vista, Colorado: High Valley Press, 1996) chronicles her Danish fathers reasons for leaving Europe and trying to strike it rich in the mines of Cripple Creek, Summitville, Goldfield, Nevada, and later Creede. McCarty describes the extended families and friends that helped each other survive in the West, while also describing her father's wanderlust to try each new mining excitement even after his marriage, to her immigrant mother in Cripple Creek, and after the arrival of children. Finally he settled in the San Luis valley, but continued to mine in the San Juan Mountains of Southwest Colorado. The book has much about people -- family and friends -- and has a kid's view of Dad's work in the mines.

Lora Nichols kept diaries from the age of thirteen for sixty-five years, collected memorabilia and gathered photographs and her memories about life in south central Wyoming. Nancy F. Anderson has woven parts of this material into a book, Lora Webb Homesteader's Daughter, Nichols: Miner's Bride (Caldwell, Idaho: Caxton Printers, 1995). Of interest to mining historians are her comments about life and marriage in the copper mining boom at Grand Encampment, Wyoming at the beginning of this century. Lora's diary entries provide us personal glimpses about the concerns of a young bride, while the news clippings, photographs, and comments by the compiler make this a worthy aid to understanding family life and the uncertainties of making a living in a mining district. All three authors provide much good material on being young and female in the mining West.

In strong contrast to the two above reminiscences are the histories of two mining camps prepared by men who were active participants in the mining Robert C. Bogart, who industry. worked his way up the ladder in the Bagdad Copper Corporation, 1942-1981, has written a history of the copper operation entitled Some Talk About a Copper Mine, A History of Bagdad, Arizona (Prescott, Arizona: Ralph Tanner Associates, 1990). Mr. Bogart was an engineer and general manager and his book reflects an engineer's view of the history, with details on the development of the mine, statistics on the operation and expansion, and the miners' work. He adds brief chapters on churches, schools and entertainment as well as includes material on the financial ups and downs of the early companies (an appendix of financial data on Bagdad

Copper is included). The book lacks footnotes, but it is obvious that the author had access to corporate records and files. Also, the author interjects his own experiences at the mine, with some welcome insights for the reader. Mining Engineer Forrest R. "Rick" Rickard has written a similar chronicle of Ajo, Arizona. Rickard worked at Ajo 1942-1978, when he retired as smelter superintendent. He writes about the years prior to his arrival, the years of discovery, exploration and phenomenal success in Exploring, Mining, Leaching, and Concentrating of Copper Ores as Related to the Development of Ajo, Arizona (to Mid-Year 1942) (Ajo, Arizona: by the author, 1996). Rickard has researched the company files, local newspapers and other sources to retell the opening of the copper mine by the New Cornelia Copper Company, the laying out and building of the company town of Ajo, and the career of John C. Greenway, successful developer and engineer. Phelps Dodge acquired the works during the great depression and upgraded the plant and mine. Rickard's is a detailed account, but like Bogart fails to provide a solid list of sources (he does include 21 endnotes). Both books are written for the more technical oriented general reader. For the mining historian there are no other as complete reviews of developments at Ajo and Bagdad, Arizona as these.

The history of the Independence gold mine, now an Alaska state park, is again available. Kathryn Koutsky Cohen's Independence Mine and the Willow Creek Mining District is extensively illustrated. The book describes the gold lode operation from discovery in the 1890s to the late 1930s, including interviews with miners and owners as well as detailed descriptions of the physical plant. Copies are \$25 plus \$2 postage; order from Alaska Historical Society, P. O. Box 100299, Anchorage, AK 99510-0299.

The Bureau of Land Management recently completed a study of the various mining ditches along the Nome River, Alaska. For a gratis copy of the well researched history with maps write for BLM-Alaska Open File Report 62, Howard L. Smith, "Nome River Water Control Structures," BLM, Alaska State Office, 222 West 7th, #13, Anchorage, Alaska 99513.

Bodie, California, the glorious ghost of a gold boom in the 1870s-1880s, is the focus of Larry Poag's Guide to Shopkeepers and Shootists of Bodie (Western Places, P. O. Box 2093, Lake Grove, OR 97035, \$16.50). Within the 80 page booklet are short notes (mostly from period newspapers) about shoutouts, scrapes and misdeeds that occurred within each of the businesses that operated in the camp. Poag adds an introduction and summary history, from discovery to boom, bust and tourists.

# **Historic Preservation**

Ellen Goodman, columnist for the Boston Globe, recently wrote about Butte. Montana and the preservation efforts of the community. Qouting Mark Reavis, city historic preservation officer, she describes the hope to provide visitors traveling between Yellowstone and Glacier national parks another story, that of western mining, its good and bad sides. Reavis and others have prepared a master plan and are hoping to attract visitors with heritage tourism, the latest boon for the once richest hill on earth.

Cerro Gordo, California, the former silver camp over the ridge from Death Valley, is now open for business, at least the local bed & breakfast offers a tour destination. Owner Jody Stewart of the American Hotel has weekend packages (call 888-446-7888); staying in the ghost

town offers the opportunity to tour a handful of stabilized buildings and mining former workings at a leisurely pace. Preservation efforts are underway by Stewart and others.

Ron Limbaugh sends word that the Kennedy Mine, the deepest gold mine in California history, has been reopened for tours. The surface plant of the Kennedy Mine in Jackson, Amador County had the deepest shaft in North America --5,912 feet -- when it closed in 1942. Still standing are the 100-foot head frame, the superintendent's office, and the huge wheels that conveyed tailings from the mill across the valley to a dump. Restoration is now underway to add other surface components to the tour. Public guided tours, operated by the Kennedy Mine Foundation, are now available on weekends, and special reserved group-tours can be arranged. For information call 209-223-9542.

Mining History Association Post Office Box 150300 Denver, Colorado 80215