



COLORADO SCHOOL OF MINES

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Arthur Lakes Library

COLORADO SCHOOL OF MINES

Volume 2, Issue 1
Fall 2004

digital images

Technology Provides Access to Images From the Past

The Library's Digital Image Collection (<http://csmphotos.coalition.org>) was created to improve access to and extend awareness of our collections, all without jeopardizing preservation of the original materials.

The Collection was started in 2000 in partnership with the National Mining Hall of Fame and Museum in Leadville, Colorado, with a grant from the newly formed Colorado Digitization Program (CDP). This grant project emphasized the mineral heritage of Colorado but included images from other regions as well. Records from the Image Database were also added to the CDP Heritage Web catalog.

Since then, the Library has expanded the Collection by digitizing photographs, slides and other materials from the Russell L. and Lyn Wood Mining History Archive and the Information Center for Ropeway Studies.

We plan to expand the Image Collection as resources become available. Working with a digital collection provides us with new opportunities to partner with organizations, and offers new options for potential donors. We are actively seeking additions to the Digital Image Collection. If you would like to support the Collection, are interested in donating print or digital photographs, or would like to discuss a collaborative digitization project, please contact the Library Office at 303-273-3690 or visit our Giving web pages at <http://www.mines.edu/library/giving>.



the collection

Today, this Collection of over 3,300 images includes items dating from the 1870s to the present in:

- Mining and mineral industries
- Ropeway engineering and industry
- Mineral specimens
- Towns, railroads, scenery and geology in Colorado
- Colorado School of Mines history

<http://csmphotos.coalition.org>



COLORADO SCHOOL OF MINES

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We've Got Mail!

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Arthur Lakes

artist & geologist

Artwork on Display in the Library

By Wendy Shortridge

Western historians acknowledge that Arthur Lakes, professor at the Colorado School of Mines in the late 1800s, has made enormous contributions in the fields of geology and paleontology. Lakes is known as the “Father of Colorado Geology.” But few know that Lakes was also an accomplished painter, journalist and naturalist whose watercolor landscapes and detailed journals describe many of the challenges facing scientific expeditions in the Old West. His journals contain detailed descriptions of the plant and wildlife, his travels through the West; reports of the James Gang’s train wrecking activities and battles with the elements on dinosaur fossil diggings in Colorado and Wyoming. Many of his sketches and journals are now housed in the Smithsonian Institution Archives.



Arthur Lakes was born in England in 1844 and attended Queen’s College at Oxford University from 1863 through 1865. He then immigrated to the United States and began his career as the writing and drawing instructor at Jarvis Hall, an Episcopalian boys prep school and college in Golden, Colorado. In 1870, the college added what is now known as the Colorado School of Mines. In addition to his duties as the writing and drawing instructor, Lakes added the study of the geology of Colorado to the curriculum and began collecting fossils. On March 26, 1877, Lakes, along with Henry Beckwith, a retired naval officer, unearthed dinosaur bones near Morrison, Colorado. Lakes wrote in his journal: “We soon traced the loose slab to the parent rock of brown sandstone from which it had slipped and as I jumped on top of the ledge there at my feet lay a monstrous vertebra carved, as it were, in bas relief of a flat slab of sandstone. It was so monstrous, however, thirty three inches circumference so utterly beyond anything I had ever read or conceived possible that I could hardly believe my eyes and called to my friend Captain B. to confirm the vision.” This spectacular find is considered one of the most incredible discoveries of dinosaur fossils in the American West.



Lakes’ watercolor paintings record the history and wildlife of the West as well as provide a visual record of early field methods in paleontology, a branch of science then in its infancy. Many of Lakes’ paintings can be found on display in the Arthur Lakes Library.

Western historians will appreciate Lakes’ journal accounts of his travels and adventures on dinosaur digs in Wyoming. While traveling to Como Bluff, Wyoming, Lakes related this story. “Whilst resting on the rocks above the railroad Reed pointed out a little trestle bridge where a party of desperadoes or ‘road agents’ had attempted to wreck a passenger train a short time before my arrival intending to plunge them down an embankment twenty feet deep which would have been certain death to many and then rush in and plunder the train in the confusion of the disaster.” Lakes’ journal accounts of fossil digs in the Wild West have been compared to those of Roy Chapman Andrews’ adventures in the Gobi Desert.



For more information about Arthur Lakes and his contributions to science, please contact the Reference Desk at the Arthur Lakes Library at the Colorado School of Mines.

Source: “Discovering Dinosaurs in the Old West: The Field Journals of Arthur Lakes” edited by Michael F. Kohl and John S. McIntosh, 1997.

Great Books in the Arthur Lakes Library, Part III

By Robert Sorgenfrei

We continue our examination of great books in the Arthur Lakes Library with another treasure from the Russell L. & Lyn Wood Mining History Archive.

Pryce, William, 1725?-1790.

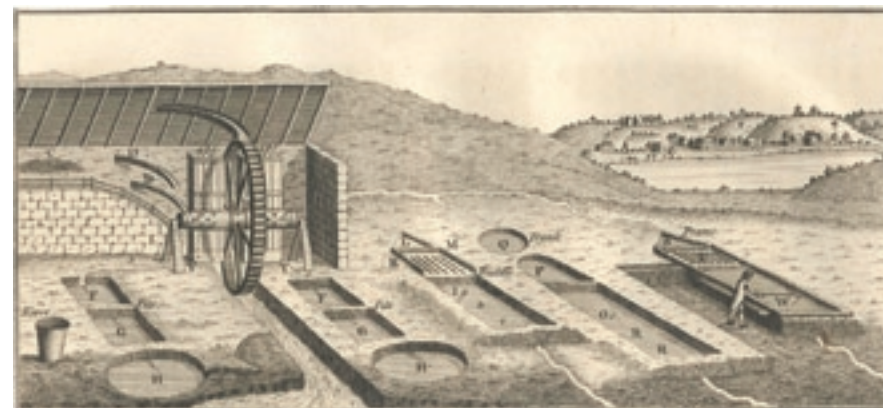
Mineralogia Cornubiensis: A Treatise on Minerals, Mines, and Mining: Containing the Theory and Natural History of Strata, Fissures, and Lodes, With the Methods of Discovering and Working of Tin, Copper, and Lead Mines, and of Cleansing and Metalizing Their Products; Shewing Each Particular Process for Dressing, Assaying and Smelting of Ores: to Which Is Added, An Explanation of the Terms and Idioms of Miners. London: Printed and Sold for the Author By J. Phillips ...1778.



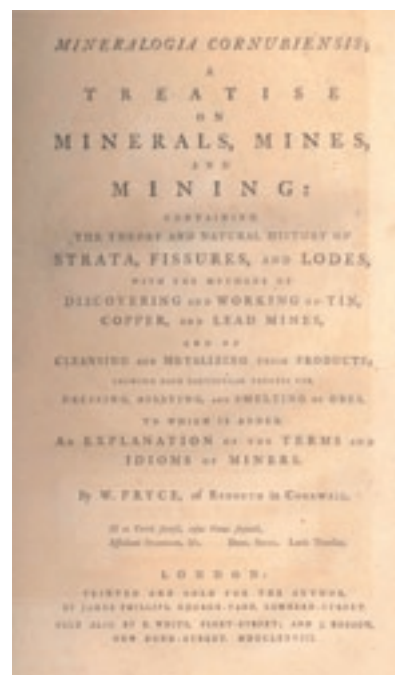
Cornwall, England is one of the oldest mining regions in the world. Over the centuries Cornish miners perfected the art of hard rock mining and in the 19th century carried their skills all over the world. When Pryce's book was published, Cornwall produced most of the world's tin and copper. By that time, Cornish miners had solved many of mining's most difficult problems:



blasting, hoisting, timbering, and ventilation. They also developed a vocabulary that a century later had become the lingua franca of mining all over the world. Words like adit, stope, raise, winze and whim all come from Cornish



mining, and an excellent glossary of Cornish mining terms is found at the end of the book. Pryce described all aspects of mining as it was understood and practiced in Cornwall in the late 18th century, including ore dressing, smelting and mining geology.



The Cornish also created a rich folklore about Tommy Knockers, and they are documented in the book. In his glossary Pryce calls them “small men” or “fairies.” He wrote:
The miners are sometimes persuaded, that they hear a pick at work under-ground, as if some invisible spirit was at work underneath or near them. This noise, I suppose, proceeds from the running or apertures of the earth. The opinion the miners have of its being a good omen, encourages them to follow or work to it; so that it has more than once occasioned a lucky discovery.

James L. Lake and the Metallurgy Collection

Enriching the Metallurgy Collection: The J. L. Lake Endowment

By Joanne V. Lerud-Heck

"A library was essential in my work throughout my life." Those are the words of James "Jim" L. Lake, a true friend of the Library and the School of Mines. In 2003 Jim followed through on his interest in libraries by giving over \$25,000 to fund an endowment in support of metallurgical information at the Arthur Lakes Library.



Jim Lake was born in 1918 in Cleveland, Ohio, but spent most of his childhood years in Duluth, Minnesota, an area with strong historical ties to the minerals industry. Jim's father, Max C. Lake, was a geologist well known for his studies of iron ore bodies in Venezuela and Canada. Jim attended the University of Minnesota, graduating in 1940 with a B.S. in Metallurgical Engineering.

Jim's career focused on extractive metallurgy with a variety of applications in the field. While with Union Carbide in Colorado, he helped develop a process for extracting tungsten ore at their Bishop facilities and worked with their uranium processing operation in Grand Junction as part of the research for development of the atomic bomb. He also lived in Durango and Uravan. Back in Minnesota, Jim's experience included five years working with Iron Range taconites for U.S. Steel in Duluth. He returned to Union Carbide where he became a general manager at the company's New York office.

Jim eventually moved back to Colorado and in 1964 became an executive Vice President with Hazen Research near Golden, the home of the Colorado School of Mines. While at Hazen, he developed a solvent extraction process for copper that was an important economic improvement for the copper industry at a time when cost effectiveness was critical. Jim joined Hanna Mining Company as Vice President of Research and Development in 1973, and retired in 1976. He and his wife, Margaret, live in Tucson, Arizona.

Throughout his distinguished career Jim has always been impressed with Colorado School of Mines graduates. To help support Mines' students he became a Friend of the School and generously contributed to several School of Mines projects. By supporting a Library collection, Jim has been able to

combine his desire to support Mines students with his belief in the value of libraries in education, research, and applications in industry for professional metallurgists and engineers.

The metallurgy and materials science collection at the Arthur Lakes Library is one of the strongest such collections in the West, and the only collection of its kind in Colorado. One of the collection's unique strengths is its research-level material on extractive metallurgy – an historical focus of the Colorado School of Mines. Jim Lake's endowment will continue to enhance the metallurgy collection into the future. Although retired, Jim remains active and interested in his field. By supporting the Library's metallurgy collection, he helps ensure the quality of future School of Mines graduates and research, and the continuing growth of his profession.



making an impact

Contributions help make the Library a world-class source for information in the study of energy, the Earth's subsurface resources, advanced materials, the environment and engineering education.

You Can Make an Impact in Your Own Way

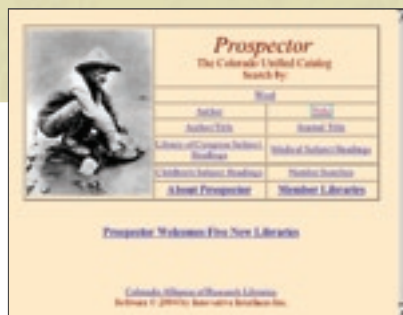
- Donate today by using the enclosed postage paid envelope.
 - Give the gift of a book in honor or memory of a loved one.
 - Include the Arthur Lakes Library in your estate planning.
 - Make a leadership gift to support a special project, collection or service.
- Please see our Giving website, <http://www.mines.edu/library/giving>, for more information about available giving opportunities.

Please contact Joanne V. Lerud-Heck to discuss how you can make an impact. Call (303)273-3690 or email jlerud@mines.edu

strike it rich!

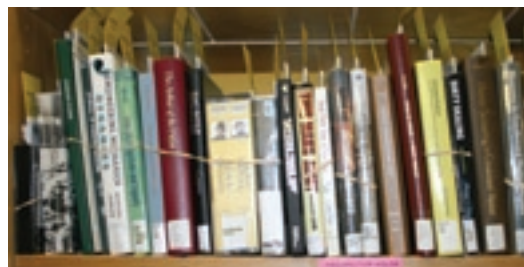
Connected to Prospector

The beginnings of Prospector go back to December 1996 when The Colorado Alliance of Research Libraries and the University of Northern Colorado submitted a joint grant proposal to create a regional union catalog. The collections of the first 12 libraries were made accessible in late 1999. Although the Arthur Lakes Library has been a part of the Alliance from its inception, the Library faced serious problems including the Library's collection in Prospector because the two systems use different database systems. After several years of planning, many hours of programming and troubleshooting, and a great deal of perseverance from our Systems Librarian, the Voyager and Prospector catalogs are now interacting. Arthur Lakes Library went live in Prospector the first day of the fall semester: August 24, 2004. We allowed a few weeks of final testing before making a general announcement to the whole campus in mid-September.



Currently, Prospector is a union catalog of 23 regional academic, public, and special libraries in Colorado. Through Prospector our patrons now have access to over 18 million items including journals, books, sound recordings, films, videotapes, and other materials held in the participating libraries.

Patrons connect to the Prospector catalog from the CSM Library web page or directly at <http://prospector.coalliance.org> and request items they want to borrow. Prospector selects an item from a participating library according to logic that distributes loan requests. Material requested through the Prospector catalog is delivered to the CSM library usually within 3-5 days and patrons are notified of delivery via email. The items can be checked out for two three-week loan periods and then are returned to the loaning library. Items are delivered to and from CSM via the state wide Colorado Courier service which collects and delivers material to our library 3 times a week.



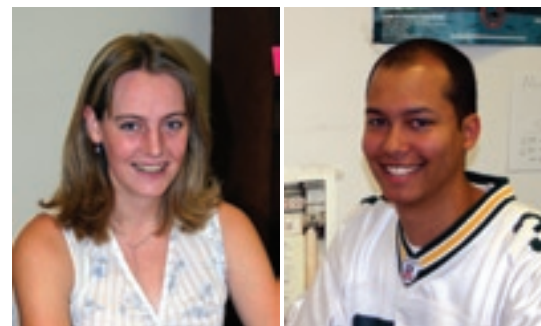
Since the formation of the Alliance, CSM patrons have been able to visit other member libraries and borrow material. Now, Prospector items are delivered directly to the patron.

thank you

Library Student Assistants Tackle Projects with Enthusiasm

The Collection Management staff at the Arthur Lakes Library has been pleased to work with students Earl Benson and Amy Kurtz for the past three years.

Both students have always been punctual, self-starters. Their primary responsibility is to prepare newly acquired books for circulation after they have been cataloged. Amy and Earl attach labels and date due slips. They insert security strips and mark materials with Arthur Lakes Library property stamps, and then they proofread the records in Catalyst.



Beyond these day-to-day tasks, they do much more! Both students have their own individual projects that they tackle with enthusiasm, skill and efficiency. For example, they help with the Library's annual book sale every February, which generates a significant amount of revenue for the Library. But this annual event is a year round effort, beginning with moving the gifts into the Library when donors deliver them, searching the database to determine if the Library already owns the volumes, and storing materials until the time of the sale. They help set up the sale beforehand by organizing and shelving hundreds of books, and then participate in the sale itself.

The biggest and most important project in which Earl and Amy have contributed was the inventory conducted during the summer of 2003. Earl helped staff fine-tune the procedures, and both students completed a large portion of the project, which inventoried 110,000 books. To complete the inventory Amy and Earl searched for missing items and helped to fix errors in Catalyst, ensuring that what patrons see in the catalog is what they will find on the shelf.

Earl, a senior majoring in Mechanical Engineering with a minor in Business, is from Grand Junction, Colorado, though he was originally from Milwaukee, Wisconsin. When Earl is not studying, he pursues an interest in sports of all kinds. Amy is a senior, Civil Engineering major from Colorado Springs, and she is also pursuing a minor in Economics. Amy plans on continuing her studies at Mines next year as a graduate student. When not studying, Amy plays viola with the Jefferson County Symphony Orchestra and enjoys painting.

extending support

Library Aids Mine Preservation Project

By Robert Sorgenfrei

In late August the Library was contacted by property owners in Gunnison County requesting support of a grant application to the State Historical Preservation Board to obtain funding to stabilize and preserve a mine on their land. One of the requirements for a successful grant is that there be public benefit from the project and the owner thought the Library might be able to help in that regard. The mine, located in the Elk Mountain Mining District, is on private property at about 11,600 feet in altitude and in a very remote part of Gunnison County. This is not nor never will be a tourist mine. The fact that it is well preserved is, in part, due to the inaccessibility of the area, and because over the years the owners of property have managed to protect it. The road to the mine is a true four-wheel drive road, only passable in summer and not for the faint of heart. For these reasons it is one of the best-preserved high altitude mine sites remaining in Colorado.

The mine has had a long history. The Hayden Expedition explored the area in 1873. Hayden in his report for that year described the rocks in the region as "...thrown together into a greater state of chaos than I have observed anywhere in the West..." This geologically



chaotic area formed some mineral deposits that came to the notice of prospectors and the first claims in the area were filed in 1878. The mine was never a great commercial success and remoteness of the area discouraged

development. Nevertheless, in 1900 a shaft house was built to shelter a headframe, steam hoist and blacksmith shop. A bunkhouse and mine manager's office were also built about this time. All of these buildings survive to this day.



The owners of the property have formed a corporation to preserve the mine site and are applying to the State Historical Fund for money to stabilize and repair the shaft house, which is in danger of collapsing during the next few years unless work is done to save it. They view the mine as an historical asset for Colorado and are willing to devote considerable time and labor to preserving it. If the grant is successful and after restoration work is completed, the owners would consider granting permission to visit the site on a limited basis during the summer months. A great deal of information on the mine has already been collected and more has been located in the Library. As part of the grant, the owners have agreed to donate copies of all material they have on the mine. Along with existing Library resources, this collection of documents will make the mine site and the mining claims of the surrounding area one of the most well documented in Colorado. The Library has the means to digitize material from the collection on this mine and provide access to a wide audience via the Internet. It would be possible to create an online "virtual tour" of the mine site, thereby helping address the requirement in the grant that there be public benefit, but at the same time protecting a unique resource. The Library supports this grant proposal with hopes it will be successful.

Now Serving the Caffeine needs of the CSM Community - -



The Book and Brew coffee cart, located at the main entrance of the Library, is open to serve the caffeine needs of the CSM community. The cart, now owned and operated by the Library, allows customers to be served during more hours of the day. Book and Brew also sells coffee by the pound and gift cards. Check back soon for other coffee and tea related items as well as gift baskets for the holiday season.

This coupon entitles you to a **FREE BEVERAGE!** of your Choice.



Located in the entrance of the Arthur Lakes Library.
HOURS: Mon - Fri 7:30am to 11:30am, Sun - Thur 5pm to 9pm & Sat 9am to 1pm

Enhancement of the collections and services of the Arthur Lakes Library are made possible through generous contributions of individuals, corporations and foundations. We are especially grateful to those listed to the right who remembered the Arthur Lakes Library in their 2004 (Apr. '04 - Sept. '04) giving.

Library Donors

Mr. Kelly P. Coleman

Mrs. Susan Hoffman

Mr. James L. Lake

Newcrest Resources, Inc.

- on behalf of Mr. Robert Barker

Mr. Richard L. Nielsen

Mr. & Mrs. Charles E. Stark

Mrs. Lyn C. Wood

Marilyn Stark

The Library has a familiar presence working as a volunteer on one of our latest projects—Marilyn Stark. Marilyn was the Assistant Director of the Arthur Lakes Library for 8 years. She moved on to become Chief of the USGS Denver Library.



Since her retirement from the USGS, Marilyn has served on the Board of Directors of the National Mining Hall of Fame and Museum in Leadville, Colorado. There, she helped head a joint NMHFM-CSM Library project to digitize images on mining in the West (<http://csmphotos.coalliance.org>), funded by a grant from the Colorado Digitization Program.

Her current project at the Library is building the Colorado Mining History database, a project she helped establish in 1999. This database contains historical references to mining in Colorado, searchable by mine, company, and location. Marilyn's work includes researching old mining activity in the literature, which also gives her an in-depth knowledge of events and trends. As Marilyn says, "Ask me about 1880's mining in Colorado! Leadville was booming, the San Juan area mines were struggling with metallurgy for the complex ores, and gold and silver were the big commodities, with lead and iron not far behind." We are very grateful and enthusiastic about having Marilyn's expert help!

Donating Materials

The collections of the Arthur Lakes Library are also enhanced by donations of library materials. Materials are evaluated for their appropriateness to our collection; some materials are added to our collection, while others support the Library by being sold at our Annual Book Sale. If you would like to learn more about donating materials, please contact Robert Sorgenfrei at 303-384-2075 or email rsorgenf@mines.edu

The 2004 Member Patron Survey

Included in this issue of the newsletter is an important Member Survey that measures patron satisfaction with Library services. If you are one of Arthur Lakes Library's community or Alumni Association patrons we invite you to complete the survey and return it to us.

In the spring of 2003 the Arthur Lakes Library participated in a survey tailored for student and faculty users conducted by the Academic and Research Libraries and Texas A&M University Libraries. More than five hundred libraries in North America have participated in this survey and the results allowed us to see how CSM

faculty, staff and students rated library services (see the Winter 2004 issue of Inside Arthur Lakes Library). Due to the design of the spring 2003 survey, users of the Library who were not CSM faculty, staff or students were unable to participate. The Member Survey included in this newsletter will allow us to gather information and opinions from those

of you who have memberships with the Library through the CSM Alumni Association, as well as our patrons who have individual or corporate accounts. If you are an alumnus or a community patron please take the time to complete the survey and return it to us by mail or drop it off at the Circulation Desk so that we can hear from you!

responsibility

In keeping with environmentally friendly practices, this newsletter was printed on 100% recycled paper using vegetable-based inks. The size and mailing method were chosen to minimize waste. Using recycled fiber takes about 1.4 tons out of the land fill to produce 1.0 tons of recycled fiber. In addition less water, fewer chemicals and less energy are required.

Please Recycle. Preserving the delicate balance of our ecology requires a commitment from all of us. Recycling is an effective way to conserve our resources and protect our environment.

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Photography and editorial assistance by Patricia Andersen, Laura Guy, Cathy Van Tassel and Jennifer Ward.

Arthur Lakes Library Reference Staff



pictured above from left to right:

Lisa Dunn, Head of Reference and Heather Whitehead, Reference Librarian



Arthur
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Library

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