Dinosaurs Were Here
Evidence near Golden, Colo., draws visitors from around the world.

George Breit ’80, ’86 studies arsenic-contaminated water in Bangladesh.

Herbert Kim ’28 survived three years in Soviet prison, then disappeared in China.
Colorado School of Mines
Alumni Association

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The Voice of Mines Alumni Since 1910

COLORADO SCHOOL OF MINES
COLORADO SCHOOL OF MINES ALUMNI ASSOCIATION

Mines Magazine

Spring 2000

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E-Days 2000
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The History and Mystery of Herbert Kim
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In Their Own Words: Mines Men in Korea, Part II
Part II of a two-part series. More than 300 CSMA members and students served during the Korean War, a conflict that helped shape geopolitics in the second half of the 20th century.

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The classes of '40, '45, '50, '55, '60, '70, '75, '80, '85 and '90 returned to campus for three days of fun and reminiscing.

Dinosaurs Were Here
While Hollywood gives us images of dinosaurs brought to life on the screen, Dinosaur Ridge outside of Golden, Colo., shows us the real evidence that the great creatures roamed through Colorado in the ancient past.

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On the cover: Ed Warren '50 points to an iguanadon track at Dinosaur Ridge. Photograph by Douglas Baldwin.
VICKI COWART MSc GEOP '77, 2000 PRESIDENT OF THE CSM ALUMNI ASSOCIATION

A New Year, A New Board and A New Day

The CSM Alumni Association Board of Directors for the year 2000 met for an exciting planning session in February. We came together to talk about our plans for the year and how we can work to be a more effective organization for the alumni and all the people and groups CSMAA serves. The CSMAA staff, several former CSMAA presidents and Tedick Bartlett were full participants in the session.

Finding the right path to be more effective is a big challenge for an organization with a few hard-working staff members, a modest budget and dedicated volunteers who live all over the world. But we are inspired by a common goal—to make the CSMAA the best it can be for the benefit of our members, all alumni and the future of CSM.

We identified our values, which include relationships, traditions, stewardship, leadership, and excellence. We drafted a vision statement and re-evaluated our mission statement. Much work by individuals and committees is still underway to bring these planning efforts to fruition. We are already taking steps to better implement one of the important aspects of our vision statement: to make CSMAA a vital, essential and integral part of Mines, working in a highly cooperative and collaborative way.

We are beginning to move from abstract ideas to concrete programs and day-to-day activities. Last year, the Board agreed that we wanted to improve Mines Magazine by increasing the number of pages, publishing quarterly and adding more color. In the spirit of collaboration and cooperation, we have agreed to join forces with the school to produce one great quarterly magazine. Beginning in August, all alumni will receive the new, improved magazine, Mines, as it will be called, will be published jointly by CSMAA and CSM. Over the next few issues you will see continuing improvement in size, color, design and content that will address many of our traditional issues about CSM alumni, and increase stories about campus activities, department news and issues of interest to those in the CSM community.

In his last President's letter, Dick Beach challenged us to think about which came first, the school or the alumni. At the Board planning day we grappled with the reality of interdependence; we each need the other and we each prosper and thrive as the other does. It is going to be an exciting and challenging year. We are off to a good start as a result of the work done by last year's Board under Dick's able leadership. I am pleased to have working with me a talented group of Miners from all over the country.

Planning an organization is always difficult, but we are not deterred. We have a longterm goal to bring together engineering students, faculty, staff, alumni and donors. The show was organized by Bartlett's wife, Frani. "It was just a demonstration of the cohesiveness that has come to this place," Bartlett said. "Some of the alumni were almost in tears getting an opportunity to recognize that engineers and scientists are both right-brained and left-brained."

We are grateful to Ted for all of his efforts to prepare Mines for the challenge of educating students during an era of rapid growth in knowledge and new trends in higher education," said Frank Eisman Met E '65, Medalist '93, president of the CSM Board of Trustees. "Among his accomplishments has been using his extensive international experience to prepare our students for success in the new global marketplace. "Ted has been wonderful to work with over the last two years," Eisman continued. "His leadership and support have contributed significantly to some exciting new partnerships between Mines and the Alumni Association. On behalf of the Alumni Association, we thank him for his friendship and the fine work he has done. We wish the very best for Ted and Frani in their retirement."

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Bickart Announces Plans To Retire July 31

President Theodore A. Bickart recently announced that he will retire July 31. He stated he has met his goal of helping the School transition from a period of long-term stability in the fields of applied science and engineering to one of rapidly changing technology, and he is looking forward to retirement.

Bickart joined Mines on August 1, 1998, as the School's 14th president. The CSM Board of Trustees has launched the search for a new president.

"Explosive growth in both the applied sciences and engineering is presenting many challenges for institutions of higher education such as Mines. Over the past two years, we have laid the groundwork for new partnerships and opportunities in the international arena to encourage more students to study abroad, as well as to enable faculty to interact with colleagues in other countries and thus stay at the cutting edge of research worldwide," said Bickart.

"Leading an institution the caliber of Mines has been a wonderful opportunity. It gives me a sense of pride to have two prestigious institutions as bookends for my career, Johns Hopkins and Colorado School of Mines. Colorado is a wonderful place, and my wife Frani and I have enjoyed living here. We are looking forward to spending more time with our family, as well as pursuing our other interests," Bickart continued.

Mines' endowment rose during Bickart's tenure and now is at $125 million, which ranks it 11th in the nation among state-supported schools in endowments per student.

Another memorable event during his tenure was the CSM art show which brought together engineering students, faculty, staff, alumni and donors. The show was organized by Bickart's wife, Frani.

"It was just a demonstration of the cohesiveness that has come to this place," Bickart said. "Some of the alumni were almost in tears getting an opportunity to recognize that engineers and scientists are both right-brained and left-brained."

"We are grateful to Ted for all of his efforts to prepare Mines for the challenge of educating students during an era of rapid growth in knowledge and new trends in higher education," said Frank Eisman Met E '65, Medalist '93, president of the CSM Board of Trustees. "Among his accomplishments has been using his extensive international experience to prepare our students for success in the new global marketplace. "Ted has been wonderful to work with over the last two years," Eisman continued. "His leadership and support have contributed significantly to some exciting new partnerships between Mines and the Alumni Association. On behalf of the Alumni Association, we thank him for his friendship and the fine work he has done. We wish the very best for Ted and Frani in their retirement."

EPICS students involved in a tire-recycling project were featured twice on 9NEWS in February. Funded with a grant from CSM's Colorado Advanced Materials Institute, the team is testing load-bearing ability and other construction characteristics of tire bales for use in home construction, highway barriers and other possible applications. Colorado drivers throw away millions of tires per year, a growing environmental concern and a waste of resources, since each tire contains the equivalent of one barrel of oil.

Easter weekend at Mines is a wonderful opportunity to prepare Mines for the challenge of educating students during an era of rapid growth in knowledge and new trends in higher education," said Frank Eisman Met E '65, Medalist '93, president of the CSM Board of Trustees. "Among his accomplishments has been using his extensive international experience to prepare our students for success in the new global marketplace. "Ted has been wonderful to work with over the last two years," Eisman continued. "His leadership and support have contributed significantly to some exciting new partnerships between Mines and the Alumni Association. On behalf of the Alumni Association, we thank him for his friendship and the fine work he has done. We wish the very best for Ted and Frani in their retirement."

14707 West Colfax, Golden, Colorado 80401
For reservations: (303) 279-7611 or (800)729-2830
Rowlinson Shares Wildcat Wealth With $1.5 Million Gift to Mines

The ’52 Prospector gave the following thumbnail of Norm Rowlinson, GE’52:

Norm Richard Rowlinson, Crandon, Wisconsin, Petroleum Geology, Alpha Tau Omega, Blue Key, Sigma Gamma Epsilon, Tau Beta Pi, Oreadiger, Press Club, E-Day Committee, S.A.M.E.

The credentials speak volumes about a young man who distinguished himself in the classroom and in extra-curricular activities, and went on to a successful career in oil exploration and consulting. Also speaking volumes about Rowlinson is his recent $1.5 million endowment to Mines dedicated to recruiting and retaining top-tier students in his field and providing scholarship support for non-resident or international undergraduate students.

Rowlinson, who now lives in Houston, was an out-of-state student on a full scholarship, which he maintained through his four years at Mines. He also took full advantage of everything Mines had to offer. Of him, Dean of Students William V. Burger wrote: "I regard Mr. Rowlinson as a young man of excellent character, and possessing traits of resoluteness, dependability, imagination and initiative. Mr. Rowlinson has commanded the respect of the faculty and is well liked by his fellow students."

Rowlinson’s traits carried him to Central and South America where he worked as a field and wellsite geologist for a petroleum engineering and geologic consulting firm, then to Bogota, Colombia, where he served as operations manager for United Fruit Company’s petroleum program, which was terminated, along with Rowlinson, in 1961.

Undaunted, Rowlinson returned to Bogota and spent the next 36 years running his own management-consulting firm for independent U.S. oil companies. The first 16 years comprised what Rowlinson called a "bullahike struggle" to establish recognition within the industry. As a hobby, Rowlinson wildcatted. He generated his own wildcat prospects under the company name Petrolinson S.A. In 35 years, he drilled 14 successful wildcats.

"Unlike my prosperous consulting business, it became obvious that as an oilfield I was a complete, abject, dismal, utter failure," said Rowlinson. "Mercifully, my 15th wildcat four years ago tested 3,400 barrels of oil per day, and my incipient failure disappeared shortly thereafter."

That 15th wildcat opened the Guadua oilfield, which Rowlinson sold along with Petrolinson to Seven Seas Petroleum Inc. in March 1997.

Rowlinson returned to the U.S. in 1997 but continues to operate his administrative management consulting business in Bogota, Colombia by modern from his Houston office. Rowlinson, who grew up "in the backwoods of northern Wisconsin," is a past president of the Colombian affiliate society of the American Association of Petroleum Geologists. He holds a master's degree in geology from the University of Colorado, Boulder.

"This gift teaches the School in a very special way. We pride ourselves on our students, our faculty and our programs, and the Rowlinson Endowment Fund will impact all three areas. We are very thankful for Mr. Rowlinson's gift, which increases the School's endowment by $1.5 million," Rowlinson's e-mail address is rowlinson@bigeye.net.

Mission to Bangladesh

Blomberg ’39 Donates Histories and Biographies To Arthur Lakes Library

Charles R. Blomberg PE ’39 has donated to the Arthur Lakes Library a number of recently published books on American history, politics and government, including some biographies of prominent Americans such as Franklin Delano Roosevelt, Harry Truman, Dwight Eisenhower, and J. P. Morgan. The books will go into the library and will be available for anyone to use.

High rates of skin cancer in West Bengal, India, and Bangladesh led to the discovery in 1993 that groundwater supplies for 30 million people are contaminated with arsenic. The cause, natural leaching of arsenic from the sediment in contact with the groundwater, has been identified, but there is no easy solution. The world scientific community has been studying the problem and Bangladesh is overwhelmed by suggestions of what they should do. But the problem persists.

When we first heard about the availability of the special plates we took a poll of what our members wanted as the design. Of the choices given—a spherical triangle, Blaster and a combination of Blaster, triangle and large "M"—the one that was chosen was the spherical triangle. It will appear in the center between the license numbers and letters. Along the bottom of the plate beneath the numbers, letters and logo will be the words "School of Mines."

More information on the cost and how to order these special plates will be forthcoming.

Biehlow Presses for Better Bangladesh

"We asked ourselves what can we provide that’s unique?" says Biehlow. "A lot of work has been done in the eastern and western parts of the country, so Biehlow and his team went to the east along the Meghna River. Along with analyzing the samples he took while there, Biehlow and his team plan to return to explain to the Bangladeshis what they have learned. ‘Often, scientists don’t go back and explain their results to the people affected,’ Biehlow says. ‘But these people are fully capable of understanding our results and successfully applying some of the technology used elsewhere in the world. They have the manpower and the intelligence."

Bangladesh is a small country about the size of Wisconsin with a population of about 130 million. When Bangladesh gained independence in the 1970s, the population was drinking surface water contaminated with cholera, dysentary and other pathogens. To solve this problem, international organizations funded an effort to build tube wells throughout the country.

Now, this new problem has emerged. Bangladeshis need to be able to tell which wells are contaminated and which are safe and there is a national effort to test every well. But scientists would also like to learn what is happening. "Arsenic contamination is becoming a global issue, says Biehlow, even in the United States. Drinking arsenic-contaminated water increases one’s chance of getting cancer 10-fold, more than if one smoked a pack of cigarettes a day. "It’s a challenging problem," continues Biehlow. "We’re working to better understand how we’re modifying our environment."

Although Bangladesh is a country of few resources, the people manage very well with simple tools. Four men using hand tools can drill 160 feet in six hours. Because the mission was cooperative, the U.S. team worked closely with Bangladeshi scientists. "They were as enthusiastic about collecting samples using hand tools as we are using more complex drill rigs," Biehlow says. "The best part of the trip for him was the people. He found them friendly, curious and eager to learn. He described his participation in the project as ‘a very good thing. I had the chance to be relevant on a higher level. We may be able to provide real-time information that may help save lives.’"
STUDENT VOICE

All I Ever Needed to Know I Learned at Mines...

1. Addition is futile—it must all be integrated.
2. Never anger your calculator.
3. Engineers are never wrong—if it's the equipment.
4. At most schools you can study, have a social life and sleep—at Mines you can only do two of those.
5. It doesn't matter how poorly you do on an exam as long as everyone else does just as bad.
6. There will always be someone who will ruin the curve.
7. On homework assignments, it only takes one person with answers (not necessarily correct) for the entire class to finish the assignment.
8. There's even a hierarchy of nerds.
9. The cheers help no one's dating life at CSM.
10. It doesn't matter how poorly you do on an exam as long as everyone else does just as bad.
11. If you don't know what you're talking about in a presentation, just jump through hoops.
12. Who needs to talk good English???
13. You know you're at Mines when your Valentine card reads “The free body diagram of my heart points to you.”
14. Academic success is 20 percent intelligence and 80 percent hard work.
15. Women—the less men can get, the more they blame it on the men.
16. Run while you still can!!!
17. No matter when your first class of the day is, it will always be too early, even at noon.
18. No matter how tired the class, you always feel bad after ditching.
19. Guys are desperate everywhere. Mines merely accentuates the fact.
20. WRG is great bribery.
21. There will always be someone who will ruin the curve.
22. All angles are 37, 53, 45 or 90 degrees.
23. Entering Mines, one immediately becomes nocturnal.
24. To be a Mines student is to be a part of the big brotherhood of humanity.
25. You know you're at Mines when your Valentine card reads “The free body diagram of my heart points to you.”
26. Any club worth joining serves free lunch.
27. You can kill your neighbors with a 9-volt battery.
28. E-mail is an addiction.
29. Grades do not reflect knowledge.
30. Everyone is someone else's weirdo.
31. Multiple choice does not mean easy.
32. A 95.7% can be an A.
33. The Art of Mines is slowly dying.
34. Women—the less men can get, the more they blame it on the men.
35. Holidays should never be taken for granted.
36. Alcohol only seems to enhance coordination.
37. 70-0 is, in fact, a football score.

Students, Staff, Faculty Show Off Creative Talents at Campus Art Show

Quals, sculpture, paintings, photography, ceramics and more were on display for three weeks at the end of spring semester at CSM’s first community-wide art show. About 90 students, staff, faculty and spouses participated in the show, displayed on the main floor of the Arthur Lakes Library.

The show was the brainchild of President Ted Bickett and his wife, Franis, who borrowed the idea from their experiences in Syracuse, N.Y., where a local museum sponsored an annual show featuring work by employees at local businesses. “Renaming the shows in Syracuse and thinking about how so many employees at Mines have talents that the rest of Mines and the Golden community are unaware of, made us think seriously about trying to have an art show here. We thought it would be fun and would build community on campus,” says Mrs. Bickett.

The show opened April 14 with wine, hors d’oeuvres, a string quartet and the unveiling of the 125th Mines anniversary quilt. Local artist Leon Loughridge judged the show and prizes, donated by local businesses, were awarded to five students, one faculty member, and seven staff. Best-of-show went to technical support staffer Grey Lee for a hand-dried, hand-sewn quilt, “UH (Breadfruit).” Best student work went to Larry Wagg for an untitled wood sculpture.

Seniors Showcase 31 Projects

Mike Delphin (left) and Harris Inamori helped to design a wheelchair souvenir for the Denver Veteran’s Medical Center. The system rests on the wheelchair seat and is capable of collecting and displaying temperature and humidity data. A separate pad collects pressure data. The data will be used to analyze conditions and circumstances that lead to the breakdown of human tissue. Other team members (in background) are Damian Gonzalez, Brenda Miers and Lance Randolph.

Twenty-five alumni helped judge this semester’s Senior Design Trade Fair April 13. The 31 projects included a portable railing toefor use by riders who must carry out their waste from rivers in National Parks, a hands-on educational tool for 8- to 12-year olds using an existing water wheel for the Salvation Army High Peak Camp, and a transportation cart for the Jews of Life for the Boulder Rural Fire Department.

Alumni judge included Janis Christopher BSc Eng ’97, John Counts Met E ’57, Allen Cockle Geol E ’70, Thomas Cole EM ’43, Michael Cresson Geol E ’65, PhD Geol ’73, Denise Dible BSc Eng ’93, Stephen Fenston BSc Eng ’87, Gregory Flecker BSc Pet ’86, van Diest Medal ’98, Michel Geathers BSc CPR ’94, Rhonda Gathers BSc CPR ’95, Linda Hadley MSc Geop ’74, Hugh Harvey BSc Min ’74, MSc Pet ’80, Alfred Ireson PE ’48, Robert Moreno BSc Phy ’76, George Off BSc Math ’70, James Oltmans II Geop E ’70, Arthur Pascoe Jr. Geol E ’63, PhD Geol ’71, Kenneth Pratt BSc Math ’74, MSc Geop ’81, Allan Proost EM ’62, Medalist ’84, Holly Sprackling BSc Eng ’91, Lori Stucky BSc Eng ’97, George Taniwaki BSc CPR ’91, Vesvzer “Hutt” Vasen Met E ’39, Al Wieder PE ’60 and John Wyan EM ’50.

The judges evaluated the various projects and their evaluations will figure in the students’ grades. “It makes the trade fair more real since they are presenting their projects to strangers,” explains John Steele, technical adviser for the wheelchair senior project (pictured above).

Dr. Joan Gosink Honored As “Unique Woman of Colorado”

Dr. Joan Gosink, CSM professor and director of the Division of Engineering, was named “2000 Unique Woman of Colorado” by the Women’s Foundation of Colorado May 8.

Gosink was chosen for being a leader in her profession. She is one of only seven female deans of engineering in the country and has served locally and nationally as a role model and mentor for women and girls.

Gosink has been responsible for providing rationale and framework for the Women in Science, Engineering and Mathematics program at Mines, which has been in existence for three years. “We need more women engineers,” she told the packed auditorium at the Temple Buell Theatre in Denver. “If women, instead of men, had designed airplanes, for example, we wouldn’t have all the problems we’re having now.”

Gosink was honored during the final lecture in the 2000 Unique Lives & Experiences program. The Women’s Foundation of Colorado, a co-sponsor of the lecture series, works to create communities in which women participate as full and equal partners in all aspects of society.

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Senior Project: Mike Delphin (left) and Harris Inamori helped to design a wheelchair souvenir for the Denver Veteran’s Medical Center. The system rests on the wheelchair seat and is capable of collecting and displaying temperature and humidity data. A separate pad collects pressure data. The data will be used to analyze conditions and circumstances that lead to the breakdown of human tissue. Other team members (in background) are Damian Gonzalez, Brenda Miers and Lance Randolph.

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Campus Celebrates Chinese New Year

Asian students celebrated the Chinese New Year in February with a festival for everyone on campus. It included food, music and entertainment.

Learning On-Line

CISM now offers graduate-level courses over the Internet in petroleum engineering and related disciplines. A certificate in petroleum reservoir management is awarded upon completion of five courses in the on-line program.
The weather cooperated fully at this year’s E-Days celebration. Bands Stroke 9 (above) and Twelve Cents for Marfin (above right) performed and Night Musik put on another great fireworks display. Photos by Douglas Baldwin.

Herbert Kim was a man of the world. He was born in Korea, fled with his family to China to escape persecution, attended and graduated from Colorado School of Mines, married an American, worked for the Soviets in Russia, and then for the government in China. What ultimately happened to the man is still a mystery. But for a time, his fate was of the utmost concern at the highest levels of CSM administration.

Kim was born in Korea in January 1904. Early in life, his family was forced to flee to China because of Japanese political persecution in Korea. He attended preparatory schools in Korea and then in Nanking, China. From there, he traveled to Colorado to attend CSM, arriving in September 1924.

The president of CSM (1925-46), Dr. Melville Coolbaugh, and his wife Osie took an interest in Kim and invited him into their home to live with them and their four children, the oldest two of which were CSM students. Kim graduated with honors with an engineer of mines degree in May 1928. He remained close to the Coolbaughs and corresponded with them for the rest of his life.

After graduation, Kim worked for two years at the Homestake Mine in South Dakota where he had also spent his summers while going to college. He then enrolled at Columbia University in New York where he attended graduate studies in mining. In 1931 he married Pauline, an American citizen and graduate of New York University. By then he had contracted with the government of the Soviet Union to work as a mining engineer. He and his new wife headed to Russia in 1931.

Much of the information known today about Kim comes from letters written to Coolbaugh, whom he called “Prexy” and Mrs. Coolbaugh, whom he called “Mother.” Pauline also corresponded with them.

Life in the Soviet Union was hard. Kim wrote in 1932 and 1933 in letters addressed from Komiassk ASSR to CSM. Goods, food and services were scarce and could only be obtained by ration cards at high cost. Some items, mostly food, were substituted.
and available in limited amounts. However, Kim reported productive improvements in the Soviet government had initiated strong programs to combat illiteracy, Kim said, and the majority of the people were satisfied with socialism, including those in mining and farming.

Transportation, however, was very poor and inefficient. “Everybody needs documents to travel, purchase goods and do almost anything,” Kim wrote. Nevertheless, Kim wrote for Russia.

Kim did well at his new job and advanced to being in charge of the most important mine in our management district, “he said. The foreign engineers were given relative freedom in their jobs although the remuneration did not meet what was stated in their contracts. The foreign engineers were given power over the Russian engineers, but Kim found that cooperation was very limited and, therefore, so were the results. The Russian engineers were very good theoretically but not as practical as the American and German engineers. They generally felt that mechanization was the solution to most problems. Kim observed, although the infrastructure was not adequate. Kim found Russian engineers and mine workers inefficient and unenthusiastic. According to a 1942 article in the Denver Post, Kim became a naturalized citizen of the USSR and was rewarded for his engineering work by being made head of the Soviet gold trust. In a letter to the Coolboughs received June 25, 1936, Kim announced the birth of his son, Robert, born Jan. 1, 1934. Robert understood English perfectly but preferred to speak Russian, he reported. In the same letter, he commented again that he was well satisfied with his progress in the Soviet government. For two years he had been holding a responsible mining position, had received wage increases and, in 1935, had been elected a member of the executive committee of the district government. He added: “I do not wish to stay on in the USSR where Pauline and I see a good future for ourselves.”

Not all was perfect, though. In the same letter Kim also wrote that there were “some moments that are not quite pleasant.” The older conservative engineers without foreign training or experience were much harder to work with than the younger engineers, he continued. “The old generation of engineers are some of the hardest people to deal with, especially when they are under the control of such an engineer as I am at the moment.”

That was the last word from Kim for nine years. Early in 1938, Coolbough learned that Kim had been imprisoned in the Soviet Union. He immediately notified the CSM Alumni Association. According to the Denver Post, “Dr. Coolbough collected documents bearing on the character, scholarship, dependability, professional attainments and citizenship of his classmate and forwarded them to the consul­late of the Russian government in New York and to Chou En-lai’s ambassador in Washington, D.C.”

A March 3, 1938 article in the Denver Post said, “In a desperate move to save the life of a former classmate believed to have been caught in Red Russia’s current blood purge, alumni of the Colorado School of Mines have appealed directly to Josef Stalin for mercy.”

On Nov. 14, 1944, Kim wrote a short letter from the Chinese Embassy in Washington, D.C. He wrote that the time Coolbough heard from Kim in 1944 was in May or June, and he continued to correspond with the Coolboughs and reported that Kim had received a 25-year sentence. Of the numerous letters that Kim had written, he continued to work in the mining industry. Apparently, Kim’s release was orchestrated by the Chinese after the Soviet Union and Japan broke off relations because of World War II. Russia and China had become allies. Several months later, in a letter dated Oct. 15, 1945, postmarked New Haw Chi, Szechwan, China, Kim recounted his return to his parents and four of his siblings after 20 years of separation. Kim was made chief engineer for the mining company of Kanou Province by the president of the province. He also discussed his imprisonment in Russia. “It is only there in the Soviet prison that I understood the worth of a pound of black bread,” he wrote. “When a person is being subjected to a constant hunger for years, he becomes a hungry beast whose sole desire is to satisfy that hunger. He forgets everybody, even closest and dearest.

It was only in my strong physical construction and the elastic temperament which enabled me to live through the media­lmost barbarian of physical torture (and) moral encroach­ment practiced upon me by the 20th century inquisition. Before my very eyes, the social system to which I was devoted, (and) unhesitatingly had given all my knowledge, experience, fact and very being—sitting down like a house of cards. The very means they had been using to achieve the des­irable qualities in society had so completely killed the souls that the builders of the new human society became a band of political purgers.

But, Kim continued, “I am eager to use this life in an unselfish and fruitful undertaking.”

March 8, 1938, To Joseph Stalm: “COLORADO SCHOOL OF MINES ALUMNI ASSOCIATION MAILING APPEAL TO YOU FOR MERCY HERBERT KIM ASSISTANT DIRECTOR GLAZOLETO.” signed Coolbough. Herbert Kim, 1942
In Their Own Words:

Mines Men in the Korean War

Part 2 of a two-part series

By Steve Voyrach

While combat operations in the Korean War made the headlines, many Mines men behind the front lines filled supply and port control positions that were vital to the logistics of the war effort.

Army 1st Lt. Douglas E. Brown EM '51 served with the 435th Engineer Construction Battalion. "Supervised two different rock quarries in Pusan supplying crushed rock to an asphalt plant for paving the streets of Pusan. Then became executive officer of the Battalion labor officer in charge of hiring about 500 indigenous personnel for the Battalion."

Army 1st Lt. James E. Massey EM '52 also served in port operations, where he met many other Mines men. "When assigned to the 532nd Regiment, Shore Bn., in Japan, I took charge of the same platoon that Chet Westfall [Geol E '52], my SAE frat brother, had been in charge of. He had left for Korea the week before. In Korea we operated a port near Ulban. Our scrounging for parts went to a nearby pipeline and friend Jerry Dyer [PE '52], my classmate. John Volosin [PE '52] was in the same unit. I learned later that Jack Petty [EM '51] was located in Taegu in the tungsten mining industry, had recollections of the war that focused neither on tungsten mining nor mining, but on "hamcha, honey buckets and cold.""

Since tungsten was a wartime strategic metal, maximizing production of the Korean tungsten mines was of considerable importance. Army 1st Lt. Thomas M. McLaren Geol E '52 writes: "While combat operations in the Korean War made the headlines, many Mines men behind the front lines filled supply and port control positions that were vital to the logistics of the war effort.

Army 1st Lt. Charles Mallette Geol E '52, a Pusan cargo officer, was also involved with tungsten. "My job was to oversee shipment and handling of Corps of Engineers equipment and materials going through the port facilities. One headache that occurred quite frequently, every two or three weeks, was the shipment of tungsten concentrates to the States. It was part of Lt. Col. John Vosch's [MSc Min '51] operation at the Dul Engang Tungsten Mine, operated by the Utah Construction Co., near Tetong, and I got roped in on the deal. Often times a million or more dollars of tungsten would go out—all guarded by a platoon of infantry."

Mines men, especially Army engineers, frequently met former classmates, and the benefits could go far beyond camaraderie. Army 1st Lt. Thomas M. McLaren Geol E '52 writes: "Upon reporting for duty in Seoul during the fighting in September 1952, I was advised that I was assigned to front-line engineers company to oversee removal of land mines under fire. While I was in the Chief of Engineers' office, I looked at the wall map of all the engineers units in Korea. The Chief of Engineers asked if I knew any of the other engineer officers and I said I saw quite a few from the Colorado School of Mines, including Tom Johnson, [Geol E '52] who had been best man at my marriage in 1951. Against the objections of many, the Chief of Engineers then changed my assignment to the 58th Engineers in Seoul as executive officer. I served with Tom Johnson, and flew in helicopters with Claude Jordus [Geol E '52], my SAE frat brother.

Army 1st Lt. John F. Fox Group E '52 found the discomfort of life in wartime Korea tempered by contact with many Mines men. "Seoul, on the Han River, was hot and humid in the summer and freezing cold and windy with snow in the winter. Muster Sergeant Carpenter, who had been on the Mines ROTC program during '49-52, showed up in my office one day. The larger unit next door was the 98th Aerial Photo Reproduction Company, where classmate Lt. Tom Johnson [Geol E '52] and Lt. Tom McLaren [Geol E '52] were assigned. Bill Brown [Geol E '52] also joined that unit a bit later as an enlisted man. John Volosin [PE '52] and Jerry Dyer [PE '52] visited several times from an engineer pipeline company.

Navy Lt. JG Curtis D. Conley Geop E '52 Geol E '59 found that during the war years, Mines men could turn up anywhere in the Far East. "We were anchored in Hong Kong harbor. I stepped into the warehouse where an Air Force Liver was standing with his back to me. I could see his profile over his shoulder. I continued on next page.

Visit the CSMAA website: 
csmaa.mines.edu/alumni

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**June**

- 16th Annual Alumni Golf Tournament. Wind Woods Golf Course, 6655 Quaker St., Arvada, Colo. 7 A.M. Proceeds to benefit CSMAA Emergency Student Loan Fund. For more information or to register, call (303) 273-3290.

**Denver Section Lunch, Southeast Area.** 11:30 A.M. Order from the menu.

**grand Junction Section Lunch.** An informal get-together of CSAM alumni the third Thursday of every month at the Bookcliff Country Club, 2730 G Road. Call for further information: John Howe, (970) 242-4903 (B) or Del Tolen, (970) 256-1118 (B).

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**Denver Section at Rockies-Dodgers baseball game.** 7:00 p.m. Call (303) 273-3295 for tickets ($15 each).

**September**

- Hall of Fame Football Game. M-A Americas Nazarene @ Mines.

- Tailgate lunch 11 A.M. Brooks Field (hospitality tent).


- Tailgate Party, Chadron @ Mines football. 11 A.M. Brooks Field.

- Denver Section at Merrick & Company, 2245 South Proctor Street, Aurora, Colo. Lunch will be followed by a presentation on Merrick & Company’s use of leading edge processes and technologies in Geographical Information Systems (GIS) and a tour of the facilities. 11:30 A.M. Cost of lunch TBA.

- Grand Junction Section Lunch, Bookcliff Country Club, 2730 G Road. Call for information: John Howe, (970) 242-4903 (B) or Del Tolen, (970) 256-1118 (B).

- Tailgate Party, P-H Hayes @ Mines football. 11 A.M. Brooks Field.

**October**

- Four Corners Tailgate Party. Mines @ FLC football in Durango. Details TBA.


- Tailgate Party, New Mexico Highlands @ Mines football. 11 A.M. Brooks Field.

- Grand Junction Section Lunch, Bookcliff Country Club, 2730 G Road. Call for information: John Howe, (970) 242-4903 (B) or Del Tolen, (970) 256-1118 (B).

- Tailgate Party, Hays @ Mines football. 11 A.M. Brooks Field.

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**August**

- Golden Lunch Bunch. An informal get-together of CSAM alumni the second Thursday of every month at the Buffalo Rose in Golden, Colo., corner of 12th and Washington, 11:30 A.M. Order from the menu.

- Grand Junction Section Lunch. An informal get-together of CSAM alumni the third Thursday of every month at the Bookcliff Country Club, 2730 G Road. Call for information: John Howe, (970) 242-4903 (B) or Del Tolen, (970) 256-1118 (B).

- Annual Alumni Picnic. 1 p.m. Coogbaugh House.
returned to Korea.”

Mines men also participated in the air war in Korea, which involved bombing of North Korean industrial and transportation facilities, supporting ground troops, reconaissance and maintaining air superiority, the latter accomplished by U.S. Air Force F-86 Sabrejets, which racked up a 1:10 kill ratio over Russian MiG-15s.

U.S. Air Force 1st Lt. John E. Nagel, who had fought in World War II in Italy only to be recalled for Korea, was one of many Mines men engaged in behind-the-lines construction. He was the commanding officer, C Company, 4th Engineer Construction Battalion. After initially advancing through the Paldang River military road, his company was assigned to undertake reconstruction of the major high-level bridge on the same Paldang River southnorth of the city of Seoul. In addition, he was sent to reconnoiter and estimate reconstraction of the principle steel truss bridge that had been bombed and dropped into the river between Seoul and the port city of Inchon. Later, my company was assigned to construct a railroad spur for the U.S. air base at Kunsan.

The Korean War brought racial restructuring to the Korean Peninsula. “It was the commanding officer, C Company, 4th Engineer Construction Battalion. After initially advancing through the Paldang River military road, my company was assigned to undertake reconstruction of the major high-level bridge on the same Paldang River southward of the city of Seoul. In addition, this was sent to reconnoiter and estimate reconstruction of the principle steel truss bridge that had been bombed and dropped into the river between Seoul and the port city of Inchon. Later, my company was assigned to construct a railroad spur for the U.S. air base at Kunsan.”

The Korean War brought racial restructuring to the U.S. military. Nagel recalls: “At this time, the army was just in­

...
continued from previous page

depots. "My main duties were training, conducting military fire in­
spectors and paying our Korean labor force. I needed a sketchy bag
of how to make the Koreans deal [units of currency], not because
they paid so well, but because of the inflation of the currency... The
worst fire developed in early December 1953 on a hilltop residential
area in central Pusan. We needed 15 hours to bring it under con­
trol. In the process, hundreds of homes, several military depots and
the Korean Communications Zone headquarters were destroyed." 

The cease fire, 3, 786 American prisoners-of-war, most of whom had been captured during the first few months of the conflict, were repatriated. Army 1st Lt. James Fouret Geel E ’51 MSc Geol ’55, a Patton leader in a combat engi­neer company, remembers Korea as a place of "snow, cold, rain,
and mud, dirt and smell." But his richest memories are, in effect, a
"life experience" if I had ever been to Korea. Then names like Chorwon,
my first return trip to a place I had never been before... How did
I respond? I didn’t do very well.

"My final reaction was that the South Koreans appreciated what
the United States and United Nations had done for them. After see­
ning what Korea looks like now, and hearing how the Koreans felt
about it, I was satisfied that it had been worthwhile effort."

Although political constraints had prevented all-out victory
in Korea, it is now clear that the conflict did much to shape geopolitics in the second half of the 20th century. As the first
direct confrontation between the free world and international gas­
communism, the Korean War ushered in the 40-year-long Cold War and was the precedent for a series of military stands
that helped bring about the eventual fall of international com­
munism.

Northwest of the effects of the Korean War more evident
than on the Korean Peninsula itself. Little can be said about
the effects of the war in areas that were not present on the Korean Peninsula in 1950-53 had been executed in.

Army 1st Lt. Norman R. Zebr E ’52 MSc Min ’56, who was an aviator with the 41st Division during the war, re­
calls the gratitude of the Korean people. "On my first return trip
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CSMAA AWARDS

Melville F. Coolbaugh Award
Awarded to an alumnus or friend of Mines who has made an outstanding contribution toward improving the image and enhancing the reputation of Colorado School of Mines.

Elisabeth Haller Stowe BSc Geop '93, a marketing representative for TGCS-NOPPEC Geological Co. in Houston, receives this year's Young Alumnus Award.

Robert T. Reeder EM '49, MSc Min '86 was chosen to receive the Outstanding Alumnus Award because he is always ready to work on any project for the advancement of the Alumni Association.

Honorary Membership Award
Awarded to an individual who has rendered distinguished service to the CSM Alumni Association and/or the Colorado School of Mines and who is of good moral character and is in good standing professionally.

CSM Magazine, Spring 2000
Class of 1955

Commencement included The Continuum honoring women graduates.

Class of 1960

John D. McHieh Met E '50 serves himself during his class breakfast.

Class of 1965

Commencement included The Continuum honoring women graduates.

Class of 1970


Class of 1975

Commencement included The Continuum honoring women graduates.

Class of 1980


Friedhoff Hall was readied for the All-Alumni Dinner Saturday night.

Alumni, spouses and friends sat at tables of eight during the dinner.

Reunion classes presented Pres. Ted Bickart with a check for $2,317,244.

More than 300 people attended the all alumni dinner Saturday night.

Alumni, spouses and friends sat at tables of eight during the dinner.

Reunion classes presented Pres. Ted Bickart with a check for $2,317,244.
Mines marbles, the latest from the Miner’s Pick, went on sale for the first time during Reunion 2000. The marbles, each in a velour bag, four blue and one white. They sell for $10 per bag.

INTERNAL 

ON THE MOVE

Mines Magazine

Spring 2000

Spring 2000

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Mines Magazine
James M. Bell Geop is a geophysicist for Lielkom Petrolei in Turks. This text is incomplete and cannot be accurately transcribed.

Keith L. Elliott BSc CPR is senior engineer for the Stratum Group LP. He lives in New York City, N.Y.

Robert W. Bogle Hydrogeol is an environmental engineer for King County in Seattle. This text is incomplete and cannot be accurately transcribed.

Richard A. Kersey BSc CPR is a test and evaluation engineer with the Federal Aviation Administration. He lives in Bakersfield, Calif.

Douglas N. Stevenson MSc Chem is a pharmacist in Laramie, Wyo. This text is incomplete and cannot be accurately transcribed.
ON THE MOVE

in San Jose, Calif. Eric J. Muler BSc CPR is a plant supervisor for ChemDesign and lives in Worcester, Mass. Koew Eisong Tan BSc MSc MSc Min E '96 is a junior trader for Statoil. He lives in Norway. Bichun Zu BSc CPR, MSc CPR '96 is a consultant for MultiPhase Solutions Inc. in Houston.

1996

Ian David Lindsay BSc Eng is a supervis­
or for Kiewit Construction in Dallas. Doug-Hoon Min PhD Phy is a research engineer for Samsung Electro-Mechano Co., Ltd. in Seoul, South Korea. Tim Snagher BSc Phy is senior photo process engineer for Texas Instruments in Dallas.

1997

Richard M. Wescott BSc Eng is a sales­
tliert with CadCam Engineers & Scientists in Wilmington, N.C. Troy B. Olson BSc CPR is a nuclear engi­
er for Knudt Amdrup Power Laboratory in Batavia, N.Y. Esther Fung BSc CPR is sole proprietor of Alaska Data Services. James Fung BSc CPR is project geophysicist of Kernmantle Exploration. They live in Chugiak, Alaska.

Jennifer R. Blum BSc MSc, MSc 1997 is a quality analyst for Western Forge in Colorado Springs, Colo.

Nicholas F. Hernandez BSc CPR is a plant engineer for Sperry-Sun Drilling Services in Everett, Wash. Craig T. Sebesta BSc Eng is a mechanical engi­
er for Johns Manville Corp. in Littleton, Colo. He lives in Golden, Colo.

1998

Rebecca R. Conner Rowley BSc CPR is a pro­
test engineer for Texas Instruments, Inc. and lives in McKinney, Texas.

Michael D. Roel BSc CPR is a self-employed con­
tactor in Littleton, Colo. Darrell T. Webb BSc Geol, Geoscience (Maynard) Webb BSc Eng, '90 works for Learjet Communica­
tions Inc. in Denver. He is a project planner and Nafoma is an access planner. They live in Golden, Colo.

1999

David A. Buell BSc Phy, M Eng Met '99 is a personnel plan­ner with the transportation projects group for Lockheed Martin Astronautics in Denver.

2000

Peter D. Harriman BSc CPR is a facility engineer for BHP Amoco plc. Christopher A. Jarrett BSc CPR is a 2nd lieu­utenant atattle manager for the U.S. Air Force at Tyndall Air Force Base in Florida. Greg L. Jenkins BSc CPR is the owner of Hydraulics Inc.

2001

By Maureen Keller

Dinosaurs Were Here

Prehistoric footprints in the Dakota Hogback give visitors a glimpse of an ancient past. CSM faculty and alumni work to preserve them.

Imagine a terrifyingly strange world where the only sounds are those made by nature, with creatures so huge their footprints make the ground shake, and where in place of the Rocky Mountains, a flat, tropical plain meets an inland ocean. This is the Colorado of 150 million years ago, the age of the dinosaur, the Jurassic Period. Fossils are of the era's dominant life forms, which are not limited to the land. The sea abounds with marine species, and the air is filled with flying reptiles. It is a world of enormous diversity, with many species preserved as footprints or fossilized bones.

Dinosaur Ridge, as the area was named in the 1980s, was discovered by CSM geology professor Arthur Lakes in 1877 during a Sunday afternoon hike. Lake's fantastic discovery yielded the world's first discovered stegosaurs and apatosaurus (also called brontosaurs) from the Jurassic Period. As 30 tons, the apatosaurus was the first mega-dinosaur ever uncovered, exciting paleontologists, geologists and archeologists the world over.

In 1930, when the Alameda Parkway was extended over the Dakota Hogback, the site also yielded hundreds of dinosaur footprints from the Cretaceous Per­
iod (100 million years ago). While the Dakota Hogback now sits was once the edge of an inland sea. Dinosaurs lived and died along its shores and left ev­i­dence of their existence in fossilized footprints embedded in rocks. It is believed that the dinosaurs left their footprints in the sand along the

beach not long before a nearby extinct river flooded, covering the impressions with silt. In addition to footprints, there is evidence of roots from an ancient mangrove-like swamp. For many years after its discovery, the geologically world-famous site remained unused, unmarked, yet easily accessible to all who were interested. For many, the temptation to collect fossils was too great and some even went so far as to chip whole footprints from the rocks. In the mid-1980s, a group of interested parties, including Bob Weimer, CSM pro­

fessor emeritus and Virginia Maat, CSM geology museum curator, founded Friends of Dinosaur Ridge, whose mission is to preserve and protect the area that is now designated a National Natural Landmark. Ed Warren Geol E '50, Hon ‘95 and Andy Taylor PhD '97 joined the volunteer group a few years later. Warren is currently president of Friends. Taylor is on the board of directors. It's a labor of love," says Warren about his and the other volunteers' activities with the Friends. Since its 1983 start-up, the group's assets have grown to just under million with one full-time paid director and 130 active volunteers. "Upwards of 100,000 people visit each year," says Warren, predicting 350,000 to 400,000 visitors per year in the near future. "Last year we had 4,000 school children in May alone." The most easily accessible parts of Dinosaur Ridge are located along the Alameda Parkway that loops around the Dakota Hogback and are well marked with 17 interpretive signs.

continued on next page
The more adventurous can hike a two-mile trail over the Dakota Hogback. About six times a year, the Alameda Parkway access is closed to traffic and guides are stationed along the road to give visitors further insights. A recently purchased bus—brightly painted with scenes from the Cretaceous Period—takes visitors to the site from the visitors center located at the northeast end of the ridge. Future plans include closing the road to traffic permanently, says Warren. The ridge would then be accessible only by bicycle, foot or bus.

The most remarkable sight along the Alameda Parkway is found at Stop 4 on the east side of the ridge. "About one hundred million years ago, the Rocky Mountains rose, pushing the plains up to a 45-degree incline," Warren explains. Highway construction then exposed the face of those slanted rocks. The footprints, which are eroding, have been darkened so that they can be more easily discerned. Solar panels illuminate the site at night. Three hundred six footprints have been mapped and measured so far. What the visitor sees at Stop 4 are tracks from Cretaceous dinosaurs, probably ornithopods, an ostrich-like carnivore and theropods, an herbivore. Two sets of theropod footprints—one large, one small—run side by side, possibly that of mother and offspring. In addition to erosion, Warren says, "Vandalism is our biggest problem." Fences have been erected around the footprints although researchers, including some college students, are allowed to study the area up close. Money raised by Friends of Dinosaur Ridge has gone toward erecting numerous signs, building a podium for use by guides and establishing and expanding the visitors center.

People love to compare their hand size to dinosaur footprints. The footprints, which are eroding, have been darkened so that they can be more easily discerned. Solar panels illuminate the site at night. Three hundred six footprints have been mapped and measured so far. What the visitor sees at Stop 4 are tracks from Cretaceous dinosaurs, probably ornithopods, an ostrich-like carnivore and theropods, an herbivore. Two sets of theropod footprints—one large, one small—run side by side, possibly that of mother and offspring. In addition to erosion, Warren says, "Vandalism is our biggest problem." Fences have been erected around the footprints although researchers, including some college students, are allowed to study the area up close. Money raised by Friends of Dinosaur Ridge has gone toward erecting numerous signs, building a podium for use by guides and expanding and establishing the visitors center.

A former residence purchased by Jefferson County, on property that abuts the ridge, serves as the visitors center and includes office space and a gift shop with dinosaur-related merchandise including plaster casts of footprints. Future plans include building a new center, somewhat in the shape of a stegosaurus, with spines atop the roof and a head protruding from the front of the building. The stegosaurus is an appropriate symbol because not only was it first discovered at Dinosaur Ridge, it has since been named Colorado's state fossil. The new center, when built, will be noticeable from the C470 highway.

Dinosaur Ridge has special programs throughout the year including Elderhostel lectures (led by Warren) and Summer Science Camp for children 11-13 co-sponsored by CSM. In the spring, bus loads of school children also visit to watch eagles, hawks and falcons migrating north overhead because the ridge sits beneath a raptor migration corridor.

Preserving Dinosaur Ridge is important for many reasons, says Warren. The site not only gives visitors a unique and remarkable glimpse of the past, it is both free and easily accessible. The thousands who visit can walk right up to the rocks and feel the smoothness of embedded, fossilized dinosaur bones from the Cretaceous Period and marvel at how small their hands appear resting inside gigantic footprints from the Cretaceous Period. "Our focus is in keeping this world-famous area from being destroyed," Warren says. "We'll all be gone in time, but we want it to be here for future generations."
Gulf Coast Region
Bone Valley (Lakeland area), Florida

More than 25 people attended the annual CSM picnic in central Florida April 9 including, at left, John C. Voss EM '42 and his wife Louise (standing) and Jack Whitaker EM '38. At right, Hermann A. Hofmann CEE '50 enjoys a beer.

The event was organized by A.L. "Judge" Holmen CEE '60.

Houston, Texas

Host Randy Oilman serves up a burger.

New Orleans and Baton Rouge, La.

Barbara Riiighofer BSc CPR '82 and Randy Oilman BSc Eng '98 organized alumni attendance at a reception hosted by Melissa Stone BSc Geop '93 at the Met Sports Club in downtown Houston April 6. Seventeen Miners attended.

West Region
California--Los Angeles Basin

Barbara Ringhofer BSc CPR '82 and Randy Oilman BSc Eng '98 organized alumni attendance at The Pacific Collegiate Swimming Championships in Long Beach, Calif. in March. After the meet, Oilman hosted an alumni team party at his home in Bellflower, Calif.

SPORTS HIGHLIGHTS

18 Student-Athletes Make RMAC All-Academic List

By Jeff Duggan
Sports Information Director

Colorado School of Mines had 18 student-athletes named to the Rocky Mountain Athletic Conference's Winter 1999-2000 All-Academic List.

To be named to the RMAC's All-Academic Team, a student-athlete must have a 3.2 or better cumulative grade point average, be a starter or key reserve on their team and must have been a student at their school for at least two consecutive semesters.

<table>
<thead>
<tr>
<th>ATHLETE</th>
<th>SPORT</th>
<th>YEAR</th>
<th>MAJOR</th>
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<tr>
<td>Charity Garrison</td>
<td>Women's Track</td>
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Four To Compete at Outdoor Nationals

Colorado Mines' Dayven Johnston, Eric Stellmon, Jim Beideman and Ben Lengerich have qualified to compete at the NCAA II Outdoor Track & Field National Championships in Raleigh, N.C. May 25th-27th.

A junior out of Colorado Springs, Johnston will run the 400-meter dash, having qualified with a time of 47.49 seconds. He will also compete on the 4X400-meter relay team along with Stellmon, Beideman and Lengerich.

Stellmon, a senior from Aurora, Colo., will run the 400-meter hurdles after qualifying with a time of 52.24 seconds.

Swimmer, Sprinter and Wrestler Go To Nationals

Mines was represented at the NCAA II Nationals in swimming, indoor track and field and wrestling nationals this winter. Freshman Brooks Masterson represented the swimming team, junior Dayven Johnston the indoor track and field team and junior Jody Trantham the wrestling squad.

Masterson (Greeley, Colo.) earned Honorable Mention All-American Honors by placing in the 500 freestyle, the 200 individual medley and the 500-yard freestyle relay.

Dayven Johnston (No. 31) at Indoor Nationals

200 freestyle and the 200-yard butterfly at Division II Nationals in Buffalo, N.Y. March 8th-11th.

Johnston finished fifth in the 400-meter dash at the NCAA II National meet in Boston and garnered All-American laurels as well. He will compete in the NCAA II Outdoor Track & Field Nationals at the end of May.

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Kim Good is Named RMAC Women's Basketball Freshman of the Year

Kim Good, a 6’5” center on the Lady Orediggers basketball team, was named the Rocky Mountain Athletic Conference’s Women’s Basketball Freshman of the Year for 1999-2000.

- Jeff Duggan

The Barb family and their in-laws have sent four generations to The Colorado School of Mines. Clark F. Barb PE ’25, MSc Pet ’28, Hon Mem ’64 spent his career at Mines. After graduation, he joined the faculty as an instructor, then became professor and finally head of the petroleum department. His field camp sessions were legendary and nicknamed “the Barb Death March.”

Clark retired as professor emeritus in 1963, but in 1977, just months before his death, he returned to lead one last field session at the age of 80.

Clark’s son Denver M. Barb PE ’43 graduated from Mines and then went to work for, and ran for many years, his wife’s family business, Auto Service and Supply Co. in Limon, Colo. He worked in the retail side of the oil and gas business. He retired recently and now lives in Yorba Linda, Calif.

Bette Barb Fulton, Clark’s daughter, married Richard Fulton PE ’50. After graduation, Fulton worked for Ball & Associates, setting up natural gas storage reservoirs underground Tokyo. He spent most of his career working for Mississippi River Transmission Corp., from which he is retired and he and Betty live in Chesterfield, Mo.

Clark’s granddaughter, Deidra L. Barb BSc Pet ’74, studied chemical engineering before joining her brother at Auto Service and Supply Co/Colorado Gifts in Limon. A third grandchild, Denise Barb Newman, is married to George Newman BSc Min ’78, who is chief financial officer for an oil and gas exploration firm, Thomasson Partner Associates, Inc., Denver. A great-granddaughter, Tanya Barb (future BSc Pet ’01), is currently a junior at Mines.

The Colorado School of Mines two-man basketball team lost to the Black Hills Normal five-man squad Friday 80-79 in four overtime periods.

The Miners were reduced to two players in the final extra period after eight team members were sent to the bench with five fouls. The officials called 48 fouls on the 10-man traveling squad—the short of the maximum.

Despite the lack of personnel, the Miners pulled within one point, then forced the home team to freeze the ball to pull out the somewhat hollow victory at Spearfish, S.D.

The score was tied 96-96 at the end of regulation play. The Miners trailed 91-97 at halftime but, blocking well off the weave, were able to pull even and force the game to its extended finish.

The first overtime ended 122 all, the second at 144 all, and the third at 166 all. It was during the third extra session that the whistle cut into the number of players the Miners could put on the floor.

The team started the final session with four players. After 15 seconds, Steve Harvey was sent to the bench, leaving only Dick Walker, Ken Ancell and Boyd Watkins on the floor. With two minutes remaining, Walker joined the majority on the bench.

Ancell and Watkins, both of whom had four fouls, shifted into what Coach Jimmy Darden called a “man for man” defense—each in a stationary position on either side of the Yellowjackets’ basket.

Trailing 80-77, Watkins stole the ball, dribbled the length of the floor past all five defenders and sank a lay-up.

Black Hills Normal went into a stall and neither defender was able to foul deliberately in an effort to get the ball—that would have left only one Miner in the game and no one to put the ball in play.

The Miners hit 29 of 64 shots during the hour-long game for an average of 46 percent. Normal hit only 18 of 56 shots for 32 percent.
Haynes '56 Dates Ruins Using Geological Data

Geochronology, the science of applying geological knowledge to archeological problems, is the niche of C. Vance Haynes Geol '56 has made his specialty. His work in the field led to his being named to the National Academy of Sciences in 1990. According to the NAS web site, "Haynes has made major contributions to the reconstruction of paleo-environments in western North America and eastern North Africa and to the understanding of processes and human implications of climate change."

Haynes began at Mines in 1949, but interrupted his education to serve in the U.S. Air Force. He was stationed in Alaska. "I was on three or four days, then had as many days off. It gave me more time with archaeologists helping them with geology. Geoarchaeology was something that could be designed that could operate on the lunar surface."

In 1984, a fire occurred on the battlefield at Little Big Horn in Montana and afterward, a Montana archaeology student noticed artifacts that had previously been hidden by grass. "I had a colleague in the National Park Service," says Haynes, "and he called me out to help determine the geochronology of Deep Ravine, where 26 bodies may still lie buried." Using metal detectors, a group of volunteers put together an up-to-the-minute survey and then plotted it in three-dimensional space. "It helped me to work out the geology of the area."

Later, Haynes supervised a hunter’s battle field on a privately owned piece of land along the Yellow- stone River. A huge hole was taken there in 1873 between Custer’s 7th Cavalry and various bands of Indians. Because the land is privately owned, few people know where it is or if one of the few sites left unplundered. "I’m putting together a book on it," Haynes says. Last July, Haynes retired from his position as Regents Professor at UA, but he is far from idle. Currently he is working in the Sahara looking for geologic evidence of climatic changes during the late Pleistocene era. "The Sahara is probably the driest place on the planet with less than 1 million of rain per year," he says. "Until a few years ago, it was not thoroughly explored." Because the area has been unpopulated for thousands of years, archaeological sites there are undisturbed.

Griffith '82 Is A Surgeon

Patricia Griffith BSc CPR ’82 is an orthopedic surgeon with a solo practice in Cheltenham, Miss. The small southern town, an hour south of Memphis, Tenn., bills itself as the “home of the blues.” Surrounded by farms producing cotton, soy beans and rice, the area is economically impoverished and was visited by President Clinton last fall.

Griffith finds herself there after a series of career decisions that took her from the food industry to the operating table. Griffith says she chose to attend CSM because she was offered a Board of Trustees scholarship. While at Mines, Griffith took off a semester to attend Oregon State and study food science. After that, she realized she could also continue her CSM she also ran track, but was the only woman on the team.

After graduation, Griffith worked as a chemical engineer for邓卡诺Hines in Cincinnati, Ohio, then Celestial Seasonings Tea Co. in Boulder, Colo. In Boulder, she took biology classes at University of Colorado, discovered an interest, and applied to medical school. Initially, Griffith wanted to be a cardiologist. She earned her medical degree from Loyola University in Chicago. While looking for a research project, she became interested in orthopedics, in part because it is a matter of health. "I worked in the gait laboratory which does computer modeling of people’s walking gait," Griffith says. "I chose to head the two headquarters of the Academy of Orthopedic Surgery and Griffith volunteered there and decided to pursue sports medicine. After graduation she did a sports medicine fellowship in Jackson, Miss., and eventually set up practice in Clarksville. Griffith still runs, competing in three or four races—usually 6K—every year. She likes to cook, an interest that originally led her to food science, and says her part of Mississippi is wonderful for gardening because of the rich, fertile soil.

Tamm '66 is Mayor of Small Town in Oregon

To his surprise, Paul Tamm PRE ’66, who earned the world of politics in his retirement. He is in his second term as mayor of Oakland, Ore., population 875. It’s an unpaid position that requires about half his time and it’s no walk in the park. "The politics in this town are vicious," he reports. "It’s never quiet in a small town before and had no idea how nasty the politics could be." With such a small population, a few people can have an inordinate influence. During his first term, for example, he survived an attempted recall.

Tamm and his wife Betty retired in 1992 after 22 years with Chevron Corp. Betty worked for more than two years as Oakland city recorder, but resigned because of a hostile city council. "The council was in opposition of something about half a year to replace her," Tamm says, during which time nothing got done. "I watched it all unfold and I didn’t see anybody coming forward to run against the incumbent mayor. I had made a big investment in this community, building a nice retirement home, and I didn’t want to put my time to something as they were. So I ran for mayor."

The vote was very close, Tamm says, but he won. Tamm says the city was facing two large utilities projects—upgrades of the water and sewer systems—he ran on an engineering platform. "Because of my engineering background, I proved that I was best qualified to shepherd those projects along," he says. Since his election, Tamm has gotten bond issues passed overwhelmingly to help finance the projects and has solicited federal and state grants to pay for the rest. Appropriations are the cornerstone of the city budget. Tamm says the city has an application pending for additional $650,000 in grants that he expects to be awarded soon. If they pull this off, he says, the project will be completed with the city only having to contribute about 12 percent of the cost. "That’s one project I’ll really feel good about," Tamm adds. Tamm’s accomplishments to date gained him the 1999 Leadership Award from the Oregon Mayor’s Association.

One of Tamm’s toughest challenges as mayor was with the chief of police, who was named in a small harassment complaint. The investigation and subsequent turmoil leading to the chief’s departure also led to the attempted recall of the mayor. Tamm survived the recall, and was re-elected, but his opposition stacked the council against him.

Problems remain. For example, after a deadstock over which company to hire for the water upgrade, Tamm proposed flipping a coin to decide the choice. He gained the approval of a majority of council, but the losing party has since threatened a lawsuit claiming the procedure was capricious. "Things are never dull in this job," Tamm says.

Tamm’s term ends in November and he is undecided whether to run for re-election.

Mandell ‘53 Owns, Runs Colorado Trout Ranch

The Cross D Bar Trout Ranch, owned by Dick Mandell PE ’53, encompasses 800 acres in the Wet Mountains (first range due west of Pueblo, Colo.) on the east side of the Sangre de Cristo Mountains. Thirteen years ago, Mandell opened the land for limited fishing. Today, the ranch is "one of the most reasonable private fishing clubs in the whole state," he says, with family memberships at $150 to $250 yearly dues. Facilities include a guest house, an authentic Stitlzi tent that sleeps four or five, cabins, camp sites, an RV park, a general store, planned activities for children, fly-fishing instruction and equipment rental.

The east side of the Sangre de Cristo mountains are the most picturesque," says Mandell. His ranch sits in a mountain valley at about 9,200-9,300 feet and has four lakes. "The trout do extremely well in these waters. They’re in over-abundance of natural food for the trout. Our fish are 100 percent wild, trout, artificially fed." The Cross D Bar supports both Trout Unlimited and the Federation of Fly Fishers (conservation organizations) and is committed to the philosophy of "catch and release." However, fishermen can keep the fish they catch in one of the lakes.

The fishing club has 55 members, mostly from Colorado, but also from Texas, Louisiana and other places. Members can park their RV’s for free in the membership area. "Some of our members have not moved their RV’s for 10 years," Mandell says. "They consider it a second home. Other members bring their RV’s in spring and remove them in the fall." During the summer season, Mandell barters arrangements where he provides space and utilities in exchange for a couple’s services such as taking care of the store and doing odd jobs. "I have two or three couples on the ranch at all times." Mandell, who is semi-retired from the oil business although he still works in Denver and maintains a home there, spends about 50 percent of his time at the ranch during the summer. In addition to its recreation facilities, the Cross D Bar is a working cattle ranch. Mandell has a herd of 30 to 40 mother cows and lease grazing land to other ranchers. Every year in June, the Cross D Bar hosts a free outdoor festival for disabled

Haynes at an excavation site in 1975.
people around the state. Mandel created the Cross Bar Recreation Foundation, a not-for-profit tax-exempt organization, to provide outdoor recreation for the disabled. "It now hosts seven or eight pro-bono events during the summer," he explains. The June event draws between 75 and 150 disabled participants for a weekend of camping, fishing, picnicking and fun. About 50 volunteers join the event.

"There are minimal outdoor recreational facilities in Colorado or the Rocky Mountain region that encourage that," Mandel says. "It's possible to gain the knowledge, physical barriers, confidence and self-reliance to help them overcome their psychological and physical barriers," Mandel says. "The Foundation opens another world of skills, confidence and self-reliance to help them overcome their psychological and physical barriers."

Barry '91 Chooses Ministry Over Oil

After seven years as a petroleum engineer, Barry Thomas BSc Pete '91 went through a soul-searching process to determine what it was he really wanted to do. He enjoyed engineering and had attended Mines because he was analytical and good at mathematics and science. But what he really wanted was to help people. That realization led him to Quail Springs Church of Christ in Oklahoma City, where Thomas is now the small-group minister.

"At first, I thought it would be difficult to find such a position. "Not many churches were interested in someone with a petroleum engineering degree," he says. Thomas had been working for Anadarko Petroleum since graduation, moving from Kansas to Oklahoma to Texas. He heard about the opening in Quail Springs and decided to apply. "I told them I thought I was a long shot," he says. "They asked why and I said, 'I don't have a Bible degree and I have no full-time ministerial experience.' They replied, 'We're looking for someone with a heart for God, a passion for small groups and strong leadership skills.' " Thomas was in.

Those who attended Mines with Thomas "will never doubt remember him. He was student-body president, student-body vice president, played on the football team, ran track," says McBride, Mines' student body president. Thomas transferred to and graduated from Metropolitan State College in Denver and became a high school mathematics teacher. She currently is a full-time mother but is attending University of Central Oklahoma to earn a master's degree in mathematics.

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Tuttie studies an area with gold and base fill. Naturally occurring bacteria break down the mediation processes that happen as landfill interacts with pore water and Okla., Tutde is United States. projects in the working on four currently, she is as Africa and get into the coal, what is the magnitude high arsenic contents. How did arsenic landscape needs to be assessed, Tuttie utte metals to the streams, " she ex­ and their state of development contrib­ metal mineralization. "We' re trying to get to the coal, mining area where the coal has generating pyrite will be the highest. the sulfur and to predict where the acid­ Turtle's fourth project involves acid­ the world in 1966, he saw an ad taking up polo again. "Polo made my 10 years in the Middle more much interesting because my subject area that I have not used in my career," he said. Criss attended Antioch College in Ohio before graduating from Mines. He also re­ a master's degree in meteorology from California Institute of Technology in 1943. From 1942-46, Criss was in the U.S. Army. In 1975, Criss married Florence Large. He is survived by her, daughter Jeanne Marie and a granddaughter.

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Swanson and Tulk permitted facilities, I began one of the more excit­ areas will become increasingly important to understand and integrate all subject audits using Global Positioning Equip­ ance regulations. He became interested in multimedia and computer- based multimedia, and established one of the nation's larg­ and banks. He also is doing investment-recovery consulting for the U.S. Post Office, does mine audits using Global Positioning Equip­ for litigation support and telecommunications National Examination for Mines and Cellular Mitsubishi students at University of Phoenix. When Tulk gives presentations to el­ ementary and high school classes, he emphasizes the importance of excelling in all of their courses of study. "I chal­ enge the students to name a class or subject area that I have not used in my career," he says. "But them, the need to understand and integrate all subject areas will become increasingly important to their careers."

For relaxation, Tulk works out and rides motorcycles. Once he hopped onto his bicycle and rode from his home in Denver to Lawrence, Kan. just for fun. His daughter is a May graduate of University of Colorado and his son is a NASA student.

O'Malley '42 Raises Horses in Ireland

A love of 19th century novels and horses led Ward O'Malley '42 to the Irish countryside 30 years ago. The native New Yorker raises Irish draught horses for jumping and hunting. He lives on a 30 acre home and cattle farm in County Tipperary and, at the age of 81, still plays polo three times a week during season.

O'Malley began his college career at Princeton, where he learned to play polo, but finished at Mines because he dreamed of gold mining in Peru. After graduation, he entered the U.S. Army and served under General Patton in World War II. Following the war, he did get to Peru to mine gold, then returned to the United States to earn a master's degree in geology from Stanford University. He became an oil geologist and moved to Tehran, Iran. There, he met and married his wife Catherine and took up polo again. "Polo made my 10 years in the Middle much more interesting because my subject area that I have not used in my career," he said. Criss attended Antioch College in Ohio before graduating from Mines. He also re­ a master's degree in meteorology from California Institute of Technology in 1943. From 1942-46, Criss was in the U.S. Army. In 1975, Criss married Florence Large. He is survived by her, daughter Jeanne Marie and a granddaughter.

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O'Malley began his college career at Princeton, where he learned to play polo, but finished at Mines because he dreamed of gold mining in Peru. After graduation, he entered the U.S. Army and served under General Patton in World War II. Following the war, he did get to Peru to mine gold, then returned to the United States to earn a master's degree in geology from Stanford University. He became an oil geologist and moved to Tehran, Iran. There, he met and married his wife Catherine and took up polo again. "Polo made my 10 years in the Middle much more interesting because my subject area that I have not used in my career," he said. Criss attended Antioch College in Ohio before graduating from Mines. He also re­ a master's degree in meteorology from California Institute of Technology in 1943. From 1942-46, Criss was in the U.S. Army. In 1975, Criss married Florence Large. He is survived by her, daughter Jeanne Marie and a granddaughter.

MEDITATION

Swanson and Tulk permitted facilities, I began one of the more excit­ areas will become increasingly important to understand and integrate all subject audits using Global Positioning Equip­ ance regulations. He became interested in multimedia and computer- based multimedia, and established one of the nation's larg­ and banks. He also is doing investment-recovery consulting for the U.S. Post Office, does mine audits using Global Positioning Equip­ for litigation support and telecommunications National Examination for Mines and Cellular Mitsubishi students at University of Phoenix. When Tulk gives presentations to el­ ementary and high school classes, he emphasizes the importance of excelling in all of their courses of study. "I chal­ enge the students to name a class or subject area that I have not used in my career," he says. "But them, the need to understand and integrate all subject areas will become increasingly important to their careers."

For relaxation, Tulk works out and rides motorcycles. Once he hopped onto his bicycle and rode from his home in Denver to Lawrence, Kan. just for fun. His daughter is a May graduate of University of Colorado and his son is a NASA student.

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Harry L. McNeill EM '24 died Jan. 1 at the age of 99. He was a faithful member of the Alumni Association and was generous to the School. He also contributed to Mines Magazine when it published technical articles. McNeill was retired from Steama-Riggers. He was class president for the Class of 1924 and was a member of Sigma Nu.

DONALD O. RAUSCH Donald O. Rauch EM '54, PhD '59, Medalist '78, of Broomfield, Colo., died Aug. 23 at the age of 75.

Rausch, a native of Portland, Ore., served in the Navy during World War II. He began his mining career as an underground contract miner in 1949. In 1951 he married Anna Howseman. Rauch's mining career included being president and chief executive officer of Western Nickel Inc., vice president of mineral resources for NL Industries, and mining engineer for Kennecott Copper Corp. and Dravo Corp.

As recently as 1998, McNeill wrote an article for Mines Magazine on his professional contributions at Mines, "We have always been proud of his accomplishments at Mines," says his widow, "He was a fine man and good engineer, well respected in the mining industry in Arizona and the Southwest." Smith is survived by his widow, sons Dana and Harvey, daughters Dorothy, Linda, Bunker and Gypsy, a sister and three great-grandchildren.

Alma BYRNE VANN HORN

Alma Byrne Vann Horn, wife of Richard Vann Horn EM '47, died of pneumonic Feb. 20 in Denver. She was 79.

Many Miners may remember her as the beautiful brunette who sold tickets at Golden Gate Gen Theater, tended fountain at Alpine Drug Store and was hostess at the Golden Hotel between 1942 and 1946. She was also an actress in the Mines theater group and a member of the Dance Club. Most of her life was devoted to raising five children.

Mrs. Vann Horn always made an effort to be outgoing and helpful. When she worked at Alpine Drugstore, many CSM foreign students got their medications there because she had the patience to work her way through their Spanish accents to understand English. Mr. Vann Horn remembers a CSM alumna he'd never met before who learned the couple had moved to Salt Lake City. "He made the effort to locate me to inquire about Alma," Vann Horn said.

WILLIAM L. ZEISER

William L. Zeiser EM '49 died at the age of 78.

Zieser was retired from U.S. Steel International Inc. He had been assistant superintendent at the Mine in both World War II and the Korean War, leaving the service as a captain. He met his future wife, V. Lee, in Pasadena, Calif. and a few weeks later, got accepted at Mines. He proposed and Lee joined him shortly thereafter in Colorado. They were married for 53 years.

During the Korean War, Capt. Smith, as a professor of mining science and tactics at CSM, taught ROTC. In 1958, he started a mining engineering consulting business in Scoldale.

Harry W. Smith Harvey W. Smith EM '49 died at age 89, on April 20 in Scottsdale, Ariz., after a long illness. Smith was an Army veteran who served in both World War II and the Korean War.

Survivors include daughters Diane Price and Patricia Fábregas, sons Michael, Mark and Richard, 10 grandchildren and 10 great-grandchildren.
The need for a handbook in the field was apparent. By the turn of the century, American mining schools had produced more than 1,000 degree-holding mining engineers. These graduates traveled the world applying professional practices learned at American mining schools. The need for a handbook in the field was acute after 1867 when Columbia School of Mines began its favorable review; "This is the most polyglot of all the professions." Mining engineers have been fortunate in securing the services of Mr. Peele as the guiding editorial spirit to transmute the conception into accomplishment. Peele retired for $5 and was originally issued as a one-volume work. However, it soon became apparent that if 3,375 pages were unwieldy and too thick for the binding, which split and broke apart after only a little use, Peele was reinsated as a two-volume set with more than 1,000 pages in each volume. This solved the problem of split binding. First editions of Peele in the one-volume format are rare because so few have survived intact. At the last library book sale, a copy of the one-volume first edition in very poor condition sold at auction for around $100. The second edition, published in 1927, can be found in both the one- and two-volume formats, but again, the one-volume book is rare. All editions are bound in maroon-colored cloth with gilt stamped lettering on the spine. Peele by itself is gilt stamped on the front cover. The first two editions are about seven inches tall with gilt edges. At about an inch and a half thick, the two-volume editions are about the size of large modern paperback books. The third edition, without gilt edges, is about an inch taller than the previous editions. This book was designed to travel easily.

Mining engineering has been described as the "most polyglot of all the professions." Indeed, an old-school mining engineer was at times a CEO, personnel director, lawyer, geologist, metallurgist, surveyor, chemist and mechanical, electrical and civil engineer all in one. The chapters in Peele reflect this eclecticism. No other engineering handbook covers so varied a subject matter, from geology to all aspects of engineering to law to payroll and personnel management. When looking at this book, one realizes no single author could have written it. The subject matter is too diverse. But when the profession's best and brightest, Peele was able to turn each contribution into a coherent piece that discussed virtually all that was known about mining engineering at the time.

The attention to detail is amazing. For example, the chapter "Prospecting and Exploration," tells one how much food is needed for each man per month on an expedition: 4 lbs. flour, 2 lbs. hardtack, 27 lbs. bacon, 7 lbs. bran, split peas, 5 lbs. sugar, 4 lbs. dried fruits, 3 lbs. butter, 2 lbs. canned milk, 2 lbs. cheese, 2 lbs. tea, coffee, 3 lbs. salt, pepper, mustard, 3 lbs. baking powder, and one bottle of olive juice. Even in such a comprehensive work, there had to be limits; recipes were not included.

Under "Special Problems of Mine Labor," advantages and disadvantages of using particular racial and ethnic groups as labor are discussed in stereotypical ways that would be unacceptable today. This section was dropped in 1941.

Peele's Mining Engineers' Handbook traveled the globe with generations of mining engineers. The third and last edition was published in 1941, a year before Peele's death. The book finally went out of print in the 1950s after many reprints. It is still a proud part of many professional libraries and is still sought after by students and newly trained mining engineers. Certain sections describing aspects of mining practice and techniques are still valuable. It is an historic testament to the old-school mining engineers: that jack of all trades who roamed the world running every aspect of a mine operation.

Robert Sorgenfrei is Director, Richard L. and Lyn Wood Mining History Archive, Arthur Lakes Library.
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