Iowa Gulch (Iowa Hill, Banner Placer, Kingsbury) History

By Bill Fountain, Rebecca Waugh, Eric Twitty, and Sandie Mather
Breckenridge, Colorado

1860, June 16, *The Rocky Mountain Herald*

"Preparations are being made to bring water into the Iowa Gulch, and several claims are being opened preparatory to mining."

1860, June 20, *Rocky Mountain News* (weekly)

"The Iowa, Gibson, Prospect and several dry gulches are turning out very satisfactorily."

1860, July 25, *Rocky Mountain News* (weekly), page 2

"The Gibson, Iowa, Illinois, Dry and Hoosier gulches are paying better as they are more thoroughly worked. . ."

1861, Fiester, 1994:28. *Miners' Record* July 20, 1861

"On the west side there are now five or six gulches, that are now being well prospected, with good promise. One of them, the Iowa, is quite extensively worked near its mouth, and good pay is obtained, but we were unable to learn particulars.

1868, February 26

Summit County Clerk and Recorder. Pre-emption book L, page 68. February 26, 1868 1200 feet of Iowa Gulch. 12 investors.

1868, July 17, *Rocky Mountain News* (daily), Page 2

"July 11, 1868
Adams, Stahl & Co., are erecting flume in Iowa Gulch and will commence to work their ground about the 15th instant."

1868, September 28, *Rocky Mountain News* (daily), page 3

"Iowa gulch has been worked this year by Messrs. Tubb, Ellis and others, but with what results I do not know."

1869, May 26, *Rocky Mountain News* (weekly)

"Iowa gulch is being opened and worked by Messrs. Stahl, Tubbs & Co. in a very systematic manner, and good pay is being taken out."

1971, June 20, *Daily Register Call* (Central City), page 4

"Messrs. Stahl & Adams, in Iowa gulch, one and a half mile from Breckinridge, are working five men and taking out one-half ounce each, per day."

1971, July 14, *Daily Register Call* (Central City), page 4

"Adams & Stahl. are running two flumes in Iowa gulch; are working four men, and are averaging $8 a day to the man."

1871, October 16 – *Rocky Mountain News (daily)*, Page 1

"Messrs. Stone & Adams, in Iowa gulch, one and one-half miles from Breckinridge, are working five men and taking out one-half ounce each, per day."

1872, July 29

Summit County Clerk and Recorder. Pre-emption Record book L, Page 372 & 373. July 29, 1872. Territory of Colorado, County of Summit County, known as Adams Patch placer in Quartz Mountain Mining District. Making 60 claims of 200 ft. square each. 60 investors.

1872, July 29

Gulch and side claims Iowa Gulch. Book L, Page 372. July 29, 1872. 25 investors.

1872, August 14, *Rocky Mountain News* (Weekly), page 1

"Five men are working in Iowa gulch for Stahl & Adams. This mine is worked by booming, they not having handled a shovelful of dirt this season. Since the middle of June they have cleaned up over $4,000, and all above the flume on the bed rock remains untouched. The mine produces coarse heavy gold, and when a bed rock clean-up is made they expect to realize $50 a day to the man, as the result of their summer's work. Stahl & Adams own the entire gulch, or 6,000 feet in length by 1`,000 wide, and every foot of it prospects remarkably rich. A boulder weighing over two hundred pounds was taken from this mine, and it is actually seamed with gold. Another very rich mine is the Stogsdell patch, owned and worked by Stogsdell & Twibell. They are working four men, with hydraulics, and they obtain from $25 to $35 per day each; $3 to the pan is a common occurrence at this mine."

1872, November 13, *Rocky Mountain News* (weekly), page 3

"The gold crop of the several placer mining camps in Park, Lake, and Summit counties has been gathered, and many of the miners are now in town. In summit county, the most brilliant results have been achieved in Iowa gulch and what is known as Stogsdale and Twebel's claim. In Iowa gulch, 'booming' has been used, and with such good results that it is probable that this will become a favorite method of working ground too poor to mine in the ordinary way. It is difficult to estimate the amount of gold obtained during the past season in Summit county, but it is safe to say that it amounts to over $100,000."

1872, November 15, *Daily Colorado Miner* (Georgetown), page 4

"Adams & Stahl worked in Iowa gulch, and by booming took out considerable gold."

1873, March 24, *Daily Colorado Miner* (Georgetown), page 2

"Iowa Gulch worked by this process, paid over $20 a day per man. This gulch proves very conclusively the superiority of this method of mining over all others. It was abandoned in '60 as worthless, and the present owners Messrs Adams, and Stahl, barely made expenses out of it for 4 years. It was a last resort that they tried booming, and the result of last season was the above handsome returns.

Booming is a process by which large quantities of gravel by the agency of water is moved. To do this a flume is built about 4 feet wide and 6 feet high and has a 'flare.' [wing] The grade varies given to the flume, an average would be about 10 inches to the 12 feet. To obtain sufficient water to run so large a flume, the water is collected in a reservoir and then let out by a pate with a rush, thus a small stream of water ifs made to do the work of a very large one."

1873, July 11, *Rocky Mountain News* (daily), page 4

"Judge Silverthorn, who arrived last evening from beyond the range, gives some interesting items of news from that region. The season is favorable and the road over the mountains good. The miners are all actively at work with most excellent prospects. The immense bed-rock flume of Stahl & Adams, in Iowa gulch, is in full operation and disposing of immense quantities of earth and rock. It is five by five feet and has a fall of an inch and a quarter to the foot. Boulders weighing a ton are swept through it at lightning velocity."

1874, May 13, *Rocky Mountain News* (weekly), page 2

GOLD RUN DITCH

In 1862 the Gold Run Ditch company was organized, and ground broke in July. The following gentlemen constituted the shareholders of this magnificent enterprise: Ed Green, L. G. Tubbs, T. Borden, E. U. Canfield, A. Hannum, Samuel Mishler, William Stahl and N. Cartwright. On the 28th day of October of the same year the people of Gold Run and Stillson Patch celebrated the arrival of water through the ditch. It is nine and one-half miles in length, and receives its supply of water from Blue river, French gulch, Indiana and West gulches.

[This was added here because it shows Shahl was a shareholder in the Gold Run Ditch.]

1874, November 13 – *Rocky Mountain News* (Daily), Page 3

"The most famous gulches—all situated within a radius of ten miles of Breckinridge—are Nigger gulch, Lincoln, Iowa, Hoosier Boy, Gold Run, Salina and Georgia."

1878, Fossett, 1880:483

Adams & Engle were working Iowa Gulch as of 1878 and netted $2,600.

1880, May 4

Summit County Clerk and Recorder. Deed Record book 20, page 149, 150, and 151. Quartz Placer (149). May 4, 1880. Marshel Siverthorn , John Willoughby, Peter Engle, E. N. Reaser, H. Duquette, Abe Larkin, Jo. D. Roby, John Montgomery to Boston & Colorado Gold Placer Mining Company. Adams Placer (150)—May 4, 1880. John C. Montgomery, H. Duquette, E. N. Reaser, Donald Fletcher, Peter Engle, George Bressler, West Yingling, John A. Willoughby to Boston & Colorado Gold Placer Mining Company. American Placer (151)—May 4, 1880. Charles N. Rickert to Boston & Colorado Gold Placer Mining Company.

1880, August 13

Conveyed to Boston & Colorado Gold Placer Mining Company by deed of John Davis, Sept. 10, 1878. Conveyed to John Y. Mainland by the Boston & Colorado Gold Placers Mining Company on August 13, 1880. $1.00 and other valuable considerations.

1880, August 23

Summit County Clerk and Recorder. Deed Record book 22, Page 275. August 13, 1880. Property conveyed to John Y. Mainland by the Boston & Colorado Gold Placers Mining Company. $1.00 and other valuable considerations. Summit County Clerk and Recorder. Deed Record book 22, Page 278. August 23, 1880. John Y. Mainland, of Boston, to Boston Gold & Silver Mining Co. (organized under the laws of the State of Colorado). Commencing at mouth of Iowa Gulch, pre-empted by Chenis (?) & Tubbs, February 25, 1868, (Book L, page 68) running up gulch 6,000 feet and width 300 feet on each side of center of gulch. Also, commencing at stake 100 ft to south of above mentioned running down said gulch 200 ft and in width 100 feet. Also, the following described property on Adams Patch. Commencing at the south east corner of said claims pre-empted and recorded on said Iowa Gulch (Book L, Page 372). Running southerly 300 feet thence running westerly 6,000 feet. Then northerly 400 feet. Thence easterly 6,000 feet to place of beginning. Also, the whole of the three ditches with the water rights, conveying water from Cucumber to Iowa Gulch north of Iowa to Iowa Gulch. Also all reservoirs, flumes, mining tools, quick silver on hand and one house and one cabin on said premises. Second, on Quartz Placer, commencing at a point of rocks on the north side of Cucumber Gulch near its mouth. Thence running south 100 feet. Thence south 80 degrees west 3,500 feet. Thence, north 2000 feet thence North 80 degrees east 3,500 feet thence south 1900 feet to placer of beginning. Third, American Patch in Quartz Mountain Mining District. Beginning at a stake marked pr(?) John Abbett, August 13, 1878. Located at the northeast corner of the said claims in Iowa Gulch and known as the

Iowa Gulch property. Thence running westerly 7,000 feet to stake mark No. II. Thence running northerly 1,000 feet to stake marked No. III. Third running easterly 7,000 feet to stake marked No. IV. Thence running southerly 1,000 feet to place of beginning containing 160 acres. Together north all singular… (more). Sum of 2 million dollars.

1880, September 2

Summit County Clerk and Recorder. Mining Deed Record book 21, page 155. September 2, 1880. Boston Silver Mining Company to P. J. Coffman, Thomas Coffman, C. J. Signor and Jerome Signor. Location Certificate recorded in Book V, Page 459. $300.

1881, November 22

November 22, 1881. Plaintiffs John W. Jenkins & Boston Gold & Silver Mining Company.

1882, August 4

Summit County Clerk and Recorder. Deed Record book 4, page 144, 145, 146, and 147. August 4, 1882. Boston Gold & Silver Mining Company to Alfred J. Ware for the sum of $25,486.30. American Patch placer claim containing 160 acres and designated as U. S. Mineral Survey No. 983. The Adams Patch placer claim containing 160 acres and designated as U. S. mineral survey No. 984. The Quartz Patch placer claim containing 157.41 acres and being U.S. Mineral Survey 985. And the Rob Roy Lode all situated lying and being in Mineral District No. 3 of the State of Colorado and in the Quartz Mountain Mining District. Also, 1,000 feet or more of galvanized iron pipe and one "Little Giant" now on said placers. Also all the ditches and water rights conveying water to and connected with said placers.

1882, August 9

Summit County Clerk and Recorder. Mining Deed Record book 39, page 270. August 9, 1882. Alfred J. Ware to Sydenhaus Mills. $25,000

1883, July 28

Summit County Clerk and Recorder. Mining Deed Record book page 49 and 554. July 28, 1883. Sydenhaus Mills of Arapahoe County to Alfred J. Ware and Kate Puterbaugh of Summit County and Henry P. Bullis of Clear Creek and State of Colorado and W. Mc D Cool. Undivided interest of American Patch placer claim containing 160 acres (U.S. Mineral Survey 984.) And 7/8 Quartz placer claim, containing 157.41 acres (U.S. Mineral Survey 985) and 7/8 of Rob Roy Lode. $20,000

1883, *Colorado Mining Directory*, 1883:805

Owner: Alfred J. Ware
Property: Iowa Hill Placer: 460 acres from Blue west into Iowa Gulch
Production: estimated at $300,000
Workings: 7 miles of ditches, 260 ft flumes, two monitors fed by 1,000 ft of piping, 2 booming reservoirs, banks 80 ft thick
Production: $300,000.

1884, March 7

Summit County Clerk and Recorder. Record of Sheriff's Levy Sale & Redemption book 1, page 43 and 59. March 7, 1884. Alfred J. Ware to A. C. Burgess. An individual 4/8 interest in the American Patch Placer mine being Mineral Survey No. 913 together with all the ditch and water rights converging water to and connected with said placer mine. Situated in Mineral District No. 3, State of Colorado, in Quartz Mountain Mining District. Summit County. Being the same property conveyed by Sydenhand (Sic?) Mills to Alfred J. Ware by deed July 28, 1883 and recorded in book 49, page 554.

1889 – Director of the Mint, report on mine production, Iowa Gulch $320.00 gold/ silver

1885, August 7

Summit County Clerk and Recorder. Miscellaneous Deed book 54, Page 134. August 7, 1885. A. J. Ware, M. B. Carpenter, Kate Puterbaugh, A. C. Bullis, and Sydenham Mills to J. Scheiderman. Prospecting agreement on Iowa Gulch. Whereas, Jacob Scheidermann is desirous of prospecting upon Iowa Placers for an interest in any lode claim he may discover…

1891, approx. – taken from June 24, 1911 *Summit County Journal and Breckenridge Bulletin*, Page 1 (see below)

Twenty years or so ago a couple of large chunks of ore, weighing over a hundred pounds apiece, were found in the pit of what is now called the 'Banner' placer. From one of these boulders or ore about $450, and from the other $470 worth of free gold was chiseled off and pounded out in a mortar. The ledge from which the rich chunks of gold 'float' came has never been definitely located, though it is presumed to be upon the adjoining group of lode claims, knows as the Quartz-Mountain Summit group on Iowa hill."

1895, April 27, *Summit County Journal*, Page 4

"Taken from the *Summit County Leader* of August 19, 1882
Gentlemen:—I have the honor to submit the following report of two weeks' examination of your mineral district. . .It is always difficult to get reliable data of

the gold taken from placers, but the following estimate may be taken, I think, as approximations to the truth:

French gulch.	$ 8,000,000
Iowa gulch.	120,000
Gold Run.	1,000,000
Delaware and Galena.	600,000
American.	600,000
Illinois with Blue River.	500,000
Hoosier pass.	150,000
Georgia gulch	12,000,000

These estimates I have taken from the best data at my command. . ..”

1898, *Colorado Mining Directory*, 1898:301

Kingsbury was mngr
Kingsbury, 1898a
Property: 442 acres
Quartzite gold ore
Fire burned off the forest several years ago, helping placer operations.
Workings: 15 acres, yielding $200,000 in past.
Kingsbury proposes hydraulicking

1898, Kingsbury, 1898b

The property features high-bank gravel deposits.
In the past, 300 cubic yards of gravel were washed with crude methods, yielding $100,000s.
Kingsbury recommended a hydraulic plant to work the high-bank deposits.
$21,664 capital needed for new infrastructure.

1899, "Mining News" *EMJ* 10/21/99 p497

One monitor was at work on the Iowa in 1899, and the operation was profitable.

1899, August 5, *Summit County Journal*, Page 1

“Earlier this week the fact was made public here that the Iowa placer, through Col. Kingsbury & Capt. Crow had been sold to a company of wealthy Nebraskans. This property embraces something like 500 acres, lying just northwest of town cemetery on the west side of the Blue. The former owner, L. N. Hawkins has worked it for years with ground sluices, and although he has only been able to scratch around on the surface, it is estimated that, altogether, at least a hundred thousand dollars’ worth of gold has been taken from this placer.

This sale was a cash transaction, and though the purchase price has not yet been made public, it is the general opinion that the consideration was at least $10,000. The new purchasers are all of Lincoln, Nebraska, and include such men as Prof.

H. H. Nicholson, of the Nebraska State University; Oliver Rogers, grain buyer, and S. W. Eddy, banker. The two first named gentlemen are here and will immediately get the property in shape for active operations. As yet, no definite conclusion has been reached relative to the methods to be employed for handling the gravel, but tow or three giants will be put in this season and by next sprig the property will be supplied with some of the modern, up-to-date facilities that are now at the command of placer miners.

The purchase of this piece of ground greatly augments the already large proportions of the placer mining industry of this county and the buyers are to be congratulated upon having secured so valuable a possession."

1899, November 30

Summit County Clerk and Recorder. Agreement Miscellaneous Record book 81, page 90. November 30, 1899. Lemuel Kingsbury (broker) Hudson H. Nicholson, Seth W. Eddy, Oliver Rogers (owners).

1899, December 31 – *Breckenridge Bulletin*

"Iowa Gulch Placers.

During the past summer Colonel L. Kingsbury, for the owner, took hold of what are known as the Iowa Gulch placers, lying just north of the Breckenridge cemetery on the west side of the Blue, and in a short time had sold the property to parties from Lincoln, Neb. Owing to the fact that it was late in the fall when the new owners took charge, little work of importance has been done except that of getting the ground in shape for patenting the title.

These placers belonged originally to L. M. Hawkins, who, even by a primitive method of operation, has made the ground pay well. As yet the company has not decided upon the modus operandi for the coming season, but it is a settled fact that the operations will assume as large proportions as any other in the county."

1900, June 16, *Summit County Journal*, Page 1

"Location—T. B. Thompson et al., Thompson placer, in Quartz Mountain district.

Location—Eli Lambert et al., South African and Cronje placers, in Quartz Mountain district."

1900, August 11, *Summit County Journal*, Page 4

"Location—J. A. Nicholson et al., Red Mountain lode, in Quartz Mountain dist.

Location—I. H. Adams et al., Red Jacket placer, in Quartz Mountain dist."

1900, August 25, *Summit County Journal*, Page 1

"William Osman is working the Iowa gulch placers under lease. These placers yield both coarse and nugget gold of excellent grade."

1900, December 22, *Summit County Journal*, Page 1

"Three men are busy putting in the balance of the assessment work on the Quartz Mountain – Summit group, on Iowa hill."

1900, December 29, *Summit County Journal*, Page 8

"MINING APPLICATION No. 5134
Survey No. 13491 Leadville Land District.
UNITED STATES LAND OFFICE
Leadville, Colorado, October 27, 1900

Notice is hereby given that Hudson H. Nicholson, Seth W. Eddy and Oliver Rodgers, whose post office address is Lincoln, Lancaster County, Nebraska, have made application for a patent for 481.417 acres on the American, Adams, Quartz and Protector Placers, bearing Gold, situate in Quartz Mountain and Spalding Mining Districts, Summit County, State of Colorado, and described by the official plat, herewith posted and by the field notes on file in this office, as follows, viz. . ."

1901, July 20, *Summit County Journal*, Page 1

"Quit-claim deed—George W. Fair to R. J. A. Widmar: ½ Quartz Mountain ditch, in Cucumber gulch."

1902, September 6, *Summit County Journal*, Page 5

"The Iowa Gulch Placer, under the lease of Robinson and Ford, is said to be keeping its fine record of production."

1903, Kingsbury (same ref as rest of Kingsbury)

$10,000 suggested for installation of infrastructure, $5,000 for reservoirs.

1904, March 26, *Summit County Journal*, Page 1

"Oliver Rodgers, formerly of Lincoln, Neb., now of Boston, has filed a suit in the district court of this county praying that a certain deed executed by himself in favor of W. E. Barkley, conveying a one-third interest in and to the American, Adams, Quartz and Protector placers, situate in Iowa gulch, near this town, be declared null and void, and that the property so conveyed revert back to the plaintiff, Rodgers.

The plaintiff claims that the deed was obtained by misrepresentation and fraud."

1904, October 8, *Breckenridge Bulletin*, page 1

"A series of storage reservoirs are being constructed to supply water for the Iowa hill placer. The work is progressing rapidly. A good road has been built over Iowa hill to haul the large timbers and machinery necessary. Col. Kingsbury has the plans complete and is urging the completing of the work so as to conserve the water from the melting snows and next spring."

1904, October 12

Summit County Clerk and Recorder. Mining Deed Record book 82, page 479. Oct. 12, 1904. Frank H. Woods to Lemuel Kingsbury and James T. Hogan. 8/9 Adams, American, Quartz, Protector placers—Quartz Mountain Mining District. $20,000.

1904, October 15, *Breckenridge Bulletin*, page 1

"In the nature of preparatory work in placer mining, there is considerable doing on the Banner Placer Mining company's property of Iowa hill. This company, of which Col. L. Kingsbury is manager, is preparing to operate the well known Iowa placer on a large scale next season. A storage reservoir is being built on a portion of the Boom placer (ten acres of which were purchased for that purpose) to hold water for supplying a couple of 'giants' under a head pressure of over 200 feet Something over 2000 feet of 2200 feet of 22 inch steel riveted placer pipe is being made at the Goldpan Engineering company's shops for the Banner people."

1904, October 20, "Mining News" *Mining Reporter* p419; "Mining News" *MSP* 9/9/05 p182

Summit Banner, managed by Kingsbury, is preparing to operate Iowa placer on large scale.
Several ponds were excavated 3500 ft west of and 200 ft above diggings (this is the reservoir currently on the Peaks Trail).
One supplies enough water for 2 monitors per day.
22 inch pipe ordered from Gold Pan shops.
Booming reservoir at head of workings features an auto release dam that triggers every few minutes around the clock (this is the reservoir above the boardinghouse).
4 ft wide sluices in the workings
Concentrating shed features motor-driven vibrating tables to concentrate black sands for smelting.

1904, October 22, *Summit County Journal*, page 5

"Messrs. A. E. Towne and Mardock M. Clark, both of Massachusetts, gentlemen interested in the Banner placers, in Iowa gulch, spent several days at the works this week."

1904, October 29, *Breckenridge Bulletin*, page 1

"Col. L. Kingsbury is driving the work on his storage reservoirs as rapidly as the fine weather will permit. He has a number of men at work with teams, plowing and scraping to deepen the naturally formed lakes into the storage reservoirs he has in contemplation and from which he expects to work the Iowa placer for a long period each year. The water will be conveyed from the reservoir by a 22-inch pipe which will be 2300 feet long, giving a head pressure of 200 feet fail—and the work is so far advanced that they expect to be ready for regular old fashioned placer mining to begin early next season. The Iowa placer has been a rich producer of high grade gold, some good sized nuggets and lots of fine gold have been taken from the gravel in times past, when only a small amount of water was available."

1904, November 5, *Summit County Journal*, Page 1

"The Summit County Banner placer people, with Colonel Kingsbury as manager, have about ten teams and a score of men employed in Iowa gulch, perfecting extensive improvements for next and subsequent seasons' work. The Iowa is one of Summit county's richest placer bars and has been worked in the old-fashioned manner for the past thirty years, returning large quantities of gold. In the past, millions of gallons of water have gone to waste in the spring of the year, and for years the want of suitable storage reservoirs has been felt. That 'long-felt want' is now about to be supplied, as the Banner people have put up the money for the construction of these required reservoirs, and the work of construction is now going rapidly forward.

On the west end of the company's holdings, in the timber, nature did much toward this end by providing a chain of natural lakes, and now the handiwork of man is enlarging the dams and leveling the ridges between the small lakes, making one large lake or reservoir covering an area of about thirty acres.

In the spring this huge lake will fill with water, to be drawn off as required for placering through a 22-ich steel pipe line 3,500 feet in length, giving a gravity fall to where it will be used for gravel washing of 235 feet. In the early part of the season, the present or old ditches will afford sufficient water to carry on placering, and the lake will be used to maintain the supply and prolong operations till late in the fall.

The pipe for this pipe-line is now being manufactured at the Goldpan shops, in Breckenridge, and contracts call for its completion this month, and it is the hope of the company to have the pipe on the ground and in place yet this fall.

A secondary consideration to this reservoir and placer scheme is a summer resort or summer-cottage site. The lake will be stocked with trout, cottages erected near the water, and wagon drives laid out along the banks of the lake. Health, pleasure

and scenic beauty will be the attractions of that 'reservation' when the company's plans are fully matured."

1904, November 19, *Summit County Journal*, Page 5

"On Wednesday, William E. Musgrove came over from Leadville with eight cans of trout fry, from the Twin Lakes hatchery, for Col. Kingsbury's prospective summer resort and pleasure park—'Banner lake,' on Iowa hill, northwest of town. The consignment was promptly conveyed to its destination and deposited into the newly created lake, to grow up for the sport of pleasure seekers."

1904, December 10, *Summit County Journal*, Page 1

"The articles of incorporation of the Summit Banner Placer Mining and Milling company were filed with the county clerk here a few days ago; it is incorporated with a capital stock of $500,000. The incorporators are Col. L. Kingsbury Mrs. Kingsbury and J. T. Hogan. A. E. Towne, J. C. Gibbs and Murdock M. Clark, all of Boston, Mass., are treasurer, secretary and vice-president respectively. Colonel Kingsbury is the president and general western manager, with offices at Breckenridge. This new and substantial company will operate what are locally called the 'Iowa gulch' placers. A storage and head-pressure reservoir was completed this autumn that will supply a 22-inch main with water, under a head pressure of 200 feet, ensuring the operation of powerful streams from hydraulic giants against the high 'bars' of this old-time producer."

1904, December 31, *Summit County Journal*, Page 1

"The reservoir and the 2,000 feet 22-inch riveted steel pipe-line, and a number of large hydraulic giants, will tear down and disintegrate the high auriferous banks of the summit Banner Placer Mining and Milling company, of which Col. L. Kingsbury is the manager."

1905, March 30

Summit County Clerk and Recorder. Quit Claim Deed Record book 67, page 498. March 30, 1905. R.J. A. Widmar to Lemuel Kingsbury 2/5 Boom Placer, ½ Boom Ditch—Spaulding $200. Mining Deed Record book 82, page 466. Sept. 28, 1904. Portion Boom Placer—Quartz Mountain—Beginning at corner No. 1 Iowa Placer (being north 230.5 ft. from corner No. 3 Survey 13491. Protector placer containing 10 acres or more. Quartz Mountain Mining District. $100.

1905, April 1905

Summit County Clerk and Recorder. Mining Claim Book. April 1905. American Patch Placer, Adams Patch Placer, Quartz Patch Placer, Protector Placer patented.

1905, April 8, *Summit County Journal*, Page 1

"Col. L. Kingsbury has his work on the Banner placer well in hand. His pipes are on the ground and he is waiting for the snow to get a little more out of the way and wants to have his plant ready to get the benefit of the water supply. The Col. Has another placer to put on a working basis as soon as he can get on the ground, and this placer is located northwest of Dillon and is owned by the Salt Lick Consolidated Placer Co., of which Mr. Kingsbury is the organizer. The company owns a vast area of ground and valuable water rights. The ground is known to be rich and has been worked on a small scale for a number of years. The two companies under Col. Kingsbury's management are situated about 11 miles apart and in order to direct the workings of both he has purchased an auto and is perfecting himself in the management of the machine and will use it as a means of looking after the work of both companies. The Col. Is an old time placer miner and understands his work."

1905, April 29, *Breckenridge Bulletin*, Page 1

"The Summit Banner Placer company will start operations very shortly and is expected to give a good account of itself with the new acquisition of the old Salt Lick placer ground, Colonel Kingsbury will have over 22200 acres of ground for operating for placer gold this year. The reservoirs built last fall will provide ample water and their perfect pipe system will convey it to all the main workings, giving a head of 265 feet."

1905, April 29, *Summit County Journal*, Page 1

"The Summit Banner Placer Company.
This company which is operating under the direction of Colonel Lemuel Kingsbury owns nearly 750 acres of rich placer ground in Iowa gulch and benches. This portion of the district has been a large producer every year since its discovery in 1859, and many local people have made large stakes out of it. This former work has always been of a crude kind and on small or individual scale, but the company now owning it proposes to work it on a scientific and up to-date method on a large scale. They have put in a series of reservoirs for the conservation of the water and installed over 5,000 feet of 22 inch hydraulic piping to convey the water to the various workings with a head of 265 feet. The necessary sluice boxes are on the ground and the buildings are near completion. The company intends to save not only the coarse and fine gold but also the black sand which occurs in the wash in large quantities and carries a high value in gold and some platinum.

The old operators were handling not more than 50 or 60 yards per day and were losing over 25 per cent of their values. The new company will handle four or five thousand yards a day and expect to make a much closer saving and all at very little increase in expense. This certainly should make the Banner what its name implies. This company has also purchased the old Salt Lick placer property, now

known as the Buffalo. This will be worked under the same management as the Banner company, only on a much larger scale, as the natural facilities admit of its being so. Buffalo company has 1560 acres of territory."

1905, May 20, *Breckenridge Bulletin*, Page 1

"Miss Mamie Kingsbury, daughter of Colonel L. and Mrs. Kingsbury of this city, whose rare vocal talent has delighted large audiences in all parts of the union, is to be the recipient of a necklace which contains eighty beautiful gold nuggets, all products of Summit county placer properties, on her next birthday, July 4.

Colonel Kingsbury is one of the owners and manage of the biggest placer workings in this part of the west and he conceived the idea a short time since to collect a number of golden nuggets which could be linked together in a necklace and thereby become not only a rare gift to his daughter but a lasting evidence of the chief industry of this county. The actual value of the necklace is about $1,000, but Mr. Kingsbury was offered just three times that amount shortly after its completion in one of the leading jewelry houses of Denver and very promptly declined to even consider the proposal. [$3,000 = $141,000 in 2008]

Each nugget of the chain clearly represents some animal, fish or other object, and we herewith give a number as deciphered by ladies who have made thorough inspection: Bear, trout, American eagle, rabbit, mountain sheep or automobile, dove, elephant's head, dragon, dove, vulture, lobster, otter, human heart, dog's head, parrot, porpoise, Generals Sherman and Sheridan. A plain golden strip near the pendant bears the names of the giver and recipient.

Miss Mamie Kingsbury who will wear this beautiful jewel is well known to many Breckenridge people, she having visited here several times with her parents. Of her the New York Daily News has this to say: "Miss Mamie Kingsbury is the possessor of a sweet and clear dramatic mezzo voice, well under control, has a pleasing richness, especially in the middle register; her tones are delightfully true, volume is ample and her phrasing is good. She is young, attractive and makes a very pleasing appearance.'"

1905, May 20, *Breckenridge Bulletin*, Page 1

"The Summit Banner placer mine was started on Tuesday by a full complement of men under he direction of Col. L. Kingsbury. The boarding house was already on the ground ready to be put up and they were ready to occupy it on Thursday. All changing of pipes and relaying of mains and laterals will be done at once so that when the water is high the ground will begin to fly. Col. Kingsbury has made every preparation he could to be ready for this beginning of the work and is congratulated himself on the completeness of his plans and the prospects of an abundance of water."

1905, June 3, *Summit County Journal*, Page 1

"Colonel Kingsbury is just getting fairly started upon active operations on his company's placers, namely, the Banner in Iowa gulch and the Buffalo in Salt Lick. He expects to make the present large flow of water do some telling as well as profitable work this season."

1905, July 8, *Breckenridge Bulletin*, Page 1

"The 3,600 feet of 11-inch and 1,000 feet of 9-inch pipe for the Banner Placer company has been completed at the Goldpan shops and several teams have been employed the past few days delivering it at the placer workings. A force of men are already at work laying the pipe lone and it will not be long before placer mining will be inaugurated with a vim by the Banner company, of which Col. L. Kingsbury is the manager."

1905, July 15, *Breckenridge Bulletin*, Page 1

"The last load of 22-ich pipe for the Banner Placer company was delivered at the workings, two miles from this city, last Thursday forenoon, and a force of men are now at work laying the pipe and making connections. This is the finishing work on the big plant and Colonel Kingsbury's company will soon enter upon an energetic gold producing campaign."

1905, July 17, "Mining News" *MSP* p397

Summit Banner Placer Co workers prepare property for production in 1905. They repaired the dam, built flumes, cleaned ditches, built a pipeline

1905, August 5, *Summit County Journal*, Page 1

"The Banner Placer company is about ready to start to 'tear up the earth' in Iowa gulch. The series of lakes (reservoirs), covering fifteen acres, are bank full of water, and in a day or two the 3,900 feet of big pipe-lone will be riveted together and ready for the reception of water to feed the giants. As an experiment to save the gold in the black sand, two Acme concentrating-tables are being housed on the eastern slope of Iowa hill. The electric generator and motor to run these tables are already in place. Colonel Kingsbury is of the opinion that the tables will fill a 'long-felt want' in placer operations."

1905, August 12, *Breckenridge Bulletin*, Page 1

"The last consignment of pipe for the Banner Placer company was delivered at the company's workings on Wednesday and the start upon an active season's work will soon begin in real earnest. The series of reservoirs covering fifteen acres are bank full of water and in a very short time the 3,900 feet of pipe line will be riveted together and ready for the reception of water to feed the giants. As an experiment to save the gold in the black sand, two Acme concentrating tables are

being housed on the eastern slope of Iowa hill. The electric generator and motor to run these tables are already in place."

1905, August 15

Summit County Clerk and Recorder. Mining Deed Record book 82, page 522. August 15, 1905. Adams, Quartz, American, Protector, Iowa Placer—Spaulding $46,600

1905, August 28, *Breckenridge Bulletin*, Page 1

"The Banner Placer company put two big giants to work Thursday at about 10 o'clock. The plant is one of the best and most complete in the west and it is expected to make good returns ere the present season closes. The company has been delayed considerably in getting its plant ready for this season, but will now go ahead with full forces and increased effort."

1905, September 1, *Fairplay Flume*, Page 2

"A Breckenridge correspondent says: Thursday the Banner placer people got down to actual placer mining with two large giants. The giants are supplied with water from a twenty-two inch pipe line under a head pressure of over 200 feet. The pipe line is over 3,000 feet long and in addition to supplying the giants drives a Pelton water wheel, which drives the dynamo that lights the plant at night and supplies power to run a couple of concentrating tables. The black sand of the placers of Summit county has been known for many years to carry sufficient values in gold and silver to make a good grade of smelting ore, if the sand could be saved reasonable clean from silica and other waste. To accomplish this saving, Col. L. Kingsbury, the manager of the Banner company, has installed a couple of concentrating tables to launder the material saved from the tailings by the use of under currents. Assays made on black sand from the adjoining property, the Quartz mountain, after the sand had been treated with mercury to remove all free gold, gave return of over $30 per ton in gold and silver. It is probable that the black sand of the Banner property will prove to be equally valuable. As the black sand of the Summit county placers carries considerable iron and some lead, it can be cheaply smelted at any lead smelter."

1905, September 2, *Summit County Journal*, Page 5

"Mr. Kirby Thomas, of Denver, western manager of the Mining World, of Chicago, spent three days here during the week, coming here specially at the instigation of Colonel Kingsbury to look over the Banner placer. The World is one of the leading mining journals of the country, and its popularity is attributed to the fact that it is conservative and reliable. Mr. Thomas was accompanied on this trip by his wife, who enjoyed her visit to the mountains."

1905, September 2, *Summit County Journal*, Page 1

"Thursday, August 31, was banner day at the Banner placer, in Iowa gulch. The event celebrated was the completion of installation of the Banner placer plant. Manger Kingsbury is so proud of the completed plant that he celebrated the occasion by inviting the whole town to come out and visit the works, assist in raising the Banner flag pole. And assist him in disposing of a ton of Rocky Ford watermelons.

A goodly number answered the summons with their presence, enjoying the outing, the melons and the colonel's hospitality immensely. The raising of the 75-foot flag pole, at the very tip of which was a small banner as a sentinel for the Banner placer, and the spreading of a large American flag to the breeze from the staff, was participated in by a large portion of those present.

The profusion of luscious melons, carved by Caterer William Hudson, was a slight reminder of Rocky Ford's famous melon day.

The equipment of the Banner consists of ditches, flumes, pipelines, storage reservoirs, sluices, giants and concentrating tables. It is now all in splendid working order, and, with the rich gravel bars, affords the visitor an interesting sight, and the company is pleased in the possession of a desirable placer property that stands to return large dividends on the investment."

1905, September 16, *Summit County Journal*, Page 5

"Colonel Kingsbury has three more Acme concentrating tables building, which will be placed beside the two he has in use on the Banner placer for the purpose of separating the gold from the black sand. The Acme is a new table and has demonstrated that it is a valuable adjunct to placer mining. Five of these tables, the colonel thinks, will suffice to treat his fine placer tailings and black sands."

1905, September 30, *Breckenridge Bulletin*, Page 1

"One of the most promising of the recent operations in the Breckenridge district placer mining is being carried on under the directions of Col. L. Kingsbury in the name of the Summit Banner Placer Mining and Milling company. This is entirely a hydraulic proposition and the details of the installation are of interest because of the new features introduced and because they represent the result of Col Kingsbury's many years experience in hydraulic mining in the San Juan and in the Breckenridge district.

This property is located just north of Breckenridge on the west side of the valley and includes the old Iowa hill placer locations, from which it is estimated that over $150,00 has been taken out. This early work was done by sluicing and as the location is the high-bar type, operations could only be carried on intermittently, dependent upon the supply of water from the limited surface drainage. The

present company owns 800 acres of land, of which 480 acres is a placer gravel deposit. It has secured by location the control of six miles of watershed on the west slope of the Ten Mile range, at the foot of which the property is located. The gravel is from 10 to 100 feet deep and slopes toward the Blue river, so as to provide a means for the disposal of the waste on to the river bottom. The problem in the development of this property was to secure a sufficient supply of water and one which would be constant during the season. To this and nearly seven miles of ditch were dug, parallel to the watershed and all leading to an extensive storage system, about 25 acres in area. By this system of ditches and storage basins all of the water from the heavy sinter snowfall will be saved along the watershed and used to regulate the supply. Thus through the season from 2,500 to 3,000 miners' inches is made constantly available. This is discharged from the last reservoir at a height of 300 feet above the main gravel deposit. This supply and the head will be used to operate three hydraulic giants and an automatic boom."

1905, October 7, *Breckenridge Bulletin*, Page 1

"Col. L. Kingsbury, manager for the Banner Placer company, exhibits several beautiful gold nuggets produced in a clean-up made last Tuesday. One of these resembles the foot of a bear and when the colonel refers to it he invariably remarks that he had a man out gunning on his placer properties that day when the precious foot was 'taken in.' The Banner is one of the producing placers and every evidence goes to show the same a merited one."

1905, November 18, *Breckenridge Bulletin*, Page 1

"Col. L. Kingsbury, manager of the Banner Placer on Iowa Hill, is having a channel washed through the rich deposit in a westerly direction, with the expectation of opening up the extension of the gold bearing quartzite reef of the Quartz Mountain, Summit group. Large boulders of good quartzite ore are being encountered near the bedrock as the trench advances westward. Some the boulders show free gold."

1905, December 30, *Summit County Journal*, Page 1

The development of the Banner placer, near Breckenridge, under the management of Colonel Kingsbury, has been interesting and instructive to the onlooker and promises to be very remunerative to the stockholders. Storage reservoirs, miles of ditches and roads have been constructed by the company; 4,500 feet of 24-inch and 22-inch steel placer pipe, with lateral pipes to three giants and to an electric light and power plant, have been placed in position, and a couple of months' 'run' on the gravel has been made, showing results even greater than Colonel Kingsbury's estimate. The giants play upon the 18 to 40 foot banks under the enormous pressure of a 308-foot 'head.' The disintegrated alluvium passes through a sluice four feet wide, lined with self-clearing angle-bar riffles that save 'flour' gold as well as course gold and nuggets. Colonel Kingsbury installed a

concentrating plant, with two Acme concentrating tables, to make a smelting product of the heavy blank sand saved by 'under-currents.' The black sand has a shipping value of $25. The tables have proven so satisfactory that four additional tables are to be added to the plant next spring. The Banner gold has a value of $19 per ounce, showing it to be on 'high grade.'"

1906, January 23, *Summit County Journal*, Page 1

"The Banner placer, in Iowa gulch, may soon turn out to be a fabulously rich gold lode mine, if present indications count. In the pit, where the giants have washed the gravel to bedrock, several huge chunks of lead ore, literally peppered with gold, several of them weighing over 100 pounds, have been gathered up, and Manager Kingsbury reports many more such chunks where they come from. The colonel is confident that they are working over one of the richest gold leads in the state, and he says he will uncover it yet this season. The chunks resemble lead carbonates, but the gold is plainly discernable with the naked eye."

1906, May 26, "Mining News" *EMJ* p1022; "Mining News" *MSP* 7/7/06 p25

Summit Banner Placer Mng Co
Col Lemuel Kingsbury mngr (Kingsbury also mngr of Buffalo Placer)
The operation was ready for booming. Pipeline and boom dam were in workings order.
Operations resumed in 1906

1906, July 21, "Mining News" *EMJ* p129; "Mining News" *MSP* 7/7/06 p25

The operation processed around 4,000 cu yd of gravel per day, unearthing several quartzite boulders featuring wire gold
The yield is around 15-20 cents per yd

1906, July 27, *Eagle Valley Enterprise*, Page 5

"At the Banner placer, Breckenridge, says a Denver Republican correspondent, they are picking up enough rich gold-bearing fragments and boulders of quartzite in the placer workings to warrant Manger Kingsbury in making a carload shipment. A good deal of this quartzite float is said to assay $60 to $200 a ton. The placer gravel in which the quartzite is found is rich. Two hydraulic giants are used."

1906, September 8, *Summit County Journal*, Page 1

"Last Tuesday forenoon, John A. Nauslan, an employee at the Banner placer, near town, was suddenly killed in a manner that can not be attributed to any other cause than his own carelessness.

Deceased was engaged in picking rocks out of the flume, when the rush of water from the 'boom' came down and carried him off his feet, his head striking a

boulder fracturing his skull and breaking his neck. As he was familiar with placer work and know the danger of getting in the path of the 'fifteen-minute washing floods,' and why he persisted in remaining in the flume, even in spite of frantic appeals from workmen near by to 'look out,' is a secret that died with the victim.

Nauslan was a native of Sweden, about 65 years of age, and for the past 30 years has been a resident miner of this camp owning claims in the Swan district. He was single, and as far as we could learn, left no relatives that can be communicated with.

Coroner Smith held an inquest, the jury returning a verdict exonerating the Banner company from responsibility for the death."

1906, September 8, *Breckenridge Bulletin*, Page 1

"John Nesland was killed at the Banner placer mine at about 9 o'clock last Tuesday and the body was buried Wednesday at Valley Brook.

Nesland had been working most of the summer at the Banner. On Tuesday he went to work as usual, and at about 9 o'clock he was in the ditch near the flume when the boom of water swept down upon him. T. P. Thomas and Harold Charlton were near him and, seeing his awful danger, they shouted to him that the boom was coming and to escape. They way he paid but little attention to them, and like a flash the rush of water struck him and carried him off his feet as though he was hot out of a gun, sweeping him on down the flume a distance of about 30 rods. When the body was recovered it was found that the unfortunate man had been literally scalped and his forehead crushed by the stones and other hard substances which he came in contact with in his lightning like trip down the flume. It is probable death was instantaneous.

The body was brought to Rogers' undertaking rooms and prepared for burial. On the person was found $94.55, as follows: Two uncashed pay checks $49.40 and $33.40, respectively, $10 in paper money and $1.75 in silver. This money was turned over to the sheriff and is at this writing locked up in his safe.

On Wednesday a coroner's jury heard evidence as to cause of death and rendered a verdict to the effect that death was accidental as the result of negligence on the part of deceased, there being evidence to prove that he had been warned many times of the danger at that point.

The remains were buried in a cheap pine box, the items of expense being: Rough box, preparing body, etc, $20; burial suit, $11; team, $6; lot, $3; digging grave, $5; total, $45. This leaves a balance of $49.55 of the money he had on his person

out of which, we understand, must be paid the services of the physician who was called to the mine on the day of the accident.

John Nesland was a Swede. He had lived the life of a hermit near Swandyke for the past 35 years, and leaves some unpatented mining claims in that section. He was about 60 years old, and although he lived off the country at the hospital for the past few winters, he is said to have told some people that he had a fortune in Sweden. We are informed he has a brother in Chicago, and Mrs. Jack DeLong, who was formerly postmistress at Swandyke, says he received letters from relatives, some of which are doubtless now in his cabin. No investigation of this was made and the unfortunate man was buried without an attempt to communicate with relatives.

LATER—Col. Kingsbury says that the deceased owed some bills here which were guaranteed, more than enough to consume all his money. There is no mistake but that Col. Kingsbury did swell and faithfully his part toward the deceased, even going to great pains to see that everything was done well. He is to be commended for the same."

[In 1872, another type of placer mining called "booming" was introduced to the Breckenridge area. It was generally used with low-grade deposits since this method of mining was economical to operate and could be done by a single miner. A wooden dam was built at the head of a gulch, creating a reservoir for water. Filled by water from a ditch or flume, the reservoir had a self-acting gate that opened when the reservoir was full, allowing all of the water in the reservoir to gush down the hillside (booming). When the reservoir was empty, the gate automatically closed, allowing the reservoir to fill again.

Booming was popular for a few short years and then very little is mentioned about it.]

1906, September 24, *Fairplay Flume*, Page 3

"While removing boulders from the track of the boom at the Banner placer near Breckenridge on the 4th inst., John A Neslund was struck by a rush of water and carried down the stream, his head striking the bottom of the ground sluice in such a manner as to break his neck and fracture his skull, resulting in instant death."

1906, September 22, *Breckenridge Bulletin*, Page 1

"ONLY A POOR FRIENDLESS AND HOMELESS MAN
Up in the Swandyke section stands a lonely cabin through the door of which no foot has passed for many days.

Within is a bed, a small stove, a crude table and a few dishes. On the walls are some shelves and in a box on one of these are some letters which came from far

over the sea and from the hand of some loving friend—perhaps a brother, a sister or a mother.

Under the bed are stacks upon stacks of old tin cans, in fact every available nook and corner of the shanty is occupied by cans and other receptacles, all crowded full of more or less valuable mineral specimens which have been gathered in different parts of Colorado during the past 28 years. One man who has seen these specimens estimates their value at $1,000, another at $500, and a third at $300.

The man to whom these specimens belonged also owned some fine mining claims nearby.

For 28 long, weary years he endured the hardships and privations of a hermit's life on the bleak mountain tips waiting for the days of wealth and happiness which beautified his dreams as he slept in his lonely cabin, to become a living reality.

'Yes,' he would say in his talkative moods, 'I love the old country and have a large fortune there, but in these hills are millions which some day I'll have to take home with me across the sea to add to my wealth there.'

Some winters this old man was a public charge. He has been known to live alone in his cabin for months on dried apples and coffee. One jack rabbit has been known to furnish him food for two weeks.

The peculiar character of whom we speak now sleeps at Valley Brook in a plain pine box, his winding sheet a pair of cheap blue overalls. He was instantly killed while working at a placer mine about three weeks ago. No pains were taken to discover his friends or relatives. His cabin was not even visited and examined before he was laid away.

He was but a poor, friendless man.

John Nesland's fate may never be known by any of his folds.

This is indeed a cold world."

1906, September 29, *Breckenridge Bulletin*, Page 1

"THE FRIENDLESS MAN ARTICLE REPLIED TO.
For the readers of the BULLETIN:
Let us have facts at all times, and sympathy when it is needed. Here are some facts as I know them to be: John Nesland, the deceased, came to work for the Banner Placer Company in June from the hospital or poor house. He worked nearly every day until the accident. When he came to me he had no means, so he

said. The Company's foreman stood good for suitable clothing for him at Watson's store. The old man had good food and all the comforts the other men had and drew $2.50 per day. He could not do a very heavy day's work and said I might pay him what I thought he was worth, and always seemed much pleased with what I paid him. In fact, I did and will do what I think is my duty in the matter. If he had been buried in a casket, the cheapest being $65, there would not have been means enough to have paid his absolute expenses, and a good pine box at the cost of $20, and paid for, is as good as a casket unpaid for, both made of the same material. But should this foul-mouthed monkey desire that the old man be buried in a casket, let him put up one-half the money and I will put up the other half. But I don't think a man who will let his neighbor starve away up on the bleak mountain side will ever contribute one cent to charity of any kind. Now, if this would be trouble maker has any information that can be of any use to the relatives or creditors of the deceased, he can give the same to the county judge, the coroner or myself, as there is an unpaid bill for board of $125.00 due a poor, hard working widow lady. Now, if any goody goody man knows of any property, let him say so, that it may be used to settle with this poor widow who would not let the old man starve. In regard to the rich mines mentioned, so far as I can ascertain they are of no value, and as to the rich specimens in the cabin, I think it is all bosh; the old man would never have gone hungry had he owned such property. In conclusion, I don't think anyone but a fool would have written that article. T. B. Thompson is a good man to look after monkeys and back-cappers, and it would be a good investment for Breckenridge people to secure his services.

I have written this for the purpose of defending the Banner company and myself.

L. KINGSBURY,
Gen Man. Banner Placer."

[It appears that John Nesland committed suicide.]

1906, September 29, *Breckenridge Bulletin*, Page 1

"Negotiations are pending for the sale of the Oro Grad placer property at Dillon, to the Banner Placer company, and it is expected the deal will be completed in a few days."

1906, October 6, *Breckenridge Bulletin*, Page 1

"The Banner placer pit is showing up excellent stuff, the coarse rock having been run off, the remaining fine material can be easily washed with the present supply of water. Numerous pieces of float are showing silver chloride and sulphates are being found in the pit along with the free gold quartz boulders."

1906, October 13, "Mining News" *EMJ* p707

The Summit Banner company was to buy Oro Grande property at Dillon

1906, October 13, *Breckenridge Bulletin*, Page 1

"The Banner placer grounds have been popular this season for visitors for many reasons, chief among which is the geniality of Manager Kingsbury and the first-class shape in which he keeps the property. The Col. Has kept a visitors' register, and it shows the following number of visitors from the states names:

California 11, Minnesota 15, Illinois 18, Wisconsin 20, Iowa 12, Indiana 8, Tennessee 12, Kentucky 6, Georgia 11, Louisiana 10, Missouri 12, New York 15, Connecticut 4, Penn. 20, Colorado 30.

These figures indicated that a much larger number of people visit this camp both for pleasure and investment than a casual observer would suppose, and it means that Breckenridge and its rich mineral fields are famous all over the country."

1906, October 20, *Breckenridge Bulletin*, Page 1

"Col. L. Kingsbury, manager of the Banner placer, will drive the New Year tunnel ahead during the winter to cut the lode from which he believes the large chunks of 'float' ore that were found in the placer came. Several of the large pieces of 'float' would weigh a ton or more. If ore is encountered on the New Year tunnel he will be allowed to work it under lease. The New Year forms a portion of the Quartz Mountain-Summit group on Iowa hill."

1906, October 27, *Breckenridge Bulletin*, Page 1

"The Banner placer has closed down for the winter. During the winter Col. Kingsbury will drive the New Years tunnel though into the Banner territory for the purpose of locating and working the ore bodied from which the rich float are found in the placer pit appears to have been broken off. It is estimated that the tunnel will cut the ore bodies several hundred feet below the surface. The arrangements made with the tunnel owners are such that the company will be allowed to work under lease, and ore that may be discovered by the Banner people in driving the tunnel towards their own property. Manager Kingsbury states that: assays on specimens from large chucks of 'float' ore found on the placer run up to $240 per ton, and that many pieces of ore showing free gold were picked up in the pit during the season."

1906, December 29, *Summit County Journal*, Page 1

"The Banner Gold M. & M. company, of which Col. L. Kingsbury is the efficient manager, had a very good season in spite of a comparatively "dry placer year." The Kingsbury lakes or reservoirs did great service in supplying water under a good head to the giants. Some unusually rich pay gravel was reached by the big pit near the close of the season; among the gravel many large boulders of gold bearing 'float' quartz were encountered. Col. Kingsbury proposes driving the

New Year tunnel, on the adjoining Quartz Mountain-Summit group, ahead to cut the ledge from which the gold bearing quartz in the placer came. Col. Kingsbury is also the manager of Buffalo placer of 1700 acres, near Dillon, which he hopes to put in shape for production during 1907."

1907, May 11, *Breckenridge Bulletin*, Page 1

"There is a lawsuit in progress in Denver a this writing with the following lineup: The Westinghouse Electric & Mf'g company and The Gold Pan Engineering & Mining company vs. Col. L. Kingsbury and the Banner Placer company. The controversy involves something like $1,180.00, the purchase price of pipe, electrical supplies and other fixtures, furnished by the plaintiffs to the Banner company. Mr. Kingsbury claims damages on account of alleged defects, etc., in the material furnished. It was at first intended to try the case at Leadville, and the first of the week depositions of evidence from J. H. Charlton, P. H. Ryan, T. B. Thomas and R. L. Gore were taken here by the county judge for use at the trial. It was later determined, however, to have the evidence heard in open court in Denver, consequently the persons named went to Denver Monday for this purpose."

1907, May 11, *Summit County Journal*, Page 1

"Before Judge Allen one of the judges of the district court, at Denver, this week, the complicated case of the Goldpan Mining company, the Colorado Consolidated M. & E. company and the Westinghouse Electric company, either or jointly as plaintiffs vs. Banner Placer company and Lemuel Kingsbury, was heard. The detailed history of the case is lengthy and somewhat ambiguous, but stripped of all technical terms and attorneys 'mixtures' the cause of action resolved itself into a clear demand upon the part of the plaintiff or plaintiffs for $1,187, as a balance due on account.

Defendants are alleged to have purchased in 1905, steel pipe for placer means from the plaintiffs to the amount of about $5,200. The pipe was to be of agreed heft, size, etc., and properly coated with certain grade of pipe coating (coal tar) and delivery to follow specified date.

About $4,000 was advanced on contract, and defendants balked on paying balance on account of alleged failure on part of plaintiff to comply with provisions of contract as to time of delivery of pipe and the use of an inferior 'dope' for coating.

The case went to trial on about the above basis and after a full hearing the court released liability of Kingsbury and rendered judgment against the Banner Placer Company for $1,152."

1907, June 22, *Breckenridge Bulletin*, Page 1

"The Banner placer has been running a number of days full blast. Col. Kingsbury made a preliminary 'cleanup' the first of the week, taking out about three pounds of fine gold, some of which is on exhibition in one or two business houses in town. The Colonel expects this to be the best year in the history of the Banner, and from the result of his first 'cleanup' one would conclude it will be."

1907, November 16, *Summit County Journal*, Page 1

"Col. Kingsbury has made the final cleanup at the Banner placer. In the saving of flower gold the colonel has a corner on the art. The placer operations have closed for the season with receipts altogether satisfactory and the colonel has a number of retorts in the shape of flower sack."

1908, June 27, *Breckenridge Bulletin*, Page 1

"We understand that Col. Kingsbury has leased the Banner placer to Richard Yanke and C. H. Johnson."

1908, August 8, *Breckenridge Bulletin*, Page 1

"The flumes of the Banner lacer were divested of their yellow treasure this week, but how much they were made to disgorge has not been made public. The Banner is running under a 50 per cent royalty lease by C. H. Johnson and Richard Yanke."

1910, June 7

Summit County Clerk and Recorder. Mining Deed Record book 60, page 413. June 7, 1910. Adams, American, The Protector, Quartz, Iowa, Boom Placer Mining Claims. $33,840 and other valuable considerations. Also all his right and title an interest in the Boom Placer Mining Claim including the lake therein, also all pipe lines, and the electric plant situated in the said patented property; also all water rights, ditch rights, flumes, an piping pipes. Also all buildings upon said patented properties.

1910, June 9

Banner Hill Mining Company incorporated June 9, 1910.

1910, August 13, *Summit County Journal and Breckenridge Bulletin*, Page 1

"Cliff Peabody and Trevor Thomas who have been working a part of the Banner placer under lease, made their second clean-up during the week and are quite well pleased with the results."

1911, May 20, *Summit County Journal and Breckenridge Bulletin*, Page 1

"J. W. Roatcap, of Olathe, and others have secured a lease on the Banner placer property, near Breckenridge, from the Banner Gold Placer Mining company of which Col. L. Kingsbury is the president. The property consists of a large acreage

and is opened by a big put to the bedrock. A big pipe-line supplies water under gravity pressure to operate the hydraulic 'giants'. Two ponds or small lakes have been made into reservoirs to impound the water required for the pipe-line; a 4 ft. wide ditch supplies water for a self-acting boom-gate, the water from which is used to 'boom' the tailings from the upper workings on down through the gulch formed by old-time operations. The gold found in the Banner Placer is of very good quality and is worth from $17.80 to $19.20 per ounce at the U. S. mint. Mr. J. W. Roatcap is superintending the operation of the lease and has seven men at work on the property. He is well known at Olathe, where he was quite prominent in local affairs. The gold found in the Banner Placer runs in size form fine gold to nuggets and much of it came from the out-cropping quartzite on the adjoining Summit Group of lode claims. The installation of the hydraulic plant was done several years ago under the supervision of Col. L. Kingsbury."

1911, May 20, *Summit County Journal and Breckenridge Bulletin*, Page 5

"J. W. Roatcap, superintendent of the Banner placer, is carrying around a badly bruised thumb and swollen hand, a piece of iron pipe accidentally striking the thumb while Mr. Roatcap was helping his men."

1911, June 24, *Summit County Journal and Breckenridge Bulletin*, Page 1

"A cleanup was made a few days ago on the Banner placer that is said to have been very satisfactory to the lessee, J. W. Roatcap. The Banner placer contains a large acreage of good high bar gravel. It is equipped with a hydraulic system for operating several giants and has a separate water supply for booming with a self acting gate. Booming is done to clear the main sluice, with its approaches, of the tailings from the operation of the hydraulic giants on the nugget-bearing stratum. Some Twenty years or so ago a couple of large chunks of ore, weighing over a hundred pounds apiece, were found in the pit of what is now called the 'Banner' placer. From one of these boulders or ore about $450, and from the other $470 worth of free gold was chiseled off and pounded out in a mortar. The ledge from which the rich chunks of gold 'float' came has never been definitely located, though it is presumed to be upon the adjoining group of lode claims, knows as the Quartz-Mountain Summit group on Iowa hill."

1911, July 14, *Fairplay Flume*, Page 2

"The Banner placer, on Iowa hill, in Breckenridge district, is being operated under lease this year by J. W. Roatcap and others. Recently a clean-up was made; it is said that besides securing a satisfactory quantity of placer gold a number of nice gold nuggets were taken out."

1911, July 15, "Mining News" *EMJ* p134

J.W. Roatcap leased the Iowa Hill property.

1914, July 24, *Summit County Journal and Breckenridge Bulletin*, Page 1

"Some good grade lead carbonate ore has been opened in the lower tunnel of the Lone Hand group in the Cucumber gulch section by Col. Kingsbury and Wm. Sauer, who are operating the property under a lease from Hon. W. M. Clark, of Denver, who is the owner of the property."

1914, August 28, *Summit County Journal and Breckenridge Bulletin*, Page 1

"The Banner placer, situated about a mile north of Breckenridge, is being worked by lessees. The owner of the property, Col. L. Kingsbury, states that the lessees are doing fine and are making money."

1915, July 17, *Summit County Journal*, Page 1

"Col. Kingsbury and A. G. Blondell have a lease on the Lone Hand on Banner hill and have timbers ready for 1000 feet more tunnel. Part of the work, which is to be started immediately will be done on each of the two tunnels."

1915, October 2, *Summit County Journal*, Page 5

"On the Banner Placer, which is being worked by the hydraulic method, several men are engaged and work is progressing with more satisfaction than at any time during the season."

1915, October 9, *Summit County Journal*, Page 4

"I hereby offer a reward of Fifty Dollars and 25 per cent of the value of all property recovered for the arrest and conviction of the person or persons who stole 865 pounds of copper wire from the Banner placer.

COL. L. KINGSBURY."

1916, February 6

Summit County Clerk and Recorder. Record of Abstract of Judgment book 1, page 120. February 6, 1916. Banner Hill Mining Co. Levy. Sheriff J. G. Detwiler to Henry T. Rogers, Daniel B. Ellis, Lewis B. Johnson, Pierpont Fuller, and George A. H. Fraser. (Roger, Ellis & Johnson) Also see: Record of Sheriff's Levy and Sale book 65, page 200

1916, April 3

Summit County Clerk and Recorder. Record of Sheriff Levy & Sale book 65, page 404. April 3, 1916. Includes all pipeline, electric plant, all water rights, ditch rights, flume, pipe, and all buildings upon said patented property. $528.70

1916, December 30, *Summit County Journal*, Page 1

"BANNER PLACER

Col. Kingsbury expects to have the Banner placer in operation next season as there will be a good supply of water for hydraulic operations. The Banner produces gold worth over $19 per ounce."

1917, December 29, *Summit County Journal*, Page 1
"The Banner placer on Iowa hill near Breckenridge in which Col. Lemuel Kingsbury is largely interested is to be actively prospected for a big ledge of gold ore, which is aid to have disclosed large boulders of gold ore found in washing the big placer pit with hydraulics.

1918, September 27
Summit County Clerk and Recorder. Sheriffs' Deed and Notaries, Bond and Com' Record book 70, page 189. September 17, 1918. Sheriff's deed. Banner Hill Mining Co. to Lemuel Kingsbury. $485.

1918, December 28, *Summit County Journal*, Page 1
"In working the Banner placer on Iowa hill, Col. L. Kingsbury who has charge of the property states that grains of platinum were found in the black sand of the placer. As the auriferous material of the placer were evidently eroded from the gold-bearing out-cropping quartzite which covers the top of Iowa hill there seems a probability that the rock carrying the platinum will be discovered eventually."

Iowa Hill Hike by Sandie Mather

1. Introduction

Summit County has not always been the home of towering mountain peaks. At one time in its history, there were swampy lagoons and dinosaurs eating lush tropical vegetation (and each other) as they walked along on vast lowlands crossed by lazily flowing steams. As the age of the dinosaurs came to a close, tremendous pressures deep within Earth compressed the crust and the lofty Rocky Mountains that we know today began to rise. Torrents of melt water deposited gravels many feet thick in stream channels. Nestled within the deposits was the rich placer gold for which Summit County became famous. Today these processes continue. The youthful Rockies continue to rise; melting snow and water carve stream beds, eroding mountainsides and reworking the deposits left by the glaciers. But this is getting ahead of the story. To learn the story of the search for minerals on Iowa Hill, one must go back about 300 million years when the first set of Rocky Mountains rose just east of what is now Summit County. Remnants from that mountain range, called Frontrangia, now form the core of the Ten Mile Range.

As Frontrangia rose, wind and water eroded the rocks. Rocks formed deep with Earth's crust weather easily when they are exposed to wind and water in the atmosphere. The sediments were carried to shallow inland seas that transgressed and regressed from the

west. Layers of sandstone, shale, and conglomerate formed in a variety of environments. Because marine fossils are present in these layers of sedimentary rock, geologists know that these were saltwater seas. It must be remembered that the western edge of the North American continent was not in its present position. The land forming California, Oregon, and Washington had not yet been attached to the continent. Other sedimentary layers contained no marine fossils. Hence these layers were deposited in fresh water environments such as lagoons and mudflats. The red color, such as seen on Vail Pass, Shrine Pass, and Jacque Peak tell of the high iron content in many of these sedimentary layers. The climate was quite dry, much like it is now in southern California.

About 200 million years ago, there was a drastic change in the climate of this area. A very warm, humid climate resulted in lush vegetation covering the land. Dinosaurs and other plants and animals flourished. A shallow inland sea transgressed from the east. This salt water ocean covered the entire central part of the North American continent. Decaying plant material settled among the sediments collecting at the bottom of this inland sea. Because the material was collecting very rapidly and not decaying quickly, the sedimentary layers that formed at this time have a dark, black color that tells of the high vegetative matter that was included when the layer formed. Rocks of this time period are found along the Snake River east of Dillon and along Green Mountain Road.

About 65 million years ago, crustal compression formed the second set of Rockies, the Rockies that we know today. This crustal compression buried the remnants of Frontrangia deep within the crust, changing them to the metamorphic rocks that now form the core of the Ten Mile Range. While the gneiss (pronounced to rhyme with the word “nice”), schist, and quartzite were crystallizing, cracks formed within the rocks. Hot, mineralized waters moved upward from deeper within the crust. The fluids cooled and solidified within the cracks, leaving the gold, silver, copper, lead, zinc, and other minerals for which Summit County is famous.

An uplift that occurred between 5 and 28 million years ago lifted this entire area about a mile higher. Because of the uplift, the land was cool enough for glaciers to form beginning about 180,000 years ago. There have been many episodes of glaciation of the Ten Mile Range since then. The last ice melted around 10,000 years ago. Both sides of the Range were glaciated. Glacial features such as cirques, U-shaped valleys, and moraines are found along the entire length of the Ten Mile Range. Over the centuries, the ice scoured the rocks, releasing the minerals from the rocks. Melt water from the ice carried the minerals into stream beds for the miners to find. (Pritchard, Sandra F. Roadside Summit, A Natural Landscape. Breckenridge, Colorado: Summit Historical Society, 1988.)

2. Iowa Hill Placer Mine

Placer (pronounced plă ser, not plāy ser, with the accent on the first syllable) claims covered the area after gold was "discovered" in the Blue River in August of 1859. The word "placer" comes from the Spanish for "pleasure." It refers to surface mining operations such as were done on Iowa Hill. To establish the presence of gold in a stream, men used pans to work their way along their claim. Men stood in the cold water all day looking for that last nugget. Miners without sturdy boots to wear might wrap their feet in burlap for protection. In order for a claim to be profitable, a miner had to collect $20 of gold per cubic yard of material worked. From 1859 until 1940, gold was valued at $21 per ounce.

There were many different types of claims that the miners could file. The first claim in a drainage area was a "discovery" claim, which measured twice the size of a normal claim. Others could stake a "pre-emption" claim, usually stretching 100 feet along the stream. In addition, there were water claims, lode claims, and mill site claims.

If sufficient gold was present, techniques seen in the photo on the sign were used. For efficiency, claims were consolidated and worked as a group. Money was raised by the sale of company stock but was often misused in the search for mineral wealth. Mining operations were expensive. It is estimated that for every $3 invested in a mining operation, only $1's worth of minerals was extracted.

3. Pan, Rocker Box, Long Tom

To increase the amount of gold-bearing gravel that could be worked in a day, the miners turned to rocker boxes and long toms. As water and gravel were poured into a rocker box, a miner rocked it like a baby's cradle. The water washed the gravel over burlap nailed to the base of the sluice. Wooden riffles with beads of mercury laid on the uphill side of each riffle were nailed in place. The mercury and burlap trapped the gold. Preferred by the miners, the long tom was six to twelve feet long, narrow at the head and wide at the foot. A wire mesh or piece of sheet iron with small holes at the foot end let the finer gold fall through into a collection box beneath. For a rocker box to be profitable, $5 of gold per cubic yard of gravel needed to be recovered. For a long tom, it was $1 per cubic yard.

4. Undercurrent Sluice

If water was moving too rapidly in a sluice, the gold would not be trapped by the mercury on the up-stream side of the riffles. An undercurrent sluice was constructed to slow the speed of the water. An undercurrent sluice might have burlap and more wooden riffles with beads of mercury. It might also have other means of trapping the gold, such as a mercury-impregnated copper plate or bed of large pebbles. As a further means of slowing the water, the slope of the undercurrent sluice was quite gentle.

5. Flumes, Sluices, and Ditches

Water was all-important to placering operations. Too much water and the claim couldn't be worked; too little water and the result was the same. The trail crosses a large ditch on the way to the next sign. This is a good time to note the differences between flumes, sluices, and ditches.

A ditch such as the one here carried water from the source to the placering operations. To retain water, the ditch was often lined with sawdust and manure, two things in great supply. Ditches are found in many places on Iowa Hill.

A slice is the three-sided wooden structure that trapped the gold by means of mercury, riffles, and burlap.

Wooden flumes carried water overland from source to mining operations when a ditch was not practical.

Hundreds of miles of flumes and ditches laced the hillsides in Summit County by 1880. Water and mining companies boasted about the miles of ditches and flumes that had been constructed to carry water. The five segments of the Great Flume in the Swan River valley stretched 33 miles. The longest section, 14 miles in length, fed mining operations in numerous gulches in the Swan Valley.

6. Sluice Box

A sluice box was just one of the wooden structures that took a heavy toll on the forests of the area. Sluices could be many feet long as this one is. The sluice might be lined with burlap and riffles with mercury on the up-stream side. As the gravel passed over the riffles, the gold was trapped in the mercury behind the riffles. Mercury can hold up to 50 percent of its weight in gold. When the mercury becomes crusty, it will hold no more gold. Mercury arrived by wagon in special flasks from California and Texas. At clean-up time, the mercury was vaporized. Because mercury was expensive, miners preferred to vaporize the mercury in a retort where it could be collected and used again. If a retort was not available, the mercury might be vaporized over a fire. Because of this, much mercury did enter the ground, water supply, or atmosphere.

7. Guard Station

Guard stations, like this one, were strategically placed around mining operations to prevent high grading, a common problem. When men worked their own claims, high grading was not a problem. When men began working for anonymous companies, the theft of gold mushroomed. Men put pieces of gold in secret pockets, hollow boot heels, lunch boxes with false bottoms, hat bands, and even in uneaten food. Some men mixed

the gold dust with grease and rubbed the mixture in their hair or put it under their fingernails. False crowned hats could hold as much as five pounds of high graded gold. If a particularly rich piece of ore was discovered, it might be hidden in an ore cart destined for the mine dump. Later under cover of darkness, the miner might return to search the mine dump for the rich piece of ore.

Miners felt that stealing the gold was a legitimate way to supplement their wages of between $2 and $4 a day. It seemed that everyone did it. Mine owners hired spies to stop the stealing. Men were required to shower before walking home; clothing worn during the day remained at the mine in a drying room so that gold could not be carried home in the day's wardrobe. Some mines required the men to take vat baths or submit to strip searches. The men might be required to squat and lift a heavy object or jump over a box before being allowed to dress for home.

Because high grading was so common, lawyers had a difficult time prosecuting high graders. A jury sympathetic to the mine owner could not be found.

8. Blacksmith

The blacksmith, one of the most important men employed at a mine site, was just one of many men working at a mine who were not miners. Others employed might be construction workers, ditch diggers, maintenance men, flume builders, machinists, engineers, office workers, shift bosses, security guards or members of a pit crew.

One of the principal jobs of the blacksmith was maintaining the drill steels used by the miners. Drill steels came in varying lengths: 12 inches to 36 inches. Anything longer would absorb the strike of the hammer or sledge rather than transfer the energy to the flanges at the tip of the drill steel. It was these flanges that shattered the rock, not the tip of the drill steel. The steels were made of black diamond rod that was narrower as the steel length increased. It was the blacksmith's job to take the dulled steels and sharpen them. Depending on the strength of the rock, a steel could penetrate about six inches before it needed retempering and sharpening.

9. Shafting

Shafts such as this were often dug in an effort to determine if paying ore would be found. Mining operations in Summit County were quite expensive; money from the stock holders and recovered gold was always inadequate. Transporting the heavy ore by wagons was quite expensive. The Denver, South Park and Pacific Railroad did not arrive in Breckenridge until 1882. Because construction costs were so high for the railroad, the cost of transporting the ore by rail was high. Even after the railroad arrived, ore had to be transported by wagon and pack train to the rail heads. The mining techniques used in the county were inefficient, which raised costs and lowered profits. Managers sent by the

company's officers often had no real understanding of mining operations. Much gold was lost in the recovery process. It has been estimated that as much as 95 percent of the gold present in Summit County in 1860 is still here. Regional smelters would have lowered costs but the only smelters operating were tiny and inefficient. Much of the mineral ore in the county was low grade to begin with, which didn't help the profits of a company.

10. Derrick

(Because this site is self-explanatory, it might be a good time to talk about the pit operation that was found at the southern end of Breckenridge.)

The Gold Pan Company was organized in December, 1899. Its 1700-acre placer ground was 1000 feet wide and extended for seven miles along the Blue River. The company constructed three miles of eight-foot-wide ditch to bring water to its pit, which was sunk 73 feet to bedrock. Six "giants" with water pressure of 150 pounds per square inch washed the gravel from the sides of the pit. Hydraulic elevators deposited the gravels at the head of a flume lined with cocoa matting. Derricks such as this one would have removed any boulders too large for the elevators to lift. Rubber conveyor belts carried the waste to dumps on lots bought for that purpose. The rocks stacked in piles up to 72 feet high were later crushed by the municipal rock crusher for use on the streets of Breckenridge and on the road to Wellington Mine. (Pritchard, Sandra F. Roadside Summit, Part II, the Human Landscape. Breckenridge, Colorado: Summit Historical Society, 1992.)

11. Hydraulic Placering

Men and mining companies quickly turned to hydraulic methods to work the gold-bearing gravels more quickly and efficiently. High pressure hoses, called "giants" and fed by diverted streams, washed the gravels into long sluice boxes. A "giant" could swivel 360 degrees as well as more up and down. The water exited the nozzles at tremendous pressure. Pressures of about 150 pounds per square inch posed dangers for the three-man pit crew. A runaway, rotating "giant" or burst hose or nozzle could quickly kill a person. Using hydraulic methods, $.20 of gold per cubic yard of gravel had to be recovered for the operation to be profitable.

The ecological damage, of course, was terrible. Piles of debris flowed downhill into the town. It must be remembered that at this time, mining came first; natural beauty was of little concern. In 1884, the editor of the *Breckenridge Daily Journal* wrote that the leading industry in the county must always be mining. He predicted that the veins would furnish employment for centuries. The miners would first wash away all boulders, gravels and soils. Then they would take the rich minerals from the exposed veins. Of course,

this would leave the area uninhabitable but not before providing the world with a great amount of mineral wealth.

This attitude prevailed well into the 20th century. In 1916, a reporter for the *Summit County Journal* wrote this about the dredging operations in the county:
"What a wonderful transformation has been wrought by man in this wonderful mineral section! The great white piles of tailings covering mile after mile, rising mountain-like and through which roads and trails have been worn, attest the vast extent of dredging operations in the past years."

12. Pipes along the Trail

Pipes such as these supplied water to mining operations. Boiler plate for forming the pipes arrived by railroad. The Gold Pan Shops, which were located across from the Gold Pan pit, where Ridge and Main streets meet, formed the boiler plate into pipes 40 feet long and weighing 6-7 tons. To prevent corrosion, the pipes were coated by dipping them into tar-filled vats on Ridge Street.

13. Giant

The cliffs around this site show the damage done by the "giants" that operated on Iowa Hill. Authors have noticed many contrasts in a mining environment: destruction amid exquisite natural beauty; the intricacy of tiny wildflowers blooming near huge sterile dumps and tailings piles; fleeting clouds casting shadows on permanent adits cut into solid rock; and clustered buildings beneath the vast blue sky. (Francaviglia, Richard V. Hard Places. Reading the Landscape of America's Historical Mining Districts. Iowa City: University of Iowa Press, 1991.)

14. Bank Blasting

At first, miners used black powder, a mixture of charcoal, sulfur, and salt peter (potassium nitrate), to blast their way through solid rock. But black powder was notorious for being unreliable. Sometimes, it detonated early; sometimes not at all. Fuses burning at unpredictable speeds were a problem. In 1831, the Bickford fuse, burning at a reliable one inch in 30 seconds, appeared. The fuse consisted of black powder wrapped in jute, then twine, and finally a water-proof tape.

Dynamite was invented by Alfred Nobel in 1867. Stronger than black powder, dynamite is simply nitroglycerine mixed with an inert material such as fuller's earth, sawdust, or

diatomaceous earth. A fulminate of mercury or other explosive in a copper tube is needed to detonate. Although dynamite is safer than black powder or pure nitroglycerine, it has its problems. Because the fumes caused nausea and headaches, miners and trammers had to wait for the fumes to dissipate before working tunnels where dynamite had been detonated. Unless dynamite is kept warm, it will freeze at 40 degrees F. and become unstable. Dynamite warmers were in common use in the county to prevent freezing.

15. Hydraulic Placering

(A short walk up the trail will bring French Gulch with its dredge piles into view and will provide a place to talk about dredging operations in the county.)

Helen Rich, noted Breckenridge author, described a dredge this way:
"The dredge squats on a brown-green pond, and wherever the dredge goes the pond goes, too. The water comes from a near-by mountain creek and it is clear when it flows into the pond but not after that. A gold boat looks like a prehistoric monster. It has a deck the same as any other boat, but at the bow there are gawky neck-like timbers called gantries. They support the bucket ladder, and the bucket ladder holds the digging buckets. Amidships is a lower hump covering the machinery. This machinery acts like a stomach. It takes gold for its food and spews out what it doesn't want. This residue goes out on a conveyor belt covered with white canvas. All day long, all night long, the conveyor belt carries everything that isn't gold up the stacker and lets it drop. Splat. Plop. As the monster lumbers forward it leaves behind tailings piles higher than a two-story house."

First used in New Zealand, dredges were powered by wood, coal, and later, electricity. Nine dredges operated from 1898 until October 15, 1942, chewing the gravels in the Blue and Swan river valleys and French Creek in French Gulch. The first dredge, which was too small to be successful, measured 96 feet X 30 feet. It could "digest" about 1000 cubic yards of gravel in 24 hours. The last model measured 130 feet X 42 feet 8 inches and could process 5000 cubic yards in 24 hours.

Without the railroad, there would have been no dredging operations in Summit County. Boilers, weighing 11 tons, came from New Jersey. Other machinery came from either San Francisco or Milwaukee. Also coming from Milwaukee, was a spud pole, weighing 13 tons. The spud poles held the dredge in place in its pond. Redwood for the hull and housing came from Oregon and California. (Pritchard, Sandra F. Roadside Summit, Part II, the Human Landscape. Breckenridge, Colorado: Summit Historical Society, 1992.)

16. Boarding House

Most of the men arriving in the early 1860s came with the intention of making their fortunes quickly and returning home. Of course, that was an unfulfilled dream for most.

But because of this hope, many men lived in hastily constructed log houses with other men. Later, private boarding houses and company-built structures such as this became available.

The population was composed primarily of white males. Of a population in Breckenridge numbering 165 in 1870, 135 were white males. White females numbered 25. In 1885, there were 600 white males, 335 white females, 21 Chinese males, and 1 Black male.

Of those born in the United States and living in Breckenridge in 1870, the greatest number came from Ohio, New York and Pennsylvania. In 1880, the same three states plus Illinois were most often claimed as "home." But many had migrated to the area from places outside of the United States. Living conditions in Great Britain (including Scotland, Wales, and Cornwall) and Ireland, as well as Germany, Canada, Sweden, and Italy sent many to Summit County.

The names of placers, miners, gulches and physical landmarks often tell of the ethnicity of early residents. French Pass and Gulch, Georgia Gulch and Pass, Illinois Gulch, Indiana Gulch, Hoosier Pass, DeLac Placer, Lafayette Placer, Jersey Placer, New England Placer, London Placer, Delaware Flats, Iowa Hill and Pennsylvania Creek are just a few names around Breckenridge that come to mind.

17. Wagon Roads

(The descent to the parking lot can be made by walking the trail through the trees or by using the wagon road. Great care is needed if the road is selected but it, too, can be a learning experience.)

It was over roads such as this with very steep grades that ore and supplies had to be carried. Wagons could carry as much as 9000 pounds of ore or supplies. Burros could carry 100 pounds while the larger mules could carry 300 pounds. Sometimes as many as 100 of the animals were lined up in jack trains led by several men and dogs. During the months when the trails were not snow-covered, these Colorado canaries or Rocky Mountain tugs could negotiate the narrowest of trails. During the winter, though, there were problems. Sometimes an animal would leave the trail and burrow itself nose-first into a snow bank. The men would lift off the load and try to coax the animal to back up. . .a very difficult, if not impossible, task. If the animal could be extricated, the load would be replaced and the jack train would move on. Otherwise, the animal was left there to fend for itself.

Fully loaded wagons needed help descending steep grades. Pulleys might be wrapped around the wagon and nearby trees to slow the descent. Sometimes, logs were attached to the rear of the wagon to slow its descent.

18. Booming

By the mid-1860s, when much of the free gold obtainable by panning was gone, the miners began searching for ways that would allow them to process an increasing amount of gold-bearing gravel efficiently but with minimal labor and low operating costs. If sufficient water was available, they turned to "booming," which was used in California in the 1850s.

Little effort was required. First a miner created a water reservoir by damming a stream uphill from the bank he wished to excavate. A self-activating headgate in the dam held the water in the reservoir. The gate opened when the reservoir was full, releasing the water to rush down the hillside. In some operations, the water was diverted into flumes and sluices. In others, the water flowed into wooden or metal pipes that fed "giants, which were turned against hillsides. When the reservoir had emptied, the gate closed and the reservoir filled again.

This process was popular for a short time especially with low-grade deposits. When the placers were consolidated and large, better-financed companies began working the gold-bearing placers and hard rock mines, booming was no longer as popular.

Historic records indicate that "booming" was used on Iowa Hill as early as the mid-1870s. The *Rocky Mountain News* on November 13, 1872, noted that the process was used in Iowa Gulch with "such good results that it is probable that this will become a favorite method of working ground too poor to mine in the ordinary way." Two days later, the *Daily Colorado Miner*, published in Georgetown, agreed that booming had resulted in "considerable gold." The reporter continued: "Iowa Gulch worked by this process, paid over $20 a day per man. This gulch proves very conclusively the superiority of this method of mining over all others. It was abandoned in '60 as worthless, and the present owners Messrs Adams, and Stahl, barely made expenses out of it for 4 years. It was a last resort that they tried booming, and the result of last season was the above handsome returns."

For those readers who might be unfamiliar with the process, the reporter explained: "Booming is a process by which large quantities of gravel by the agency of water is moved. To do this a flume is built about 4 feet wide and 6 feet high and has a 'flare.' [wing] The grade varies given to the flume, an average would be about 10 inches to the 12 feet. To obtain sufficient water to run so large a flume, the water is collected in a reservoir and then let out by a gate with a rush, thus a small stream of water is made to do the work of a very large one."

Booming was still used on Iowa Hill 1883. The Colorado Mining Directory listed two booming reservoirs on the placer, then owned by Alfred J. Ware. Although more efficient methods of retrieving the gold were used after the turn of the twentieth century, booming

continued on Iowa Hill. In October, 1904, Col. Lemuel Kingsbury, manager of the Banner Placer Mining Company's property on Iowa Hill, announced plans for a new storage reservoir. Ten acres of land had been acquired for the new reservoir. To channel the water from the reservoir, over 2200 feet of 22-inch steel pipe had been ordered from the Gold Pan Shops in Breckenridge. The October 20, 1904, issue of the *Mining News* elaborated on the plans. A booming reservoir at the head of the workings featured an auto release dam that triggered a release of water every few minutes around the clock. By the following spring, the plans were complete and booming operations began.

As with all mining operations, dangerous conditions existed. Accidents were sometimes the result of careless actions on the part of the employee. One John A. Nauslan, employed on the Banner placer, was killed while he was clearing rocks from a flume. Ignoring the shouts of those around him, he was struck by a "boom" of rapidly moving water. He died instantly as the force of the on-coming water carried him along the wooden flume.

Booming had a secondary function. Not only did the water bring the gold-bearing gravel to the flumes and sluices, the force of the water could be used to clear the flumes and sluices of mud and other fine material left from previous "booms." The *Summit County Journal and Breckenridge Bulletin* on June 24, 1911, indicated that this was occurring on the Banner Placer on Iowa Hill. "The Banner placer. . . . .has a separate water supply for booming with a self acting gate. Booming is done to clear the main sluice, with its approaches, of the tailings from the operation of the hydraulic giants on the nugget-bearing stratum."

Archaeology Statement by Eric Twitty

To understand the lifestyle of those who worked on Iowa Hill and lived in the boardinghouse, it is necessary to study their trash! The items discarded in the nearby dump tell a great deal about the ordinary individuals who made the placering operation on Iowa Hill possible. While managers, company officials, and investors were necessary to the success of the operation, it was the common mines and laborers who built the infrastructure, maintained the facilities, and worked no matter what the weather. Yet, relatively little is known of these tough and resourceful individuals because written

information about the daily lives of the workforce is often nonexistent. This is true of Iowa Hill as well as nearly all of the other mining operations in the Breckenridge area.

When researchers try to tell the history of a mining operation such as that on Iowa hill, they consult primary sources such as publications, reports, technical journals, and newspapers of the appropriate time period. The inherent flaw with these archival records is that they usually include only the information that the record-keeper thought was important. Because the record-keeper thought the life of the ordinary miner and laborer was unimportant, this information was not included. Today, researchers recognize that the workers were a significant aspect of the story.

Faced with this lack of information, researchers turn to a completely different source of information. They study the material evidence left behind in trash dumps! This type of archeological project is often of more importance than archival sources.

Mention an archaeological investigation and people imagine a weathered archaeologist cautiously excavating buried material with brushes and dustpans. While this is not inaccurate, this is not the entire story. Archaeologists study items on the surface of a site as well as those buried beneath the surface. At Iowa Hill, and throughout all mining areas, much evidence lies on the surface.

For what are the researchers looking? What items provide evidence of the lifestyle of the ordinary miner and laborer who lived and worked on Iowa Hill? The men generated a variety of items that told of their daily lives. For example, cans were discarded after the contents were eaten or used, as were empty bottles and uneaten table-scraps. Clothing, broken household goods, utensils, and hardware no longer useable were added to the dump that was usually close to and downhill from a boardinghouse. Thus it was on Iowa Hill. Over time, the perishable items disintegrated; glass, tableware, metal, and butchered bones remained. Fragile pieces such as tableware and bottles broke, steel and iron corroded, and organic items such as bones and leather boots decayed. Despite the passage of time, many of the objects are still identifiable.

By being a detective, the researcher uses clues to interpret the lifestyle of the workers. Analyzing the cans and bottles offers information regarding diet, health, the consumption of alcohol, and drug use. From clothing remnants, household items and personal articles, it is possible to determine if women lived in the boarding house, the socioeconomic status of the workers, and other aspects of the population. While the residents of the Iowa Hill boardinghouse considered these items to be useless trash, they are vital clues to understanding aspects of life in the mining areas.

Workers considered food to be second in importance only to wages. To retain a quality workforce, companies realized that they had to provide not only the meals that workers relished, but in sufficient amounts to support their long, active days. In general, mine

workers preferred foods that can be categorized as the *Victorian diet*, which evolved from traditional Northern European cuisine. Meals emphasized fat, protein, carbohydrates, and starches, usually in the form of meat, egg dishes, baked goods, grains, vegetables, and fruit. Beef was favored above other meats; port was least desirable. Fresh meats and vegetables were preferred over preserved foods. Meat dishes often took the form of roasts, stews, and fried cuts, while vegetables tended to be boiled and potatoes fried and roasted. 1

Knowing that workers preferred fresh foods, what did the company provide for their workers on Iowa Hill? Did the men subsist on canned beans, flapjacks, and sourdough as popular stereotypes portray? Or did the company provide the meals that were truly desired? The answer becomes apparent when the archaeological evidence is examined. Based on the high number of cans in the dump, it is safe to say that the company served the Iowa Hill workers a diet of mostly preserved foods, such as soups, beans, meat, vegetables, and fruit—all from cans. The evidence indicates that the workers enjoyed fresh items on rare occasions. Baking powder tins indicate the presence of baked goods and the few butchered bones indicate that the workers enjoyed beef stew, roasts, and steak occasionally. The company cook probably served potatoes, cabbage, apples, grains, and other produce that stored well.

If mine workers preferred fresh food, why was their diet based on canned goods? One reason has to do with the cost of fresh produce and meat. Produce was grown on farms at lower altitude and came to Summit County by rail. Denver and the Mormon settlements around Salt Lake City were prime sources. Food items transported on the railroad were expensive. In addition, produce was seasonal and many items did not store well at high altitude. Meat, too, was difficult to keep from spoiling; therefore it had to be delivered regularly, which added to its cost. Thus fresh food was difficult to obtain and high in cost. Often a company concerned about earning a profit for its investors was unwilling to pay the prices demanded for fresh food.
But trash dumps tell about more than just the workers' diet. Popular stereotypes say that mine workers such as those on Iowa Hill, as well as the rest of the mining region, were heavy drinkers and smokers. Fragmented bottles and earthenware jugs around the boardinghouse indicate that this is not correct. During the 19th century, distillers packaged liquor in flasks, long-neck bottles, and earthenware jugs, while brewers distributed their beer in heavy bottles designed to be recycled. If the Iowa Hill workers drank heavily, remnants of these vessels should be in evidence around the boardinghouse.

However, the artifacts found include only one beer bottle and one liquor container, indicating that the workers drank little alcohol. Furthermore, studies at other sites around Breckenridge show that Iowa Hill was not unique. This trend was nearly universal. Overall, it appears that mine workers were much more conservative in their alcohol consumption than the popular stereotype suggests. Although the reasons for this might be many, the most compelling probably lies with company policy. At Iowa Hill, drinking

alcohol was discouraged because it was thought to contribute to social problems and a poor work ethic.

Likewise, workers consumed tobacco products in moderation. Pipes were a favorite with the workers. Tobacco for pipes usually came in large, open-top cans. None of these or any other type of tobacco containers were present at Iowa Hill. Here again the popular stereotype is incorrect.

As helpful as the artifacts might be in telling about diet, smoking, and drinking, they do not tell about the demography of the workforce. There is no evidence of fine, costly goods or the presence women. Instead the artifacts are simple, very limited in variety, and contain almost no household goods. This is characteristic of male mine laborers. They had little disposable income, spent most of their time at work, and lived in austere accommodations.

Remnants of clothing confirm that the men at Iowa Hill were mine workers. Because hydraulic mining was wet, dirty work, some wore rubber slickers and boots to stay dry. To protect their feet on the uneven surface, some work hobnail boots with iron cleats on the soles. Evidence of the slickers and boots surrounds the boardinghouse.

In summary, the archaeological artifacts around the Iowa Hill boardinghouse confirm that the residents were all men, most earning limited wages, and belonging to a lower socioeconomic class. This is typical of the workforce of numerous company-financed placer operations. To assure a profit, companies often relied on poorly paid, unskilled workers.

A word of caution is required. Chances are good that those reading this book have been to the Breckenridge area, are interested in the historical sites such as Iowa Hill, or are planning such a visit. Those who have enjoyed repeated visits in the past know that the rich legacy of the mining era is disappearing. While natural decay takes its toll, humans are, too. Historical sites such as Iowa Hill are being carried away piece-by-piece by irresponsible visitors. Collectors with metal detectors and shovels excavate privy pits, plow through collapsed buildings, and destroy structures in the search for treasure, accelerating the process. The legacy cannot be restored. Those visiting Iowa Hill notice that the legacy is no longer there. No intact bottles remain. No coins or articles of value are to be found. Today's visitors bear the direct responsibility of preserving this important site for future generations.