

Forest Hill Divide Mines, 1895 to 1899, V. 70--79

Mining and Scientific Press, V. 70, 1/12/1895, p. 26

Hidden Treasure.—Sentinel: The Hidden Treasure Company at Sunny South, operate their drift mine on the most extensive scale of any gravel property in the United States. The company has just closed one of the most successful and profitable year's work in the history of this famous gold mine. During the past twelve months they have breasted and worked an area of 200,000 square feet of channel, which has produced 110,000 car loads of pay gravel.

Last fall a new trail was built from the old works at Sunny South to the mouth of their newly acquired Dam tunnel, a distance of about two miles. A force of five meu are at present engaged extending the tunnel. During the past year the average number of men employed has been 180. The amount of money disbursed by the company for labor and material has been a trifle over ¥101,000. The tailings in Blacksmith Canyon, which came from the sluices of the Hidden Treasure mine at Sunny South, will probably he sold some time during the coming month. They have not been worked for about three years. The Chinese usually purchase them. They sell for many thousand dollars. After being worked, the tailings pass into El Dorado Canyon, where they are worked over and over by the Chinese who have claims located in the canyons.

Mining and Scientific Press, V. 70, 2/9/1895, p. 90

Not Consistent.—Herald: The anti-debris men of the valley are doing everything in their power to prevent the Legislature from making an appropriation to construct dams for the impounding of debris from the hydraulic mines. We have heard of hogs but they take the cake. They claim it a private industry and that the proposition has no right to receive financial support from the Government. They lose sight if the fact that the dams are for their own protection and not the miner's; that it is to keep the debris from ruining their land and filling the river beds. Why not "live and let live?" Why do the valley people keep agitating this question when they know—if they would admit the truth—that by construction of dams their lands and river's are safe? Come, neighbors of the valley, give the miner a chance.

Mining and Scientific Press, V. 70, 2/16/1895, p. 99

The usual order of things is reported reversed at the Sunny South mine, Placer Co., where the white miners accepted a recent cut in wages from \$3 to \$2.50 per day, while the Chinese, who were cut from \$1.75 to \$1.50 laid down their tools and refused to work at the reduced wages. Supt. Power is putting on white men in their places.

Mining and Scientific Press, V. 70, 2/23/1895, p. 122

The Gem Mine.—Sentinel: Work at the Gem mine at Humbug is being pushed. The lower tunnel is in about 200 feet and the upper tunnel not quite that distance. The mine is excellently situated for the building of a mill ; and if the ledge proves to be what is expected from previous prospecting, a large mill will go up on the site. The ledge is only a few miles from the famous Pioneer, which is paying better now than at any time previously.

Mining and Scientific Press, V. 70, 3/9/1895, p. 154

The Black Hawk.—The Black Hawk mine at Forest Hill, formerly the Kirk property, was bonded this week to J. P. Mallette, of Chicago, for \$40,000. He is the recent purchaser of the Zantgraf mine for \$150,000.

Mining and Scientific Press, V. 70, 3/16/1895, p. 170

The North River hydraulic mine at Yankee Jim's is now running.

Mining and Scientific Press, V. 70, 3/23/1895, p. 179

\$227 have been contributed to the treasury of the Placer County Miners' Association by the miners at the Hidden Treasure mine. Sunny South, Placer county.

Mining and Scientific Press, V. 70, 3/30/1895, p. 192

None but white men are now employed at the Hidden Treasure gravel mine, Sunny South. Placer Co. There is now a large number of men on the payroll. The running expenses of the mine for '94 were over \$120,000. It is one of the many dividend paying mines of the State, of which little is heard, but which affords steady employment to many and pays its owners. On the same list may be placed the Mayflower gravel mine, three miles north of Forest Hill, in the same county, which employs about 100 men, and pays out nearly \$8000 per month, and the Morning Star gravel mine, near Iowa Hill, employing fifty men, which has worked over 1000 feet of the channel at a handsome profit.

Mining and Scientific Press, V. 70, 4/13/1895, p. 227

At the Hidden Treasure mine, Sunny South, placer Co., 110 men are now employed—all white men.

Mining and Scientific Press, V. 70, 5/4/1895, p. 275

The Mayflower, in Placer Co., paid a dividend of \$10,000 in March, a total of \$30,000 since Jan. 1st. The Morning Star, in the same county, paid \$16,800 that month, \$30,000 since Jan. 1st. The Standard, of Bodie, also paid \$10,000 in March. The Kennedy mine, of Amador county, has paid \$90,000 since Jan. 1st. Others not reported are paying big monthly dividends right along. It is calculated that 148 dividend-paying mines have paid \$300,000,000 since '71. It is figured that their gross output for that time was \$1,500,000,000 and that \$1,200,000,000 was paid out for machinery, supplies, labor, etc. That is, a billion and a half was added to the solid, tangible, permanent wealth of the world, the dividend part being incidental.

Mining and Scientific Press, V. 70, 5/11/1895, p. 291

The May dividend of the Morning Star mine of Iowa Hill, Placer county, is \$4 per share.

Mining and Scientific Press, V. 70, 5/18/1895, p. 307

Last Monday the California Debris Commission granted permits to carry on hydraulic mining to the Iowa and Tiger mines, in Placer county, and the American House mine, in Plumas county. Permits for the Liberty Hill and Polar Star mines, near Dutch Flat, were withheld.

Mining and Scientific Press, V. 70, 6/8/1895, p. 366

W. A. Freeman and the Wallace estate have bonded the Black Hawk mine, at Forest Hill, for a \$40,000 sale.

The McCall mine, situated at Gray Eagle Bar, on the middle fork of the American river, was sold for \$40,000.

Mining and Scientific Press, V. 70, 6/22/1895, p. 391

The Eureka Consolidated mine on the Forest Hill divide, Placer Co., one of the most valuable mining properties in the State, is about to pass into the hands of Eastern people, if the price can be agreed upon. There are 275 acres, and nearly seven miles of ancient channel. Over \$30,000,000 has been got out of the divide, and a good many think considerably more than \$30,000,000 additional will be secured from the same locality.

Mining and Scientific Press, V. 71, 7/6/1895, p. 10

The Pioneer Mine.—The Colfax Sentinel reports the probable sale of the Pioneer mine to an Eastern company, recently capitalized at \$1,000,000. one-fourth of which was subscribed.

Mining and Scientific Press, V. 71, 7/20/1895, p. 39

The Pioneer mine, Placer county, formerly owned by the Fair estate, which has given employment to nearly 100 men, will be worked on a large scale by the Boston people who recently bought it. A tunnel is being driven 500 feet below the former workings, to strike the ledge at that depth. J. Sullivan is the superintendent.

Mining and Scientific Press, V. 71, 7/27/1895, p. 55

A 10-stamp mill will be put up next month at the Osborne mine, near Westville, Placer Co.

Geo. Montgomery, of this city, is about to put a new forty-stamp mill on his Trinidad mine, at Sailor Canyon, Placer Co.

Mining and Scientific Press, V. 71, 7/27/1895, p. 62

On the Divide.—There are more prospectors on the Forest Hill divide than before in years. The Hidden Treasure tunnel has been worked 9000 feet, but now operations are being carried on at a distance of 3000 feet, where 150 men are employed. It is a low-grade mine, but the output is \$15,000 a month. Operations have just been begun on the Mountain Gate mine, to the north of the Hidden Treasure, and the owners of the latter have purchased the Dam tunnel in order to open the ground on the south end of Mountain Gate.

Mining and Scientific Press, V. 71, 8/3/1895, p. 70

The register and receiver of the Sacramento land office have decided the Placer county contest against the miners and in favor of the C. P. R'y Co.—that is, in the face of facts, they decide that the Forest Hill dividers "agricultural land." The property has on it a valuable placer claim; another part of it has another claim bonded to the Gray Eagle Co. for \$30,000, and a tunnel is being run. If that land is "agricultural, then the Idaho-Maryland mine is a potato patch and the U tica fit Only for raising alfalfa. One is just as "agricultural" as the other. The law is all right, but its interpretation is an outrage upon human rights.

Mining and Scientific Press, V. 71, 8/10/1895, p. 94

Mine Sold.—Sentinel: The Eureka Consolidated Mining Co., of which Felix Chappellet is superintendent, purchased this week the Indian Springs mine from J. H. Neff and D. W. Lubeck. The claim consists of about 2000 acres and lies just ahead of the famous Red Point mine. This, with the 3000 acres already owned by the Eureka Co., will give it one of the largest, if not the largest, area of any drift mining company in the State.

Mining and Scientific Press, V. 71, 8/17/1895, p. 103

Regarding the sale by the administrators of the Fair estate to Pierre Humbert Jr. of Boston of the estate's one-half interest in the Pioneer mine, in Placer county, suit is to be brought to partition the mine between the estate and A. E. Davis, owner of the other one-half. Humbert agrees to bid at the partition sale a sum which will yield the estate \$72,500, and to secure his promise has made a deposit of \$75,000 with the First National Bank. Should Humbert fail to carry out his agreement, the \$75,000 is not to be returned until he shall indemnify the Fair estate for all loss or damage sustained by reason of his breach of contract. The mine has yielded \$381,800, and is considered cheap at \$150,000.

Mining and Scientific Press, V. 71, 8/17/1895, p. 106

The Pioneer Mine.—Forty-eight men are on the payroll of the Pioneer mine. The new tunnel, 520 feet below the present working tunnel, is now in over 400 feet. It must be run 1500 feet to strike the Pioneer ledge and a total of 2600 feet to strike the Linn vein of quartz. A new compressor has been put in to run the drills. The company expects to have forty additional stamps by the end of this year.

The Black Hawk has fifteen men at work under direction of Superintendent Blood. Goodall, Perkins & Company have secured a proprietary interest in a portion of this mine under an agreement to develop the property and erect a ten-stamp mill. The ledge is from 3 ½ to 7 feet in width.

E. A. Frenzel, of Sao Benito county, has a bond and two years working lease on the Dorer ledge. This mine now has 3200 feet of tramway and a ten-stamp mill located on the river below. Mr. Frenzel is backed by the Bank of Hollister. If the ore holds up to the present indications he will build a new tramway and commence operations on an extensive scale. Five men are at present working on the ledge.

Mining and Scientific Press, V. 71, 9/7/1895, p. 154

Another "Lost Mine" Found.—The lost "Emigrant mine," about twenty miles east of Cisco in Placer county, has at last been found, after a search of five years. The ore body is very extensive and is reported to go \$200 per ton.

Mining and Scientific Press, V. 71, 9/21/1895, p. 186

The Gray Eagle.—Argus: Gravel paying \$10 a carload has been struck in the Gray Eagle mine at Spring Garden. The significance of this development will be appreciated by all miners interested on the Forest Hill divide. For seven years the Gray Eagle Mining Company has been pluckily spending large sums of money in sinking a shaft 400 feet through the cement, and then when that failed of making the expected discovery a still larger sum has been expended in running a tunnel in the face of which, 600 feet underground, the strike has finally been made which will turn back the golden stream. Below the Dardanelles mine there has been known to be seven miles of channel, undoubtedly rich, but so deeply buried that it has balked the efforts of many mining companies to find it. The Gray Eagle discovery locates this channel and at the same time proves its value. Other companies will now be encouraged to go

ahead to develop this channel, thus adding materially to the gold product of this county for years to come and providing work for many miners. There is every reason to believe the channel to be the same as that mined in the Breece & Wheeler and Mayflower, and that it will repeat the phenomenal yield of those mines.

The Gray Eagle Company is a San Francisco corporation of which H. W. Gray is the president and T. G. Durning superintendent.

Eureka Con.—Sentinel: One of the most extensive mines on the Forest Hill divide, is the Eureka Consolidated gravel mine, which embraces 3600 acres of land and extends over six and one-half miles of channel. The mine is owned principally by Felix Chappellet; W. H. Bailey, of Oakland, is also a large shareholder. Mr. Chappellet began buying up the property some fifteen years ago satisfied it was a good thing. The channel is supposed to be the same as the one worked in the Greek mine east of it and in the Dix mine west of it. The gravel sought after is the deep or blue channel although a great deal of the white or upper channel is known to exist in the holding. The company has already driven in one tunnel through the bedrock 1500 feet and tapped the channel. This tunnel proved too high although it crossed a bed of gravel 400 feet wide. Another tunnel, known as the Clara, was run into the hill about 210 feet but has since been abandoned and another has been started about 400 feet lower on the same side of El Dorado canyon. It is expected that the channel will be tapped after running about 1800 feet through bedrock. Work is in progress for the erection of a building for the boiler, compressor and blacksmith shop. This building will be about 80x65 feet, built near the mouth of the tunnel and connected with it by sheds to protect the track from snow. A road has just been graded from the top of the ridge to a point just above the tunnel for the purpose of getting in the machinery.

In addition to other improvements the company has fitted up about a mile of the old Breece & Wheeler water ditch which carries water from El Dorado canyon, thus furnishing the mine with an ample supply of water power. The company's land is covered with much valuable timber and it is the intention next year to put in a small portable sawmill to supply the mine with timbers, etc.

The tunnel will be run large enough to allow a small engine for hauling the cars. The mouth of the tunnel is situated about 2 ½ miles east of the Red Point mine and at an elevation of 3914 feet above sea level, being over 800 feet lower than the main divide.

About twenty-one men are at present employed. Felix Chappellet, Jr. is superintendent.

Mining and Scientific Press, V. 71, 10/5/1895, p. 214

The Morning Star Gravel mine, Placer county, has declared dividend No. 58, of \$3 per share,

Mining and Scientific Press, V. 71, 10/5/1895, p. 218

On American Bar.—A ten-stamp mill will be put up on T. C. McCall's quartz mine on American Bar, near Michigan Bluff. Captain G. A. Nihell will superintend the construction. The quartz will be carried to the mill over a tramway 1,800 feet lone. The ledge is from 50 to 100 feet in width, the ore low grade.

Mining and Scientific Press, V. 71, 10/12/1895, p. 234

R. A. Davis is opening up the Sailor gravel claim in Sailor canyon, Placer Co., and expects to do considerable work next winter.

In the New Treasure mine, near Sunny South, Placer Co., J. B. Sellier proposes to run about 3000 feet of tunnel westerly to tap the Golden river channel, now being worked from Red Point.

Mining and Scientific Press, V. 71, 10/12/1895, p. 238

The Pioneer Mine,—The administrators of the estate of the late Jas. G. Fair have made a return of the sale of the estate's half interest in the Pioneer mining property. The sale of the entire property was made to J. M. Cox and S. F. Bickford" for \$151,250. From this was deducted \$1244.65, the expense of the sale, leaving a balance of \$150,000.35, of which latter sum \$75,002.70 was paid to the Fair estate. The administrators have since paid out of the estate's share \$2500 to J. M. Brazell as a commission for making the sale.

Takes Care of Itself.—At the Lady Bedford mine, in eastern Placer, a two-stamp mill has been used for the past two years and pays the owners. This is, perhaps, about the only mill in the county that takes care of itself. The Sentinel says the owners of the mine do their own work, and while they are driving ahead their tunnel or getting out ore the little mill hammers away by itself. Before going home at night the ore bin is filled and the mill hammers away all night to perfection.

Mining and Scientific Press, V. 71, 10/26/1895, p. 267

The Argus- reports gravel that goes \$100 to the oar struck in the Gray Eagle tunnel, Placer Co.!

Mining and Scientific Press, V. 71, 11/9/1895, p. 267

Felix Chappellet is about to incorporate the Eureka mine on the Forest Hill Divide, Placer Co.

The Placer Republican ironically says: One reason why Placer county mines have not received deserved attention from capitalists is that her mines are too close to the railroad. Capitalists are always seeking phantom wealth in some inaccessible country, but a year or so will change all this. Such mines as the Zantgraf, Pike Bell or Black Oak, Marguerite and others will instill confidence into men of wealth and they will seek investments there.

Mining and Scientific Press, V. 71, 11/9/1895, p. 306

The Gray Eagle Mine.—Republican: The Gray Eagle mine, of the Forest Hill Divide, is proving richer than the most sanguine expectations of its owners. The gravel runs as high as \$400 per car and there is a prospect of its continuing throughout the channel at this high figure.

Mining and Scientific Press, V. 71, 11/23/1895, p. 328

A not unusual feature in the recent rich find in the Gray Eagle drift mine. Placer Co., is that the drift extends beyond the line of the mine into lands recently taken up by a man named Clark as agricultural and then bonded to the mining company at \$60 an acre.

Mining and Scientific Press, V. 71, 11/30/1895, p. 358

The Black Hawk Bonded. —Republican: The Black Hawk gravel mine, near Forest Hill, has been bonded to a syndicate of San Francisco gentlemen for \$40,000, This mine is the property of W. A. Freeman and the W. C. Wallace estate. Work will be commenced immediately on the mine, and no doubt the transfer will be made in due time. The mine promises to be a good one as it is an extension of the Mayflower.

The Mayflower.—At the Mayflower gravel mine a further ten stamps will shortly be added, making thirty in all. The mill has now been running about a month with the new battery. It was shut down

for but twenty days, during which the entire change of machinery was made, under the management of Mr. L. I. Ogden of Forest Hill.

The Eureka.—At the Eureka Consolidated, which gives employment at present to fifteen men, all is activity. The tunnel, 6 ½ feet square, is now in 220 feet out of the 1800 feet which will have to be run before gravel is expected to be struck. Three Burleigh drills will shortly be installed, driven by Rix & Firth compressors, which will considerably expedite the work. All supplies necessary to last through the winter have now been delivered at the mine.

Mining and Scientific Press, V. 71, 12/7/1895, p. 374

Black Hawk Bonded.—The Black Hawk gravel mine, north of the Mayflower, has been bonded to Dr. Brewer, of this city, for eighteen months, with privilege of purchase for \$40,000: \$6,000 has been put up for development.

Evening Star Mine. Sentinel: Sacramento capitalists have located a river claim near Colfax which they have named the Evening Star mine. They have located a portion of the American river from a short distance above Shirt Tail canyon to a point above Indian canyon.

A number of gravel banks will be worked during the winter. Next summer it is the intention of the company to turn the river for a long distance and clean up the bedrock.

Mining and Scientific Press, V. 71, 12/14/1895, p. 390

Around Michigan Bluff. —Herald: The mill on the American Bar mine is completed.

The Dixon mine at Deadwood has closed down for repairs.

The New Treasure Company are pushing their tunnel ahead.

The Grey Eagle Bar Company have completed their shaft and have one of the best equipped gravel mines in the State.

General Notes.—Herald: At the Eureka Con. drift mine the company are pushing the tunnel. This claim is the largest drift mine in the State, being composed of 3000 acres.

Mining and Scientific Press, V. 71, 12/21/1895, p. 410

The Herman.—At the Herman the mill is running 'night and day, working twenty-five or thirty men. A two weeks' cleanup recently realized \$5200.

Mining and Scientific Press, V. 71, 12/28/1895, p. 422

At last Monday's meeting the Debris Commission issued permits to the owners of the Lost Camp mine, near Blue Canyon, Placer county; Wild Yankee, near Shady Run, Placer county; Trafton, near Yankee Jim's, Placer county.

Mining and Scientific Press, V. 71, 12/28/1895, p. 430

Struck Rich Gravel.—Herald : The North Fork Co., who are running for gravel near Forest City, struck their channel recently, and it was so good that half the town went up to take a look at it. Superintendent Jones and the company are more than pleased with their prospects now, as the gravel is rich enough to make every carload pay well.

"Nine carloads that were washed a few days ago yielded \$20.85," says Mr. Page, who is the chief promoter of the enterprise," and even then we could not clean the bedrock, as we were working in water."

As the North Fork is a tunnel proposition, it will be seen that this is good pay. Mr. Page thinks that they will be able to extract and wash gravel for about 05 cents per carload.

The gravel bed is 4 ½ feet thick where they are working now, and they have run into it 20 feet. The company has over 11,000 feet of this channel.

Mining and Scientific Press, V. 72, 1/4/1896, p. 9

Republican : The Cinnamon Bear mine is situated three-fourths of a mile from the Lost Emigrant. The vein is from two to ten feet wide and has been traced for half a mile. The ore assays 17 ounces in silver, 31 per cent copper and 83 in free gold. The mine is at an altitude of about 6000 feet. The country rock is of porphyry formation.

Mining and Scientific Press, V. 72, 1/18/1896, p. 50

At Clipper Gap.—The Ellen Dip Consolidated mine is in Codfish canyon, Colfax district. The lead shows up for 200 feet. The ledge where it crops out on top is 20 inches to 2 ½ feet wide and at No. 2 is about 18 feet wide; \$6 or \$7 rock. The facilities for working this mine are excellent. This mine is about 1 ½ miles from Black Oak mine which sold for a large sum some time ago. The company has 80 acres; four claims consolidated. The owners are S. F. Woodworth, of Clipper Gap; R. S. Young, of Seattle; D. A. Murdock, of Auburn.

Mining and Scientific Press, V. 72, 1/25/1896, p. 53

Superintendent E. A. Frenzel, Dorer mine, Humbug Canyon Placer Co. has twenty men at work. The 10-stamp mill is running.

Mining and Scientific Press, V. 72, 2/1/1896, p. 83

Tin- Morning Star gravel Mining Company, Placer Co., last Monday declared dividend No. 63 of \$5 per share. The mine is looking well and promises to pay many more such dividends.

Mining and Scientific Press, V. 72, 2/1/1896, p. 90

Argus : The heavy rain of last week caused a landslide at the Osborn or Gaylord mine, and in consequence a large portion of the tunnel was covered up.

Col. Davis has completed a contract for putting in a \$5000 electric plant at his Texas Bar mine, adjoining Mammoth Bar. The work will be done under the instruction of Howard Davis, who is general superintendent of his father's properties.

Mining and Scientific Press, V. 72, 2/1/1896, p. 94

A. D. Gassaway, recently superintendent of the West Harmony and Delaware mines, Nevada Co., has accepted the superintendence of the Mayflower mine, on the Forest Hill divide, Placer Co. The Mayflower is the largest drift mine in the State and now employs 110 men.

Mining and Scientific Press, V. 72, 2/8/1896, p. 110

Sentinel: There are at present 150 men on the payroll of the Hidden Treasure mine. Twenty-five of these men are working at the Dam tunnel and four miners are busy retimbering the old Mountain Gate tunnel.

Mining and Scientific Press, V. 72, 2/15/1896, p. 130

Auburn Herald: The Zantgraf made a cleanup Saturday last after a three weeks' run of their mill. It realized \$10,000, or about \$700 a day, besides the sulphurets.

Supt. O. L. Barton of the Herman mine, near Westville, tells the Sentinel that the company is working nineteen men and that the ten-stamp mill is running continually. The present working tunnel is sixty feet above the mill. A tunnel on the mill level is now in 400 feet, and they soon expect to crosscut the ledge. Bullion is being shipped.

Sentinel: Emanuel Polifka of Michigan Bluff has struck a fifteen-foot quartz ledge of \$6 ore, four miles above the big trees and about three miles from Greek Flat.

Mining and Scientific Press, V. 72, 2/22/1896, p. 146

The Anti-Debris Association.

The Executive Committee of the Anti-Debris Association held its monthly meeting in this city yesterday, at which the reports of Manager Phipps and the watchmen employed to keep track of hydraulic mining operations were read.

These reports show that some hydraulic mining is being done on the American and Yuba rivers without permits, and that several dams, in addition to those heretofore reported, were washed out or injured by the storms of January. The Henning's dam in Placer county, the Wolf dam in El Dorado county and the Valentine and Gardner Bros. dams in Shasta county, were entirely ruined.

The attention of the California Debris Commission had been called to these conditions of affairs.

The photographs of dams taken by the association have been distributed as educators on the insufficiency of dams.

The report of the attorney for the association shows the present condition of the suits in court commenced by the association, or in the prosecution of which it is assisting, and also correspondence on matters pending in Congress.

The Legislative Committee, through Mr. Ohleyer of Sutter county, submitted a report of its correspondence and work.—Sacramento Record-Union, 19th.

Mining and Scientific Press, V. 72, 2/29/1896, p. 170

Last week the superintendent's office at the Red Point mine was destroyed by fire. Maps, papers and valuables about the office to the amount of \$4000 were destroyed. Acting Superintendent George Hoffman was out on the pipe line at the time of the fire.

The Colfax Sentinel describes the Eureka Consolidated drift mine, a property that it is proposed to develop on the Forest Hill Divide. Felix Chappellett, of the Mayflower mine is the principal owner in the company. The main tunnel to tap the channel is being driven in a canyon about two and a half miles east of the Red Point, 3,914 feet above sea level, and 500 feet below the level of the main divide. The tunnel is equipped with an air compressor which furnishes the power to drive the drills. Work is prosecuted continually, and the tunnel has reached a distance of 400 feet in the blue slate rock. The claim is one of the largest on the coast, embracing over 3,000 acres of land covering six and a half miles of ancient river beds, containing valuable deposits of gold. Though these old river beds are covered with a lava cap from 400 to 800 feet deep, the existence of the deepest channel has been established by the mining done on both ends of the channel near the lines of the Eureka, and by tunnels that have been run into the gravel at different points on the company's property.

Mining and Scientific Press, V. 72, 3/7/1896, p. 190

Harold Power tells a Colfax newspaper man he intends to push right ahead at the Haskell gravel mine and go clear through the hill, if necessary. At Bath, the Paragon mine has laid off all the men but six. They expect to resume soon with a full force.

The Auburn Herald hears that C. F. Reed has sold his Drummond quartz mine above Forest Hill to Denver men for \$100,000.

Colfax Sentinel: A. B. Eastwood, superintendent of the Hathaway quartz mine at Ophir, has leased the Dardanelles drift mine below Forest Hill, and has men repairing the ditch. At Bath, at the Washington quartz mine, owned by J. B. Sellier, the tunnel will tap the ledge 200 feet from the surface. It is now in 1000 feet. The Sellier Consolidated will be developed. This mine embraces holdings of 1000 acres southwest of the Hidden Treasure. Men are getting out timbers.

Mining and Scientific Press, V. 72, 3/4/1896, p. 210

At Sailor Canyon gravel mine additional working force will be put on as soon as sufficient ground is put in order by crosscuts and gangways, now being run to make room for them. The company sent in 1000 feet of air pipe and a blower last week.

The Schippman Company has its tunnel going and expects to reach the channel in early spring. Preparations are being made to start work in the Bald Mountain mine.

The Herman mine and mill are running full time. A shipment of \$5200 was made for last month's run. The company intends placing an additional ten stamps in its mill this season.

Mining and Scientific Press, V. 72, 3/14/1896, p. 212

Last Tuesday Robert J. Tomas, foreman at the Pioneer mine, above Iowa Hill, Placer Co., fell down a 200-foot shaft and was instantly killed. His skull was fractured, and his neck, arm and one leg were broken. Mr. Tomas was a shareholder in the Mountain Gate and Hidden Treasure mines.

Mining and Scientific Press, V. 72, 3/21/1896, p. 230

A nugget, valued at \$160, was lately discovered at Iowa Hill by John Watts.

Mining and Scientific Press, V. 72, 3/28/1896, p. 250

In the Herman mine the distance from the surface to the tunnel is 280 feet.

The Sentinel says J. K. Carpenter has a contract for running about 2000 feet of the lower tunnel at Pioneer mine beginning April 1.

Gone to Cariboo.—Nearly fifty miners, on route for the Horsefly mine near Cariboo, B. C., passed through Colfax during the present week from Iowa Hill, Sunny South and Damascus. Some of the miners will travel by rail, but the majority of them will ship from San Francisco to Vancouver. From Vancouver they will go to Ashcroft, a distance of 200 miles by rail. The trip from Ashcroft to Horsefly, 175 miles is covered by stage. The party contains some of the best drift and hydraulic miners in California.

Mining and Scientific Press, V. 72, 4/4/1896, p. 270

Sealing and Bryne are negotiating for the purchase of the Emanuel Polifka ledge, near Last Chance. It is expected that the first installment of the purchase—\$5000—will be paid on April 6th.

The Pioneer G. M. Co. is about to add forty stamps to its mill. It is one of the big California gold producers.

Sentinel: At the Herman, mine the mill daily crushes 30 to 38 tons. The March cleanup was \$10,000, The sulphurets are showing well and will justify shipping to San Francisco for reduction. Ten additional stamps will be placed in the mill next month if the weather remains favorable, thus increasing the output 50 per cent without extra expense for power or management, as the present engine and attachments were placed with a view to increase the number of stamps to twenty if desired.

Mining and Scientific Press, V. 72, 4/4/1896, p. 270

The following are present dividend-paying mines in the eastern part of the county: Morning Star and Big Dipper drift mines, Iowa Hill; Pioneer quartz mine, near Damascus; May Flower drift mine, Forest Hill; American Bar quartz mine, near Michigan Bluff; Hidden Treasure drift mine, Sunny South; Herman quartz mine, Westville; Page & Buckman quartz mine, Westville; Golden River mine, Red Point.

A 20-stamp mill at the Pioneer quartz mine, Damascus, produced during February, \$17,512.

Mining and Scientific Press, V. 72, 4/18/1896, p. 322

Sentinel: Supt. Gassaway of the Mayflower intends to make an upraise in the main tunnel, when a larger force of men will be employed.

D. N. Kent, representing the Horseshoe Bar Mining Company, will work their claim near Michigan Bluff extensively this season. A force of men is now engaged in repairing the ditch, which is to furnish power for hydraulic elevators. More than a year ago this company drove a tunnel, which takes the water from the river and conveys it for about one mile.

Eighteen men are employed at the quartz mine at American Bar and the ten stamps are dropping continuously. Alfred Dixon has a force of men engaged at his Center mine, near Deadwood. The Hidden Treasure mine at Sunny South is operated on the most extensive scale of any drift mine in California. Between five and six hundred cars of gravel are mined and washed through the sluices each day. Supt. H. T. Power informed the Sentinel that the company has 200 men on the payroll. Thirty men are engaged in development work on the property. An upraise is being made in the Dam tunnel at a point 6,000 feet from the surface to reach the white gravel. Mr. Power thinks that if prospects hold up to present indications, the company would be able to work a total force of 400 men. Supt. Felix Chappellet Jr. says that the tunnel to tap the channel at the Eureka mine is now in over 700 feet. The company expects to make the upraise into gravel during next September or October. The Eureka Company owns more than six miles of channel and will be able to work from 300 to 350 men when they are ready to breast gravel. This, with the increased operations at Hidden Treasure mine will give employment to more than 500 new miners on the Forest Hill divide.

Mining and Scientific Press, V. 72, 4/25/1896, p. 335

Contrary to supposition, the old Mayflower, one of Placer's great producers, is far from being exhausted. Felix Chappellet says that recent developments from an upraise on the south side of the main tunnel ensures 8,000 feet of new ground for the company.

Mining and Scientific Press, V. 72, 5/16/1896, p. 402

Sentinel: The Mayflower mill is running steadily, with a good prospect of increasing the working force during the coming season.

At Red Point Supt. Hoffman reports 58 men on the payroll. The recent cave in the main tunnel has been repaired and the returns from the gravel they are taking out at present are very encouraging.

At the Eureka mine the main tunnel is now in 850 feet. The tunnel is 6 ½ x7 feet. Supt. Felix Chappellet Jr. says that he expects to reach the 1000-foot mark during the month of May.

Mining and Scientific Press, V. 72, 5/23/1896, p. 422

At the Hogsback country the French company recently organized by W. C. Ralston is about to work about 30,000 acres of ground located by Messrs. Ralston and Grayson in the upper end of Placer county. Mr. Ralston tells the Herald that he believes that the Breece and Wheeler channel runs in that locality, and boring will be the mode of prospecting. Active work will begin this summer.

Mining and Scientific Press, V. 72, 5/30/1896, p. 439

Tun Sunny South, Placer Co.. Miners' Association, a model local organization, has bought a \$100 organ.

Mining and Scientific Press, V. 72, 6/13/1896, p. 479

The Superior Court of Placer county, Cal., sold at public auction on the 8th inst. what is known as the Irish & Byrne placer mine for \$41,000. The mine is situated a mile and a half southeast of the town of Iowa Hill in that county. It lies between the Morning Star mine and what is known as the Big Dipper or Hoorman mine. The workings of these two important drift mines are close enough to the ground sold, to establish a belief that the rich channel worked in both of them, is continuous throughout the Irish & Byrne. The owners of the two mines were the only bidders. Columbus Waterhouse, the owner of the Hoorman mine, was the purchaser. The area of the ground sold is 115 acres, and it is estimated that it contains about 800 linear feet of the channel. The price paid amounts to something over \$50 a linear foot of channel, and is a fair indication that the bidders estimate the probable gold yield at not less than \$300 a linear foot.

Mining and Scientific Press, V. 72, 6/13/1896, p. 487

Sentinel: At the Pioneer mine the company expects to have steam up in the new boiler the first of the week.

Mining and Scientific Press, V. 72, 6/13/1896, p. 494

The Morning Star gravel mine, Placer Co., has declared a \$6 dividend per share—its sixtieth dividend.

Mining and Scientific Press, V. 72, 6/20/1896, p. 503

Seven- fugitive Chinese were convicted in the U. S. District Court last Saturday of violation of the Caminetti act. This is the first proceedings of the kind. No better instance could be cited of the law-abiding character of the California miners than this. The Caminetti law has been in force for three years, yet in all that time throughout the whole hydraulic mining area affected by It, despite the efforts of a small army of paid spies and informers, no infraction of its provisions or violation of its requirements by California miners has been brought before a court. The first and only instance is as cited— a gang of irresponsible Chinamen, who, on their own account, started hydraulic operations in Placer Co., in ignorance or defiance of the law. Upon the facts being reported to the U. S. Debris Commission, the Mongolians were promptly punished, being sentenced to six months in the Alameda County jail.

Mining and Scientific Press, V. 72, 6/20/1896, p. 510

Sentinel: The tunnel at the Eureka mine was in 1023-foot mark June 1st—198 feet during May. The "I Will Try It" Drift Gravel Mining Company will work their property this summer. The mine is at Fall Creek, Nevada county, and the nearest post office is Emigrant Gap. The Zuver Bros., of Auburn, are owners of the mine. Augustus Buchanan will superintend the work this season. They expect to work about fifty men.

Mining and Scientific Press, V. 72, 6/27/1896, p. 526

(Special Correspondence).—At the present time the attention of capital is being given to the mines of this county to a greater extent than ever known before. There is nothing of a boom, but many sales are being made, old mines are being reopened, new ones being discovered, and developing is going on with a confidence in results to come such as has not been known before. All of this is being accomplished with very little surface stir. Mines are sold and important enterprises are inaugurated so quietly that even the attention of the local newspapers is not always attracted. A bare list of the new enterprises is instructive and significant of the growing magnitude of the mining industry.

The Hancock & Watson quartz mine, situated at Bath, idle for nearly a quarter of a century, is being reopened. This mine was the second quartz mine discovered in the county. It is on a large ledge, known to be rich in gold, having yielded over \$50,000 from the early-day workings.

The Devils' Basin drift mine at Deadwood and several adjoining drift properties have been bought by a San Francisco company who will work these properties on an extensive scale. The Devil's Basin mine has been closed for twenty-five years, though of known richness, having yielded half a million dollars in the early-day workings.

The Drummond quartz mine, which has been shut down for three years, is being started up again under a new ownership. This mine yielded about \$100,000 from upper workings but lack of capital has heretofore prevented the mine being opened at greater depth.

The Oro & Mountain View Consolidated drift mine near Iowa Hill is also being developed under changed ownership after being idle for several years.

The Horseshoe Bar Consolidated, a river-bed mine near Michigan Bluff, is another mine that has been closed for several years that is now being reopened with increased facilities for working. A ditch is being constructed which will bring water to the mine under 400 feet head to be utilized by a hydraulic elevator.

The winter's work at the Barton or Herrmann quartz mine on the Deadwood ridge has been so satisfactory in returns that the owners are buying all the adjoining land offered, acquiring with it many promising quartz ledges. They intend building their own saw mill this summer.

The Gray Eagle drift mine near Forest hill is yielding rich gravel and the working force has been doubled. Projected improvements will largely reduce the cost of mining and milling at this mine.

All these enterprises aggregate the employment of many more men than last year and are certain to largely increase the gold yield of this year over any former year. Auburn, June 23, '96.

(Special Correspondence). — One of the claims purchased by the predecessors of the Big Dipper Mining Co. was the Horman placer mine. The Big Dipper mine embraces several original claims, and the name "Horman" has long since given way to that of "Big Dipper." The Big Dipper mine is also sometimes called the Hoorman, Harmon, Harnnair, Hermann and other similar names.

The Big Dipper mine is situated three miles from Iowa Hill, the claim adjoining that of the Morning Star Mining Co. (the claim comprising some 300 acres), and is working by the drifting process

the same cement gravel channel that the latter company is operating upon. The channel, which has been worked for a distance of some 2500 feet and at a width of 150 feet, is tapped by means of a bedrock tunnel. Tunnels and drifts are driven and gravel breasted by means of three-inch machine drills and compressor. The gold is recovered by the sluicing process after being passed through a rock-breaker and 10-stamp mill. The mine is superintended by George D. Blood. The president of the company is Columbus Waterhouse. The main office of the company is located at 16 Beale St., San Francisco, and is in charge of the vice-president, E. W. A. Waterhouse. .Iowa Hill, June 24, '96.

Sentinel: Extensive preparations will be made this summer to work the Dam claim near Sunny South on a large scale. The Hidden Treasure Company has leased the old Dam tunnel and for the past year has had a force of men at work opening up the extension of the Hidden Treasure channel which lies between the Hidden Treasure mine and the Old Mountain Gate mine at Damascus. It promises to be one of the most extensive drift mines on the Forest Hill divide. An order for 140,000 feet of lumber for the construction of necessary buildings has been given and the work will go ahead at once. A splendid road has been graded to the mine and is one of the best grades in the mountains. Harold T. Power, superintendent of the Hidden Treasure Co. has charge of the work and it is needless to say that it will be ably managed.

Wm. Muir informs the Sentinel that preparations are being made to operate two hydraulic elevators at Horse-shoe Bar, below Michigan Bluff. They will be 800-horse power.

The new machinery recently put in place at the Pioneer mine works admirably and the mine continues to show up well. Some of the best dividends in the history of the mine have been declared this spring.

Mining and Scientific Press, V. 73, 7/4/1896, p. 3

For "steady work," probably the Mayflower drift mine, Placer Co., has a record not surpassed by any mine in the State. It has been operated, without the stoppage of a single day's work, for over seven years.

Mining and Scientific Press, V. 73, 7/4/1896, p. 10

The Morning Star mine of Iowa Hill has declared dividend No. 67 of \$7 per share.

Mining and Scientific Press, V. 73, 7/18/1896, p. 54

Sentinel: P. Schultz is building a stamp mill on a mine supposed to be an extension of the Herman mine, on Deadwood divide. The lower tunnel at the Pioneer quartz mine, near Towle, now in 750 feet, will strike the ledge 510 feet below the present working tunnel. Twenty-eight hundred feet of tunnel will be required.

(Special Correspondence). — The Horseshoe Bar Con. M. Co. is building a ditch—capacity of flow 2500 inches—from the north fork of the middle fork of the American river, crossing El Dorado canyon on a bridge, five miles long to the Horseshoe Bar mine. The water will be used under 400 feet head in elevators. A mile of the river channel is kept free of river water by a tunnel run several years since through Horseshoe bend, and the mine is to be worked without the usual winter shut down on account of high water.

At the Gray Eagle mine, Forest Hill, the mining of gravel below the tunnel has been discontinued. A water power hoist and pump are being put in to work the mine through the old incline, through which the first work was done in the channel.

Mining and Scientific Press, V. 73, 8/1/1896, p. 87

The Morning Star Mining Company, Iowa Hill, Placer Co., last Tuesday declared dividend No. 68 of \$5 per share.

Mining and Scientific Press, V. 73, 8/8/1896, p. 116

Heath & Doolittle are developing their Lost Emigrant mine, sixteen miles from Cisco.

Mining and Scientific Press, V. 73, 8/15/1896, p. 140

H. T. Power, president of the Placer Co., Cal., Miners' Association, has been nominated for the legislature by the Republicans of that district.

Mining and Scientific Press, V. 73, 8/22/1896, p. 158

Colfax Sentinel: The Hidden Treasure at Sunny South had one of the best cleanups last month that it has had for years. Nearly 100 men are employed at the mine.

Captain Montgomery, owner of the La Trinidad mine in Sailor canyon will place a mill on the property this season. Fifteen men are now employed.

Some good paying gravel was struck in the Alta mine last week. It is of the same nature as that within the Hidden Treasure.

A strike is reported to have been made in the Westchester tunnel on the Black Hawk drift mine, near Forest Hill, which was originally started in 1857.

A new drift mine is being operated at Codfish Point, three miles below the Wise and Partridge claim, on the south side of the American river.

Preparations are being made to run a 500-foot tunnel from Devil's Canyon into the channel on the Ashland claim, recently purchased by A. Clark from G. S. Sanborn.

E. A. Wiltsee of San Francisco has charge of the development work at the Drummond quartz mine. A contract has been let to run 5200 feet of tunnel to tap the ledge 400 feet below the present workings.

Mining and Scientific Press, V. 73, 8/29/1896, p. 178

Capt. Montgomery, owner of the La Trinidad mine, in Sailor canyon, twelve miles southeast of Cisco, will place a mill on the property this season. Fifteen men are now employed at the mine.

The Mayflower mill is again running steadily.

Mining and Scientific Press, V. 73, 9/5/1896, p. 198

Sentinel: The tunnel at the Eureka Consolidated drift mine above Forest Hill is now in 1480 feet.

The force of men at the Mayflower mine has been increased to 75. The mill is running steadily. They are taking out good gravel at the south end and also in the Orono channel.

Mining and Scientific Press, V. 73, 9/12/1896, p. 222

Colfax Sentinel; At the Mayflower mine last week 3 ½ feet of gravel was struck at a point 125 feet up the incline they are now running. A survey for hydraulicking has been completed. The company expects to impound debris in Black Oak canyon.

Mining and Scientific Press, V. 73, 9/26/1896, p. 262

Colfax Sentinel: A new quartz mill will soon be erected at the La Trinidad mine, in Sailor canyon, sixteen miles southeast of Cisco.

The Nissen quartz mine, near Colfax, on the Forest Hill road, has closed down temporarily owing to the death of one of the parties who have a working bond upon it.

The Eureka tunnel is now in 1650 feet. This leaves only 350 feet remaining to the point where gravel will be reached.

Mining and Scientific Press, V. 73, 10/3/1896, p. 282

Colfax Sentinel: At the Mayflower it is believed that the old upper Paragon lead of gravel has been struck at a point 178 feet on the upraise which the company has been running.

Mining and Scientific Press, V. 73, 10/10/1896, p. 295

A quartz vein that promises well has been discovered in the bedrock of the Sailor gravel mine in Sailor canyon, Placer county.

Mining and Scientific Press, V. 73, 10/10/1896, p. 302

Colfax Sentinel: The Mayflower Company have made an upraise into what they believe to be an extension of the old Paragon lead.

O. J. Spencer of Iowa Hill has sold the Big Gun mine at Michigan Bluff, which includes the Van Eman and Red Hill patents. The parties making the purchase are J. and E. Powell, G. Hill, N. Huff, W. Locey and E. S. Thompson.

A vein of quartz 2 feet in thickness and bearing free gold in considerable quantities has recently been discovered in the Sailor gravel mine at Sailor canyon, The company have commenced an exploring tunnel to develop the ledge. The work of exploring the channel or old river bed is progressing steadily. At present the main gangway is being driven ahead and is in about 1700 feet.

Bids are asked for raising the Liberty Hill dam across Bear river, near Dutch Flat. When the work is commenced the Liberty Hill and Polar Star hydraulic claims will be operated.

Some very good gravel has been taken from the Breece & Wheeler mine at Bath. There are 14 men at work.

Mining and Scientific Press, V. 73, 10/17/1896, p. 322

Colfax Sentinel: The average yield per running foot of all channels on the Forest Hill divide is \$150. This estimate is made by Ross E. Browne and Chas. F. Hoffman, superintendent of the Red Point mine.

The Hidden Treasure Company of Sunny South are making extensive improvements in the Dam claim at Centerville. Near \$90,000 has been expended in development work during the past two years, and this without levying a single assessment. The main tunnel is in over 6000 feet. The numerous drifts and crosscuts leave the gravel in blocks 200x260 feet, ready for breasting.

Much development work is being done at the Glenn and Gray Eagle Consolidated drift mine on Bald mountain, above Secret House. This claim comprises about 400 acres of land.

The Big Channel claim, formerly owned by J. S. Ferrier of Todd's valley, has been sold to Eastern capitalists.

Mining and Scientific Press, V. 73, 10/24/1896, p. 372

Colfax Sentinel: The mill at the Herman mine is running day and night. Twenty-seven men are employed. Work is being done in tunnels No. 1, No. 2 and No. 3. Tunnel No. 4 has been started 400 feet below No. 3 and will be driven in on the ledge 1200 feet.

At the Macedon quartz mine, Black Canyon, a tunnel is being run on the ledge that "will give them 300 feet of backs for stoping. Ore has been taken out recently that shows free gold.

The shaft at the Occidental mine 2 ½ miles east of Iowa Hill, at Grizzly Flat, is now down about 70 feet. They expect to strike gravel and bedrock in about a month. Wm. Cameron is superintendent.

About sixty-five men are engaged on the surface and development work at the Dam claim.

Mining and Scientific Press, V. 73, 11/7/1896, p. 382

The hoisting works at the Gray Eagle mine, near Butcher Ranch, have been destroyed by fire. Work will be continued through the tunnel as heretofore.

Mining and Scientific Press, V. 73, 11/14/1896, p. 405

Charles F. Hoffmann, who has been for many years manager of the Red Point, drift mines in Placer county, owned by French capitalists, has accepted a three years' engagement in Siberia and will leave shortly accompanied by his son Ross Hoffmann. Mr. Hoffmann was prominently mentioned (or the presidency of the California Miners' Association, until Mr. Neff consented to again accept the office.

Mining and Scientific Press, V. 73, 11/14/1896, p. 406

(Special Correspondence).—The new tunnel the Pioneer Gold Mining Co. are now running to cut the present working vein at a depth of 510 feet below the present level, is being driven ahead at a very quick rate. For the thirty one days ending October 31, 1896, this tunnel was advanced 306 feet, or nearly 10 feet every twenty-four hours, and for the week ending November 7th the tunnel has been advanced 7½ feet. This is very fast work. The formation is in hard slate rock, with occasional bodies of very hard quartzite cutting through it. The size of the tunnel is 6½ feet wide, 7 feet high, and with a grade of 6 inches to 100 feet. The tunnel is being run with two 3 ½ -inch drill machines. The holes are drilled to a depth of from 9½ to 10½ feet at each drilling, and it takes twelve holes in the face of the tunnel to break the face. The tunnel is now in 1500 feet and will have to run 1300 feet yet before the back vein is reached.

Mining and Scientific Press, V. 73, 11/21/1896, p. 426

The California Mining Company at Yankee Jims have finished work in their canyon for the season.

Hoffman & McDonald of Forest Hill have leased and are preparing to hydraulic the Gilbert claim, on Georgia bill, under permit from the Debris Commission.

Mining and Scientific Press, V. 73, 11/28/1896, p. 446

Colfax Sentinel: Owing to the death of Mr. Borland, one of the owners, the Sacramento gravel mine on the Forest Hill divide will be sold. The claim comprises 144 acres. The tunnel has been run 1500 feet.

The 20-stamp mill at the Mayflower gravel mine, near Forest Hill, is running steadily.

A new six-ton boiler and furnace has arrived at Colfax for the Pioneer Mining Co.

The company which owns the Emanuel Polifka ledge above Westville has finished hauling in forty-two tons of machinery and supplies. They will try to build a sawmill yet this winter.

The big tunnel of the Eureka drift gravel mine, Forest Hill divide, is in 1740 feet. For the last 350 feet the tunnel is principally in quartz. The company. is cutting across an enormous vein.

Mining and Scientific Press, V. 73, 12/5/1896, p. 466

At the Occidental mine at Grizzly Flat, near Iowa Hill, Supt. W. Cameron has a force of men busy sinking a shaft. Arrangements have been made for placing a 50 H. P. dynamo at the mine. The mine buildings will be lighted by electricity, and telephone connection will be established with Iowa Hill .

Mining and Scientific Press, V. 73, 12/12/1896, p. 486

F. X. Lavalley has bonded the Green mine to E. W. Chapman, who has erected a hoist and has been engaged for some months in cleaning out and retimbering the old shaft, 300 feet deep.

C. C. Handy at Boulder has a force of six men. The 200-foot level, going west, is now in about 500 feet, with a strong ledge of good ore in sight. The 8-stamp mill on this property is kept going.

Five men are at work on the Morning Star mine.

The Bullion mine is being worked under bond by Rood & Ladd. There are two veins. The shaft has been sunk to a depth of 150 feet on the front or hanging wall ledge. At this depth levels have been run east and west on the ledge, showing a strong vein of fair ore.

Mining and Scientific Press, V. 73, 12/19/1896, p. 506

Colfax Sentinel: Development work is in progress at the Bald Mountain gravel mine, twenty miles above Westville. They expect to work six men during the winter.

At the Cedar Creek gravel mine, near Shady Run, Superintendent Rodger will make an upraise into gravel from the lower tunnel about December 25th.

At the Derby mine, at Centerville, an upraise has been made 500 feet in on the main tunnel. Gravel was found and the prospect drift is now about 40 feet ahead of the main tunnel.

The new lower tunnel at the Drummond mine is being crowded rapidly ahead. Power drills are used. Hoffman, McDonald & Henning have a permit and are preparing to mine by the hydraulic process at the Gilbert claim on Georgia hill, Yankee Jims.

The tunnel at the Eureka gravel mine above Centerville is now in 1777 feet.

Mining and Scientific Press, V. 73, 12/26/1896, p. 526

At the Pioneer mine rapid progress is being made at the No. 4 lower tunnel. Two power drills are used, and the tunnel was advanced 317 feet during the month of November. The tunnel is now in over 1800 feet. The new machinery will be ready to run in a few days.

Superintendent E. A. Frenzel has a force of men at work at the Dorer quartz mine. The 10-stamp mill is being repaired, and will be run day and night. The ore in sight is very good.

The Dorer Brothers, the report says, have struck some very rich ore in the Central quartz mine, near the Dorer.

Mining and Scientific Press, V. 74, 1/23/1897, p. 76

Sentinel: A prospect stamp mill has been erected at the Blackhawk gravel mine, near Forest Hill.

Mining and Scientific Press, V. 74, 2/6/1897, p. 114

Argus: The California Debris Commission has received an application from G. D. Duncan & Co. to mine by the hydraulic process in the Pebble Bottom mine, near Yankee Jims. Johnson, Graber &, Dyer are putting up a Huntington mill on the old Gayetty ledge, on the Bear river slope.

Herald: At the Red Point sixty men are employed. The old channel is being followed and they are in over 10,000 feet, the prospects continuing good. This mine is operated by a French company whose interests are looked after by J. A. Ferguson.

The Morning Star mine at Iowa Hill continues to be one of the most steady paying properties in that section. A dividend of \$6 per share was recently declared.

The Big Dipper mine near Iowa Hill is in active operation and is a good producer. The mining operations in the vicinity of Michigan Bluff are at somewhat of a standstill owing to the lack of water, but after the first heavy rain work will be vigorously prosecuted.

The old Evening Star mine on the James Heenan ranch, on Rock creek, has been opened up by a San Francisco company. About fifteen men have been engaged the past two weeks in cleaning out the old shaft, and when the drifts are reached as many more men will be employed. The Evening Star is a good property, and a good deal of money was taken out of it in early days.

Since the Dam mine was purchased by the Hidden Treasure's Company, Centerville, where it is located, has become an important point, and when active operations begin in the spring it will be one of the liveliest camps in the mountains, owing to the large number employed about the mine.

The Hidden Treasure at Sunny South continues a steady producer, although only a comparatively small force is now employed.

Work at the Mountain Gate mine is being carried on with speed, the tunnel now being opened a distance of 5000 feet, and they are crosscutting for solid gravel. This property is owned by the Hidden Treasure Company.

About sixty men are employed at the Pioneer mine under the management of D. J. Sullivan. A shaft is being sunk from the 500 to the 1000- foot level, and the mill is kept running steadily night and day. Tunnel No. 4 is now in 2200 feet, and they will have to go in 500 feet more to reach the vein. Power drills are kept in constant operation, and 10 ½ feet a day is made. The company recently purchased four other claims adjoining their own property and ore is being taken out and milled at the Pioneer, and thus far with good results. This mine is owned by a Boston company.

Mining and Scientific Press, V. 74, 3/6/1897, p. 194

At the Glen Consolidated gravel mine at Duncan canyon, on the Forest Hill divide, they have developed a well-defined channel. The gravel is coarse and heavy and runs from \$3 to \$10 a car, making an average of over \$5. The company owns 550 acres, covering 13,000 feet of the channel. They have a breast about 80 feet wide, but the channel is over 100 feet wide. The gravel is blue and is soft and free. Very little powder is used.

At the Polifka the ledge is about 8 feet wide. It will be opened on a larger scale in the spring.

The Hidden Treasure Company have everything in shape now at Centerville for extensive operations. A larger force has been put to work. They are preparing to place an electric- power plant early next spring in the east branch of El Dorado canyon, near the mouth of the Hidden Treasure tunnel. They will convey 40 inches of water which flows from the tunnel to a point above the site selected for the works. The survey shows that 864 feet of pressure can be obtained. This will give them 75 H. P. The

current will be transmitted to the Dam claim, a distance of three miles, and will be used to illuminate the mine and to furnish power for operating the blower, the forges and running the cars.

At the Red Point gravel mine the main working tunnel is now in nearly 10,000 feet. The gravel is yielding well and sixty men are employed.

Mining and Scientific Press, V. 74, 3/20/1897, p. 238

The old Mountain Gate mine is being slowly opened up. Five men are engaged in retimbering the old gangways.

About a dozen men have been laid off at the Pioneer mine.

Mining and Scientific Press, V. 74, 3/27/1897, p. 262

Sentinel: The big tunnel at the Eureka Consolidated drift gravel mine, above Forest Hill, was in a distance of 1933 feet on the date of March 13. The rock is very soft, and gives evidence that the channel must be near at hand. An upraise will soon be made. The company owns 6^{^^} miles of established channel on the divide that has so far produced over \$30, 000,000.

Mining and Scientific Press, V. 74, 4/3/1897, p. 286

The French Hill quartz mine in Spanish Dry Diggings district, near Butcher ranch, has been sold to J. H. Galey of Pittsburgh Pa., for \$40,000. The mine was the property of State Printer A. J. Johnston, and the sale was negotiated by Col. W. R. Wallace of Auburn. Mr. Galey is a large stockholder in the Standard Oil Company. A 10-stamp mill is on the ground and a concentrator has arrived at Auburn. The ledge is about 40 feet in width and prospects well in free gold. The sulphurets are rich.

At a depth of 260 feet in the Occidental mine at Grizzly Plat gravel has been encountered. Supt. Wm. Cameron expects to reach bedrock by sinking the shaft 60 feet farther. The Occidental adjoins the Morning Star mine.

At the quartz mine on the old Brokaw place, east of Auburn, purchased from C. F. Reed by James E. and John T. Walsh, a perpendicular shaft is being sunk. Some weeks ago these gentlemen took nearly \$1000 from a rich stringer.

One-half interest in the Bell Union mine has been sold for 14000 to P. A. Hart. The mine is owned principally by H. M. Bayne and is situated on the American river, near Auburn. The ledge is 4 feet thick and has been cut in many different places.

At Westville the Herman mine is working twenty-five men and is paying well, if not better than ever. Supt. O. L. Barton says as soon as the road can be opened the company will put in a compressor to run the new tunnel to tap the main ledge 400 feet lower. Everything looks favorable for putting ten more stamps in the mill this coming summer.

The Avalon gravel mine at New York canyon, east of Westville, is working seven men. Supt. Worden expects soon to strike through into gravel.

Supt. B. Denton of the Sailor Canyon gravel mine says that the mine has been bonded to a German syndicate in San Francisco for a large sum.

Italian Bar mining district bids fair to be a prosperous camp in the near future, as some eight or ten locations have been made in quartz this season, and all seem to show good prospects and can be opened with very little capital.

Hobsou, Ward & Co. have closed down their mine until spring, when they will reopen on a larger scale.

There is beyond a doubt going to be a boom among the mines in this vicinity this summer, especially among quartz mines, as they seem to be more numerous than gravel.

Mining and Scientific Press, V. 74, 4/10/1897, p. 306

The Central gravel mine, at Deadwood, recently purchased by J. O. Whitney, has six men engaged on development work. A larger force of men will be put on this spring.

Mining and Scientific Press, V. 74, 4/17/1897, p. 326

Sentinel: Supt. J. A. Shields of the Glen Consolidated gravel mine reports that the mine continues to pay well. Six men are now at work and the force will be increased this spring.

The Hidden Treasure Gravel Mining Company have ceased operations at the tunnel at Sunny South and will devote their entire attention to their works at the Dam tunnel at Centerville. The Hidden Treasure Company now have seventy-five miners at work breasting gravel at Centerville.

D. Harmon, formerly superintendent of the Mayflower mine, is now in charge of the California quartz mine near Graniteville, owned by the Shasta Mining Company. A bedrock, 2000-foot tunnel is running to tap the ledge below the old works. The tunnel is now in 1675 feet, 163 feet having been made during March. The vein is on the contact between slate and syenite, and workings near the surface developed a pay chute of nearly 1000 feet.

Argus: The Bullion mine, near Ophir, which has produced some excellent ore, but which has been idle for some time past, has been bonded and is now being worked by H. E. Ladd and J. C. Rude.

The Eclipse mine was started up on Wednesday last under the management and superintendency of Ben Hawkins. At present, while drifting is going on, only five stamps will be run, but it is expected they will start the other five stamps soon.

Mining and Scientific Press, V. 74, 4/24/1897, p. 346

Bedrock has been reached at the Occidental mine, near Iowa Hill, at a depth in the shaft of 280 feet. The company is now running a stope and have reached a point about 80 feet from the shaft.

Arima: The tunnel at the Dardanelles mine, the scene of the late accident, is being reopened.

Herald: Operations have begun at the Gray Eagle mine, and quite a force of men will be put on. When the mine is well opened up the force will be increased. It is said that no Chinamen will be employed.

Mining and Scientific Press, V. 74, 5/1/1897, p. 370

The May Flower Mining Company at Forest Hill have commenced to build a flume to convey the water which they will use for hydraulicking next winter. At their drift mine the company is engaged running a bedrock tunnel to strike the channel in the Orono tunnel, 2500 feet east of the Mav Flower channel.

The big tunnel of the Eureka Consolidated Drift Mining Company, above Forest Hill, is now in 2010 feet. The rock at present is very soft and the outlook is very encouraging.

At the Retta quartz mine in the Westville district a shaft will be sunk on the ledge this season.

Sprague & Neal will open the old Blake quartz mine, near Succor Flat, this spring. They will run a tunnel in on the ledge.

Mining and Scientific Press, V. 74, 5/8/1897, p. 390

A corporation has been formed of Placer county people to reopen the old Dardanelles mine, which has in its long history produced over \$3,500,000 as a drift and hydraulic mine.

Mining and Scientific Press, V. 74, 5/15/1897, p. 414

Since the snow has melted at Westville work has been resumed at the Herman mine with a force of twenty-eight men. The company are preparing to use compressed air conveyed from a power plant four miles distant.

The Hidden Treasure Mining Company has purchased ninety tons of 30-pound steel rails. The rails are the same size as the ones used by the Nevada County Narrow Gauge Railroad. The rails will lay 2% miles of track and will be used in the main' tunnels of the company's mines. The Glen Gravel Mining Company has purchased 3000 feet of rails to be shipped at the same time.

Mining and Scientific Press, V. 74, 5/22/1897, p. 434

Sentinel: The report of the Pioneer Mining Company of Boston for the eighteen months ending March 31st, shows:

RECEIPTS.	
Production gold bullion	\$77,368
18,500 shares treasury stock sold	95,500
Premium on gold coin	88
Interest account	1,065
Total receipts , . .	\$174,021
DISBURSEMENTS.	
Pay roll and supplies	\$104,743
Machinery, etc	13,150
Other expenses	9,280
Cash paid account new mines	10,000
Total disbursements	\$137,173
Cash on hand	\$36,848

Mining and Scientific Press, V. 74, 6/12/1897, p. 498

Sentinel: At the Horse Shoe Bar Consolidated mine, four miles below Michigan Bluff, on the middle fork of the American river, the hydraulic elevators have been started and sinking to bedrock commenced. They are run under a head of 400 feet pressure. The suction pipes, of which there are two to each elevator, draws up sand and gravel to the size of 7 inches, as well as the water which is used to sluice the material to the pumps. A tunnel 35 feet wide and 13 feet high has been cut through solid slate rock for a distance of 300 feet, which drains the loop, or horseshoe, for over a mile of channel. A flume and ditch, carrying 1300 inches of water, which required half a million feet of lumber, was run over some of the most precipitous parts of the country and gained them a free water right.

At Sunny South the Hidden Treasure Company have ceased breasting gravel and about twenty men are working on tribute. About seventy- five men are employed by the Hidden Treasure Company at their works at Centerville.

The Glen Consolidated Company have six men at work at the mine above Forest Hill.

Mining and Scientific Press, V. 74, 6/19/1897, p. 518

Sentinel: At La Trinidad mine, in Sailor canyon, the average width of the ore body is 30 feet, and the developments consist of five tunnels aggregating in length 1500 feet, from which crosscuts and prospecting drifts have been run to open up a body of ore ready for stoping, which justifies the company to erect a mill and reduction works. The mill will be run by water power, conducted by a pipe line of 4000 feet in length. The grading for the mill site will be finished this week. Material for building the mill is on the ground.

The Jupiter Consolidated and Winchester Gravel Mining Company, near Iowa Hill, are preparing to commence active development work on their property. The holdings of this company comprise about two miles of channel.

At the Mayflower mine the company is prospecting a new channel in the McCall pit and preparing to hydraulic next fall.

The big Eureka tunnel is now in 3090 feet. The rock is wet. An upraise will be commenced immediately.

Mining and Scientific Press, V. 74, 6/26/1897, p. 546

Sentinel : At the Pioneer a short time ago a rich pay chute was struck on the Lynn vein in the lower tunnel known as No. 4. The chute is now over 100 feet long. The vein has been from two to six feet in width, and still shows a width of four feet in face. No. 4 tunnel is 510 feet below tunnel No. 3. The dip of the ledge will give the company considerably more than 500 feet of backs to stope. The company owns fourteen mining claims, covering an area of 300 acres. Pioneer quartz mine has for years been a heavy producer.

Nine men are engaged working on leases at the Paragon mine at Bath. The company has 11 men at work.

The Dorer mill in Humbug Canyon, seven miles from Towle, is steadily running on custom ore.

Mining and Scientific Press, V. 75, 7/10/1897, p. 27

The main tunnel of the Red Point drift gravel mine, near Damascus, Placer county, Cal., is now in over two miles on the channel.

Mining and Scientific Press, V. 75, 7/10/1897, p. 30

On the Morning Star mine at Iowa Hill the adit tunnel is 4,300 feet in length. The gravel is worked from 7 to 14 feet in height, the channel averaging about 250 feet in width. The gravel is slightly cemented, which necessitates crushing. The mill has ten stamps, which crush about 135 tons per twenty-four hours. The development or dead work done.

Mining and Scientific Press, V. 75, 7/10/1897, p. 43

Abram Breece, one of the owners of the Paragon drift gravel mine at Bath, Placer county, Cal., which he and his partner, Judson Wheeler, had worked nearly a quarter of a century, died in San Francisco last Sunday.

Mining and Scientific Press, V. 75, 7/17/1897, p. 50

Record Union : Near Sunny South on the Eureka, Felix Chappellet and his company have run a tunnel 3,100 feet and are now raising to strike the channel.

At the Centerville mine the gravel has been worked over 500 feet wide, and rim rock has not yet been encountered. Thus far the material is hauled out of the tunnel to the mill by horses, by the company is preparing to put in an electric plant to transport the gravel and light the town and mine.

The Sunny South, owned by the Hidden Treasure Company, has been pretty well worked out, though there are fifteen men working who have the mine under lease.

The Drummond mine, owned by C. F. Reed of Auburn, has been proven to have rich rock, and, to more systematically open it, a tunnel was started, and has been extended 6(10 feet. It is expected to tap the ledge in 60 feet farther. Mr. Reed has bonded the mine to Mr. Wiltsee, who will open the property on an extensive scale if the tunnel developments are satisfactory.

The Mayflower mine has a tunnel two miles long and a 20-stamp mill, which crushes 300 tons of gravel per day. It has paid regular dividends for years, and has levied no assessments in all that time. There are about seventy-five men employed there now. At present an upraise is being made in anticipation of finding an upper and unworked channel.

The Pioneer quartz mine, owned by a Boston company, has been worked by them for two years. The croppings of the ledge run down a steep mountain side and the ledge has been worked by a series of tunnels, one of which penetrates the hill 3000 feet. The ledge averages from 3 to 13 feet in width. There is a 30-stamp mill on the property. The company employs from thirty to seventy-five men. Jerry Sullivan is superintendent. Quite a rich strike has been recently reported in the mine.

The Golden River or Red Point drift mine at Pioneer was started by a French company with C. F. Hoffman as superintendent, about 189.5. A tunnel was run 1800 feet before the channel was encountered. The same tunnel has been extended on the channel until it is now two miles long. The channel varies from 50 to 400 feet in width, averaging about 150 feet. The gravel is worked from 3 to 3 feet high. When Mr. Hoffman accepted a position to go to Siberia, J. A. Ferguson was appointed superintendent. There are sixty men employed at the mine.

The Cash Rock Company are making extensive preparations to work the gravel in the river bed below Todd's valley. Electrical machinery will be used. A large force of men are employed building ditches and flumes and erecting mine buildings.

Mining and Scientific Press, V. 75, 7/24/1897, p. 71

The California Debris Commission has received new applications to mine by the hydraulic process from the Mayflower Gravel Mining Company, in the Mayflower mine, near Forest Hill, Placer county, Cal. ; from Dr. J. P. Welch, in the Pactolian mine, near Genesee, Plumas county, Cal. ; from the Gold Bug Mining Company, in its mine near Georgetown, El Dorado county, Cal., and from E. D. Bowman et al., in the Eclipse and Boston claims, near Onion valley, Plumas county, Cal.

Mining and Scientific Press, V. 75, 7/31/1897, p. 102

The Pioneer mine produced \$14,156.08 in June; expenses \$5,100, net earnings \$9,056; 650 tons were crushed, average yield per ton \$21.77; nine tons of sulphurets were saved, not included, which will mill from \$85 to \$90 per ton gross. The company has lately purchased 160 acres of timber land, paying \$3.25 per acre.

Mining and Scientific Press, V. 75, 8/7/1897, p. 129

H. C. Beur of the General Electric Co. is superintending the building of the \$15,000 electric plant at the Hidden Treasure mine, Sunny South, Placer Co., Cal.

Mining and Scientific Press, V. 75, 8/7/1897, p. 126

The Hermit Con. M. Co. are working their mine near Michigan Bluff. Their main tunnel is 5x7 feet and is now in 1000 feet. At the Paragon mine, at Bath, twenty-six men are now employed at the mine. The number of men working for the mine is sixteen. W. H. Grennell is superintendent. Ten men are working leased ground. The mill is running twelve hours per day.

At the Hidden Treasure mine, at Sunny South, the company is working at the Dam tunnel, the main tunnel being in over 7000 feet. Fifteen men are engaged at the new electric plant works, built in El Dorado canyon, 12,000 feet from the mouth of the Dam tunnel. Water for power will be taken from the Hidden Treasure tunnel at Sunny South, conveyed in a ditch one-half mile, where a pipe line, 1860 feet in length with 850 feet pressure, will run the 200 H. P. Pelton wheel.

Two dynamos will be used to generate a current of 160 H. P. Two wires are used for the circuit to the mouth of the Dam tunnel, where a trolley line will propel trains of cars in and out of the main tunnel. The return current of electricity will be carried on the rails. A " rail-bond " makes this possible. Besides running the trains, power will be furnished for operating the blowers and a saw with which to frame timbers. There will be a surplus of power to run the pumps when the company sinks and commences to breast gravel on their lower blue channel. The new plant will compel additions to the boarding house and lodging house, as the company intend to employ a much larger force. The Hidden Treasure Company has over two miles of channel to work, and when the electric plant is in operation the mine will be operated upon an extensive scale.

At the Pioneer mine, eight miles south of Towle, the property of a Boston company, who purchased the mine from Fair & Davis of San Francisco, the new company will work the mine upon a large scale. After securing the mine, they commenced the work of driving tunnel No. 4 to strike the ledge and pay chute at the 1000-foot level, 500 feet below the former lowest working tunnel. Last May the pay chute was encountered in Lynn vein in the new No, 4 tunnel. The length of the pay chute is 160 feet. An average of \$31.75 per ton was secured from all quartz crushed in June. Compressed air is conveyed by a pipe line of 1400 feet to the mouth of tunnel No. 4, and thence about 3000 feet into the mine, where stoping is in progress. Power drills are used to mine the quartz. The company has fifty three men on the pay-roll; J. J. Sullivan is superintendent.

Tidings: Mr. Wiltse, who formerly superintended mines at Grass Valley, went to South Africa a few years ago and was fortunate enough to make a snug fortune. He returned to California about a year ago and has made several purchases of mines, mostly in Placer county. He bought a half interest in the Gold Blossom mine, at Ophir, from C. F. Reed, and the company are making extensive improvements there and have a paying mine. He also bonded the Drummond mine, near Forest Hill, owned by Mr. Reed. Recently he made a sale of the Gold Run, Limited, to a London syndicate, and the company are making preparations to work the property, which consists of a channel four miles in length, by both drifting and hydraulic process. Mr. Wiltse's operations have added a new impetus to mining in that county.

Mining and Scientific Press, V. 75, 8/7/1897, p. 129

Morning star Mining Co., Placer Co., Cal., dividend No. 80, \$5 per share; payable immediately.

Mining and Scientific Press, V. 75, 8/14/1897, p. 146

In last week's issue the Mining and Scientific Press announced that the Morning Star Mining Company's 80th dividend was an \$5 per share one. Three inquiries have been received asking if that

wasn't a mistake, if \$5 wasn't meant. Five dollars per share is the usual monthly dividend of this company, but this time it was as stated, \$8. Mr. J. H. Neff, the president of the California State Miners' Association, is the general manager of the company, which employs sixty men, and has a mile of paying channel at Iowa Hill, opened by a tunnel three-quarters of a mile in length. The gravel is run through a 10-stamp mill, about 750 cars being daily worked.

{Special Correspondence).—The Big Dipper Mining Company has recently developed an extensive body of gravel at their property near Iowa Hill. No. 16 upraise, 3000 feet from the mouth of the tunnel, discovered a large body of gravel extending in a northerly direction as well as southerly and back along the line of the old works, but considerably to the east thereof. There is reason to believe that this body of gravel extends some 1600 feet to the south, paralleling the old works and separated therefrom by a high ridge of bedrock, this body of gravel being, however, on a higher level than that extracted from the old workings. A crosscut {and other drifts) from No. 16 upraise shows the gravel deposit to be 350 feet in width as far as developed, the east side not having been reached yet, however. The main bedrock tunnel has been driven 1000 feet north from No. 16 upraise. From this piece of tunnel several more upraises will be made shortly, and it is estimated that five months' further work will open up ground which will, with the present milling capacity, require six years to extract. Two years work is at present in sight. It is necessary to extract 950 cars of gravel (of 2250 lbs. each) per week in order to keep the 10-stamp mill running continuously. This gravel, together with 150 cars of waste per week, is trammed by one man and one horse on each shift of 10 hours. The machinery plant consists of a 10-stamp mill (1050-lb. stamps), assisted by a rock crusher (the gravel being sufficiently cemented to require milling) and a 4-drill air compressor. The main tunnel has recently been driven by two 3-inch Ingersoll drill machines, working on eight-hour shifts, at the rate of 250 feet per month. The power plant consists of ditch, pipe line and Pelton waterwheels, together with a boiler for use in the dry season. About eighty men are at present employed by the company. The Big Dipper mine is located on the same ancient channel that was so successfully worked at Iowa Hill and Wisconsin Hill, and from which the Morning Star Mining Company is now extracting gravel. The piece of channel between the old Wisconsin Hill diggings and the Morning Star mine is now being worked through a bedrock drain tunnel by the Big Dipper Mining Company. The Big Dipper mine was ably superintended from January 1, 1865, to July 1, 1897, by George D. Blood, a graduate from the mining department of the University of California, who resigned to enter new lines in the mining industry, and is now in charge of the secretary and general manager of the company, Seymour Waterhouse, assisted by the foreman. P. H. Schulze. Iowa Hill, Aug. 13th. Sentinel: At the Occidental mine twelve men are employed. Wm. Cameron is superintendent. Depth of shaft, 341 feet. The Eureka Drift Mining Company have reached the 68-foot mark in the upraise. The ground is very wet and they hope to strike gravel soon. This property is located above Forest Hill on the main divide.

Mining and Scientific Press, V. 75, 8/21/1897, p. 170

Sentinel: Two carloads of machinery have arrived at Colfax for the Hidden Treasure Mining Company above Forest Hill. One car contained the dynamo for the \$15,000 electric plant and the necessary wire, about 24,000 feet for the circuit. A second car was loaded with 11-inch pipe for the new blower.

Mining and Scientific Press, V. 75, 8/28/1897, p. 198

The Pioneer quartz mine, near Iowa Hill, produced \$13,241 last month at an expense of \$6582. Sentinel: The new 10-stamp quartz mill at La Trinidad mine, in Sailor canyon, sixteen

miles southeast of Cisco, is in operation.

The Tadpole placer mine, near Secret House, is working six men running a bedrock cut.

J. B. Knapp, secretary of the Blue Canyon Mining and Development Company, is putting in new machinery to run the power drills. The air compressor will have a 10 ½ x14-inch cylinder.

Mining and Scientific Press, V. 75, 9/4/1897, p. 218

R. L. Dunn has bonded the property of the Dardanelles Consolidated Gravel Mining Company near Forest Hill.

Mining and Scientific Press, V. 75, 9/4/1897, p. 225

Dividend: Morning Star, Placer Co., Cal., No. 81, \$5 per share: payable immediately.

Mining and Scientific Press, V. 75, 9/11/1897, p. 246

The Eclipse clean-up last week gave as result 155 ounces of gold valued at \$13. 60 per ounce, after a run of twenty-two days with ten stamps. B. Hawkins is superintendent.

The Curtin Mine and Milling Company has incorporated at Newcastle: J. Curtin, E. H. Baxter, A. McDonald, M. Murphy, G. W. Fletcher.

At the Mayflower gravel mine, 1 ½ miles north of Forest Hill, at an elevation of 3700 feet, Wm. Rule superintendent, a 20-stamp water-power mill capable of crushing nearly 300 tons of rock daily, is running. Seventy men are at present employed, and eighty cars of a ton each are crushed per day. They are breasting in the tunnel 8000 feet in. Four rubbers, one in front of each table, carry the gold to the undercurrent. The tailings are dumped into the company's canyon. Six hundred feet of flume convey the water.

The Breece and Wheeler or Paragon mine at Bath has been leased by Grenell & Akers. Thirty men are employed breasting an old channel about one-half mile in. A 10-stamp steam-power mill is kept busy twelve hours a day; the amount crushed per day is about forty tons.

The gravel mine at Red Point, a mile and a half from Damascus, owned by the River Mining Company of Paris, France, is superintended by J. A. Ferguson. Sixty-five men are employed in the Red Point Channel tunnel, 2 ½ miles long. The channel averages 150 feet in width. About 3000 cars, of a ton's capacity each are taken out per month. The cars are run by horses, three for each shift.

A director of the Pioneer says that the mine is yielding monthly net earnings at the rate of 10% per annum on the par value beside paying all the development and construction expenses, that the August yield will be at least \$14,000, and that the ore is averaging \$20 a ton.

Mining and Scientific Press, V. 75, 9/18/1897, p. 270

In the Eureka Con. drift gravel mine at the head of the upraise the slate is becoming softer and very wet. Mr. Chappellet is so

sanguine of reaching the gold-bearing gravel soon that he has let the contract for building the washing dump near the mouth of the tunnel and will be ready to go to washing the gravel as soon as the channel is struck.

Following is a statement of the Pioneer Mining Company for June, July and August:

August, July. June.

Tons rock crushed.	765	807	650
Value of gold bars.	\$14,543	\$13,241	\$14 156
Pay roll	4,367	3,614	
Bills	1,723	3,968	
Total expenses....	6,090	6,582	5,100
Net earnings	8,453	6,659	9,056
Average value rock	19.01	17.65	21.77

The mine now employs fifty-three men.

Mining and Scientific Press, V. 75, 9/25/1897, p. 294

The Glen mine has incorporated. The holdings consist of 540 acres. The main tunnel at the mine is in 700 feet.

At the Goldie May quartz mine, above Forest Hill, the shaft is down 45 feet on the ledge. The width of the ledge is about three feet. Tests show a value of \$30 per ton.

Mining and Scientific Press, V. 75, 10/2/1897, p. 311

In case J. H. Neff, the present honored president of the California State Miners' Association, should decline to further serve, it is believed that H. T. Power of Sunny South, Placer Co., would be good timber for that position. The name of Mr. Edward Coleman of San Francisco is also prominently mentioned.

Mining and Scientific Press, V. 75, 10/2/1897, p. 318

The Morning Star mine at Iowa Hill has just paid its 82d dividend, the latest of \$7 per share, and is now opened up so that there is said to be four years work ahead on pay gravel.

Mining and Scientific Press, V. 75, 10/9/1897, p. 342

The superintendent of the Pioneer reports that the tunnel going north on the vein in the south tunnel was advanced 8 feet during the three days ending Sept. 18, making this tunnel 32 feet north of the cross-drift in the south tunnel. The vein in the face of the tunnel is 4 feet wide, and the ore is very good. The ore in the slopes holds out with no change in character.

Eastern directors say of Pioneer: "It is considered assured that the stockholders will receive a dividend soon. Earnings are declared very satisfactory, with better earnings in prospect, and the cash resources of the company are over \$100,000."

The upraise at the big Eureka Consolidated gravel mine, above Forest Hill, has reached the 180-foot mark. The rock is very soft and some clay has been encountered. Prospects are good for breaking through very soon.

Mining and Scientific Press, V. 75, 10/18/1897, p. 366

Sentinel: The electrical machinery for the Hidden Treasure mine is in successful operation. The blower which forces the air into the mine has been started. The electric locomotive will soon be in active operation. The Truro gravel mine has been shut down for the present.

Argus: , on the Baker divide twelve miles from Forest Hill, intend to sink a shaft 200 feet in the hope of reaching the main gravel channel, and if they succeed big pay is practically assured them. The Hidden Treasure Mining Company expect to have the electric plant at the Dam claim at Centerville in full

operation in two weeks. The La Trinidad mine in Sailor canyon, which is worked by members of the Salvation Army, is rapidly becoming a good producer. The Red Point mine, J. A. Ferguson superintendent, is running a big force of men, and it is said that very rich gravel is now being extracted. The Valley View mine, near Lincoln, is about to resume operations. T. G. Durning, formerly of the Gray Eagle, is superintendent. The Baccaratt mine, about two miles from Lincoln, will soon be running in full blast, the company now in charge of it having made all the improvements necessary to push development work.

Mining and Scientific Press, V. 75, 10/23/1897, p. 390

Following is the September statement of the Pioneer Mining Co. :

Gross receipts	\$11,858
Pay-roll	4,441
Bills	<u>1,271</u>
Total expenses.	15,713
Net	\$ 6,146

This \$11,858 was from 610 tons of ore, being an average of \$19.44 a ton. In August 765 tons of ore were crushed and the yield was \$19.01 a ton. The smaller quantity of ore milled in September was due to the unusual shortness of the water supply, and not to any lack of ore of high grade. The superintendent says: "It would be no trouble to keep the mill running to its full capacity, if we had the usual supply of water." He expects soon to have sufficient water to run the mill to its full capacity of 1500 tons per month.

Three of the directors, Messrs. Cutler, Grose and Bickford, were at the mine last week, and expect to make arrangements for additional water power sufficient to run the mill to its full capacity.

The new pay chute on the 1000-foot level was opened on September 30th a length of 51 feet. The superintendent says: "The vein is now 5½ feet wide and the ore coming from it is very good."

Colfax Sentinel: The Drummond Quartz mine, eight miles west of Forest Hill, has a record of having produced over \$110,000 from a rich pay chute of ore. E. A. Wiltsee, representing English capital, recently purchased this mine from C. F. Reed, of Auburn. The Company is developing the property under the direction of Supt. C. L. Lang. A Pelton wheel with water under a pressure of 835 feet is used to run a fifty-five horse power compressor used in working the power drills. The new lower tunnel, which has passed the 1000 foot mark, will tap the ledge 750 feet below the croppings, and 400 feet below the lowest point reached in the old works. Even with a very low head of water, Supt. Lang has been able to make 50 feet per week in hard formation. The ledge will be 200 feet farther, when an upraise will be made. A tramway from the lower tunnel to the five-stamp mill is building. It is hoped to erect a twenty-stamp mill near the mouth of the tunnel. Thirty men are employed on the pay roll.

During the week the Eureka upraise reached 245 feet.

At the Pioneer Supt. Sullivan will place location notices for water rights on the American river; to make a survey for a dam, and for a tunnel to strike the vein at the 1500-foot level. Work will be commenced immediately toward the erection of twenty more stamps. In the spring another compressor will be added, and those now in use will be moved to the new location near the river. Then the mill, as well as the drills, will be run by air.

Mining and Scientific Press, V. 75, 11/6/1897, p. 484

The Pioneer directors make the following statement in relation to the vein in No. 4 tunnel: "At the time we left it was 370 feet in length, averaging 5 ½ feet wide, and yielding from 810 to \$40 per ton. In the opinion of the superintendent there was every indication of the pay chute extending a considerable distance farther north. The vein is a strong and well-defined fissure, and is now well opened and in condition for stoping, so that all the ore which is necessary for running the mill to its full capacity can easily be obtained (40 or 50 tons daily) as soon as the rainy season sets in, so that there will be plenty of water to run the mill."

The Pioneer Gold Mining Company has ordered a survey for a new tunnel on the 1500-foot level to strike the vein at the No. 4 tunnel at the 1000-foot level. The foundation for 20 additional stamps has also been ordered, and the directors recommend the building of a chlorination plant to treat its own sulphurets. In the spring another compressor will be added, and those now in use will be moved to the new location near the river. Then the mill, as well as the drills, will be, run by air.

A Forest Hill report of the 2nd says workmen employed in the long tunnel of the Eureka gravel mine have broken through the rim rock and came upon the bed of gravel for which the company has been tunneling for some time. "The workmen made their discovery at 3 o'clock this morning and to all appearances have struck rich gravel." Felix Chappellet of Oakland, Cal., is at the head of the enterprise, and in spite of the opinions of many prominent mining men that there were no gravel deposits where the Eureka Company was working, Mr. Chappellet continued his operations and staked his money and professional reputation that his judgment was good. The country is a very hard one in which to prospect, it being covered with deep lava deposits. The Eureka people have always had faith in their investment and own 4000 acres of land along what they believe to be the channel. They have in this manner secured seven miles of the channel, and the amount of gold contained ought to be considerable.

Mining and Scientific Press, V. 75, 11/27/1897, p. 506

The Pioneer mine earned \$9337 gross for October, and \$3058 net. The amount of rock crushed was 508 tons, and the average yield was \$18.38 per ton. The lack of water hampered the working of the mill to its full extent, but advices from the mine received recently state that there are four inches of snow on the ground. The October output compares with previous months thus:

	Oct.	Sept.	Aug.
Tons rock crushed	508	610	705
Val, gold bars	\$9,337	\$11,858	\$14,543
Payroll	4,636	4,441	4,367
Bills	<u>1,642</u>	<u>1,271</u>	<u>1,733</u>
Total ex	\$6,278	\$5,712	\$6,090
Net earnings	3,058	6,146	8,453
Av. value rock	18.38	19.44	19.01
Men employed	57	56	53

Sentinel: The Bear River Hydraulic Company has turned in 200 inches of water and started their hydraulic elevator in Bear river, near Colfax. The plant is in successful operation.

Mining and Scientific Press, V. 75, 12/4/1897, p. 526

F. Chappellet of the Eureka estimates the distance of the main tunnel to be driven before making the upraise to tap the channel to be 600 feet.

A French company has begun development of the Maus quartz mine, east of Forest Hill. They will sink a two-compartment shaft 200 feet, from which they will crosscut the ledge. F. Rouraage is superintendent.

Mining and Scientific Press, V. 75, 12/11/1897, p. 554

The Pioneer has made a survey for a new tunnel on the 1500-foot level. The foundation for the twenty additional stamps has been ordered, and it is expected a chlorination plant will be erected.

Mining and Scientific Press, V. 75, 12/18/1897, p. 574

The Herman, on the upper Forest Hill divide, has been in successful operation for two years.

Sentinel: The French company owning the Red Point gravel mine have sixty-seven men on the payroll. About 135 cars of gravel per day are brought to the dump. Seven horses are used in pulling trains. The company is in the channel a distance of over 11,000 feet. Forty-seven miners' inches of water flow from the mine. This is taken up with a pipe at a distance of 4000 feet in the tunnel, giving 90 feet pressure, which is used to drive the blower. The company has secured estimates for an electric plant and have taken the matter under advisement.

At the Herman mine, near Westville, Supt. Barton says the pay chute in tunnel No. 3 has been worked 290 feet on the ledge. Tunnel No. 5 is in 400 feet.

Mining and Scientific Press, V. 75, 12/25/1897, p. 598

Boston—The statement of the Pioneer M. Co. for November compares as follows with previous months;

	Nov.	Oct.	Sept.
Tons rock crushed	530	508	610
Value of gold bars	\$8,367	\$9,337	\$11,854
Payroll	4,421	4,636	4,441
Bills	<u>1,717</u>	<u>1,613</u>	<u>1,271</u>
Total expenses	6,138	6,278	5,712
Net earnings	2,228	3,158	6,146
Average value of rock	15.70	18.38	19.44
Men employed	56	57	56

Sentinel: The Schultz mine near Westville has a tunnel on the ledge 350 feet, and a 2-stamp mill.

At Sunny South twenty-five men are at work.

J. Q. Ackerman is the new Supt. at the Sailor Consolidated, fourteen miles above Westville.

At the Bald Mountain Gravel mine above Westville, the channel is worked through a shaft of 100 feet. Operations will be continued during the winter. The ledge at the Drummond has been encountered in the new tunnel at a distance of 1313 feet, 750 feet from the surface. A crosscut, shows the ledge to be 14 feet between the walls. The Drummond is eight miles northwest of Forest Hill. C. L. Lang is Supt.

Five men are engaged at the African Gravel mine on the American river, three miles from Applegate. M Merrithew is Supt. A shaft has been sunk 54 feet and drifting commenced.

The new tunnel on the Drummond cut a 14-foot ledge 750 feet below the surface.

Mining and Scientific Press, V. 76, 1/1/1898, p. 10

The directors of the Pioneer M. Co. expect to declare a dividend at the quarterly rate of 25c a share, or 10% a year on par of \$10. The company has about \$130,000 in its treasury. The November statement of the company showed that the average value of the rock mined was less per ton than it had been for the preceding five months, or \$15.79 against an average of \$19.25 for the five previous months. They consider that \$10 ore will meet every requirement and expectation.

Mining and Scientific Press, V. 76, 1/8/1898, p. 88

Glen mine, on Duncan canyon, is opening ground to breast in spring. This is one of the permanent and paying enterprises of eastern Placer.

The Blue Eyes, half mile from the Glen, is waiting for water. This has been hydraulicked for two years and paid from the grass roots.

The Bald Mountain gravel mine has been operating for several years. A party from San Francisco are operating with complete equipment for extensive work.

On the Flat Ravine quartz ledge, operated by Savage & Co., a tunnel is 600 feet on the ledge.

Collins & Morehead; Sellier, Murray & Larrabee, and Schippman & Ferrier, have made locations on which development work has been done with encouraging results.

Canada Hill mining district contains a number of promising claims. The Hobson & Payne Co. are running gangways and upraises preparatory to stoping.

The Gostlin & Worden gravel mine, idle for many years, has discovered the pay lead again and is working.

The Pioneer Supt. says the winze is down 34 feet; the vein is feet wide at the bottom in ore that will mill \$14 per ton, weather fine, water short, cold weather and ice having interfered with the water supply, running fifteen stamps slowly by day and faster by night. The company has twenty stamps and is considering a plan to dam the north fork of the American river about half a mile above the mill, thus securing a steady supply of water. Preliminary steps are being taken to this end, and the company has money to meet the expense.

Mining and Scientific Press, V. 76, 1/15/1898, p. 58

The annual meeting of the Eureka Drift M. Co. was held last week. The following were elected directors for the ensuing year: F. Chappellet, F. A. Leach, H. P. Dalton, C. E. Colton and A. E. Bolton. The company is in good financial condition and has ample funds for the completion of development work. It is thought that by next May they will be washing the gravel from the deep buried channel.

The Maus mine shaft, near Forest Hill, is down to the 100-foot level. It is double compartment. A 10-H. P. hoist is used. The New Austral Co., Ltd., of Paris, France, is interested. S. Roumage is Mgr.

Mining and Scientific Press, V. 76, 1/22/1898, p. 86

The statement of the Pioneer M. Co. for December is as follows : Tons rock crushed, 780; value gold bars, \$11,461; payroll, \$4103; bills, \$1518; total expenses, \$5621; net earnings, \$5839; average value rock, \$14.70; men employed, 49.

Mining and Scientific Press, V. 76, 2/5/1898, p. 162

Mr. Chappellet has word that at the Eureka Drift mine they are making fine progress in the tunnel. The steam drills were started up on Jan. 15, and in the following week 47 feet were driven, putting the tunnel in 105 feet beyond the upraise.

Colfax Sentinel: The Lost Emigrant quartz mine, on the North Fork of the American, is sixteen miles south of Soda Springs. The shaft sunk on the ledge is down 74 feet. A test of rock on the surface shows a value of \$165.80. Ore from the bottom goes \$173 to the ton. Tests of rocks taken at intervals for 2500 feet on the ledge assay from \$5 to \$160 per ton. A mill will be erected this season.

Auburn Argus: Considerable development work has recently been done on the Galena quartz mine, at Black canyon. The main tunnel has been extended on the ledge 410 feet. The ledge has an average width of 4 feet. Development work is being done on the Horsefly quartz mine, which is an extension of the Galena quartz mine in Black canyon. The prospect tunnel is now in 70 feet on the ledge and some fine-looking quartz has been taken out.

Mining and Scientific Press, V. 76, 2/12/1898, p. 182

Sentinel : The outlook at the Lost Emigrant quartz mine on the North Fork of the American, sixteen miles from Soda springs, is said to be encouraging. The shaft is 74 feet on the ledge. A test of rock on the surface shows a value of \$105.80. Ore from the bottom goes \$173 to the ton. The mine is owned by Goulden & Co.

Mining and Scientific Press, V. 76, 2/26/1898, p. 233

(Special Correspondence).—Local capitalists have incorporated to operate extensively on Iowa Hill. The company will be known as the Jupiter Consolidated. The directors are R. F. Rooney, T. J. Nichols, C. A. Wickman, W. S. Graham, B. B. Demlng. C. A. Wickman (Auburn P. O.) will be Supt.

The property comprises 1 ½ mile of channel and is situated one mile east of the present workings of the Morning Star mine. Work will be started within thirty days.

Auburn, Feb. 22nd, '98. The miners are crying for rain and snow.

Sentinel: The Herman quartz mine, near Westville, will place a pump and machinery for sinking. The 10-stamp mill is working to its full capacity. The lower tunnel strikes the ledge 400 feet below the present works.

Mining and Scientific Press, V. 76, 3/12/1898, p. 289

(Special Correspondence).—Work will be resumed on the Lost Emigrant mine, sixteen miles south of Summit, so soon as the snow disappears. The property is owned principally by F. L. Heath, E. Doolittle and S. W. Jacobs of Summit. A shaft has been sunk 75 feet on a ledge varying from 18 inches to 8 feet. Mill tests have yielded as high as \$75 per ton. The company will build a 5-stamp mill. Summit, March 5th, '98.

The Eureka gravel mine near Forest Hill during February, with two shifts, ran 223 feet of bedrock tunnel. The tunnel is in 2455 feet.

Mining and Scientific Press, V. 76, 3/19/1898, p. 321

The February statement of the Pioneer G. M. Co. shows as follows:

	February.	June 1 to Feb. 28.
Value of gold bars	\$14,161	\$105,488
Total expenses	5,823	52,563
Net Income	8,338	\$52,925
Tons rock crushed	919	6,131
Av. value rock per ton..	\$15 06	\$17 21

Mining and Scientific Press, V. 76, 3/26/1898, p. 345

The Breece & Wheeler Co. at Bath has twenty men on the pay-roll. Some new ground is being opened and enough gravel is mined to keep the mill running about half the time.

Sentinel : At the Morning Star gravel mine the company has sixty-five men on the payroll. The Morning Star has been one of the largest bullion producers of the State. The dividend for March was No. 87. The main bedrock tunnel is considerably over 4000 feet. The gravel is crushed by a 10-stamp mill. About 100 cars of gravel are mined during each twenty-four hours. The January cleanup from the Morning Star was on exhibit at the recent Mining Fair. It weighed 1555.94 ounces and was valued at \$28,754.70. At Big Dipper gravel mine men are converting a hydraulic pit north of the mill into a reservoir, which will have an area of over ten acres. The 10-stamp mill is running steadily.

About seventy men are employed and 140 cars of gravel mined in twenty-four hours. C. Waterhouse is Supt. At the Occidental gravel mine, near Grizzly Flat, the distance to bedrock from the surface is 347 feet. A number of prospect drifts have been run. W. Cameron is Supt.

The Pioneer M. Co. in the last nine months, June to February, inclusive, earned \$105,487, crushed 6811 tons of rock, which averaged \$17.05 a ton, and carried to the surplus account net earnings of 158,083. This is equivalent to over 50 cents per share (par \$10). To be more exact, the mine has earned for the stock in the last nine months 5.29 per cent. The gross returns of \$14,160 for February—twenty-eight days—were, with one exception, the largest of any month since last June, while the 940 tons crushed give evidence of improved water supply; it was the largest month's crushing since last summer.

Mining and Scientific Press, V. 76, 4/2/1898, p. 373

The Colfax Sentinel says the six months just closing have been disastrous for hydraulic and shallow gravel mining operations, owing to the scarcity of water. The rainfall at Colfax to date has been 25.09 inches, as against 50.44 inches to corresponding date of last season. At Robinson's Flat, near Forest Hill, the snow is at present only 1 ½ feet in depth. Last season at this date there were nearly 16 feet, well settled and frozen.

The water from Hidden Treasure tunnel is as low as at the close of the summer season.

With an early spring much development will be commenced on quartz and gravel properties on the upper Forest Hill divide. River mining can be carried on this year under favorable circumstances, as the absence of snow in the mountains will bring the river down very low early in the season.

The Morning Star reservoir, near Damascus, has not filled this winter, a condition that has not been known for years. The Morning Star and the Big Dipper mines will be run by steam during the latter part of the season.

At the Mayflower mine Supt. McAuley has fifteen men on the pay-roll. The company has had a permit to hydraulic, but thus far has not had sufficient water. A test run of ninety cars of gravel from the Mayflower mine was made recently which resulted in over \$9 per car.

At the Drummond mine Supt. Berry is running on the ledge and is near the pay chute which was encountered in the shaft above. Eighteen men are employed.

The Bazacoo mine, at Butcher Ranch, the property of Sheridan Bros., has a ledge from a few inches to 2% feet in width. A tunnel has been run on the ledge 180 feet.

The Horseshoe Bar Gravel M. Co. will start the elevators soon.

At the Maus Ledge, near Forest Hill, the shaft is in 181 feet. From the 200-foot level a drift will be run to crosscut the ledge. Work will soon resume at the Spanish ledge.

The bedrock tunnel to tap the channel at the Eureka gravel mine is being rapidly driven. Last Monday week it measured 2615 feet. Supt. F. Chappellet, with power drills and two shifts, has made an average of 50 feet a week.

Supt. Power has nearly 200 men on the payroll at the Hidden Treasure mine. A large quantity of gravel has been blocked and drained at their point of operations in the Centerville tunnel. The gravel brings handsome returns. The electric plant is a success. The outlook for the mine is encouraging.

Herald: The electric motor is hauling out 400 cars of gravel daily for the Hidden Treasure Co., at Centerville. The company contemplates adding a new electric locomotive and 100 cars the coming season.

The Cash Rock mine will put in extensive machinery in the near future.

The Pioneer M. Co. is providing against future shortage of water by the construction of a dam across the American river, which, with the necessary flumes, etc., will cost about \$10,000.

Mining and Scientific Press, V. 76, 4/9/1898, p. 397

R. L. Dunn contemplates the erection of a cyanide plant at the Dardanelles mine, near Forest hill.

Mining and Scientific Press, V. 76, 4/16/1898, p. 430

At the Herman mine the main tunnel extends 300 feet to the ledge, thence following the ore body 750 feet, a continuous pay chute averaging 6 feet in width. At least six months' run for the 10-stamp mill remains in the stopes on this level. About 1000 tons are mined in the stopes ready for milling. The company contemplates the erection of a 30-stamp mill to be run by electric power. The generator will be placed on the American river one-mile from the mine. Thirty-two men are employed. The mill runs steadily and crushes twenty-five tons of ore per day.

Mining and Scientific Press, V. 76, 4/23/1898, p. 445

The statement of the Pioneer Mining Co. for February and March is as follows:

	March.	February.
Tons rock crushed	940	940
Value gold bars	\$15,730	\$14,180
Pay roll	4,870	3,948
Bills	1,951	1,876
Total Expenses	6,473	6,884
Net earnings	9,257	8,338
Average- value rock	13 68	15 06
Men employed	65	50

Mining and Scientific Press, V. 76, 4/30/1898, p. 469

Herald, A force of men is at work at the Cash Rock near Forest Hill, putting things in shape for the season's run.--- Supt. Roumage has 20 men at work at Horseshoe Bar and will soon be ready to start the hydraulic elevator.--- A good sized ledge of ribbon rock has been struck at the Maus mine,--- The Blackhawk tunnel is being driven ahead rapidly. This mine is being worked under bond by Senator Chapman.---A large force is at work on the Spanish quartz mine and will soon have the mill in running order. Supt. Chappellet is still driving the Eureka tunnel ahead at the rate of 50 feet a week. He expects to start the upraise by the middle of May. The Mayflower people are taking out pay gravel and have

increased their working force during the past week. T. Wolford, Supt. Black Canyon mine, will resume work on that property. Considerable development work is being done on the Ralston Ridge. A contract is about to be let for 250 feet of bedrock tunnel with the privilege of taking 250 feet more. Work has been resumed on the Buckeye tunnel. Mr. Blackledge is Supt. The contract for sinking 50 feet on the Providential quartz ledge was completed and a contract for sinking 50 feet deeper will be let.

Mining and Scientific Press, V. 76, 5/7/1898, p. 486

The great force of the water issuing from the nozzle of a monitor used in hydraulicking was fearfully illustrated in Placer Co., Cal., last week. T. H. Hobson, while piping at the Horseshoe Bar mine, on the American river, below Michigan Bluff, lost control of the monitor and was thrown some distance. He attempted to rise and the stream of water struck him in the back, killing him instantly. He was a son of J. B. Hobson, at present managing the Horsefly mine, Cariboo, B. C.

Mining and Scientific Press, V. 76, 5/7/1898, p. 493

Sentinel: The Hidden Treasure Drift Gravel M. Co. at Sunny South has 269 men on the pay roll. Four hundred tons of gravel are daily taken from the mine. A storage reservoir is being constructed. The new tunnel at the Herman quartz mine near Westville is in over 800 feet. It is 5x6 feet in size and two shifts of men are making about 86 feet per week. The J. G. Peters M. Co., organized last week, commenced operating near Dutch Flat. They have purchased the Opel & Williams claim, and will run a 500-foot bedrock tunnel to open it. Good quartz has been struck in the Azalea mine at Blue Canyon. The tunnel has reached 800 feet, the whole face showing quartz. Several small stringers have assayed from \$2 to \$7 a ton. The company is running the tunnel for a gravel channel.

Mining and Scientific Press, V. 76, 5/14/1898, p. 517

The tunnel of the Eureka drift mine was finished to the 3000-foot mark. An upraise was started in soft rock, requiring timbering. About thirty men are at work on the Cash Rock, near Forest Hill. They have completed their cribs for the dam and will soon commence operations in the bed of the stream. A contract has been let for 250 feet of tunnel on the Ralston mine at \$4 per foot.

The Herald says that Leahy & Co. have struck a rich gravel channel on their claim near Rocklin. They prospected the gravel which they found to be 100 feet wide and 70 feet from the surface. They sunk a shaft and found the gravel 3 feet in thickness and of good quality. They have completed a steam hoist and as the gravel is of a soft slaty formation it will be worked for the present in an arrastra.

Sentinel: This season has been disastrous for hydraulic miners in Placer county. Fourteen permits to mine by the hydraulic process were issued by the U. S. Debris Commission. In nearly every case the pipe lines and monitors were in place behind the accepted restraining dams. Nearly all of these mines have been unable to turn on water. The only notable exception has been the Polar Star hydraulic mine at Dutch Flat, which has used 2000 inches of water for a portion of each day during the winter.

Other mines have also suffered on account of scarcity of water. W. S. Davis, who is working Texas Bar, has received notice from the California Water Co. that water cannot be supplied this season. He is removing his machinery from the river. From the present outlook the Bear River Hydraulic Co., operating on Bear river, near Colfax, will not resume work this spring, owing to the short supply of water. The Morning Star and Big Dipper drift gravel mines are equipped with machinery for use of steam power to run their stamp mills. Much development work will be prosecuted this season by companies owning gravel and quartz properties on the upper Iowa Hill and Forest Hill Divides.

Mining and Scientific Press, V. 76, 5/21/1898, p. 541

Sentinel: The Prairie Flower quartz mine, near Canada Hill, comprises three full claims. Average width of ledge, 2 feet; ore free milling, paying about \$10 per ton. The ground is opened up for about 300 feet. A new tunnel is started which will tap the ledge at 400 feet. Ore can be mined at a cost not exceeding \$2.50 per ton. Daily capacity of the stamp mill is fifteen tons; mill run by steam. The company proposes to put in a pipe line this summer. G. W. Payne is owner and Supt. C. C. Handy has ten men at work on the Boulder. He is drifting and stoping on the 250-foot level. C. A. Reed is stoping at his St. Lawrence mine. A run of eighty tons of rock paid well. A shipment of selected ore netted \$200 per ton.

The Pioneer directors have under consideration the question of doubling the number of stamps to forty. The company is reported to have ore reserves and sufficient ore in sight to keep forty stamps running full time. The flume to be constructed from the new reservoir will be 6 feet square. The April statement of the Pioneer Co. shows 960 tons crushed ; value, \$13, 102 ; expenses, \$6,422; income, \$6,680; per ton, \$13.64. The statement for the eleven months ended April 30 shows gross income of \$134,320, and net earnings of \$68,860. The average value of the rock crushed for the eleven months was \$15.95.

Mining and Scientific Press, V. 76, 5/28/1898, p. 569

(Special Correspondence).—The starting up of the mill and cyanide works of the Forest Hill M. Co. notes the point of change in the nature of the mining on which this town is dependent. The marvelously rich drift mines that in the aggregate yielded about \$25,000,000, are no longer gold producers to any extent, many of them being completely worked out and abandoned. Forest Hill has never hitherto been considered a quartz mining district, being supposed to have only placer mines. In early days, in the '50s and '60s, some quartz ledges in Volcano canyon, between Forest Hill and Bath, were worked, and the quartz crushed in small mills and hand-mortars. The ore is said to have been high grade, but placer mining gave so much larger returns that the quartz mines were abandoned; and in time it came to be believed that they were abandoned because they were only pockets and worked out by the old miners. One of these mines is the property of the Forest Hill Co. It has before been known as the Spanish mine, because owned by Spaniards. It was supposed to be a porphyry dike containing pockets that were very rich. The Spaniards washed the surface of the ledge off by sluicing and hydraulicking, and worked some rich rock in arrastras. The experts who have examined it for the Forest Hill Co. say that it is not a porphyry dike, but a true lode of a new kind of gold-bearing rock. The dike or lode is from 50 to 200 feet wide in serpentine walls. All of it contains some gold, but the mill failed to save the gold by amalgamation. Seven-eighths of it is said to have been lost with the tailings in the first run made. The Forest Hill Co. claim that the loss of gold was because of its extreme fineness and flour character, and that tests made by the cyanide process show that it can be entirely saved by that process. The mill capacity has been increased to thirty tons daily and a cyanide process works constructed. The successful operation of this mine will make up some of the drop in annual gold production of Placer county, due to the working out of the drift mines, and it will keep Forest Hill town up to its old importance as a mining camp. The amount of ore in sight in the lode cannot be worked out in twenty-five years, even with the cyanide plant built up to 400 tons a day capacity, as promised by the company. Forest Hill, May 25th, *98.

Mining and Scientific Press, V. 76, 6/11/1898, p. 621

Republican : The Mayflower mine at Forest Hill has closed down, and has thrown a great many out of work.

About thirty men are employed at the Cash Rock mine. The machinery is completed and the flume is rapidly being built.

Mining and Scientific Press, V. 76, 6/18/1898, p. 645

Work has resumed in the May Flower mine, Forest City.

Mining and Scientific Press, V. 76, 6/25/1898, p. 662

In Placer Co., Cal., on the Forest Hill divide, is a case in point, a lava-capped ridge overlying an ancient river channel; over \$30,000,000 in gold have been extracted, the ground paying from \$75 to \$1000 per running foot. This channel is covered from 500 to 1000 feet by a cap of cement or lava, and on the surface gives no indication of being mineral land; grass, flowers and trees do not hint at the buried treasure which is reached by horizontal drifts and tunnels. On one, the Hidden Treasure, in the region mentioned, the tunnel thus opening the deposit was 900 feet long. That mine has produced over \$1,500,000; \$1.75 per ton of gravel. The Mayflower drift mine paid \$7 per ton of gravel; there were 12,000 feet of drifts. Conservative mining experts calculate that there still remain in that one California county 200 miles of un worked auriferous gravel channels, which would yield from \$500,000 to \$3,000,000 per mile. The work of opening up these buried deposits is costly enough without the ever-threatening expense of contest regarding the "agricultural" character of the land, under the law as at present framed.

Mining and Scientific Press, V. 76, 6/25/1898, p. 670

The statement of the Pioneer M. Co. for May is as follows:

Tons rock crushed	630
Men employed	50
Average value rock	\$13.77
Value gold bars	8,676
Pay roll	4,238
Bills	1.226
Total expenses	5,465
Net earnings	3,211

Water at the mill has been very short all the month; some of the time ten stamps only were running, and they very slowly. The construction of the dam and flume is progressing very satisfactorily, the low water in the river offering a favorable opportunity for doing the work. When this dam is completed a regular monthly product is assured, and it is further expected that sufficient power will be obtained to run twenty more stamps, and when these expectations are realized the stamps will be added and the product should be doubled. This completes the twelve months during which the management has reported monthly operations. During this period the gross earnings were \$142,995,9051 tons of rock were crushed, which averaged \$15.80 per ton; \$25,000 was paid in dividends and \$47,069 carried to surplus account. The company earned 7.2 per cent on its \$1,000,000 stock. Dividends are now being declared at the annual rate of 5 per cent.

Mining and Scientific Press, V. 77, 7/2/1898, p. 9

The superintendent of the Pioneer gold mine says that a vein in the north tunnel recently opened in the 50-foot drift from the winze, 12 inches wide, has widened to 18 inches.

Mining and Scientific Press, V. 77, 7/18/1898, p. 61

The Dardanelles mine of Forest Hill, which has been idle for years, is said to have been sold to L. Chamberlain. The transfer also includes the Oro claim.

Mining and Scientific Press, V. 77, 7/23/1898, p. 85

A 353 H. P. turbine water wheel has arrived at the Pioneer. The Pioneer directors think that after the completion of the dam and the installation of the electric plant they can safely figure on \$10,000 monthly net earnings.

Mining and Scientific Press, V. 77, 7/30/1898, p. 103

After the payment of the recently declared dividend the Pioneer Placer M. Co. of Placer Co., Cal., will have a cash surplus of about \$140,000.

Mining and Scientific Press, V. 77, 7/30/1898, p. 109

The June statement of the Pioneer G. M. Co. reports as follows :

Value gold bars	\$6,665
Total expenses	4,918
Net Income	\$1,747
Tons of rock crushed	505
Number of men employed	44

The June statement of the Pioneer G. M. Co. compares as follows with previous months:

	Tons rock crushed.	Value gold bar.	Total ex- penses.	Net, in- come.	Value ore per ton.
1897.					
June	650	\$14,156	\$5,100	\$9,056	\$21 77
July	807	13,241	6,582	6,659	17 65
August	765	14,543	6,090	8,453	19 01
September	.610	11,858	5,712	6,146	19 44
October	508	9,337	6,279	3,058	18 38
November	.530	8,367	6,139	2,228	15 79
December	...780	11,461	5,622	5,839	14 70
1898.					
January 721	8,364	5,217	3,147	1160
February	... 940	14,160	5,824	8,336	15 06
March	1,150	15,731	6,473	9 358	13 68
April	960	13,102	6,422	6,680	13 64
May	630	8,676	5,465	3,211	13 77
June	505	6,665	4,918	1,747	13 20
6 mos. '98.	4,906	\$34,319	\$32,379	\$13 60	

Accompanying the Pioneer statement the directors make the following announcement: "The small amount of rock crushed in June is owing entirely to the diminishing water supply. The work on the dam and flume is being rapidly pushed, and plans for the electric plant, recently contracted for, are being prepared prepared. The directors expect it will be in place by the time the dam is finished."

Near Forest Hill prospecting is being done at the Mayflower and a small crew is at work at the Breece & Wheeler claim at Bath. A. F. Westneld has struck pay gravel at his claim on Shirt Tail canyon. At the Eureka, F. Chappellet, Jr., Supt., the tunnel is in 3000 feet, where an upraise has been driven 200 feet. The upraise is in a soft formation. Twelve men are employed. At the Hidden Treasure mine near Centerville 235 men are employed. Men are working on tribute in the old tunnel at Sunny South and are said to be making good wages. Mining on the river near Michigan Bluff is active. Supt. Roumage has a large force at work at Horseshoe Bar and from present indications ho will have a very profitable season's run.—Owing to the scarcity of water W. S. Davis will not be able to work his mine at Mammoth Bar this season. G. F. Huber and L. L. Chamberlin are working a small crew at the Gold Slide on the American river.

Mining and Scientific Press, V. 77, 7/30/1898, p. 111

C. T. Di bhino, Supt. Gray Eagle mine, Forest Hill, Cal., has returned from San Francisco.

Mining and Scientific Press, V. 77, 8/20/1898, p. 183

F. S. Rormage has resigned as Supt. Horseshoe Bar mine, Michigan Bluff, Cal.

Mining and Scientific Press, V. 77, 8/27/1898, p. 209

The statement of the Pioneer Mining Co. for twenty-six days in July shows: Tons rock crushed, 302; value gold bars, \$4708; payroll, \$3222; bills, \$695; total expenses, \$8917; net earnings, \$850; average value rock, \$13.17; men employed, 44. The water supply diminished steadily during the month, but It has been a favorable time for constructing the dam, which is about completed. When finished and the new electric plant Installed, there will be sufficient power for all purposes.

The shaft in the Marguerite mine near Auburn has reached 400 feet. The company will continue sinking for three months and then begin running drifts.

Mining and Scientific Press, V. 77, 9/3/1898, p. 233

Herald: At the Cash Rock mine on the American river, near Forest Hill, Supt. Waterhouse has two shifts at work and expects to reach bedrock in a few days. They have found pay dirt and look for a good body of pay gravel when the bed of the river has been reached. Owing to the great scarcity of water in the mountains this has been a favorable season for river mining. Mr. Waterhouse is employing 150 men at the Cash Rock. Supt. McAulay is working twenty men at the old Mayflower mine. Grenell & Rousb, lessees of the Breece & Wheeler claim at Bath, are employing thirty men and the mine is reported paying. Ten men are employed at the Spanish Queen mine near Forest Hill.

Mining and Scientific Press, V. 77, 9/10/1898, p. 258

Supt. Sullivan of the Pioneer gold mine reports that, in doing exploratory work in the south end of No. 4 tunnel, an entirely new vein of ore has been struck. When first encountered it was only 24 inches wide. It has since widened to 3 feet and is still broadening.

Mining and Scientific Press, V. 77, 9/17/1898, p. 285

The Mayflower G. M. Co. has levied an assessment of 5 cents per share, delinquent October 10.

Mining and Scientific Press, V. 77, 9/24/1898, p. 309

At the Pioneer mine the dam is finished. Poles for wiring from the power house to the mill, a distance of 4000 feet, are set and the wire strung.

The new 30-foot vein at the Pioneer mine runs \$0 per ton. The machinery for the electric plant is on the ground and the dam is completed.

F. Taylor uses nineteen pack mules between Towle and the Pioneer mine at Damascus to carry out sulphurets.

Mining and Scientific Press, V. 77, 10/1/1898, p. 334

The bond on the Oro mine, near Iowa Hill, has been extended until Aug. 1, 1899, and development work will continue. E. M. Armstrong will remain as Supt. The company is composed of Woodland, Colusa and Red Bluff people.

The August statement of the Pioneer G. M. Co. makes the following comparisons:

August.	1898.	1897.
Tons rock crushed	536	765
Value gold bars	\$5,962	\$14,543
Expenses	5,459	6,090
Net	\$503	\$8,453

Colfax Sentinel : The Hidden Treasure Gravel M. Co. at Sunny South and Centerville employs 230 men. The power to operate the mine is generated by a \$25,000 electric plant. The water from the mine tunnel at Sunny South, a flow of about 40 inches, is used to furnish pressure to operate the machinery at the power plant. The trainloads of gravel, the blower, saws for framing timbers, and other machinery, are operated by electric power. The present force is able to mine an average of 400 cars of gravel per day with two shifts. The mine is lighted by electricity, and the residences at Centerville are being wired for electric lights. The Dam tunnel is now in 7800. The crosscut shows a width of channel of 1000 feet. At the close of one of the driest seasons ever known in California the flow of water from the Hidden Treasure tunnel continues almost the same as former seasons,---At the Eureka mine near Centerville work on the new upraise is progressing in a satisfactory manner. Supt. Chappellet has ten men un the roll. The new upraise, started from the 2500-foot mark in the main tunnel, is now up 78 feet. This is one of the most extensive properties on the divide. At the Paragon gravel mine at Bath twenty-four men are working. A lead of good gravel has been struck and the mill is running every day. W. H Grennell is Supt. At the Basin Con. mine near Deadwood gravel is being breasted one-half mile in on the tunnel. Water for washing gravel on the dump is scarce. Nine men are employed, and J. Dunlap is Supt. At the Buckeye placer mine in Brushy mining district, owned by J. A, Johnston and Mrs. J. V. Collins, the main tunnel is in over 1000 feet. Blue gravel has been struck from an incline. Nuggets worth as high as \$2.25 have been secured, and the future for this mine looks promising. Lofruth & Co. are working their Elkhorn gravel mine near Deadwood and take out about ten cars of gravel per day. Some rich quartz is being taken out of the Rawhide mine on Texas ridge. The property is owned by J. T. Patrick & Co. Supt. Rodger of the Cedar Creek mine at Shady Run is getting the property in shape for winter. He expects to start up with twenty men.

Mining and Scientific Press, V. 77, 10/8/1898, p. 357

Colfax Sentinel: The main tunnel at the Red Point gravel mine at Damascus is in 12,000 feet. Supt. Ferguson has sixty-five men on the roll; 130 cars of gravel per day is taken out. The power for running the blower is supplied by 40 inches of water from the mine. This water is conveyed from an upper tunnel and is taken up 4000 feet, giving a pressure at the mouth of the main tunnel of 90 feet. The gravel is free washing and the flow from the mine furnishes ample water. Good progress is made on the tunnel of the Blue Canyon & D. Co., near Blue canyon. A machine is used and 23 feet was made last week. The tunnel is in 1050 feet. An installment of 1 cent per share is collected each month, giving \$400 per month for development work. There are 130 stockholders and assessments are paid promptly.

Herald: E. B. Quigle is prospecting the Ferrier gravel mine, near Todd's valley. His tunnel is in about 1100 feet, he employs eight men.

Mining and Scientific Press, V. 77, 10/15/1898, p. 381

At the Herman mine, near Westville, twenty-five men are employed. The 10-stamp mill is running day and night. An average of thirty tons of ore is crushed every twenty four hours. Tunnel No. 3 crosscuts the ledge at 300 feet, and has been run on the vein 900 feet. The ledge is from 7 to 10 feet in width. A lower tunnel has been run and sinking done to connect with the tunnel. Water for the mill is pumped from the lower tunnel. Steam power is used to run the mill. The company next spring will build a 21-stamp mill. Dr. J. L. Barton is Supt. of the mine.

Mining and Scientific Press, V. 77, 10/22/1898, p. 403

D. M. Kent, San Francisco, secretary Mayflower G. M. Co., Forest Hill, Cal., is at the mine making an examination of the property.

Mining and Scientific Press, V. 77, 10/22/1898, p. 405

Colfax Sentinel; The extensive river mining operations at Cash Rock mine, near Forest Hill, have come to a sudden close this season. During the rainstorm Oct. 2nd a cloudburst precipitated a volume of water on an area of about 200 yards up Dardanelles canyon. This, added to the flow of the river, carried away a large portion of the flume of the Cash Rock Co.; and owing to the lateness of the season operations have been discontinued until next spring. Before the cloudburst fifty men were employed. A log dam 160 feet in length held the water in the river, which was conveyed by a large flume 600 feet.

Mining and Scientific Press, V. 77, 10/29/1898, p. 429

The Pioneer Co. now employs sixty-two men: twenty-one are at work on the new dam. A tunnel to tap the ledge will be started 570 feet below No. 4 tunnel. The new tunnel will be 530 feet above the bed of the river. A flume 6x7 feet carries the water 900 feet, where with a head of 33 feet it will be used to run the 353 H. P. turbine water wheel. This wheel will operate the 270 H. P. electric generator. The electric power generated will be transmitted to the mine and will be used in operating the 20 head of stamps in the mill, the blower and two compressors. The fiscal year of the company closed Sept. 30. During six months of the year the water supply was very short. During the year were crushed 8367 tons. The figures for the year ended Sept. 30th, 1898, are as follows:

Gross receipts	\$116,001
Total expenses	67,668

Net earnings	48,333	
Three dividends paid of 1¼ % each..		37.501
Balance	10,833	

Mining and Scientific Press, V. 77, 11/19/1898, p. 509

Colfax Sentinel: The mill at the Herman mine near Deadwood is running day and night. Thirty-five men are employed. The ledge is from 10 to 12 feet wide, all milling ore. The Golden West quartz mine near Blue canyon has 700 feet of tunnel on the ledge. A new tunnel will soon be started 200 feet lower on the river, 32 feet above highwater mark. The tunnel of the Blue Canyon M. & D. Co. is in 1150 feet. The company uses a machine drill and employs five men. J. W. Schmutzler, with seven men, is working the Dardanelles and Big Spring gravel mines near Forest Hill.

Mining and Scientific Press, V. 77, 11/26/1898, p. 531

Heroism Recognized.

On the afternoon of the first day of the convention in San Francisco of the California State Miners' Association, on the 21st inst., Chas. G. Yale took the platform and read the following :

Whereas, At the time of the recent disastrous fire in the compressor house at the mouth of the tunnel of the Eureka drift mine, on the Forest Hill divide. Placer county, Cal., upon finding that the buildings would be destroyed, Felix Chappelet Jr., superintendent of the mine, knowing that four men were in what might be a dangerous position, ran for 2500 feet through the tunnel and up a 300-foot upraise to where the men were at work, bringing them out through the smoke and flame in safety; be it

Resolved, That our fellow member, Felix Chappelet Sr., already noted as among our most skillful drift miners, be congratulated upon having a son who "is a chip of the old block," and, though only a young man of 21, possessing the bravery to do a noble action with self-sacrifice and promptness.

Resolved, That the miners of California, in convention assembled, recognize the heroism of this young native son of California, and of a distinguished sire, and desire to congratulate him upon so bravely doing his duty to the men under his charge.

Amid multitudinous cheering, a motion to pass the resolution " by a rising vote" was responded to by the 600 delegates springing to their feet.

Mining and Scientific Press, V. 77, 12/31/1898, p. 662

During November the Pioneer mill crushed 556 tons ore; average value, \$11.89. The payroll for the month was \$3256; net earnings, \$2132.

Colfax Sentinel: Development work is in progress on quartz claims in Humbug canyon. The claims are owned by T. S. Hawkins of Hollister. The ledge is about 22 feet in width. A shipment of 2680 pounds of ore to Selby's returned \$61.70 in gold. At the Hidden Treasure mine, as soon as the winter rains move the tailings, the mine will be run with an increased force. Supt. Power says that, even with a reduced force, they are able to take out 400 cars of gravel daily. At the Bradshaw Bar gravel mine the owners have completed a five-mile ditch. Flumes are in place and work will begin as soon as sufficient water can be secured. The new electric plant at Pioneer is In place. A trial made shows everything in working order, awaiting the rains. At the Buckeye gravel mine, near Forest Hill, sixteen men are employed. J. A. Seward is Supt. The mine is owned by J. A. Johnston and Mrs. J. V. Collins.

Mining and Scientific Press, V. 78, 1/14/1899, p. 38

When the Pioneer G. M. Co., near Damascus, three years ago bought the property work had reached only to the 500-foot level. Since that time the company has put in No. 4 tunnel on the 1000-foot level. For the past year and a half pay ore has been taken from between the 1000-foot level and the 500-foot level. The company will run No. 5 tunnel at the 1500-foot level. During the summer a dam 100 feet in length, 30 feet wide at the base, 6 feet wide at the top and 23 feet in height was constructed across the American river, which will guarantee sufficient water to meet all the requirements of the property. There has also been installed an electrical plant which furnishes 300 H. P. During the past year the ore averaged from \$9 to \$17 per ton.

The Eureka Con. D. M. Co., near Forest Hill, for three years has been running tunnels, upraises and drifts, searching for the channel. Last November a year ago the east vein of the channel was located, but all efforts to find the west vein or opposite side were fruitless until last Saturday. This development has been anticipated by Mr. Chappellet. It is possible that the channel just found is not the main one. Experts have expressed the opinion that there were at least two channels in the Eureka ground.

Mining and Scientific Press, V. 78, 1/21/1899, p. 67

Auburn Herald: The Mayflower M. Co. near Forest Hill has bought all the claims between its ground and Smith's Point. At an early date mining on the upper lead of the Mayflower will begin. This lead carries a fine grade of gold, selling for nearly \$20 an ounce.

Mining and Scientific Press, V. 78, 1/28/1899, p. 93

Colfax Sentinel: The new power plant of the Pioneer G. M. Co. is running satisfactorily. There is plenty of water to generate power for all the motors. All the machinery is running by electricity and giving satisfaction. The motors are also driving the air compressors. At the Bellevue quartz mine, near Ophir, some high-grade quartz is taken from the 150-foot level. The ledge is 2 feet wide at the point where the rich ore is taken out. At the Eureka Consolidated drift mine, near Forest Hill, Supt. Chappellet has cut the channel but has not yet reached gravel. In the first raise the company cut the east rim and the new raise is on the west rim. Supt. Chappellet will follow the bedrock to get the pitch, when he will go down the raise and drift into the channel. The cement carries wash boulders.

Mining and Scientific Press, V. 78, 2/11/1899, p. 155

The reservoir at the Big Dipper mine, in the Iowa Hill mining district, broke last Thursday night and carried away the mill, blacksmith shop and drying house. Five Chinamen and one white man, Joseph Farber, were killed. Their bodies were found several miles down the canyon. The loss to the mine will be \$12,000.

Mining and Scientific Press, V. 78, 2/18/1899, p. 175

In the rush of water consequent on the recent bursting of the reservoir at the Big Dipper gravel mine, Iowa Hill, Placer Co., Cal., a 1600-pound shaft was carried three fourths of a mile down the canyon. The mill will be rebuilt.

Mining and Scientific Press, V. 78, 2/18/1899, p. 183

The Pioneer mine, near Damascus, has a shoot of paying ore which is uncovered at the 500-foot level and again at the 1000-foot level. A winze is sunk 200 feet below the 1000-foot level, where it shows that this ore body holds. This ore averages \$11 per ton. Water is sufficient to drive the mill, which has

twenty stamps, and It is proposed to double the capacity this summer. The earnings of the mine for the current month will make a good showing. The newly installed electrical machinery works successfully and is a saving in operating expense, as well as the increasing of the mine's productive capacity; 1200 tons a month can be easily crushed. The company will drive a new tunnel at the 1500-foot level as soon as the weather permits.

Herald; Work is still going on at the Eureka mine. The width of the channel at that particular point has been determined by upraises to be 100 feet. Lack of water prevents work at the Big Gun. The Centerville mine is paying splendidly. The Pioneer continues to yield good paying ore. The old Dardanelles Is being worked by lessees. They are trying to pump out the old shaft and hunt for the back channel. At Yankee Jims no mining is going on for lack of water except at the Anthony Clark mine in Georgia Hill. The tunnel is in 500 feet, and the upraises show a channel of moderate richness ; but as only the edge of the channel has been reached, it is not a fair test of the mine. According to report, rich gravel has been struck in the Mayflower mine on the Orono lead at a point adjoining the Grinnell mine. There is sufficient water to run the compressors only. As soon as water comes, the company will begin hydraulicking the upper or Young America lead. At the Crandall mine a new track has been laid the entire length of the tunnel. The new mill will be ready for use by the first of the month. The stamps will weigh 1100 pounds each, and the dies are one inch larger in diameter than those of any other battery in the county. The machinist warrants the battery to crush twenty-five tons of rock a day. There will be five stamps, and the mill will have a capacity of forty, if needed.

Mining and Scientific Press, V. 78, 2/25/1899, p. 211

The Bear River Hydraulic Co.'s mine near Colfax has just commenced operations on a small scale.

The Big Dipper mill is being repaired.

Mining and Scientific Press, V. 78, 3/4/1899, p. 239

The Hidden Treasure G. M. Co., at Centerville, has 135 men on the payroll.

The Eureka Consolidated Drift M. Co. has found gravel in the shaft they were sinking, so much water was encountered that a drift is now being run to tap the channel below the shaft.

Near Michigan Bluff, W. Stuart, Supt. Of the American Bar quartz mine, is working fifteen men.

In the Eureka Con. drift mine on the Forest Hill divide, three miles north of Sunny South, Cal the channel, for which search has so long been made under the direction of F. Chappellet Jr., Supt., has been found 300 feet above the main tunnel and 2100 feet from its mouth. This means much for drift mining in that section of California, and will doubtless result in the opening of a new and great mine and the employment this season of 200 men.

The Big Dipper Co. near Iowa Hill expects to have the mill running in ten days.

H. Stemple is running gravel at the Pioneer below Yankee Jims.

The Pioneer mine, near Damascus, has issued its statement for January as follows:

	1899	1898.
Value of gold bars	\$10,465	\$8,364
Total expenses	4,531	5,127
Net income	5,935	3,147
Tons of rock crushed	951	7211

A ditch is being opened from Centerville to Sunny South to increase the water supply for the generator plant at the Hidden Treasure mine at Sunny South.

At the Mayflower mine near Forest Hill the company is compelled to run their machinery by steam on account of the scarcity of water.

Mining and Scientific Press, V. 78, 3/18/1899, p. 295

The Drummond mine near Forest Hill, which has been working under bond for some time past, has been shut down and the air compressors removed.

Lessees are working the Dardanelles drift mine near Forest Hill, crushing the gravel in a stamp mill at the mine.

Placer Herald: The Mayflower drift mine, near Forest Hill, is employing fifty-five men. All the work is being done on the Orono lead, and paying well. The mill and compressor are run by steam. The company is figuring on putting in an electric plant. In the near future a tunnel will be started to open the Andy Steel claim, which was rich on the same lead above. Work is going on at the Bartley mine, Dutch Flat. Its channel is 1000 feet wide. The company has no impounding dam. Wm. Stuart is in good paying ore at the Caledonia on the Middle Fork.

Mining and Scientific Press, V. 78, 3/25/1899, p. 323

Pay gravel is being taken from the Wesley mine, near Iowa Hill.

The Boston News Bureau hears that the capital stock of the Pioneer M. Co. will be increased from 100,000 to 150,000 shares. The new stock will be sold for working capital, as the electrical equipment recently installed cost more than at first anticipated.

Mining and Scientific Press, V. 78, 4/1/1899, p. 351

The Morning Star M. Co., whose property is at Iowa Hill, have declared a \$2.50 dividend, No. 100. It is the smallest paid for a long time. There are 100 men on the payroll.

Herald : San Francisco capitalists have bonded the copper property near Cooperstown. The Drummond mine, near Forest Hill, is to be started up again. The Mayflower mine, near Forest Hill, has commenced hydraulicking.

The tunnel of the Alta mine, near Alta station, is now nearly 5000 feet long.

Mining and Scientific Press, V. 78, 4/8/1899, p. 379

Colfax Sentinel: A number of hydraulic mines have been able to commence work, owing to rain. The water in the North Fork of the American was higher last week than since the flood of '90. River bar mining will be profitable the coming season. The flood has lowered the tailings in the North Fork about 2 feet. Nearly the entire bed of the river is held by location from the Yankee Jims bridge to a point opposite Gold Run. For the past two years the floods have been insufficient to move the tailings. Three years ago miners on river bar claims cleaned up \$3 per day for the season; some of them made runs that returned \$8 per day to the man. Supt. McAuley is piping in the McCall pit at the Mayflower mine, near Forest Hill. A permit was secured in '97, but the water supply has not been adequate until now. The restraining dam is located in Black Oak canyon. Several men are employed in the drift mine. The Big Gun hydraulic mine at Michigan Bluff is working. It is owned by A. Dixon and others. The flood carried away the boarding house at the Cash Rock river mine, on the Middle Fork of the American river. At the Red Point mine, near Damascus, there are fifty-nine men on the payroll. The main tunnel is now in 12,700 feet. An

average of 108 cars of gravel are mined per day. Seven horses are used in hauling trains. Supt. H. F. Adams of the Derby mine, between Centerville and Sunny South, says the new lower tunnel is in over 900 feet.

Placer Herald: The Bouks are taking out good ore at their mine near Bloomer Cut. The vein averages 14 inches. The rock at the two-foot level of the Hathaway mine, near Ophir, proves richer than any other part thus far opened up. The Gold Blossom, near Ophir, is working a large force of men. The Herman mine, six miles north of Deadwood, has been shut down for thirty days. The pumps cannot handle the water. The Morning Star at Iowa Hill employs sixty-five men and yields its regular dividend. The old shaft at the Coppertown mine will be cleaned out and sunk deeper. The Evening Star mine with all its machinery on Rock creek has been bid in by H. Bernard. This mine was sold a year ago by J. Henan for \$5000. Since then a plant costing \$7000 has been placed there.

Mining and Scientific Press, V. 78, 4/15/1899, p. 405

Herald: On the west side of Duncan canyon, south of Bald mountain, the Hutchinson mine has been in operation all winter. They now have water to wash the dirt and will ground-sluice the front. Three-fourths of a mile northeast the Pine Nut Co. will resume work in their bedrock tunnel and will complete it by fall. One mile northeast is the Blue Eyes mine, fitted up for hydraulicking. The bedrock having pinched off indicates a lower channel. No washing was done last year, owing to the dry winter. The company placed flumes and appliances in order last fall and made an addition to the canyon flume, and now will begin work. One and a half miles northeast from the Blue Eyes the Lucinda Con. Gravel M. Co. have fitted up to ground-sluice and prospect at several points this spring.

Colfax Sentinel : At Pioneer mine, near Damascus, the work of repairing the flume is in progress. Sinking in the No. 4 tunnel has reached the 1250-foot level. There are fifty five men on the payroll. The 5-stamp mill at the Mountain Maid mine, on the You Bet road, three miles from Colfax, is running steadily. It is now owned by Dr. C. Pusheck. J. N. Findley is hydraulicking at the Trafton mine at Georgia hill, near Yankee Jim's.

Mining and Scientific Press, V. 78, 4/29/1899, p. 461

Colfax Sentinel: Supt. Felix Chappellet, Jr., at the Eureka Con. drift gravel mine, is drifting to drain the channel struck in the upraise. They expect to reach it in a few days. The Eureka, when opened, will employ 300 men. The company owns six miles of channel. During the heavy storms in March the pumps at the Herman mine near Deadwood were not able to handle the water and the shaft was filled. The new pumps will have sufficient capacity. Tunnel No. 5 cut the ledge at 1308 feet. A drift has been run south on the ledge 45 feet. The Blue Canyon M. & D. Co. have their Azalea tunnel in 1430 feet. This tunnel is being run for a gravel channel. Quartz veins have been struck in the tunnel through the bedrock.

Mining and Scientific Press, V. 78, 5/6/1899, p. 486

Work is in progress at the Little Dipper mine near the Iowa Hill grade in Shirt Tail canyon. The mine is owned by Holmes & Pease of Yankee Jims. The old works have been timbered and arrangements are being made to breast the new gravel recently found. J. Harrison, who is working the St. George gravel mine, has finished an upraise and is preparing to take out gravel. The tunnel is in 1200 feet.

G. A. Colwell has been taking out good gravel at his mine on Shirt Tail canyon. He is also prospecting a quartz ledge near his gravel claim.

Kavanaugh, Dougherty and Hodder, who have a lease on the Small Hope gravel mine, are cleaning bedrock. The mine is owned by Cranage & Federer.

The Trafton claim on Georgia Hill is being worked on a lease by Gilbert, McCoy, Lowell and Findley. The lessees are hydraulicking under permit from the U. S. Debris Commission. They use 100 inches of water under a pressure of 150 feet.

Auburn Leader : At Valley View mine new machinery is being put in which will double the capacity of the plant. The Blue Canyon M. & D. Co. has its Azalea tunnel in 1430 feet, run for a gravel channel. Quartz veins have been struck in the tunnel. At the California mine in Washington district a tunnel 2100 feet cuts the vein at a depth of 700 feet, and the ledge is 30 feet wide. The ore averages \$6 per ton and is worked in a 20- stamp mill. The company will put in twenty more stamps this spring. The Supt. is Dana Harmon. The Giant King near Washington is being developed by a San Francisco company, A. Pugh, Mgr. They have a large ledge of low-grade ore so situated as to handle it at a low figure. The same company is developing the Dillon mines, where they have a tunnel in on the vein 400 feet, with a depth of 250 feet. The Eagle Bird has a 30-stamp mill at work. The mine is 800 feet deep. Thirty men are employed. G. W. Hall is Supt. The Gray Eagle mine has a new air plant and is running a crosscut to tap the ledge 400 feet below the workings. J. Cohoe is Supt. This company has a mine on Canyon creek which is being developed. The St. Patrick mines, six claims, on a ledge 50 feet wide, are opened by tunnels, giving a depth of 600 feet. They are building a 20-stamp mill and expect to add twenty more.

Grass Valley Telegraph : Directors of the Morning Star M. Co. held a meeting May 1st at Colfax. Pres. Neff and F. Richards were present. They decided to declare a dividend, No. 101, but the amount has not yet been made public. The dividends for March and April were \$2.50 per share and in February was \$3.50. For some time a hard formation has been encountered and the usual amount of gravel has not been taken out. The usual output is 900 cars a week, at present only 550 carloads being extracted.

Mining and Scientific Press, V. 78, 5/27/1899, p. 565

(Special Correspondence).—In the Eureka Con. drift mine near Forest Hill the prospect work has resulted in striking the rim of the channel at a lower point than that reached several weeks ago. The wash contains many large boulders and much water. It will be several days before much definite information can be had. This work is in charge of F. Chapellet Jr. Forest Hill, May 20th, '99.

Auburn Republican: C. F. Hollen of San Francisco recently leased the Boulder mine of C. C. Handy of Ophir, and leased the Line mine on Auburn ravine, below Auburn, of J. Malmberg. Mr. Hollen is representing the Alliance Experimenting, Mining Co. of San Francisco.— B. F. Hartley is in charge of the Bear River G. M. Co. 's property, on Bear river, above Colfax. A hydraulic elevator is being put in and work will be done on the river this summer. The company is composed principally of Englishmen who have purchased several miles of river bed.

Mining and Scientific Press, V. 78, 6/3/1899, p. 590

The Alameda quartz mine is located on the south side of Bunce canyon, on the Forest Hill road, 4½ miles southeast of Colfax, and is owned by F. Wise and M. Partridge. The gold-bearing vein is a porphyry dyke or ledge 100 feet in width, which runs north and south, and is cut by seams running diagonally across it. For a depth of from 25 to 40 feet the dyke formation is soft, and they have worked the claim by sluicing. Wm. Shaub and E. Jones are making wages sluicing tailings from this mine.— The extension north of the Alameda, the Annie Laurie, is owned by G. Nissen. The decomposed ledge is 100 feet in width and is sluiced to a depth of 35 feet. Mr. Nissen cleaned up \$170 from a 16% days' run. Three

tunnels have been run 90, 78 and 68 feet.- A. Weske is running a a tunnel from the American river to tap a ledge parallel with the Alameda. The tunnel is in 85 feet.

Auburn Republican-Argus: The Jupiter Con. M. Co., an Auburn organization, owning the Jupiter and Winchester mines, near Iowa Hill, has ordered machinery and is preparing to work the property. An incline has been run down the rim rock 225 feet, and a slope will be run from the foot of the shaft. F. H. Harvey, E. M., of Gait recently visited the mine in the interest of Sacramento stockholders and will act as consulting engineer. Following are the officers of the company: R. F. Rooney, Pres. ; T. J. Nichols, Vice-Pres.; B. B. Deming, Sec'y ; C. Wickman, Supt. The above are the directors, together with W. S. Graham. The mine is south of the Morning Star. It is reported that the Mineral Hill mine, near Spencerville, has been sold to a New York company for \$50,000. The mine carries gold and copper.

Nevada Trayiscript: O. Woehler of Spencerville, who has been to North Bloomfield to inspect a copper mine owned by the McKillican estate, will probably open it up. The mine is about a mile from North Bloomfield. Auburn Herald: C. Hollen has six men at work on the Boulder mine and will sink the shaft deeper. He has leased the Malmberg quartz mill in Auburn ravine. Washing at the Big Gun claim at Michigan Bluff uncovered fair gravel, hut the water season was so short the owners were unable to realize much. An electrician is making an estimate of the expense of putting in an electric plant at the Red Point mine. There will be more prospecting this season than ever before at the eastern end of the Forest Hill divide. W. Nicholls is hydraulicking at the Polar Star. The gravel pays. The Gold Run M. & M. Co. is handling rich gravel, but has lost the grade.

Mining and Scientific Press, V. 78, 6/10/1899, p. 617

The Eureka Con. workings, near Forest Hill, have at last reached the channel after numerous raises and crosscuts to determine the position of the channel. The wash includes many boulders of good size, all much rounded, and the quantity of water is large. A drift has been extended some distance and a crosscut will be run to determine the width of channel at that point. The long bedrock tunnel is 200 feet lower than the channel; and as it passes underneath the channel, about two miles from the lower end of the company's holdings, they will be able by a series of raises to drain all that portion of the

Mining and Scientific Press, V. 78, 6/17/1899, p. 642

The shaft at the Whisky Hill copper mine is down 135 feet. Cuts have been run, opening up 1200 feet of the ledge. The rock yields 9% copper, \$3 in silver and \$5 gold per ton.

J. McAninch, G. Cowan, E. B. Qulgley and J. Shiels have bonded the Glen Consolidated mine in Duncan canyon to a Colorado company.

Mining and Scientific Press, V. 78, 6/24/1899, p. 669

E. C. Uren, an old and respected resident of Placer Co., Cal., and a pioneer miner in that section, died at Auburn, Cal., on the 14th inst., in the 73rd year of bis age.

Mining and Scientific Press, V. 78, 6/24/1899, p. 670

Auburn Herald: The Polar Star mine at Dutch Flat, owned and operated by W. Nicholls, Jr., has given employment to thirty men during the past season. From reports the mine has done well and preparations are being made for next season. The Blue Lead M. Co. will erect a 10-stamp mill on their mine. S. L. Jordan is Supt. The Gold Run Gravel M. Co., Limited, is running a mill. The gravel prospects well. The company's hydraulic mines will have water a few weeks longer. ---The Mayflower mine near

Forest Hill has closed down. A San Francisco company has leased R. Greenwood's mine at Bath and are preparing to prospect the ledge. H. Davis has completed preparations for the summer's work at Mammoth Bar. Julien, Reynolds & Co. are prospecting the bar on the Middle Fork at Long Canyon crossing. The company have machinery, pumps, etc., and expect to reach bedrock in a short time. The bar showed prospects in the preliminary work last year. Paul Carprero, who has been operating at Turkey Hill for a year, has located a claim on Middle Fork above the claim of Julien, Reynolds & Co. M. Savage of Bald Mountain is prospecting on the Middle Fork, below Duncan Canyon.

Auburn Republican-Argus : At the Marguerite mine near Auburn drifting on the 500 level is in progress. Twelve men are employed. The shaft at the Whisky Hill copper mine is down 135 feet. Cuts have opened up 1200 feet of the ledge. The rock yields 9% copper, \$3 in silver and \$5 per ton in gold. J. McAninch, G. Cowan, E. B. Quigley and J. Shlels have bonded the Glen Consolidated mine in Duncan canyon to a Colorado company.

Mining and Scientific Press, V. 79, 7/1/1899, p. 13

Attention is being given to the porphyry dike four and one-half miles southeast of Colfax. The Nisson and Wise & Partridge claims produce well when water can be secured. The width of this dike is from 50 to 100 feet and it can be traced from near Colfax to Butcher Ranch, ten miles.

H. J. Wise, J. H. Butts and G. Thompson are developing a group of claims across the American river from Colfax, embracing the Adelaide, Alma, Gladys and Bassil. Water will be brought 4000 feet from Owl creek; 2000 feet of the ditch has been graded and 1600 feet of flume will be built.

Supt. J. J. Sullivan reports that he has forty-four men on the payroll at the Pioneer mine, near Damascus, and says miners are scarce. Main No. 5 tunnel is in 4369 feet, running west 2569 and bearing south 1800 feet. Sinking on the ledge from the No. 4 tunnel is in progress, down 250 feet, and is 1250 feet from the surface.

Auburn Herald: The ore at the Grass Ravine mine is improving. It is rich in galena sulphurets. The Polar Star is paying, the returns being larger than expected. The Morning Star and the Big Dipper mines near Iowa Hill are working the usual number of men and paying the usual dividends. The Red Point mine near Damascus is paying. The Marguerite mill will be started up again. Three shifts are working at the Jupiter Con. The machinery is in place. Sinking the slope is in progress.

Mining and Scientific Press, V. 79, 7/8/1899, p. 41

Colfax Sentinel : G. McAulay, Supt. of the Mayflower mine, at Forest Hill, reports that the mine has been leased for three years to J. Finning, S. Bowman, J. G. De Bons, A. Martin, F. Smith, G. McAulay, L. Smith and J. Kelley. The Mayflower Co. contemplate the purchase of the Albrecht tunnel. If this purchase is not made a new tunnel will run, as the company owns one and a quarter miles of unworked ground on the Mayflower and Orono channels. The Dutch Flat Blue Lead M. Co. are busy grading the foundation for a 10-stamp mill, to crush cemented gravel from their drift mine near Dutch Flat. A. Brown is taking out pay in his river bar claim on the American river, below the Forest Hill bridge. He made one run this spring, when with two men and wheelbarrows he took out fourteen ounces of gold in fifteen days. R. Taylor and G. Middleton, of Colfax, fourteen years old, are river-bar mining on the American near Colfax. They run the pay gravel through a rocker.

Auburn Herald: Prospecting is being done this season in the Meadow Lake section, in the eastern part of the county. W. Houchln cleaned up twenty ounces the first of the week from rock taken from the extension on the Conrad, near Auburn. J. Johnson has leased the Hathaway and has put a crew of men to

work. The Big Pine and the Crandall, near Auburn, have been bonded to Hopkins & Barnard of San Francisco. The Herman mine, near Deadwood, is paying its usual dividends. The ledge is worked through the lower tunnel and is 5 feet in thickness. It has paid from the croppings down to the present level, 450 feet. The Boulder shaft, near Ophir, is down 275 feet, and will be sunk to greater depth. The ledge is 2 feet wide. Last week the men struck the pay shoot. The ledge at this point is rich in sulphurets and gold.

Mining and Scientific Press, V. 79, 7/15/1899, p. 65

A compressed air plant is being installed at the Red Point mine, near Damascus, on the Forest Hill divide.

Auburn Herald: F. Brye has ore from the Bellevue at the 100-foot level which is very rich. The old Mayflower claim has been leased to J. De Bon and others. Supt. Geo. McAulay reports that if the Mayflower Co. can buy the Dutch Washington they will get an outlet to a portion of the Mayflower ground that has never been worked. E. Kavanaugh has picked up a \$30 nugget in his claim, the Channel Bend on the Middle Fork. It is reported that the lessees of the Breece & Wheeler mine are getting pay dirt.

Mining and Scientific Press, V. 79, 7/15/1899, p. 68

F. Chappellet, Sr., of San Francisco, Cal., has gone to the Eureka Con. mine, near Forest Hill, Placer Co., Cal.

Mining and Scientific Press, V. 79, 7/22/1899, p. 99

Dividend: Hidden Treasure drift mine, Placer county, Cal., 10 cents a share, \$3600; July 20.

Mining and Scientific Press, V. 79, 7/29/1899, p. 115

Since the Forest Hill Divide ancient channel system in Placer county, Cal., was formed, and covered with the flow of andesite from the Sierras, the forks of the American river have cut down through the lava cap and into the underlying bedrock nearly 3000 feet, and still the formation of the gravel channels are considered a recent geological event.

Mining and Scientific Press, V. 79, 7/29/1899, p. 123

The Bald Mountain gravel mine, twenty miles east of Forest Hill, has been bonded in San Francisco. F. W. Venze is Supt. and fourteen men are employed. A new hoist will be put in. The company is said to have \$15,000 for development work.

Mining and Scientific Press, V. 79, 7/29/1899, p. 126

Hidden Treasure drift mine, Placer Co., Cal., dividend 10 cents per share, \$3600; July 20.

Mining and Scientific Press, V. 79, 8/5/1899, p. 151

Auburn Leader: At Gold Run the hydraulic mine has closed down, making their last cleanup for the season, as the water has given out. At Dutch Flat the Nichols mine, the Polar Star, is closed. At the Blue Lead gravel mine, near Dutch Flat, twenty-five men are employed in the tunnel and erecting a 10-stamp mill. This property was formerly owned by S. Jordan, but was sold to Sacramento parties. Mr. Jordan is superintending the mine. When the mill is running forty men will be employed. At Bear Valley twenty-five men are putting in a couple of dams across the lower end of the valley for the South Yuba

Water Co. P. P. Ferron, chief engineer of the Jupiter mine, above Iowa Hill, says the Jupiter Co. struck gravel at 353 feet but have not yet reached the main channel, yet the gravel is rich. They are going to crosscut the channel. The bench gravel in which they are working now is 2 feet deep. Thirty men are employed at the Van Avery quartz mine, and new machinery is being put in, among which is a new 10-stamp mill. A company from Des Moines, Iowa, are operating the mine. The Bear River Hydraulic M. Co., operating on Bear river, three and a half miles from Colfax, expect to reach bedrock this week. Twelve men are employed. They are operating by use of the hydraulic elevator and work in two shifts.

Mining and Scientific Press, V. 79, 8/12/1899, p. 177

The forty-four men at the Pioneer have progressed 1967 feet in the No. 4 tunnel south. Two hundred feet more will reach a point under the old workings, at which it is proposed to work upward with a view to reaching the region abandoned by the former management. The new tunnel is 600 feet below the level of the old workings.

Mining and Scientific Press, V. 79, 8/19/1899, p. 205

The directors of the Morning Star mine, at Iowa Hill, at a recent meeting, declared the regular monthly dividend of \$2 a share.

Auburn Herald: The Jupiter Con. has 2 feet of gravel which prospects well. The tunnel at the Red Point mine, near Damascus, is in two and three-fourths miles. The loaded cars run out by gravity and are drawn back by horses. The pay is chiefly in gravel on bedrock, and sometimes 2 or 3 feet in the bedrock itself. The channel is winding and crooked and was passed in opening the mine, owing to a sharp curve, although within 12 feet of the tunnel, which was run 1500 feet past it. Seventy-five men are employed under Supt. J. A. Ferguson. A New York company has located a ledge below the Pioneer mine, near Damascus, and named it the Southern Cross. R. J. Trimble is in charge. The Bellevue Con. M. Co. has been incorporated by. F. E. Brye, P. S. Lozano, A. L. Smith, E. L. Hawk and S. Bartlett.

Colfax Sentinel : Development is in progress at the Jupiter gravel mine, above the Morning Star, near Iowa Hill. With a 12 H. P. engine and hoist, an Incline of 45° has been sunk 350 feet to the channel. Recently \$200 in gold was washed from gravel taken out in crosscutting the channel. Twelve men are employed. C. A. Wickman is Supt. and F. H. Harvey of Gait is consulting engineer. L. L. Chamberlain of Auburn has given a working bond on the Dardanelles drift mine, near Forest Hill, to W. McDonald, J. Marchant, Marchant, A. McDonald and F. E. Vennewitz. The mine has a 5-stamp mill. The lessees have a two years' bond with the privilege of purchasing the property for \$15,000.

Mining and Scientific Press, V. 79, 8/19/1899, p. 208

Dividend: Morning Star Mining Co., Placer Co., Cal., \$2 per share; Aug. 10.

Mining and Scientific Press, V. 79, 9/9/1899, p. 280

The Red Point drift mine near Damascus, on the Forest Hill divide, is to have a compressed air haulage plant. The power will be furnished by the water flowing from the workings, which are in 14,000 feet. The compressor will be located 660 feet lower than the mouth of the tunnel. H. C. Behr, who is the constructing engineer of this plant, figures on the development of 38 H. P. after making necessary deductions for loss. The haulage will be done by storage engines, which will be charged as often as required, along the line, which eventually will be five miles in length. Large blowers will be put in and air

forced to the face. J. A. Ferguson is Supt. The compressor will be operated to 750 pounds pressure per square inch.

Colfax Sentinel: During the past week a 14-foot ledge has been encountered in the lower tunnel at the Herman mine on the Deadwood ridge, four miles east of Westville. From a test run in the mill It is found to yield from \$25 to \$40 per ton. Over 700 feet of backs can be stoped. Dr. O. L. Barton Is Supt. The ledge at the Drummond quartz mine on Shirt Tail canyon, near Forest Hill, was struck In the new lower tunnel this week. A shoot of ore in the Drummond mine returned many thousands of dollars some years ago, having been worked to a considerable depth through a shaft. The tunnel at the Oro & Mountain View drift gravel mine, above Iowa Hill, Is in 2100 feet. E. M. Armstrong is Supt.

Mining and Scientific Press, V. 79, 9/16/1899, p. 319

At the Sailor mine. In Sailor canyon, where a large amount of money has been expended in search of a gravel channel, a new tunnel has been started, on the advice of N. A. Harris, 100 feet higher than the old workings. It Is thought the channel will be found in 350 feet.

Mining and Scientific Press, V. 79, 9/28/1899, p. 345

Auburn Herald : At the Jupiter Consolidated the drift up the channel has run out of gravel. The drift down is still in gravel. For the month 120 ounces have been taken out in running the drifts. W. E. Whitney Is working the old Dixon mine at Deadwood. It is reported that F. Chapelet, Sr., who has examined the Buckeye gravel, considers the lead a part of the old Mayflower channel. The MacDonald Company have the old Dardanelles slope nearly pumped out. At the Herman mine, near Last Chance, in the lower tunnel 300 feet below the old works, the ledge has been struck. It is 10 feet wide and runs \$15 to \$50 per ton. Dr. O. L. Barton is superintendent. The mine has paid well from the outset.

Colfax Sentinel: E. M. Armstrong, Supt. Oro and Mountain View mine near Iowa Hill, has bought a three-fourths interest in the Van Riper drift claim. The remaining one fourth interest is retained by T. Gostlin. The new mill at the mine of the Dutch Flat Blue Lead is running. A larger force will be put on in the mine as soon as the drifts and shafts can be put in shape.

Mining and Scientific Press, V. 79, 9/30/1899, p. 371

A tunnel driven at the Red Point mine, on the Forest Hill divide, In Placer Co., Cal., was run several hundred feet before striking the channel. When the channel was worked it was eventually learned that the channel might have been reached within a few feet of the mouth of the tunnel; but the fact was not previously apparent, owing to the surface debris. At the Gray Eagle mine, on the same ridge, a shaft was sunk several hundred feet to prospect for a channel, and gravel was found, apparently in the channel. A tunnel was run several thousand feet to tap the bottom of the shaft, when, upon reaching it, the discovery was made that the shaft had struck a depression on the rim, and the tunnel had to be turned up-stream and run several thousand feet before bedrock was reached, on the main channel; which illustrates how difficult it is to see into the ground.

Mining and Scientific Press, V. 79, 9/30/1899, p. 382

Placer county, during a period of eighteen years, from 1880 to 1898, inclusive, produced \$21,598,576, and it is estimated that prior to that not less than \$43,000,000 came from the mines of this county, the greater part, over 90%, coming from hydraulic, drift and placer mines.

Auburn Herald : I. Meyer has sold his interest in the copper mine at Whisky Hill. The ore carried from \$3.75 to \$6 in gold and \$25 per ton in copper. Mr. Meyer has formed a company for working tailings in Auburn ravine by the hydraulic elevator process. The company has bought the Wall and Sickles farms and is negotiating for the Symmes farm at Gold Hill. Work will be begun near the upper end of the Pagg farm. The water will be taken from Chili hill; 11,000 feet of iron pipe will be required. Supt. J. E. Walsh expects to start work at the Gold Blossom, near Ophir, October 1st.—The shaft at the Bullion, an extension of the Bellevue, in Ophir district, is nearly pumped out. The company will begin sinking as soon as the ground is drained. A wheel 36 feet in diameter will furnish power for hoisting. In the three shafts sunk at the Three Star mine quartz has been struck in each and levels have been run. The company is doing prospect work before putting up reduction works. C. A. Reed brought from the mountains fine copper ore from the Oro Fino mine at Meadow Lake. But few prospectors are here this summer. It is reported the pay chute at the Pioneer, near Damascus, has been struck again.

Mining and Scientific Press, V. 79, 10/14/1899, p. 431

The greatest width of channel developed in the Hidden Treasure mine on the Forest Hill divide, Placer county, Cal., is 1610 feet. The white quartz channel has a length of 18,000 feet in this property. The employment of electric haulage effects a saving over animal haulage of \$4.25 dally. The electric Installation cost \$20,000.

Mining and Scientific Press, V. 79, 10/14/1899, p. 438

Colfax Sentinel : The extension of the main tunnel at the Eureka Consolidated drift mine near Michigan Bluff, on the Forest Hill divide, was recently commenced at the 3000 foot mark. On Oct. 4th, 66 feet of new tunnel had been driven. The rock is of average hardness and they are making 5 feet per day. The tunnel is being run to tap the lower gravel channel. Felix Chappellet, Jr., is Supt.

Mining and Scientific Press, V. 79, 11/4/1899, p. 521

Auburn Herald: The Michigan Bluff M. Co., Incorporated, has bought the Burns Con. Mexican placer mining claim at Michigan Bluff. The former owners ran a tunnel and struck the channel on the rim. It is now proposed to run a new tunnel 40 feet below the channel and open it, so it may be worked throughout its full length on the ground owned by the company. The Bullion shaft, Ophir district, under its new owners, has been sunk 10 feet and is down 160 feet. The ledge is of ribbon rock 4 feet wide at the bottom of the shaft and shows good ore. The company has ordered a new hoist from the Union Iron Works. Sixteen men are at work. At the Boulder, near Ophir, they are preparing to put in an air compressor. Two concentrators have been ordered. A. Clarke is preparing to put up an air compressor at his Georgia Hill mine. Laird & Quinn Bros. are cleaning a ditch preparatory to sluicing the ravine on P. Snyder's farm. They have a mile of pipe laid.

Colfax Sentinel: The Gold Channel M. Co., whose mine is near Emigrant Gap, are doing successful work in their shaft. They struck gravel at the end of a 100-foot drift recently and are sinking now to bedrock. The mine is under the management of F. W. Armstrong, formerly of the Big Dipper, near Iowa Hill.

Mining and Scientific Press, V. 79, 11/11/1899, p. 551

(Special Correspondence).—Three-fourths of the stock of the Morning Star M. Co. has been transferred. On the 6th inst. 1803 shares of stock in that mine were bought by H. T. Power, D. W. Lubeck,

J. McAninch, Mrs. I. M. Power, Mrs. D. T. Briggs and H. E. Yardley. H. T. Power was elected Pres. And Supt., vice J. H. Neff, resigned. The total number of shares in the company is 2400. The gravel channel in the Morning Star having turned in the direction of the Big Dipper mine adjoining, the Morning Star would be forced to discontinue its operations. There is still considerable gravel left in the old company's ground. The Morning Star mine has been worked for many years and employs forty men. The gravel has averaged from \$7.50 to \$10 per ton for the 2000 feet of channel which have been worked. The output of the Morning Star is \$1000 a day. Colfax, Nov. 8th, '99.

Lincoln News-Messenger : F. Pohl has made a strike on Bear river, near the Nevada and Placer county line. W. Taylor, Supt. Whisky Diggings mine, is interested.--- At the Algot copper mine rich developments have been made recently. At the 100-foot level a 65-foot vein of copper ore was struck. Fourteen feet of the vein contains quartz bearing gold. The remainder of the vein carries copper, which varies from 3% to 40% in value. The mine is on Dry creek and is managed by Anderson Bros. ---Houchin and Dixon begun crushing sixty-seven tons of ore from the Conrad extension, near Ophir. ---The Mayflower Co. near Forest Hill is building a new reservoir, which give a pressure of 100 feet.--- It is reported that R. Greenwood has struck some rich quartz at a point across Volcano canyon from Bath--- At the Dardanelles mine near Forest Hill, the McDonald Co. has pumped out the slope and run through the bedrock and is breasting into the gravel.

Mining and Scientific Press, V. 79, 11/18/1899, p. 581

The Sentinel reports a strike of gravel in the Oro gravel mine, near Iowa Hill. E. M. Armstrong is Supt. and has a large Interest in the property.

Mining and Scientific Press, V. 79, 11/25/1899, p. 611

A strike is reported from the Oro drift mine near Iowa Hill.

Mining and Scientific Press, V. 79, 12/2/1899, p. 638

(Special Correspondence).—The head gangway of the Big Dipper mine, near Iowa Hill, broke into the works of the Morning Star mine Nov. 10th, 750 feet north of the main works of the Big Dipper mine. The distance from the mouth of the Big Dipper tunnel to the mouth of the Morning Star tunnel is 10,000 feet. The fact that the works of the Big Dipper and Morning Star mines are now connected, as well as thorough prospecting in northerly and easterly directions by the Morning Star M. Co. and the Big Dipper M. Co., proves conclusively that these two mines are operating in the same channel. Careful and extended observation also proves that this channel flowed in a general northerly direction—that is, from the mouth of the Big Dipper tunnel toward the mouth of the Morning Star tunnel.

The channel comes from the direction of the Forest Hill divide, possibly being the channel upon which the Paragon, Mayflower, Baltimore and Dardanelles mines operated, crosses Shirttail canyon and enters the Iowa Hill divide, from New York canyon, at the old Vaughn hydraulic claim at Wisconsin hill. From this point to the lines of the Big Dipper mine the channel has been laid bare by the hydraulic process and can be plainly followed. Its course is here about northwest for 2500 feet, thence easterly to the Big Dipper mine, 2500 feet, which it enters, turning to the north and preserving a general northerly course for 5500 feet to the line of the Morning Star mine, where it changes its course to the west, and preserves a westerly course to the mouth of the Morning Star tunnel, a distance of 4500 feet. At this point the channel crosses Indian canyon, where it is eroded, and passes under the town of Iowa Hill, turning to the north, and thence across the canyon of the North Fork of the American river, by which it has been

eroded, to Gold Run and Dutch Flat. From the point of entrance at Indian canyon to the point of emergence into the North Fork canyon, a distance of about 4000 feet, the channel has been hydraulicked with the exception of a small strip upon which stands the town of Iowa Hill, The gross product of this channel, from the point of its entrance into the Iowa Hill divide to its point of emergence therefrom, has been about \$7,000, 000, or over \$350 per running foot, for from 18,000 to 20,000 feet of the channel.

Shirttail, New York, Indian and North Fork canyons were very rich at the places where these canyons cut away the ancient channel. Iowa Hill, Nov. 25th, '99.

The hanging wall ledge and the foot wall ledge of La Trinidad mine are being connected with a crosscut 700 feet in on the tunnel. The mine is in Sailor canyon, near the American river. It has a 10-stamp mill. J. R. Brokenshire is Supt.

J. J. Hoffman and T. M. Browne have applied to the California Debris Commission to mine by the hydraulic process at the Paragon gravel mine, Bath, to deposit tailings In Volcano canyon. The old hydraulic pit at the Paragon mine is supposed to be rich. It was extensively worked before hydraulicking was enjoined. It Is on the same channel as the Mayflower and Dardanelles mines. This important channel enters the Forest Hill divide at Bath, flowing in a northeasterly direction, then sweeping around to the westward into the Mayflower, to the Dardanelles, where it is exposed In a hydraulic pit nearly half a mile long. Here it turns back under the divide, running directly north toward Yankee Jim's, but Is lost under the divide, being cut out by a later channel. The Paragon and Mayflower workings are connected and are over Ave miles in length.

In the Hidden Treasure mine, at Sunny South, the rich Dam channel has been cut 5000 feet in on the main tunnel. It is 32 feet lower than the upper channel. The gravel is blue, the deposit 6 feet in depth and very rich, going as high as \$5 to the car. A hoisting and pumping plant will be required. A drift will be run up the channel to develop it. The Hidden Treasure Co. employs 180 men. The mine has been paying monthly dividends the past Ave months. Harold T, Power is Supt.

Mining and Scientific Press, V. 79, 12/9/1899, p. 667

A. Clarke has driven a tunnel into Georgia Hill, near Yankee Jim's, 500 feet, and finding he was too high to reach the channel he had started to reach, he has sunk an incline on the vein 60 feet deep and is still sinking, though contending with water. Hydraulic ejectors are employed in raising water from the slope.

The Boston & South Dakota Mining Co. have secured 1700 acres on the Forest Hill divide, near Michigan Bluff, including the Weske and Manhattan channels, which were rich when worked in former years. A channel which has never been worked has been discovered in an upraise from the Weske channel. The wash, though not large, is heavy and consists wholly of bedrock material, chiefly quartz and the harder metamorphic rocks. It Is evidently one of the older channels. It will be developed and worked through the Weske tunnel. J. R. Scupham is in charge.

The recent connection of the workings of the Morning Star mine and the Big Dipper mine on the Morning Star channel near Iowa Hill, mention of which was made herein at the time, led to the belief that these mines were owned by the same company. The Morning Star property recently passed to the control of the Hidden Treasure Company, of which H. T. Power Is superintendent, and the Big Dipper mine is owned by the Big Dipper Mining Co., of which Seymour Waterhouse it superintendent.

Mining and Scientific Press, V. 79, 12/28/1899, p. 733

Pond Bros, will hydraulic at their claim in Todds valley, and deposit tailings behind a dam in Todds valley canyon.

The mill at Pioneer mine, near Damascus, is running on half time. An upraise is being made from No. 4 to No. 3 level. J. J. Sullivan Is superintendent.

One of the compressors at the Drummond mine, near Forest Hill, will be taken to Ophir for use at the Gold Blossom mine.

Colfax Sentinel: At the Clark mine, at Yankee Jims, an incline Is running 500 feet from the mouth of the tunnel to reach the bottom of the channel. The Southern Cross quartz mine, at Euchre Bar, on the North Fork of the American river, near Towle, is being opened up from the west tunnel. The ledge was struck at 170 feet. The tunnel was driven along the banging wall. The quartz is heavily charged with arsenical pyrites. The tunnel will be continued 100 feet more on the vein, when a crosscut will be run to cut the east and middle veins. An 857-foot tramway Is being laid. The mill at the Rawhide mine is crushing ore steadily. This mine is owned by J, T. Patrick, and is on Texas ridge, five miles south of Blue Canyon. The main tunnel Is in over 100 feet and a lower tunnel has been started. The ledge is 2 to 5 feet in width.