Mining and Scientific Press, V. 60, 1/4/1890, p. 4

Iowa Hill.—Cor. Placer Argus, Dec. 28: The latest news from all the mines in this vicinity and on the Upper Divide is encouraging. Fair & Davis have 35 men at work on the Pioneer quartz mine, near Damascus, and keep 15 stamps running most of the time on rock that gives good dividends to the owners. A lower tunnel is being run to cut the ledge at a greater depth. C. Hoffman reports about 40 men at work at the Red Point mine taking out gravel that must pay well if Mr. Hoffman's good spirits are any indication. Chas. F. Reed, owner of the Drummond quartz mine at Cottage Home, passed through town on Friday last on his way to the mine. About 25 men are now at work and the force will be doubled during the spring. The Huntington mill crushes from 25 to 30 tons per day with good results. Mr. Reed is well pleased with his investment in Placer county. The famous old Mountain Gate gravel mine at Damascus has been bonded to the same French syndicate that owns the Red Point mine. The Mountain Gate has been one of the richest mines on the Divide. Enough of the old blue channel still remains unworked to warrant the new owners putting in pumping machinery, or to run a new and lower tunnel to drain the mine. The French company have abundant capital to do either, and have intelligent engineers in their employ who will bring back the old Mountain Gate to its former position as one of the best paying mines in Placer. It is rumored that the same company have bonded other claims in the same vicinity on which work will be commenced in the spring. Ross Browne, the mining engineer, has been surveying and taking the levels on rim rock and channels on the Forest Hill Divide, and it would not be a surprise if you should hear that the French syndicates had got hold of some of the rich gravel mines in that district. The Morning Star gravel mine, at Iowa Hill, has been bonded to a company represented by Mr. J. Hammond, who is at present working the mine under his bond. The main tunnel is being driven ahead 500 feet; when that work has been completed a larger force of men again be put to work taking out gravel and the mill again be run on full time. E. West has charge of the work. Tom Dick and the Schmidt boys are running a tunnel on the old McCall mine at Elizabeth town. They have started an upraise and expect to break through before New Year's. They have christened the claim the Emma mine. The Huntington mill at the Horman mine, at Wisconsin Hill, is crushing 12 to 15 tons of rich gravel per day. Another mill is on the way to the mine, but it will not get there before spring unless the roads improve.

Sunny South.—Cor. Placer Republican, Dec. 25: Five miles from Michigan Bluff at the head of a tributary of El Dorado canyon lies the little town of Sunny South. It depends entirely upon the Hidden Treasure mine for its existence, but since it is "built upon a rock" no one is apprehensive as to its future. The Hidden Treasure mine has been worked for about 13 years and is now operated through 8300 feet of tunnel, through a slate formation, by drifting. The pay gravel is white quartz. The bedrock is slate varying in color from white to black. The mine is timbered throughout with spruce and pine. The gravel is washed by water supplied by the mine. The cars are drawn into the mine by horses, and as the cars come out of the mine loaded their contents are dumped through a chute to the washing floor, where they are washed into sluices by

a stream of water under a pressure of 20 feet. After being washed the gravel passes through two sets of sluices lined with quartz bowlders and worn-out car wheels. Considerable quicksilver is used in the sluices.

Mining and Scientific Press, V. 60, 1/11/1890, p. 22

Forest Hill Divide.—Placer Herald, Jan. 6: Mining as it has been for years still claims the attention of most of the people, and probably will until the gravel beds are worked out. No startling developments have been made during the year, although much labor has been expended. The Gray Eagle Co., early in the spring, succeeded in sinking a shaft 350 feet in depth to good gravel. They then turned their attention to running a tunnel that should tap the channel and drain it. The tunnel is now over 500 feet in length. The rock is a soft black slate, and consequently admits of rapid progress. Anthony Clark has started another tunnel farther up Owl Creek to tap the Wolverine, a. claim adjoining the Gray Eagle. There has been but little mining either at Todds Valley or Yankee Jims during the year. Some work has been done on the Red Sea at the latter place, and C. Trafton has now a tunnel about 800 feet in length in his Georgia Hill claim. At Forest Hill there is but little raiding going on except at the Mayflower, Work on a large scale was suspended last spring at the Dardanelles. Several men are at work there now. The Baker Divide Co. is, drifting, and would, if all their upraises and drifts had been put into the main tunnel, have been in between 6000 and 7000 feet The Mayflower gives employment to the usual force, and shows no abatement in its output of dust. The mill has been running almost steadily since it was started on Dec. 11, 1888, Twenty stamps have been in operation the greater part of the time. The yield in gold for the year ending Dec. 11. 1889, was \$330,000, and for the month of November, the mime paid \$34,000. For the last six months the principal part of the work has been done in the north gangway. The yellow deposit with its black gold has been cut through and connection will be made shortly with the old ground which paid so immensely in 1886. The old Paragon at Bath .has been beating its record for the last few months. This mine has been one of the richest in the State. It was worked in 1850 by George Webster. In 1862 A, Breece, Judson Wheeler and W. A. Freeman owned it. Mr. Freeman afterward sold out and went to Oakland with a fortune. Messrs. Breece & Wheeler have owned the mine since then, and have consolidated with it the Mint and Rough Gold, There are two channels, an upper and lower. The upper was rich, but never paid so regularly as the lower. No work has been done on this for years. The tunnel in the lower channel is now 9240 feet long. The pay dirt where work is now going on is six feet in depth and very rich. Gangways and crosscuts are being run in order to block out the ground so that a large force of men can be put to work. The channel here is 60 feet wide, and on one side yields \$60 to the carload or ton of gravel. Mr. Breece has taken out as high as \$3000 to the pan in this claim, and in one crevice last winter he took out \$15,000. It is a remarkable mine, and there appears to be no end to its richness. It has always paid big dividends from the time it was opened. According to latest reports no mining has been done at Michigan Bluff since last winter. W. Muir is operating at the Oro near the Weske, and is taking out some gold. The Hidden Treasure tunnel is now 8300 feet in length and in rich ground. Some idea of

the amount of work that is done in this mine may be gained from the statement that 200,000 laggings and 40,000 caps and posts are used yearly in the tunnel, drifts and crosscuts.

Mining and Scientific Press, V. 60, 1/25/1890, p. 56

An Important Case.—A case of more than usual interest has been commenced in the Superior Court by J. E Prewett, attorney for plaintiffs, not only on account of the large amount of money and property involved, but also on account of the important land questions to be determined. The suit is to recover a tract of very valuable mining land situated near the Mayflower mine, on the Forest Hill divide, together with \$51 000 rents and profits Judge Spear and W. H. Ballock own the mine under the mining laws, and the Mayflower Company claims it under a patent to the railroad company. The land has been known to be mineral land from 1860 down to the present, and the determination of the question will be of interest to many miners in all parts of the mining regions as to whether the railroad company can acquire a valid patent to land known to be mineral at the time of the passage of the railroad grant in 1862. The Mayflower Company is in possession of the property and is the defendant in the suit; and W. H. Ballock, Judge Spear, J. S. Raes and R, Greenwood are the plaintiffs.—Placer Republican.

Mining and Scientific Press, V. 60, 1/25/1890, p. 58

Too Late.—Placer Herald, Jan. 18: According to W, Hill, Grant Van Vacior was a month too late in starting to put up his machinery at Canada Hill. He succeeded in getting his cabin built, but the timbers and lumber for the mill and the machinery are lying under 25 feet of snow. The mortar was set and the gallows-frame was up -before the storm began.

Channel.—John Schipraan has a valuable claim on New York Canyon and estimates that he will have to run his tunnel only 75 feet further to tap the channel.

Mining and Scientific Press, V. 60, 2/8/1890, p. 94

Empire.-F. C. Halstead of Yankee Jims will start up the Empire mine, near Duncan Hill, about the 15th of this month.

Mining and Scientific Press, V. 60, 3/1/1890, p. 148

SUNNY South.—Placer Argus, Feb. 22: H. T. Power came down from Sunny South. Monday, to look after the Burnham estate, of which he was ap pointed executor. He says they have been working only about half the usual force for some time, in the Hidden Treasure mine, but will put on the full force as soon as the weather clears up, and he hopes for good returns.

Mayflower.-F. Chappellet's resignation of his position as superintendent of the Mayflower mine has finally been accepted. Mr. Chappellet's health is not the best, and he will have a needed respite. Mr. Beach, who has acted as assistant, will take Mr. Chappellet's place for the present.

Mining and Scientific Press, V. 60, 3/8/1890, p. 164

Eureka. — Placer Argus, March i: We mentioned last week that F. Chappellet had resigned his position as superintendent of the Mayflower mine. He still retains charge of the Live Oak and has been chosen superintendent of the Eureka mine. The Eureka Mining Co. has been organized with the following directors: F. Chappellet, H. Barroilhet, J. Morizio, Anthony Clark, J. C. Plunkett. W, H. Rabe is secretary, Belloc & Co., treasurer, and F. Chappellet, superintendent.

Iowa Hill. — Cor. Placer Herald, March 2: The Waterhouse and Dorn mine has been shut down for a few days past, on account of an insufficient supply of water to run their machinery, the ditch having been broken near the head during the storm. The Morning Star mine force has been laid off, most of them also lately, but I hear they will soon resume work. At the Pioneer a force of men has been driving the main tunnel ahead to connect with the Lynn ledge; whether they have succeeded or not I do not know. A sad accident occurred at the Red Point on Saturday night. A large slab of the roof, some 50 feet in length, fell and caught several of the men, killing George Patrick and four Chinamen. Mr. W. James, Fred Snyder and G. W. Snyder's nephew were also caught, but I believe none of them were seriously injured, Fred Snyder being badly bruised. It is believed that death was instantaneous in the case of George Patrick.

Mining and Scientific Press, V. 60, 3/22/1890, p. 200

New Mill.—Placer Herald, March 15: The new lo-stamp mill at the Eclipse mine, it is expected, will be ready to start up by the 1st of April. It will be the most complete, substantial and convenient quartz mine in the county. They are down 250 feet on the incline and the rock at the bottom looks fine.

Mining and Scientific Press, V. 60, 4/19/1890, p. 266

The Drummond Quartz Mine.—Herald, April 12: The old-time miner and mining superintendent, Wm. Werry, after the hard winter, has again taken charge of the Drummond quartz mine, near Iowa Hill, and reports everything as looking well. A contract has been let to run tunnel No. 2, in which the ledge is likely to be struck soon, Mr. Werry thinks this lower tunnel will demonstrate the mine's increased value. But even the openings in tunnel No. i show the Drummond to be a rich mine and good for years. If they strike good ore at a lower level, so much the better. The intention is to soon have another mill in operation, probably by the 1st of May. There are now about 20 men employed, and when the new mill is started they will increase the force. When in full operation they expect to crush from 30 to 35 tons of rock per day.

Mining and Scientific Press, V. 60, 5/3/1890, p. 298

The Van Vactor Quartz Mine.—Work is being vigorously prosecuted at the Van Vactor quartz mine, at Canada Hill. The great depth of snow materially delayed the erection of buildings, but the late fair weather overhead has enabled them to make excellent progress lately, and by the 15th of May all will be in readiness to start crushing ore. The almost insurmountable difficulties overcome by Mr. Van Vactor, the energetic young superintendent of the above mine,

in the erection of the mill during the past severe winter amid snow from 25 to 30 feet deep, and in having everything in readiness to begin active operations so early in the season, reflects great credit on his administrative ability and demonstrates the possibility of mining to advantage during the severest winter in the high altitudes, when proper arrangements are made.

The Eclipse.— Last summer a N. Y. Co. got possession of the old Eclipse quartz mine, located about two miles west of Auburn, and under the superintendency of J. B. Patterson, the former owner, has been busy at work ever since erecting hoisting works, a new mill and developing the mine. They have been delayed by the excessive rains of the past winter, but at this writing have everything running in good shape. The hoisting works and pump, 100 feet from the mill, are run by a 4-foot Pelton water-wheel, and are so complete in automatic appliances that one man receives the cars and attends to everything. The mill is one of the finest in the county. Between the hoisting works and the mill is an elevated railway, along which the cars are run and from which the ore is dumped into the large ore bin. The automatic appliances are here again so complete that the entire works of the mill are operated by one man. The machinery is all very perfect and works like a charm. The power for the mill is supplied by a 5-foot Pelton waterwheel. The company has expended for buildings and machinery about \$30,000. The vein varies in thickness from 20 inches to 4 feet, and is all mill rock. At the bottom of the main incline the ore is as good as any they have had, and a 60-foot drift extending on either side of the incline, at a depth of 260 feet, shows a strong vein and uniformly rich ore. When they started the mill they had nearly 300 tons of rock on hand, and expect with this start to keep the 10 stamps running constantly day and night. Seven hundred feet east of the present works a shaft has been sunk to a depth of 200 feet. A steam-hoisting plant is being put on this, and it will be connected to the mill by a track so arranged that the ore can be delivered at the mill by machinery. Connected with the works is an assay office which is conducted by Mr. J. W. Peck, who for several years was first assistant assayer at the U.S. Mint in San Francisco.

Eclipse.—Placer Argus, April 26: The new mill at the Eclipse mine is in operation, and flattering developments are being made in the mine.

Mining and Scientific Press, V. 60, 5/10/1890, p. 316

On the Divide.—Placer Herald, May 2: A. Breece called on us while on his way from Bath to Sin Francisco last Wednesday. He tells us that the Breece & Wheeler mine is panning out its usual handsome returns. The gravel is running over \$30 to the car, and for the month of April they will declare a dividend of \$10,000 or \$5000 for each of the owners. The Hidden Treasure mine at Sunny South, he tells us, according to his information, is keeping up its old-time reputation for richness. At the Mayflower, he understood, they were running drifts and opening up in good shape.

Mining and Scientific Press, V. 60, 5/17/1890, p. 332

The Drummond Mine.— Herald, May 10: Wm. Werry, superintendent of the Drummond quartz mine, located a few miles south of Iowa Hill, was in Auburn last Saturday, and from him

we learn that work on the mine is progressing satisfactorily, and that the developments are very encouraging. The lower or new tunnel only lacked 25 feet of being into the ledge, and by the time that is in the second roller-mill will be ready to run, after which they will be able to crush from 35 to 40 tons of ore a day. At present they are extracting ore from the old or upper tunnel and crushing on an average a little less than 20 tons a day. The vein is good and strong, averaging four feet, and is all milling ore, and yields right along from \$6 to \$7 per ton. This mine is the property of C. F. Reed of Auburn, and from present indications promises to prove very valuable,

Mining and Scientific Press, V. 60, 5/24/1890, p. 348

Mayflower. — Placer Argus, May 17: Mr. Chappellet says that the Mayflower M. Co. have paid out over \$1,000, 000 at Forest Hill, during the last 13 years. The bullion yield has been over \$600,000, but the work in developing the mine is pretty well completed. The mill will soon resume work, as pay gravel has been struck in the south drift.

The Drummond.—Herald, May 17: Mr. Wm. Werry, the well-known quartz-miner, in conversation with a representative of this paper stated that he had resigned his position as superintendent of the Drummond mine, owned and operated by Hon. F. Reed, and that Mr. Hanchett, a man of large experience in the management of mines in the States of Nevada and Colorado, has been employed as his successor. Mr. Werry spoke very flatteringly of the comparatively new mine. He said: " In leaving the Drummond mine I left one of the leading mines in the State. It is bound to be a very large producer of bullion. While the ore is not of a high grade, there is an immense body of it, the vein being large and very extensive. It is another Idaho; like the Idaho of Grass Valley. When I first took charge of the Drummond the ore paid only \$2.70 per ton, and when I left the value of the ore would average about \$8 per ton. The mine paid under my administration, with one Huntington mill, all expenses of opening and a little surplus, and with two mills it ought to pay a handsome profit, ore enough being in sight above the No. i tunnel to run two mills for three years to come, crushing 40 tons per day. During the time I had charge I run another tunnel, or crosscut, so as to tap the vein still lower. This lower tunnel is called tunnel No. 2. Enough ore can be taken from No, 2 to run the two mills three years. Crosscuts can be run below No. 2 to tap the vein at a depth of 1200 feet. I regret that other enterprises in which I am interested seemed to make it necessary for me to resign, but I have faith in the ability of my successor. About 1000 feet from the Drummond ledge is a parallel vein running east and west—the Drummond ledge running south of east and west of north—and I am confident that the two ledges will come together, thus forming a very large body of ore. Very rich rock has been taken from the second lode on which but little work has been done as yet, proving conclusively this of itself is a big mine. This parallel lead is called the Eclipse, also owned by Mr. Reed. Specimens of ore from the Eclipse can be seen at Freeman's hotel, which were taken from the bottom of the shaft at a depth of only 80 feet. The mills are now run by steam, but can be run by water-power if necessary, which shows that these mines can be handled very economically. In conclusion let me tell you that the size of the ore body, its quality, the

surroundings and conveniences for working make it another Sierra Buttes mine in location and production.

Mining and Scientific Press, V. 60,6/7/1890, p. 384

Auriferous Gravels of California

The fact is that there is very little reliable data concerning our gravel mines. Few seem to have taken the trouble to make any permanent records. Take, for instance, the drift mining districts of the Forest Hill ridge or divide, in Placer county. The earliest developments in this section (covering about 25 miles of the gravel channel) were confined to the more accessible portions of the beds. The amount of gold produced has been estimated at from \$25,000,000 to \$30,000,000, and the greater part of the ridge remains untouched. Many of the claims being worked out or proving unprofitable, were abandoned and the openings have been filled up by caving.

Information which has cost large sums of money to obtain, and which might have furnished a valuable guide in subsequent undertaking, was lost for want of a proper record. It has been necessary to repeat a great deal of prospect work merely to test the memory of predecessors.

Mining and Scientific Press, V. 60,6/7/1890, p. 385

The Steamboat Mine Case.—The case of W. H. Ballock. and others against the Mayflower Gravel mining Company was this week transferred from the Superior Court of Placer county to the United States Circuit in San Francisco. Ballook and others seek to recover possession of the Steamboat placer mine, located in Placer county, near Forest Hill, besides \$1000 damages and \$50,000 rent for use of the mine, which, they claim, they were unlawfully dispossessed of. The directors claim that the mine was purchased by them in good faith from the Central Pacific Railroad Co.

Mining and Scientific Press, V. 60,6/14/1890, p. 396

Forest Hill.—Placer Herald^ June 7: At the Mayflower the tunnel has been run 1200 feet in a northerly direction under the old works, and Supt. Beech expects to start the mill in six weeks. Swansburrough & Co. have leased the Dardanelles and are taking out good pay dirt. The Breece & Wheeler mine is paying big. The yield for the last month netted the owners \$10,000. Work at the Hogsback is progressing satisfactorily. The tunnel is now 1500 feet in length. The tunnel at the Gray Eagle is in about 1500 feet. The rock is soft and easily worked. Henderson & Pease expect to make a good cleanup in their claim at Yankee Jims, as the gravel prospects well. A. Clark has the iron ore band for some 600 feet of car track at the Wolverine tunnel. Tom Harper is rushing his tunnel at Sailor canyon, having run about 700 feet this winter.

Mining and Scientific Press, V. 60,6/21/1890, p. 414

The Divide.—Placer Herald. June 14: Our industries being principally mining, we are more interested in that line than any other. I have to note the continued prosperity of those industries, our paying mines continuing to yield their usual quota of bullion. Messrs. Breece & Wheeler visited their mine the past week, both looking in good health and spirits, well pleased with the output from their mine under the superintendence of Mr. Grinnell who is now employing about 25 men. The Drummond mine at present seems to take the cake, working to the full capacity of the mill in ore so abundant that the superintendent has dispensed with the night shift; the whole body of the ore yielding \$8 per ton. This to the proprietor means a fortune, It is rumored that the Mayflower will be ready to put on a full force in a few weeks. At present they are engaged in running tunnels preparatory to opening up the mine in the large body of gravel from the immense river-bed extending through their property. The Gray Eagle is pushing its tunnel ahead at the rate of 300 feet per month and expects to strike the body of pay gravel by October.

Iowa Hill.—Cor. Placer Herald, June 14 While we do not make any great outcry, I think Iowa Hill holds its own with most of the small mountain towns. The Morning Star mine keeps on the even tenor with a moderate crew of men, under Mr. H. Simons; the Waterhouse & Dorn is reported having the richest cement in sight that they ever had, and I have seen some from there which was very rich. The Drummond mine, near Cottage Home, in spite of the predictions of many sore heads, has been a paying properly all winter, although the extra expense incurred on account of deep snow was very heavy. The new tunnel is progressing rapidly and the expectation is that the ledge may be struck inside of 50 feet. The Pioneer is also making over expenses, though they were handicapped by the deep snow also. Red Point is reported as doing well and about to start" the Burleighs soon to extend the main (tunnel. I hear that a contract has been let to push the New Basil bed rock tunnel in Black Canyon 400 feet, to start immediately. Reports from Canada Hill and Sailor Canyon are meager, yet hopeful. There are several small mines near here which are worked by their owners principally, which are reported as doing fairly well. Among them are the Watts mine at Monona, Tommy Dick, at King's Hill, and others,

Mining and Scientific Press, V. 61, 7/19/1890, p. 36

Last Chance Mines.— Placer Herald, July 12: Last Chance-, owing to us remoteness, attracts but little attention from the mining world, and yet it contains some very good and steady paying properties. The El Dorado mine at the Chance is reported as paying \$10 a day to the man, and the Bishop mine is doing nearly or quite as well. The Golden Riffle is thought to be a better mine, even, than either of the above, but the tunnel which has been run into the channel proved to be too high, and another tunnel will have to be run before it can be profitably worked. The Caledonia, owned by David John, Aaron Anson and George Williamson, and worked by them, is yielding good pay at present from a bar outside of the channel.

Elkhorn. — At Deadwood the Elkhorn mine, the Davis mine and the mine of Gould & Dixon are all running, and while none of them are very large enterprises, we are informed that they are all doing pretty well in a modest way.

Mining and Scientific Press, V. 61, 7/26/1890, p. 52

A Big Enterprise.-Herald. July 19: Under the direction of C. P. Udell, work has been resumed in a small way on the big tunnel being run by the Muir Tunnel and Cons. Mining Co. at Michigan Bluff. This enterprise was started some years ago, but for reasons best known to the company has been holding fire. A number of channels lies in the divide through which this tunnel is directed, and it is proposed, on the principle of the Sutro tunnel, to drain them and open them all by means of this one big outlet. The enterprise is one that will require a good deal of money to prosecute. Its success, however, would not only contribute largely to the gold output of the county, but would restore to Michigan Bluff, near which town the tunnel has its opening, the life and prosperity that belonged to it in early days.

Rich Pickings.—We learn from O. J. Spencer of Iowa Hill, who was in Auburn early in the week, that last Saturday and Sunday there was picked from the bedrock of a mine near the Hill, which Sprague and others are working, 168 ounces of gold, the chunks varying from 15 ounces down. This does not look as though mining was played out, as some pretend to believe.

Mining and Scientific Press, V. 61, 7/26/1890, p. 56

The heaviest fine ever assessed upon a mining company in this State for "contempt" has been imposed upon the Omega Mining Company of Placer county, by Judge Sawyer. The usual fine has been \$500, but this time \$3000 is imposed.

Fined For Contempt —A fine of \$3000 was this week entered in the U. S. Circuit Court against the Omega Water and Mining Co. of Placer Co. The Omega was one of the hydraulic mining companies enjoined, and it was cited to appear and show cause why It should not be punished, and the Master in Chancery decided that the company had not shown cause for its action. The customary punishment in such cases is \$500, bat Judge Sawyer in this case levied the heaviest fine—\$3000—ever assessed upon mining companies in this State for contempt.

Mining and Scientific Press, V. 61, 7/30/1890, p. 138

Hogsback.—Placer Herald, Aug. 23: J. T. McCall, foreman at the Hogsback mine, was in town Monday. Mr. McCall says the new tunnel is now 2200 feet in length, leaving only 350 feet to be run to finish it. They expect to break through into gravel about the first of October.

Linn.—About the first of this month fine ore was struck in the Linn mine, near Damascus, and the owners are so well satisfied that they will push the work of development uninterruptedly until the ledge is opened. The prospects warrant them in believing they have a permanent paying mine.

Doig.—A. Shurtleff is running a drift from the shaft in the Doig mine. He has run 90 feet and expects to strike in the next ten feet. If he doesn't he will run another drift in an easterly direction and connect the drifts with a crosscut. He has rock that pays \$25, but is confident that he will strike richer ore. He is right after it, and will find it if any one can.

Mining and Scientific Press, V. 61, 9/20/1890, p. 186

The Drummond Quartz Mine.—Herald, Sept. 13: We learn from a gentleman who is in a position to know that since Mr. Wm. Werry resumed charge of the Drummond quartz mine, near Iowa Hill, he has put things in good shape and has the mine again on a paying basis. Rock is being taken from the old stopes which Mr, Werry 's predecessor had condemned, and is paying well. These stopes are extensive and the vein is large, assuring rich rock for a long time. Besides these, No, 2 tunnel, now in between 500 and 600 feet, will afford new backs of virgin ore on a strong vein so rich in places as to show free gold. No. 2 tunnel has just been connected by a winze 500 feet from its mouth with tunnel No. 1, which will facilitate the working of both by affording excellent ventilation, A shaft is being sunk about 800 feet from tunnel No. 2 on what is known as the Hobson tunnel. This shaft shows a four-foot vein, also of excellent ore. In time this shaft will connect with tunnel No. 2. Until the connection is made, however, the ore from the shaft is being hauled to the mill in a dump-cart. The mine, in short, is open in good shape, and in all the openings it gives evidence of being a strong lead of good-paying ore. Mr. C. F. Reed, the owner, is to be congratulated on his prospects.

Mining and Scientific Press, V. 61, 10/11/1890, p. 234

Mining Generally Prosperous.—Republican, Oct, 6: With the exception of the hydraulic branch of the business, now dead, mining is generally prosperous throughout this county, this having been with the drifters and the river-bed operators a fairly good year. The Hogsback tunnel is now completed a distance of 2510 feet. A perpendicular 5x8 feet upraise wilt be started up at once with Ingersoll drills which will tap the channel in about 170 feet.

Mining and Scientific Press, V. 61, 11/1/1890, p. 284

At the Mayflower. — Republican, Oct. 25: There are about 80 men employed at the Mayflower mine near Forest Hill. Half of them are miners underground and the others engaged in various preparations for the winter work. The mill is crushing 12-hour runs five days in the week and is crushing 375 tons of gravel a week with good pay.

Mining and Scientific Press, V. 61, 11/15/1890, p. 316

Mining Notes.—Republican, Nov. 1: Since hydraulic mining has been suspended much interest has been taken in other kinds of mining the past two years with good success. We expect to see the mining interest once more flourish and be again recognized as the foundation of every industry of the State, and those now that are its most bitter enemies will be its warmest advocates. The Tai Sing Co. of Indiana Hill declared a dividend last week of \$26,000 on their entire stock for the past year. The company will soon erect a 20-stamp mill near their works to overcome the heavy expenses of running their cement the great distance they are now doing.

Mining and Scientific Press, V. 61, 12/13/1890, p. 380

Tunnel Mining Enterprise.—Republican, Dec. 6: The tunnel at the Gray Eagle mine is completed and was accepted by the company last Friday. It is 2500 feet long and will be extended 100 feet farther before an upraise is made.

King's Hill Mining Co,~ Republican, Dec. 7: This property, under the management of Thomas B. Everett, is situated on the Iowa Hill divide, about three miles from the town of Iowa Hill, between Big Indian and Shirt Tail canyons, in one of the richest mining sections in the State. The company have title to ,640 acres, nearly all of which prospects well in placer gold, enough so that it is expected to give large returns when the plant is in operation. Preparations are now being made for active work as soon as the plant, which consists of the Freeman dry process, can be procured. This plant has been tested upon the ground to the satisfaction of all parties interested.

Mining and Scientific Press, V. 61, 12/20/1890, p. 396

Mayflower Cleanup.—Republican, Dec. 9: The Mayflower drift mine of Placer county cleaned up \$16,000 last month and \$9500 during the first six days of this month.

Mining and Scientific Press, V. 62, 1/3/1891, p. 4

Mayflower.—Placer Herald, Dec. 27: F. Chappellet, president of the Mayflower Mining Co., says that the Mayflower mine is in good shape and yielding lots of lucre.

The Golden River.—Republican, Dec. 28: C. F. Hoffman, superintendent of the Hogsback and Red Point mines, was in Auburn list Friday and showed a handful of coarse gold that was taken out of the gravel where the upraise from the lower Hogsback tunnel cut through the rimrock into the channel. The gold is in the form of small nuggets, and in that respect differs from that taken out at Red Point, which is in the form of scales. The difference in the character of the gold tends to confirm the opinion, based upon the trend of the rimrock and other facts, that the channel struck at Hogsback is not the one encountered at Red Point. All the surveys that have been made indicate that there are at least two channels down that divide. The bottom of the channel has not been reached at Hogsback, but the inequalities of the bedrock are being followed by a drift, and it is expected that the trough will be found soon. The finding of coarse gold in the gravel along the rim and above the bottom indicates that the channel is very rich and will yield big returns. Twenty-two men are now at work in the Hogsback tunnel. At Red Point about 60 men are employed and the mine is yielding between \$4000 and \$6000 a month. In 1889 the Red Point gravel yielded \$3 a carload, and the total yield for the year was \$65,000. For 1890, up to December, the mine produced \$54,000, the value of the gravel per carload being \$2.50. Under favorable conditions \$2.30 per carload will pay expenses, all over that being profit, but the Red Point channel narrowed down and ran into a hole, which increased the cost of working and taking out the gravel. Water impeded the work and the miners were obliged to throw the gravel up two platforms to get it out. The irregularity of the bedrock prevented the laying of tracks for ore cars, and wheelbarrows had to be used in place of cars. The extra expense wiped out the margin of profit, and, although the mine paid expenses, the stockholders got no dividends. Supt.

Hoffman reports that the channel is widening and he hopes to make the mine a dividend paying property next year. The French company that owns the Red Point and Hogsback mines has spent a great deal of money but has received no dividends yet. The Red Point frequently has yielded a great deal more than enough to pay expenses, but the surplus has been applied to development work and the extension of the tunnel.

Mining and Scientific Press, V. 62, 1/24/1891, p. 52

Doing Well.—Placer Herald, Jan. 17: H. T. Power, superintendent of the Mayflower mine, near Forest Hill, was in Auburn early in the week. He reports the Mayflower and the Hidden Treasure mines as both doing well, and working at present about 70 men each.

Mining and Scientific Press, V. 62, 2/7/1891, p. 84

Reopening.—Placer Republican, Jan. 28: L. Remler, Dan Russell and Al. Ingram of Forest Hill have bonded the old Home Stake quartz mine in Volcano Canyon and are opening up the old tunnel which was run a distance of 630 feet years ago, but which was allowed to cave in and fill up. The ledge is about six inches thick, but the quartz assays from \$50 to \$100 a ton, and there is great confidence that it will prove a good property. Mr. Remler has lived at Forest Hill 30 years, but this is the first time he has ever invested in a mine.

The Paragon Mine.— "Considerin' everything, Abraham Breece and Judson Wheeler are prob'ly the two luckiest miners that ever struck Placer county," said an old resident of Forest Hill the other day." They got the Paragon cheap, and in ten or twelve years have cleaned up pretty well on to threequarters of a million in clear money." The old Paragon claim at Bath always has paid since 1857, both as a hydraulic and drift mine. The tunnel has not been worked on "scientific" mining principles. It wanders around under the mountain following the lead of the channel, and only gravel that paid has been taken out. The under lead, which is' the one that has been worked and proved so rich since about 1880, has been worked to within about 20 feet of the May Flower ground, and when that remaining distance of 20 feet was worked out, old miners thought the gold-producing days of the Paragon would be over. But not so. Six or seven weeks ago the miners under the direction of Supt. W. H. Grenell were set to work prospecting a favorable spot about half-way into the tunnel, and the result is the discovery of a new and distinct channel running at nearly right angles with the old blue lead across the whole width of the Paragon claim. The old lead contained blue gravel and runs nearly north and south. The new channel is above the old one, contains red gravel and runs east and west. The distance across the claim In the latter direction is about 9000 feet. The old lead averaged \$18 a carload. The new red gravel averages only \$5 so far, but as Mr. Grenell has worked across it a distance of 185 feet and has not yet determined the full width, and as it costs only \$2.25 to mine and mill the gravel, the new channel may well be considered somewhat of a bonanza in itself. At present 27 men are working in the mine, but the force is to be increased.

Mining and Scientific Press, V. 62, 3/7/1891, p. 148

The Land Of Gold.— Herald, Feb. 28: Last Monday morning after the unprecedented hard storm of the night before which washed the streets and gullies clear of soil, the gold-hunters were out in force. Quite a number of pieces were picked up in different parts of the city, varying in value from a few cents lo a few dollars. The largest find "reported was by Katie Deetkin. who picked up a piece in the road out near Ames' place worth some \$6 or \$8. The value of all the pieces picked up here in the city would probably exceed \$20. California is truly the land of gold. In Auburn they literally pick it up in the streets.

Mining and Scientific Press, V. 62, 3/28/1891, p. 196

As Rich as Ever.—Placer Herald, March 21: We received a pleasant call last Saturday from Mr. A. Breece, late of Bath in this county, now a resident of S. F. Mr. Breece and Judson Wheeler are the owners of the Paragon drift mine at Bath, and while the Paragon has been a liberal dividend payer for many years, the present prospects of the mine are as encouraging for the future as at any time in its history. In working their old channel, the main direction of which has been a little west of north, they have cut into a new channel, coming in from the east toward the Hazard claim in Volcano canyon, which is extensive and rich. They own 5000 feet on this new channel which so far as prospected is from 200 to 300 feet wide; the gravel on an average pays \$6 to the car and can be taken out at the rate of two cars a day to the man. Contemplate a bed of gravel 5,000 feet long, say 250 feet wide, six or eight feet deep, which contains for its owners from \$3 to \$5 of net profit for every miner's car load, then you can form some conception of the richness and extent of the famous Paragon drift mine in Placer county.

The Gray Eagle.—We received a call last Wednesday from W. F. Eicke, foreman of the Gray Eagle drift mine, located on the ridge about five miles this side of Forest Hill. So far, work on this mine has been mainly in the way of prospecting the property, but the prospecting has now sufficiently advanced to render certain the existence of a rich and extensive channel which promises soon to yield big returns to the lucky owners. In the main tunnel at 2538 feet from the mouth they ran into the channel. For 200 feet the tunnel has been continued through the gravel, and yet the channel has not been crossed. The gravel above the tunnel followed back on the rim is very rich, and at 1700 feet from the mouth of the main tunnel an upraise has been made which at about 140 feet is expected to cut through to the gravel, and which, Mr. Eickle thinks, will probably be finished by the time he gets back. The gravel from the higher rim or upper channel will be worked through this upraise, while the gravel in the main channel below the level of the main tunnel will be worked through the said main tunnel, the mine being kept dry by pumps put in for that purpose. Considerable gravel has already been taken out, but so far none to speak of has been washed. Everywhere it prospects rich and it is known to be extensive, and the company feel fully assured now that they have a big and rich mine.

Mining and Scientific Press, V. 62, 4/18/1891, p. 244

Forest Hill.—Placer Herald. April ii: The Gray Eagle mine, located a short distance below Forest Hill, is developing some good gravel. The upraise which was mentioned in the

Herald a few weeks ago as being made 1670 feet from the mouth of the tunnel, has been completed. It cut through into the gravel 168 feet above the tunnel. It was found to be too high, as where it broke through, the bedrock was pitching pretty steep. Down 19 feet from the top a drift was run into the channel, and it, we understand, is high, but it developed some gravel which from the prospects will pay \$3 to \$4 to the car.

Mining and Scientific Press, V. 62, 5/16/1891, p. 308

The Hogsback Closed.—Placer Republican, May 6; The Hogsback mine has closed down temporarily, probably for a year. The cause attributed is that the company will reorganize, and the absence of some of the members from Paris necessitates such a long delay. The gravel in the channel is very rich, but its paucity in quantity has caused the yield of gold so far to be comparatively small. The Red Point drift mine some ten miles farther down the divide is paying satisfactory dividends monthly. The company has over 27,000 linear feet of channel which insures dividends for many years to come. The old Hidden Treasure is still on the list as a good paying mine. A large force of men is constantly employed drifting out the vast deposit of white quartz gravel. Underlying all this section of the divide are many "ancient river beds, but only a few have been discovered and developed. Michigan Bluff has been rather dull for some time past, but a new era of prosperity is about to dawn, for the Deadwood district only a few miles above here is getting to be a lively camp. Outside capital is being invested and the mines are looking prosperous. At the Paragon and May Flower mines active work is being prosecuted and regular dividends are a result. Other properties in their vicinity are being worked, mostly for the purpose of development.

Mining and Scientific Press, V. 62, 6/6/1891, p. 356

Blair Claim.[Eldorado Co.]—Mt. Democrat, May 30; Large teams have been engaged during the past two weeks in hauling material from the Baker's Divide ranch in Placer county to the Blair claim at the Nine Mile House. Work on this claim is being pushed rapidly, and when the improvements now in the course of construction are completed, more men will be put on, and the tunnel pushed at the rate of ten feet per day. That amount has already been driven several times.

Mining and Scientific Press, V. 62, 6/27/1891, p. 404

Mayflower.—Mt. Messenger[^] June 20: We learn that Oscar Jones is running the Mayflower drift gravel mine in Placer county. At a distance of 8000 feet from the tunnel mouth a shaft was raised for air. The channel has been worked nearly 2000 feet both up and down stream from the point where the lead was first tapped by the main tunnel. The company has nearly a mile of channel left on the upper end before reaching the Breece & Wheeler line. The Mayflower is paying largely.

Mining and Scientific Press, V. 63, 7/25/1891, p. 52

Iowa Hill Petitioners.—Placer Herald, July i8: A committee of citizens from Iowa Hill, consisting of S. M. Sprague, M. R. Gleeson, J. F. Brown and others, waited on the supervisors of Sacramento county this week with a strong petition asking that no injunction be laid against the miners of Iowa Hill that would prevent them from working the lower or heavy gravel stratas of their mines the debris from which never reaches the American river, or that would interfere with drifting. The committee of miners, which even the Bee had to admit were a fine lot of well behaved gentleman, represented that such work as they desired to prosecute could be performed without injury to Sacramento or the valley in the least, and they asked that the board visit the locality and satisfy themselves of the truth of these representations before permitting an injunction that would necessarily ruin the mining industry at Iowa Hill entirely. Though Chairman Greer, of the board, opposed making the trip to the Hill, and argued in favor of hitting the miners as hard as he could, showing no more feeling for his fellow men in this case than as though the miner was a Hottentot and he was a king, yet the majority of the board manifested more reason and decided finally to visit the mines at a date to be hereafter selected. This effort of the Iowa Hill Committee deserves praise, for anything that brings the contending factions nearer together and leads to a better understanding of the situation must result in a modification of the unnecessarily bitter feeling which is the cause of much of the present difficultly, and which stands in the way of any reasonable suggestion for a practical solution of the trouble. It seems on later information that an injunction has already been laid against the mines of Iowa Hill which is extreme in its provisions, and the committee ask to have it modified to an extent that will allow them to mine where no injury will result. Every element of humanity and justice demands that their petition be granted.

Mining and Scientific Press, V. 63, 9/5/1891, p. 118

Gray Eagle.—Herald, Aug. 29: The Gray Eagle mine, located on the divide a short distance this side of Forest Hill, is now working about 15 men, and times around there are livelier than for some time. Everything is in good shape, and the mine is looking well.

Mining and Scientific Press, V. 63, 9/26/1891, p. 198

HOMESTAKE.—Placer Herald, Sept. 19: The Homestake quartz mine, near Forest Hill, owned by Remler, Russell, Bilkey and Neal, is said to be looking fine. At present the mill is closed down to allow them to put in a 30-foot overshot wheel in place of the Hurdy, as they have hardly water enough to run the latter, Plumas.

Mining and Scientific Press, V. 63, 10/10/1891, p. 230

Gray Eagle,—Placer Herald, Oct. 3: Wm. Northwood, of near Forest Hill, made us a pleasant call last Monday. He informs us that the Gray Eagle mine has been troubled considerably with water lately, but they are now putting in new and larger pumps with a capacity sufficient to handle all the water they have or are likely to have.

Mining and Scientific Press, V. 63, 10/17/1891, p. 252

Gold Nugget.—A. gold quartz nugget of the value of \$1,400 was found on Monday afternoon lying on the bedrock in the Washington mine at Iowa Hill, Placer county. It had lain there for a long time and many people had walked over It. Experts say this is one of the handsomest nuggets ever found in the State.

Mining and Scientific Press, V. 63, 10/31/1891, p. 280

The Gray Eagle Min e,—Herald, Oct. 24: From what we learn of the outlook, the next important mining development in our- county can be confidently expected from this property. There is no reason why as rich a mine as the Mayflower has proved itself to be will not soon be making golden returns for the pluck and energy of the men who have pushed it through the long period of development work. At the present time a slope is being driven down from the tunnel to find the bed of the channel. The flow of water is readily handled by the new steam pump, which is the largest ever taken onto the Forest Hill Divide. The steam for it is brought down from the surface, over 400 feet above where the work is being done in the mine. The arrangements for ventilation and drainage are complete, and everything points to the early lapping of the channel. The formations being passed through are similar to those found in the Mayflower, and confirm the opinions of experts that both mines are on the same channel. The striking of gold in this mine will locate and prove the value of some five miles of deep blue gravel channel, half of which, owing to the shape of the country, can only be worked through the Gray Eagle tunnel. The managers of the mine are considering the advisability of putting in an electric pumping and hoisting plant to replace the present steam pump. The water pumped from the mine will be used under 600-foot head to generate the electricity at a point in the North Fork canyon, a short mile from the mine, and ample power will be developed to do all the pumping, hoisting and drilling required in the mine, and even to run a stamp-mill if the gravel be found cemented, as at the Mayflower. The economy over the present steam plant for pumping and hoisting alone will be several hundred dollars a month, or sufficient to pay all the epenses of the change in six months running.

Mining and Scientific Press, V. 64, 2/6/1892, p. 94

The Iowa Hill Mineral Contest. — Some years ago, John B. Hobson filed a mineral claim in the U. S. Laud Office at Sacramento, covering a portion of the town site of Iowa Hill, Placer county. His claim was rejected by the Land Office on the testimony of citizens of the town that the land claimed was more valuable for agricultural than mining purposes. After a long contest, it was taken to the Secretary of the Interior, who has finally decided that the testimony as to the agricultural character of the land has not been established, but on the contrary, it was shown to have value as to its mineral, and that Hobson was entitled to file upon the land for the purposes of mining.

Mining and Scientific Press, V. 64, 2/13/1892, p. 116

Where the Tunnel is too High. —Placer Herald. Feb. 9—In running a tunnel to tap the main channel in the Dardanelles gravel mine, near Forest Hill, it was found that it was too high. The tunnel at a distance of 2,600 feet struck the rim of the channel. Ordinarily the remedy in such cases is to go back and drive another tunnel on a lower level, which is very expensive and which only a very rich prospect will warrant. In this case, however, the difficulty has been overcome by a cheaper method and one which will interest mining men as something new in the plan of mining development. In the first place an endless three-quarter inch steel cable was put in the full length of the tunnel. It is run by a two-foot Hurdy wheel at the tunnel's mouth. This cable is made to carry the cars in and out and at the extreme end of the tunnel, 2,600 feet from the mouth, it runs over a 9-foot wheel, and this wheel in turn affords power for hoisting the cars up the side of the channel which has an incline of about one foot in three, and runs a pump that keeps the lower levels of the mine free from water. Should this plan prove successful, and so far as tried it works admirably, it will prove a boon to many miners who, find, after expending thousands of dollars, that their tunnel is too high.

Mining and Scientific Press, V. 64, 3/26/1892, p. 224

Two Gravel Channels and One Claim.— Grass Valley Tidings, March 18: The great Mayflower drift mine near Forest Hill, in Placer county, continues to send out good reports. Some two years ago. in working up the channel in this mine, they cut through another gravel channel at right angles, which was lighter in color, softer and more easily worked than the Mayflower, and which they named the Oreno. The Mayflower had apparently been cut in two by the Oreno, and, after crossing the latter a distance of nearly 200 feet, they came into the Mayflower again, and have continued up that channel, and have worked it, to date, for a distance of about 8000 feet. The company own the Oreno some 7000 feet, and recently they have commenced operations on this channel. The returns from it are very encouraging. One run of 29 tons recently yielded \$6 per ton, and a still later run of 94 tons yielded \$7.75 per ton. The channel will average over 100 feet in width, and when one estimates the amount of gravel that lies in a channel averaging 100 feet in width and 7000 feet long, and figures it at say \$7 a ton, he can form some idea as to the amount of wealth insured to the Mayflower Company by the apparently accidental but fortunate discovery of the Oreno channel.

Mining and Scientific Press, V. 64, 4/2/1892, p. 244

Divide Mining News.—Placer Herald, March 26: We learn from a gentleman who has recently been on a tour of inspection of the Forest Hi I divide that he found the mines of that section quite prosperous, and the outlook altogether encouraging. The pioneer quartz mine at Damascus, he says, has recently tapped the ledge with a new tunnel, at a lower level, and is taking out ore from a strong vein that will average \$15 a ton. At the Red Point drift mine, they are working over 50 men, and the mine is paying well. The Hidden Treasure is paying well at present, and is working about 40 men. Al the Paragon, Breece & Wheeler's mine at Bath, the last clean up averaged \$4.02 to the car. At the Gray Eagle, the gravel is found to be so thoroughly

cemented that it is thought they will have to erect a mill for crushing it. The Drummond quartz mine continues to yield rich rock from a strong ledge. At the Mayflower, they are, at present, doing a good deal of contract work in the way of opening new ground, etc.

Mining and Scientific Press, V. 64, 4/16/1892, p. 282

Paying.—Placer Republican, April 6: In reference to Placer county mines, we learn that the Morning Star mine in its last dividend paid \$4 per share. The Holman drift mine at Wisconsin Hill is paying well. Gravel in the Breece & Wheeler mine has been going as high as \$4.02 to the car.

Mining and Scientific Press, V. 65, 8/20/1892, p. 121

Placer County Mines.—From Thos. B. Everett, secretary of the Placer County Miners' Association, we learn that the Pioneer mine is running steadily under the management of Mr. Sullivan. The Drummond, up near the head of Shirt-tail canyon is doing well. Remler & Co. of Forest Hill are taking out good ore. The Harlow drift mine at Loomis is in some sort of difficulty just now, but the mine pays and will be going again shortly. The mines at Ophir are very quiet at present, but there is some talk of starting up the Hathaway very soon. As soon as they put in a new crusher they will start up the Gold Blossom. They are using the cyanide process at this latter mine.

Mining and Scientific Press, V. 65, 8/20/1892, p. 133

Doing Well.—Placer Herald, Aug. 13: The mines on the Forest Hill divide are doing well, and the prospects indicate for that section a more than usually good season. At Iowa Hill and Damascus the mines are holding their own, and those places continue to turn out a good deal of money. There are some drift-mining developments at Dutch Flat that indicate better times for that locality. The quartz mines of Auburn and Ophir are doing some work, though they are not as active as we would like to see them.

Mining and Scientific Press, V. 65, 9/10/1892, p. 171

The Morning Star Mining Company of Iowa Hill has bought of Coleman Bros., of Grass Valley, the water ditch or canal situated in Placer County, known as the "Iowa Hill Canal," and all the right of way held and used in connection therewith. Said canal has not been completed according to the original design, but has been constructed over a great portion of the intended line. It is the intention to convey the completed portion as well as all the right to the grantors to the uncompleted portion.

Mining and Scientific Press, V. 65, 10/22/1892, p. 277

A Big Clean-Up.—Auburn Herald. Oct. 15: The Morning Star mine is located about half wav between Auburn and Ophir, close to the Eclipse mine, on the Dotv's Flat road. Its owner is

Otto T. Walter, of Ophir Last spring he allowed Frank Miller and R. P. Miller to work the mine for a royalty. They took out a

crushing of 10 tons which paid them at the mill \$57 a ton. On the 1st of June they entered into a formal lease for six months, agreeing to work the mine and pav Mr. Walter 10 per cent of all they should realize. Last week they made their first crushing of 30 tons under the new lease. They cleaned up Saturday and found that they had, as the yield of their 30 tons of rock, over ?0 pounds of retorted gold, or, to be exact, just 331 ounces, about \$5000. They are only down 40 feet, at which point they started a drift and this last crushing was all taken out in removing 75 feet of the drift. The ledge varies from one to three feet in thickness and is all picking ground. If the strike was in some remote place, difficult of access, it would cause a panic; bit aa it is right here in the midst of civilization, in a country easy of access, it will cause no rush to Ibis locality and no special flurry of excitement. It will serve to prove, however, that I here are still some rich quartz mines remaining undeveloped in this part of California.

Mining and Scientific Press, V. 65, 10/29/1892, p. 282

The days of rich pockets and nuggets are by no means over in California. For instance, a few weeks ago they got \$10,000 out of a pocket in the Stow mine, Forbestown, Butte county, and the mine since made a cleanup of \$20,000. Henry Miller, of Magalia, in the same county, found a little pocket in his claim from which he took out in a few minutes \$580. Ed. Gilbert found in his drift mine near Butcher ranch. Placer county, a nugget worth \$2300. It was about ten inches the long way, from three to seven inches in width and from an inch to an inch and a half in thickness. The whole surface was very irregular. Its beauty consisted of having the formation of crystallized quartz, with clear-cut corners, the sides of whose cubes shone with dazzling brilliancy at any angle from which a person viewed it. The mine has been worked more or less since 1856.

Mining and Scientific Press, V. 65, 11/19/1892, p. 341

The Mayflower.—To the Editor:—Your issue of Nov. 12th contains a report from your traveling agent on the Forest Hill divide. Permit me to say that the report on the Mayflower mine is incorrect. The Mayflower Co. did not yield \$37,000 in one week, but it yielded \$363,000 in 11 months. The Mayflower Co. has not worked its claim to its south limit The main tunnel is not 4000 feet long, but 5585 feet, and there is not an upward 90-feet-long incline. About the Orono, the company is running a single drift up channel, first to ascertain the value of the gravel; second, to drain the ground, which is exceedingly wet. No breasting has been done for nearly two months. The gravel is not of medium quality. The Orono gravel pays \$3.50 per ton when washed through 24 feet of sluices, and \$5 to \$5.50 per ton when crushed in the mill. The last return of the gravel in the north breast is \$14.30 per ton. I wish to know the application of the word "rapids," so profusely used. The assertion that the Mayflower Co. employed 50 men, a majority of them Chinese, is incorrect. The company employs 50 men, among them being 12 to 14 Chinamen.

F. Chappellet.

Mining and Scientific Press, V. 65, 12/10/1892, p. 379

Mr. Hoffman, superintendent of the Red Point mine. Forest Hill divide. Placer county, is in the city for a few days.

Mr. J. H. Neff, President of the State Miners' Association, was seriously hurt this week, and is confined to his home at Colfax. {J. H. Neff was superintendent and president of the Morning Star Mine}

John B. Hobson, formerly of Iowa Hill, Placer county, and one of the delegates sent to Washington on behalf of the State Miners' Association, has returned to this city from British Columbia, where he has been during the summer. Mr. Hobson has the reputation of being one of the best hydraulic miners in California, and was sent for to take charge of a hydraulic mine in British Columbia. He will remain in this State for a month or two and then go north again to resume his duties.

Mining and Scientific Press, V. 65, 12/24/1892, p. 411

Some of the Placer county papers state that the Red Point mine on the Forest Hill divide has suspended operations This is incorrect. The mine was closed for a few days only. It is owned by a French syndicate, which has a large investment in the property.

Mining and Scientific Press, V. 66, 1/21/1893, p. 45

Gold near Sage Hill.—Placer Argus, Jan. 14: Considerable excitement was caused at Michigan Bluff, on Monday, when the report reached town that Henry Scheimer, formerly superintendent of the Golden Fleece mine, but who is now working his own mine near Sage Hill, had struck a bonanza in the shape of a large number of "chunks," some of which weighed as high as \$30. The report is that there are plenty more left. Oscar Baggs, one of our young mining experts, went to Last Chance to find the ledge. The rock prospects \$3000 per ton. Mr. Baggs has not returned yet.

Mining and Scientific Press, V. 66, 3/18/1893, p. 173

Iowa Hill.—Placer Herald, March 11: We learn from Mr. Bonham of Iowa Hill, who was in Auburn this week, that times at the Hill are pretty good, and that the passage of the Caminetti mining bill encourages the people of that part of the county to hope they will be better before they are worse. The Morning Star and the Big Dipper (formerly Horman) drift mines are both running steadily and both paying well, and between them are giving employment to about 70 men. Spies have been pretty thick around the Hill lately, but of course they found nothing to report on that is contrary to what ought to be. They are generally well heeled, and, not being very good poker players, the boys in the mines are getting so that they like to see them come around. In fact, the opinion is spreading that the more flush spies the valley people can send into the mountains, the better for mountain people.

Mining and Scientific Press, V. 66, 4/1/1893, p. 205

Big Dipper Mine.—Grass Valley Telegraph, March 22: Charley Smith has just returned from the Big Dipper mine, near Iowa Hill, Placer county. This mine used to be known as the Harmon mine and it is very rich. Charley Smith says that the gravel claims in that section are all looking well, and that a lively season is confidently expected. The Big Dipper mine is owned by Columbus Waterhouse, of the firm of Waterhouse & Lester, San Francisco.

Mining and Scientific Press, V. 66, 4/8/1893, p. 221

Boring for Gravel.—Placer Herald, March 30: The boring machine for prospecting gravel mines, referred to in a late issue of the Herald, has been set up and is being operated on the Forest Hill divide. The Drummond quartz mine, between Iowa Hill and Forest Hill, the property of Hon. C. F. Reed, has developed a very rich lead lately, and report says it is now turning out some as fine rock as ever came from a quartz mine in the county.

Mining and Scientific Press, V. 66, 4/22/1893, p. 242

Mb. Felix Chappelet, of the Mayflower mine, Placer county, who has been confined to his home with erysipelas, is now on the road to recovery. His illness was brought about by striking his head on a timber in the mine, and he was at one time very ill.

Mining and Scientific Press, V. 66, 4/22/1893, p. 353

Paid Another Dividend. — Grass Valley Union, April 15: The stockholders of the Morning Star mine were gratified to learn yesterday that the mine had yielded a dividend of \$1 per share. This mine, which is located at Iowa Hill, is owned chiefly by Grass Valleyans, and a dividend causes quite a little cheerfulness in the faces of some of our citizens. J. H. Neff is superintendent.

Mining and Scientific Press, V. 66, 4/29/1893, p. 369

Good Monthly Yield —Placer Herald, April 22: The Horman gravel mine at Iowa Hill, under the excellent superintendent of Mr. Elliott West, is turning out from \$18,000 to \$24,000 a month. This is not one of the biggest, but it is one of the best mines in the State.

Mining and Scientific Press, V. 66, 5/13/1893, p. 301

Dividends.—Placer Herald, April 29: The old Breece & Wheeler still pays big dividends. The Hidden Treasure pays as rich as ever. Quite a large force is at work. There is a prospect of the Hogsback starting up this spring. At the Black Canyon the tunnel has been completed and gravel struck. The Red Point is not paying much at present. The Pioneer mine is paying big. Work will be resumed on the old Weske mine this spring. On Wednesday of last week the owners of the Ben Franklin mine at Yankee Jims cleaned up \$2300, the result of 150 days' work for one man. The gold is of very fine quality, being worth \$18 per ounce. Work at the Gray Eagle

began on the 17th. The company intend to run a new tunnel, which will be about 4800 feet long. This will open up the mine at a lower level. The pay streak at the Dardanelles is irregular, as the cement shuts it off at intervals. In places the cement rests on the bedrock; wherever it lifts the pay is big. The boring machine for prospecting gravel channels is at work on the divide. The Drummond mine has temporarily shut down.

Mining and Scientific Press, V. 66, 5/20/1893, p. 317

The Mayflower Boring Machine.—Colfax Sentinel, May 13: A machine that will bring about a great saving in drift mining is at present in use at the Mayflower mine, Forest Hill. It is a boring machine consisting of a portable engine and boiler combined and a portable tower 40 feet high with gearing for the drill, which alone weighs 1100 pounds. The machine when working will bore a hole six inches in diameter and from 15 to 25 feet a day in mountain cement or in rock wet or dry. There is a pump eight feet long and five inches in diameter, the drills and this pump, working like an ordinary pump, fills with the sand and is then emptied. Whenever it is desired rocks the size of a hen's egg may be taken out, which increases its usefulness in prospecting. The machine enables the owners to prospect the pitch of the bedrock or channel, and works as well at 1200 as at 200. It has proved itself a success and will prove a great saver of energy and money in prospecting. It has been on the divide for about two months, and will continue to be used over there as it belongs to the Mayflower Co. It can be put up in two days and taken down in one and requires but two men to run it. At present it is run by a man from Pennsylvania who has had much experience in boring wells. It consumes but little fuel, and no doubt will aid materially in developing the mineral resources of the divide.

Mining and Scientific Press, V. 66, 5/27/1893, p. 333

Damascus Doings.—Colfax Sentinel, May 20: D. J. Sullivan, superintendent of the Pioneer mine, has returned from a trip to the bay. Quartz mining has quite a boom at present in. the Humbug Canyon district. Ed Ford & Co., who have one of the best locations in the district are now pushing their work as fast as they can. They are grading for a ten-stamp mill and for a boarding-house. They intend to build a wagon road to connect with the Pioneer mine road. A drawback to their work is the lack of lumber, for which they must wait until the mills start up. Their ledge is a true fissure vein and shows plenty of free gold. Ford & Co. are pioneers in this district, and we wish them unbounded success, as they have labored under many difficulties to get their vein opened. J. Patrick, who has leased the Dorer mine, has quite a force of men at work, and is running day and night. The ore shows up well. The Pioneer mine is running full blast and paying dividends monthly. Take it all together, times will be lively in here this summer.

Mining and Scientific Press, V. 66, 6/3/1893, p. 349

A Big Strike.—Placer Herald, May 27: Hon. Cbas. F. Reed made a big strike at his Drummond mine at Forest Hill last week. The ore was taken from what is termed the Eclipse

lead and assays from \$20,000 to \$40,000 per ton. As yet the find has not been developed and its extent is not known.

Mining and Scientific Press, V. 66, 6/24/1893, p. 388

The Placer Argus says: L. I. Ogden went to Iowa Hill Saturday night last to put in running order at the Morning Star mine an electric dynamo to be used in lighting the works, tunnels, etc., of that property.

Mining and Scientific Press, V. 66, 6/24/1893, p. 397

Notes.—Placer Herald, June 17: The Mayflower is paying as well at the present time as it ever did before. The Sunny South and Paragon are paying exceedingly well. L. Remler, of Forest Hill, has commenced on bis timber contract for the Sunny South mine. The Big Spring mine, adjoining the Dardanelles, is paying \$5 to \$6 to the pan. The Gray Eagle is still shut down. We understand it will be opened again soon. The World's Fair Mining Co., which has a mine just above Mammoth Bar, are about ready for work. They are getting out some heavy timbers to be used for the waterwheels. Work commenced Thursday at the French Hill claim one mile below Spanish Diggings, in Hoboken canyon.

Mining and Scientific Press, V. 67, 7/1/1893, p. 13

Mayflower.—Colfax Sentinel^ June 23: The Mayflower is running full blast. The Mammoth Consolidated Mining Company have their contract just about finished. It was let some time ago to Wm, Burns, to run 200 feet of tunnel through the gravel to tap the main channel and he is now within a few feet of finishing it.

Yankee Jims.—While at Yankee Jims the other day we saw a prospect taken from the "Ben Franklin" mine that reminded us of the fact that Yankee Jims district is not yet worked out. Out of a single pan of dirt Mr. Burke secured \$to in coarse gold, the sight of which was enough to make a newspaper man's mouth, also eyes, water, and to stir up within him all the covetousness of his soul. The prospect shows what yet lies hidden in some of our mining districts that are considered effete. Some day we will be chronicling the developments of larger operations in this old-time district.

Mining and Scientific Press, V. 67, 7/15/1893, p. 45

Good Gravel.—Colfax Sentinel, July 7: The Morehead mine at Deadwood is yielding good paying gravel at present, and bids fair to become a good mine. Dr. J. LaBaree of Forest Hill is at present in San Francisco organizing a company to work his mine near Weske Hill. Mr. LaBaree has spent considerable money in developing his property, and has considerable faith in its ultimate paying. qualities. The mine is known as the Louisiana Consolidated, and, no doubt, if Mr. LaBaree's plans as to its development succeed, it will be one of the mines of the divide. The Mayflower is running with the customary force. At present an airshaft is being sunk by the boring machine. This machine continues to work welt, and is a great saving in

prospecting. The work of pumping out the water in the old Turkey Hill mine is progressing very well, and in a few weeks it is supposed that it will be emptied. This mine itself is not to be worked, but adjoining ground is to be worked through it. If this venture is a success, it will benefit Michigan Bluff a great deal. The Hidden Treasure at Sunny South continues its usual dividends. The same may be said of the Morning Star at Iowa Hill and the Pioneer mine at Damascus. There are quite a number of miners on the Forest Hill, Iowa Hill and Dutch Flat divides prospecting for gravel and quartz, and the indications are that in the next few years quite a number of new mines will be developed.

What a Difference.—What a difference six or eight millions of dollars a year from the hydraulic mines would make in these panicky times in California? Much of the distress of to-day would be relieved if the hydraulic mines were again allowed to give employment to thousands of people. The farmers themselves would reap the benefit at once in the hundreds of thousands of dollars worth of produce that the miners would buy from them.

Mining and Scientific Press, V. 67, 7/22/1893, p. 50

We have before referred to the prospecting operations in a cross-channel of the Mayflower mine on the Forest Hill divide, Placer county, where they are boring through the lava and gravel with an ordinary artesian- well apparatus. We learn this week from Mr. Chappelet, president of the company, that the fourth hole bored is now down 375 feet. They recently passed through eight feet of "niggerhead," which is a very hard material, as most miners know. Mr. Chappelet says every one was surprised at the tools being able to pierce this material as well as they have. They are confident now that they can get through anything they meet. Where boulders are met, blasting is resorted to, otherwise they bore right along. This system of finding the depth and centers of gravel channels under the lava cap has often been suggested, but this time practical experience shows that it is not only feasible, but cheap. The expense is comparatively little. Four men carry on the work in two shifts. They are not only prospecting the channel, but one of the holes will ventilate the main tunnel of the Mayfiower. This mine is now paying very well, the gravel in the channel being of high grade.

Mining and Scientific Press, V. 67, 7/29/1893, p. 77

Morning Stab Dividend.—Colfax Sentinel, July 22: The Morning Star mine of Iowa Hill Has declared another dividend of \$2 per share, aggregating \$4800. This makes dividend No. 31 and many more are expected from the famous producer. The stockholders are mostly composed of Grass Valleyans and Colfaxans, and surely they have a "good thing" in the Morning Star, The mine is looking fine at present.

Mining and Scientific Press, V. 67, 8/5/1893, p. 93

Michigan Bluff.—Colfax Sentinel. July 29: More men have been put on at the Turkey Hill of late. It has been reported here that there has been a sale of the Morebead mine at

Deadwood. There is a full crew at work again at the Old Mexican. A double shift (night and day) is pushing things at present.

Ford Mine.—Work was suspended on the Ford mine for a few days. They expect to start up again soon with a large force of men. Things are running at full blast at the Pioneer and Dorer mines.

Forest Hill Divide.—The Breece & Wheeler mine at Bath is working a good force of men. The mine still continues to look well. On Sunday afternoon we took a drive out to the Mayflower mine. Here we found one of the liveliest little mining camps in the whole county. There are some 70 or 80 men employed at the mine, and everything is in tiptop shape. The gold output still continues, and the mine has a bright future. The tunnel is in now about two miles.

Mining and Scientific Press, V. 67, 8/19/1893, p. 126

Starting Up the Weske.—Placer Herald, Aug. 12: The Turkey Hill drift mine, near Michigan Bluff, is being pumped out with the view of working it again. This, generally known as the Weske claim, has yielded big money in its time, and those best posted are of the opinion that it contains a great deal more. Messrs. Weske, Hayward and Brown are back of the enterprise, and it is hoped their best expectations will be realized.

Mining and Scientific Press, V. 67, 8/26/1893, p. 142

River Mining.—Placer Herald, Ang. 19: F. H. Bell, A. Ambrose and A. F. Bigelow have a force of 15 or 20 men at work prospecting and developing a gravel claim on what is known as Brown's Bar on the Middle Fork of the American river a short distance above Mammoth Bar. A good many years ago this Bar yielded with ancient appliances some \$90,000 as the result of one summer's work with a small force of men. Those working it now get a good prospect, and are confident in the belief that, when thoroughly opened, it will yield them a good deal of money.

Mining and Scientific Press, V. 67, 9/9/1893, p. 174

New Company.—Placer Herald, Sept. 2: One of the new mining companies is the Santa Fe. Its members are all Anbumites, viz.: Jas, Hill, J. "W. Morgan, M. T. Barnett, Dan Kirby and Prof. Hazen. They are working at Canada Hill and think they have something in sight. Thos. Monaghan of Rock Creek left last week in company with Mr, Hill with a load of tools, provisions, etc. The Black Canyon mine, near Westville, is making a good showing under the able supervision of Geo. West. The Hogsback, at Westville, still remains idle. The White boys, at Ophir, are now running a 300-foot level to tap the chute. In their last cleanup, about two weeks ago, they realized \$3000. It is rumored that the St. Lawrence mine, at Ophir, will start up again in about a month. Work is going right along at the Three Stars mine at Ophir, the property of the Denver Co. and B. F. Hartley. One mile of pipe will be laid, giving over 600 feet fall to run the hoisting works and dynamo. Most of the lumber is on the ground for the buildings. A contract for two 50-foot shafts has been let to Chris Lindley for \$12 a foot. Pike Bell has been hauling a lot

of his rock from near Clipper Gap to Col. McCullough's mill at the Minerica, below Auburn. It will be crushed in about a month.

At Forest Hill.—Republican: The Forest Hill divide is enjoying a season of prosperity, and the future prospects were never better. The gold output now is something like \$70,000 per month, and upward of 500 miners are employed. Mr. Anthony Clark has just effected a sale of 560 acres of mining ground to the Gray Eagle Mining Company, which will at once drive a tunnel on the property, which they hope to complete in about ten months. Mr. Clark is also pushing a tunnel on some valuable mining ground.

Mining and Scientific Press, V. 67, 10/21/1893, p. 275

The Morning Star mine at Iowa Hill has undergone considerable repairs during the past few weeks, and will soon be ready for work again. Besides a fine new stamp-mill, a great deal of the main tunnel has been retimbered.

Mr. Gould of Iowa Hill, who has been for a long time near Iowa Hill prospecting for the main channel, has at last struck it, and, like the rest of the channel on that divide, it prospects fine.

W. Rodger, who has had charge of the Dam claim belonging to Mr. Weake, recently struck what is supposed to be the Hidden Treasure lead. The main tunnel of the Dam claim has been pushed ahead of late in hopes of striking the blue lead which had run out. The Dam claim at one time was a good-paying mine, the gravel being of the blue lead. A few years ago it gave out. This blue lead interacted and cut off the white lead which paid so well in the old Mountain Gate mine at Damascus, and which is still paying well in the Hidden Treasure of Sunny South. The tunnel of the Dam claim last week was run into the gap between the Hidden Treasure and the Mountain Gate at about 80 feet lower than the channel of the Hidden Treasure. To the surprise of the owners of the Dam claim, some of the same character of gravel as is now being worked in the Hidden Treasure was struck. The tunnel was run about 15 feet into the white gravel, but, on a survey being made, it was found to be on the Hidden Treasure ground, so Mr. Weske abandoned the work. If it should prove that there is much of a body of gravel in the gap where none was supposed to be, it will prove a great find, as the gravel prospects very well. The tunnel of the Dam claim is in about 6000 feet, but, as there is no more paying ground in the blue lead through which it runs, it will be abandoned, unless the Hidden Treasure should find enough of the white lead in the gap to justify working through the Dam claim tunnel.

Mining and Scientific Press, V. 67, 11/4/1893, p. 302

Goon Clean-up.—Herald, Oct. 27: From 34 tons of ore recently taken out of the Morning Star mine by Sam Kaiser and Will Till, they cleaned up \$1500, or about \$44 a ton. The Morning Star is owned by Otto Walters of Ophir.

Mining and Scientific Press, V. 67, 11/18/1893, p. 334

Started Up.—Argus, Nov. 11: The Mayflower started on full time again on Tuesday last. The company has just finished putting in new mortars and making many other repairs, which practically makes the mill as good as new. It is about eight weeks since these improvements began, and a lay-off had to be given to nearly half the force during that time in consequence.

Mining and Scientific Press, V. 67, 12/2/1893, p. 365

The Red Point is looking well, and it is reported the company will soon introduce waterpower to run the big blower.

The repairs on the Mayflower mine, near Forest Hill, have been completed and work is going ahead again with a full force. The mine looks well.

Iowa Hill is now the liveliest camp in the county, and this owing principally to the fact that she has two of the beat mines—the Horman and Morning Star. Both are paying big. There are also a number of smaller claims that are paying good dividends, the Big Dipper looking exceedingly well. The Pioneer mine at Damascus is running full blast and is a big help to the Iowa Hill camp. That there is yet millions of gold in these parts has been demonstrated this summer at Dutch Flat. A great number of Chinamen, and a few white men, have been mining in the river beds on either side of that once famous mining camp, using only the historic rocker, bucket and pick and shovel. They have all made good wages, averaging from \$3 to \$10 a day. The heavy storms and the natural settling of the heavier material upon the bedrock have made it profitable to mine by the '49 process, A thousand men, we believe, could now make good wages mining in this simple way in the vicinity of Dutch Flat.

At the Dardanelles—Colfax Sentinel: The Dardanelles mine at Forest Hill struck some immensely rich gravel this week. It is literally covered with gold. The mill is running steadily, and a big clean-up is expected.

The Big Dipper mine above Iowa Hill is looking better now than it has since the mine was discovered. The future prospects are very flattering, and the mine bids fair to be a bullion-producer for many years to come.

The Morning Star mine is getting better and better every day. This week the miners took out some dirt that was good for sore eyes to gaze upon. It looked as though the gold had been thrown there by the handful!. They have ground enough opened up to insure dividends for the next ten years to come.

Mining and Scientific Press, V. 67, 12/9/1893, p. 381

A New Bonanza.—Colfax Sentinel: Within another year eastern Placer will have one of the largest quartz mines in California. The Sterrett mine is located about 12 miles south of Cisco on the North Fork of the American river, between it and Sailor canyon. At the surface there are two ledges separated by a dike and here each ledge has a width of 60 feet. Six hundred feet in from the surface the two ledges come together in one formation and here the ledge is 70 feet in width. Tunnels have been run into the ledge from both the American river and Sailor Canyon sides, 1000 feet each, and besides other prospecting has been done to satisfy the owners

that the mine is a bonanza. At present men are at work opening up the mine and putting up buildings and getting out timbers for the large stamp mill and chlorination works to be put up in the spring.

The huge ledge prospects from one wall to the other, both at the surface and all the way to the end of the 1000 foot tunnel. Although generally of a low grade ore, yielding in free fold \$2.60 a ton, yet it abounds in sulphurets. n some places the ledge is so mineralized that sulphurets can be taken out by the solid block of three and four feet. In some places the ore has gone over \$90 a ton, although it is generally of a low grade. Owing to the immense size of the ledge and its bearing free gold throughout, even the low grade ore can be worked at great profit. Besides with chlorination works the sulphurets will pay well.

The company owning the mine is composed of San Francisco and New York capitalists. Geo. S. Montgomery, the well known San Francisco millionaire is at the head of the company and every preparation is being made to put up an extensive stamp mill and chlorination works as soon as possible in the spring. A 60-stamp mill will be put up at first.

Mining and Scientific Press, V. 68, 1/6/1894, p. 13

Pumps at Work.—Placer Herald: The pumps are gaining on the water in the Weske mine, near Michigan Bluff, and it is hoped to be able to commence taking out gravel early in the new year.

Mining and Scientific Press, V. 68, 1/13/1894, p. 29

Mines Pay Well.—Colfax Sentinel: The mine on Bushy, near Forest Hill, owned by Mr. C. Albrecht and others is paying very well. This mine is located near the one of Cranage & Federer, and is becoming quite celebrated for its richness.

The Paragon mine at Bath laid off quite a number of men Christina, but it is expected they will soon be put to work again.

The Mayflower mine is working a full force of men and is paying as well as ever.

The Dardanelles mine prospects well, but some trouble with the machinery has been had of late that has interfered with its working. It is all right again, and the mine will soon begin to pay as well as formerly.

The Big Dipper mine at Iowa Hill Is rapidly developing into one of the best drift mines in the county. The gravel is rich and the machinery works splendidly. About 40 men are employed at present.

Considerable development is promised in the Black Canyon section and near Sailor Canyon and Bald Mountain the coming summer. In fact, everywhere throughout the mining sections of Placer there is a renewed activity and an increased interest in mining propertied.

Another Dividend.—Colfax Sentinel: The Morning Star mine at Iowa Hill declared an other dividend of \$3 a share last Wednesday This is dividend No. 37, and is but in keeping with the mine's past record. There are about 40 men working at the mine at present, and the indications for the future are bright indeed. This mine pays out about \$3500 every month

in wages. This for a year is equivalent in value to about twice the entire amount of fruit shipped from Colfax last season.

Mining and Scientific Press, V. 68, 2/3/1894, p. 77

Parties at Forest Hill have leased the Homestake mine near there, and will begin work on the property again.

The mill at the Gold King mine at Green valley is now ready for operation and will be crushing cement next week. Supt. Ames is an expert millwright and has had considerable experience in setting up mills. It was an extremely arduous task to bring the heavy machinery from the top of the mountain ridge on the Iowa Hill side down to the river thousands of feet below. A chute was built for this purpose and the ponderous mortars and other heavy machinery were thus taken down. It was quite a feat, and that the mill is all ready for work is due to the skill and energy of Supt. Ames and his efficient foreman, L. C. Jacobs. Over 600 feet of eight-inch pipe have been made on the ground, and nearly 700 feet of ditch dug, in order to gain the power for the mill. The Gold Ring gives every promise of becoming one of the paying mines of Placer county.

Mining and Scientific Press, V. 68, 2/17/1894, p. 109

Paying Well.—Michigan Bluff Cor. Sentinel: The Frissell mine, formerly the Morehead mine, is reported as paying handsomely. It is to be hoped that it will long continue to do so, as the superintendent pays the highest wages and is opposed to any reduction.

F. W. Lament and G. W. Hoffman, of this place, have taken a contract to run 100 feet of tunnel in the Washington mine at Deadwood, at \$10 per foot.

Mining and Scientific Press, V. 68, 2/24/1894, p. 125

On Forest Hill.—The Auburn Herald learns that several new mines are being opened on the Forest Hill divide by parties from San Francisco and Eastern States. Among others, the Labaree mine and the Wills mine have recently been sold and are being opened by their purchasers. One of the largest properties, however, which is prosecuting development work is the Eureka Consolidated, a drift mine of great promise, situated above the now famous Mayflower drift mine. The Eureka Company owns nearly seven miles of the channel. It is arranging to use a small Baldwin locomotive or a motor for running its cars in and out of the mine, the same as the celebrated Bald Mountain mine has adopted. The rate the work is going ahead at the Eureka at present it is expected they will reach gravel before the end of the present year.

The Hidden Treasure mine at Sunny South paid a bigger dividend last month than any time in its history. The mine has been paying for the past twenty years. About forty-five white men and a hundred Chinamen are employed at the mine.

The company that has bonded the Willis Gould mine at Iowa Hill commenced work on the same this week. Two shifts are at work pushing the tunnel ahead.

The Golden River mine at Red Point is said to have reduced the white miners' wages to

Mining and Scientific Press, V. 68, 3/3/1894, p. 141

New Mining Company.—Colfax Sentinel: The Alta Gold Mining Company has recently incorporated with the following directors: W. M. Hall, W. 8. Miller, F. 8. Cbadbourne, J. P. Edhoff and J. E. Doolittle. The company has been organized for the purpose of working the Alta mine at Alta in eastern Placer. This mine promised very well a few years ago, but owing to litigation and other hindrances it was closed down. The last gravel worked promised the beat of all. The gravel is of the white lead of the' same character as the gravel in the famous Hidden Treasure mine at Sunny South. There is every reason for believing that, with improved facilities for working, this mine will become a good paying property. The company has not yet decided as to the manner in which the mine is to be worked, but that will be decided very soon and work will be begun as soon as the weather permits. The company has organized with a capital stock of \$1,000,000, of which \$550,000 have already been subscribed.

Mining and Scientific Press, V. 68, 3/24/1894, p. 189

An Old Mine Reopened, — Sacramento Record- Union: A company formed here last fall purchased an old and abandoned quartz mine at Horseshoe Bar, Placer county, which was worked years ago by the then Golden Rule Mining Company, and formerly owned by the late Horace Adams, C. H. Krebs and others.

The new Golden Rule mining directors are all old and well known Sacramentans—William Gutenberger, Nelson Wilcox, Lincoln White, J. B. Patterson, E. J. O. Rother and .lames I. Felter, the secretary. The latter has been advised that the main vein was struck this week, and Superintendent Rother, who is a man of large mining experience, pronounces it a finely developed mother lode, rich in free gold and sulphurets.

Thirty years ago there were thousands of miners on the American river at Horseshoe and Rattlesnake bars and in the immediate vicinity, and millions of dollars were taken out of the bed of the river and ravines by the crude methods of mining then in use.

The present company purchased this property from L. L. Crocker and J. W. Smyth. The latter has resided there continuously for forty years, as a miner, merchant, farmer and fruit raiser, and claims to be the pioneer producer of citrus fruits in Placer county and central California.

Draft of Twenty Men.—Colfax Sentinel: The Paragon mine at Bath made a draft of twenty men last Saturday. It is expected that the men will soon be put on again.

Work is steadily being pushed on the, tunnel in the Alta mine.

The Gold Ring mine at Green Valley is working a force of thirty men. The mill works first rate and the cement looks promising.

The new company recently organized to work the Willis Gould mine at Iowa Hill are very much encouraged by the prospects they have already found and think the mine will soon be one of the best on the divide.

It is rumored that the Dardanelle mine at Forest Hill is soon to be sold to a large company.

The work in the tunnel at the Golden Eagle mine at Shady Run, after a short stop owing to lack of timbers, will soon begin again.

The Pioneer mine is looking better now than ever before in its history. The ledge is a solid one, being highly mineralized and yielding from \$10 to \$25 per ton. The pay-chute is extensive, and has the promise of yielding a vast amount of money to its already wealthy owners. This mine has been paying regular monthly dividends for the past three years, and each month finds the prospects growing brighter. Fifty men are employed and the 20-stamp mill is kept going night and day.

Mining and Scientific Press, V. 68, 4/7/1894, p. 221

The Hidden Treasure.—Republican, March 30: Harold T. Power, of the Hidden Treasure mine at Sunny South, was in Auburn this week. Over 190 men are now employed in the mine, and the yield is very satisfactory. Mr. Power states that the past winter has been the most severe and most disagreeable he has ever experienced on the divide. Up to Tuesday last the road had not yet been opened to the mine for teams, and supplies were yet being taken in on sleds. It was expected, however, to have the road open by Wednesday.

Mining and Scientific Press, V. 68, 4/28/1894, p. 273

Drift Mines at Deadwood.

Every mining State and almost every mining county has its Deadwood mining district. More often than otherwise it is a good mining district. Placer county is no exception in either respect. Deadwood is a small drift-mining locality, situated on the divide between two of the tributaries to the middle fork of the American river, seven miles northeast of Michigan Bluffs. Through the summit of the divide cross diagonally the buried channels of some of the ancient rivers so extensively and profitably mined for gold in Placer and other counties. Prominent among these is what has been known as the Devil's Basin channel, which, 25 years ago, was mined down stream as far as drainage could be had and yielded a very large amount of gold. The outlet and continuation of this channel on the west side of the ridge has been prospected for during many years and is now believed to have been found. The owners of the Clifton mine, Messrs. Dixon and McCarty, are the fortunate individuals. The channel mined so profitably in the Center mine has turned and enters the Clifton, through which it can be traced by the rims, and be identified as the old Devil's Basin channel. Where it enters the Clifton, the channel is about 60 feet wide; it is in soft bedrock, with four to eight feet of gravel under a cement roof. In the Clifton the conditions for mining will be very favorable, and a tunnel now being pushed will soon reach pay. Once again mining in this channel, Deadwood will regain some of its old-time importance as a gold-producing camp.

Mining and Scientific Press, V. 68, 6/9/1894, p. 365

Columbus Waterous of the Big Dipper mine, in response to a query concerning affairs at the mine, said they had recently added about 25 men and were running two breasts. They expect to open a new breast this week, which will necessitate the addition of 15 or 20 new men to the force now employed.

Mining and Scientific Press, V. 68, 6/16/1894, p. 371

The Hidden Treasure mine, Placer county, is about to incorporate with a \$350,000 capital stock.

Mining and Scientific Press, V. 68, 6/30/1894, p. 414

Some very good ground has been struck again in the Paragon mine at Bath, and the company has canceled the lease made a short time ago and is again working the mine.

Mining and Scientific Press, V. 69, 7/21/1894, p. 43

At the Mayflower mine, near Forest Hill, a large force of men is employed. The Mayflower is one of the best mines in the State, and is the scene where drift mining is conducted on the most extensive scale in California. They have discovered a new channel of gravel at a depth of about 169 feet from the surface. F. Chappellet says that it only takes about 1400 feet of tunnel to work the newly located channel, and that he will complete arrangements this week whereby active work looking to the handling of this gravel will be commenced. He has always had faith in the existence of this gravel, and believes it to be an extension of the old Paragon channel which was worked with immense profit at Bath. The blue lead is being worked successfully by the Mayflower Company, but the discovery of this new and promising gravel channel is like finding a new mine.

Mining and Scientific Press, V. 69, 8/11/1894, p. 85

[the following is a portion of an article: Methods of Mine Timbering]

In running the main tunnel of the Hidden Treasure mine at Forest Hill, in Placer county, swelling bedrock was encountered. Mr. Ross E. Browne, E. M. in his article,": The Ancient River Beds of the Forest Hill Divide " (cide X report, State Mineralogist of California) says of this occurrence:

"The pressure of the gravel is not great, but the swelling bedrock has been a source of trouble, driving the legs of the timber-set inward and crushing the cap. After many unsuccessful attempts to overcome this difficulty, the legs were given an increasingly greater bottom spread, until finally it was found that they remained stationary. The swelling bedrock is removed from time to time and the track adjusted. The accompanying cut shows the form of tunnel timber-set now used in bad swelling ground. Sets are first put in four feet apart, and in the course of a few months center-sets are placed between these. Timber sets on this plan have now been in place three years (1879), and are still in good condition. In 8500 feet length of tunnel there are about

4000 sets of timbers. Two men are kept constantly employed in easing and repairing the sets and adjusting the track."

Mining and Scientific Press, V. 69, 8/11/1894, p. 90

The Osborn - Gaylord Mine:. — Herald: Messrs. Osborn, Gaylord and Haskill have consolidated their mining claims on Rattlesnake and incorporated. Supt. Gaylord has had eight men working, and the tunnel is in about 500 feet, and the gravel (of a cement formation) is uncovered, ready for milling. Mr. Gaylord has been in San Francisco this week, making arrangements for putting up a mill immediately. The prospect is good, and there is enough gravel uncovered to keep the mill running a year.

Mining and Scientific Press, V. 69, 8/18/1894, p. 103

The State's Oldest Miner.

The Colfax Sentinel makes the claim that Placer county has among her residents the oldest miner in California, in the person of Fred Howell Sr., at the Hidden Treasure mine at the Sunny South, Placer county. He has followed the business of mining since he was six years old. He is now sixty-five years of age, and the period during which he has been a practical miner is a trifle over fifty-nine years. Mr. Howell is a native of Wales and commenced his active work as a gatekeeper in a coal mine in his native land. At the age of twenty-five he came to Placer county (in '54) and has followed gold mining with varying success ever since. For the past eleven years Mr. Howell has been a shareholder in the Hidden Treasure mine, and for the past five years he has superintended the sluice washing and the cleanup. Miners of a riper age who are still in California are numerous, but we believe this veteran miner can justly claim the distinction of having spent more years in active

Mining and Scientific Press, V. 69, 9/8/1894, p. 154

Iowa Hill—Sentinel: The Morning Star and Harmon mines are working about 50 and 40 men respectively and are both doing well.

The work on the tunnel in the Juno claim is being pushed forward as rapidly as the hard rock in the tunnel will permit.

Two other tunnels are being run in claims south of the Morning Star mines. One of these has struck good prospects and the other has good indications of striking gravel in a very short time.

Mining and Scientific Press, V. 69, 9/15/1894, p. 170

The Hidden Treasure.—Sentinel: The Hidden Treasure mine at Sunny South, Placer county, has incorporated. The business of the company will in the future be done under the name of the Hidden Treasure Mining Company. The work of the corporation commenced July 3d. Twenty deeds to cover the transfers from the shareholders to the company were filed for record at Auburn last Saturday. The stock of the company amounts to 30,000 shares of the per value of

\$10 per share. The shares in the -Hidden Treasure are owned by Californians exclusively. The following is a list of the officers of the new company: Harold T. Power, President and General Manager. J. A. Ferguson, Secretary. Directors—Harold T. Power, Mrs. I. M. Power, A. F. Boardman, F. Howell and R. M. Sparks.

The company have recently purchased the Dam tunnel, with tracks, water rights and dumping grounds, together with right-of-way for tailings in adjoining canons. Several men are now at work in the tunnel. It is the intention of the company next season to erect works at the mouth of the tunnel. The money is up and the company expect soon to acquire the Mountain Gate drift mine. The transfer deeds have nearly all been made.

The Hidden Treasure Company now own three miles of channel, which comprises a surface area of about 2,000 acres. By the acquisition of the Dam tunnel the company will be able to work their ground covered by the black channel, or the same channel that is now being worked within the lines of the Red Point.

The operations at the Hidden Treasure are the most extensive of any drift mining property in the United States.

Mining and Scientific Press, V. 69, 9/22/1894, p. 179

The Osborn mine at Websterville {Westville?], Placer Co., has been sold at administrator's sale to O. L. Barton, of Rocklin, for \$10,500.

T. C, J. W. and S. T. Sterrett have brought suit against G. S. Montgomery, C. N. Crittenton, J. W. Martin, .P. Kyle, etal., for \$200,000 damages, the cancelation of certain contracts and the repossession of the Sterrett mine {later named the Trinidad} in Placer county, said to be worth \$250,000. About two years ago plaintiffs made a transfer of their property under certain conditions, and now claim that they were defrauded.

Mining and Scientific Press, V. 69, 10/20/1894, p. 243

The Morning Star gravel mine of Iowa Hill, Placer county, has declared its forty-sixth dividend of \$1.50 per share.

At the annual meeting of the Mayflower Gravel Mining Co. of Placer county, the following officers were elected: M. Chapplet, president; H. P. Green, Vice-president, and Chas Mayne, F. W. Zeile and H. Bendel, directors. D. M. Kent was re-elected secretary. A dividend of ten cents a share was declared and the annual statement shows a credit of \$39,000.

Mining and Scientific Press, V. 69, 10/20/1894, p. 250

At Work,—Colfax Sentinel: Superintendent W. H. Greneil, of Bath, informs us that things are prosperous at the Breece & Wheeler mine at that place. About thirty men are employed.

Centennial.—The Centennial mine at Butcher Ranch belonging to George Chesebro,

was bid in at sheriff's sale last Monday by the Rico State Bank.

Mining and Scientific Press, V. 69, 10/27/1894, p. 257

The Hidden Treasure Mining Company, Placer county, is extending the Dam tunnel, building shops, etc., and making all preparations for active operations through their new property.