

F.H.D.M., 1900 to 1904, V 80-89

Mining and Scientific Press, V. 80, 1/6/1900, p. 13

The Big Gun hydraulic mine, at Michigan Bluff, is working with a good head of water, but progress is slow, as the top ground slides into the pit.

The lower tunnel of the Eureka drift mine, six miles northeast of Sunny South, is in .3276 feet and is in a blue lead. The upper lead, which is 200 feet higher, is of grayish color.

Mining and Scientific Press, V. 80, 1/13/1900, p. 43

The late heavy storm has put water in all the mountain ravines, and will furnish a good head for ground sluicing.

Mining and Scientific Press, V. 80, 1/20/1900, p. 71

Directors of the Pioneer Mining Co. say that the vein lost some months ago will be found. Forty miners are working in various parts of the property in search of the lost ore body. The mill was recently started up. A director says the company has \$30,000 cash on hand.

Operations have begun again at Lynchburg, and good gravel, it is said, has been struck there.

Men are at work at the Basin Con. At Deadwood.

At the Crandall, where only five or six inches flowed out of the tunnel a year ago, fully 150 flow to-day.

Wm. Muir is working 25 men at the Weske.

Colfax Sentinel: The new compressed air plant at the Red Point gravel mine, twelve miles above Forest Hill, is being installed. The engine is 15 feet in length and weighs 11,000 pounds. The compressor plant is located down the canyon 3500 feet from the mouth of the tunnel. Power is generated by using 40 inches of water that flows from the tunnel. The pipe line to the compressor gives a pressure of 656 feet, furnishing a minimum of 40 H. P. The company have purchased 10,000 feet of heavy pipe to convey compressed air to the charging stations. The main tunnel at Red Point is now in over 15,000 feet. The gravel was formerly dumped through a chute from an upper tunnel into cars in the lower tunnel at a point 2200 feet in. A start was made back 1800 feet from mouth of tunnel and 800 feet of new tunnel on a 3% grade connects the upper and lower tunnels. The Red Point mine is the first mine in Placer county to use compressed air for traction purposes. Seventy men are now employed at the mine. J. A. Ferguson is superintendent.

The Morning Star Mining Company have sold their telephone line from Iowa Hill to Colfax to the Sunset Company. A line has recently been put in between the mine at Iowa Hill and Sunny South.

Mining and Scientific Press, V. 80, 1/27/1900, p. 97

At Forest Hill the Mayflower hydraulic mine, which was shut down for a week, has resumed:

The Bath mine is now paying and additional men have been put to work.

Mining and Scientific Press, V. 80, 2/3/1900, p. 125

At the Hidden Treasure mine Supt. Power has cut a chamber 20x30x12 feet in cement, where electric hoisting machinery will be placed. The main tunnel is now in over 8000 feet.

The Boston & South Dakota G. M. Co., which declared a dividend of 1% Jan. 23, is working a mining property in the Forest Hill divide. The South Dakota mine Works Cited

There are no sources in the current document.

the same conglomerate that the Homestake Co. has wrought for years. A 40-stamp mill has been erected there and twenty stamps are already in commission. The Weske tunnel property opens two ancient river beds in the base of the mountain. The White river channel is now being worked. The Blue river bed will be drained by the present owners.

Mining and Scientific Press, V. 80, 2/10/1900, p. 154

The Michigan Bluff M. Co., at Michigan Bluff, has two shifts running. A large tunnel, well timbered, is now in over 300 feet. The company is operating the property formerly known as the Burns Con. Mexican Placer mining claim. The tunnel will strike 40 feet below the channel.

Mining and Scientific Press, V. 80, 2/24/1900, p. 212

Frank A. Leach, Supt. U. S. Mint, San Francisco, is at Forest Hill divide. Placer Co., Cal., where he has mining interests.

Mining and Scientific Press, V. 80, 3/3/1900, p. 243

A telegram from Forest Hill says that the Boston & South Dakota G. M. Co. have struck the Big Blue lead in an upraise from a crosscut from the main Weske tunnel. The company contemplate an electric plant on their Dead horse ditch claim, and a mill at Turkey Hill to work the gravel coming from the Weske tunnel.

Pioneer stock was issued at \$5 in 1895; 100,000 shares, par \$10. The company paid dividends in 1898. Its stock sold from 2 to 8½ in '99.

C. A. Wikman, Supt. Jupiter mine, Iowa Hill, proposes to drive a tunnel to drain the mine.

Mining and Scientific Press, V. 80, 3/17/1900, p. 203

At the Hidden Treasure gravel mine, near Michigan Bluff, the management has finished the installation of a new electric plant for pump and hoist at the inside station, one and one-half miles from the mouth of the tunnel. Power is derived by connecting with the trolley wire which supplies energy for running the electrically propelled ore cars. The hoist runs 32 feet to a second channel recently discovered, and twenty tons of gravel per hour can be raised
Auburn, March 10.

Mining and Scientific Press, V. 80, 3/24/1900, p. 322

At the Morning Star drift gravel mine, Iowa Hill, the Colfax Sentinel says the working tunnel is in over 4000 feet and is below the gravel channel. As the gravel is mined it is dropped into cars through chutes. A daily average of 100 cars of gravel are mined. The average monthly payroll is about \$4500. The partly cemented gravel is crushed in a 10-stamp mill.

Mining and Scientific Press, V. 80, 4/14/1900, p. 399

U. S. ENGINEERS and others figure that in parts of California's Sierra foothills, notably near the Forest Hill divide in Placer county, there are great gold placers to be mined by the drift method, the gold to be got out from under the lava. The channels of the old rivers under this capping are much richer than those of the modern rivers and placers that yielded a thousand million dollars in gold. This because the

channels of the ancient rivers had served as bedrock sluices for untold ages before the disturbing lava flows began. The present rivers of California received the greater part of their gold by cutting across and carrying away great sections of the rich channels of the ancient rivers. In this way sections of the ancient channels, miles in length, were carried away and redeposited, as is to be noted at the canyons of the present river system. Thus the ancient channels, which have a north and south course, are left lying in sections between the present rivers, which run from east to west.

Mining and Scientific Press, V. 80, 4/21/1900, p. 434

The Paragon, or Breece & Wheeler, is a combination drift and hydraulic property at Bath, 3 miles from the town of Forest Hill. The drifts in this mine are connected with the workings of the Mayflower, which was at one time a very extensive gravel property. The two mines are on the same channel, which also extends to the Dardanelles, on the other side of the Mayflower. The original operators worked out the best pay in the center of the Breece & Wheeler channel, and the drift work that is now being prosecuted is by lessees, who find good pay on the rims and upper leads. They have a tunnel 400 feet in length, bringing the fomented gravel to a 10-stamp mill, where water power under 400 feet head has recently been substituted for steam. The company laid 1100 feet of pipe in order to get the above head, and now run their mill with 15 inches of water. T. M. Brown and Wm. Ready Jr. are the lessees of the drift portion of the mine. In the latter diggings a 4-inch monitor is used, with a fall of 200 feet. They make three runs per day of about one hour each. Both portions of the mine are paying well. In the drift mine fifteen men are employed, and in the hydraulic about the same number.

Marchant, McDonald & Vonnewitz have a bond on the Dardanelles mine at Forest Hill. This is an old drift mine which yielded well years ago, but which was considered worked out, so far as the main channel is concerned, and was abandoned. The present operators unwatered the old drifts and have put in an electric plant for the hoist and pump. They have been prospecting for six months and feel that they have demonstrated the existence of another channel. They are running a bedrock tunnel to intersect it, and within 100 feet hope to strike rich gravel. There is a 110-stamp mill on the property and the company has a reliable water supply for seven months of each year.

The Big Gun gravel mine at Michigan Bluff has a claim of 500 acres, part of which was hydraulicked in former years. They have a 11-inch pipe line 600 feet in length and throw water through a No. 2 monitor under a head of 200 feet.

The Michigan Bluff M. Co. is composed of Auburn business men. They are developing a gravel proposition adjoining the Big Gun by driving a tunnel through bedrock in the direction of the channel. This tunnel is now in 400 feet, and an upraise is being driven for an air shaft and to determine the value of the gravel at that point. The tunnel will be continued at least 400 feet farther. An old tunnel, 45 feet higher, 1100 feet in length, was run several years ago by a former company. M. H. Burns and three co-workers are driving the tunnel, having been employed since November last.

The Morning Star gravel mine is within a mile of Iowa Hill. Its underground workings are connected with the Big Dipper, which claim joins it on the south. It is thought they are on the same channel. The Morning Star tunnel is 4400 feet in length, with upraises to gravel each 200 or 300 feet. These upraises are usually 38 feet in height, and are divided into three compartments, two chutes for the gravel, with a ladder-way between. A shaft 488 feet deep gives excellent ventilation. The channel has an average width of 275 feet, and 500 carloads per week are extracted. The gravel is cemented and is put through a 10-stamp mill, run by water, with a steam plant in reserve. The company has its own storage reservoir, and by means of a pipe line 1200 feet in length obtains a fall at the mill of 450 feet. The

Morning Star is one of the most reliable dividend payers in the State. H. T. Power is Supt.; H. Simons, foreman. About forty men are employed.

As before stated, the Big Dipper mine joins the Morning Star on the south, its mill being located about three miles from Iowa Hill. The tunnel is 4500 feet in length, being below but following in general the sinuosities of the ancient river channel, 500 to 600 feet wide, from which the cemented gravel is taken through upraises converted into chutes. A portion of the gravel is put through a rock breaker and is then washed, while another portion goes through rock breaker and a 10-stamp mill. This mill is run by water under 270-foot fall, while a 6-toot wheel operates an air compressor, which in turn furnishes power for the machine drills in the mine. A steam plant in reserve is usually resorted to from June to November, each year, while the water supply is low. The output of the mine is 725 to 900 carloads of gravel per week. About seventy- five men are employed. Seymour Waterhouse, Gen. Mgr.; P. H. Schuize, foreman.

John Watts, near Iowa Hill, owns the Strawberry gravel mine. He has driven a tunnel 2000 feet, following up the gravel channel, which is 50 to 60 feet wide. The gravel is blue, but free washing, and is yielding satisfactorily.

Mining and Scientific Press, V. 80, 4/28/1900, p. 465

(Special Correspondence). — The Hidden Treasure, with its main work at Centerville, eight miles from Iowa Hill, is the most extensive gravel mine in California. This, company began operations at Sunny South, three miles from Centerville, twenty-two years ago, and until 1896 prosecuted its work through the tunnel terminating at the former place. Eight thousand feet from the mouth of the tunnel the channel of white quartz gravel was cut off abruptly by a blue gravel lead that was being worked as the "Dam Claim." This latter claim was purchased by the Hidden Treasure Co., and since the purchase of that and contiguous ground, operations have become focused at Centerville. The white gravel channel was rediscovered 60 feet beyond the blue gravel cut-off, and both channels, each upon its own level (varying 25 feet), are now being worked by the Hidden Treasure Co. Some rich gravel is now being taken out of the "black channel," or the original Dam claim, which encourages the company to continue its development. It is to prosecute this work that an electric hoist was recently put in. The difference in the gravel is strongly marked. In one channel it is loose, white and friable, and can be breasted out with pick and shovel; in the other channel it is strongly cemented, requiring powder blasts to break it down. The tunnel which runs into the hillside from Centerville strikes the white channel 8000 feet from its mouth, following the level of the Dam tunnel 6000 feet, and then branching off, and rising by an easy grade 25 feet within the next 2000. At this latter point the gravel is being extracted to the extent of 225 to 250 carloads per day (twenty-four hours), and is hauled to the mill in trainloads of fifteen to thirty cars by means of an electric trolley line. Ten trips per day are made. It is dumped from the cars by hydraulic connections, and falls into the bins, where it is sluiced into the flume leading down the canyon. All of the operations of the mine are systematic. It is a regular dividend-payer, and promises to continue such for many years. H. T. Power is the Gen. Mgr. and principal owner; M. Holt, Supt. About 200 men are employed, something more than half of whom are Chinese.

The Red Point mine, four miles from the Hidden Treasure, is an interesting gravel proposition. There is here one of the longest tunnels worked from a single opening that can be found in the State. This tunnel was driven into the hill for 2000 feet as a crosscut; here it struck the locality of the gravel channel, and this it has continued to follow for a distance, in the aggregate, of three miles. In a tunnel so long as this, ventilation is an important factor. This is accomplished by blowers, which force pure air to the face of the tunnel. The gravel is strongly cemented, in a channel averaging 70 feet in width, but slacks quickly

upon exposure to the atmosphere, and then washes freely. Three thousand carloads per month is the output. The cars are propelled by a compressed air locomotive, there being a charging station at the mouth of the tunnel, and another at a central point inside. Fourteen cars of one-half-ton capacity each constitute a load, and these are run at a speed of fifteen miles per hour. The air is compressed at power houses located in the steep ravine below the mine. Water which runs out of the tunnel (unvarying in amount through the entire season) is utilized twice under a fall of 500 feet in each instance, creating ample power for the purpose required. A French syndicate owns the Red Point. Seventy men are employed, with J. A. Ferguson as Supt. Iowa Hill, April 14.

Boston News Bureau: The Pioneer M. Co. held a meeting Saturday. The mine was closed down on April 5th and only three men are now employed there. The company's surplus has shrunk from \$50,000 to about \$1000. The directors represent 10,000 shares of stock and suggest that an assessment of 50 cents per share be levied. The stock is nonassessable under Montana laws except three-quarters of the stockholders agree to an assessment. It was the sense of the meeting that the company be reorganized, and it was voted to refer the matter back to the director's with the request that they devise a plan of reorganization.

Boston News Bureau: The directors of the Pioneer M. Co. are expected to meet this week to discuss plans for financial relief. A director says: "I personally favor the calling of a 50-cent assessment, payable in two installments of 25 cents each. If \$25,000 is sufficient, and I believe it will be, why of course the remaining \$25,000 need not be called. I am decidedly opposed to running the company in debt. We recently ran the mill, twelve hours a day, but the rock was of so low grade that only \$2600 in bullion was produced. We have been expending our treasury funds at the rate of about \$5000 a month. Additional funds must now be raised with which to continue our explorations for profitable ore bodies. I believe such ore bodies exist in our property, but it will take money to find them."

Mining and Scientific Press, V. 80, 5/5/1900, p. 494

A special meeting of the stockholders of the Pioneer G. M. Co. will be held May 31 at Helena, Mont., when a proposition will be laid before the shareholders looking to the raising of a sum sufficient to carry on development work.

Mining and Scientific Press, V. 80, 5/26/1900, p. 583

President Grose of the Pioneer G. M. Co. says in reply to the attack made on the present management by an ex-director: "He first accuses the present management with eating up \$100,000 of the stockholders' money, and follows this by a review of operations at the mine, which show that the funds of the company were put to good use. He neglects, however, to mention that \$50,000 of the '\$100,000 eaten up' was returned to the stockholders in dividends. Mr. Cox mentions that \$15,000 was paid for a piece of property to the north of the mine. This, in my opinion, was a good investment. He says that the Pioneer is one of the best equipped mines in California. It is, and the equipment was paid for out of the '\$100,000 eaten up.' The American river was dammed and the best water power and electrical plant in California provided for the mine, and the development work 'carried to the verge of the ore shoot,' as he acknowledges, by the present management. All of this has been paid out of the \$100,000 that Mr. Cox claims was 'eaten up' by the present management. In fact, everything is in preparation for the opening of the ore body. The assessment will fall most heavily on those who own the stock, and very lightly on Mr. Cox."

Mining and Scientific Press, V. 80, 6/2/1900, p. 613

A tunnel 1500 feet long is to be driven at Spring Gardon, near Forest Hill, to tap the channels of the divide.

The Sentinel reports a strike in the Breece & Wheeler, or Paragon mine, near Bath, of a lead of blue gravel.

Mining and Scientific Press, V. 80, 6/16/1900, p. 674

The Michigan Bluff M. Co.'s tunnel is in 660 feet; about 150 feet more reaches the channel next month. The main tunnel out through an old upraise with figures showing that work had been abandoned on it in 1860.

At a recent Boston meeting of stockholders of the Pioneer G. M. Co., the management voted on 53,000 shares; the opposition voted on 12,000 shares—a total of 65,000 out of the whole capital of 100,000

The majority vote authorized the directors to incur an indebtedness for the development of the property; to mortgage the property to secure the indebtedness; to dispose of the property at public or private sale, and to form a new company and to exchange the shares of the old company for shares in the new company upon a basis to be decided upon by the directors.

Colfax Sentinel: In the Hidden Treasure mine at Centerville, the main tunnel is in 8500 feet. The company have been breasting the channel to the width of 600 feet. They will extend No. 5 gangway, crosscutting the channel 1100 feet; thence north up the channel 1000 feet. In order to work a portion of the upper lead where the main tunnel is too high to work it. A room has been cut in the cement 20x30x12 feet, on the right of the main tunnel at a point 5000 feet in. Here an electric hoist and pump is used to develop the blue channel 32 feet lower. A drift of 350 feet has been run on the channel, and crosscuts are being made which have developed 150 feet width of channel. Supt. Akers reports 176 men on the payroll. Twenty trains drawn by an electric motor bring out 350 cars daily. The Hidden Treasure drift mine is operated upon the most extensive scale of any drift mine in the State. The mine is paying regular dividends and never looked better. Work will be resumed at the Pioneer quartz mine, near Towle. R. Jones, Supt. Canada Hill mine, is working twenty men. A tunnel 900 feet in length has struck gravel. D. Lovelace, in Humbug canyon, below Red Point, will erect a 5-stamp mill. The Bald Mountain gravel mine is being worked through a shaft. Number of men employed, 15; W. H. Bell, Supt. Over \$200,000 has been spent on the Big Channel, Rough & Ready and Peckham Hill gravel mines in an effort to discover the outlet of the deep channel on the lower Forest Hill divide. The tunnels were all too high. It is believed that the tunnel now started in Snyder canyon at an elevation of 2100 feet will be low enough to tap the channel.

Mining and Scientific Press, V. 81, 7/7/1900, p. 10

Colfax Sentinel: Supt. Felix Chappellet, Jr. of the Eureka mine is extending the: main tunnel. The tunnel of the Azalea : mine, Blue canyon, is in 2640 feet.

The Gold Run Gravel Co., also the Inskip Co., have closed down ; failure of water supply. The Inskip Co. has shown that the bedrock is pitching into the hill. The company will extend the main tunnel 300 feet to reach gravel at the bottom of the channel.

Mining and Scientific Press, V. 81, 7/21/1900, p. 69

H. F. Calenberg is Supt. at the Jupiter gravel mine, Iowa Hill. He reports the outlook favorable.

Wm. Muir, Supt. Boston & S. D. M. Co., Michigan Bluff, has forty-three men at work.

Mining and Scientific Press, V. 81, 8/4/1900, p. 118

SO FAR as known, the biggest mine blast in California was fired in 1878, in the Dardanelles mine, Placer county, moving 500,000 cubic yards gravel ; nineteen tons Judson powder were used—equivalent to about 75,000 pounds black powder.

Mining and Scientific Press, V. 81, 8/4/1900, p. 118

The Prairie Flower quartz mine at Canada Hill has a 5-stamp mill running steadily. Twenty men are employed.

A plan for the reorganization of the Pioneer G. M. Co. has been agreed upon by the directors—the same as that upon which the stockholders voted at Helena, Mont., May 31st, except that it provides that 20 cents instead of 25 cents be paid by present stockholders for having the stock of the present company exchanged into the stock of the new and that 30 cents more may be called later.

Colfax Sentinel: W. Muir, Turkey Hill mine, Michigan Bluff, has thirty men at work in the old Weske channel, and men are developing the Sacramento mine at Forest Hill.

Mining and Scientific Press, V. 81, 8/11/1900, p. 159

Colfax Sentinel : The Tadpole Con. G. M. Co., 80,000 shares, \$20,000, W. H. Cass, secretary, will work a gravel channel 4 miles east of Westville.

Coffin & Gray will work the Big Spring mine, Texas ridge, main north fork American river.

At the Turkey Hill mine the B. & S. D. M. Co., Wm. Muir, Supt., will put in a \$50,000 electric plant.

Mining and Scientific Press, V. 81, 8/11/1900, p. 159

The Hidden Treasure mine employs 170 men. The station in the white channel has been moved to a point 1000 feet up the channel. The blue or lower channel has been opened up for a distance of 600 feet. The channel is 250 feet in width. With the present machinery the company is able to daily take out 250 cars of blue gravel.

On the Middle Fork of the American river the Cash Rock Co. intends to put in machinery and drill through the gravel beds.

Mining and Scientific Press, V. 81, 8/18/1900, p. 194

H. T. Power has returned to Placer county, Cal., from an extended Eastern trip.

Mining and Scientific Press, V. 81, 8/25/1900, p. 223

The J. D. Peters M. Co., at Green Valley, after running the lower tunnel 1000 feet, made an upraise of 110 feet and found gravel. They are putting in chutes to handle pay dirt through lower tunnel, using upper tunnel for waste.

The Boston News Bureau says "Pioneer has advanced from 15 cents to 25 cents on a report that its troubles are o'er or lack of ore is over."

Mining and Scientific Press, V. 81, 9/1/1900, p. 255

D. T. Callahan of San Francisco has bought the Buckeye Con. Drift gravel mine, comprising about 100 acres in extent, on the Forest Hill Divide, 4 miles northwest of Forest Hill for \$3,5000. It is a channel mine with 1000 feet of tunnel through gravel with external breast at the face. The new owner is putting in a 10-stamp mill and expects to crush gravel by Nov. 1. R. E. Stephens will superintend the work.

J. A. Thompson and associates are locally reported to have sold the Kirk claim, near Forest Hill, for \$34,000. It is a gravel Mine and is supposed to be on the same channel as the Mayflower.

P. Nichols is superintending a project to work tailings in the North Fork of the American river. A dam will be built three-fourths of a mile below Rice's bridge.

Mining and Scientific Press, V. 81, 9/8/1900, p. 287

The Sacramento folio of the U. S. Geological Atlas says: During the Neocene period the auriferous gravels accumulated on the slope of the Sierra Nevada, and at the same time there was deposited in the gulf then occupying the great valley a sedimentary series consisting of clays and sands to which the name "lone formation" has been given. Beds of this age, which probably underlie the larger part of the Pleistocene or surface formations in the valley, are exposed only to a limited extent. At Lincoln there is a succession of white sand and clay bods containing a few seams of lignite. North of Rocklin the same series 50 to 100 feet thick is exposed in places below andesitic beds. The strata form characteristic flat-topped hills and consist of light colored clays and white or yellowish-brown sandstones. On top of the lone formation there is usually a layer of reddish Pleistocene gravel a few feet thick. The highest point at which the beds are found is about 450 feet above sea level.

Mining and Scientific Press, V. 81, 9/15/1900, p. 317

Supt. Felix Chappellet, Jr., at the Eureka drift mine, 12 miles above Forest Hill, has the main tunnel in 3900 feet.

Herald: At the Brece & Wheeler mine at Bath work has begun at stations 5 and 28 for working the top streak over the old blue lead.--- Owing to the scarcity of water, a great many claims in the mountains have been forced to suspend operations.--- At the Pay Streak in Humbug Canyon a 5-stamp mill is in operation. The Pioneer mine expects to start up during the present month with the usual force of men.--- The Dorer mine is running the usual force.--- At the Patrick quartz mine the stamp mill is in operation.--- An electric plant for the Turkey Hill mine is being put up in El Dorado canyon.--- M. R. Gleeson has ten men working at his mine near Iowa Hill.--- Parties with a view of purchasing have been examining the Barton mine.--- The quartz ledge in Black Canyon, owned by Snyder, Richards & Co., has been bonded to San Francisco men, who will sink on the ledge. They will use a horse-power whim for the first 100 feet.--- Preparations for resuming work at the Tadpole Consolidated mine are being made.--- The Canada Hill M. Co. is running its regular force.--- At the Sailor Gravel mine a new tunnel is being run. At the Glen mine a shaft is down 100 feet from the level of the tunnel.--- San Francisco men are investigating the Haney Consolidated mine.--- The Whitney mine at Deadwood is working steadily with a full crew.

Mining and Scientific Press, V. 81, 9/22/1900, p. 347

The Morning Star mine of Iowa Hill is again a dividend producer, a \$3 dividend having been declared.

Sentinel: The Alameda quartz mine will raise the retaining dam 4 feet. The mine consists of a ledge from 50 to 100 feet in width. The surface of the ledge on the steep mountain is decomposed and is worked by a piping and sluicing process.

Mining and Scientific Press, V. 81, 9/29/1900, p. 377

(Special Correspondence).—After lying idle for three years, operations have been resumed at the Trinidad mine near here. A 10-stamp mill is running at full capacity. The company expects to put in a plant to work the concentrates within sixty days. J. D. Hoff is Supt. Cisco, Sept. 22.

Sentinel: The Rocky Bar G. M. Co. is opening a claim on the American river, 3 miles from Colfax, on an extensive scale. P. Nicholls has charge. A. M. Burnbam is superintending the work for the company.---Fifteen men are putting an undercurrent in a gorge in the American river, an extensive work.

Mining and Scientific Press, V. 81, 10/6/1900, p. 406

The Dewey Con. M. Co., composed of Stewart, Doolittle, Sprague, et al., is building retaining works in Indian canyon, near Iowa Hill, to mine next winter by the hydraulic process.

Supt. Jordan has the Blue Lead mine in good condition. A bedrock cut is extended up the Dutch Flat canyon. He thinks he has found the old deep blue lead channel.

The Pioneer G. M. Co., through its secretary, C. H. Howard, states that at the meeting at Helena, Mont., the Pioneer-Lynn M. Co. was organized under the laws of Colorado, with the same number of shares as the old company, of the par value of \$5 each, for the purpose of acquiring the California properties, and asks surrender of certificates of stock, before Oct. 22, and at the same time pay 20 cents for each share surrendered; stockholders so doing will thereupon receive a receipt for a similar number of shares of the new company, to be delivered as soon as certificates can be prepared. It was at first proposed to require a payment of 50 cents a share upon the exchange of stock, but the sum was reduced to 20 cents on the recommendation of the advisory committee appointed by the stockholders. In case all of the stockholders should not exchange their stock, those making the exchange will be given the right to take the remaining stock of the new company on paying therefor 25 cents a share.

Mining and Scientific Press, V. 81, 10/13/1900, p. 439

A. Bordeaux is manager of the Ralston Divide G. M. Co. 's property, a drift mine in a territory described and illustrated at considerable length in the issue of July 30, 1898. His nearest postoffice is Georgetown, 30 miles away ; his supplies are received at Summit station. A system of ditches, when completed, will furnish water the coming winter to carry on hydraulic operations that are expected to reimburse the company for its considerable outlay. Felix Chappellet is president of the company, which has acquired possession of considerable valuable property which will be thoroughly developed. Mr. Chappellet has already shown considerable nerve in such enterprises. When at the Mayflower he determined that by adopting a certain course the ancient channel could be found, and for this purpose a tunnel 5585 feet long was driven through hard slate at a cost of \$150,000, with entire success. That section has yielded about \$30,000,000, which is considered to be but an index of the amount yet to be extracted therefrom.

Sentinel : At the Occidental gravel mine at Grizzly Flat, near Iowa Hill, the main tunnel has followed the channel 350 feet. Crosscuts show a width of about 400 feet.--- At the Herman quartz mine, near Westville, the new tunnel taps the ledge at 1400 feet and has been extended 300 feet on the ledge. Thirty-five men are employed.

Mining and Scientific Press, V. 81, 10/13/1900, p. 441

C. D. Akers has been re-elected superintendent Hidden Treasure Grand M. Co., Placer county, Cal.

Mining and Scientific Press, V. 81, 10/20/1900, p. 469

In the Mayflower, the new tunnel on the upper lead is in 1500 feet; pay gravel is expected in 500 feet more.

Herald : Near Forest Hill, at the Sellier claim, H. T. Bell Supt., satisfactory work goes on. The Horseshoe Bar Co. is ready for the winter's work. Buckeye mine owners are grading to put in a stamp mill. The Big Con. Co. has let a contract to drive the main tunnel ahead from Peckham hill. Work has been resumed at the Grey Eagle, T. G. Durning Supt. Near Michigan Bluffs, at the Turkey Hill mine, the dam, ditch and pole line are completed. About sixty men are employed ; the gravel averages \$3 per car. Wm. Muir is Supt. of the company known as the Boston & South Dakota Con. At the Webster claim A. Dipple is Supt. The Prairie Flower at Canada Hill is now under the management of Geo. Payne. The Canada Hill M. Co. is getting ready for a run, R. Jones Supt.

Mining and Scientific Press, V. 81, 10/27/1900, p. 498

The tunnel at the Herman, near Westville, is in 300 feet on 1400-foot level. Two 3-stamp mills will be erected. Thirty-five men are employed.

Mining and Scientific Press, V. 81, 11/3/1900, p. 510

It is locally reported that the Westinghouse Electric Co. is considering the project of putting in an electric plant to furnish power for mines in Humbug canyon, near Colfax.

The tunnel at the Mayflower, near Forest Hill, now in over 1500 feet, will probably be continued another 500 feet.

The Hidden Treasure, near Colfax, produces about 250 carloads blue gravel daily from a channel 250 feet wide.

Mining and Scientific Press, V. 81, 11/10/1900, p. 523

The 10-stamp mill at the La Trinidad mine, 16 miles southeast of Cisco, is running. The first cleanup since the resumption of work gave 92 ounces; G. S. Montgomery Supt.

The Rawhide Co., Auburn, are putting in 1200-foot tramway.

The Pioneer, Supt. Sullivan, has resumed.

Pay Streak mill, Humbug canyon, W. Lovelace, Supt., is running.

Mining and Scientific Press, V. 81, 11/17/1900, p. 536

G. F. Stone, Supt. Herman, near Westville, has finished the work of placing a 10-stamp mill in the lower tunnel and work is in progress.

Colfax Sentinel : The main tunnel at the Eureka Con. drift mine, 12 miles above Forest Hill, is in over 4000 feet. The company owns 6A miles of channel. F. Chappellet Jr. is Supt.

The Morning Star mine of Iowa Hill closed down this week, the pay channel being exhausted

Mining and Scientific Press, V. 81, 11/24/1900, p. 549

The main tunnel at the Red Point, 12 miles above Forest Hill, is in over 3 miles.
The Herman M. Co. are putting in a pipe line from the Breece & Wheeler ditch to the mill.

Mining and Scientific Press, V. 81, 12/8/1900, p. 574

The Boston-South Dakota M. Co. is handling 25 cubic yards of gravel daily, which averages \$5.25 per yard; the product will be increased. The cost of handling it, with the improved machinery now being installed, will be reduced to \$1.25 per cubic yard. The mine is being equipped with electrical machinery. The company's agent estimates that there are 900,000 yards of gravel in the Weske channel alone, or enough to supply 250 to 300 yards daily for more than ten years. The River M. Co., operating the Pleasant Bar, American Bar and Willow Bar placers, on Middle Fork of the American river between Michigan Bluff and Forest City, has leased the Horseshoe Bar property, including ditch and water right of 800 inches under 400 feet pressure, hydraulic elevator, pumps, giants, etc., for five years. The tunnel at Horseshoe Bar is paved with 100 feet of rock and 50 feet of T rails.—At the Dewey Consolidated (gravel), at Iowa Hill, piping is under way; 800 inches water are available. At Deadwood, twelve men are employed at the Basin Con. Drift. Average width of channel is 60 feet; main working tunnel is in over 4000 feet. J. C. Whitney, owner; J. W. Dunlap, Supt.

In the Morning Star, at Iowa Hill, portions of the mine may be leased. Supt. J. Sullivan is pushing work on the Pioneer and expects to have the mill running soon. Dorer Bros, are running their 10-stamp mill, one shift at present, but will run it steadily as soon as development permits. Olson & Co. have contract to drive a tunnel on the Southern Cross. The old Bob Lewis (gravel), at Damascus, will be reopened, it is said, with G. W. Snyder as Supt. A 2000-foot tunnel will probably be run to strike the channel.

Mining and Scientific Press, V. 81, 12/15/1900, p. 586

A. Gorman is getting the Lady Walker, at Michigan Bluff, in shape for a run. The Big Gun M. Co. will push work on the Big Gun next season. W. Muir, Supt. of the Turkey Hill, is putting on men. The electric plant is in and the crushing mill will be running Jan. 1.

Mining and Scientific Press, V. 81, 12/22/1900, p. 598

The Hidden Treasure Gravel M. Co., Supt. C. D. Akers, has 175 men employed; 500 cars of gravel are taken out daily from the blue and white channels; in the former a 1200-foot gangway is run; a 32-foot shaft is sunk; latter is supplied with an electric hoist; a 700-foot upraise up channel is being made; a new 10 H. P. electric motor to run blower is in. W. Muir has men working on the Sacramento (gravel), at Forest Hill. The tunnel at Peckham hill is in 100 feet. The tunnel on the Sellier, at Bath, is in 800 feet: a new mill will go in soon; Washington G. M. Co., owners. -F. A. Elster has leased the Trafton (gravel), at Yankee Jims. C. Lovell is running a bedrock tunnel on the St. George. Parmelee Bros, are pushing work on the Bishop, at Last Chance. The tunnel of the El Dorado (drift) is in 3000 feet. The undercurrent, 1\ miles from the mouth of Greenhorn, 4 miles from Colfax, is completed.

Mining and Scientific Press, V. 81, 12/29/1900, p. 611

A strike of rich ore is reported made on the Herman, at Westville. Supt. T. G. Durning is retimbering the Grey Eagle tunnel, Auburn. The Malmberg mill is running on ore from the Rocky Ridge. The Never Sweat is sold to J. Johnson.

On Turkey Hill (gravel), El Dorado Canyon, Michigan Bluff, a new electric plant consisting of two 60 H. P. generators, etc., are in; power will be distributed as follows: Mill, 35 H. P.; compressor, 35 H. P.; electric locomotive, 20 H. P.; hoisting, 7½ H. P.; pumping, 7½ H. P.

Mining and Scientific Press, V. 82, 1/5/1901, p. 2

As elsewhere, the industrial development of California is almost wholly founded on the mining industry. Had it not been for mining, the Union Iron Works would not have been in condition to make such a battleship as the Oregon and the other vessels that have won for the American flag imperishable renown. Mining brought giant powder into being; it created the Pelton wheel and others of its kind; it brought into being the iron and steel pipe as now made. The cable railway, a San Francisco invention, was inspired by similar use of a wire rope in the Dardanelles drift mine in Placer Co., Cal. Mining has called into existence the largest electrical transmission systems, and is the mother of many other discoveries and inventions of material general value.

Mining and Scientific Press, V. 82, 1/5/1901, p. 8

Electric power will be used at the Southern Cross (quartz), near Colfax; a dam is being built in the American river.--- The new tunnel at the Jupiter (gravel), on Iowa Hill, is in 260 feet; eleven men are employed.

Mining and Scientific Press, V. 82, 1/12/1901, p. 41

A. Brown and others have leased the Baltimore, at Forest Hill, and have begun work. Excavations for the new mill at the Southern Cross (quartz), near Iowa Hill, are completed; ten stamps will go in first, and ten more later; electric power will be used; R. J. Trimble, Supt. The new tunnel at the Jupiter (gravel), near Iowa Hill, has cut the channel at a point 260 feet in, cutting off over 1500 feet of tunnel which enters channel at another point; eleven men are working under Supt. Calenberg.

Mining and Scientific Press, V. 82, 1/12/1901, p. 44

J. R. Scupham, manager Boston-South Dakota M. Co., recently seriously injured at Colfax, Cal., is at the Turkey Hill mine, Placer county, Cal., where his company has installed an electric plant.

Mining and Scientific Press, V. 82, 1/19/1901, p. 53

The Great Channel M. Co. of Chicago, which recently bought J. B. Sellier's gravel mine near Bath, is running a lower tunnel on the property, which will probably go to the 1300-foot mark. A. Clark has put in a new pump at his tunnel at Yankee Jim's, and work is going ahead satisfactorily. Handy & Ellison are working the Good Friday, at Ophir, with good results.

Mining and Scientific Press, V. 82, 1/19/1901, p. 56

Harold T. Power has returned to Placer county, Cal., from San Francisco.

Mining and Scientific Press, V. 82, 1/26/1901, p. 64

The mineral products of the county are gold and silver, granite and pottery clay. The total value of the minerals for the three years ending December, 1899, was \$4,291,974, of which sum the value of the gold output was \$4,113,044. The forthcoming report shows twenty-two mines and about fifteen granite quarries in active operation. There are four stamp mills.

Mining and Scientific Press, V. 82, 1/26/1901, p. 66

Felix Chappellet Jr. goes from Placer county, Cal., to superintend operations at the Santa Rosalia mine, Sonora, Mexico.

Mining and Scientific Press, V. 82, 2/2/1901, p. 75

The new electric plant at Turkey Hill drift gravel mine, near Michigan Bluff, has been started and is running the mill and electric locomotive which hauls the cars of gravel from the mine.

Mining and Scientific Press, V. 82, 2/16/1901, p. 91

Current statement is made of a recent discovery in an eastern Oregon gold mine of a vein 25 feet wide in which from a "streak" of ore 12 inches in width "several chunks of ore, each as large as a man's head, have been taken out, which yield one-third gold." With no more than passing reference to the statement, which may or may not be true, it is a matter of record that a rich ore streak will produce great store of treasure -from a very small space. Over \$2,500,000 has been taken from a space "the size of a three-room cottage." From one little "pocket" in the Moose mine, near Alma, Colo., about \$1,500,000 was taken. The same holds good regarding several gold deposits in Placer, Tuolumne and other California counties. The Rhodes claim, near Murphys, Calaveras county, Cal., produced \$250,000 from an area 40x100 feet; ninety pounds of gold were taken out in twenty-four hours. A similar area in the Jamieson claim, Iowa Hill, Placer county, Cal., yielded over \$500,000; the Dardanelles claim, Forest Hill, in the same county, yielded \$2,000,000; near Springfield, Tuolumne county, Cal., single miners' carloads of "pay dirt" panned out \$1000 each. This constitutes one of the charms of mining. Development of a "prospect," proper working of a "mining claim," may make each of its 1500 feet worth more than the most valuable 1500 feet front of property on Broadway, New York.

Mining and Scientific Press, V. 82, 2/16/1901, p. 97

The Eureka Con. M. Co. at Forest Hill has struck the blue gravel in the face of the drift at a vertical depth of 750 feet, and 4230 feet from the mouth of the tunnel, thus verifying and vindicating the effort and judgment of the superintendent in pushing the drift for the last four years. To drift mining in that vicinity the striking of the blue gravel means much, maybe another Mayflower.

Mining and Scientific Press, V. 82, 3/9/1901, p. 127

The Big Gun, at Michigan Bluff, is running steadily.

The Bob Lewis No. 2 (gravel), near Colfax, comprising the blue channel between the Hidden Treasure and Red Point mines, is sold to H. M. Jarvis, representing a Philadelphia company, for \$20,000; new owners will run a tunnel to tap the channel from Drummond canyon. J. Giles, representing Oakland men, is running a tunnel on property on the North Fork, southeast of Cisco.

Work is progressing satisfactorily on the Paragon, at Bath. Three shafts are sunk on the Three Stars, near Ophir, one of them being 1100 feet deep; work is begun on erection of a stamp mill; E. J. Kendall, Supt. More men are put on at the Star, near Ophir; work is being pushed.

Mining and Scientific Press, V. 82, 3/16/1901, p. 137

Operations are under way at the Pioneer, near Colfax; Supt. J. J. Sullivan. A new tunnel is being run on the Central (quartz). The Rawhide Con. M. Co. is running a new lower tunnel; two shifts are working. Work is being pushed on the Morning Star, at Iowa Hill.

Mining and Scientific Press, V. 82, 3/30/1901, p. 160

A new 10-stamp mill will be put in by the Washington Quartz M. Co. at Bath. H. F. Calenberg has sixteen men working at the Jupiter gravel mine.

Mining and Scientific Press, V. 82, 4/17/1901, p. 182

At the Eureka Con. drift mine, Centerville, a lead of pay gravel has been struck on the west rim 12 feet up from the pay channel lately cut by the bedrock tunnel.

Mining and Scientific Press, V. 82, 5/4/1901, p. 214

A bedrock tunnel to open the channel in the Tadpole mine near Secret House has been started. Wm. Muir, superintending the Sacramento mine at Forest Hill, says blue gravel has been struck that prospects 20 cents per pan.

Mining and Scientific Press, V. 82, 5/11/1901, p. 224

At the Eureka mine, on the Forest Hill Divide, 22 feet of good-looking gravel with quartz boulders has been found on a bench on the west rim of the channel. The drift pushed northeasterly has been run 131 feet without reaching bedrock in the channel.

Mining and Scientific Press, V. 82, 5/18/1901, p. 234

A. W. Hutchins and other capitalists are developing the Sellier Con. Gravel mine, adjoining the Hidden Treasure. The tunnel is now in 1000 feet.

The Washington G. Q. M. Co. has let a contract to W. S. May of Grass Valley to construct a 20-stamp mill at their quartz mine at Bath.

Mining and Scientific Press, V. 82, 6/1/1901, p. 254

The new owners of the Bob Lewis No. 2 gravel mine, near Forks House, are building a road from the Red Point grade to where their tunnel to mine the channel will be started.

Mining and Scientific Press, V. 82, 6/8/1901, p. 264

The Pioneer-Lynn G. M. Co. have closed down the mine, near Damascus, again and are examining it to determine the advisability of continuing work. Low-grade ore bodies have been found, but will not pay to work with a 20-stamp mill.

Mining and Scientific Press, V. 82, 6/29/1901, p. 298

At the Mayflower mine at Forest Hill J. E. Nihll is Supt. Work has been done to tap the upper Paragon channel.

At the Sacramento mine, near Forest Hill, an upraise of 153 feet was made from the main tunnel some 1200 feet in. Very rich gravel was encountered and preparations are being made to develop it.

At Butcher Ranch II. McKinstry and H. Skinner are prospecting the E. li. Gilbert claim.

Semple & Son of Yankee Jims have commenced to clean up at the Cambridge tailing mine. J. A. Holmes is taking out good gravel at the Little Dipper mine. Chinese are working the Small Hope gravel mine on a lease. A. McCullom has a lease on the Enos, Federer & Cranage mine.

At the Hidden Treasure at Centerville some time since an east and west channel was cut crossing and cutting off the big white gravel channel at a point about 9000 feet in. The main tunnel extended through cement 200 feet, again entered the white gravel. A shaft was sunk in the 200-foot channel 18 feet, when 3 feet of blue gravel and bedrock was reached. The main tunnel has been extended 550 feet on the white channel beyond the point where it was cut off. A gangway run west 250 feet cut the rim. The gangway east 300 feet is still in good gravel. The present operations are in the four breasts in gangways Nos. 9 and 10 at a point about 8000 feet in, with about a year's work in sight. No. 5 gangway 7000 feet in on the main tunnel has been run west across the channel 1100 feet; then in a northwesterly direction 440 feet to work a body of gravel on that side of the channel which is lower than the main tunnel. The blue channel is being worked through a slope. This channel has been opened north 1000 feet and south 300 feet. An average of 400 cars of pay gravel are taken from the white channel daily and 100 from the blue channel. The Hidden Treasure Gravel M. Co. employs 170 men. H. T. Power is president, F. K. Devey secretary and C. D. Akers Supt.

Mining and Scientific Press, V. 83, 7/6/1901, p. 8

A new bedrock tunnel has been started to tap the blue gravel channel in the Bob Lewis No. 2 at Damascus. It is expected that the channel will be reached in 1200 feet. Power to run machine drills is conveyed from the Red Point compressor plant. H. M. Jarvis is Supt.

Mining and Scientific Press, V. 83, 7/18/1901, p. 18

The Sailor Canyon Gravel M. Co., W. Dufifey Supt., has opened the channel 800 feet in by an upraise of 16 feet.

E. M. Armstrong is manager of a company developing the Blue Hill gravel mine at Canada Hill. A channel 120 feet in width with good gravel has been prospected through an incline and a 1600-foot tunnel is being run to open it up.

The Canada Hill Gravel M. Co. has thirty men working on a channel 60 feet wide. The tunnel is in 1600 feet. The mill is running steadily. A reservoir will be built this summer on Robinson Flat. The estimated cost is \$10,000. R. Jones is Supt.

The compressed air power plant at Red Point mine is operating successfully. The Red Point Co. is now mining gravel 3 miles underground from the mouth of the main tunnel. An average of 120 cars of gravel are taken out daily in trains of sixteen carloads. The gravel is all free-washing. J. A. Ferguson is Supt. and seventy men are employed.

R. J. Trimble, Supt. of the Southern Cross quartz mine, near Towle, expects to have a new 10-stamp mill installed within the next sixty days. A 4-foot ledge of rich quartz has been opened for stoping.

A tunnel at the Central quartz mine, in Humbug canyon, near the Pioneer, is being run to cut the vein 400 feet deeper than the present workings. It is expected the ledge will be reached by running 40 feet more.

Mining and Scientific Press, V. 83, 8/3/1901, p. 48

Supt. H. M. Jarvis of the Bob Lewis No. 2 gravel mine, near Red Point, states that the new bedrock tunnel running to tap the channel is now in 200 feet. An air compressor and power drills are used. It is expected the channel will be reached in about 1200 feet.

The Jupiter Con. G. M. Co., operating a drift gold mine at Iowa Hill has declared its first dividend.

Mining and Scientific Press, V. 83, 8/10/1901, p. 58

The Black Canyon M. Co. are placing some hoisting works at their quartz mine above Westville. The tunnel is in on the ledge 400 feet. An upraise of 180 feet has been made and a shaft will be sunk in on the main tunnel.

Mining and Scientific Press, V. 83, 8/24/1901, p. 80

W. H. Niemeyer and G. W. Manwell of Wheatland, Yuba Co., who are interested in the Zelma Bell Dredger M. Co., owning claims on the Middle Fork of the American river above Auburn, state that the company proposes to build a dredger to work the claims.

The Rocky Bar M. Co. is operating in the American river at Colfax. D. P. Hocking of Oakland and G. W. Crystal and J. Burns of Vacaville are interested in the company.

The ledge at the Central quartz mine, near Damascus, has been struck. Its width is 5 feet and there is about 230 feet of backs on the pay chute to the old stopes above.

A recent shipment of fifteen tons of quartz from the Lost Emigrant mine, near Summit, gave a return of \$135 per ton, at the Selby Smelting Works. This mine is owned by Heath, Jacobs, Goulden & Doolittle.

Mining and Scientific Press, V. 83, 8/31/1901, p. 91

(Special Correspondence).—The Turkey Hill drift mine at Michigan Bluff is being operated by the Boston-South Dakota M. Co., J. Calderwood general manager. About eighty men are being worked. The old workings are being cleaned out and some rich gravel is being taken out. A complete map is being made of the complicated underground workings. At the Caledonia quartz mine on Horseshoe bar a local company, with W. Stuart as Supt., is extending the tunnel 130 feet to cut the shoot. G. Macauley has twenty-five men at work on the Horseshoe Bar placer mine. The hydraulic elevator plant is being moved to new ground that prospects well. Michigan Bluff, Aug. 23.

The Tadpole Con. M. Co., operating near Canada Hill, above Westville, has its tunnel in 55 feet and has found 3 feet of gravel that prospects.

A report from the Bob Lewis No. 2 gravel mine of Westville states that the new main tunnel is being driven in at the rate of 49 feet per week. The company expect to strike gravel in about 1200 feet.

Mining and Scientific Press, V. 83, 9/7/1901, p. 102

At the Lost Emigrant mine near Cisco the shaft has been sunk 100 feet. The last shipment of ore returned \$135 per ton.

Mining and Scientific Press, V. 83, 9/14/1901, p. 112

At the Santa Fe at Canada Hill, Westville P. O., gravel has been struck which prospects. W. Morgan, D. Kirby, E. Wooldridge, A. R. Green, W. N. Hazen and H. G. Pouting of Auburn own the mine.

Mining and Scientific Press, V. 83, 9/21/1901, p. 123

The Sailor Con. M. Co. of San Francisco is developing the Sailor drift mine at Canada Hill. The new tunnel is in about 420 feet and has passed through 50 feet of good looking gravel in the bottom of the channel. The company owns patented ground and claims covering 480 acres. N. A. Harris of San Francisco is president of the company and W. Duffy is Supt. In charge of the mine.

The channel of the Gray Eagle mine has been rediscovered in the Wolverine claim of the Anthony Clark ground, adjoining, and it is said is paying \$10 a carload. W. H. H. Hart of San Francisco is prospecting the mine under a bond. T. G. Darning is the Supt. The discovery is 25 feet below the tunnel level.

Mining and Scientific Press, V. 83, 10/12/1901, p. 156

Developments at the Central quartz mine, near Towle, continue to show a fine ore body. New machinery is being put in the mill. The Pioneer-Linn G. M. Co. are having their dam repaired, ready to commence operations at the Pioneer quartz mine. G. H. Stone is Supt. A new tunnel is being run on the ledge at the Southern Cross quartz mine. They have encountered some very rich ore.

Mining and Scientific Press, V. 83, 10/12/1901, p. 158

R. Jones, superintendent of the Canada Hill G. M. Co., of Placer county, Cal, is sojourning in San Francisco.

Mining and Scientific Press, V. 83, 10/19/1901, p. 168

A. W. HUTCHINS of New York is at the Washington mine, Forest Hill, Cal.

J. W. Dunlap, Supt. of the Devil's Basin mine at Deadwood, Placer county, Cal., has returned there from a sojourn in San Francisco.

Mining and Scientific Press, V. 83, 10/28/1901, p. 176

At the Black Canyon mine, at Westville, the shaft is now down 200 feet. Supt. Plnkston Is working three shifts.

The Pioneer quartz mine, at Damascus, will start up again as soon as there is sufficient water to provide power. Supt. Stone has already put some men on.

The Bob Lewis drift mine has started up again, H. M. Jarvis Supt. Buildings are being put up for the winter, and two power drills are working in the tunnel. They expect to break through into the channel about January.

Mining and Scientific Press, V. 83, 11/16/1901, p. 201

The Cripple Creek, Colo., drain tunnel, now in 2800 feet, 9x9 feet in dimensions, is costing somewhat less than \$30 a foot. The Baker Divide tunnel, near Forest Hill, Cal., 3300 feet long, 10 feet wide by 8 feet high, cost \$14 per foot. The Red Point drift mine tunnel, at Damascus, Cal., 2400 feet long, 8 feet wide by 7 feet high, cost \$19 a foot. The Gray Eagle tunnel, near Auburn, Cal., 2700 feet long, 9 feet wide by 7 feet high, cost \$11.50 a foot.

Mining and Scientific Press, V. 83, 11/16/1901, p. 207

It is reported that the Ralston Divide G. M. Co. is about to abandon its mine in Long canyon and close down permanently.

A strike of rich quartz has been made in Bunco canyon, near Colfax, on the Red Bird and Buena Vista claims, owned by H. Newton of Lincoln and G. A. Tubbs of San Francisco. The ledge is from 4 to 10 feet in width. A tunnel has been run 60 feet on the ledge.

Mining and Scientific Press, V. 83, 11/23/1901, p. 221

Two carloads of ore from the Lost Emigrant mine, located about 16 miles southwest of Summit, returned \$3500. The ore on one car assayed \$135 and the other \$178 per ton. F. L. Heath of Colfax is one of the owners.

Mining and Scientific Press, V. 83, 11/30/1901, p. 235

The tunnel in the Bob Lewis No. 2 gravel mine, at Damascus, is now in 760 feet. At present Supt. Jarvis is making 10 feet heading per day. A new blacksmith shop, office, changehouse and barn have been erected. Lumber is on the ground for dumphouse and sluices.

At the Ralston Divide G. M. Co.'s mine near Michigan Bluffs, work of development is being pushed. P. Esplnas is superintendent.

J. Smith and J. J. Blake of Salt Lake City have taken a bond on the Spanish quartz ledge at Forest Hill. Supt. Baker will extend the main tunnel 100 feet and also sink 100 feet on the ledge. The mine is owned by J. Acuna, E. Bryant, J. Romoldo and others of Forest Hill.

It is reported that an excellent body of good gravel has been crosscut in the upper lead of the Mayflower mine at Forest Hill. This is the lead that paid \$2,000,000 in the front workings of the Paragon mine at Bath. Fifteen men have been put on and arrangements have been made to start the mill.

Mining and Scientific Press, V. 83, 11/30/1901, p. 237

Supt. Chittenden, who will take charge of the Pioneer-Lynn G. M. Co., Placer county, Cal., has arrived at the property. Leon S. Griswold has been engaged as consulting engineer.

Mining and Scientific Press, V. 83, 12/7/1901, p. 241

At the Hidden Treasure placer gold mine. Placer Co., Cal., the mine is lighted by electricity, and the gravel handled by electric power generated solely by the mine drainage water.

Mining and Scientific Press, V. 83, 12/28/1901, p. 289

A. C. La Bud of Oak Bar, Siskiyou county, is completing arrangements to put his scoop dredger on the Zelma Bell river mine, 7 miles south of Colfax, on the North Fork of the American river.

Mining and Scientific Press, V. 84, 1/11/1902, p. 25

The 20-stamp mill at the Mayflower drift mine, near Forest Hill, has been started on a test run of gravel from the upper lead. F. H. Green of Oakland is president of the company.

Mining and Scientific Press, V. 84, 2/1/1902, p. 67

E. Dugger, N. Collins, W. Atwell and B. Horton are developing a gravel claim in Secret canyon, 5 miles east of Colfax.

The Tadpole Con. G. M. Co. have begun work at their mine near Westville. The company expect to reach pay gravel with 100 feet advance of the tunnel.

Five new quartz mills were built in Placer county in 1901, as follows : Washington mine, near Forest Hill, 20 stamp mill ; Three Stars mine, Ophir, 20-stamp mill; Rawhide mine, near Towle, 10-stamp mill ; Central mine, near Damascus, 10-stamp mill to replace old mill; Shady Run mine, near Towle, 10-stamp mill.

Mining and Scientific Press, V. 84, 2/15/1902, p. 93

During the past season considerable development work has been done at the Daniel Webster quartz mine, near Michigan Bluff. The shaft has reached a depth of 125 feet and a number of drifts and crosscuts have been made.

T. M. Bowne, W. Rea, Jr., & Co. have everything in readiness to hydraulic at the Paragon mine, at Bath.

Mining and Scientific Press, V. 84, 2/15/1902, p. 95

Joseph DeBons is Supt. Pat Goggins gravel mine, at Michigan ' Bluff, Placer county, Cal.

Mining and Scientific Press, V. 84, 3/1/1902, p. 119

The Washington M. Co. at Forest Hill have sunk a double-compartment shaft 75 feet below the level of the tunnel. Drifts run 78 feet east and west show 3J feet of ribbon quartz in the ledge.

Mining and Scientific Press, V. 84, 3/8/1902, p. 134

The Big Gun hydraulic mine, at Michigan Bluff, has commenced operations. The new company at the Black Canyon quartz mine, at Westville, will erect a 20-stamp mill. J. Ruiz has taken the contract to freight it from Washington, Nevada county, to Black canyon.

Mining and Scientific Press, V. 84, 3/29/1902, p. 181

W. Duffy, Supt. of the Sailor gravel mine, near Westville, reports that he has cut into well-washed blue channel gravel that prospects \$4 per car.

Mining and Scientific Press, V. 84, 4/5/1902, p. 194

The sale is reported to A. C. Burrage of Boston, Mass., of the properties of the Big Channel Con. G. M. Co., on the Forest Hill divide, for a large sum. The property consists of 3500 acres of deep channel placer ground, comprising the Gray Eagle, North Star, Mountain, Spring, Garden, Natches, Wolverine, Owl Creek, Union and Rough & Ready claims. The property is to be opened by tunnels driven from Gas canyon and Owl creek.

The Tadpole Con. M. Co. of Sacramento has elected W. H. Cass president and secretary; J. L. Sparhawk of Iowa Hill has been appointed superintendent. The tunnel at the mine above Westville was advanced in very hard rock 32 feet during February.

Mining and Scientific Press, V. 84, 4/19/1902, p. 222

Thos. Brown has bought the old Paragon mine at Bath from D. Wheeler and the Breece estate.

R. Jones, Supt. of the Canada Hill gravel mine, near Westville, says that his present force of twelve men would soon be largely increased.

Mining and Scientific Press, V. 84, 5/3/1902, p. 248

At Forest Hill work is being done, retimbering in the old Baltimore mine, to put it in shape to be operated. This claim is owned by Mrs. S. E. Reamer of Oakland.

The tunnel at the Red Point drift mine at Westville is now in on the channel 3½ miles. The quantity of water which flows from the mine is 70 cubic feet per minute.

Mining and Scientific Press, V. 84, 5/10/1902, p. 261

It is reported that a rich strike has been made in the Morning Star drift mine at Iowa Hill. The controlling interest in the property is now owned by Harold Power of Auburn.

Mining and Scientific Press, V. 84, 5/24/1902, p. 287

Fifteen men are employed on the Baltimore mine near Forest Hill.

At the Sailor gravel mine at Canada Hill the main tunnel is in 460 feet. Pumping machinery will be put in and breasting carried on while lower tunnel is being run.

The Bob Lewis No. 2 gravel mine at Damascus is being developed by an Eastern company, G. Knutzen, manager; H. M. Jarvis, Supt.; purchase price \$20 000, to be paid next August. The main tunnel is in 1300 feet.

Mining and Scientific Press, V. 84, 5/24/1902, p. 290

G. Knutzen is manager Dardanelles and Bob Lewis gravel mines, Damascus, Placer county, Cal.

Mining and Scientific Press, V. 84, 5/31/1902, p. 300

W. F. Englebright, in charge of the construction work of the Central California Electric Co., says one hundred men are employed on the power plant at Alta and in fixing up ditches and reservoirs for the starting up of the system in September. Surveyors are mapping routes for pole lines, one to Auburn and the other to Grass Valley and Nevada City.

A mill will be erected in the fall. The Baltimore and Hope, at Forest Hill, has been bonded to Mr. Westhall. At the Sellier mine the tunnel is in 1600 feet. H. T. Power is Supt. at Forest Hill. The Boston Co. is operating a quartz mill on Dewey and Mayflower ground.

Mining and Scientific Press, V. 84, 6/7/1902, p. 313

The Baltimore & Hope mine at Forest Hill has been bonded to J. R. Westhall.

The Hancock & Watson mine at Bath has been bonded to G. D. Emery of Boston.

G. Knutsen has bonded the Sacramento gravel mine at Forest Hill and development has begun.

The Black Canyon quartz mine, above Westville, will install a 20-stamp mill. G. Strong is Supt.

Mining and Scientific Press, V. 84, 6/7/1902, p. 316

C. T. DUDLEY is Supt. Selller mine at Forest Hill, Cal.

Mining and Scientific Press, V. 84, 6/21/1902, p. 339

At Iowa Hill the leasers of the Morning Star have reached gravel by a bedrock tunnel 200 feet left of the main tunnel.

Near Spring Garden the Big Channel Co. has begun the tunnel to tap the gravel. Supt. Nesmith has charge.

G. Knutzen is manager Dardanelles, Bob Lewis and Sacramento gravel mines.

The 10-stamp quartz mill at the Central mine, formerly the Dorer, is in operation. F. Devey is Supt.

Mining and Scientific Press, V. 84, 6/28/1902, p. 351

The Washington Quartz M. Co. at Bath has bonded the Dewey & Hancock ledge. Supt. Dudley is extending the Dewey tunnel to the ledge 500 feet lower than the upper tunnel.

J. Nihill, in charge of the development at the May Flower mine, is running three 8-hour shifts.

King & Wolford have a shoot of quartz at their mine in Black Canyon, 4 feet in width; a 5-stamp mill is projected. The Black Canyon quartz mine will build a ditch and flume to bring water from Secret canyon to run the mill. The work of excavation for a 20 stamp mill goes on.

The Herald Bays mines are looking up on the Forest Hill Divide. There is not an idle man in Forest Hill and Michigan Bluff, and men are wanted at the Jarvis mine.

Mining and Scientific Press, V. 85, 7/5/1902, p. 11

The 20-stamp mill at the St. Patrick mine, near Washington, has been taken to Black canyon, near Forest Hill, where it will be erected on the property of the Black Canyon quartz mine. A ditch and flume will be built to bring water from Secret canyon to run the mill.

In the Hidden Treasure drift mine, Centerville, the tunnels at Sunny South and Centerville are operated on a large scale; 180 men are employed. The face of the tunnel at Centerville is in 10,100 feet; breasting operations are carried on at 8000 feet. During May 10,633 tons of pay gravel and 806 tons of waste were extracted—a daily average of 440 tons. The company are working six breasts. The electric plant, cost \$20,000, is a success; capacity, 200 H. P., generated by dropping water from a ditch with a flow of 90 cubic feet per minute, delivered to a water wheel under a vertical head of 850 feet.

Supt. H. M. Jarvis has twenty-five men employed at the Bob Lewis gravel mine, at Red Point, on the same channel as the Red Point Co. The tunnel is 1300 feet in length; gravel is reached by an upraise into the channel; fifty tons of gravel are daily taken out.

Mining and Scientific Press, V. 85, 7/12/1902, p. 29

.W. D. Pinkston has charge of the Alameda G. M. Co.'s operations near Westville, Placer county, Cal.

Mining and Scientific Press, V. 85, 7/19/1902, p. 38

Cass & Eckhart, at the Tadpole mine, have nearly 200 feet of the main tunnel to develop the gravel property run.

The 10-stamp mill at the Central mine, known formerly as the Dover, has started up. F. Devey is Supt.

Near Sunny South the Hidden Treasure Co. has a new blue lead channel which cuts out 200 feet of the white gravel at a point 8800 feet in.

In the Peckham Hill mine Manager Nesmith will double the present force of twenty men. Steam will be put in temporarily to work two power drills and later an electric plant will be installed. The owners of the Lost Emigrant mine, near Summit, have a small stamp mill and will crush ore.

Mining and Scientific Press, V. 85, 7/26/1902, p. 52

The Colfax Sentinel says W. R. Russell of Boston is at the head of the company which bought 7 miles of channel below Forest Hill. The tunnel to work the property is being run at Peckham Hill, 1100 feet below the level of the town of Forest Hill. Fifteen men are employed. Suitable machinery will be put in.

Mining and Scientific Press, V. 85, 8/2/1902, p. 52

(Special Correspondence).—For the use of the compressed air locomotive at the Red Point gravel mine, air is being compressed to 840 pounds by the three-stage compressor located below the mine. Almost the entire power for the compressor is derived from the mine water. Of the 70 cubic feet per minute coming from the mine, a part is used to wash the gravels, the remainder, in addition to running two ventilating blowers, runs the water wheel for the compressor. Damascus, July 30.

G. W. Sackett is lessee Boston-South Dakota mine, Michigan Bluff.

The California mine at Shady Run employs thirty men.

The Summit mine, near Towle, reports fine prospects.

New machinery will be put in the Peckham Hill mine, near Spring Garden. The Bradley tunnel, at Black canyon, is in 100 feet.

Mining and Scientific Press, V. 85, 8/23/1902, p. 106

Superintendent F. Schulze, at the Big Hill mine, Canada Hill, owned by the Golden We9t Con. M. Co., has men at work in the lower tunnel into the channel to drain it. The 1100 feet to reach the channel can be done by Jan. 1, 1903.

Mining and Scientific Press, V. 85, 8/23/1902, p. 110

G. McAulay succeeds S. D. Nesmith as superintendent Big Channel M. Co., Forest Hill, Cal.

Mining and Scientific Press, V. 85, 8/30/1902, p. 120

Near Forest Hill J. Beach has a 6-foot ledge which assays unusually high in gold.

Mining and Scientific Press, V. 85, 9/13/1902, p. 151

At the Tadpole Con. M. Co. they are developing near Secret House. The main tunnel to tap the ancient channel is in 260 feet; an upraise is being made to strike gravel. The body of quartz is now 70 feet in width and prospects in free gold.

Mining and Scientific Press, V. 85, 10/4/1902, p. 186

In the Red Jacket drift mine, Placer county, Cal., the gold is found in the channel of an obliterated river, now covered with volcanic filling to a depth of several thousand feet, but still at the top of a mountain. It is reached by a horizontal drift 1700 feet long. The drainage water is made to drive a water wheel and blower for ventilation purposes, and farther in its flow downward to drive another compressor, which furnishes the power for the operation of the mine, including an air compressor locomotive. Compressed air was adopted for the haulage system in preference to an electric traction system, owing to the irregularity of the tunnel and to the fact that there is no timbering in the mine, the volcanic roof of the tunnel being as hard and strong as cement. Consequently there were no convenient points for the

attachment of insulators. The locomotive can take sixteen to eighteen empty cars into the mine at a speed of about 9 miles an hour. The loaded cars are taken out by gravity. The face of the working is over 3½ miles from the entrance to the tunnel. This is a typical drift mine, representing in its operation the perfections, detail and economy of cost that experience in this kind of mining has suggested. Its original location was by purely theoretical deduction.

Mining and Scientific Press, V. 85, 10/4/1902, p. 195

At the lower Forest Hill divide Russell & Burrage have started a new tunnel to tap 7 miles of the tunnel on the main divide at Peckham hill, 91 feet below the old Rough & Ready tunnel. The new is in 245 feet. The machinery comprises a steam compressor, blower, machine drills and a forty light power electric plant.

The Turkey Hill mine is sold at sheriff's sale for \$8193. The plaintiffs, Pereira vs. Hamilton, secured a judgment on labor liens. The property was bid in by A. K. Robinson for plaintiffs.

Mining and Scientific Press, V. 85, 10/11/1902, p. 209

The Colfax Sentinel says that on the 1st inst. the Big Dipper M. Co. closed the working of the Big Dipper gravel mine near Iowa Hill under the company's name.

Manager G. T. Crozier of the Haub gravel mine is extending the new main tunnel, now in 130 feet. An upraise will be made to gravel in two weeks.

Mining and Scientific Press, V. 85, 10/11/1902, p. 214

E. A. Hardy of San Francisco has returned thence from Forest Hill, Cal., where he had been examining the Wisconsin mine, and which he will operate.

Mining and Scientific Press, V. 85, 10/23/1902, p. 241

The Alameda G. M. Co. are building a 20-stamp mill at their mine in Black canyon, near Westville.

Mining and Scientific Press, V. 85, 11/1/1902, p. 256

The Rocky Bar M. Co., North Fork American river, will clean up the river bed next year by a flume and the aid of their dam.

Mining and Scientific Press, V. 85, 12/27/1902, p. 372

G. and L. Pease are preparing to mine under permit by the hydraulic process at Yankee Jims, near Colfax. Their tailings will be impounded in Devil's canyon. The new 10-stamp mill at Black canyon mine, Westville, was started last week. It is reported the Rising Sun mine, near Colfax, will be reopened. Electric power will be used.

Mining and Scientific Press, V. 86, 1/3/1903, p. 11

The new 10-stamp mill at Black Canyon mine, near Westville, is running.

M. Savage, superintendent the Deep Canyon mine, 3 miles above Last Chance, says the 5-stamp mill is running steadily.

The Santa Fe mine at Canada Hill, near Westville, has been bonded.

Mining and Scientific Press, V. 86, 1/3/1903, p. 15

M. Savage is superintendent of the Deep Canyon mine, near Last Chance, Placer county, Cal.

Mining and Scientific Press, V. 86, 1/10/1903, p. 27

At the Rawhide Con. M. Co. twenty men are at work. The main tunnel is in 720 feet. Ore from the mine is conveyed from the ledge to the mill at the river, a distance of 2100 feet, by an aerial ropeway with buckets.

G. Nissen, owner of the Annie Laurie mine, near Colfax, is building a ditch to carry water to his claim.

The Alameda G. M. Co. at their mill in Black canyon, near Westville, have ten stamps dropping and they have battery space for ten more when required.

Superintendent C. D. Akers of the Hidden Treasure mine, above Forest Hill, says the company is taking out an average of 2500 cars of gravel per week.

At the Great Channel mine, southwest of the Hidden Treasure, near Sunny South, the tunnel is in 1920 feet and an upraise started to strike the gravel.

Mining and Scientific Press, V. 86, 1/17/1903, p. 43

At the Kings Hill mine, near Iowa Hill, Noble & Carpenter are ground sluicing. The Dewey hydraulic, at Iowa Hill, is in operation under permit of the Debris Commission. The Hidden Treasure Co. at Centerville has struck a gravel channel 8500 feet in on the main tunnel. The new channel is 100 feet wide and 21 feet lower than the Hidden Treasure-Mountain Gate channel. An incline has been run and the channel opened 300 feet east and west. Hosmer & Welker are cleaning up at the Lehigh canyon claim, below the Paragon, at Bath. The water has been lowered in the Morning Star reservoir, near Damascus, and men are removing 800 dead trees.

Mining and Scientific Press, V. 86, 1/24/1903, p. 59

At a recent meeting of the citizens of Forest Hill to prevent wholesale grabbing of timber land in the mineral belt in eastern Placer, a committee was appointed to raise funds to file a protest with the registrar of the land office.

Mining and Scientific Press, V. 86, 2/7/1903, p. 91

The offices of the Hidden Treasure M. Co., near Michigan Bluff, have been removed from Sunny South to Centerville, at the mouth of the main tunnel, which is in 5 miles under Forest Hill divide

The Hings Hill mine at Iowa Hill resumed last week.

Mining and Scientific Press, V. 86, 2/14/1903, p. 107

The Peckham hill tunnel of the Big Channel Con. M. Co., in Snyder canyon, near Forest Hill, is in 400 feet, says Superintendent Ramsdell, and it is expected to cut the channel in 400 feet more.

G. Bisbee has a full head of water and is working his claims on point Look down and at Shenanigan hill, near Forest Hill.

Mining and Scientific Press, V. 86, 2/28/1903, p. 131

A compressed air haulage plant is and has been in operation at the Red Point drift mine, near Damascus, Placer county, Cal., for several years past. The motor operates under an initial pressure of 700

pounds per square inch. When first introduced the train was controlled on the outward trip by air brakes; but owing to the heavy grades, notwithstanding the numerous sharp reverse curves, it was found that it required as much air to control a train with this type of brake as was needed to pull the empty train into the mine, and the air brakes were discarded and hand brakes similar to the ordinary railway brake put in. These are manipulated by means of a stout, short stick to give greater leverage, in the hands of the trainmen. There is a relay station inside the mine several miles from the mouth of the tunnel, where the motor is recharged.

Mining and Scientific Press, V. 86, 2/28/1903, p. 139

Manager F. B. Jackson, of Sacramento, says he will work the Fowler & Gallagher placer claims on the American river near Colfax with a dredger, to be installed this spring.

It is reported the Charonnot & Lindley drift mine at Canada Hill, northeast of Westville, is bonded to J. F. Littlefield of San Francisco. A tunnel has been started.

Mining and Scientific Press, V. 86, 2/28/1903, p. 143

H. T. Power, manager of the Hidden Treasure mine, in Placer county, Cal., is in San Francisco, Cal.

Mining and Scientific Press, V. 86, 3/14/1903, p. 171

The Enterprise mine at Iowa Hill is being prospected by Gilmore Bros. The tunnel is in 400 feet and paying moderate wages to the men who are working, says the Sentinel.

V. C. Gorst, who has a lease on the Green Emigrant, on the Pike Bell place, in Rock Creek, near Auburn, report taking out \$600 in two pans, down 30 feet last week.

Mining and Scientific Press, V. 86, 3/28/1903, p. 203

At the Dardanelles placer mine, near Forest Hill, operated by an Eastern company, the last storm carried the dam, pipe and flume lines, and other improvements away. They are ground sluicing, however, and taking out good pay.

Mining and Scientific Press, V. 86, 4/4/1903, p. 219

The Annie Laurie mine, 5 miles from Colfax and near the American river, has been sold to Manager Russell, says the Sentinel. He will begin development next week.

The Fowler & Gallagher placer claims on the American river near Colfax are to be worked by a dredger, with F. B. Jackson, of Sacramento, superintendent.

Mining and Scientific Press, V. 86, 4/18/1903, p. 251

The Sacramento M. & D. Co. was incorporated last week; F. P. Jackson, M. J. Curtis, W. W. Bassett, B. Welch and E. Franklin; to dredge on the Fowler & Gallagher claim on the American river, near Colfax.

Mining and Scientific Press, V. 86, 4/25/1903, p. 268

The Never Sweat mine, near Westville, is being worked by Denton & Dodds. The Herman mine, near Westville, recently sold to J. B. Hanna et al., is expected to start this week. The company intend to increase the number of stamps from twelve to twenty-two.

Mining and Scientific Press, V. 86, 5/9/1903, p. 307

Local reports say the Sacramento M. & Dredging Co. of Sacramento proposes to operate on the tailings produced by the hydraulic mines of Iowa Hill and Gold Run, near Colfax, which emptied into the American river for a period of forty years. Beneath these tailings, it is thought, in many places lie bedrock gravel, which has never been disturbed.

The Nissan quartz claim on the Colfax and Forest Hill road has been sold to Russell et al. of San Francisco for \$8000.

The Bob mine, 2½ miles above Auburn, is showing up well, says the Sentinel, and seven men are on development work. Drifts are being run and last week a new shaft was started. It is stated the company intend to build works on the American river several hundred feet below the mine, and a tunnel may be run from that point.

The Pingston mine, near Colfax, has closed down for an indefinite period, says the Sentinel.

Mining and Scientific Press, V. 86, 5/16/1903, p. 321

The Pingston mine, near Colfax, has closed down for an Indefinite period.

Superintendent J. L. Grimes has men at work at the Herman mine, at Westville.

Mining and Scientific Press, V. 86, 5/16/1903, p. 325

H. T. Power, manager of the Hidden Treasure G. -M. Co. at Sunny South, Placer Co., Cal., is in San Francisco, Cal.

Mining and Scientific Press, V. 86, 5/23/1903, p. 344

H. T. POWER, superintendent of the Hidden Treasure drift mine at Sunny South, Placer county, Cal, has returned to the mine from San Francisco, Cal.

Mining and Scientific Press, V. 86, 6/6/1903, p. 371

H. M. Jarvis of Damascus is operating the Bob Lewis No. 2, and has about forty men employed. It is reported that the Annie Laurie mine has shut down for lack of water.

Mining and Scientific Press, V. 86, 6/6/1903, p. 374

W. R. Boyker, a pioneer miner of Placer county, Cal., died at his home near Kent, Wash., May 28, at the age of 75 years. Deceased was born in Charlottetown, Prince Edward Island, and came West, across the Isthmus of Panama, in 1849. A widow, five daughters and seven sons survive him.

Mining and Scientific Press, V. 86, 6/27/1903, p. 415

The Hidden Treasure Gravel M. Co., near Centerville, has put in a 15-kilowatt direct connected electric generator for lighting purposes.

Mining and Scientific Press, V. 86, 6/27/1903, p. 419

H. T. POWER, superintendent of the Hidden Treasure drift mine, Placer county, Cal., has been appointed by Governor Pardee of California a trustee of the State Mining Bureau, vice F. G. Drum, resigned.

Mining and Scientific Press, V. 87, 7/4/1903, p. 11

The Hidden Treasure M. Co operating the Hidden Treasure drift mine at Centerville, has 20 men at work.

Mining and Scientific Press, V. 87, 7/18/1903, p. 42

At the Nissen mine, being operated by A. Russell of San Francisco, men are at work making cuts and building flumes. A hydraulic plant will be put in. Russell proposes to buy the Rising Sun mine, a free milling proposition, near Colfax, says the Herald.

The International M. & S. Co. of New York has begun operations at the Southern Cross mine at Humbug canyon, near Towle. They will build a 20-stamp mill, says E. J. Trimble, superintendent.

Mining and Scientific Press, V. 87, 7/25/1903, p. 56

The Sacramento Dredging & M. Co. is building a dredger to operate on the North Fork above Colfax.

Mining and Scientific Press, V. 87, 8/1/1903, p. 75

ROSS E. Browne, E. M., has returned to San Francisco, Cal , from Placer county, Cal , where he has been on professional business.

Mining and Scientific Press, V. 87, 8/8/1903, p. 88

G. Skidmore of North Bloom field has bought a half interest in the T. Power gravel mine, at Iowa Hill, and development work will be Increased.

A rich body of gravel is reported struck on the Peckham Hill property at Spring Garden, on the Forest Hill divide. The group is composed of a number of claims, aggregating several thousand acres, and owned by A. C. Burrage of Boston, Mass. The tunnel is going ahead, says Superintendent G. McAulay.

Mining and Scientific Press, V. 87, 8/22/1903, p. 120

Work on the Cash Rock mine, near Forest Hill, Is progressing and preparations are being made to put in additional machinery.

Mining and Scientific Press, V. 87, 9/5/1903, p. 156

Superintendent F. P. Jackson of the gold dredging plant operating on the North Fork of the American river, near Iowa Hill, reports work going ahead satisfactorily.

Mining and Scientific Press, V. 87, 9/19/1903, p. 190

(Special Correspondence).—The Zuber bond on the Mike Cochran claim on Long canyon, southeast of Michigan Bluff, having expired on Sept. 1, Cochran Is making preparation to work same himself. This is a gravel claim. The Ralston Divide Co , owned by French capital, is idle. A great deal of money has been spent there.

Mining and Scientific Press, V. 87, 9/26/1903, p. 207

The water right and electric power plant of the Pioneer-Lynn M. Co. has been sold to the International M. & S. Co., owners of the Southern Cross and other quartz properties near Euchre Bar, 7

miles from Towle, for \$7500 cash and stock. The sale includes a water right of 3000 inches, dam, flume, power house, 350 H P. turbineew hi, electric plant with complete equipment.

Mining and Scientific Press, V. 87, 10/10/1903, p. 241

The Sacramento Dredging Co., which has a plant on the American river near Colfax, reports work progressing, and they have completed the flume and put In a water wheel on the east side of the river, which is to operate the pump that supplies water for washing out the gold, says the Colfax Sentinel.

Mining and Scientific Press, V. 87, 10/24/1903, p. 275

Increased operations are under way at the Barton mine at Westville, and fifteen more men will be put on next week. It is reported the Red Point mine will be shut down. The tunnel. has reached the 4-mile point, says the Placer, Republican.

Mining and Scientific Press, V. 87, 11/14/1903, p. 325

(Special Correspondence).—The production of the Lost Emigrant quartz mine, at Canada Hill, to date, including two carloads of ore snipped to the Selby smelter and four months' run with a 2-stamp mill, is \$20,486.21. The mine is owned by F. L. Heath, J. Goulden, S. Jacobs et al. of Colfax, the first-named being superintendent. Colfax, Nov. 11.

Mining and Scientific Press, V. 87, 11/21/1903, p. 342

(Special Correspondence).—The Trinidad mine in Sailor canyon, near the American river, near Emigrant Gap, has taken in winter supplies and will operate ten stamps. The ore is of fair grade but the conditions are such that mining and milling is being done at a cost of 88 cents per ton. Ore is mined by a system similar to that employed some years ago in the Old Spanish mine in Nevada county, where ore was stoped, shot down a raise, and delivered to mill by gravity for 67 cents per ton. This property is owned by G. S. Montgomery of Beulah. A. J. Froehlich is superintendent. Emigrant Gap, Nov. 17.

Mining and Scientific Press, V. 87, 12/19/1903, p. 401

The so-called blue leads of California are ancient rivers, usually containing gold in the gravels. These streams in many cases have been uplifted by geological disturbances, above the level of the recent gulches, though in some instances they are below them. These ancient streams are rarely below the main canyons of the vicinity when they are found. Some of the channels of the Forest Hill divide are 1500 feet below the summit of the ridge under which they occur, having been buried to that depth beneath the volcanic mud and debris, but these channels are several hundred feet above the forks of the American river. The channels, which are red. were bluish or gray in depth, the red color being due to oxidation of the iron of the gravel.

Mining and Scientific Press, V. 88, 1/16/1904, p. 36

Relation of Placer to Quartz Veins.

In some portions of California placer gold has been mined in large amount where as far as known there are no gold bearing veins of sufficient importance tributary to the district to have afforded a tenth part of the gold found in the placer deposits. This is notably the case on the Forest Hill divide in Placer county, where a number of large and rich ancient channels have been worked for years, making an

aggregate production of many millions of dollars, while a few hundred thousand would cover all that has been mined from quartz in the same region.

Mining and Scientific Press, V. 88, 1/16/1904, p. 48

N. J. Pierson, H. Wales and N. T. Collins have bought the Big Boulder mining claim, in Secret canyon on the American river, near Colfax.

Mining and Scientific Press, V. 88, 2/6/1904, p. 101

Work has started on the opening up of the Blue Lead gravel mine at Bangor. Men were put on last week. It is proposed to pump out some of the shafts, particularly the Catskill, and prospect the ground. If satisfactory, the work of driving the tunnel from Kentucky Ranch will be started. As considerable of the gravel is cemented, it is thought a stamp mill will be built near the mouth of the tunnel. Formerly the cemented gravel was handled by an arrastra.

Mining and Scientific Press, V. 88, 2/20/1904, p. 136

The Hidden Treasure M. Co., near Michigan Bluff, is having a model of its mine made, which it will send to the St. Louis Exposition. The model will be a complete representation of the mine, even to the running of ore cars.

Mining and Scientific Press, V. 88, 2/27/1904, p. 152

H. W. Morris, of San Francisco, has bought the Rawhide mine, near Shady Run, for \$80,000, and will put in air compressors, drilling machines and other improvements.

At the Southern Cross mine in Humbug canyon, 4 miles from the Rawhide mine, near Shady Run, the 10-stamp mill, which is run by electricity, will be enlarged.

Mining and Scientific Press, V. 88, 3/5/1904, p. 169

The Rawhide quartz mine on the American river, near Shady Run, near Towle, has been sold to the Soldan G. M. Co. of San Francisco, with H. W. Morris as manager. The company will put in an air compressor, and as soon as the weather is settled enough to handle machinery will add ten more stamps to the mill. Twenty men will be put to work this week.

Mining and Scientific Press, V. 88, 3/12/1904, p. 189

H. T. Power, manager of the Hidden Treasure-Mountain Gate drift mines on the Forest Hill divide, near Michigan Bluff, Placer county, Cal., is in San Francisco, Cal.

Mining and Scientific Press, V. 88, 3/19/1904, p. 192

The mineral specimens from Forest Hill, Cal., are: No. 1, serpentine; No. 2, also serpentine, but sheared (essentially talc schist); No. 3, diorite, partly altered; No. 4 is schist altered from No. 3. The serpentine may contain gold, but none is visible in the specimen.

Mining and Scientific Press, V. 88, 5/7/1904, p. 319

The Turkey Hill Con. G. M. Co. has been incorporated, with principal place of in Sacramento, to operate in Placer county. The directors are W. C. and Y. Chapin of Sacramento, W. C. and W. Muir of Michigan Bluff, and J. I. Meredith of Auburn.

Mining and Scientific Press, V. 88, 5/14/1904, p. 335

The Buckeye mine, on the Forest Hill divide, has been sold to J. A. Johnson et al. for \$40,000. The Buckeye adjoins the Mayflower mine, near Forest Hill.

Mining and Scientific Press, V. 88, 5/28/1904, p. 373

M. R. GLEESON, a mining man of Placer county, Cal., died in Sacramento, Cal., May 10th. Deceased was born at Wisconsin Hill, near Iowa Hill, Placer county, Cal., and was 42 years old.

Mining and Scientific Press, V. 88, 6/11/1904, p. 400

(Special Correspondence).—La Rita M. Co., J. H. Meyers, superintendent, has six men working on the Old Spanish ledge near Forest Hill. A shaft is being cleaned out, which was last worked forty-nine years ago. Spokane, Wash., and Boston, Mass., men are interested. Forest Hill, June 8.

Mining and Scientific Press, V. 89, 7/9/1904, p. 28

(Special Correspondence).—The Auburn G. M. & M. Co. is working the Buckeye mine, 5 miles from Forest Hill. The main drift is in 1300 feet and a 283-foot raise has been completed. The company is preparing to put in a Krogh roller gravel mill, a 6-foot Huntington mill and Wilfley table. As soon as these are in, Superintendent J. A. Johnston expects to open up with fifty men. The plant is expected to handle 150 tons of gravel per day. The Mayflower is running a tunnel to tap the lower channel. Forest Hill, July 6.

(Special Correspondence). —Work is being increased around Last Chance. The Placer Gravel G. M. Co. has bought up a number of claims, including the El Dorado and Missouri Flat channels, the Morning Star channel and the Root Hog. El Dorado channel had already been opened up and the others have been developed since the company bought them. The Morning Star channel was formerly worked following the downward course of the stream. This method had to be abandoned because of the accumulation of water. It has now been tapped from the lower end. This is the main channel of Last Chance. It is expected to take six or eight months to block it out and prepare for proper working. The Root Hog channel has been tapped from below. It is yielding well at present, 105 ounces gold being stated as the cleanup of June 30. D. M. Ray has charge.

The Deep Canyon quartz mine, 3 miles above Last Chance, is being operated and developed by G. E. Moore of Port Huron, Mich. The property is equipped with a 5-stamp prospecting mill run by water power. Eight men are at work. The New El Dorado quartz property comprises a number of locations owned by E. Hains, C. P. Tollotson, F. Tollotson, E. F. Kavanaugh and M. Savage. They are bonded to Moore & Partridge, representing New York men. They contain four high-grade veins on the surface. A main tunnel is being run to determine whether these veins combine into one pay shoot and to find if the surface richness continues. Ten men are at work.

Three miles northwest of Last Chance, W. T. Davis and R. Caples are developing the Morning Star property. H. Parmalee and E. K. Parmalee are developing the Bishop mine, the southeast extension of the Morning Star. East of the Parmalee claim, A. J. Bishop and B. Caples are running a bedrock tunnel. Last Chance (via Michigan Bluff), July 6.

(Special Correspondence).—Near Michigan Bluff, W. C. McGilvray is leasing and working the gravels at Horseshoe Bar.

The Hidden Treasure M. Co., operating the Hidden Treasure and Mountain Gate drift mines at Sunny South, near Michigan Bluff, started July 5 to sink a 720-foot shaft to meet the face of the drift. This is to be equipped with an electric hoist and will also be of material assistance in ventilation. A 40 H. P. electric locomotive will be used to help in hauling the cars in the tunnel, this work having formerly been done with a 20 H. P. motor. Commencing at the end of the first 4000 feet of the drift, a new 4000-foot tunnel is to be run in the cement. This will replace the sinuous drift in the swelling bedrock that has been used in the past. The drift follows the channel. Offices for the company and for H. T. Power, manager, have been put up at the new postoffice of Bullion. Michigan Bluff, July 6.

Mining and Scientific Press, V. 89, 7/9/1904, p. 32

H. T. Power, manager of the Hidden Treasure mines, near Michigan Bluff, Placer county, Cal., is in San Francisco, Cal.

Mining and Scientific Press, V. 89, 7/16/1904, p. 44

Men are at work at the Baltimore mine, near Forest Hill. Superintendent R. Jones is increasing work at the Cash Rock mine, near Forest Hill. This is a river claim and can be worked only in the dry season. They are already down to pay.

Mining and Scientific Press, V. 89, 7/16/1904, p. 48

Harold T. Power, manager of the Mountain Gate mine, Placer county, Cal., has returned to the mines from San Francisco, Cal.

Mining and Scientific Press, V. 89, 8/13/1904, p. 110

Superintendent J. B. Patterson says that at his mine they are driving the tunnel, lack of water causing the mill to shut down. There is payable gravel in sight.

Mining and Scientific Press, V. 89, 8/20/1904, p. 127

(Special Correspondence).—J. E. Belden and W. J. Esteb are opening up the Sidewinder mine near Bald mountain, east of Westville. The ledge of quartz is 10 to 14 inches wide, carrying free gold, and crops on the surface for 40 feet. Westville, August 17.

Mining and Scientific Press, V. 89, 9/3/1904, p. 164

The Last Chance and Hidden Treasure mines (the Eureka drift mines) have been bonded to a Sacramento company for \$35,000. The mines will be worked by drift and a tunnel will be run. T. Carroll of Grass Valley, superintendent, will start work next week.

Mining and Scientific Press, V. 89, 9/10/1904, p. 180

The Star Town mine at Last Chance, near Michigan Bluff, is running a bedrock tunnel to tap the main channel. W. Davis is superintendent. The Evening Star mine has been bonded by an Eastern company, which is working two shifts. They are running a bedrock tunnel to tap the main channel. At the Deep Canyon G. M. Co. 's mine stoping is under way. The men are following a lead across the canyon.—The company owning the Channel Bend river claim, E. C. Kavanaugh manager, has started work on the dam which will be used to work the mine. The dam is being built 1 mile below the mine on the American river.

The Placer M. Co., of which D. Ray is superintendent, at Last Chance, near Michigan Bluff, has struck the channel and gravel is being taken out. When the raise which they are driving is completed thirty men will be added to the payroll.

Mining and Scientific Press, V. 89, 9/21/1904, p. 212

The Baltimore mine at Forest Hill is running with a few men opening up the ore bodies, says Superintendent Vestal. About thirty-five men are at work putting in the dam for the Eagle Bar M. Co. at Channel Bend.

There are seventy men working at the Cash Rock mine, near Forest Hill. They are nearly down to bedrock. This is a river mine and they cannot work after high water arrives. Twenty men are at work driving the tunnel at Peckham Hill. They are also putting the tunnel ahead at the Sellier mine and expect to break through next week.

Mining and Scientific Press, V. 89, 10/15/1904, p. 262

In the Hidden Treasure mine, at Bullion (formerly known as Centerville), 200 men are at work and are taking out a large quantity of gravel daily, says the Colfax Sentinel. A contract was let last week for running the tunnel 400 feet additional. The company is sinking an air shaft which will strike the tunnel in about 2 miles from the mouth, and it is estimated that the depth to sink will be 740 feet. They will start a raise to meet it. A 50 H. P. motor is being set up at the shaft. All the timbers will be sent down the air shaft instead of being hauled down the mountain side for nearly 5 miles and taken in through the tunnel. A sawmill is also to be erected near the shaft. The air pipe, of which there are several miles, will be taken out as soon as the shaft is completed and will give more room in the tunnel. The shaft is now down 120 feet. The Hidden Treasure is a drift gravel mine, has 1700 feet of flume and washes 100 tons of gravel per hour under 250 inches of water. H. T. Power is manager.

Mining and Scientific Press, V. 89, 10/29/1904, p. 301

H. J. Stempel, a mine owner and pioneer of California, died at Iowa Hill, Placer county, Cal., on the 16th inst.

Mining and Scientific Press, V. 89, 11/12/1904, p. 330

The Blakegrave-Meeke quartz mine in Canada Hill district, near Westville, is taking out ore and the 2-stamp mill is running steadily. Men are at work on the Tadpole mine, in the same district, under the supervision of J. L. Sparhawk. It is reported that the Ex Ray mine at Sailor Canyon will be started up again. A 10-stamp mill is operating at the Salvation mine, near Canada Hill. The Santa Fe mine will be started up as soon as the water supply is sufficient. The Golden West mine at Canada Hill has closed down for the winter, but will resume in the spring.

Mining and Scientific Press, V. 89, 11/19/1904, p. 346

(Special Correspondence).—W. H. Cass is secretary T. C. G. M. Co., 628 7th street, Sacramento, Cal. The company will put in an entire new plant next February. The mine is 5 miles from Westville, Placer county. A fine body of ore is now being opened up by tunnel work. Westville, Nov. 16.

The Golden West mine at Canada Hill, near Blue Canon, will resume work, says Superintendent F. P. Armstrong. They will drive the tunnel to open up the ore bodies.

Mining and Scientific Press, V. 89, 12/10/1904, p. 399

At the Golden West gravel mine, Canada Hill district, above the Hidden Treasure, Superintendent F. F. Armstrong says the gravel channel has been reached and pay dirt struck.

Mining and Scientific Press, V. 89, 12/17/1904, p. 414

(Special Correspondence).—The Tadpole Con. G. M. Co., near Westville, Canada Hill mining district, has been prospecting the ledge during the past season by shafts from 4 to 12 feet deep. They have purchased nine claims traversed by two canyons having water sufficient to run a mill. A tunnel has been driven 255 feet. The company intends to install power drills and a 50-ton mill. H. M. Morton is superintendent. Westville, Dec. 14.

Mining and Scientific Press, V. 89, 12/31/1904, p. 444

The Santa Fe M. Co. has been formed by L. Hanke, G. Stark, A. R. Green D. Kirby, J. W. Morgan to work the Santa Fe and Dewey placer mines at Canada hill. L. Hanke is superintendent.