

W. H. Miller

Reminiscences of an Old Miner, showing
among other things, some instances of the
accidents of mining on the Pacific Coast in
the early '40s and '50s.

Early in 1855 I came to California, as engineer
in an English company, to bring water from the
Sierra Nevada Range (a large stream having its
source high up on the Western slope of the
Sierra Nevada Range of mountains) to supply
the deep gravel mines of Nevada County with sufficient
water to enable them to be worked on a large scale,
with large quantities of water, delivered under
a high pressure (or head) through wrought-iron
pipes, instead of small quantities (as supplied
until then) at a low pressure, through canvas hose.

During that year I necessarily became personally
familiar with the topography of the central
portion of the Sierra Nevada lying in the
Counties of Nevada, Sierra, and Placer, from the
foothills in the Sacramento Valley, to their summit,
at an elevation of 6 or 10,000 feet, and embracing
a territory of 100 miles square or more.

Their summit was then the dividing line
between the State of California and the Territory
of Utah; but is now that between California
and the State (formerly Territory) of Nevada,
which was cut off from Utah in 1850 soon after
the discovery of the Comstock Lode, which is,
(with some other mining districts (since discovered)
within its boundaries), and all are tributary to California.

The water (High Water) (down) (into the) (port) (of) (the) (mountain) (range) (to) (the) (white) (mountain) (range) (around) (around) (New) (York) (and) (the) (women) (and) (the) (men) (all) (went) (as) (fast) (as) (they) (could) (to) (keep) (them) (from) (falling) (into) (the) (abyss) (and) (the) (mountain) (range) (by) (treating) (them) (kindly) (but) (firmly) (and) (mountain) (range)

Being fond of exploring, and "roughing it" I went, in the summer of 1856, as one of a party of 14, (10 men and 4 women, one of whom ^{soon afterwards} became my wife) on horseback, and with pack mules ^(from our home in Maryland) on a pleasure excursion the summit, and down the Eastern slope of the mountains, following the Truckee River 100 or so miles from its sources at the North end of Lake ^(since called Truckee Lake, and now Lake Tahoe) a beautiful sheet of water of great depth, 50 miles long by 20 wide, lying (at an altitude of 6000 feet) between the snow capped summits of the range (which at that point is double) which tower 3 or 5000 feet above it. *

We followed the river to the point where it sinks (as do all the streams which rise on the Eastern slope of the Sierra Nevada) in the Great Central Basin of Utah (lying between the Sierra Nevada Range on the West and the Rocky mountains on the East) in which the great Salt Lake, and other, smaller, alkaline lakes or saturated deposits, are caused by the waters flowing in the rivers being more or less evaporated by the dry heat of the arid plains - many of these alkaline deposits have since been, and are now, being used for commercial purposes.

We were well mounted, and equipped, and often found emigrant roads, or ^{trails} trails, to follow, making the trip generally an easy, and always a pleasant one. On our return we followed ^(running down into the desert) the Carson River (from the large stream) up to the Eastern base of the mountains, and crossed their Eastern summit to the South end of Lake Bigler, and camped there, intending to stay and rest.

for a day or two - That evening however, some
Mormon packers (who had been to Sacramento to
get provisions, and were taking them to Salt Lake),
reached our camp, and informed us that Nevada
City, a ~~town~~^{Ministry of about} 2500 inhabitants, had been burned
to the ground a few days before, and that only 4
brick buildings with iron shutters (out of 40 supposed
to be fire proof) had escaped, and not one of the
several hundred wooden ones - We saddled
up without much loss of time, rode all night
and next day, and did not "draw rein" until we
reached our respective piles of brickbats or burnt
lumber - Some of us, who had no buildings to lose,
had money loaned out and secured by mortgages,
but, as the Stone Court House was gutted (with all
the County Records and the contents), any attempt
to collect such debts would have been an
empty farce; so, as what can't be saved, should
be endured, we at once went to work to
help build a new town, without any one thinking
of "crying over spilt milk," for such was the
general spirit of California on those days! -

In the summer of the next year (1857) two
men of my acquaintance, who had "crossed the plains"
in 1856, told me and some others that his party
had camped on the North Bank of Truckee River
and had "panned out" (at the foot of a hill covered
with broken quartz) "dirt" which went "over a
dollar to the pan", but that they were too crazy
to reach California to stop "enroute" for any
prospects, however good it might be.

I thought I recognized from his description a hill covered with quartz, on the North Bank of Truckee river, which I had seen the year before, but (not then knowing much about mining) had not paid any attention to -

Four of us started immediately on foot, with two pack mules, to find and prospect the hill in question: but, notwithstanding my feeling as sure of being able to go straight to it, we were unable to find it, and returned "res ineffecta".

A year later (in June 1858) the first silver bearing lode in the United States was discovered in Utah, less than a mile from where we had camped, ^{on the Truckee River} and it soon became world widely known as "The Comstock".

In returning from our "wild goose chase" we started West from the Truckee river to cross the Summit of the Sierras by an Indian trail, so plain as to promise well for its continuance - After a days travel on it however, we reached a high altitude at which, although it was in August, there was snow several feet deep, entirely obliterating all signs of the trail which had evidently not been used that season. The surface of the snow was so soft that we sank deep at every step and had considerable difficulty in getting our small footed animals through it.

To do so at all we had to ^{improve snow shoes out of a blanket for them and to} carry them loads

~~and carry them ourselves,~~ ^{making} piece by piece several miles and several trips in the two days it took us to

such bare ground on the West side of the Summit.
 We found ourselves at the head of a deep, rough,
 gorge or canon which proved to be the North Fork
 of American River (one of the large streams running
 down the West slope of the Sierras to the the Valley
 of the Sacramento River) it took us two days to get
 the mules over rough and precipitous ground
~~around~~ at the head of this canyon, and, at evening
 of the second day, we came to a very narrow
 backbone or ridge dividing it from the
 Middle fork of the same river - Following
 this ridge down a short distance we again found
 the trail (which we had lost in the snow)
 coming to, and running down ^{at a point} it (as we afterwards
 ascertained) about 40 miles ^{above} Michigan Bluffs,
 at that time the highest mining camp in
 Placer County. Looking across the ridge (down
 to the Middle Fork) we saw, about 3000 feet
 below us, (what we ^{afterwards} found were known as the
 Big Meadows), an extensive river bottom covered
 with grass ~~over three deep~~ - As our mules had
 been on very short feed of scattered bunch
 Grass for some days, we thought we would
 give them a feast and a rest, so we went
 down into the valley to camp, and turned them
 loose (merely dropping their ropes), telling for
 granted they would not stray away from
 the good feed - We were however much
 mistaken! On waking at sunrise the next
 morning there was no sign of them in the valley,
 and we found their tracks and the marks of
 their dragging ropes following to the top of the ridge

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there they had made in coming down the evening before - They knew better than we did how much sweeter to them was the scanty bunch grass than the coarse meadow grass -
"Et hinc illa lacryma!"

Two of us started up the hill on their tracks, thinking we would soon overtake them, but we were badly fooled, as we had to climb to the top of the ridge before we found one of them that had got her rope wound round a Manganita bush so as to hold her fast. This was close to the trail running down the ridge, and, while my companion took the mate we caught back to camp, I followed the track of the other down the ridge thinking I would soon overtake him; but I was again fooled, as circumstances showed that they could have started back very soon after reaching the meadow on the previous evening, and have traveled all night. The brute had apparently sauntered along on the trail, leaving it occasionally on one side or the other to nibble, but always returning to it, as the sides of the backbone were very steep and rugged within a short distance - Counting on always picking up his tracks each time he returned to the trail, I kept along it for several hours, but finally lost all traces of him. Supposing that I might not be very far from some mining camp ^{surface} mountain stock range, and that he would probably work his way down into them, I kept on until about noon, when I found in a small grassy flat, some butchers

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who were herding cattle to supply meat to the ~~new~~ mining camp of Michigan Bluffs (about 20 miles farther down the ridge).

They promised to catch my mule if he strayed (as was probable) into their herd of cattle, and asked me to take pot luck with them, which I did without much persuasion as I had left camp without breakfast. While I was taking the sharp edge off my appetite, one of their companions, who had gone down to "the Bluffs" the day before, returned with a cask of flour on his shoulder, and ^{with} the news that the town had ^{been} completely burned down the day before. Although I had never been there I had a friend there engaged in a gold dust buying and banking business, and I took a notion. (*Semel inanimus omnes!*), (as I had only walked 20 or 25 miles since dawn) and was in light marching order, (trousers, flannel shirt, knife, pistol and pipe) to walk on down to see the ashes - which I did.

My friend treated me handsomely, dividing me coffee and crackers (just come in) and his blanket with me, and I slept the sleep of the just (without rocking!) The next morning I started out early for my forty and walk back to camp. Climbing the ridge out of town I overtook a miner who told me of a rich strike of gravel just made, 5 or 6 miles up the ridge, which I could see by going with him along a mining ditch just as I did, and saw that I could ^{scarcely} ~~reach~~ the ridge from there. I did so, and became as much excited over the discovery

as were the many men who were already on the ground "locating extensions" of the new discovery. Without loss of time, I got back to camp that evening and the next day we walked down to the new discoveries and located and "staked out" claims for ourselves and some of our friends. The auriferous gravels of the Pacific West may be divided into two distinct classes:

- 1° The shallow deposits of gravel in the beds of existing rivers (or smaller streams) caused by the recent erosion of the strata through which they run (in the form of quartz veins)
- 2° The deep deposits of gravel formed in large rivers many geologies ago, often containing gold bearing quartz, or free gold, which has (by long attrition) been rounded and freed from its quartz matrix. The greater part of these ancient deposits of gravel have been subsequently covered by lava or (in minor partance) cement, through which the recent rivers have cut their way, exposing on their banks, sometimes the lava, sometimes the gravel, and sometimes the slaty or schistose ^{underlying them?} formation through which the early rivers had cut channels (which latter is called by miners "the Bed Rock").

In the present case, the gold bearing gravels were exposed on two projecting points (about 3 miles apart) of the banks of the deep gulf ^{and stream} (called "El Dorado Canyon") several hundred feet above its bed. They proved rich, and were being washed down, and the gold extracted from them, by hydraulic process i.e. by streams of water under high pressure being brought to bear on the gravel, washing ^{it} into " sluice boxes" in which, under the action of the running water, the gold ^(being the heaviest) is separated from the gravel and ^{settles to the bottom} and is "saved".

while the lighter material passes on, and is carried by the water back into the ravine or canon).

Between these two points the old channel was naturally supposed to be ~~in~~ the Bed rock, where it could be ~~found~~ and reached by tunnels ~~run~~ from the exposed surface of the hills towards it, and through the ~~iron~~ rock, into the channel (or old river bed) =

(According to mining regulations, and customs) we located (on the supposed course of the channel) 100 feet in length on the surface for discovery, and 100 feet for each locator or claimant; each claim extending in width (as far as could be proved, at right angles to the course of the channel) to the centre of the ridge dividing Eldorado Canon from Volcan Canon (a deep ravine on the other side of the ridge) - In this case the length of our claims was from 100 to 1500 feet, and (if the channel across our ground had been straight) a few hundred feet of tunnel would have reached, and enabled us to work it to advantage by the system of underground (or drift) mining (which consists in taking out ^{by picks and chisels} the material lying a few feet above bed rock or as much of it (generally 10 or 20 feet in depth) as should be ^{taken} found, and taking it out in cars to the mouth of the tunnel where it is wasted, and the gold separated from the gravel and sand).

Having determined the best point at which to start the tunnel to be sure to reach the Channel, ^{supposed to be} as we found, I left my companions to begin work on it, went ^{to} Macke's Bluffs to arrange for supplies being sent to them, and, having a prearrangement ^{that my} wife from Nevada City (about 70 miles ^{round} about road, but only about 40 in an air line across 3 deep canyons), was ill, I shouldered my blankets and walked over them across country.

This ends the 1st Chapter. —

We ran the tunnel for seven years at a cost of several thousand dollars, until we had to stop it for want of means. This was also the time with companies on each side of us who ^{had} ~~ran~~ ^{had} ~~run~~ ^{run} ^{the tunnels} a thousand or two feet or more before abandoning them. — Two or three years later some miners sank a shaft on the other side of the ridge and struck there the channel we had expected to find in our point, and it proved as rich as we had hoped to find it. At about the same time the channel was struck very rich on our side of the ridge a mile or so beyond our larion, so it would appear as though the Shinnards had adopted that curved line of beauty from our especial beneficence(?) — my special condition

river

in the whole matter, say in the hopes that the mule, whacked been the cause of it all, got fast round some bushes and stam'd to death, as was probably the case, for we never heard ~~heard~~ of him again - Requiescat in pace!" "Thou endeth the first Chapter!" It changed

however, the entire current of my life, as to be near my claim I moved with ^{my wife} from Nevada City to Mother's Bluffs, where my oldest son was born, and my wife died, and where I stayed, practicing my profession as an Engineer, ^{and surveyor} until the discovery of the Comstock in the ^{winter} of 1858.

In 1857-58 some of the advanced party of prospectors (consisting generally of one or two miners, with pick, shovel, pans and a burro (donkey)) were pushed forward from California mines to, and across, the summit, and waddled their way down to the Carson River and its tributaries. On one of the latter they found, on the eastern slope of Mt Davidson, surface gravel which proved to carry down to some of the small cracks running into Carson River, where they panned out ^{from it} enough gold to make "good wages" (not less than \$4 or \$5 per day).

Two of them (Black and Bill; Hendersons) were on what was then, and is still, called, Gold Hill, where the soil contained free gold with little admixture of silver, and were making good wages (later they, and others, became rich from the yields of the Gold Hill group of mines). Two young men (the French Brothers) had discovered, during the

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previous Antimony some free gold which
one of them took over the mountains to California late
in the season ^{just over deep now} after reaching the upper part
of Placer County he lost the use of both legs and died
from frost and exposure. The other died soon
afterwards and their discovery was what that time traced to
its source. In the spring of 1858 a man named
Comstock was working on the ^{crappings of the} ledge (to which
~~later~~ his name was given) he wrote out his
claim to some ^{other} prospectors for an old horse
on which he crossed over to California and
became lost to history. The prospectors on
the "Comstock ledge" were much bothered with
what they called "the black stuff" which, being
mixed with the quartz and dirt, and being very
heavy, made it difficult for them (in panning
out) to separate it from sand to see the gold. A Mexican
prospecter, named Maldonado, came there and thought he was
it was being rich silver ore ^{concentrated such} as he had seen
in the mines of Mexico. He located a claim
(1400 feet) on the ledge and sent some of the
"black stuff" over to Nevada City and Fran Valley
(the two nearest mining towns, both in Nevada
County California) for assay. Assays of it
made by Melville Attwood, Mining Engineer, who was
superintendent of the Aqueduct (or Gold Hill) English
Mining Company in Fran Valley, and also by
Julius Ott, Assayer in Nevada City, gave practically
similar results, showing values in gold and

silver of over \$1500 per ton. Attended at once
 arranged to send Judge Walsh (Secy of the F.H.M.C.)
 and Joe Woodworth (a mining surveyor connected
 with them) over the mountains with the
 least possible delay, to make locations for
 their joint benefit — On that day I had
 ridden over from Michigan Bluffs (in the adjoining
 County, (about 40 miles from Nevada) to
 keep an appointment, to examine and report
 on an mining and water proposition for
 which the owners had been waiting patiently ^{weeks} 2 or 3.
 As I rode through the valley into Nevada City, ^(as only 4 miles off) the town,
 I met with a ^{very} ^{large} ^{number} of horseback, getting ready to
 start over the mountains ^{to the new discovery}. Knowing how useful
 my knowledge of the mountains would be in
 enabling them to get their ^{as quick as possible and} ahead of the
 horde of men who would be sure to rush over
 as soon as the facts leaked out, they strongly
 urged me to join them, and they were right, for
 for, within a few days, ^{the} every trail
 and road leading across the ^{summit} of the Sierras
 was ^(figuratively speaking) black with the crowds on
 foot or on horseback, all eager to outstrip the
 others in the "search for the golden fleece".
 However much I wanted to go, I could, of
 course, not ^{with much regret,} disappear. The men who had
 been patiently waiting for me so long, and, that

to decline going until I had kept my engagements

— They arrived ^{on the ground} in time to make a bargain with ^{and others} Maldonado, to sell them, for \$10,000 (which

Walsh immediately went over to Sacramento to borrow) 200 feet at the south end, and 1000 feet at the north end, of his claim, ^{which he called the Ophi} he

retaining the 200 feet, between the two, on which he was working. This letter proved extremely rich, and became known as the Mexican claim.

They located several claims on Cedar Hill extending northwards from the North Ophi, ^{but} none of them (not the North Ophi itself) ever paid the expense of dipping on them, until many years later, ^{in 1878} a small body of gold ore was found

in the Sierra Nevada claim, one of the northern locations, which caused excitement, which however lasted but a very short time, and after declaring a few dividends, it relapsed permanently into

its old habit of flourishing in the custom (with few exceptions) on the Comstock of levying assessments

(or as we called them "Swish dividends"), from which pernicious practice they have never since departed. Within a few months of the purchase from

Maldonado, Judge Walsh sold his one half of the \$10,000 purchase of the Ophi claim for \$60,000 in cash, which he took down to Mexico, ^{and did poor} there in mining speculation. — His partner

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Joe Woodworth retained his interest in the claim for two or three years, during which time the claim (having been incorporated in San Francisco) and having a large body of ore (500 feet wide) between its walls, and several hundred feet deep, which proved extremely rich, large dividends were declared. The number of shares in each company (which was originally 1 share for each lineal foot of ground on the ledge) was increased almost without limit to being them in their reach of every laborer and servant ^{in the state} gold, as well as of the middle class and capitalists who ~~generally~~ ^{generally} ~~time~~ ^{time} ~~through~~ ^{through} ~~own~~ ^{own} ~~connections~~ ^{connections} ~~and~~ ^{and} ~~it~~ ^{it} ~~would~~ ^{would} ~~then~~ ^{then} the parable of mining would exclusively in the supposed actual values of mining properties, from that time, it amounted largely in the manipulation of the stock market. Joe Woodworth received large amounts of money from dividends declared by the above company, and still larger amounts by the purchase in the market of dividends in that company in advance of their being declared. He was therefore while, a very rich man, and built in San Francisco a ^{large and} ~~substantial~~ ^{superior} residence more expensive than any on the Pacific Coast. He played however his favorite game ^(on a very large scale) of buying dividends in advance of their being declared - or earned) once too often, and ^{he also} died a poor man. The enclosed print (which please return to me) is taken from a reliable work in file in volume being published in N. York a year or two ago. It shows a block of shafts ^{about} on the 2 1/2 miles of

The Comstock lode which has been worked out
and the etched lines show all of the ore bodies
that have been found within that distance to the
depth of 2000 feet below the surface.

On the left side of the picture the vertical lines
filled in with pencil show the (Midas, or Segmented
Belted claim which was segmented to hold the

mine out at the extreme southern end of the (Bellevue
which I think I have found one, says the
North end of the vein, which has a fairly
good body of ore and I never got the cut of
the candles out of it though and my partners
spent more thousands on it than you would
believe possible and left us with a debt
that I do not go into here. (Cave)
Such is the Kingdom of Heaven, I tell!

Wm. Hayward