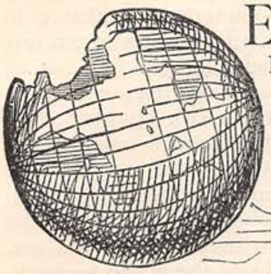
# PIONEER MINING IN CALIFORNIA.



The Earth at the end of the Diggings. (Reprinted from "Punch.")

EUREKA! We have found it! The coast had many hours been anxiously watched through glasses to discover the Golden Gate, and there it was. Our long voyage of ninety-seven days from Panama was about over. The old brigantine, leaking at every seam, was headed for the opening between the rocky headlands, and in the bright moonlight, August 4, 1849, she slowly made her way, all sails set, into the magnificent bay of San Francisco. She rounded Clark's Point, and before dawn swung with the tide up to the spot occupied by the rear end of Montgomery block, between Montgomery and Sansome streets, now a half-mile inland from the water-front of San Francisco.

It was an exciting hour. We had received no news from home since our departure from New York on the 1st of March, and everybody was eager to get ashore for letters and papers. Not far away was a little shell of a building, probably sixteen feet square, erected on four posts, each resting on a hogshead filled with stones and thus stayed in the mud. From this a plank ran to *terra firma*. The sun had not risen when we landed from our iron cockle-shell and wandered in squads through a straggling village, chiefly of tents; only a few wooden houses had yet been built, while three or four adobe structures told of Mexican occupation. Sand-dunes were plenty, and when the winds came in from the Pacific the dust made lively work, and gave us our first lessons in Californian climatology.

With the morning light the tents gave forth their sleepers, and such a motley tenantry! And such a stir! Americans in great variety of dress, natives of the islands, with a picturesque mingling of Mexicans in wide trousers and short jackets with a profusion of small globular buttons, their shock heads thrust through slits in their serapes and topped off with brown, sugar-loaf-crowned, broad-brimmed, heavy felt sombreros.

Ship-fare had given us a longing for a fancy breakfast. A restaurant-sign attracted me, and I went in. The table was a bare plank against one of the walls of the tent; the plates and cups were of tin, and the meal consisted of fried beef, bread, and black coffee. The bill was three dollars.

Some of the largest tents were devoted to gambling on a large scale, though the vice had not reached the magnitude of succeeding years, when the El Dorado gambling-tent paid a rental of $40,000 a year, and $20,000 were staked on the turn of a card. In those early days these gambling-tents were the most attractive places in the larger towns. They were commodious, and were about the only places warmed by fires; they had well-furnished and somewhat tasteful bars, where liquors were dispensed at a dollar a glass. Tables were distributed along the sides, and in rows through the middle, at which monte, faro, vingt-et-un, roulette, lansquenet, and I do not know how many other games were played. When the whole was ablaze with lights of an evening, an occasional woman seen assisting at the games, and a band of music or singers giving forth a concourse of sweet sounds, crowds surged before the bar and around the tables, some attracted by the novelty, some to get warm, but more to try their luck.

Our stay in San Francisco was but for a day or two. We had come to mine for gold, and though the inducements for business in the incipient city were flattering, even wages commanding eight to ten dollars a day, or a dollar an hour, we determined to push on to the mines. Glowing accounts induced us to try the southern mines, and a passage to Stockton was secured on an old tub of a schooner at the rate of three ounces of gold, or thirty-six dollars, per head. The deck was crowded with men of every nationality. The rolling hills, tawny, and flecked with green trees, bounding the bays of San Francisco, Suisun, and San Pablo, were novel and interesting. The very color of the earth, covered with wild oats or dried grass, suggested a land of gold. The sight was inspiriting. But when we reached the mouth of the San Joaquin our miseries began. This river has an extraordinarily tortuous course almost entirely through tule, or marshlands, that in 1849 produced bushels of voracious mosquitoes to the acre. I had never known the like before. It seemed as if there was a stratum of swarming insect life ten feet thick over the surface of the earth. I corded my trousers tight to my boot-legs to keep them from pulling up, donned a thick coat, though the heat was intolerable, shielded my neck and face with handkerchiefs, and put on buckskin gloves, and in that condition parboiled and smothered. In spite of all precautions our faces were much swollen with the poison of numberless bites. To escape the hot sun we took refuge below deck, and to drive away the pests a smudge was made on some sand in the bottom of the boat, which filled the hold almost to suffocation. The mosquitoes were too ravenous to be wholly foiled by smoke. I think I never endured such vexation and suffering. Sleep was impossible. The boat had to be worked by hand around the numerous bends, and half the time the sails were useless for want of wind. It was a burning calm in the midst of a swamp. But even in our distress there was a humorous side, provoking grim smiles at least.

We finally arrived at Stockton, then also a village of tents. The newest style of architecture called for light frames on which canvas was tacked for sides and roof. There was no need of windows except for air currents, light enough coming through the cloth. We were impatient to go on to our destination, the Big Bar of the Mokelumne River, and soon were on the way with pack-mules and horses hired for the purpose. Camping on the bank of the Calaveras the first night, we were treated to our first serenade by coyotes. A peculiarity of this small wolf is that he can pipe in any key, fooling you with the belief that he has twenty companions, though one little wretch is making all the noise. We passed the plain of the San Joaquin Valley, with its dark, spreading live-oaks, like an old orchard miles in extent, and began the ascent of the foothills. Brown and red soil made its appearance hot and dusty; nut-pines were mingled with oaks and manzanitas, ceanothus, buckeye, and poison oak. Wild oats and burr clover still remained in patches unfound by the cattle of the plain. The air was dry, but grew more bracing. The trail wound among trees, around hills, through ravines, and sometimes up steep ascents, but at last, on the third day from Stockton, after a journey of more than seven thousand miles by land and sea, we reached the mines.

My first impressions were not pleasant. The first miner I saw at his work was a rough, dirty-looking man in a dry ravine. The banks were about as high as his shoulders. A double-barreled shot-gun lay on the edge of the bank within easy reach. He was picking up dry clay and gravel from the bottom of his claim, pulverizing it in his wooden pan with a stone, and then shaking it about till the lighter particles came to the top and were brushed over the rim. The pulverizing and shaking continued until a small quantity of dust and gold was left in the bottom. The dust was blown out with the breath. This process was called "dry washing."

The Big Bar of the Mokelumne lay in the gorge six or eight hundred feet below. The sight was not at all inspiring. What in mining parlance are called "bars" are deposits of sand, gravel, clay, and boulders made by rivers, usually opposite the angle of a bend. Sometimes these are small, and sometimes several acres in extent, and vary from a few inches to ten feet or more in depth to the bed-rock. Our bar, as its name denotes, was a large one, of perhaps five or six acres, covered with boulders from a few pounds' weight to several tons. A few tall pines were scattered over it, and here and there were a number of tents. Though perhaps a hundred miners were at work, the river went merrily on unstained to the sea. Down the steep banks of the gorge we went, stirring up the red dust and covering ourselves with it from head to foot. The animals did not like so steep a trail, and would have their own way among the timber, loosening the packs; but we made the descent with average success. On the bar we found friends that we had made in Panama, who had preceded us a few days, long enough to speak the vernacular of mining and to pride themselves on being "old miners," assuming as such to know just where the gold would be found in the largest quantities, and where to expect the least.

And now my mining life began. It was as free from restraint as the air that came through the soughing pines. Only Mexican law could be said to exist, and in all the mining region there were no officers to enforce its feeble demands. Every man was a law unto himself, and it is little to say in behalf of the pioneers of California that they carried the laws of justice and humanity in their hearts to such a degree that no more orderly society was ever known on the face of the earth than in those early days.

Pioneer mining life — what was it? The miner must have an outfit of a pick, pan, shovel, rocker, dipper and bucket of wood, or of rawhide. A tent was good to have, but he could make shift during the dry season with a substitute of boughs, for there was no fear of rain from May to October. A blanket of rubber spread on a stratum of leaves, on which his woolen blankets were laid, sufficed for a bed. His culinary utensils were confined to a frying-pan, a small iron pot, tin cups and plates, knife, fork, and spoon. His wardrobe consisted generally of a pair of serviceable shirts, a change of trousers, strong boots, and a slouch-hat. With these, and a supply of bacon, flour, salt, saleratus, beans, a few candles, and occasionally fresh beef, the miner was ready for work. His luxuries were tea and raw sugar, with occasionally the addition of dried peaches from Chili. His bread was made by mixing flour, water,

A TULE MARSH ON THE SAN JOAQUIN. (DRAWN BY HARRY FENN.)

and saleratus in the tin or iron pan which did double duty in the kitchen and in gathering gold, and baking it about two inches thick, like a shortcake. But slapjacks, the legitimate successors of the Mexican tortillas, were also a standard article of diet. Tin teapots were sometimes affected, but the small iron pot with a hollow handle did duty for both tea and beans or frijoles. The latter were of a brown variety grown in Chili, and were prepared after the Mexican style with a piece of bacon or fresh beef and plenty of chili colorado, or red pepper. They were allowed to cook a long time, often standing in the hot embers over night to be ready for breakfast in the morning. The bill-of-fare did not vary much for breakfast, dinner, and supper.

The most expensive instrument of the early miner was the rocker, which, though simple in construction, cost in the mines from fifty to a hundred dollars. In general appearance it was not unlike a baby's cradle as used by our grandmothers and as still seen on the frontier. It consisted of a flat bottom with two sides that flared outward, and an end board at the head, while the foot was open save a riffle about an inch and a half high at the bottom to catch the gold that might pass another riffle across the bottom near the middle. At the head of the cradle was a hopper about eighteen inches square, with a perforated sheet-iron bottom or wire screen. Under this was an apron, or board, sloping downward towards the head. Two substantial rockers under the whole completed the simple machine which gave to the world millions of dollars. The *modus operandi* may be described as follows: Two sticks of wood hewn on the upper side were imbedded at the river's brink, one four inches lower than the other, on which the rockers were to rest, thus securing a grade in the machine to facilitate the outward flow of the water and sand. Two miners usually worked together as partners. One shoveled the earth into the rocker, while the other, seated on a boulder or block of wood, dipped the water from the river, and poured it upon the earth in the hopper with one hand, all the time rocking with the other.

THE OLD SACRAMENTO TRAIL NORTH OF DONNER LAKE.

When the earth was thoroughly washed, he rose, lifted the hopper from its place, threw out the stones and gravel, replaced it, and thus the work went on. As the ground about the rocker became exhausted to the bed-rock, recourse was had to the bucket, and the earth was carried sometimes a few rods, making laborious work for the miner. To keep the rocker going another hand would be employed to carry earth, and each would carry two buckets at a time. Hard work of this kind suggested improvements in mining. At noon the gold and black sand collected above the riffles were taken up on a scraper and thrown into the pan, which was carried to the river and carefully washed to remove as far as possible all but the gold. The yield of the forenoon was carried to the camp, dried over a blaze, the dry sand blown out, and the gold weighed in scales or guessed at, and poured into the partnership purse and deposited under the bed or anywhere else out of sight. Few miners thought of weighing themselves down with gold, and few taxed their resources much to find places of concealment. I was in many camps down to 1854, and in none did I ever know of a theft of gold, and I heard of but one, and that was punished by a cat-o'-nine-tails, which was afterward nailed to the center-post of a trader's tent, as a warning to evil-doers.

The gold taken from the river bars was mostly in the form of scales resembling cucumber seeds, and of varying size. It was most plentiful on the bed-rock and in a few inches of soil above it, though sometimes three or four feet of earth would pay to wash. Where the bed-rock was hard the miner cleaned it, for a shovelful of dirt might contain a few dollars in small particles. Where the bed-rock was soft shale or slate on edge the miner picked away an inch or so and washed it, as frequently the scales were found to be driven quite thickly into the crevices. When the ground was very rich the rocker was cleaned of gold every hour or two. When work was over, around the supper fire the events of the day were discussed, earnings compared, reports made of grizzly bears or deer being seen or killed, of better diggings of "coarse gold" discovered. This was the hour for speculations as to the origin of the gold in the rivers, and a strong opinion was entertained by many who were not well-read that immense masses of the precious metal would some day be brought to light in the snow-capped peaks towering to the east. "Coarse gold" was a charm to the ear of the ordinary miner. His claim might be paying him an ounce a day in fine gold, but he was always interested in some reported diggings far away where the product was in lumps, and not infrequently he left a good mine to seek some richer El Dorado. The characteristic and besetting fault of the early miner was unrest. He was forever seeking better fortune. Yet it was this passion for prospecting that resulted in the discovery of gold in an incredibly short time from the southern end of the San Joaquin Valley to the northern limit of the State. To "prospect" was to find a spot that looked favorable and make an examination of it. The miner would take a pan of earth, shake and gyrate it under water, raising and tipping it frequently to run the dirt and water off, then plunge it again, and so continue until a small residuum of black sand and gold remained. A speck of gold was the "color," several specks were "several colors," and the number and size determined the judgment of the miner whether he should go to work or move on. I have seen ounces taken in this way in a single pan, but in the earlier days

WORKING A CLAIM.

"NOT EVEN THE COLOR."
(COMPOSED FROM AN OLD PRINT.)

we counted a "bit" to the pan, twelve and a half cents, a fair prospect.

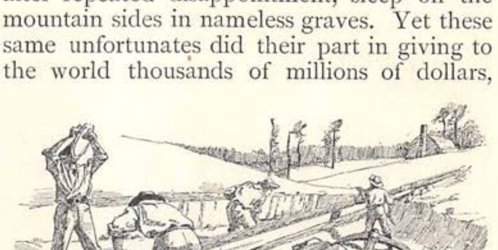
The average gain of the miner in those days can never be known. Though he was extraordinarily frank and confiding in the offhand conversations about the camp-fire, yet there is reason to believe that his largest receipts were sometimes not reported. My observation was that the industrious worker rarely brought to his supper less than ten dollars, often an ounce (reckoned at sixteen dollars), and sometimes six ounces, or even more. I myself took from the earth nearly one hundred and fifty ounces in seventeen successive working days. My largest clean-up was $224. One day, in less than half an hour, I took with my knife from a crevice in the rocks six and a half ounces of gold. When the river went down after it had been swollen by the first rains and had swept over the bed-rock of bars supposed to be worked out, hundreds of glittering scales were left exposed, affording pleasant picking for a day or two.

The nights in the mines were glorious for sleep. However hot the days,— and I have known a thermometer hung on the north side of a pine-tree to show 128° at two o'clock,— the nights were cool, requiring at least one good pair of blankets for comfort. Stretched on the ground under a tent or canopy of boughs, or with nothing but the purest air between him and the stars, the miner was lulled to rest by the murmur of the river or by a coyote, running his remarkable gamut. The great heat did not interfere with work, and there was not a case of sunstroke, nor was the atmosphere sultry or very oppressive. Eighty-eight degrees in the moist climate of Panama made life vastly more uncomfortable.

At first, and until the blue-shirted population became numerous, not much regard was had to the size of claims, the miner occupying about all the ground he desired. But a change soon came. The sense of justice of the first occupants of a locality, inspired, it may be, by the fact that the swarms of new immigrants would soon compel a division, allowed a mining statute limiting claims to a certain size. This varied in the different camps, and depended somewhat on the richness of the earth. Generally each miner was restricted to about fifteen feet front on the river, the claim extending across the bar to the hill, but where the bar was a wide one the length was shortened. In some cases a claim was from fifteen to eighteen feet square. Back from the river and near the foot of the mountain the bed-rock was sometimes ten or twelve feet below the surface, and great labor was required to throw off the top earth to reach the auriferous stratum, and often such deep claims were very wet, calling for constant bailing. Of course such claims must be rich to pay, and some of them were, but it was not always so. I have known days and sometimes weeks of hard work to be spent in one of these pits, to find a smooth bed-rock at last with very little gold on it. Now and then, after long and tedious toil and discouragements, the miner "struck his pile," but as often he found nothing but barren rock or gravel.

SURFACE SLUICING.

Mining is one of the most fascinating and exciting of employments. But in the earlier days, when we knew less about genuine indications, mining was, more than now, a species of gambling. The effects are yet to be seen in hundreds of men still living near their old haunts, who, in common phrase, have "lost their grip"; others live in our memories who, after repeated disappointment, sleep on the mountain sides in nameless graves. Yet these same unfortunates did their part in giving to the world thousands of millions of dollars,



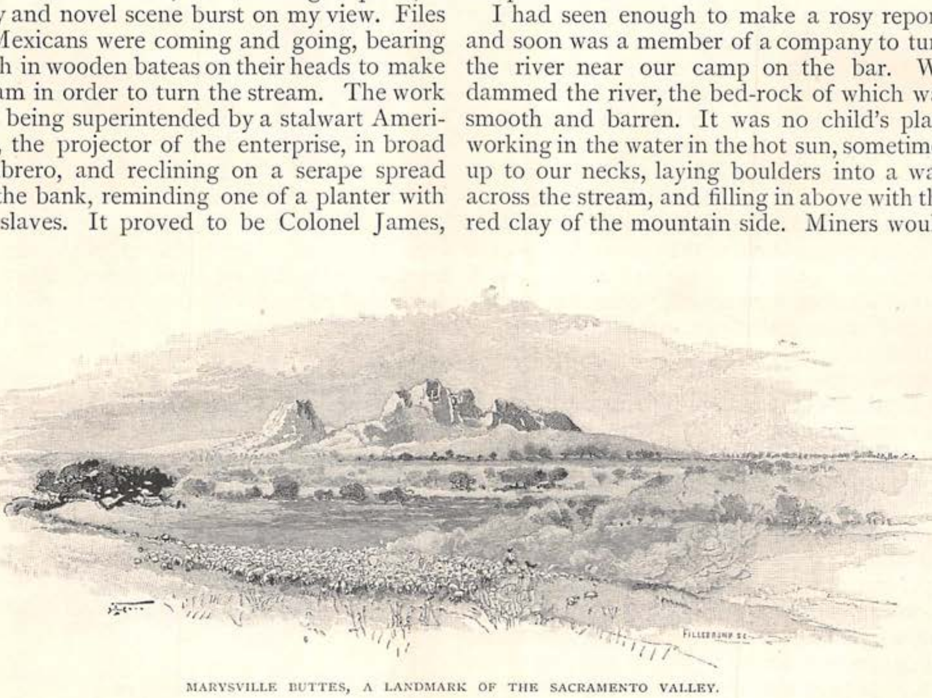
LONG TOM. (COMPOSED FROM A LITHOGRAPH, BY BRITTON & REY, PUBLISHED ABOUT 1849.)

thus stimulating progress probably more than was ever known in any other epoch of similar length in the history of mankind.

The early miner soon observed in working by the river's shore that the pay dirt sometimes extended down under the water, and he was not slow in going after the yellow metal wherever it was to be found. Large prospects suggested turning the stream from its bed to work the bottom, and this was usually done by digging a canal across the bar, or by carrying the water in a wooden flume over the channel or across the bends. I have seen companies of men, filled with enthusiasm and confidence, at work for weeks until the river-bed was laid bare, to find only a narrow strip of pay ground along the edge. But in some cases the reward was enormous.

One Sunday in September, 1849, putting on my "store clothes" and "biled shirt," brought along from the old home in utter ignorance of the real life I was to lead in the mines, I went on a pedestrian trip of observation down the river. The air of the morning was like champagne. The shaking of rockers or rattle of stones thrown from hoppers was little heard. Miners were washing their clothes by the side of the river. Camp-fires smoked everywhere, and many resting or sleeping men were stretched on buffalo-robes or blankets under trees and brush awnings. The trail was across rocky bars, stony points, and along the steep sides of the hills. I had sauntered for three or four miles when, on rounding a point, a busy and novel scene burst on my view. Files of Mexicans were coming and going, bearing earth in wooden bateas on their heads to make a dam in order to turn the stream. The work was being superintended by a stalwart American, the projector of the enterprise, in broad sombrero, and reclining on a serape spread on the bank, reminding one of a planter with his slaves. It proved to be Colonel James, who was afterwards a distinguished criminal lawyer of San Francisco. I learned from him that the dam, after weeks of labor, was nearly completed; an hour more and the river would be flowing in an old channel. My curiosity was excited, and I remained to see the result of his venture. When the water was drawn off, the bed of the river presented the appearance of successive strata of hard slate, on edge, from three or four inches to a foot or more apart, the softer slate or shale between having been worn out and the depressions partly filled with sand and gravel. These strata on edge extended diagonally across the channel, forming an abundance of natural riffles to catch and retain the gold. My recollection is that the bed of the river had been laid bare to an extent of 200 yards in length by 60 feet in width. The great moment of expectation had come. By invitation I followed the colonel, who carried a pick, a pan, a shovel, and a small tin cup. It was plain there would be little gravel to wash, as the claim was on the slope of a "rapid," the grade being so great that most of the light material borne by the waters had been carried over. The shovel at once showed the wealth of one of the crevices, and I distinctly saw the colonel take his tin cup by the handle and scrape up from the bottom of the crevice a few handfuls that seemed to me to be half gold. I did not stay to see the gold washed, but I can safely say that I saw at least a thousand dollars go into the pan in half an hour.

I had seen enough to make a rosy report, and soon was a member of a company to turn the river near our camp on the bar. We dammed the river, the bed-rock of which was smooth and barren. It was no child's play, working in the water in the hot sun, sometimes up to our necks, laying boulders into a wall across the stream, and filling in above with the red clay of the mountain side. Miners would



MARYSVILLE BUTTES, A LANDMARK OF THE SACRAMENTO VALLEY.


A RUSH FOR NEW DIGGINGS.

pass and repass, envy us our claim, and chances were numerous to sell out interests at good figures; but we had come to California to make a fortune and return as soon as possible, and had no thought of selling a "sure thing" for a few thousand dollars. Alas, for great expectations! the river claim proved a failure. The earnings from washing the bar were nearly all gone, newcomers occupied all the ground not exhausted, and so we prepared to wander.

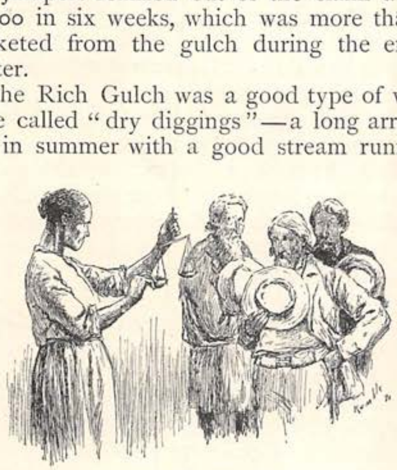
Pictures of camp-life crowd upon one. Who can forget the trains of loaded mules descending the mountain to the bar, with their attending Mexicans, raising a cloud of red dust and filling the air with their cries of "Hoopa!" "Mula!" and other expletives? Or the herds of wild cattle galloping down at breakneck speed, followed by swarthy and dust-begrimed *vaqueros*, "in sugar-loaf hats and legs of leather," and their headlong riding over the boulder-covered bar, swinging their riatas and lassoing the frightened bullocks for the butchers? Almost every store-tent had one or more rude tables where card-playing was indulged in "for the drinks," or where monte, the favorite gambling game, was played for dust, and at night these places were alive with miners purchasing supplies or trying their luck at the tables. As illustrative of the confidence of traders in the miners, I may here mention that in 1849 and for a year or two thereafter I never knew of a miner being refused credit for anything he wanted. A trader, a total stranger to me, who had heard a rumor of better diggings, once offered me his tent and contents at cost—about $2200, not a dollar to be paid until all the goods were sold. The miners on the bar were always ready to help others with purse or counsel, to share the last flapjack or frijole, or to espouse the cause of the injured. On Sunday or when the work of the day was over visits were exchanged without formality, and there was a general cordial mingling of men from all parts of the country and from every quarter of the globe. A considerable number of the first gold-seekers had brought books to the mines which passed from hand to hand, and there could be found a variety of volumes. Reading and argument were common sources of amusement, and in some of the tents one might hear the picking of improvised banjos.

The autumn of 1849 came on. The leaves had begun to fall; the winds in the towering pines and the murmur of the waters had more melancholy tones, the crickets sang more plaintively, the few birds were restless, and what with the want of claims to work and the coming of the rainy season it was needful that we

A ROUGH ROAD TO THE MINES.

seek another locality and prepare for the winter. I had already prospected the Rich Gulch of the Calaveras five or six miles away, had worked one day on a claim and had left a pick and shovel there as an evidence of ownership. The custom of the miners was to recognize mining tools in a claim as equivalent to possession, and in the absence of the claimant these tools were sufficient to hold the claim ten days. But my partner had fallen sick, and I was not able to leave him, and when we moved to the gulch eleven days after I had left it, we found the tools on the bank and two "jumpers" at work. We were too late, but we took the loss philosophically, as there was plenty of ground not taken. I understood afterward that the jumpers realized out of the claim about $7000 in six weeks, which was more than I pocketed from the gulch during the entire winter.

The Rich Gulch was a good type of what were called "dry diggings"—a long arroyo, dry in summer with a good stream running down it after a rain. Claims extended from bank to bank, and for sixteen feet in length. The brown and red soil from the hills had run down in the course of time and changed the channel of the stream in many places, and here the miners had to expend a good deal of labor on what they called "dead work," removing this hill soil, sometimes twenty feet in depth, to get to the old gold-bearing bed. As coöperation in the way of drainage had at this time been little thought of, each claim had to get rid of its own water in any way without much consideration for neighbors below. The amount of bottom dirt washed was slight compared with the whole removed, but in most claims it was exceedingly rich. Many a man had reason to remember with pleasure those winter diggings for the fortune they gave him. The gold was coarser and rougher than that of the rivers, not having been so much ground among the sand and gravel.



A WOMAN IN THE MINES.

During the winter of 1849–50, the cost of living was extreme. As the season was a very wet one, the roads and trails were full of mud-holes, in which supply wagons were stuck and mules and oxen mired. Wagons and animals were unloaded several times a day to extricate them from the mud, and in one instance at least fourteen days were spent on the road from Stockton, fifty miles away. Flour reached a dollar a pound, rice the same, pork and bacon a dollar and sixty cents a pound, saleratus sixteen dollars a pound, and spermaceti candles a dollar each. An ounce of gold was the price of a pick or shovel, and almost anything needed, except fresh beef, commanded a proportionate price. That all miners did not get rich is accounted for in the statement that it took a fair claim to pay expenses. The short duration of a placer claim, the loss of time in finding another, and the too general restlessness, tell the story of many failures to realize a fortune by even those who were the most lucky. Too often it was due to extravagance, gambling, or the guzzling of brandy or whisky at eight dollars a bottle. But, drunk or sober, one was obliged to pay two ounces for a pair of pantaloons, a hundred dollars for a pair of long-legged boots, and four dollars expressage for a letter.

There were not more than four or five log-huts in the gulch, nine-tenths of all the miners living in common soldier tents, about eight feet square, the entire winter. Ours had a huge fire-place in front, that sent through our thin, cotton dwelling a warm glow from a fire of manzanita wood, which is nearly equal to hickory for fuel. The weather was at no time very cold, and we suffered no discomfort. February was like May in New York.

It was during this month that an alcalde, assuming to have derived his authority from an alcalde at Stockton, began to give law to the little community. Some of his decisions in cases of double ownership of claims did not square with our notions of justice. It was more than suspected that he had been "greased," *i. e.* bribed, to make them. A meeting of miners was called, and a committee was appointed to draft laws for the gulch. The alcalde, a stalwart and swarthy Creole, gathered his boon companions around him and tried to interrupt the reading of the proposed laws, loudly declaring that he was alcalde and was going to govern the camp at any hazard. But the odds against him soon cooled his courage, and though pistols were exhibited and violence was threatened, no blows were struck. The next morning the blustering alcalde retired from the gulch forever. The new laws constituted the first code (so far as I know) adopted in the mines, and sufficed for the settlement of disputes for a long time.

PROSPECTING IN CALIFORNIA IN 1851.

I neglected to state in the proper place that in the early part of October business took me to Sacramento, and I only go back to relate an incident which will help to illustrate mining life as it was in California. The trip was made in a large mule-wagon dignified with the name of stage, and consumed nearly three days. Late


A MINERS' BALL.

in the afternoon of the first day, the driver said it was about time to camp, but he remarked that at a house four miles farther on there was a woman. Now a woman in the mines was a rarity; we had had a glimpse of one on the bar during the summer, and that was all. It was at once put to vote to determine whether we should camp or go on. Of course there can be no doubt of the result. In the evening we halted in front of a log house with a very steep roof made of tules, and applied for supper. The hostess, a tall, raw-boned Missourian, on presenting our bill in the morning, to weigh the dust put a cube of lead in the scales that approximated the size of a hymnbook, but the generosity and chivalry of the early miner and the rarity of women combined to make us ignore it.

In the spring of 1850 I returned to San Francisco, and in May, with one companion and four animals, went around the bay to Sonoma and from thence began the exploration of that unknown region from Sonoma to Oregon. Wandering miners we knew had already gone over the mountains and found gold on the Trinity. Were there not other streams flowing into the Pacific north of San Francisco, and might not all be auriferous as well? It was a tedious, eventful, but fruitless journey of forty-seven days, almost wholly over mountains trodden by Digger Indians and, what was more perilous, by ferocious grizzlies, of which we saw five at one time. No gold was found in any stream till we reached the Trinity, thirty-six days from San Francisco, and there the diggings were not remarkably rich. The hardest toilers reported but from eight to ten dollars a day. The style of mining did not differ from that which I have described, except that the pay dirt was carried a considerable distance in buckets from high and dry bars down to the river to be washed. Something better must be found, and a prospecting party was sent on an exploring expedition farther north.

There were some queer distinctions in those days. One Sunday, going to the butcher's booth, I found a customer ahead of me, who inquired if he could not have a piece of a liver which was hanging on a tree in plain sight.

"Don't know if you can or not," said the butcher.

"I 'd like to know why? I 've been trading with you all along, and never asked for liver before; but I want some variety now."

"Stand around and let me look at you. No, you can't have any liver."

"Well, why?"

"There ain't enough to go round. I have to have some rule about givin' it out, and I have decided that no miner can have a scrap of liver from me unless he wears a canvas patch on the seat of his pants."

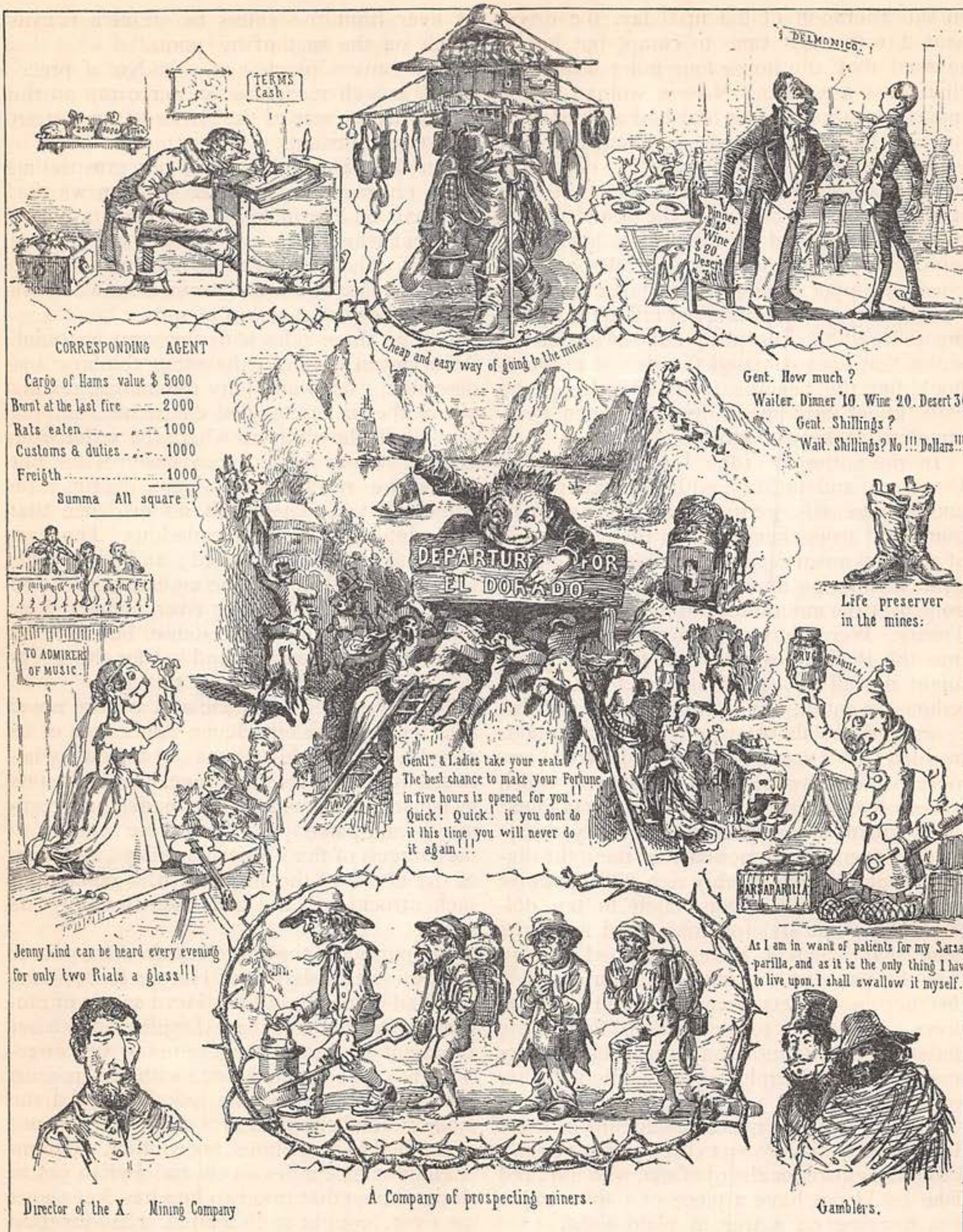
The canvas patch was a badge of precedence as well recognized in our camp on the Trinity as the star of the Order of the Garter is in Great Britain.

On the 3d of July two of our prospecting party returned and whispered the news that rich bars had been found on a stream full of salmon farther north, and the next morning we were off. The night of the fourth and fifth gave us the variety of a snow-storm, from which we took shelter under a roof of spruce boughs inclosed on three sides with the same material. After eleven days of exhausting climbing and descending steep and lofty mountains, tearing our clothes in the tangled chaparral, camping at night in the chilly air where the water from melting snows made green pastures for our mules, we reached the virgin diggings on Salmon River. There was no evidence that any white man had preceded us. The bars by the river were untouched; an interminable forest stretched all over the mountain sides and up and down the winding river, unmarked by the woodman's ax — not dense, but relieved by glades and openings, and but for the steepness of the mountains easily traveled.

Here was a newer scene and a more novel life. There were but eleven Americans of us all told, and a wide and rugged region lay between us and others of our race. Indians came in squads, shyly viewed us, made their comments, and passed on. They were superior to the Diggers of the California valleys, and were of the blood of the Modocs, who committed such atrocities in the lava-beds twenty years after.

My partner in the new diggings was a printer from the establishment of Harper & Brothers, who had come around the Horn as one of Stevenson's regiment in 1847. Displeased with our allotment of claims, which were too wet, we resolved to take chances alone with the Indians. So one fine morning we quietly packed the mules, forded the river at a shallow place, and proceeded to go we knew not whither. A tramp of eight or nine miles on elk and Indian paths, along a ridge that rose two hundred feet above the river, brought us to a point at the junction of streams. Crossing the north fork we made our camp on a high bar covered with young pines and oaks and already occupied by an Indian family, with whom we hastened to make friends by gifts of beads, bracelets, and other trinkets captivating to the savage. We had no tent, and made our camp by inclosing a small space with ropes tied to saplings for corner posts, to keep the mules, turned loose upon the bar, away from our bed and provisions.

Here, again, was a still fresher and wilder




SAN FRANCISCO CARICATURES.
(FROM AN OLD LITHOGRAPH BY JUSTH AND QUIROT, IN THE COLLECTION OF COMMANDER JOHN R. BARTLETT.)

life. Cut loose from our kind we trusted to uncorrupted natives, and did not trust in vain. A little prospecting gave glowing promise. Fifty cents to the pan was not infrequent. The rocker was speedily screwed together and real work begun. The river was high from melting snows on the mountains, and the portions of the bars out of water were small, but our first day's work yielded about fourteen ounces. Thus we passed two weeks, mining in patches and with varying success, when miners on the Klamath, hearing from the Indians that white men were working on one of the branches above, pushed up the country to see if somebody had not something better than they. Among the new-comers were a few Texans who laid claim to a very wet bar down the river, and were soon doing well. Somehow a rumor came to our isolated camp that big lump diggings had been found to the northeast on Scott River, and the Texans were on the wing. My partner took the big lump fever and went along. I associated myself with three others, entire strangers, and we took possession of Texas Bar, threw a slight breakwater of clay along the river's edge to stop the water from spreading over the bar, and then cutting a drain to the bed-rock from the lower end, we had comparatively dry ground and went to washing. We worked early and late, sometimes not ceasing till starlight, for all our provisions except flour were exhausted, and our only reliance was on the Indians, who supplied us with salmon in exchange for trinkets. This kind of living could not last, and we strained every nerve to get as much gold from the claim as possible. The average spoil of a day was rather more than a hundred dollars to the man. About the middle of September a conference of the few miners left on the river was held at the Forks, and as the diggings were too good to abandon it was agreed to despatch six men and twenty mules to Trinidad on the coast for supplies to last the winter. The train was made up and took the trail at once. Haste was necessary, as even flour, the last link to civilization, was nearly gone.

Meanwhile the mining went on. Few in numbers, and without provisions, our position could easily become critical. Our relief party came back suddenly; it could not go through. The Indians on the Klamath were hostile. Oregon men had shot some Indian dogs down the river, and the young bucks had retaliated by killing a horse. Thus began the so-called Klamath war, that cost the State, and ultimately the nation, a large sum of money. The miners were without delay in council. My party of four had scant rations for four days. At four o'clock we abandoned claims, picks, and shovels and commenced a forced march for the Trinity. I shall not detail the experiences of that hurried tramp on foot over the roughest of mountains. It is enough to say that one day four of us subsisted on a ground squirrel and a woodpecker, and the last day on copious draughts of water when fortunate enough to find it. And when at last we struck the Trinity it was only to be disappointed. The river was deserted; the miners had gone to winter quarters in the "dry diggings" at Weaverville. Wet, weary, and disgusted, with a dreary prospect for supper, we crawled up the bank and dropped down at a fallen tree to make a fire for the night. The mules were relieved of their packs and left to graze. They were too nearly dead to stray. A smoke was seen a few hundred yards away. I went to reconnoiter. A Mexican pack-train was encamping. Meeting two muleteers gathering faggots for the fire, I inquired what they had to sell. "*Ninguna cosa*" ("Not a thing") was the answer. Going on to the camp-fire I inquired if they would sell me something to eat. The reply in Spanish was that they only sold by the cargo. Then I observed, sitting by the fire and smoking a cigarette, a Mexican whom I recognized. Stepping up to him I asked in Spanish if he did not know me. He said no.

"But, Don Fernando, do you not remember the man who bought an iron-gray mule of you on the Calaveras last year?"

"*Ah, si, señor,*" and he grasped my hand. I explained the situation in as few words as possible. Instantly, snapping his thumb and finger, he called out to two men:

"*Mira, hombres! Ven aca! Dos quintales de harina, carne seca, panoche, y todas cosas por los Americanos; anda!*" ("Attention, men! Come here! Two quintals of flour, dried beef, raw sugar, and everything for the Americans; travel!")

"How much for it all?" I inquired.

"*Ninguno centavo; gracias á Dios, señor*" ("Not a cent; thanks to God, sir"), he replied with emphasis, and the *hombres* carried an abundant supply of substantials to our camp. That tall and swarthy Don in brown sugar-loaf hat, his head thrust through a hole in the middle of a blanket that served for a cloak, standing in his spurs, the rowels of which were four inches in diameter, is not a figure to be readily forgotten.

There was an incredible amount of cooking that night. Slapjacks and sugar, ropes of dried beef broiled on the coals, coffee made of an extract—everything was welcome. It was a merry night. I never knew before the intoxication of eating. We cooked, ate, lay back upon the blankets, told stories, returned to the cooking again, and so alternated until sleep overtook us in the warm glow of the fire.

When, in the afternoon, we made our entry into Weaverville, a scattered village of about four hundred miners' cabins, Don Fernando found himself in trouble. He could find but one trader with money in the whole town—and he was a type of the monopolists who have since become the curse of California. He offered the Mexican about half-price for his cargo, and there was no other place to which to carry the goods. It was now our turn. It was suggested that we help Don Fernando out. He had been offered \$1200. We told him that we did not want his goods, as we did not know what we were going to do, but we would make the trader pay more for them.

"Tell him we offer you \$1500." In a short time we learned that \$1600 had been bid.

"Tell him we will give \$1800."

Again came a bid of $1900. We offered $2000, and soon were confronted by an angry Missourian, who "was n't goin' to have any durned Yankee git in 'tween him and a greaser in a trade." So he jumped our bid $200. Don Fernando in a whisper said it was *bastante* (enough), and the Missourian was the buyer. We had paid off some of our obligations to Don Fernando and had made a little stir in the new diggings.

The autumn of 1850 was unlike that of 1849. The miners in the dry ravines had thrown up on the banks large quantities of pay-dirt from the beds, and were continuing their work hoping to be able to wash. But little rain fell till the following March. The miners scattered again along the Trinity to pay expenses, and I with others departed for Sacramento.

The early summer of 1851 found me in the mines at Nevada City, in the richest gold-producing section of California, or perhaps of the world. The two mining towns of Nevada and Grass Valley are but four miles apart, and that either of these is more populous than any other town in the Sierra Nevada is evidence of the great wealth of the region. The miners of Nevada County originated or adopted most of the improved methods for facilitating washing and saving gold. The long tom came into use early as the successor of the rocker. It was a trough of boards ten or twelve feet long, two feet wide on the bottom, with sides eight or ten inches high, and was furnished with a perforated sheet-iron plate three feet long, which had the end part curved upward to stop the stones and gravel, while the water, sand, and small gravel dropped through into a riffle-box below, set on an incline to allow the lighter matter to pass off with the water. The long tom was put on an easy grade and supplied with a constant stream of flowing water, enough to drive and wash all the earth thrown into it down upon the perforated screen. Two or more men shoveled the earth into the tom, and one threw out the stones from the screen with a fork or square-pointed shovel, when they were sufficiently washed. As the claim was worked back, the long tom was extended by means of sluice boxes until a dozen or more miners were shoveling dirt into them on both sides. Afterward it was found that by putting riffles into the sluice boxes the long tom could be dispensed with, and miles of sluices of all sizes were seen, some supplied with a few inches of running water, miners' measure, while others bore torrents of the muddy fluid. The sluice requiring a rapid flow of water was set on a grade of say four inches to twelve feet in length. It is plain that in a short distance the pay dirt would have to be lifted higher than the miner's head. A descending bed-rock added to the difficulty, and sometimes the earth was thrown by one set of miners up on a platform to be shoveled by another set into the sluice. Numerous small boulders were kept in the sluice, around and over which the water boiled and leaped, dissolving the clay. When the gold was fine and difficult to save, quicksilver was poured into the sluices to catch it, the riffles arresting the amalgam as it moved down.

More and more, as experience was gained, water was made to do the labor of men. Instead of carrying the dirt in buckets to the river to be washed, the river was carried to the dirt. Ditches were dug at great expense and water from them was sold at a dollar an inch for ten hours' use, and often it was resold in its muddy state one, two, and three times at decreasing rates. The water belonged to the ditch owner as long as it could be used. The fact may here be noted that one of the first ditches constructed was that from Rock Creek to the hill diggings about Nevada City. It was nine miles long, and cost about ten thousand dollars, and so rich were the diggings and so active the demand for water that the enterprise paid for itself in six weeks.

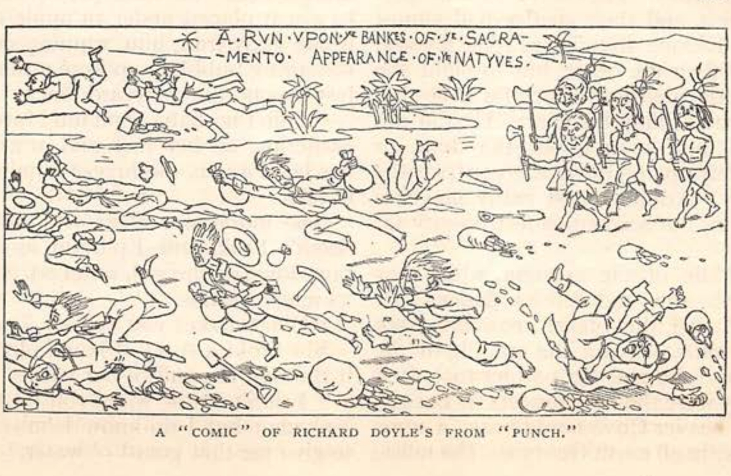
It was early discovered that the river gorges in which the first mining was done — those deep channels from the high Sierra — cut across ancient river-beds filled with auriferous gravel, the bottoms of which were hundreds of feet above the beds of the modern streams. From these deposits of far-back ages much of the gold found on the later river bars had come, and these ancient storehouses, exposed by the wear and tear of centuries, led to another kind of mining. Great canals from high up the rivers were carried with fine engineering skill and large outlays of labor and money, without the aid of foreign capital but by the pluck, purses, and brawny arms of miners along frightful precipices, across cañons in lofty flumes and through tunnels to the ancient filled river channels. Here the water was carried down the banks in strong iron tubes or hose, and large quantities were compressed through nozzles and thrown with terrific force against the banks of auriferous gravel. Ditches dug in the earth on a moderate grade, or sluices of lumber, caught the muddy debris and separated the gold, leaving it on the bottom. A steady throw of this water against a bank, directed with a miner's judgment, was kept up for days and even months without cessation night or day. This was called hydraulic mining, and it was introduced into California in 1852. To facilitate the work of the monitor or water-cannon that shot the compressed stream, tunnels were run into the banks where they were hard and tons of powder were exploded in them at a single blast, pulverizing the deposit to the extent of acres and often to a depth of more than a hundred feet.

In the great mining region of California, which has given to the world more gold than any other area of like extent on the globe, all this is now over. The fiat of courts has gone forth that no debris of any kind can be allowed to be dumped into any stream or its affluent to the danger of property below or to the impeding of navigable waters. Thus has been destroyed the market value of hundreds of miles of canals, great artificial lakes to store the waters of winter, and vast deposits of auriferous gravel — in a word, a hundred million dollars in mining property. Thousands of miners who have exhausted their energies and the best part of their lives in the mines have, with their families, been reduced to poverty and distress.

The old miner, full of cherished memories of that wonderful past, on revisiting the scenes of his early labors sees no winding line of miners by the river marge, with their rattling rockers or long toms; no smoke from camp-fire or chimney arises from the depths of gorges; cabins are gone; no laughter nor cheery voice comes up from the cañons; no ounce a day is dried by the supper fire. Gone are most of the oaks and pines from the mountain-sides; the beds of the rivers are covered deep with the accumulated debris of years, over which the water, once clear and cold from the melting snows of the Sierra, goes sluggishly, laden with mud, in serpentine windings from bank to bank. On the tableland above, in the chasms made by hydraulic power in the pleiocene drift, the hollow columns of iron that once compressed the water stand rusting away; the monitors lie dismantled like artillery in a captured fortress. All is silence and desolation where once was the roar of water and the noise of busy life. The same red and brown soil is beneath your feet, the same alternation of ridges and gorges is here, the same skies unflecked by clouds from May to November are overhead; the same pure air is left to breathe in spite of courts and monopolies; a considerable portion of the soil is cultivated; scattered here and there over the mountain slopes are homes surrounded with flowers and fruits — but the early miner sees it all with the sad belief that the glory is gone.

The early miner has never been truly painted. I protest against the flippant style and eccentric rhetoric of those writers who have made him a terror, or who, seizing upon a sporadic case of extreme oddity, some drunken, brawling wretch, have given a caricature to the world as the typical miner. The so-called literature that treats of the golden era is too extravagant in this direction. In all my personal experience in mining-camps from 1849 to 1854 there was not a case of bloodshed, robbery, theft, or actual violence. I doubt if a more orderly society was ever known. How could it be otherwise? The pioneers were young, ardent, uncorrupted, most of them well educated and from the best families in the East. The early miner was ambitious, energetic, and enterprising. No undertaking was too great to daunt him. The pluck and resources exhibited by him in attempting mighty projects with nothing but his courage and his brawny arms to carry them out was phenomenal. His generosity was profuse and his sympathy active, knowing no distinction of race. His sentiment that justice is sacred was never dulled. His services were at command to settle differences peaceably, or with pistol in hand to right a grievous wrong to a stranger. His capacity for self-government never has been surpassed. Of a glorious epoch, he was of a glorious race.

*E. G. Waite.*




A "COMIC" OF RICHARD DOYLE'S FROM "PUNCH."