

LIFE AND DEATH JOSTLE ONE ANOTHER: MEDICINE IN THE EARLY GOLD CAMPS

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"We had not been out long when disease and death made its appearance among us...There was seventeen died before we got half way..."

[Gold seeker sailing north from Panama]

"...a raving disease of a typhoid character,--so-called 'mountain fever,' that demanded many victims."

[Colorado, 1859]



WITH THE DISCOVERY of gold at Sutter's mill in January, 1848, and the "sordid cry of gold, gold, GOLD" racing throughout the world, interest in the American West took on a new intensity. Suddenly, the golden dreams of a generation seemed to be within reach, wrapped up in the call, "Ho for California." The California mines promised that anyone could "get rich without working."

A "motley assemblage, composed of lawyers, merchants, grocers, carpenters, and cooks all possessed with the desire of becoming suddenly rich" rushed off to the mines in 1848. Even larger numbers, well over 100,000 people, headed toward the Mother Lode country the next year. These forty-niners eagerly sought their destination, which they envisioned as a land of gold that would fulfill every expectation. These Argonauts ventured West, confident of making their fortunes and returning home within a season or two, at most.

The one-time farmers, merchants, seamen, teachers, doctors, ministers--sojourners from all walks of life--found more than they had bargained for. They risked not just a few months of their time, but their very lives, in the hope of "filling their pockets with the shining ore." The search for gold obsessed them, diverting their interest from the normal amenities of living. As that perceptive eyewitness, Louise Clapp (Dame Shirley), observed at Rich Bar, "You have no idea of the hand to mouth sort of style in which most men in this country

are in the habit of living."¹

The toil and dangers inherent in the journey to the gold fields and the physical exertion of mining took a toll that very few had anticipated in those early exhilarating days of 1848 and 1849. The cost in human lives and ruined health just to reach California was appalling. Far more migrants died of disease while crossing the continent than were ever killed by Indians. When the worn-out survivors turned to mining, they were sometimes physically taxed beyond endurance. These prospectors were the first, but not the last, to discover the exorbitant cost of being seduced by the siren call of gold, of silver, of the mining West.

Anyone who came west expecting to make a fortune had to stay healthy, not an easy task with the state of the medical profession being what it was in 1848-49. Medicine and western mining would be intertwined from this point. Unfortunately for its participants, mining evolved faster than medicine. Medical science in the first half of the 19th century had advanced hardly beyond the realm of the ancient Greeks. In the 1840s, for example, there existed thirty-eight schools of thought on the theory of disease. Diagnosis was unsystematic and superficial. Heredity was seen as the principal

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precipitator of disease, illustrating the general ignorance of the causes of infection. Surgery was hazardous, as were some of the prescribed cures.²

The doctors--the front line--commanded little respect. Ineffective and primitive treatments did little to inspire confidence among patients, who often sought out their physicians only after all else had failed. These prevailing conditions meant that illness too frequently resulted in death, or more often, permanent disability or disfigurement. The reputation of medicine fell into further disrepute.

Doctors called on their own resourcefulness and imagination to discover medications that would ease a patient's ills. They prescribed opium (for pain & diarrhea), quinine (malaria), mercury (syphilis), and morphine (dysentery), with casual indifference to side effects. Purgatives and emetics were widely used, calomel (mercury salt) being the most popular of these. The ancient practice of bloodletting also lingered as a curative. Some physicians used whiskey as an antiseptic, others as a crude anesthetic. A few lavished it on their insides to steady their nerves.³

Calling medicine a profession stretched the definition of the term. All who had the inclination to dabble in it could hang out their shingles and declare themselves open for business. Anyone who had read a book about medicine, taken a course or a brief apprenticeship, or perhaps simply become intrigued by medicine could, quite literally, "practice." As a result, "quacks" outnumbered credentialed physicians in some areas.

Under these circumstances, the American public harbored a certain fatalism about the practice of medicine. They relied on home remedies and patent medicines in preference to subjecting themselves to a doctor's treatment. Professionalism was not the only issue. Patients also complained about high fees in the 19th century.

Americans complicated the health picture by failing to take good care of themselves, especially if that care thwarted their scramble for the cherished wealth. Forty-niner physician James L. Tyson expressed it, "But who is careful or who is prudent in the pursuit of gold in California?" After the investigative work of Scotsman James Lind in the mid-18th century, the concept of eating oranges, lemons, and limes to prevent and cure scurvy had become well understood. The ingestion of cream of tartar and vinegar also produced good results in combating the dietary deficiency that caused scurvy. Yet the 1849ers, in their rush to riches, chose to ignore common wisdom (fresh fruit and vegetables) and medical counsel. They paid a severe penalty. Americans were some of the best-fed people in the world in 1849; nevertheless, scurvy stalked the mining West relentlessly that year. The rushers had no one to blame but themselves.⁴

Gold fever forced other concerns far from their minds. The route chosen to reach the West determined to which diseases the traveler fell victim or succumbed. None of the paths was disease-free. The quickest and most expensive lay through the Isthmus of Panama. This fever-ridden journey ended thousands of lives and left many more forty-niners debilitated upon their arrival in California. Malaria could kill them along the Chagres River or attack them later with the same ferocity. The ship route around Cape Horn and up the west coast of South America was long and arduous. Spoiled food, cramped quarters, impure water, unsanitary conditions, and inactivity brought the would-be miner into San Francisco harbor in a wasted physical condition.

The overland trails from the Missouri River were in some ways the most rugged, but they kept the Argonauts walking and riding outdoors, a distinct advantage over the more sedentary water routes. Tragically, many unanticipated dangers lurked along the trails.

No matter how fast these immigrants traveled, they could not outrun cholera, the great killer of 1849-1850. The forty-niners dubbed cholera "the ruthless destroyer," and one described the road from Independence, Missouri, to Fort Laramie as a "graveyard." The disease most often struck suddenly, and death came within hours, usually with "great agony." Fevers of various kinds, many carried by the pioneers from their midwestern homes, wreaked havoc all along the trail. The forty-niners listed lung, camp, typhus, bilious, typhoid, and the ever-popular ague as fever ailments. Mountain fever, a term the gold rushers used loosely to include almost any fever that struck them in or near the mountains, may have been Rocky Mountain Spotted or Colorado Tick fever. The constant travel exhausted both animals and humans; the physical exertion required of them to reach California was staggering. A fever under these conditions, far from home and civilized comforts, gave sickness a new--and often deadly--impact.⁵

On the trail, more ordinary illnesses, such as mumps, rheumatism, measles, bilious complaints, "summer complaints," and even the common cold, could evolve into unexpected complications. Smallpox was a dreaded scourge. Pregnancy's inherent discomforts and dangers became more perilous. A toothache could progress to something more than a mere annoyance. Louise Clapp wrote that hardly a family existed that had not left a beloved member buried upon the plains.

The physicians and pseudo-physicians who traveled west among the rushers understood little of the causes or cures of many of these diseases. Dr. E. A. Tompkins believed that he could explain some of them. He first blamed the high saline and alkaline content of the water and the ingestion of fish, before he came closer to

hitting the mark, when he pointed to poor preparation of camp food, chilly night watches, sleeping on cold wet ground, and finally, the "constant hard and exhausting toil." If doctors were ignorant of the causes and cures, it could hardly be expected that the rest of the Argonauts could cope with the multitude of illnesses they had rarely or never before encountered.⁶

Often ill, usually exhausted, but always energized by the prospect of gold, the forty-niners arrived at the "diggings." Their new life style and hard labor demanded strength and endurance. The editor of Sacramento's *Placer Times*, December 8, 1849, wrote that one rarely heard of an individual not succeeding, "if he has been able to preserve his health."

Miner Alonzo Delano, who wrote several books and many newspaper articles about his experiences, observed in March, 1850, that most immigrants, even if they arrived in good health, would "be sick after arrival." He concluded, "exposure and bad diet contribute much to producing sickness." Contemporary William Swaine concurred, "Exposure causes sickness to a great extent, for in most of the mines tents are all the habitation miners have." Delano pointed out another factor involved in ill health when he wrote that many persons "rushed to the mines and went to work...without blankets to shield them from the cold night air."

California's climate had already garnered a reputation for being salubrious, but the miners found the mountains, though invigorating much of the time, to be miserable during the rainy winter season. Damp, cold, sunless days for weeks on end made mining in and along the streams physical torture. The summer had problems of its own. The sharp contrast between cold-water work and warm-land life, and the generally unsanitary conditions of the camps and placer mines, led to different health problems. Fleas and lice commonly accompanied the miners wherever they went. In the lives of many, neatness and cleanliness did not equate with godliness in terms of personal hygiene, laundering, and housekeeping.

If work and the climate affected miners' health, even more so did their diets. Long working hours and high food costs (because of isolation, transportation, and weather problems) dampened the individual's incentive to seek out variety or balance in his food. It was too much of a chore and took too much time to plan, purchase, and cook what today would be termed a balanced meal. Beans, bread, and beef constituted the daily menu. Scotsman J. D. Borthwick described his bill of fare as "beefsteaks, damper [flour/water dough] and tea"--morning, noon, and night. Many years later, forty-niner R. C. Shaw remembered what he ate, "stewed beans and flapjacks 21 times per week though the later was occasionally replaced by flour dumplings and molasses." Dr. Jacob D. B. Stillman lamented that even

in Sacramento in 1850 he had "almost forgotten what I used to eat."⁷

Scurvy entered the camps as one of the worst scourges of 1849-50, bringing down many already weakened forty-niners. Scurvy, though, had myriad equally-debilitating companions. Dr. James Tyson ranked rheumatism and dysentery right up there with it. In the second half of 1850, the State Marine Hospital in San Francisco admitted 262 patients with diarrhea, 204 with dysentery, 160 with rheumatism, and 93 with "intermittent fever." Stillman observed that in Sacramento in November, 1849, diarrhea was so general that "it has been popularly regarded as the disease of California...with the number of deaths greater than from any other disease." Also, as the *Alta California* (August 30, 1849) pointed out, many feared that an attack of diarrhea was the "precursor of the terrible scourge cholera." Surprisingly, cholera did not make its debut until 1850, by which time many believed that California led a charmed existence.

Smallpox was always a legitimate worry of the miners, but poison oak, another nemesis, proved far more discomfiting than dooming. The failure, the boredom, and the overwhelmingly masculine society aided and abetted "demon rum." Alcoholism claimed victims from the very beginning of the rush. Disappointed dreams, homesickness, and widely fluctuating moods of optimism/depression conspired to produce an unhealthy mental environment among the forty-niners. It is unlikely that the gold seekers anticipated these kinds of problems, but they could have fatal results, nevertheless.

Merchant/miner John Ingalls concluded, "There are thousands of persons here who hardly ever saw a sick day in the States and are completely broken-down, and many of them, if they live, will never fully recover their health." Physician Tyson concurred in that opinion. He observed that most of those who worked the mines rarely left with their accustomed health: "I never saw so many broken-down constitutions as during my brief stay in California."⁸

Exactly ten years later, news of another gold discovery sped eastward. This time the site lay in the Pike's Peak country, and in the spring of 1859 frantic gold seekers stampeded to future Colorado. The second greatest gold rush in American history had its share of medical miseries. Like the forty-niners before them, the fifty-niners planned to go west for a season, make their fortunes, and return home to a life they could never have achieved otherwise. Despite the lessons of ten years before, they proved to be no more medically prepared than were their predecessors. Times change, dreams do not.

Cholera was no epidemic threat in 1859, and the short overland trip, the only way to reach the new

diggings, allowed the gold seekers to avoid the threat of scurvy. It took only about a month to reach Denver, which diminished the dangers of the trail. Nonetheless, a reporter for the *Rocky Mountain News* (May 7, 1859) had this to say about the infamous Smoky Hill route: "Every day we meet men arriving from the States by the above route most of them in a famishing condition." Once they arrived in Colorado, they relearned the lessons of California. Former schoolteacher William Dutt spoke for many when he observed a couple of years later that this was "a hard country and a hard life a man leads in it." If, he concluded, one made mining his business, "sufferings, privations and hardships of life, generally, are more often realized than the object for which they endured."

Like the forty-niners before them, these miners suffered from the effects of poor food, fleas, and "cold-stream" mining. They attributed the "cold-stream complaint" to working in the water, the dampness of the mines, and the altitude. Some contracted Rocky Mountain fever from tick bites, and others were felled by the "old ague." Unsanitary living conditions in the mining camps hastened the same outbreaks of "filth diseases"; both the 1849ers and 1859ers trashed their sites with indifference.

The Pike's Peakers suffered from the mysterious disease they called "mountain fever," which struck in the late summer and early fall of 1859. Whether this was one disease or several remains unknown; regardless, it created a serious problem in the mountain districts. Newspaperman Henry Villard, writing in 1860, believed that "copious rains," starting in the last half of July, caused the fever: "this together with general exposure, scanty and ill-prepared food, the free use of bad water and worse whisky, produced a raging disease." He concluded that "mountain fever" was of a typhoid character. It "demanded many victims," he wrote, "and caused many more to abandon their work and seek the plains."

Gilpin County milling man George Pullman was one of those victims. He wrote his mother from Denver that he had "quite a severe attack of Mountain fever," after catching a "severe cold." Putting himself in the care of Mrs. Lane, a Chicago woman with whom he boarded when in Denver, he "remained for ten days and in the meantime was some sick and thought of home and Mother pretty often. However with good nursing, plenty of cold water and Homeopathy, [he] finally came out all right."⁹

A major difference between the two rushes was the higher average altitude in the Pike's Peak region. Denver stood a mile high, and all of the mountain camps and towns well above that, some over 10,000 feet. Altitude had an impact on all who lived and worked in those mountains.

Dr. Irving Pollok, who came in 1860, reported that

the symptoms he treated in people living above timberline were similar to lead poisoning--'heart acting languidly,' nausea, sleeplessness, constipation, and pain in the small intestines. He studied particularly a group of people living in McNulty's Gulch, on the divide between the Arkansas and Blue rivers. Not only they were affected, but also their "dogs and cats [which] died within three months." He concluded that it was "almost certain death for cats and dogs" to be carried to high altitudes. He advised his human patients to move to a lower altitude. The women and children did and recovered; the men stayed to mine and suffered.

Long-time Denver physician Arnold Stedman reported to the Territorial Medical Society in 1876 that persons of "ordinary health and flesh" usually lost weight with prolonged residency at high elevations. He also concluded that some suffer sleep disorders and recommended that people of "nervous temperaments" not travel to those high areas, as they likely would suffer "nervous prostration." Stedman held out hope that the next generation would evolve with constitutions better adapted to the rigors of high altitudes.

These early Coloradans were actually experiencing what today is known as altitude sickness. Mining at 9,000 feet or more taxed one's physical system and could engender health problems that ranged from headaches and lightheadedness to heart conditions. Miners could never escape this problem as long as Colorado mining continued.¹⁰

Colorado's placer districts proved limited compared to California's. Only a matter of months intervened before miners began burrowing into the ground to follow the gold veins. Hardrock mining dominated Colorado after 1860, and its experiences in many ways more closely paralleled those of Nevada than they did California.

In the two great gold rushes, men and women inevitably fell sick; most recovered, others found their health undermined, and many died. Rarely did any of them simply accept their fate without experimenting with a variety of treatments that tell much about the state of medicine in this generation.

The miners carried their favorite remedies with them, usually in a medicine chest. Brown University chemistry professor Nathaniel Hill toted his own "stock of medicines" to Colorado. It included brandy, lemon juice, extract of ginger, dried prunes, cayenne, "Martin's life cordial," and a bottle of "Perry Davis' Pain Killer." Both 1849ers and 1859ers could purchase a prepared assortment. For example, Catherine Haun's "portable apothecary shop" provided quinine, citric acid, opium, whiskey, and other medicines.

They tried everything to ease their ills. Opium, "the monarch of medical power, the soothing angel of moral and physical pain," topped the list of palliatives. Eng-

lishman Frank Marrat evidenced anxiety when he observed too many California gold seekers dosing themselves with another popular nostrum, mercury. He believed quinine and castor oil to be the only valuable medicines, but in rest lay the ultimate answer to most ills. That remedy created problems for some men because, as he observed, "the fear of the jeers of his healthier companions will often cause a man to continue to work when prudence would dictate an opposite course."¹¹

Threatened by scurvy, forty-niners ingested wild plants they found near the diggings or consumed a tea of sassafras and spruce leaves. They also ate stewed fruits and pickles and drank acidulous drinks. Burying live scurvy victims in the earth up to their necks was not a typical remedy! Some camps tried it, however. When William Swain came down with chills, fever, and dysentery, he consumed "opium and a large dose of quinine." Rushers of both eras used quinine for their various fevers. Henry Page experimented with pipe tobacco to allay the pain of toothaches but finally resorted to having a doctor pull the offending tooth. After another ache arose and another tooth departed his mouth, he was prompted to write his wife that "if it keeps on this rate you will have a toothless, bald old man for a husband."

Cholera was a mystery. Dr. Israel Lord, who came west in 1849, treated patients with a "single dose of laudanum, with pepper, camphor, musk, ammonia, peppermint or other stimulants." Another treatment involved camphor and opium. One medical book recommended "at all times and under all circumstances, to place a reliance upon Almighty God."

Hardly a miner existed who did not put trust in his favorite patent medicine, of which Perry Davis' Pain Killer was only one. These elixirs promised to cure almost every illness or disease known to man or woman. Mrs. A. Ragsdale's Vegetable Preparation was "guaranteed to cure diphtheria," Rosenbaum's Bitters claimed to cure fever and diarrhea, and Constitution Water was advertised as the only remedy for diseases of the bladder, kidneys, impotency, and many others. Only the sufferer's degree of gullibility or desperation limited the hope promised by the patent medicines. For those fortunate to be near one, a mineral spring constituted almost as much of a "medical miracle" as the patent medicines. A dip in the hot springs worked wonders in soothing the aches and pains mining gave rise to, and a quaff of the "curing waters" might relieve a "sour stomach."¹²

Virtually as a last resort, miners visited a doctor. Both rushes were rather well-supplied with those who claimed to be physicians, but prohibitive doctors' fees discouraged many a miner. One disillusioned forty-niner summed up the attitude: "Diarea, piles, gravel, chills, fever and scurvy begin to make their apperance and I

ain't well myself. There has been three doctors or things they call doctors working at me for some time. Have now paid out all my gold to the doctors and they leave me worse in health." Another complained that "the doctors charge pretty well. They charge for pills as if they were diamonds, and bleed a man of an ounce of gold and an ounce of blood at the same time."

Doctors also labored under the stigma that they actually caused pain. Well aware of this perception, they worked hard to overcome it. Dr. W. B. Mead, who opened a medical and dental office in Missouri City, Colorado, promised to perform painful operations in the most thorough manner, yet "causing the very least possible amount of suffering." The challenge of eliminating pain and coming up with something new gave abundant incentive to quacks. Dr. J. B. Young and his "medical and business clairvoyant," Miss Jackson, landed in Denver in February, 1862. They promised, at the patient's leisure, to prescribe for all the diseases to which human flesh could fall heir. This would be done by "reformed principles independent of asking any questions" of the patients!¹³

At what cost did the quest for wealth in 1849 and 1859 come? The knowledgeable gold-field physician, Dr. Jacob Stillman, estimated that one out of five miners died within six months of his arrival in California. That estimate may be conservative. No similar estimate was made for the Pike's Peak rush, although the number of deaths would have been much lower. Health and death horror stories did not appear in 1858-60 as they had in 1848-50. Unaccounted for are those who died trying to reach the gold fields or en route back home.

For the over 200,000 people who participated in these two gold rushes, it would not be unreasonable to project a death rate of ten to fifteen percent. Even the most conservative estimate would make mining the most deadly of all the western frontiers. Far more miners died from illness or were killed in mining accidents than lost their lives in natural disasters, Indian wars, cattle feuds, railroad and farming accidents, and legendary gunfights combined. When one adds the total cost of mining (hardrock and coal) over the last half of the 19th century and the first decades of the 20th, it is abundantly clear that the industry took a terrible toll of those who sought to get rich without working. The treasure at the end of the rainbow was too often a forgotten grave in some nameless canyon, in a mountain valley, or on a prairie trailside.

Louisa Clapp regained her health in the California mines while her physician husband scrambled to make a living. She wrote her sister, "[I have] gained an unwonted strength in what seemed to you such unfavorable surroundings." The "half-dying invalid" who boarded a ship to come west was "your now perfectly healthy sister." The mining West was not solely a deadly

health trap. Yet she also understood the dichotomy and provided a perfect epigram for this era, "How oddly do life and death jostle each other in this strange world of ours! How nearly allied are smiles and tears!"¹⁴

ENDNOTES

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