CHAPTER SEVEN
GOLD MINING IN MONTANA

The discovery of gold in Montana changed the history of the state in a few years. The population increased as people rushed to Montana to "strike it rich." This population increase led to Montana becoming a territory and eventually a state. There are three aspects of gold mining that it is important to know: the different stages, how towns grew around a gold strike, and the most important gold strikes in Montana.

Vocabulary

retrieve	quartz	staked out
nugget	shaft	flume
principle	crosscut	played out
trough	drift (n)	banishment
cleat	horizontal	vigilante
deposit (n)	timber	currency
divert	vertical	buckskin
ore	smelter	poke (n)
vein	chemical	culture

The Two Stages of Gold Mining

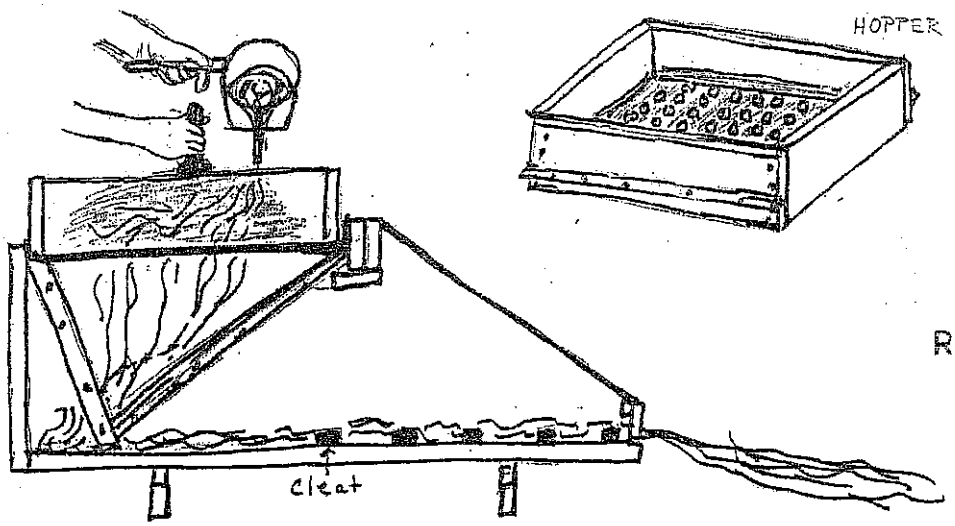
Placer Mining was the first stage of mining done when gold was discovered at a certain place. Placer mining retrieves gold in its loose state from the gravel in which it is mixed. This loose gold is in the form of dust or small nuggets. Placer mining is based on the principle that gold is nineteen times heavier than gravel.

There were five methods of placer mining. **Gold panning** was the first method. The first prospectors to a place would pan for gold in the creek beds, looking for a "show of color." The gold pan itself was a black iron pan that looked like a frying pan with no handle. The miner would scoop up half a pan of gravel and water from the stream bed and swirl it around in the pan, tipping it slightly so that the gravel and water would gradually spill over the edge. He would continue to do this until all the gravel and

water was out of the pan. Because the gold was heavier than the gravel, it would be left in the bottom of the pan.

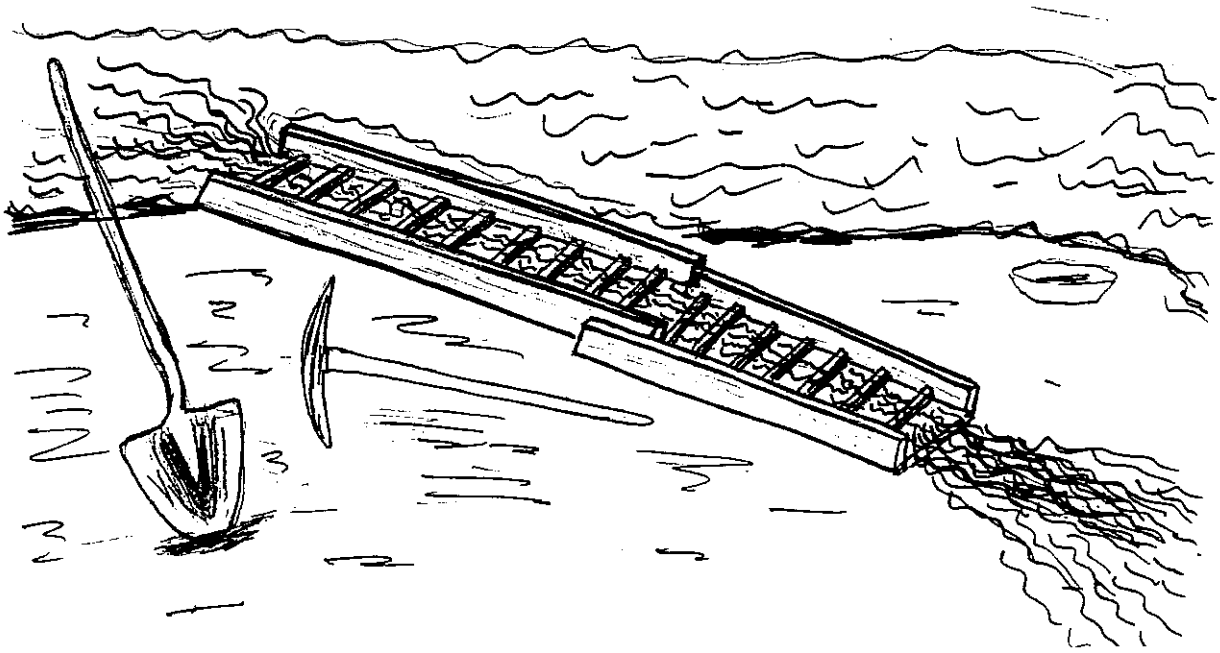
gold panner

The **rocker box,** or cradle, was the second method of placer mining. Once a good strike of gold had been found, panning became too slow. The miner would now build a rough trough made of three boards nailed together so that it had a bottom and two sides. Across the bottom of the box, about one foot apart, were narrow strips of boards called cleats. The box sat on rockers, like a baby's cradle. Gravel and water were poured out of a pail into the box, which the miner would rock back and forth , spilling out the water and gravel and leaving the gold caught behind the cleats. The rocker box could be moved easily, so it was used for small deposits of loose gold.



Rocker Box

The third method of placer mining was a **sluice,** or long tom. It was like a rocker box, with three sides and cleats along the bottom, but was much longer and more permanent. It was set next to the stream, and the stream water was diverted through it. The miner would then drop a shovelful of gravel from the streambed or hillside into the sluice and the force of the water would carry the gravel out, leaving the gold, which was heavier, caught behind the cleats.



A fourth method of placer mining was **hydraulic mining**. A large pipe brought water from up in the mountains at high pressure, washing whole hills of gravel through a sluice to separate out the gold. This type of mining was very destructive to the environment.

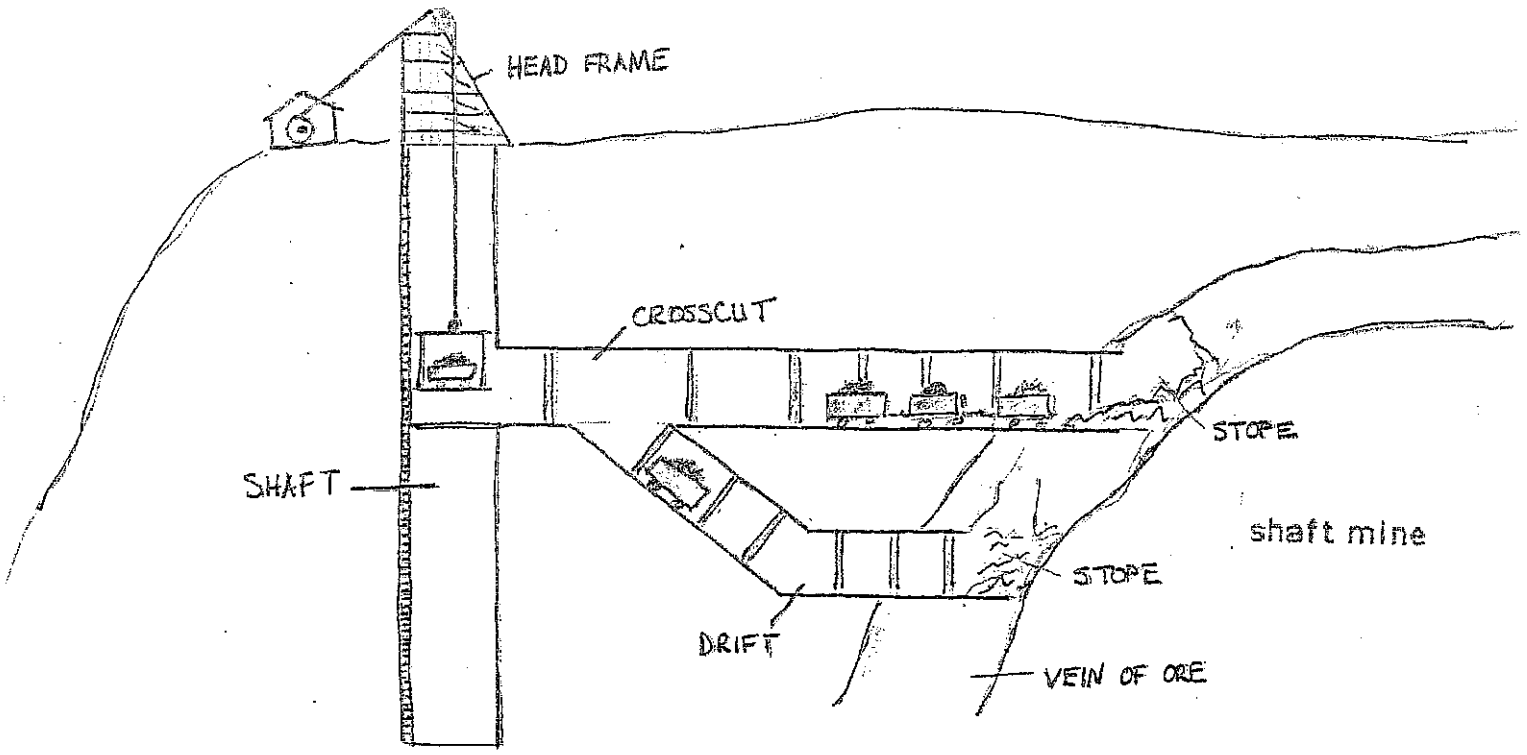
The **dredge** was the fifth method of placer mining. It was used much later on, after the invention of steam engines and electricity, to recover loose gold that was left in the gravel on the bottom of the streams. A dredge had a long suction hose which sucked up the gravel from the streambed. This gravel was then run through a sluice box. This type of placer mining was also very destructive to the environment, completely changing the stream bed and leaving enormous piles of gravel.

Hardrock Mining was the second stage of gold mining. Miners needed to use more permanent mining methods when the loose gold had been recovered from the

streams and hillsides with pans, rocker boxes or sluices. Now the large deposits of gold were in the form of gold ore, which meant it was mixed in solid rock in veins in the mountains. Because the gold was often mixed with a mineral called quartz, this type of mining is also called quartz mining. It was much more expensive than placer mining, because it took a lot of money to get the ore out of the veins.

There were five steps to mining gold ore. First, the miners would dig different types of tunnels into the mountains. A shaft was the main tunnel down into the mountain. Crosscuts and drifts were horizontal tunnels running from the shaft to the vein of ore. These tunnels all had to be reinforced with large timbers to keep them from collapsing.

Second, the miners would drill into the solid ore and blast it with dynamite into large chunks. The place where this was done was called the stope, which was at the end of the drift or crosscut. Third, the chunks of ore were loaded into carts which were then pulled by mules or donkeys out of the mountain in horizontal shafts. Later on, in the larger mines where the tunnels were deep in the earth, small trains would carry the ore to elevators which carried it up vertical shafts to the surface. The headframes which supported these elevators can still be seen above many mines today, especially in Butte.



Fourth, the ore was crushed. The arrastra was the earliest method to crush the ore. A boulder was found which was fairly flat on top. Chunks of gold ore were put on top of the boulder, and a second rock was dragged across the top of the boulder, usually by a horse or mule, crushing the ore. This method was not the most efficient, but it was not expensive to set up. The stamp mill was the second method. It was a large machine with iron stamps which rose and fell, crushing the ore. The stamp mill would only be used if there was a large deposit of gold because it cost a lot of money to buy and set up.

Fifth, the crushed ore was taken to a smelter, where it was melted and mixed with chemicals to produce pure gold.

Montana Gold Strikes

The story of gold in Montana actually begins with the California Gold Rush of 1849. Many men rushed to California to search for gold, but were disappointed because they had arrived too late and found that the best streams had been staked out. They drifted to other parts of the West, searching for gold. By the 1860's, some of these disappointed miners were appearing in Montana, and the Montana gold rush began.

Grasshopper Creek was the first great gold strike in Montana. It was discovered in July of 1862 by a man named John White, and the town that grew up there was named Bannack. Within a year, there were a thousand people in Bannack, and $5,000,000 dollars in gold dust had been found. Bannack is a ghost town today, and is protected as a Montana State Park.

Alder Gulch was the second important gold strike in Montana. It was discovered in May of 1863. The story goes that a man named Bill Fairweather and his friends from Bannack were captured by a group of Crow Indians. Fairweather, who loved snakes, pulled a rattlesnake out from under his shirt, which scared the Indians and allowed Bill and his friends to escape. As Bill panned for gold near camp that night, he made the richest strike in Montana history. He and his friends went back to Bannack to get their things and tried to keep the strike a secret. Word soon got out, however, and many people followed them back to Alder Gulch. The town that grew up there almost overnight was called Virginia City. Before the year was over, Virginia City had a

population of 10,000 people. Today, it is a restored mining town and a Montana tourist attraction.

Last Chance Gulch was the third big strike in Montana. It was discovered in July of 1864. It was found by a group of disappointed miners known as the "Four Georgians" who knew that this would be their last chance to find gold. The town of Helena, which is now the capital of Montana, grew up there.

Confederate Gulch was the fourth big strike. It was discovered in the fall of 1864 in the Big Belt Mountains by four soldiers who had fought for the South during the Civil War. The town of Diamond City in Confederate Gulch got its name from the pattern in the snow in the shape of a diamond connecting the first four claims that winter. Because the water supply was not adequate for placer mining, the miners built large flumes, which were wooden structures to carry water from nearby creeks. At least $75,000,000 worth of gold was taken from Confederate Gulch before it finally played out in 1871.

The Growth of Towns

If prospectors did not find very much gold when they started to pan a certain creek, they would move on to another place. If they found a lot of gold, they would stay and keep panning. If it turned into a big strike, nearby miners would find out about it and rush there. Soon the area would be full of miners prospecting for gold.

Towns grew up around a big strike almost overnight. People would come to the town to make money selling things to the miners, who were too busy looking for gold to do things for themselves. Stores were opened to sell the miners needed supplies. Hotels and boarding houses gave the miners a place to live, and restaurants gave them a place to eat. Saloons and gambling houses gave the miners entertainment.

Often the gold played out, and the people left, leaving a ghost town. A gold strike would develop into a permanent town only if certain conditions existed. First, if the mines continued to produce gold or other minerals such as silver and copper, hardrock mining would develop and the town would continue to thrive. Second, even if mining did not continue to be profitable, other industries such as logging or ranching might develop because of abundant natural resources. Third, the availability of good

transportation such as a major river, road, or railroad was another factor that might cause a town to become permanent.

Once a town became established in this way, the population would change. Men would now bring their families to live. Schools and churches were built. Places that began as a gold strike still exist as cities today, such as Helena.

New Roads into Montana Territory

As more and more people wanted to get to Montana to try to "strike it rich," new roads into the territory were built. Stagecoaches, mule and oxen teams, and horses were used to travel on these roads. Travel was very slow and difficult, especially in the winter.

Fort Benton became a busy port as more and more steamboats came up the Missouri, bringing miners, supplies, and mining equipment, and taking gold back down the river. In 1862 the **Mullan Road** was completed, connecting Fort Benton with the gold strikes, and ending at Walla Walla, Washington.

The **Bozeman Road** was built on the shortest and easiest route from the Oregon Trail to the goldfields of Montana. It was built by John Bozeman in 1863. It left the Oregon Trail at Fort Laramie, went on the east side of the Bighorn Mountains, crossed the Yellowstone River, and continued over Bozeman Pass and on through the Gallatin Valley to Virginia City. This road ran directly through land promised to the Sioux and the Cheyenne Indians, and although Forts Fetterman, Reno, Phil Kearny and C.F. Smith were built by the Army to protect travelers on the road, it was finally closed in 1868 because of Indian attacks.

Jim Bridger, the mountain man, built another road on the other side of the Bighorn Mountains, called the **Bridger Cutoff.** Although it did not go through Sioux territory and was therefore safer, it followed steeper terrain and did not have good forage, so it was not popular.

The **Corinne-Virginia City Road** ran from the Union Pacific Railroad in Corinne, Utah Territory north to Montana starting in 1869 when the transcontinental railroad was completed.

Life in the Mining Towns

Life in the early mining towns was very rough and uncivilized. The early population of the mining towns was mostly young, single men. While most were law abiding and honest, some were deserters from the Civil War, gamblers, robbers, or criminals on the run from other places.

There was no organized law at first. Almost everyone carried a gun, and there were many quarrels, gunfights, and murders. Saloons and gambling houses outnumbered stores and offices, because when the men were not mining they wanted to be entertained and spend their gold dust. To protect themselves against criminals, some of the towns organized "miners' courts," a group of miners who would punish lawbreakers. Punishment would be hanging, jail, or banishment from the town. Eventually, the town would have its own sheriff.

Sometimes even having a sheriff did not protect a town. In Bannack and Virginia City, a group of outlaws were robbing and murdering the miners for their gold. When the sheriff did not stop it, some citizens formed a vigilante committee and took the law into their own hands. They hanged many men accused of being the outlaws, including the sheriff of the town, a man named Henry Plummer, without a trial.

Gold was the currency, or money, used in the mining towns. In 1865, it was worth eighteen dollars an ounce. The miners carried their gold dust in small drawstring buckskin sacks called pokes. Every business had gold scales to weigh out the gold to pay for each purchase. Money could be made by sweeping up the floors under the bars for gold dust that had spilled. Sometimes the mud off a miner's boots would be panned for gold. Mining towns became more civilized as women and children arrived. Schools and churches were built, and the community became more concerned with safety and culture.

Locate the following on the map:

Bannack	Mullan Road	Corinne-Virginia City Road
Virginia City	Fort Walla Walla	Corinne, Utah
Helena	Bozeman Road	Diamond City
Fort Benton	Bridger Road	Fort Fetterman
Fort Reno	Fort Phil Kearney	Fort C.F. Smith