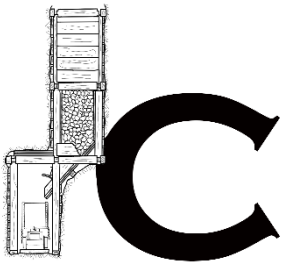
A

Arc Gate – a curved steel chute door. Miners used to comment that the friction of the rock flowing through the curved shape of the gate would help close the gate.

B

"Black Drift" – A drift on the 700 level of the Nighthawk mine. Why it was called the Black drift is presently unknown.

Bulldozing level – This was the 400 level (93ft above the 500 level) of the Sacramento Mine and was underneath the Sacramento Pit. It was on this level the Bulldozing chambers were located. This level was approximately 145 ft. below the bottom of the Sacramento Pit. See Also bulldozing chamber.



C

Cage Rider – An uncommon term for cager. See Cager

Concrete timber Posts of reinforced concrete were tried in 1909, as a cheaper longer lasting alternative to wood timber. The Concrete drift sets were cast in 6" X 8" individual pieces. Caps were about 4'^" long and posts 7'6". The caps weighed 350 pounds and the post were heavier. It was determined that although in some cases concrete was cheaper these sets could not be used in heavy ground, since concrete sets designed to support heavy ground would be too heavy to install. Concrete was used to line shafts like the Sacramento,

Campbell and Junction mines and also areas like pump stations. The frames for fire doors were also concrete.

Copper tube – A 20 foot or greater long copper pipe that was used to slide 1 ¼" X 8 in cartridges of dynamite into the toe holes in the Sacramento Pit. Copper pipe was used as it is non-sparking.

Copper Tube being used in the Sacramento Pit C-1919

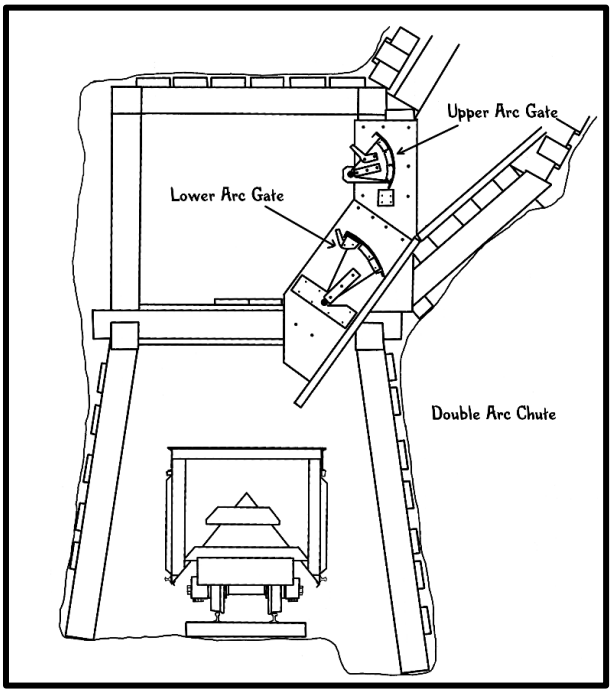
Creosoted timber – For a short time in 1909, creosote was applied in different amounts to timber as an experiment to preserve timber. It never was adopted . This was likely due to the flammability of creosote.

Diamond Tip – A type of Carbide lamp tip . It consisted of a "Lava" tip with metal casing sold by Universal Lamp Company. They made the popular, Autolite cap lamp. See also Lava tip

Diamond tip , In well used in an Autolite carbide cap lamp

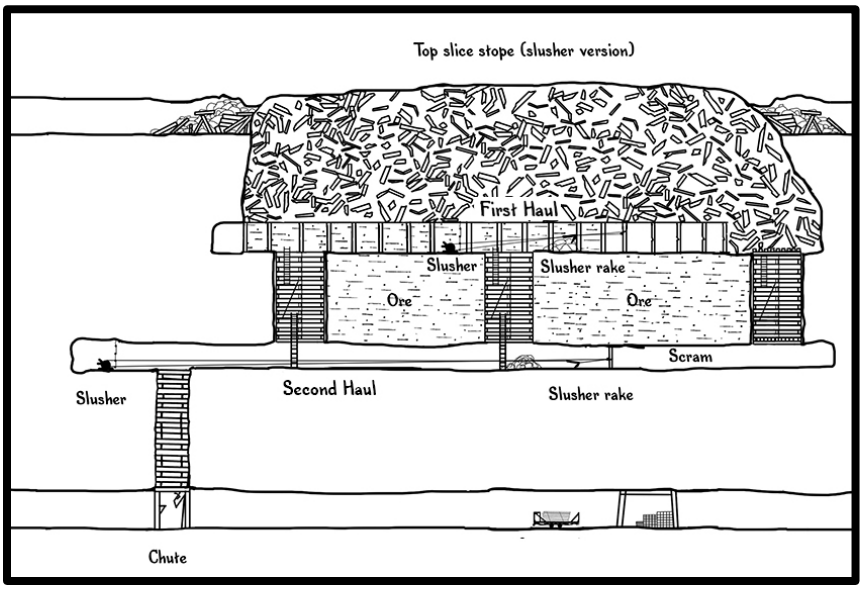
Disposition Ticket – A ticket given to the brakeman on the trains leaving the Sacramento Pit. This ticket indicated whether the train should be sent to the waste dumps, leach dumps or to the mill. The ore in the Sacramento Pit could not be determined visually. Each train was sampled and assayed before leaving the pit. Often the assays would not be completed in time so the train would be held at a main rail switch in Lowell until the assay was completed. The trains were not allowed to dump without a disposition ticket.

Double arc gate – Larger chutes, such as those used in in the block cave and in the Sacramento glory-holes used two chute gates, an upper and a lower. The upper or higher gate was used to control the rate of flow of muck from chute and the lower gate was used to stop the flow of muck.



Double Arc gate

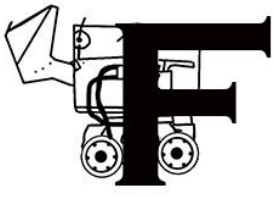
Double Mucking – Two slushers working together to remove muck from a stope. Typically, the first slusher moves the broken muck out of the mining face into a raise that leads to a scram. The second slusher moves the rock from the bottom of raise along the scram into a raise with a chute on the level. Alternatively, two slushers can be working together on the same floor one mucking from the face to a specific point where another slusher would move the rock into the chute.



Double Mucking in a top sluice stope

Dusted – A miner or former miner suffering from silicosis

"Dynamite with a fuse lit" – A phrase indicating someone was ill-tempered.



Fish-tail Tip – These are carbide lamp burners. There are two basic types. the lava burners had wings and two holes to feed in acetylene and four holes to allow in air. This type tip was used in lamps like the "Little Giant", "Copper Queen" and the "Uncle Sam" The other type of Fish Tail tip were homemade burners made

from pointed ends of damaged water needles from rock drills. A miner would cut a ½"-3/4" piece of including the pointed end from the water needle. A thin wire is run through the piece and then the un-pointed end was flattened with a hammer or ax. The wire was then removed creating the hole for the acetylene to travel through. A saw blade was used to clean up the hole and created the fish-tail. These tips were commonly used, but if they did not fit perfectly into the lamp. This would result in two flames burning a strong flame from the fish -tail and then a tiny secondary flame where the tip seated into the lamp.

Fish -tail tip(s) three made from water needles and a Lava fish-tail tips

Gasket – Collar for mule

Gloryholes – *3).*used to describe stopes, possibly a Cornish term

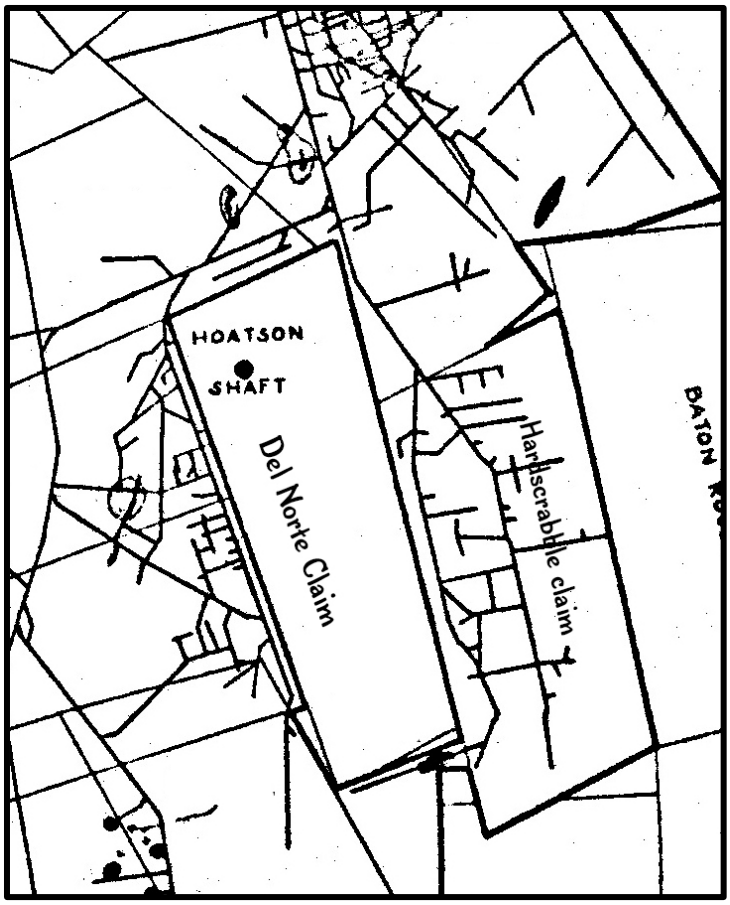
"Gold Stope" – A stope on the 200 level of the White Tail Deer Mine. This stope contained gold and silver values and was initially the only stope on the 200 level of the Whitetail deer mine.

"Gone where all the good miners go." – Indicates the miner has died.

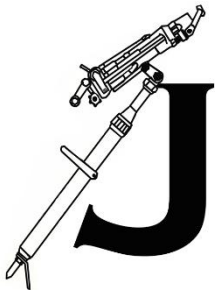
Greensands – The tailings from the Shattuck-Denn mill located near the Denn mine. These tailings had a greenish tinge. This tailing dam was reclaimed in the late 1990s

H

Hardscrabble Mine – Actually just a claim and not a mine. It was next to and east of to the Del Norte claim. The hardscrabble which the Hoatson mine. The Hoatson shaft was located on single claim that belonged to the C&A was almost entirely surrounded by the Copper Queen Properties only a narrow fraction of the Bengal claim that was also owned by the Calumet & Arizona connected to the claim. This resulted in the Hardscrabble was inconvenient to mine. The Lowell was the closest shaft owned Copper Queen located , but the Lowell workings had to go completely This around the Del Norte claim. The Sacramento was distant and was close to ½ mile away. claim was heavily mined between 1400-1900 levels mined from the Sacramento and Lowell mines.

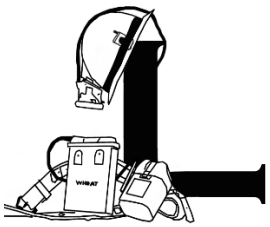


Hardscrabble "Mine "claim on the 1400 level



"Jewel" Tip – A type of Carbide lamp tip . It consisted of a "Lava" tip with metal casing sold by Justrite Manufacturing Company. See also Lava Tip

Jewel Tip(s)

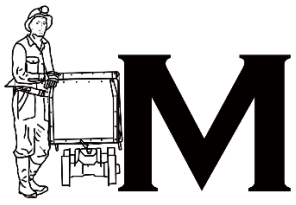


Lava Tip– A carbide lamp burner , these burners manufactured from Steatite a type of Talc mixed with a binder like clay. It was then fired to harden it. After this it was known as "Lava". This is rather erroneous as Steatite is a metamorphic rock and not volcanic. It was then formed into a small "Lava" tip with a hole for the acetylene to pass through. Sometimes air holes were added to create a stronger cleaner burn. These tips were held in with compression by a nut. Metals like iron or brass were not suitable for burners. The temperature of the burning acetylene causes the hole in the tip to oxidize and erode. Steatite ("Lava") does

not erode and has extremely limited expansion and contraction upon heating and cooling.

Lava tip(s)

Lower Arc gate– Larger chutes, such as those used in in the block cave and in the Sacramento glory-holes used two chute gates an upper and a lower. The lower gate was used to stop the flow of muck from the chute.. The chute handle was located in the center of the lower gate. See also Double arc gate

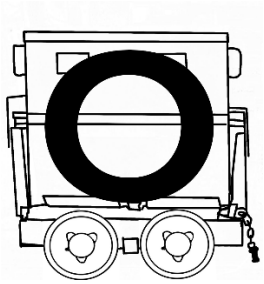


M

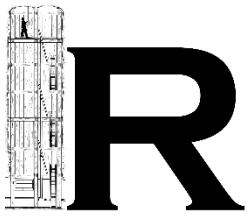
Machine Shop Bench – A bench in the Sacramento Pit that was at the same elevation the Copper Queen Machine shop had been originally located. The Machine shop was demolished before the Sacramento Pit mined through this area. It was better known as 5315N Bench.

Mourners bench – This a term for the bench in front of Copper Queen general office where old retired miners hung out during the day.

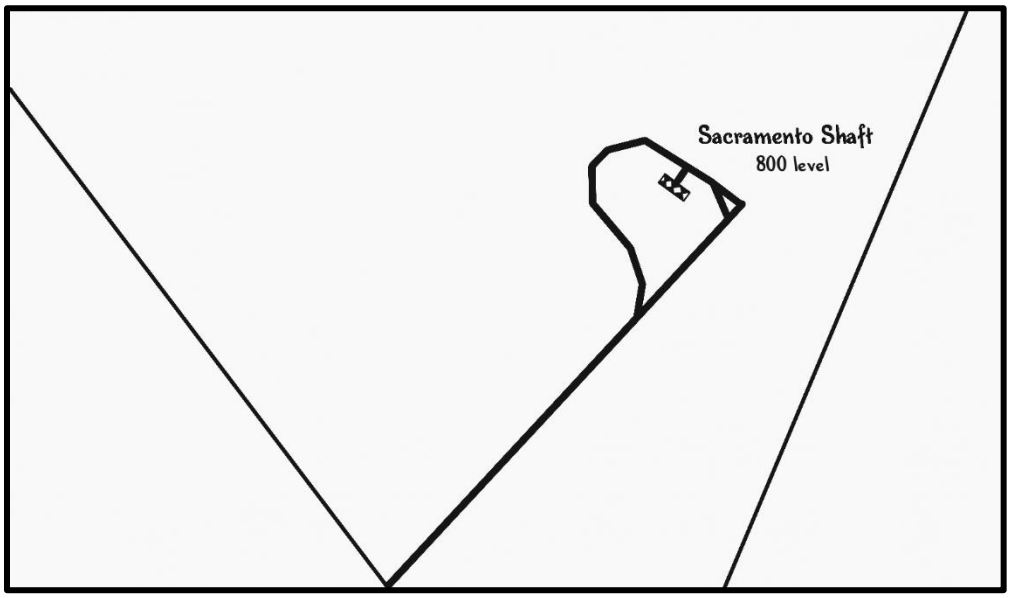
My Room – The small section of a stope a miner was assigned to work in.



"On the bean" – Focused and on the job



Runaround– a haulage tunnel driven as a loop to allow for rapid loading of trains at major chutes and a quick return to the shaft pocket or in case of the Queen tunnel a return to the surface. They were also used around major shaft stations to help move supplies and for trains dumping into a shaft pocket.



Runaround on the 800 level

Secondary Blast – In an open pit mine Blasting boulders left over from the primary that were too large to directly send to the crusher. These boulders were set aside and drilled and blasted later. This was called a secondary blast.

Service – For a motor crew to deliver empty mine cars to a crosscut and haul away loaded mine cars.

"Skin a Mule" – To drive a mule

Slice – short for top slice

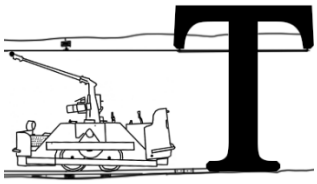
Sticker – Another term for a band aid

Steel timbering – Steel sets were tried in May 1909 inside 3-161 xc on the 300 level Holbrook Mine. The area selected was heavy ground where 12'x12" wood had failed in one month. It was determined steel timber could save 3 carloads of muck per set due to their smaller size. 8", 6" and 4" beams were tested. Unfortunately, these sets tended to fail in less time than regular timber sets and with their high cost were deemed unusable. A 6" steel set cost in 1909 , $18.00 and a 12"x12" timber set cost $5.50. Steel sets were used later on in Shaft stations and other areas. When the Shattuck Shaft was retimbered in the mid-1970s it was timbered with steel. Today, much of the timbering at the completed at the Queen Mine tour in areas unseen by the tourists are completed with steel . These areas are in light ground and timber rotting is the biggest concern. This is largely due to the fact that skilled timbermen are becoming extremely difficult to find and will become even more so over time. The plan is that the steel timber in these locations will last decades with limited high skilled repair.

Steel Timbering in the back of the 2966level Station Campbell Mine

Sun-Ray Burner – A type of Carbide lamp tip . It consisted of a "Lava" tip with metal casing sold by Dewar Manufacturing Company. See also Lava Tip

Sun-Ray Burner(s)



Target – A large circle often, white in color painted on an air doors to increase their visibility for the motormen, in the dark crosscuts. Some air doors had two targets painted on them.

Target on an air door. Campbell Mine C-1938

Temporary Stull – A piece of timber installed to provide short term support of ground or other timber.

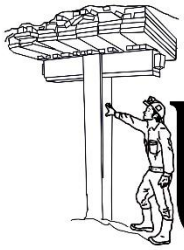
Temporary Stull (s) Two temporary stulls supporting segment sets at the 3rd level Southwest Shaft station

Timber Butcher – A timberman

Tommy Knockers – This was not a particularly common term in Bisbee. One Cornish miner explained Tommy Knockers as "Spirits of Dead miners" that explained the noises of ground moving, timber taking weight and rats moving behind timber .

"Top of the Slice" – The highest part of a top slice stope.

Trim – using the bucket on a steam or electric shovel to remove loose and unsafe material from the wall of the bench. In the Sacramento Pit the original bench height of 60 ft was reduced to 45 feet and finally to 30 feet because the shovels could not effectively clean up (trim) benches higher than 30 feet.

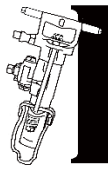


U

Upper Arc gate– Larger chutes, such as those used in in the block cave and in the Sacramento glory-holes used two chute gates an upper and a lower. The upper or higher gate was used to control the rate of flow of muck from chute. Two chute handles were located on the sides of the gate. See also Double arc gate

Y

Yellow iron – pyrite



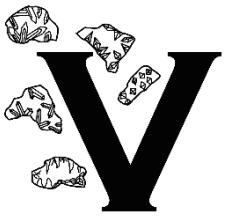
P

Primer – In Bisbee , In the underground mines this was the stick of dynamite than contains the blasting cap. Typically, only one stick of dynamite had a blasting cap. The other sticks of dynamite in the hole were detonated by this " primer" stick of dynamite detonating. The Sacramento pit used 12 ½ pound packages of dynamite with an electric blasting cap as the primer. In the Lavender Pit TNT Boosters were used as primers. Two primers were often used in open pit blasting.

Primary blast – The initial blast intended to break up the majority of in a given area into pieces of desired size. Any boulders too large for handling or processing are set aside to be blasted again in a secondary blast.

Prestripping – The removal of the overlying waste rock before mining of the ore can begin.

Pull – *1.)* to successful break the rock with a blast. *2.)* To remove rock from a chute



Vertical transfer– A vertical raise that is used to drop/transfer ore from one point to a lower point.

Abbreviations

Dw-33 – A plugger type drill manufactured by Sullivan Machinery Company

R.H.-36 – A plugger type drill manufactured in the 1920s by Cochise Rock Drill Manufacturing Company.

T-3 – A drifter type drill manufactured by Sullivan Machinery Company

TPD – Tons per day