

# Mine Bell Signs

by Ted Bobrink

Bell signals have been used in shaft mining since the mid-1800's. Any mine worked from a vertical or inclined shaft used bell signals to communicate with the hoist engineer on top. Bell signals were used to lift or lower miners, lift ore, and move material to and from the surface. The first mine bell signal signs were made of wood, but probably did not last long in a wet mine. Porcelainized steel was later used as well as painted tin until the 1920's when cloth and paper became common.

Early mine bell signs are very rare and highly prized. Condition is not a prime factor because they were used in harsh environments. Porcelain signs command the highest prices followed by tin, and then cloth or paper.

Each state had its own set of signal rules so the signs may vary considerably. I have found that bell signs from Colorado, Arizona, Montana, California, and Nevada tend to be the most common (in order). Some signs will be found with the name of the state mine inspector printed at the bottom. The name can be used to find out the approximate date of the sign.

## HOISTING & STATION SIGNALS AT ONEDA SHAFT SOUTH EUREKA MINING CO.

1 BELL TO HOIST SKIP  
 2 " " LOWER " "  
 1 " " STOP " " IF IN MOTION.  
 3 " " HOIST " " WITH ORE OR WASTE FROM CHUTE.  
 3 & 1 BELL TO HOIST SKIP WITH MEN RUN SLOWER THAN WITH ORE.  
 3 & 2 " " LOWER " " " " " "  
 3 & 3 & 1 BELL TO HOIST SKIP VERY SLOW " " " "  
 3 & 3 & 2 " " LOWER " " " " " "  
 2 & 2 " " " " " " TO NEXT LEVEL  
 2 & 2 & 2 " " " " " " TWO LEVELS & SCT.  
 1 & 2 " " " " " " FROM STATION TO CHUTE  
 2 & 1 " " HOIST " " TO NEXT LEVEL OR FROM CHUTE TO STATION  
 2 & 2 & 1 " " " " " " TWO LEVELS & SCT.  
 2 & 1 & 1 " " " " " " TO THE NEXT CHUTE & SCT.  
 2 & 2 & 1 & 1 " " LOWER " " " " " "  
 3 & 2 & 1 BELL READY TO BLAST. ENGINEER MUST SHAKE SKIP OR BUCKET TO INDICATE THAT HE IS READY TO HOIST WHEN GIVEN THE SIGNAL.

1200	LEVEL 3 & 3 BELLS	2400	1ST. WINDZE LEVEL 5 & 4 BELLS
1300	" 3 & 4 "	2600	2ND. " 5 & 5 "
1500	" 4 & 3 "	2800	3RD. " 5 & 6 "
1700	" 4 & 4 "	3000	4TH. " 5 & 7 "
1800	" 4 & 5 "	3200	5TH. " 5 & 8 "
2000	" 5 & 1 "	3400	6TH. " 5 & 9 "
2200	" 5 & 2 "	3600	7TH. " 6 & 1 "

CALLING THE DIFFERENT LEVELS BY TELEPHONE WILL BE RUNG AS THE LEVELS ARE INDICATED ABOVE. FOR EXAMPLE (1200 LEVEL) 3 & 3 BELLS ON THE TELEPHONE WILL CALL THE 1200 LEVEL.

SUPERINTENDENTS OFFICE	1	LONG & 1 SHORT BELL
MASTER MECHANIC	2	" " " "
ENGINEER	1	" BELL " "
SAW-MILL	2	" " " "
SHOPTENDER	3	" " " "

SOUTH EUREKA MINING CO.  
 SUTTER CREEK, CAL.  
 MARCH 1ST. 1916.

Wm. H. SCHMAL.  
 SUPERINTENDENT.