

## B & M SHAFT - HOMESTAKE MINE, LEAD, S.D.

BY AL WINTERS

Very few candlesticks can be traced to the Homestake Mine or mining district despite the many thousands of miners employed during the years candlesticks provided underground lighting. One candlestick presented to me by the Officers and Board on my retirement from Homestake can be traced to the Homestake Mine by the writing on the spike. The candlestick, a well made blacksmith stick 11-1/4 inches long is marked *R.C. Uncer 1905* on the thimble side and *B & M Lead S.D.* on the hook side. Nothing is known about Mr. Uncer or the circumstances under which he received the candlestick, but the B & M Shaft was one of the great early day shafts of western gold mining.

Sinking of the vertical shaft began in 1878, just two years after the Homestake lode discovery and was initially known as the "Old Abe" shaft for its location on the Old Abe and Giant Claims. The B & M name came later when contractors Balantyne and Mortensen installed the steam hoist. Deepening of the shaft continued as mining progressed and by 1905 the three compartment shaft had reached the 1250 foot level. During these early years, the B & M was the principal hoisting shaft and was located just to the east of the great Main Ledge Orebody from which Homestake mined well over

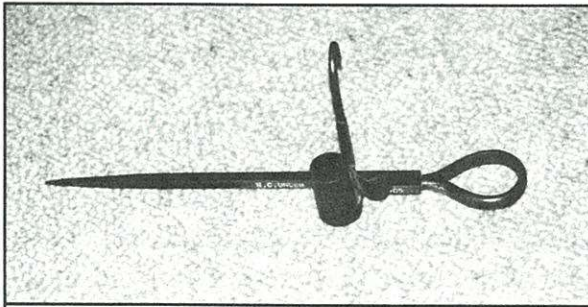
seventy-five million tons of gold ore which ran between 1/3 and 1/2 ounce per ton. This orebody produced the bulk of the mines thirty-eight million ounces of gold production and is still producing today.

The original hoist and boilers were shipped in by ox teams and installed in 1879. The hoist was equipped with double steam drive cylinders- 18 inches in diameter with a 60-inch stroke. The hoisting works had a depth capacity of 2000 feet with 2100 feet of 4 X 1/2 inch flat cable. Self dumping skips were employed making the shaft works one of the more efficient in the country. Improvements were continuous with a new compressor plant installed in 1894, a Cornish pump on the 600 level in 1894 and a 125 HP state of the art light plant in 1895.

The B & M was called on to bail water after an uncontrollable fire occurred on the 500 level in 1907. This fire was finally extinguished by flooding the entire mine and in May 1908, the B & M was fitted with 1000 gallon skips and set to work dewatering along with airlifts and 4 other shafts equipped with bail buckets. The mine was rapidly dewatered once work began and ore hoisting and stamp milling resumed again in July of that year.

In 1914, the original hoist was re-

placed with a new four cylinder Nordberg hoist capable of greater depth, faster speed and higher payloads. Sinking of the shaft continued to a depth of 2000 feet. In 1918, a speed and overtravel device called a Lilly hoist controller was installed



R.C. Uncer marking dated 1905, a rare example of a Homestake Mining candlestick.

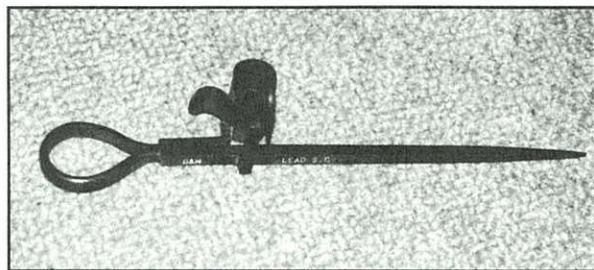
on the B & M skip hoist on an experimental basis. This device, which became the standard for the industry, saved the hoisting engine from ruin on January 2, 1921 when the skip rope broke. Unfortunately the broken rope end came flying back into the engine room killing the hoist engineer, Mr. Burke Lovejoy.

Subsidence from adjacent mining began to effect hoisting efficiency and emphasis was placed on the larger Ellison Shaft and a sister shaft which was commissioned in 1924. This sister shaft reached the 1800 level in 1928 and was named the B & M #2. The new shaft was located just east of the B & M (now known as the B & M #1) in solid ground.

On July 10, 1930, a fatal fire en-

gulfed the Ellison hoist works and completely destroyed the surface hoisting and compressor facilities as well as causing damage in the shaft when the hoist ropes burnt, dropping the cable, cage, and two cage tenders to the bottom. Following the fire, the B & M #1 handled the entire ore and waste hoisting requirements for the mine while the B & M #2 handled the men and materials.

The B & M was Homestake's main shaft and work horse for fifty-six years. The last ore was hoisted on December 29, 1934, and man hoisting ceased operations on March 9, 1935. In 1936, the B & M compressor plant was replaced by the Ross compressors bringing an end to the B & M surface facilities. The site of the old workings and remaining concrete slabs were removed by the Open Cut surface mine in 1985 erasing all traces of one



B & M Lead S.D. gang stamped along spike.

of the greatest gold producing shafts ever. Only a few B & M artifacts such as the candlestick photos and pieces of flat cable remain as reminders of those days.

**References:**

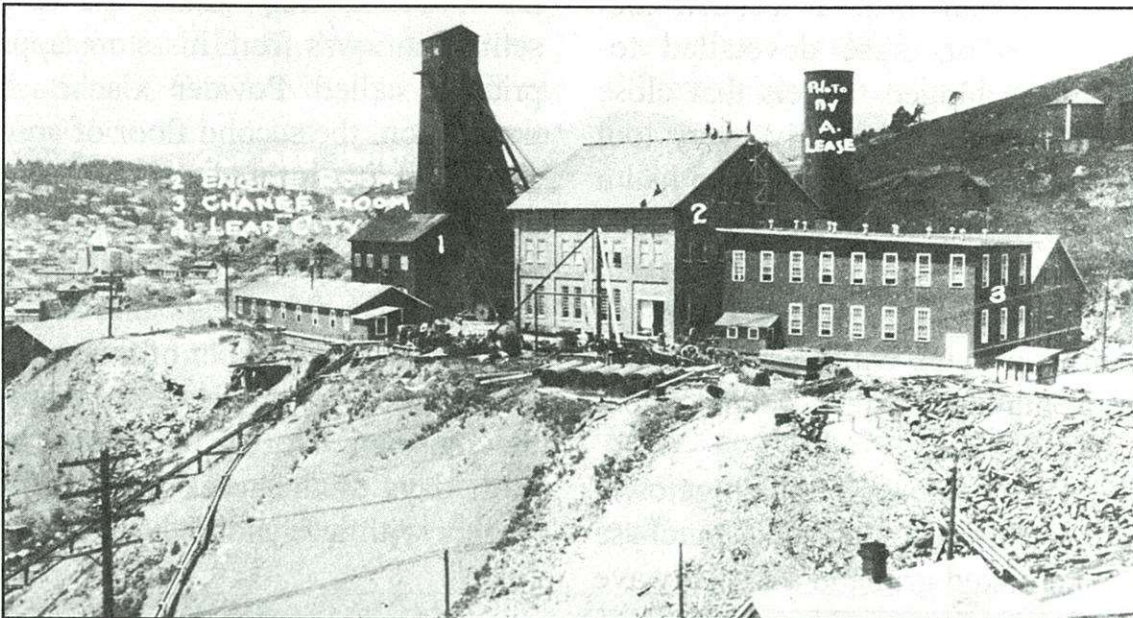
**1. Gold Belt Sites, Lead and Homestake.**

by Donald Toms, William J. Stone and Gretchen Motcherbacher. G.O.L.D. Unlimited. Lead, S.D. 1988

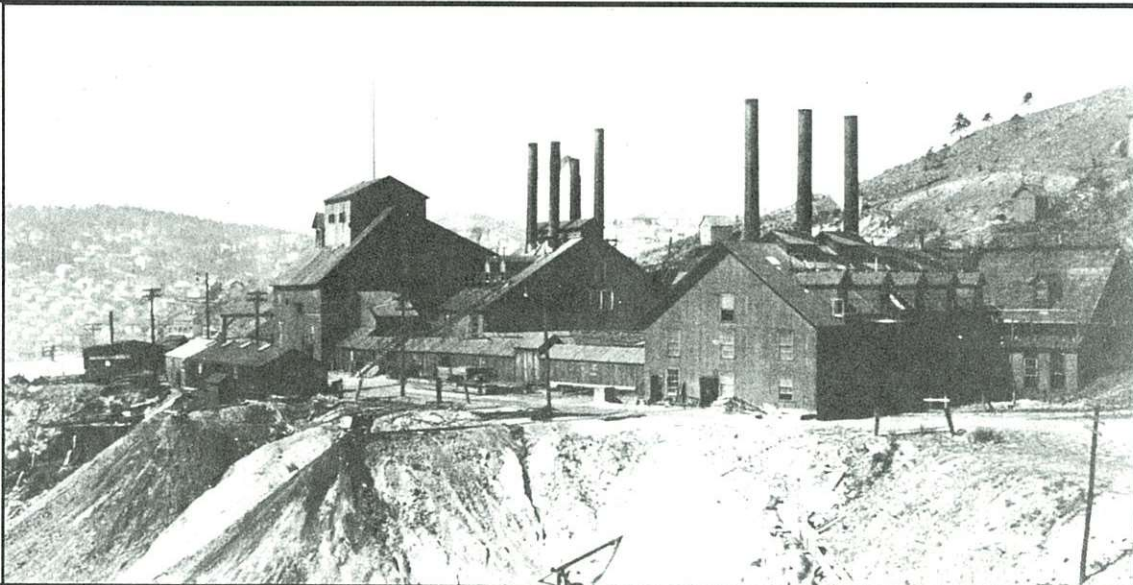
**2. The Treasure of Homestake Gold**

by Mildred Fielder. North Plains Press. Aberdeen, S.D. 1970

3. Personal communications with Chuck Tesch and Joel Waterland. Long time Homestake Employees.



Original B & M Shaft House ( Old Abe shaft) circa 1900 before upgrading hoist and surface facilities.



B & M Shaft after installation of new hoist and surface facilities. Circa 1920.