

# THE HOMESTAKE CLAW HAMMER

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Lead, South Dakota

This very large claw hammer was used in the Homestake Mine at Lead, South Dakota, from 1936 until 1966. The hammer head was made at Homestake's very own foundry and it used a 36 inch axe handle.

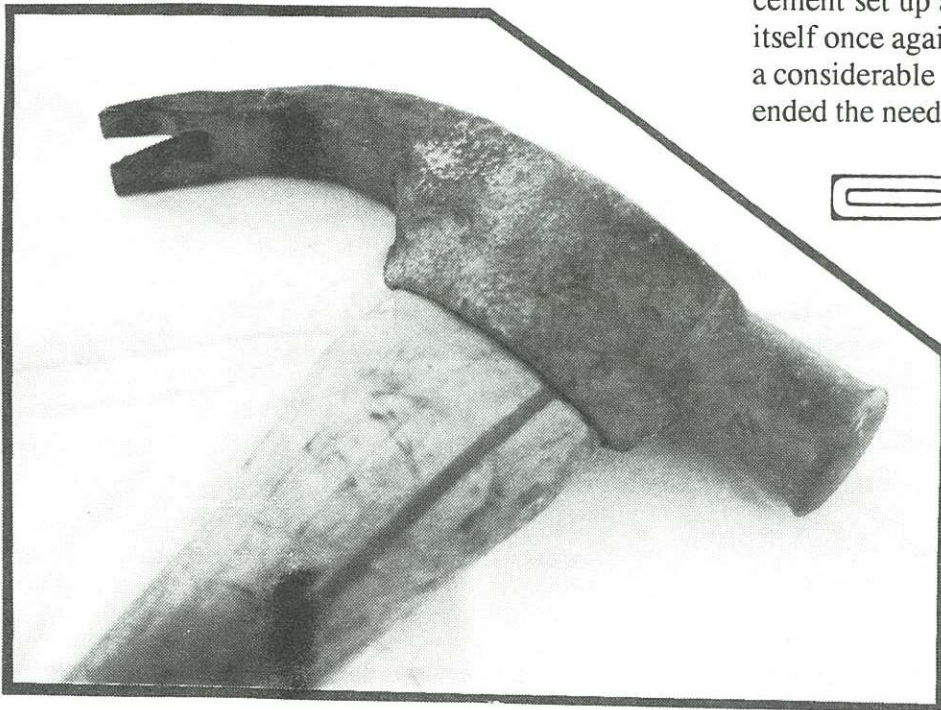
In 1936 the sand backfill method was started at the Homestake Mine. This consisted of running the mill tailings through rubber lined pipes back into the stopes. The mill tailings, "a fine sand material," was used to support the walls and prevent ground movement. It also provided a work platform for the miners to work on when taking a ten foot slice of ore out of the back of the stope.

The miners faced one problem with the sand backfill method however. When the rock was blasted from the back, it would sink into the sand becoming diluted and lowering the ore grade (or value). This occurred particularly during the "slushing" operations. To solve this problem, it became necessary to construct a floor

with two inch planks. This was no small feat by any means as some of the stopes reached 200+ feet in length and 40+ feet in width.

This floor provided a very good work platform to work on and to slush the rock to the ore bins. The miners mined away the back in ten foot lifts. Once the entire back was mined and the ore was removed, the plank floor had to be removed so that the stope could be backfilled again. This is where the Homestake claw hammer came in. It was used to remove the thousands of spikes in the floor and then used again to drive the spikes back in when replacing the floor for the next lift. (Thirteen lifts were taken between levels which were 150 feet apart.)

It was reported in 1966 that well over one million board feet of lumber was used each year for this process. The procedure was replaced in 1966 by adding cement to the sand backfill. Cement provided a smooth and hard surface for the miners to work on. After a few hours, the cement set up and the mining cycle could repeat itself once again. This procedure saved the mine a considerable amount of labor and materials and ended the need for the Homestake claw hammer.



The head of a Homestake claw hammer that was made by the Homestake Mine in its foundry. (Chuck Tesch collection)