H.L.Lowman, Miner's Pick, Vº48,080, Fatented June 6,1865. Inventor M. L. Lowman Witnesses Oclamis Knight. Alex of & Klancks.

UNITED STATES PATENT OFFICE.

HARVEY L. LOWMAN, OF VIRGINIA CITY, NEVADA.

IMPROVED MINING-PICK.

Specification forming part of Letters Patent No. 48,080, dated June 6, 1865.

To all whom it may concern:

Be it known that I, HARVEY L. LOWMAN, of Virginia City, in the county of Story and State of Nevada, have made a new and useful Improvement in Mining Picks; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, which are made part of this specification, and in which-

Figure 1 represents my improvement by a longitudinal sectional view through the pick, showing the helve or handle in elevation. Fig. 2 is a transverse central section across the eye

of the pick.

The same letters refer to like parts in the different figures; and to enable one skilled in the branch of industry appertaining to my invention to construct and use the same, I will

proceed to describe it.

The objects of my improvement do not distinguish it from other inventions of the same class which have preceded it. These are strength and stability. The first is due to the proportion of the parts, and the second to the method of attachment of the helve or handle. It is practically useless to endeavor to attain one without the other, for both are necessary to a satisfactory result, and I shall therefore consider myself justified in treating the two features as combined to produce as near a perfect result as the nature of the case will permit.

I shall state both of the features above alluded to, and while treating of them separately I explicitly state that my claim is and will be based upon their combination in one tool as a new article of manufacture, the tool thus constructed being better, stronger, and more stable than any other.

I make the eye of the pick of elliptical form of an even size during its whole length, and the latter is increased, as shown in the drawings, making a raised eye, which, in addition |

to prolonging the grasp upon the helve, has two other effects, each in itself desirablenamely, first, increasing the weight of metal at the middle of the tool; and, second, forming an elongation transversely to the general trending line of the pick, so as to receive the junction of each bit or end of the pick by a gradual curve, instead of by an angular or shouldered junction. The vibration of the bit of the pick in its ordinary percussive action is ultimately expended at the point where it springs out of the central boss or head, and the tendency to rupture at this point is both theoretically and practically demonstrable. By a gradual mergence of the bit into the head, no absolute line of fracture is anticipated or provoked, as is the case in the squareshouldered bit, which distinctly vibrates upon the line of junction with the central boss. The end of the helve is not split, wedged, or otherwise spread, but is intended to fit and fill the hole per se, as does the whole length of the portion embraced by the eye. In this connection it can be readily withdrawn by a direct blow, suitably applied upon the helve, but withstands in a surprising and highly satisfactory manner the jar incident to the blow received transversely to the axis of the helve.

Having thus described my invention, what I claim therein as new, and desire to secure by

Letters Patent, is-

As a new article of manufacture, the pick constructed as herein described—that is to say, with an elliptical socket—the opposite sides of which are parallel to each other and elongated in the line of its axis, in combination with bits merging by curved lines into the central socketed head, as described and represented.

H. L. LOWMAN.

Witnesses:

C. D. SMITH. OCTAVIUS KNIGHT.