

J. SULLIVAN.
Bush Hammer.

No. 201,850.

Patented March 26, 1878.

Fig. 1.

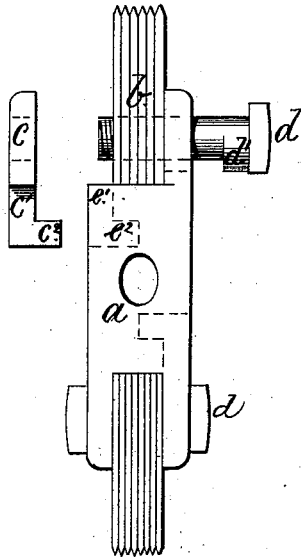


Fig. 2.

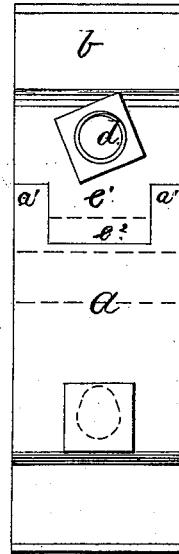
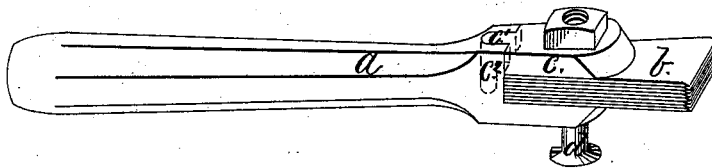


Fig. 3.



WITNESSES:

Chas. Larkin

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INVENTOR:

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by Joseph A. Miller

UNITED STATES PATENT OFFICE.

JOHN SULLIVAN, OF STONINGTON, CONNECTICUT.

IMPROVEMENT IN BUSH-HAMMERS.

Specification forming part of Letters Patent No. **201,850**, dated March 26, 1878; application filed February 6, 1878.

To all whom it may concern:

Be it known that I, JOHN SULLIVAN, of Stonington, in the county of New London and State of Connecticut, have invented certain new and useful Improvements in Bush-Hammers; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention has reference to improvements in bush-hammers used for dressing stone; and consists in the peculiar and novel manner for securing the steel bits or cuts in the gibs of the hammer.

Figure 1 is an end view of my improved double hammer, the clamp at one end being shown as loose. Fig. 2 is a side view of the hammer. Fig. 3 is a perspective view of a single hammer or bit-stock.

Bush-hammers, as heretofore constructed, consisted of a gib and a clamp-plate, by which the steel bits or cuts on both ends are secured by a bolt passing through the bits, and any inequality in thickness of the steel bits would prevent a firm bearing of the clamp-plate on the bits, which would spring and give under a blow and injure the same.

In my improved hammer the bits are secured at each end by a separate clamp-plate, which firmly rests in a seat provided in the stock or gib, and each set of bits or cuts is firmly secured by a bolt.

In the old bush-hammer the bits or cuts are provided with a shoulder on each side, and a projecting portion entering a groove in the stock or gib. Such bits did not bear evenly, as it is difficult to fit these shoulders and the cen-

tral portion with sufficient accuracy to give them all a uniform bearing. The bits in my bush-hammer are square at the ends, and rest firmly on the surface of the stock or gib.

In the drawings, *a* is the stock or gib; *b*, the steel bits or cuts; *c*, the clamp, provided with the central shank *c*¹ and the projecting dowel *c*². *e*¹ is a gain or recess in the stock *a*, and *e*² is a rectangular mortise sunk below the gain *e*¹. The shank *c*¹ is fitted into the stock *a*, and the projection *c*² enters the mortise *e*² still farther, and firmly supports the clamp against the sudden shocks when in use. The bolt *d* is passed through the lip of the stock or gib through the bits and the clamp, and is secured by a nut, to keep this bolt from turning. The end near the head is provided with a spline or enlargement, fitting into a hole of like section. When the bolt is tightened the bits will be firmly held between the clamp, and are not liable to spring or ring when in use, and as they have a firm bearing on their rear end the whole width, they are not liable to upset at the shoulders, as is the case with the bits in the older construction of bush-hammers.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

In a bush-hammer, the combination, with the stock or gib *a*, provided with the recess *e*¹ and *e*², of the bits *b*, resting squarely on the stock the whole of their width, the clamp *c*, provided with the shank *c*¹ and dowel-piece *c*², the whole secured together by the bolt *d*, substantially as and for the purpose described.

In testimony that I claim the foregoing as my invention I affix my signature in presence of two witnesses.

JOHN SULLIVAN.

Witnesses:

JOSEPH A. MILLER,
AMOS A. WHITE.