

J. HARTNOLL.

HAMMER FOR DRESSING STONE.

No. 185,999.

Patented Jan. 2, 1877.

Fig. 1.

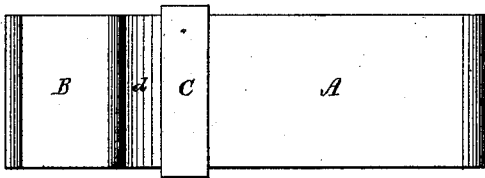


Fig. 3.

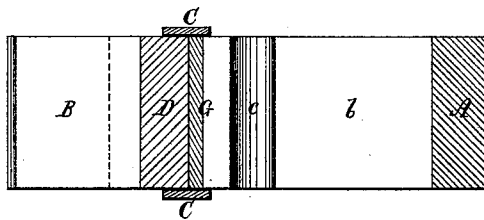


Fig. 2.

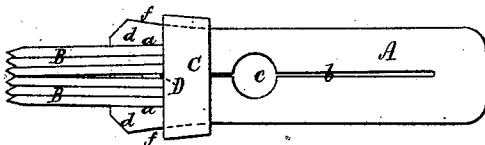
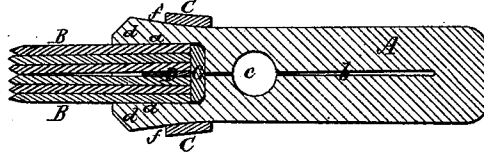


Fig. 4.



Witnesses

S. W. Piper

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R. H. Eddy.

UNITED STATES PATENT OFFICE.

JOHN HARTNOLL, OF MASON, NEW HAMPSHIRE, ASSIGNOR TO ALEXANDER McDONALD, OF BELMONT, MASSACHUSETTS.

IMPROVEMENT IN HAMMERS FOR DRESSING STONE.

Specification forming part of Letters Patent No. 185,999, dated January 2, 1877; application filed December 28, 1876.

To all whom it may concern:

Be it known that I, JOHN HARTNOLL, of Mason, of the county of Hillsborough, of the State of New Hampshire, have invented a certain new and useful Improvement in Hammers or Tools for Dressing Stone; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, of which—

Figure 1 is a side elevation, Fig. 2 a top view, Fig. 3 a longitudinal and vertical section, and Fig. 4 a longitudinal and horizontal section, of a stone-dressing hammer-head, provided with or embodying my invention.

The first part of my invention consists in a stone-dressing hammer-head, provided with a slit, and a tapering recess arranged in it, as set forth.

The second part of my invention consists in a stone-dressing hammer-head, provided with a slit, a tapering recess, and jaws, all as set forth.

The third part of my invention consists in a stone-dressing hammer-head, provided with the slit, the tapering recess, and jaws, and a collar applied to such head, all being as set forth.

The fourth part of my invention consists in a stone-dressing hammer-head, provided with the slit, the tapering recess, a wedge, and a series of chisels, all as and arranged as set forth.

The fifth part of my invention consists in the stone-dressing hammer-head, provided with the slit, the tapering recess, and jaws, the series of chisels, and a wedge, arranged as set forth.

The sixth part of my invention consists in the stone-dressing hammer-head, provided with the slit, the tapering recess, and jaws, the series of chisels, the wedge, and the collar, all arranged and constructed substantially as specified and represented.

The seventh part of my invention consists in the combination of a bridge-piece, as hereinafter described, with the recessed and slotted hammer-head, and its wedge and cutters arranged as set forth.

The purpose of my invention is the securing of or firmly fastening a series of chisels to the head.

The hammer-head exhibited at A is provided at its front end with a tapering recess, *a*, as shown, for the reception of a series of dressing tools or chisels, B B. From the middle of the base of such recess the head is slitted, as represented at *b*, through the handle-eye *c*, and nearly to the butt or rear end of the head. Furthermore, the parts *d d*, which flank the recess, constitute jaws to hold the series of chisels in place. Each of the said jaws *d d* is wedge-shaped, or tapers as represented at *f*, to co-operate with a collar, C, in securing the chisels. This collar circumscribes the head transversely, and on being driven against the tapering outer surfaces of the jaws *d d*, will crowd the said jaws toward each other, and tightly against the series of chisels. Between the two middle chisels there is placed a wedge, D, it being arranged with them in manner as represented. It serves to spread the series in opposite directions in the recess, and, with the jaws and collar, operates to confine the chisels to the head. The slit of the head enables the jaws to be readily closed on the series of chisels. Within the eye of the head a handle is to be inserted.

In order to support the chisels at their inner ends, and to prevent the wedge D from being driven into the slit *b*, there is arranged in the recess *a*, in manner as shown, an abutment or bridge-piece, G, of metal, which, on its front surface, may be formed as shown, or may be concave or convex. When the said face is curved the cutting-edges of the chisels become arranged in a corresponding curve, it being sometimes desirable to so dispose them.

I claim as my invention as follows:

1. The stone-dressing hammer-head A, provided with the slit *b*, and the tapering recess *a*, and jaws *d d*, as set forth.

2. The stone-dressing hammer-head A, provided with the slit *b*, the tapering recess *a*, and jaws *d d*, and the collar C, applied to such head, as set forth.

3. The stone-dressing hammer-head, pro-

vided with the slit *b*, and the tapering recess *a*, the wedge D, and the series of chisels B, arranged as set forth.

4. The stone-dressing hammer-head A, provided with the slit *b*, the tapering recess *a*, and jaws *d d*, the series of chisels B, and the wedge D, arranged as set forth.

5. The stone-dressing hammer-head A, provided with the slit *b*, the tapering recess *a*, and jaws *d d*, the series of chisels B, the wedge D, and the collar C, arranged as set forth.

6. The stone-dressing hammer-head, recessed and slotted as described, and provided with the wedge, chisels, and bridge-piece, all being substantially as specified.

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Witnesses:

R. H. EDDY,

J. R. SNOW.