

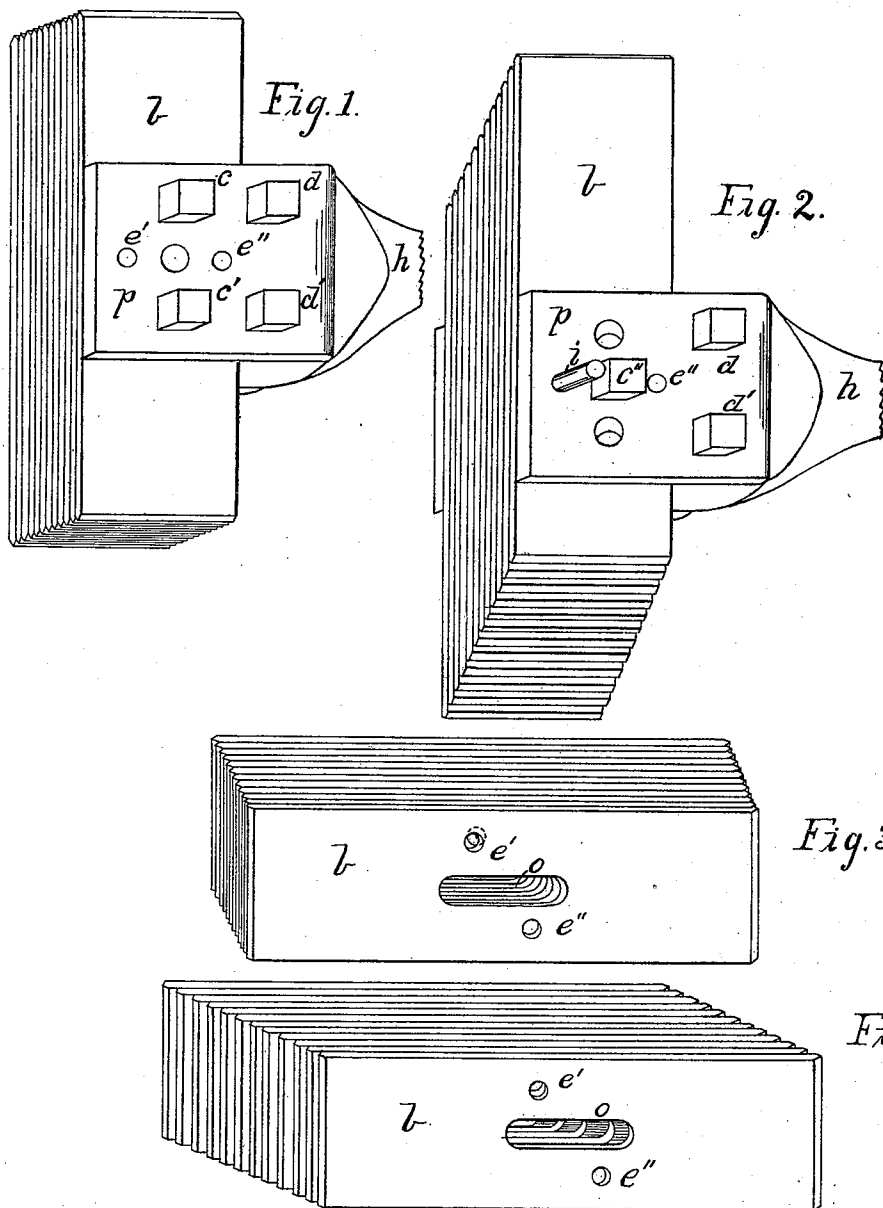
(No Model.)

2 Sheets—Sheet 1.

P. DENHAM.
GRANITE HAMMER.

No. 469,040.

Patented Feb. 16, 1892.



WITNESSES:

Francis F. Ford
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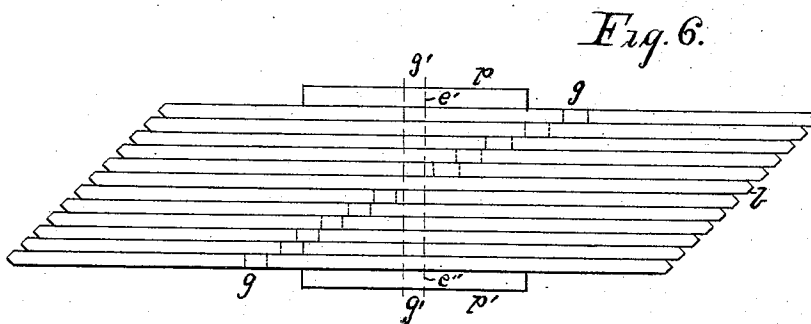
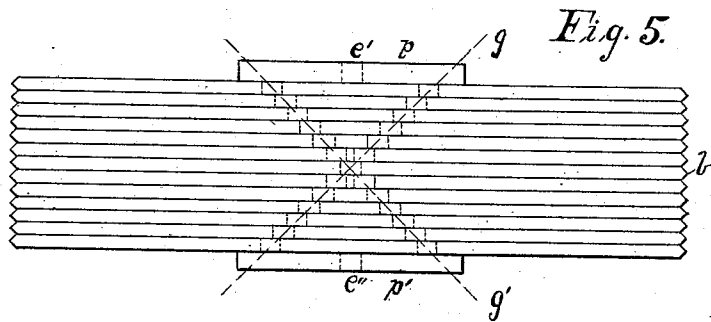
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2 Sheets—Sheet 2.

P. DENHAM.
GRANITE HAMMER.

No. 469,040.

Patented Feb. 16, 1892.



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PERRY DENHAM, OF SANDFORD, INDIANA.

GRANITE-HAMMER.

SPECIFICATION forming part of Letters Patent No. 469,040, dated February 16, 1892.

Application filed September 7, 1891. Serial No. 405,053. (No model.)

To all whom it may concern:

Be it known that I, PERRY DENHAM, a citizen of the United States, and a resident of Sandford, in the county of Vigo and State of Indiana, have invented certain new and useful Improvements in Granite-Hammers; and I do hereby declare that the following is a full, clear, and exact description of the invention, 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 part of this specification.

My invention relates to that class of granite-hammers that are composed of a number of metallic plates or blades which are fastened firmly together, and when so fastened the several edges of the blades taken together present a rigid surface for dressing stone.

The objects of my invention are to provide a hammer that will be strong and substantial and a means of sharpening the several edges of the blades that will be more accurate and time-saving than similar tools used heretofore. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the hammer when ready for use. Fig. 2 is a view of the hammer when it is prepared for grinding the edges of the blades. Fig. 3 is a view of the blades, showing the position of the different perforations. Fig. 4 is a view of the blades removed from the handle, but arranged for grinding, and showing the position of the various perforations while so arranged. Fig. 5 is an elevation of the longitudinal edges of the blades *b* in the position for use, showing by dotted lines the perforations *e'*, *e''*, *g*, and *g'*. Fig. 6 is an elevation of the longitudinal edges of the blades *b* in position for grinding, showing by dotted lines the perforations *e'*, *e''*, *g*, and *g'*.

Similar letters refer to similar parts throughout the several views.

The letter *h* indicates a strong hard-wood handle, one end of which is enlarged and planed square, as seen in Figs. 1 and 2.

The letters *p p'* indicate two strong flat plates, usually of malleable iron, which are bolted upon opposite sides of the handle *h*.

These plates extend beyond the end of the handle and thus form a fork upon the end of the same, within which the plates or blades *b* are clamped. The plates *p p'* are perforated to receive the bolts *d* and *d'*, by means of which the plates are fastened upon the handle, the bolts *c c' c''*, and the peg *i*, the purpose of which is set forth hereinafter.

The letter *b* indicates a strong steel blade, a number of which are shown in Figs. 3 and 4. The blades *b b* are sharpened at each end to a V-shaped edge, and the bevels leading to said edges are at an angle of forty-five degrees to the sides of the blades. Each plate is perforated at the center by a long slot *o*, each end of which is rounded, and at *g* and *g'*, as explained hereinafter, and shown in the Figs. 3 and 4.

The hammer-head is composed of twelve or any other desired number of blades *b*. By sliding the blades one upon the next succeeding one all of the sharp edges of the same can be brought to lie in one plane, which plane is generally at an angle of forty-five degrees from the plane of the blades *b*, and consequently the bevels of the edges of one side of the blades, which are also at an angle of forty-five degrees, will all lie in one plane. While the blades are thus arranged, as shown in Fig. 4, I make a perforation *g* through the entire mass at right angles to the planes of the blades to receive the peg *i*, which serves to hold the blades in such position. By sliding the blades upon each other in the opposite direction the other bevels of the edges can be brought into the same plane and at an angle of forty-five degrees from the planes of the blades, when a perforation *g'* can be made through the mass of blades at right angles to the same to receive the peg *i*, thus fixing the blades firmly in such position.

Having prepared the blades *b* in the manner just described, I place the blades within the fork or clamp formed at the end of the handle *h*, where they are firmly fastened by means of the bolts *c* and *c'*. If I wish to sharpen the blades now, I pass the bolt *c''* through the perforation at the middle of the plates *p p'*, and consequently through the slots *o* of the blades, as shown in Fig. 2. Then slide the blades upon each other until their edges are all in the same plane, said

plane being at an angle of forty-five degrees from the plane of the blades, and by so doing the bevels of one side of the edges of the blades are brought into the same plane and the perforations *g* of the several blades are brought opposite to each other and the perforations *e'*. Then I pass the peg *i* through said perforations, and thereby fasten the blades in such position in the fork of the handle. I now tighten the bolt *c''*, and placing the beveled ends of the hammer-head upon the grinding-wheel the edges of all the blades are ground evenly and at exactly the same angle. Having ground the two sets of bevels in this position, I loosen the bolt *c''*, remove the peg *i*, and then slide the blades upon each other in the opposite direction until the other bevels of the blades are in the same plane and the peg *i* may be passed through the perforations *g'* and *e''*. Then tightening the bolt *c''* the remaining bevels may be ground down similar to those of the other side of the blades. Having ground the edges of the blades, as desired, it is only necessary to remove the peg *i* and slide the blades back until the edges are brought into one plane at right angles to the plane of the

blades, insert and tighten the bolts *c* and *c'*, and the hammer is ready for use, as shown in Fig. 1.

Having thus described my granite-hammer, what I claim as my invention, and desire to secure by Letters Patent, is—

The combination, in a granite-hammer, of a handle *h*, to which are fastened two metallic plates or clamps *p p'*, said clamps being perforated to receive the bolts *d d' c c' c''* and the peg *i*, with a number of blades *b*, both ends of which are ground to a V-shaped edge, said blades being perforated at the middle by a slot *o* and at *g g'* in the different blades, being so situated that when the blades are brought into position for grinding they will stand opposite to each other and receive the peg *i*, all as and for the purpose set forth and specified.

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

PERRY DENHAM.

Witnesses:

FRANCIS T. HORD,
GEORGE M. DAVIS.