

P. H. BARTSCH.

HAMMER.

APPLICATION FILED AUG. 14, 1907.

937,915.

Patented Oct. 26, 1909.

Fig. 1.

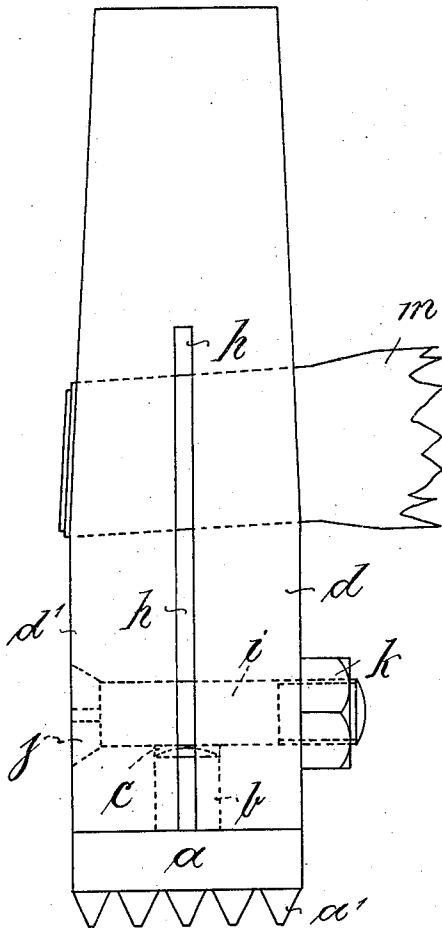
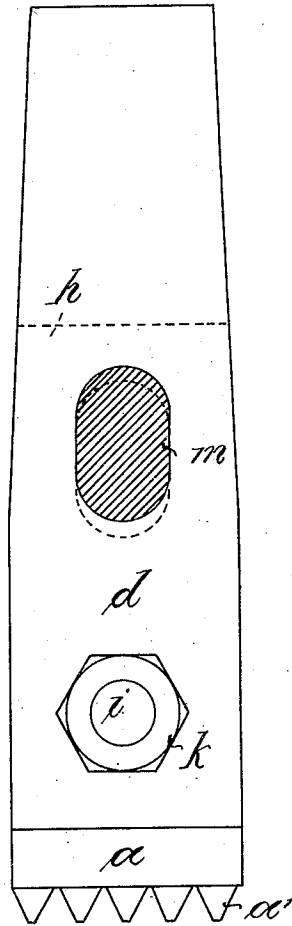


Fig. 2.



Witnesses:

Arthur Scholz
Carl Rupp

Inventor:
Paul Hubertus Bartsch
by Robert Daigle,
Attorney

UNITED STATES PATENT OFFICE.

PAUL HUBERTUS BARTSCH, OF STRIEGAU, GERMANY.

HAMMER.

937,915.

Specification of Letters Patent.

Patented Oct. 26, 1909.

Application filed August 14, 1907. Serial No. 388,502.

To all whom it may concern:

Be it known that I, PAUL HUBERTUS BARTSCH, a subject of the King of Prussia, and resident of 10 Jauerstrasse, Striegau, in the German Empire, have invented certain new and useful Improvements in Hammers, of which the following is an exact specification.

This invention relates to improvements in hammers for dressing stone, marble and the like, more especially to improvements in hand hammers for planing, molding and shaping stone, marble and the like.

This new stone cutter or hand hammer differs from those now in use by the particular and new attachment or fastening of the cutting edge to the hammer body and it is the object of the present invention to provide for such a special fastening device that the cutting edge can easily be exchanged without any loss of time.

Further advantages arising from the improved hammer construction consist in obtaining a good resiliency of rebounding after each blow made with the hammer and in enabling the workman to freely observe the whole work-piece before the hammer, that is to say, no projecting parts of the fastening means cover an objectionable amount of the piece of stone operated upon.

It may be observed that hammers and also chisels are known in which the attachment of a cutting edge is obtained by a frictional action whereby the shocks of the blows were transmitted to the fastening device which was thereby damaged and also the solidity of structure necessary for obtaining that rebounding action which is of such importance in ordinary handle hammers as well as pneumatic and like hammers was totally lost. These disadvantages are efficiently removed by the present invention, which consists in a hammer the body of which is slotted to a sufficient extent to insure resiliency of the jaws thus formed and in approaching to or removing the jaws from each other by a clamping screw bolt passing through the jaws. The detachable cutting or working face butts directly against the face end of the body or stock and is provided with a pin projecting into a prismatic recess conveniently of circular cross section formed with a half in each jaw. The jaws thus frictionally hold the pin but the shocks of the blows are transmitted directly to the hammer body or stock.

To make my invention clear, I refer to the accompanying drawing, in which:

Figure 1 is a side view of the hammer body, its handle being partially omitted. Fig. 2 is a view taken at right angles to that of Fig. 1, the handle being sectioned.

Referring to the figures, *a* is the separable edge piece in this particular example provided with points *a'*, as usual in hand tools for dressing stones and the like hard wares.

b is a fastening pin made in this example integral with the cutting edge *a*; however it is not necessary to have this pin integral with the edge *a*, they can be fixed to each other in any convenient manner, for instance by screwing.

h is a comparatively long slot extending over the whole breadth of the stock and from the one end of the hammer body nearly to or even beyond the middle for imparting resiliency to the jaws *d*, *d'*.

i is a screw bolt passing transversely through the clamping jaws *d*, *d'* and being provided with a head *j* closely fitting into a recess of the jaw *d*.

k is a screw nut.

The pin *b* rests in a prismatic recess *c* of circular cross section arranged axially with regard to the length of the slot *h* and formed in both the clamping jaws *d*, *d'*.

m is the handle attached to the hammer body in any convenient or preferred manner.

For attaching the working face *a* to the hammer the prismatic projection *b* on the rear side of the working face is inserted in the prismatic recess *c* which is formed in both walls of the slot *h* so that the back of the working face *a* bears directly against the end face of the jaws and conforms to the shape of the end of said jaws. The clamping screw bolt *i* does not require to be dismounted for the purpose of introducing the cutting face or edge piece *a* and by making tight the nut *k* the fastening pin *b* is securely held in connection with the hammer body by friction, owing to the resiliency of the clamping jaws *d* obtained by the long slot *h*. For exchanging the cutting edge it is only necessary to loosen the nut *k* whereupon the cutting edge can easily be removed and then to insert a new cutting edge as described above. Trials made with this improved hammer construction have proved that this hammer can easily be handled, rebounds easily from the piece of work acted upon and the clamping pin remains undis-

turbed thus lengthening the life of the hammer. This mode of attaching the cutting edge to the hammer body is not limited to its employment in hammers having the usual shafts as other hand tools such as pneumatic or otherwise mechanically operated hammers for dressing stone and the like can be provided with this improvement.

I claim:

- 10 A hammer composed of a solid metal stock divided by a slot extending over the whole breadth of the stock and axially for a considerable distance from one end face of the stock toward the middle of the same, the
15 walls of said slot being recessed from said end face toward the center, a detachable working face substantially corresponding in

shape to the said end face of the hammer stock, a prismatic projection formed on the rear side of the working face and fitting between the walls of said slot and into the recess formed in said walls while said rear side bears against said end face on the stock from which the slot extends axially and a bolt passing through said stock and axial slot to draw the walls of the slot and the recesses therein together. 20 25

In witness whereof I have hereunto set my hand in the presence of two witnesses.

PAUL HUBERTUS BARTSCH.

Witnesses:

ERNST KATZ,

ERNST BLUSCH.