(No Model.) 2 Sheets—Sheet 1.

# S. H. PICKERING.

## STONE DRESSING TOOL.

No. 558,739. Patented Apr. 21, 1896.

Fig. 1.

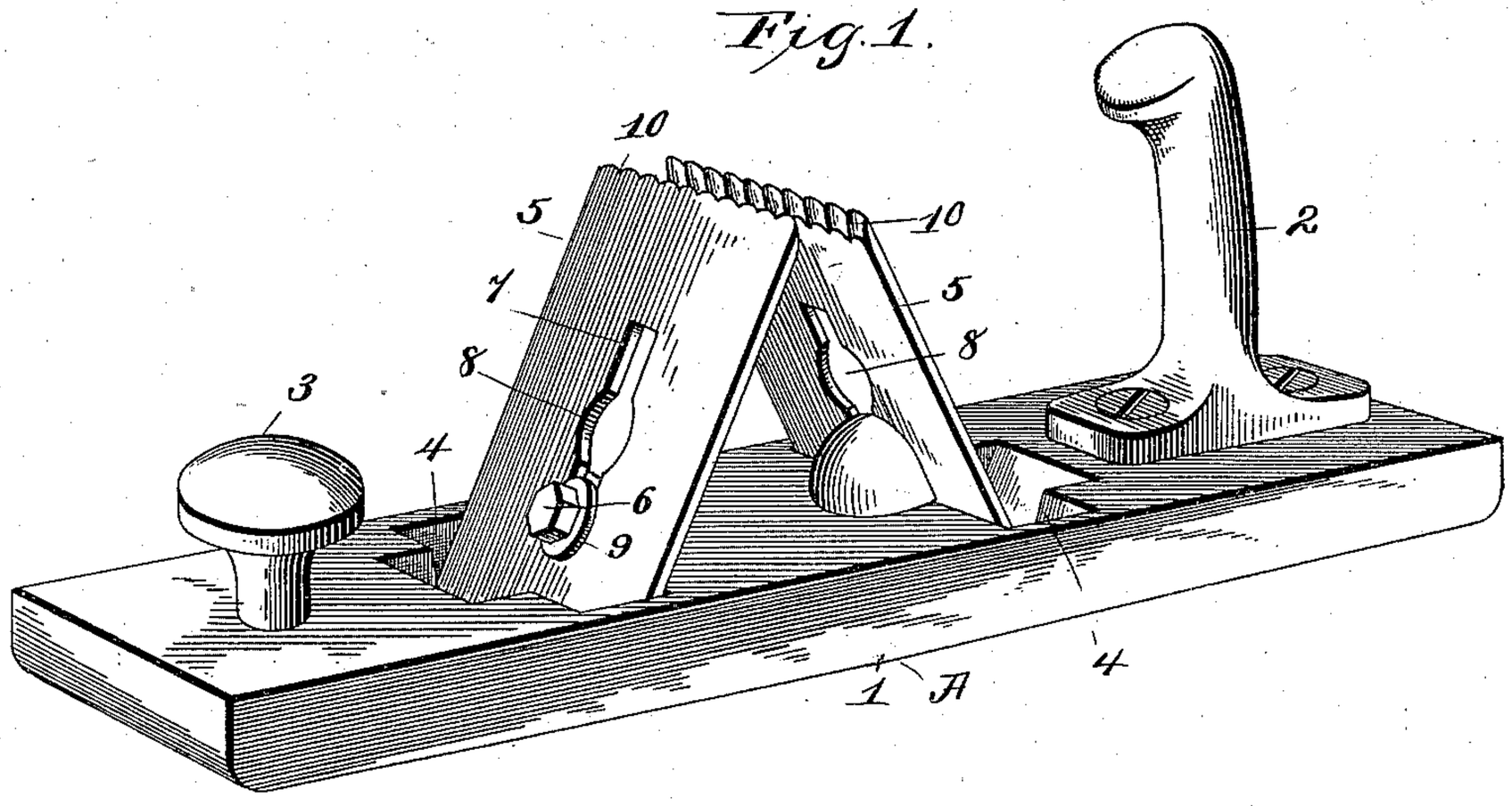
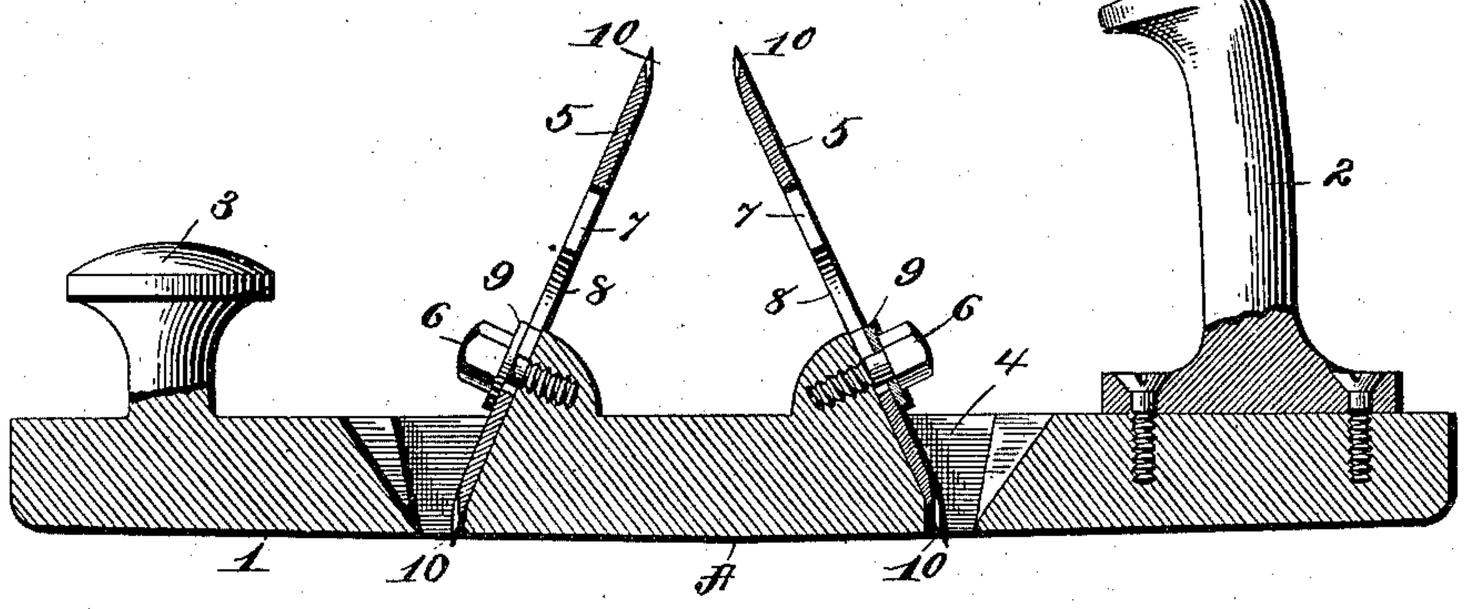



Fig. 2.




Witnesses

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(No Model.) 2 Sheets—Sheet 2.

# S. H. PICKERING.

## STONE DRESSING TOOL.

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Fig. 3.

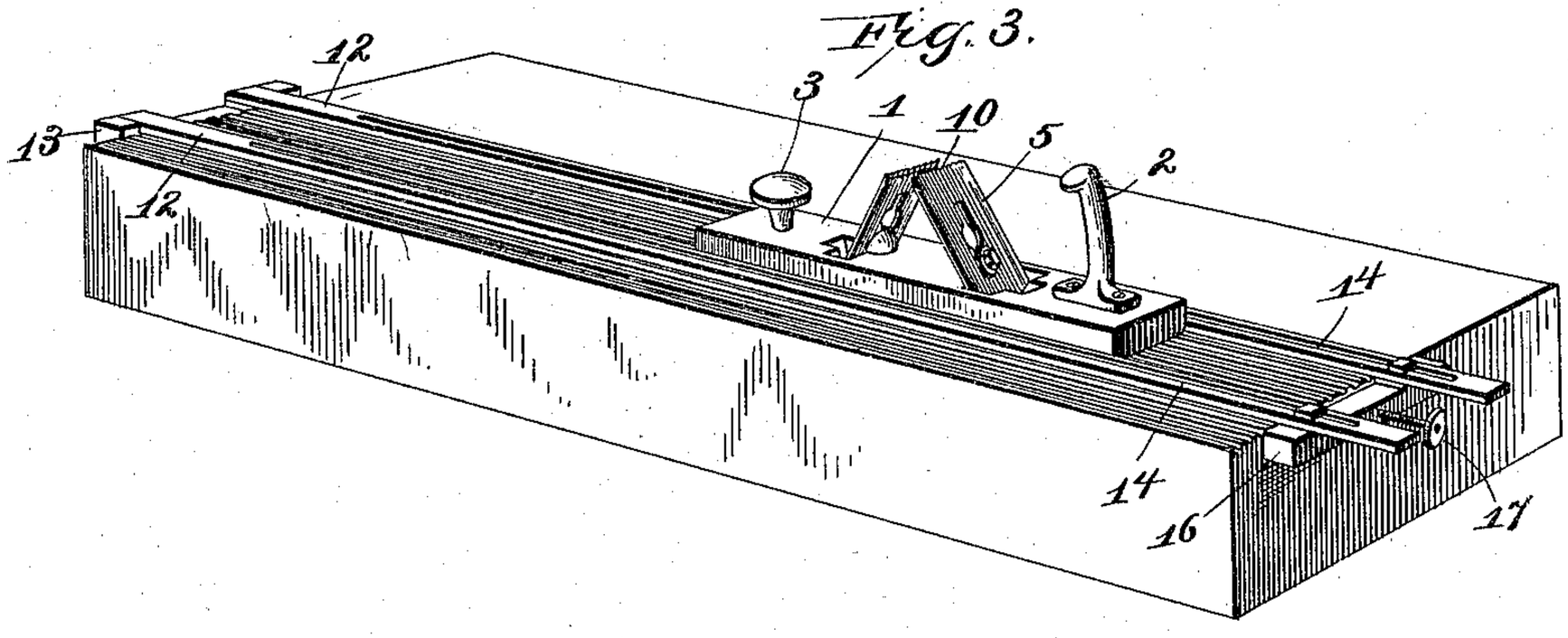
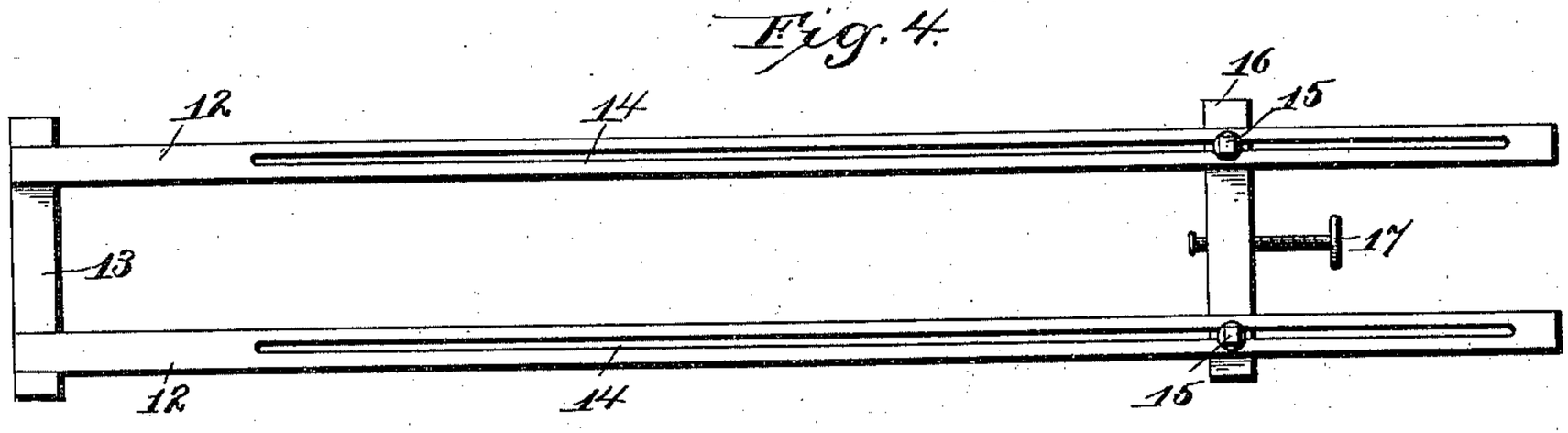



Fig. 4.

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# UNITED STATES PATENT OFFICE.

SAMUEL H. PICKERING, OF NORRISTOWN, PENNSYLVANIA.

## STONE-DRESSING TOOL.

SPECIFICATION forming part of Letters Patent No. 558,739, dated April 21, 1896.

Application filed January 11, 1896. Serial No. 575,055. (No model.)

*To all whom it may concern:*

Be it known that I, SAMUEL H. PICKERING, a citizen of the United States, residing at Norristown, in the county of Montgomery and State of Pennsylvania, have invented certain new and useful Improvements in Stone-Dressing Tools, of which the following is a specification.

My invention relates to a new and useful improvement in tools for dressing stone, and especially to that class known as "toolers" for fluting certain classes of stone, and has for its object to provide such a device by which this class of work may be accomplished with but little or no skill upon the part of the manipulator, and at the same time produce a better class of work and at a reduced cost.

With these ends in view my invention consists in the details of construction and combination of elements hereinafter set forth, and then specifically designated by the claim.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, I will describe its construction and operation in detail, referring by numbers to the accompanying drawings, forming a part of this specification, and in which—

Figure 1 is a perspective of my improved tool; Fig. 2, a central vertical longitudinal section thereof. Fig. 3 is a perspective of my improvement in operative position upon the block of stone, and Fig. 4 a plan view of the guide by which the device is alined.

Similar numbers denote like parts in all the views of the drawings.

Heretofore great difficulty has been experienced in producing longitudinal flutes or corrugations upon the surface of the stone, which was largely due to the fact that the tools for this purpose consisted of a single bit and the bevel upon this bit was at such an angle as to gouge the stone, thereby necessitating great care upon the part of the manipulator to prevent chipping, and also requiring considerable power to move the tool to and fro; and a further disadvantage experienced in connection with the tools now in use is the fact that on account of the use of the circular bit one motion of the operator is lost so far as the production of useful work is concerned, as well as the dulling of the edge of the bit on account of moving it backward while in contact with the stone. But I have overcome all of these disadvantages by the use of my improvement, the construction of which is as follows:

1 is the stock of my improved tool, which is preferably an elongated rectangular block of metal, to which is secured a handle 2 and hand-post 3 for the purpose of manipulation. The bottom of the stock is formed of two planes, intersecting each other at the longitudinal center A of said stock, the object of which will be hereinafter set forth. Formed through this stock are two openings 4, of suitable shape and size to receive the bits 5, which latter are secured to the stock by means of bolts 6, passed through double-end button-hole-slots 7, the eyelets 8 of which are of sufficient size to permit the passage of the head of the bolts and their washers 9, for the purpose hereinafter set forth. Upon the upper edges of each of these bits are formed semi-cylindrical beads 10, at such an angle that when in operative position, as shown in Fig. 2, the lower ends of the bits stand at substantially a right angle to the surface of the stone being operated upon. The object of this arrangement of the operating edges of the bits is to prevent the gouging of the surface of the stone when the tool is in operation, as it will be readily understood that a tool standing at substantially right angles to the surface upon which it is working will not draw in, therefore cannot gouge, but will have the general action of a file.

The two bits are set at angles to each other, so that when the tool is moved in one direction one bit will be in position to produce a maximum effect upon the stone, and when moved in the opposite direction the other bit will be in a like position. The force required to move the stock in either direction will also cause said stock to rock upon the ridge formed by the meeting of two planes on the bottom of the stock at A, thus lifting the rear bit out of contact with the stone and placing the forward bit into its proper operative position. The reversing of the direction of the stock will produce a like result in connection with the other bit. For the purpose of guiding the tool and causing it to track I provide a

frame composed of parallel bars 12, having secured thereto at one end a cross-bar 13 and from within slots 14, through which suitable bolts are adapted to pass, by means of which the cross-stop 16 is adjustably secured to the said parallel bars.

17 is a clamp-screw; and this device is secured to the block to be operated upon by adjusting the cross-strip 16, so that the strips 13 and 16 may embrace the block, when by the manipulation of the screw 17 the device may be firmly held to said block. The tool is adapted to move to and fro between these parallel bars, whereby it will be properly guided. A new portion of the surface of the block is operated upon by unclamping the device and moving it a proper relative distance and then reclamping it to said block, as before described.

When either edge of the bit has become dulled or for other causes it is desired to remove the bit from the stock, it is only necessary to back off its bolt a half-turn, when the bit may be moved downward until the eyelet 8 registers with the head of said bolt, when the bit may be removed, as will be readily understood.

To sharpen the cutting edge of the bit, the surface opposite the beads may be ground after the manner of a gear-cutting mill, which will not alter the shape of the beads, thus considerably increasing the life of the bit.

While I have shown beaded edged bits for the purpose of producing flutes upon the surface of the stone, it is obvious that any particular shape of edge may be used which will produce a negative shape in the stone surface.

In practice I prefer to make the stock of such size as to have sufficient weight to relieve the manipulator of the necessity of having to bear upon the tool to cause it to accomplish its work.

Having thus fully described my invention, what I claim as new and useful is—

The herein-described combination of elongated rectangular stock having openings 4, formed therethrough, bits 5, secured to said stock at an angle to each other and projecting through said openings, double-end button-hole-slots formed in said bits by means of which they may be removed from the stock without the removal of their bolts, and beaded edges formed upon said bits at such an angle as to be at substantially right angles to the stone when in operative position, substantially as and for the purposes set forth.

In testimony whereof I have hereunto affixed my signature in the presence of two subscribing witnesses.

SAMUEL H. PICKERING.

Witnesses:
GEORGE MCCURDY,
S. S. WILLIAMSON.