A. R. WATTERSON.

Mortising-Chisel.

No. 168,358. Patented Oct. 5, 1875.

Fig. 1.

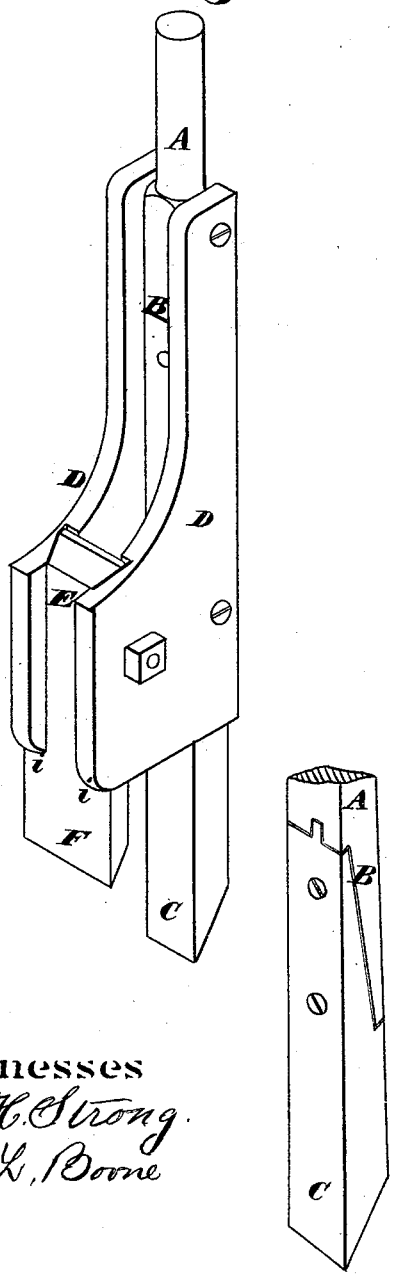
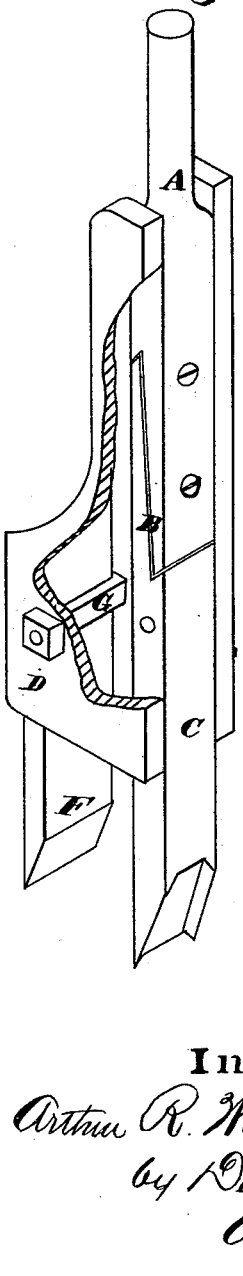


Fig. 2.



Witnesses

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ARTHUR ROBERT WATTERSON, OF SAN FRANCISCO, CALIFORNIA.

IMPROVEMENT IN MORTISING-CHISELS.

Specification forming part of Letters Patent No. **168,358**, dated October 5, 1875; application filed May 6, 1875.

To all whom it may concern:

Be it known that I, ARTHUR R. WATTERSON, of San Francisco city and county, State of California, have invented an Improvement in Mortising-Chisels; and I do hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention or improvement without further invention or experiment.

The object of my invention is to provide certain improvements in mortising-chisels, and more especially such chisels as are employed in machine-work; and it consists, first, in a novel construction of a chisel in two parts, so that the lower part may be removed for the purpose of sharpening, or to substitute a different width of tool without removing the socket or upper part.

Referring to the accompanying drawings for a more complete explanation of my invention, Figures 1 and 2 are perspective views from back and front respectively. Fig. 3 is a detached view of the cutter or chisel.

A is the upper or stem portion of a chisel fitted to be introduced to the socket of a mortising-machine. As many different sizes of chisels are used upon these machines, it is necessary to remove and introduce chisels frequently, and this so wears the stems in time that they will not fit as well. They must also be removed for the purpose of sharpening. My invention contemplates the construction of this upper part with a scarf or splice joint, as at B. The lower or cutting portion C of a number of tools of different sizes are then made with their upper ends to fit the shape B of the upper part, and they may be secured to it by means of screws or bolts, as shown.

In practice, it will probably be most feasible to employ a quarter-inch stem for all sizes of chisels up to one-half an inch, and a half-inch stem will be strong enough for the remaining sizes. By this construction I am enabled to remove the chisels at any time for sharpening, or to change the sizes, without removing the socket-piece.

In order to form the countersunk ledge, which is necessary to receive the flange of pulleys, locks, &c., I employ an attachment, which consists of two side plates, D D, and a supplementary chisel. These two plates are secured to the chisel by bolts passing through holes made for the purpose. The lower ends of these plates are extended as far as may be desired, and have a slot or guide formed vertically in each. Between these guides the stem E of a chisel, F, is fitted, and its back is slotted transversely, so that the key G passing through the sides D D will retain it in place. The chisel part F has shoulders at *i*, which rest against the bottom of the sides D, and thus hold it firmly. By this construction the chisel F is set at any desired distance from the chisel C either by using different side plates D or by slotting these plates at different distances so as to admit of the removal of the chisel F to different distances. This chisel is also made of any desired width, and, being set to cut the proper depth, it will be manifest that the mortise and the ledge will be formed at the same time. This attachment is equally applicable to chisels which are not divided as above described.

I am aware of the patent to C. Hinz, August 10, 1869, No. 93,534, for mortising-chisel, but this is not my invention; but

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

The chisel A C, constructed as described, in two parts, with the uniting-joint B, in combination with the vertically-slotted sides D, the transversely-slotted chisel F, and key G, all arranged to operate substantially as and for the purpose set forth.

ARTHUR ROBERT WATTERSON.

Witnesses:
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