S. S. STEEL & G. W. REEL.

Crozing and Leveling Tool.

No. 167,704. Patented Sept. 14, 1875.

Fig: 1.

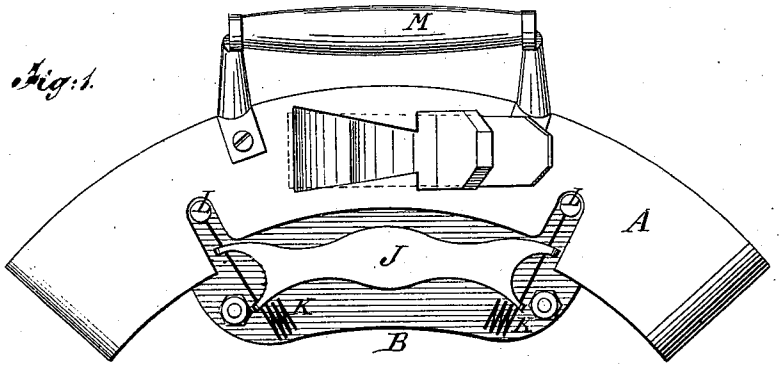


Fig: 2.

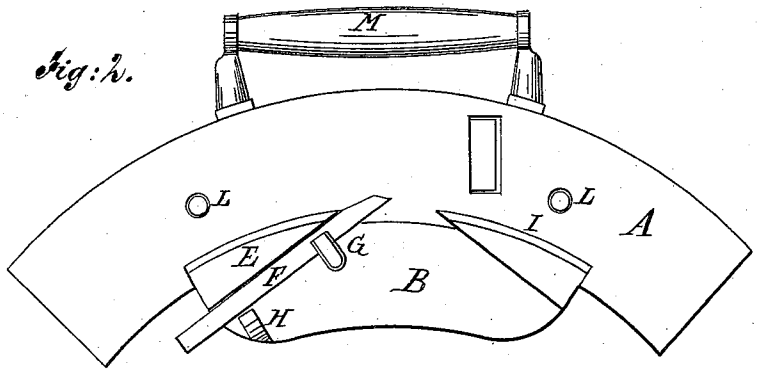


Fig: 3.

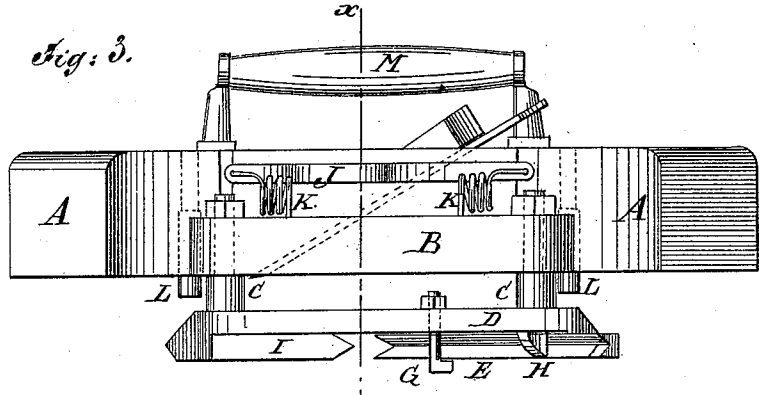
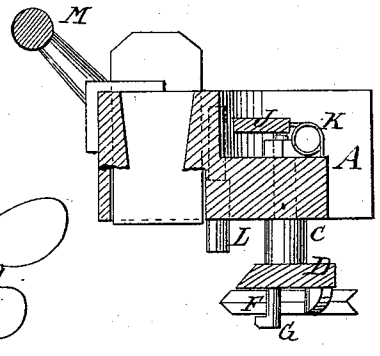


Fig: 4.



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UNITED STATES PATENT OFFICE.

SAMUEL S. STEEL, OF MARTIN, AND GEORGE W. REEL, OF WOODVILLE, OHIO.

IMPROVEMENT IN CROZING AND LEVELING TOOLS.

Specification forming part of Letters Patent No. **167,704**, dated September 14, 1875; application filed May 15, 1875.

To all whom it may concern:

Be it known that we, SAMUEL S. STEEL, of Martin, in the county of Ottawa and State of Ohio, and GEORGE W. REEL, of Woodville, in the county of Sandusky and State of Ohio, have invented a new and useful Improvement in Crozing and Leveling Tools, of which the following is a specification:

This invention relates to a new and useful improvement in coopers' tools, whereby two indispensable tools are combined in one, the same being constructed as hereinafter described.

In the accompanying drawing, Figure 1 is a top view of the combined tools. Fig. 2 is a view of the under or cutting side. Fig. 3 is an edge view. Fig. 4 is a cross-section, taken on the line *x x* of Fig. 3.

Similar letters of reference indicate corresponding parts.

A is the stock of the leveler or plane, which is made of segmental form, having a plane iron or cutter and wedge, and an orifice for the shaving, in the usual manner. This stock has a projection, B, on its inner or concave edge, to which the crozing-tool is attached by means of the studs C C. D represents the crozing-plate, on which is a projection, E, to which the crozing iron or cutter F is attached, and secured in place by the screw-hook G and the lug H on the plate D. I is a projection of corresponding form on the plate D, which serves as a guide for the tool like the projection E. The plate D and the guides E and I are circular in form, to correspond with the inner side of the barrel. J is a thumb-piece, attached to the two springs K K, the latter being attached to the projecting plate B. The upper ends of these springs extend from the plate B, and are attached to pins L L, which play freely through the stock A.

In using the tool, the thumb is placed on the piece J, and the pins L L are pressed through the stock, so that their ends bear upon the inner surface of the stave ends, and thereby prevent the crozing-bit from cutting while the barrel is being leveled. The guides E and I are V-shaped. M is a handle, rigidly attached to the stock A, by means of which the tool is conveniently operated.

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

A combined beveling and crozing tool, constructed substantially as described—that is, having projection B, studs C C, plate D, springs K K, adjustable pins L L, and handle M, as shown and described.

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Witnesses:
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