(Model.)

G. WALSH.

SAW JOINTER.

No. 244,958. Patented July 26, 1881.

Fig. 1.

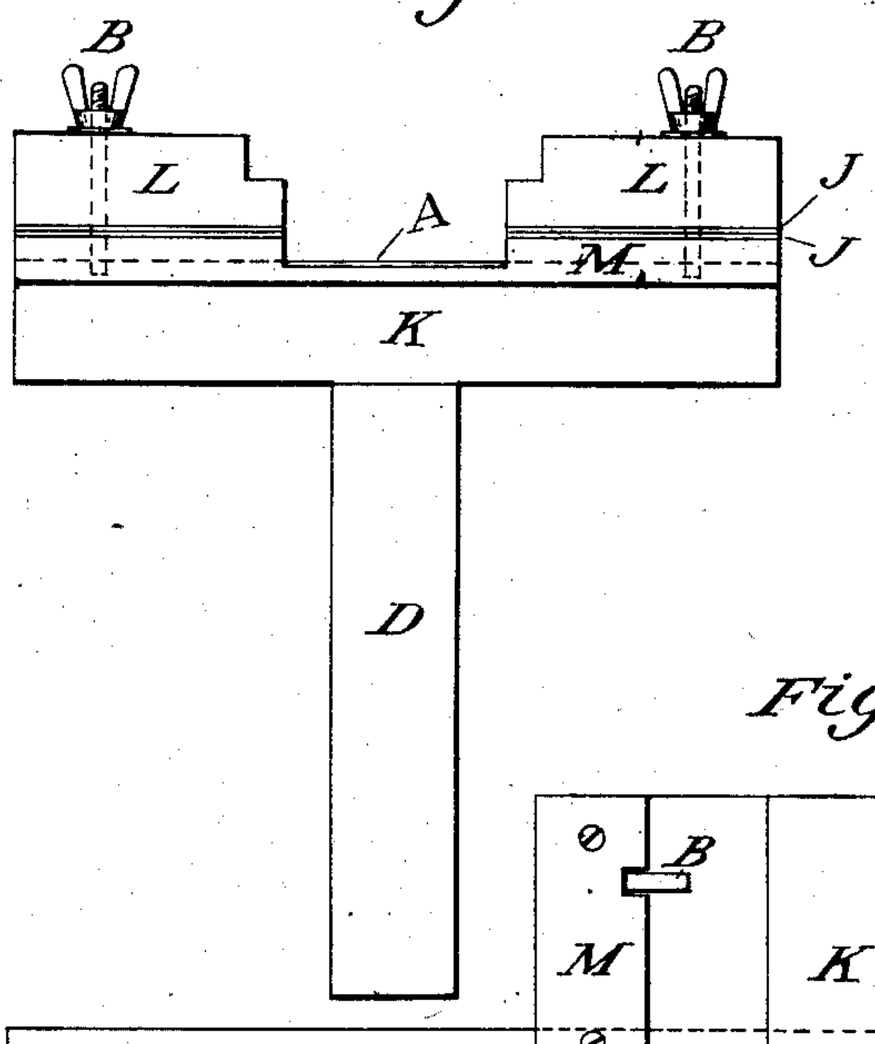

Fig. 2.

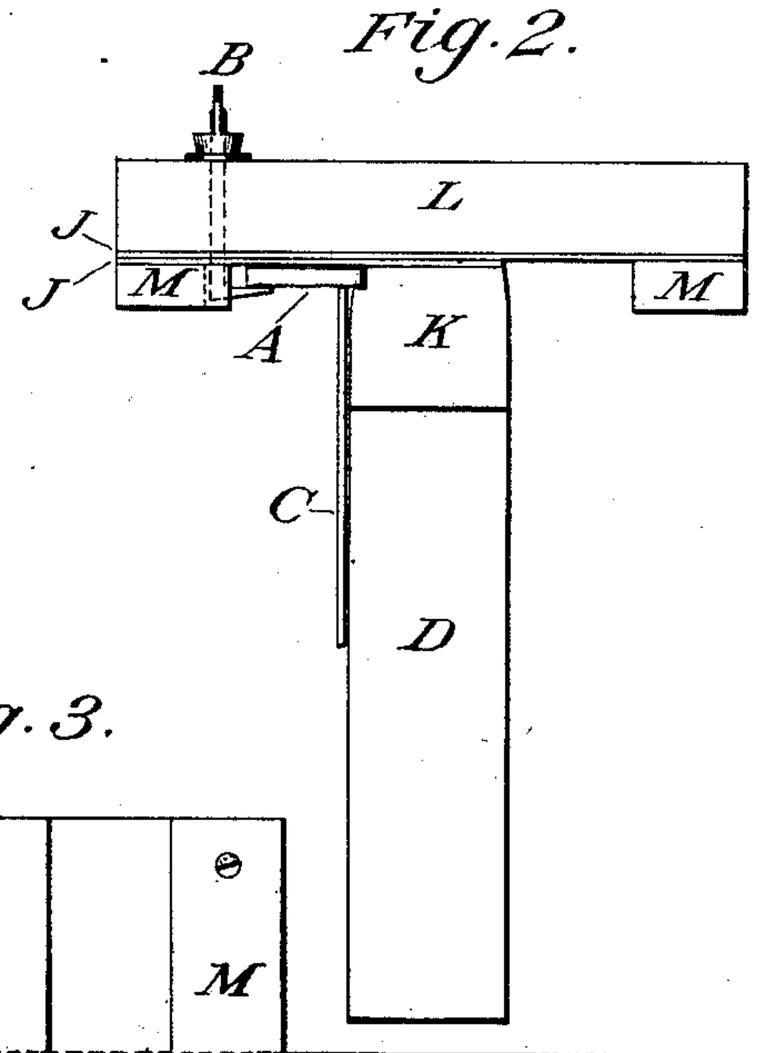

Fig. 3.

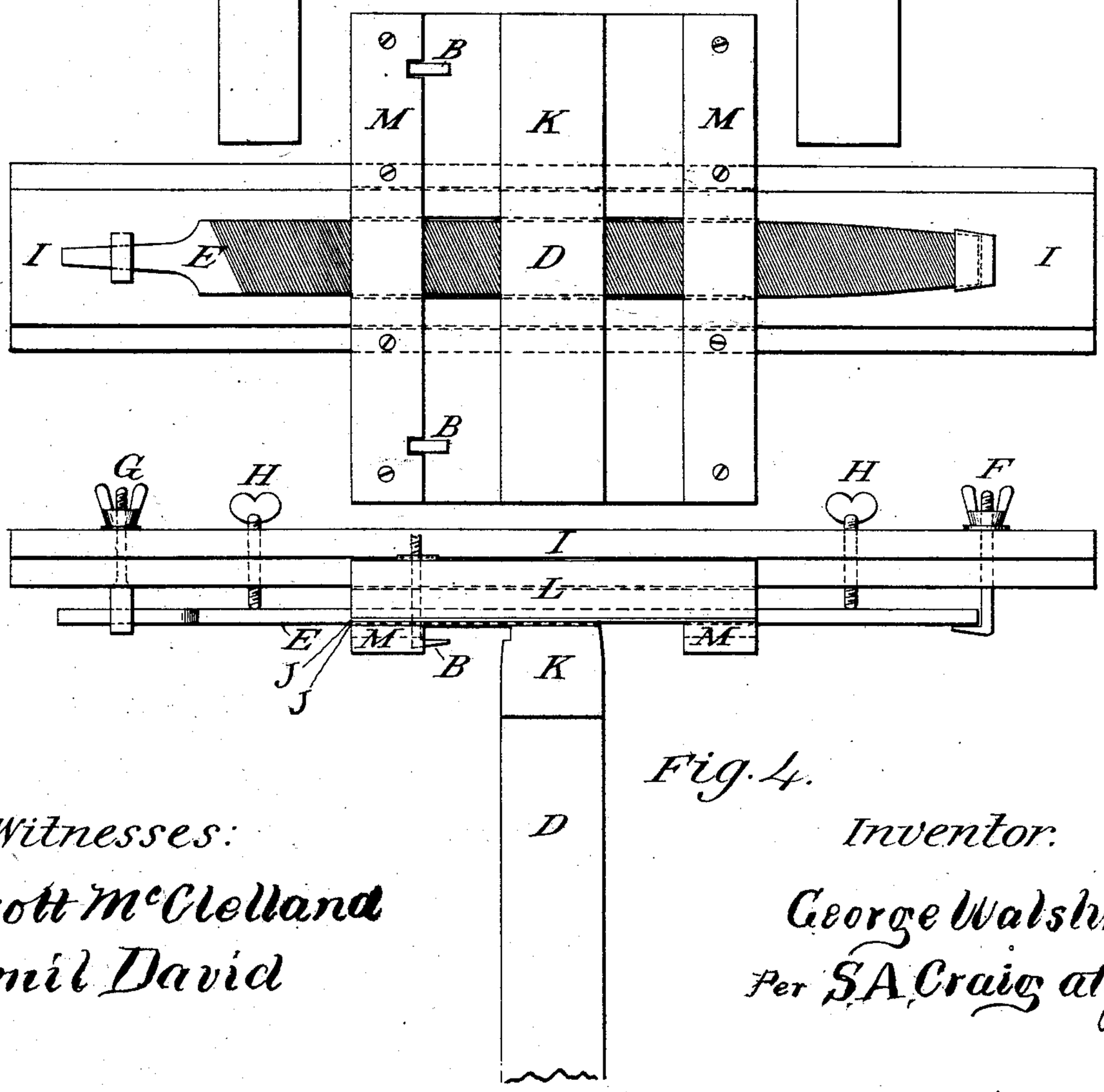

Fig. 4.

Witnesses:

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Inventor:

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UNITED STATES PATENT OFFICE.

GEORGE WALSH, OF BROCKWAYVILLE, PENNSYLVANIA.

SAW-JOINTER.

SPECIFICATION forming part of Letters Patent No. 244,958, dated July 26, 1881.

Application filed May 9, 1881. (Model.)

To all whom it may concern:

Be it known that I, GEORGE WALSH, a citizen of the United States, residing at Brockwayville, in the county of Jefferson and State of Pennsylvania, have invented certain new and useful Improvements in Saw-Jointer, or jointer for the fleam-teeth and jointer for the chisel-teeth of cross-cut saws, combined in one instrument; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as 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 or figures of reference marked thereon, which form a part of this specification.

The object of my invention is to joint the teeth of saws, by which mill-men understand filing off the points of the teeth to a uniform length.

It consists in, first, a contrivance for holding a file squarely over the points of the fleam-teeth, so that they may be jointed and evened up alike; and, second, a contrivance for jointing the chisel, hooker, or clearing teeth of cross-cut saws to a uniform length and as much shorter than the fleam-teeth as may be desired. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figures 1 and 2 are representations of the instrument for jointing the fleam-teeth. At Fig. 2 is seen the instrument D K, placed against the saw C, with the flat file A upon the points of the fleam-teeth, as it is used. Figs. 3 and 4 are representations of the instrument for jointing the chisel-teeth of cross-cut saws. At D K, Fig. 4, is seen a side view of the instrument, with the slide I I holding the file E. The saw C, Fig. 2, should be in the same position in Fig. 4. Fig. 3 represents the under or bottom view of the instrument, with the slide I I and file E in position.

I make the wooden stem D, Figs. 1, 2, 3, and 4, about one and one-fourth inch square and five inches long, and join thereto across the top the bar K of same size, thus forming a T-frame. Across the top of the frame D K, at right angles thereto, I make a frame about five inches square, of strips of wood, L L and M M, about one and one-fourth inch in width and one-half inch in thickness. A space is left between the strips M M and bar K, in order to insert an eight-inch flat file, A, against and parallel with the bar K. I cut away or bevel the top edge of the bar K, so as to let the file A pass over the teeth of the saw C, when the side of the instrument D K is placed against it. The file A is fastened in place firmly by means of gripe and thumb-screw B B. The operator places the saw C in a vise with teeth upward, places the stem D against the flat side of the saw, with the file resting on the points of the teeth. He should hold the stem D firmly against the side of the saw. He then passes the instrument along the points of the teeth, and thus files them or joints them off uniformly and squarely with the side of the saw.

The present way of jointing the teeth of saws is by filing, sometimes by hand, when it is guess-work, and of a more or less uneven and irregular character, and sometimes by fastening a file in a notch in a straight-edge or strip of board by a wooden key, which does not hold the file true or square, gets out of order, and does not make good work; while in my invention the file is held firmly at right angles to the saw, and is not liable to get out of place, but makes good, true work.

For the jointer for the chisel-teeth of cross-cut saws I use the same instrument, D K L M, as described above. The file A should be removed, as not used in this process. I place copper plates J J, about one-sixteenth inch thick, between the strips M M and L L. I rabbet the inner edges of the plates L L, (seen in Fig. 1,) and construct the slide I I about twelve inches long by two inches wide and one-half inch thick, its side rabbeted to correspond, so that it will fit and move easily in the space between the plates L L. I fasten an eight or ten inch file on the slide I I by means of the griper and screw F and loop and screw G. I contrive the screws H H so that by their means and the gripers F G the file can be thrown off from or brought near to the slide I I. The operator places the saw, teeth upward, in a vise, placing a stiff board in the vise with it, on the side opposite the operator, nearly as high as the teeth, to keep the saw firm. He then places the stem D against the flat side of the saw, the copper plates J J resting on the points of the fleam-teeth, so as to bring the chisel-

tooth under the center of the space between the rabbeted strips L L; in other words, places the slide I I with the file E E in place (file down) between the strips L L, so that the chisel-teeth will be directly under the file. In this position he holds the instrument firmly against the saw with the left hand and pushes the file squarely back and forth across the points of the chisel-teeth, thus jointing or filing them off as much shorter than the fleam-teeth as desired. He sets the file on the slide down until it will cut the hooker-teeth as much shorter as he wishes, and then by this process each chisel or hooker tooth will be jointed to a uniform length.

I claim as my improvement—

1. The contrivance of the T-shaped frame D K, together with the frame on the top of it, constructed of the pieces L L and M M for holding a file in place over the teeth at right angles to the side of the saw, in the manner described.

2. The contrivance of the T-shaped frame D K jointly with the frame L L M M on the top of it, and with the slide I I holding the file, as and for the purpose set forth.

3. The contrivance of the rabbetted slide I I jointly with the griping devices F G for holding the file and guiding it across the frame.

In testimony whereof I affix my signature in presence of two witnesses.

his
GEORGE + WALSH.
mark.

Witnesses:
R. C. MOORHEAD,
J. G. DAILEY.