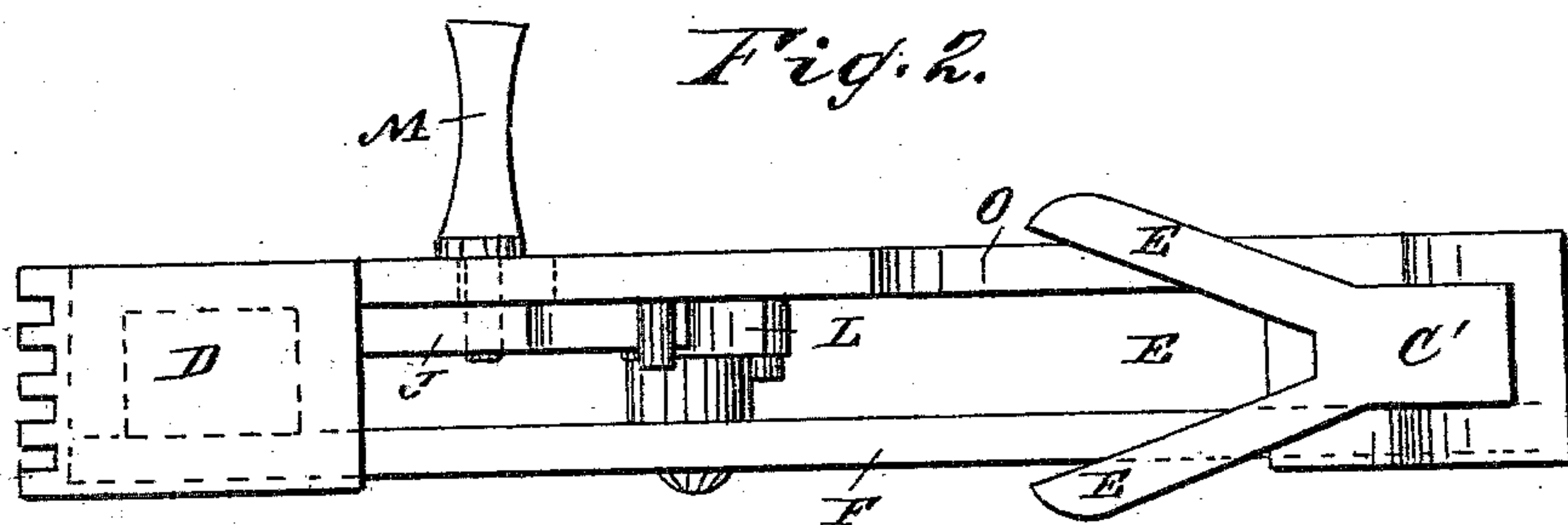
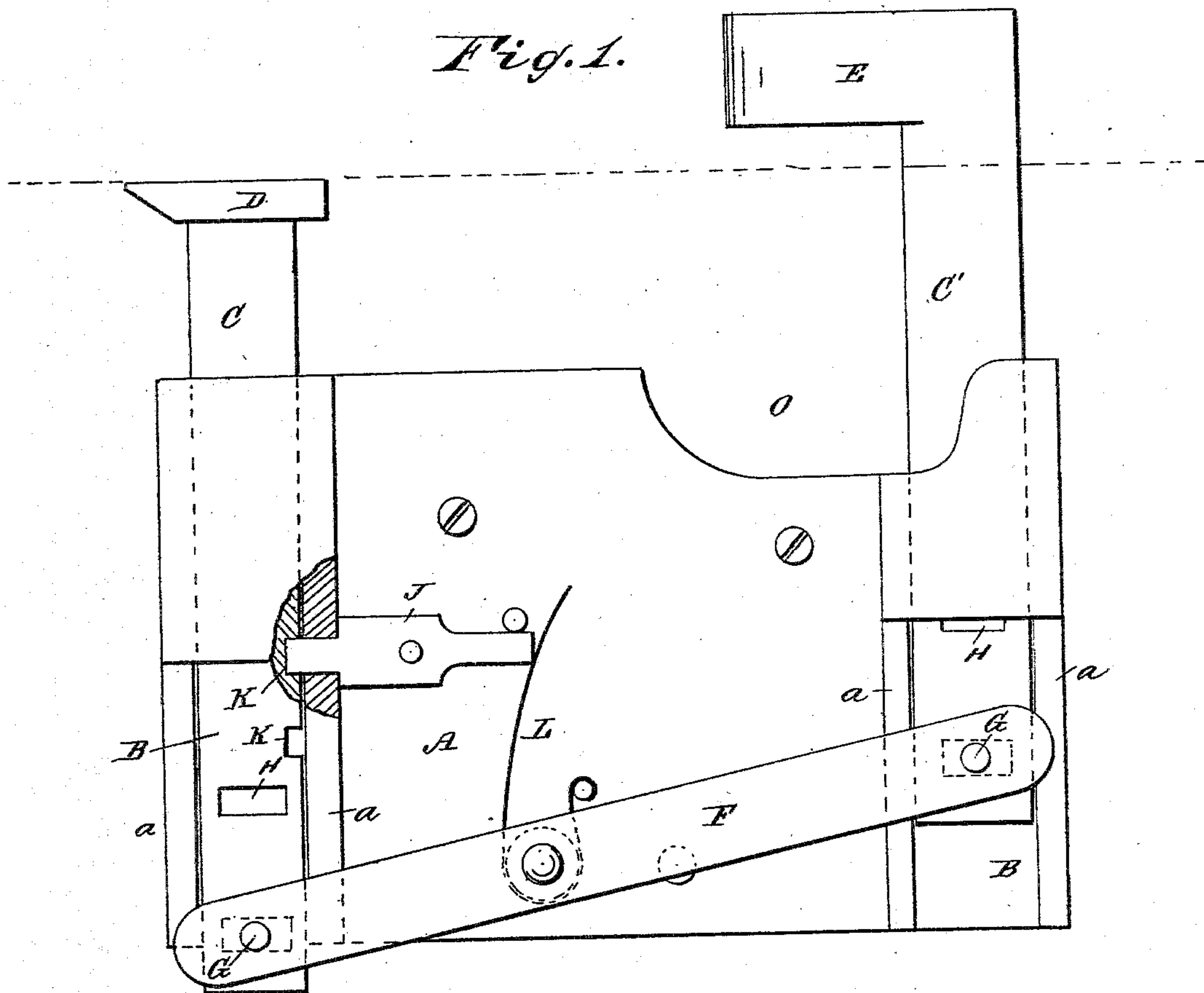


(No Model.)

J. McVANE.
BENCH HOOK.

No. 303,031.

Patented Aug. 5, 1884.



WITNESSES:

Wm. G. Hooper
C. Sedgwick

INVENTOR:

J. McVane
BY *Munn & Co.*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

JAMES McVANE, OF BOSTON, MASSACHUSETTS.

BENCH-HOOK.

SPECIFICATION forming part of Letters Patent No. 303,031, dated August 5, 1884.

Application filed November 28, 1883. (No model.)

To all whom it may concern:

Be it known that I, JAMES McVANE, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and Improved Bench-Hook, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved bench-hook which can be used for holding planks placed on the bench flat or edgewise.

The invention consists in a bench-hook constructed with two bolts held to slide vertically on a plate, which bolts have their lower ends pivoted to the ends of a lever pivoted on the plate, whereby one bolt will be raised when the other is lowered. One bolt is provided with a toothed head or hook at its upper end, and the other bolt is provided with a U-shaped crotch. The bolts can be locked in place by a latch.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a longitudinal elevation of the inside of my improved bench-hook, parts being broken and others shown in section. Fig. 2 is a plan view of the same.

On the rear surface of a plate, A, a vertical guide-groove, B, is formed, at each end, by two ridges, *a*, projecting from the said inner surface. In the said guide-grooves vertically-sliding bolts C C' are held, of which the former is provided at its upper end with a toothed hook or head, D, and the bolt C is provided at its upper end with a V-shaped crotch, E, held horizontally, the open end of the crotch being in the same direction from the bolt C' as the toothed edge of the head D is from the bolt C. A lever, F, is pivoted to the inner surface of the plate A, and has its ends pivoted to the bolts C and C', respectively, by pins G G, which are held in one of several recesses, H, in the bolts, thus providing for pivoting the ends of the lever F a greater or less distance from the ends of the bolts C C'. A sliding latch, J, held on the inner surface of the plate A, has one end held in an aperture in one of the ridges forming the guide-groove for the bolt C, which bolt is provided with one or more notches, K, for receiving the end of the

latch, and which latch is pressed toward the said bolt by a spring, L. The bolt can be withdrawn by a handle, M, passing through a slot in the plate A, and projecting from the front of the plate A. The plate A is held on a bench in such a manner that when the head D on the bolt C projects above the top of the bench the crotch E on the bolt C' will be below the top of the bench, and vice versa. As shown, the crotch E projects above the top of the bench, and the bolts are locked in position by the latch J. Narrow boards, or boards placed edgewise, can be held on the bench by placing the ends between the shanks of the crotch E. If the toothed hook or head D is to be used for holding a plank or board resting flat on the bench, the latch J is withdrawn to release the bolt C, and the bolt C' is pressed downward, whereby the bolt C is raised, and is then locked in place by the latch J, which snaps into the corresponding notch, K, in the said bolt C. The bolts can be adjusted to project a greater or less distance above the top of the bench by pivoting them to the lever F a greater or less distance from their lower ends. The plate A is provided in its upper edge with a recess, O, into which the crotch E can pass when the bolt C' is lowered.

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

1. In a bench-hook, the combination, with a supporting-plate, of two vertical bolts sliding in ways at the opposite ends of said plate, and having their lower ends connected to the ends of a pivoted lever, substantially as herein shown and described.

2. In a bench-hook, the combination, with a plate, of the vertically-sliding bolts held on the same, one of which bolts is provided at the upper end with a toothed hook or head, and the other with a V-shaped crotch, and a pivoted lever having its ends pivoted to the bolts, substantially as herein shown and described.

3. The combination, with the plate A, provided with two guide-grooves, B, of the bolts C C', held in the same, the pivoted lever F, having its ends pivoted to the bolts C C', the latch J, and the spring L, substantially as herein shown and described.

4. The combination, with the plate A, having the two guide-grooves B, of the bolts C C',

held in the same, the pivoted lever F, and the pins G, held adjustable in the bolts C C', substantially as herein shown and described.

5 5. The combination, with the plate A, of the sliding bolts C C', held on the same, of which the former is provided with notches K, the lever F, pivoted on the plate A and to the bolts C C', and the latch J, substantially as herein shown and described.

10 6. In a bench-hook, the combination, with

the slotted plate A, the vertically-sliding bolts C C', connected by lever F, the bolt C being provided with the notches K, of the sliding latch J, provided with the handle M, and the spring L, substantially as herein shown and 15 described.

JAMES McVANE.

Witnesses:

JOSEPH EDGAR FARNUM,
W. R. WILLIAMS.