

No. 713,423.

Patented Nov. 11, 1902.

J. W. GAEDE.
FOLDING VISE.

(Application filed Apr. 30, 1902.)

(No Model.)

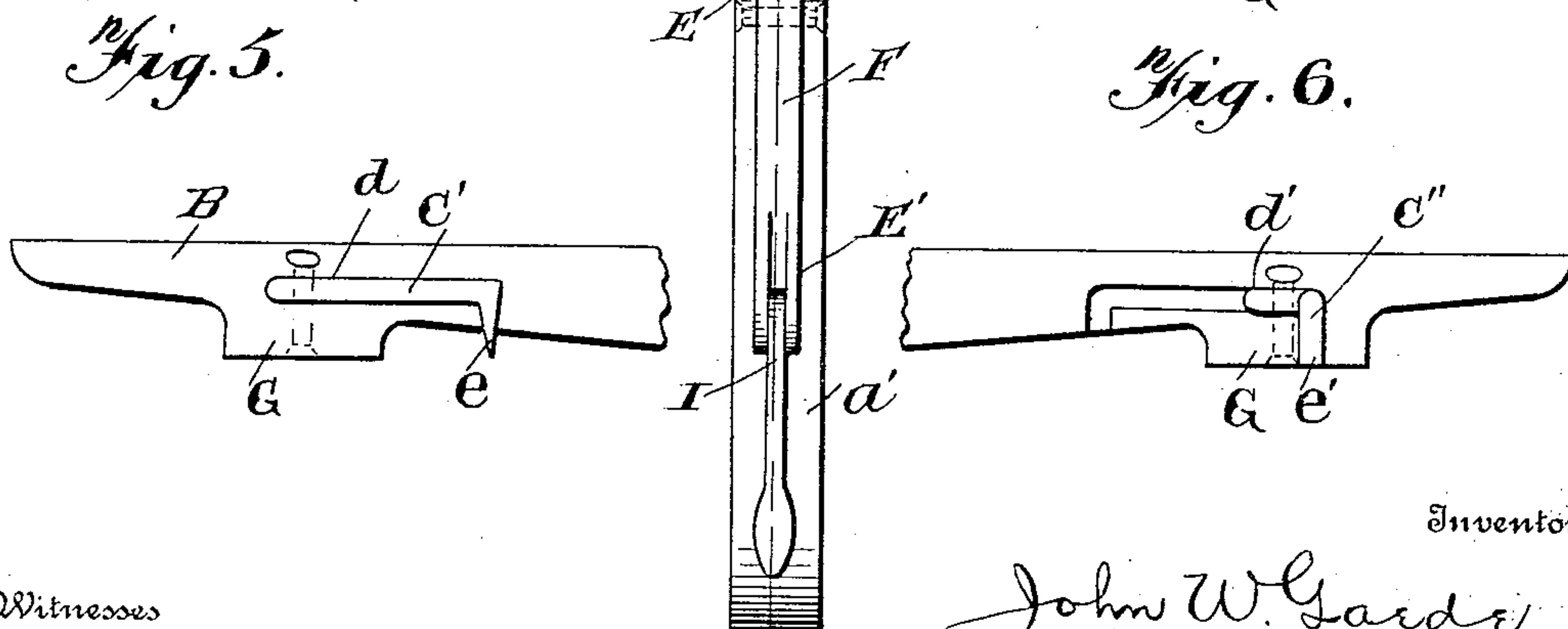
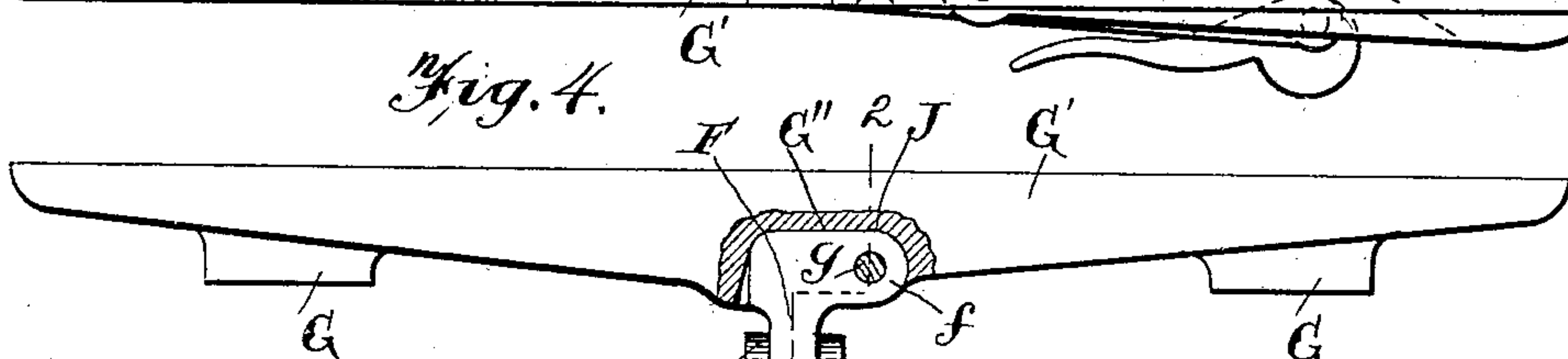
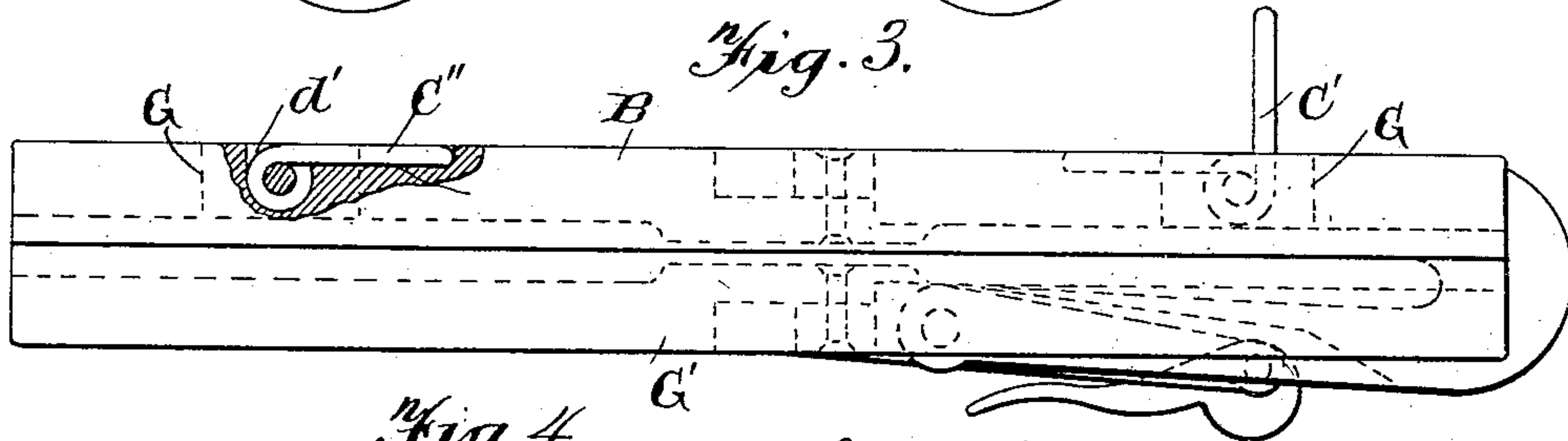
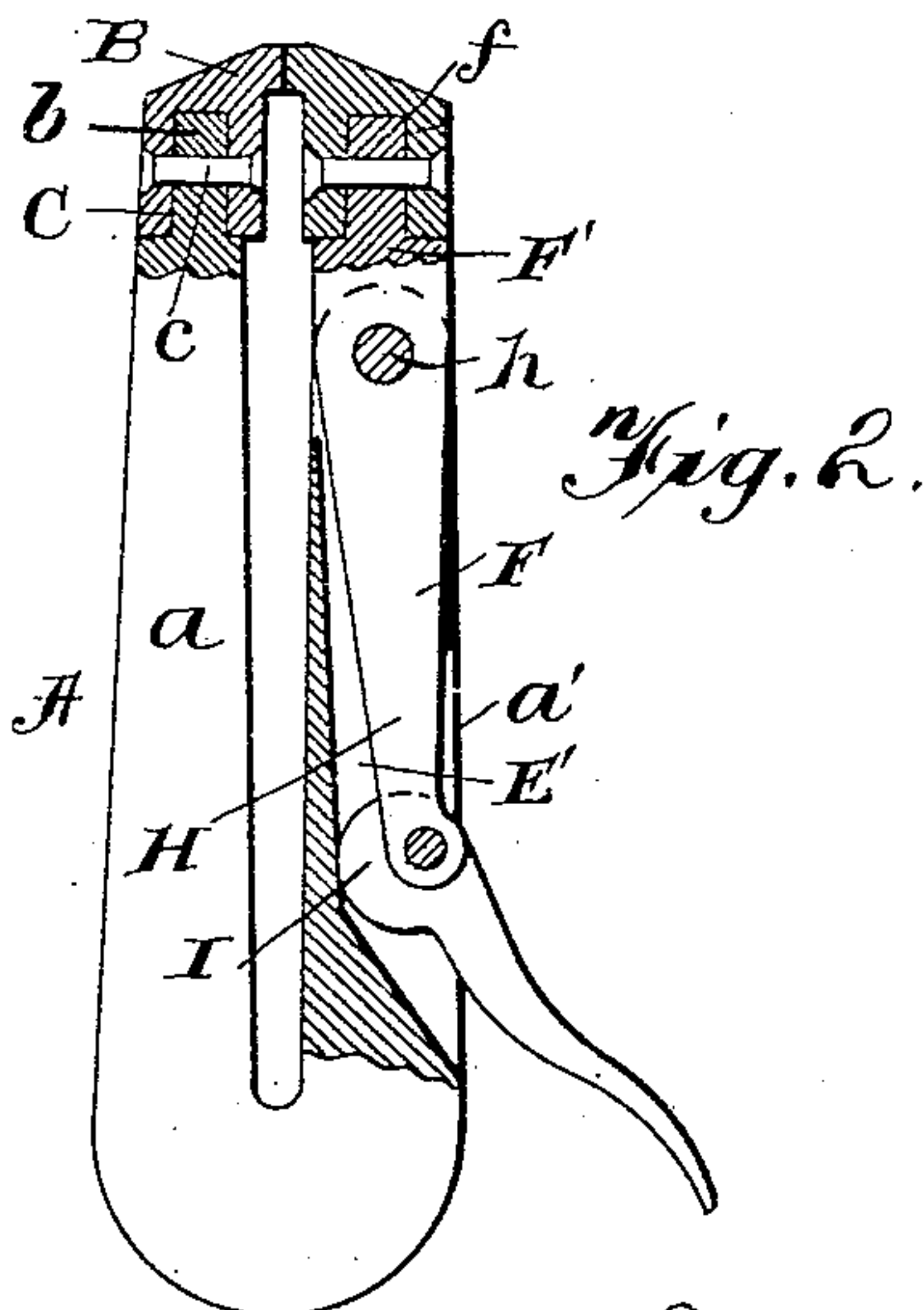
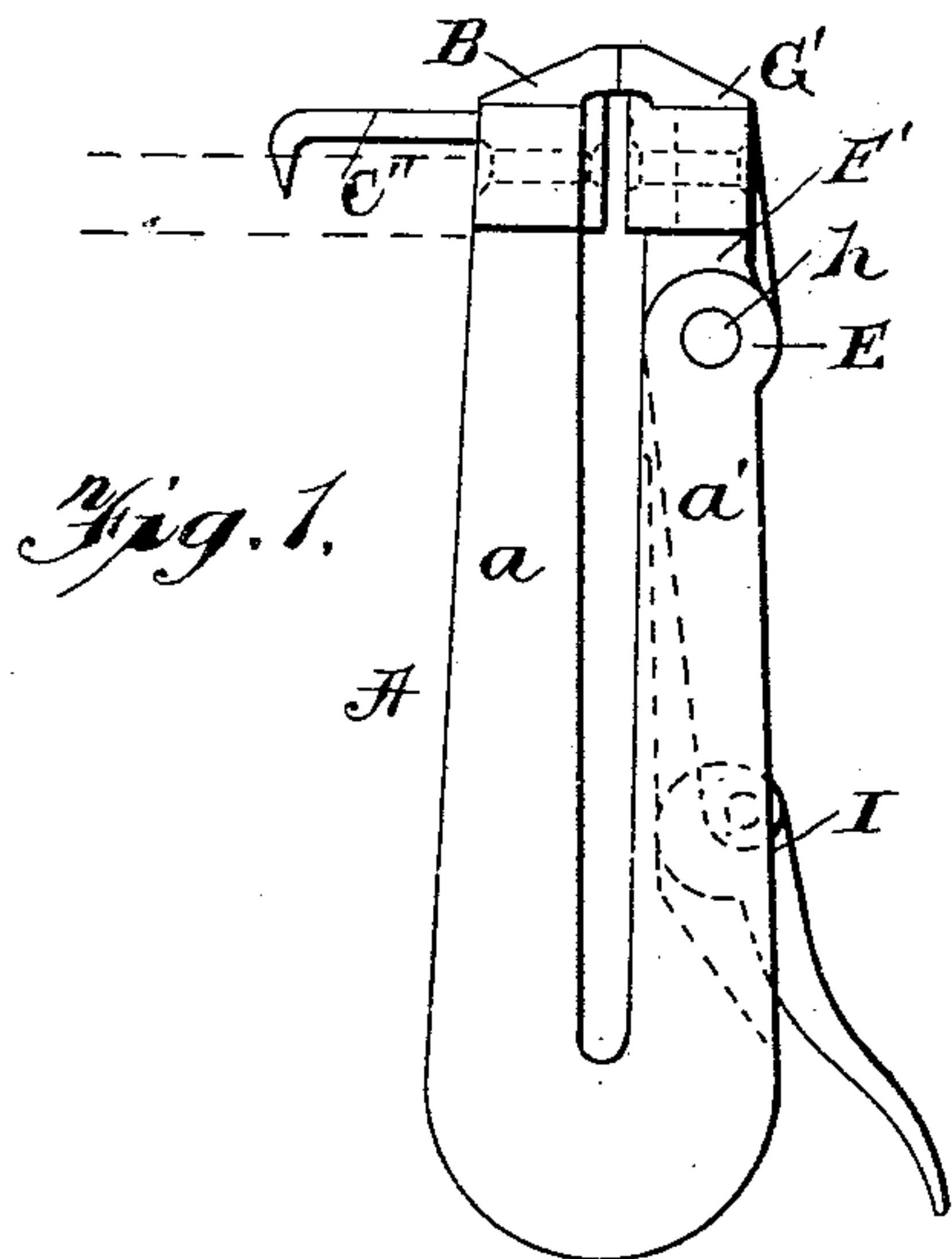


Fig. 6.

Witnesses
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UNITED STATES PATENT OFFICE.

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FOLDING VISE.

SPECIFICATION forming part of Letters Patent No. 713,423, dated November 11, 1902.

Application filed April 30, 1902. Serial No. 105,351. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. GAEDE, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented new and useful Improvements in Folding Vises, of which the following is a specification.

My invention relates to improvements in folding vises, and pertains more particularly to that class known as "saw-sharpening vises."

The object of my invention is to provide a vise which is adapted to be used by carpenters for holding the saw while sharpening and so arranged that the elongated horizontal jaws can be folded in a vertical position parallel the body of the vise, and thus taking much less room in the carpenter's chest.

Another object of my device is to provide a cheap, simple, and effective device of the character described which can be readily attached or detached from a bench or frame of any character having a horizontal flat surface.

In the accompanying drawings, Figure 1 is an end view of my device, showing the supporting means. Fig. 2 is an end view, partly broken away. Fig. 3 is a top plan view showing the U-shaped member folded up. Fig. 4 is a side view, partly broken away. Fig. 5 is a side view of the portion of the clamping-arm, showing the supporting-hook folded. Fig. 6 is a side view of the opposite end of the clamping-arm, showing the supporting-hook open.

Referring now to the drawings, A represents the main body of my vise, which is essentially U-shaped and has the arm *a* extending considerably higher than the arm *a'* and said arm *a* having the laterally-extending member *b*. The jaw B is elongated, as clearly shown, and is provided with an elongated opening C in its lower face, which is adapted to receive the laterally-extending member of the arm *a* and has a pivot *c* passing through the jaw and the laterally-extending arm, whereby a pivotal connection is formed. The jaw B is gradually tapered upward from the center toward the end and is provided with downwardly-projecting lugs G, adapted to rest against the bench or stand to which the device is attached, thus holding

the vise steady. The said jaw is also provided with two openings *d* and *d'* in its vertical walls adjacent its ends, and pivoted within said openings *d* and *d'* are the two horizontally-swinging members C' and C'', which are provided with downwardly-turned outer sharpened ends *e* and *e'*, adapted to be driven into the bench or frame, thereby firmly holding it and also holding it in a position whereby it can be readily attached or detached. The opposite end *a'* of the U-shaped body of the vise has its upper end bifurcated a short distance at E, and extending from said bifurcated end is a vertical gradually outwardly decreasing recess E'. Pivoted within the upper end of the bifurcated member *a'* is an arm F, having the upwardly-extending portion F' provided with the laterally-extending arm *f*. The said arm is adapted to enter a recess G'' in the under side of the jaw G', and a pivot *g* passes through the jaw and extreme outer end of the laterally-extending member. The said jaw is of a shape to correspond with that of the first-mentioned jaw, so that the abutting faces will correspond. The said arm F has a downwardly-extending arm H below its pivotal connection *h*, which extends within the recess E'. (Clearly shown in dotted lines in Fig. 3.) The extreme lower end of said arm F is also bifurcated, and pivotally mounted in said bifurcated portion is an eccentric or cam I, which, as will be clearly seen, will bear against the inner wall of the recess E'. When the cam is thrown down, as clearly shown in Fig. 3, it engages the inner wall of the recess, as before stated, and forces it outward, thus throwing the jaw carried by the upper end inward in engagement with the jaw B, thus firmly clamping the saw or article between the same.

It will also be readily seen that by having the laterally-extending arms pivoted at their outer ends within the recesses in the jaws they can be swung in but one direction, and after raised in the horizontal position ready for work they will not readily tilt, as the weight is practically all on the upper edge J of the said laterally-extending member and not on the pivot, as would be the case if they were pivoted to the upper ends of said arms and the laterally-extending arms left off.

It will also be clearly seen that by having

the securing members C and C' folding in the recesses d and d' in the jaw a more compact vise is formed.

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

1. A folding vise comprising a U-shaped body portion, a laterally-extending member carried by one end thereof, a pivoted arm carried by the other end of said U-shaped body portion, a laterally-extending member carried by the upper end of said pivoted arm, jaws having elongated recesses in their lower faces adapted to receive the laterally-extending members, and pivots passing through said jaws and the outer ends of said laterally-extending members, substantially as described.

2. A folding vise comprising a U-shaped body portion, a laterally-extending member carried thereby, a jaw having an elongated recess formed to receive the laterally-extending member with the bottom of the recess

resting on the top of the arm and pivoted adjacent the outer end of said member, said jaw having a recess adjacent to each end, supporting members, pivoted within said recesses to lie flush when folded, a pivoted arm carried by said U-shaped body portion, a laterally-extending member carried by the pivoted arm, a jaw having an elongated recess formed to receive the laterally-extending member of the pivoted arm with the bottom of the recess resting on top of the arm, said jaw pivoted to the outer end thereof and a pivoted cam carried by the lower end of said pivoted arm, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

JOHN W. GAEDE.

Witnesses:

A. J. GAHR,
DAVID GAHR.