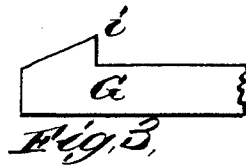
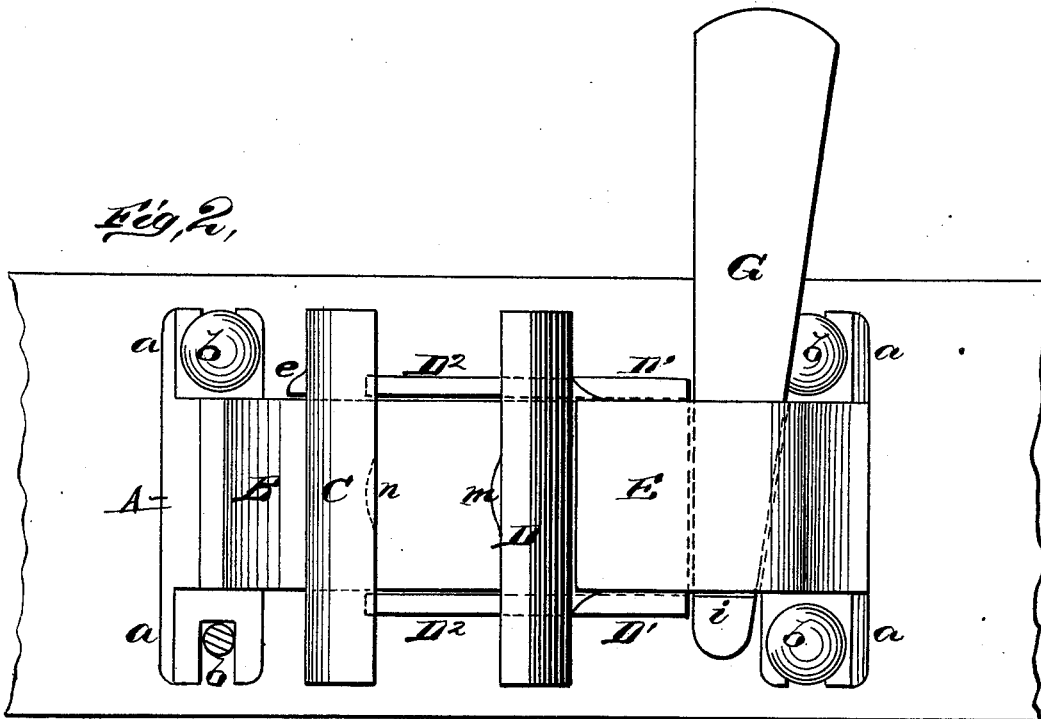
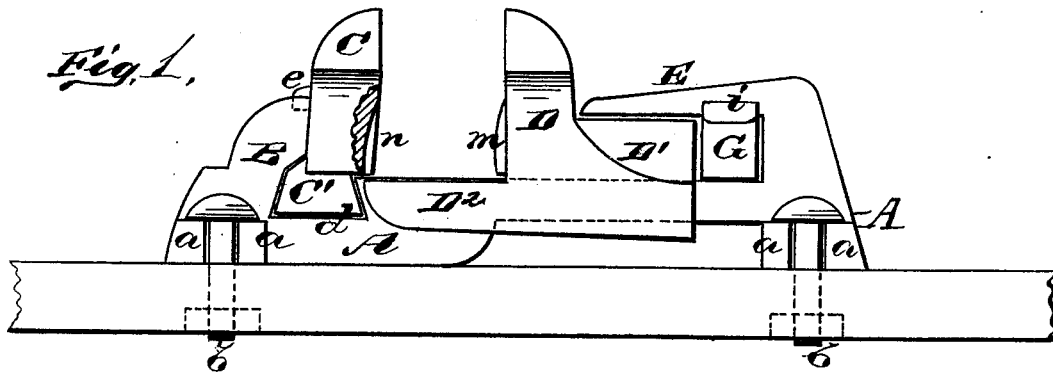


A. H. BELL.
Vise.

No. 197,083.

Patented Nov. 13, 1877.



WITNESSES
J. H. Bates
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AZEL H. BELL, OF BELLE PLAINE, IOWA.

IMPROVEMENT IN VISES.

Specification forming part of Letters Patent No. **197,083**, dated November 13, 1877; application filed September 22, 1877.

To all whom it may concern:

Be it known that I, AZEL H. BELL, of Belle Plaine, in the county of Benton and State of Iowa, have invented a new and valuable Improvement in Vises; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a side view of my vise. Fig. 2 is a plan view, and Fig. 3 a detail view, thereof.

The nature of my invention consists in the construction and arrangement of a vise, as will be hereinafter more fully set forth.

The annexed drawings, to which reference is made, fully illustrate my invention.

A represents the bed of my vise, formed at each end with slotted side projections *a* for the passage of bolts *b*, to fasten the same to a base or lever.

At one end of the bed A is formed an upwardly-projecting lip, B, which constitutes a back support for the jaw C of the vise. This jaw is formed with a dovetailed tapering tongue or tenon, C', on its under side, which is inserted from one side into a corresponding groove, *d*, formed in the bed A alongside of the lip B, in such manner that when the jaw C is placed in position the said lip bears against the back thereof, and forms a back support for the same. The tongue or tenon C' is of the same length as the width of the base A, and a lug, *e*, on the back of the jaw C forms a stop against the side of the lip B to limit its movement. At the other end of the bed A is formed an inwardly-projecting flat hook, E, as shown.

D represents the movable jaw of the vise, formed at its base with a rearward extension, D', and at the sides with downwardly-projecting flanges, which extend forward in front of the jaw in the form of arms D² D².

G represents the wedge-shaped key by means of which the movable jaw is operated, said key having a lug, *i*, formed at its smaller end, to prevent its withdrawal altogether from its place in the hook E.

To put the parts of the vise together, the key G is first placed in the hook E. The jaw D is then placed on the bed A, the side flanges fitting on the sides of the bed. When the

jaw D is moved, with its extension D', as far as possible under the hook E, the ends of the arms D² will just be free from the groove *d*, and the jaw C can then be inserted in said groove, as above mentioned, and the vise is complete.

The jaws C and D of the vise are so constructed that their lower portions will clamp a wire in such manner that it cannot be drawn through when tightening up a fence. This construction consists of a bulge, *m*, on one jaw, with a corresponding concavity or recess, *n*, in the other jaw, and this does not interfere with the jaws when used as a vise.

When using it as a wire-tightener, the bed A is bolted to a lever, and the vise clamped to the wire. The short end of the lever is placed against the end or stretching post, and the wire then drawn taut, and secured by a staple or other suitable means.

The arms D² of the sliding jaw, it will be noticed, pass under the stationary jaw C at the ends of the tongue C', and not only prevent the stationary jaw from coming out, but also keep the sliding jaw in place, so that when the pressure is on the top edges of the jaws, the sliding jaw cannot tip back.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination of the bed A, provided with the top B and dovetailed tapering groove *d*, and the jaw C, provided with the dovetailed tapering tongue C', sliding jaw D, and the stop *e*, substantially as and for the purposes set forth.

2. The sliding jaw D, provided with the extension D' and arms D² D², in combination with the bed A, hook E, and stationary jaw C, substantially as and for the purposes set forth.

3. The combination of the grooved bed A, with hook E and lip B, the detachable stationary jaw C, the sliding jaw D, with extension D' and arms D², and the key G, all constructed substantially as and for the purposes set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

AZEL H. BELL.

Witnesses:

W. ROBINSON,
AMOS STONE.