J. C. Crumpton,

Vise.

No. 83,045. Patented Oct. 13, 1868.

Fig. 1

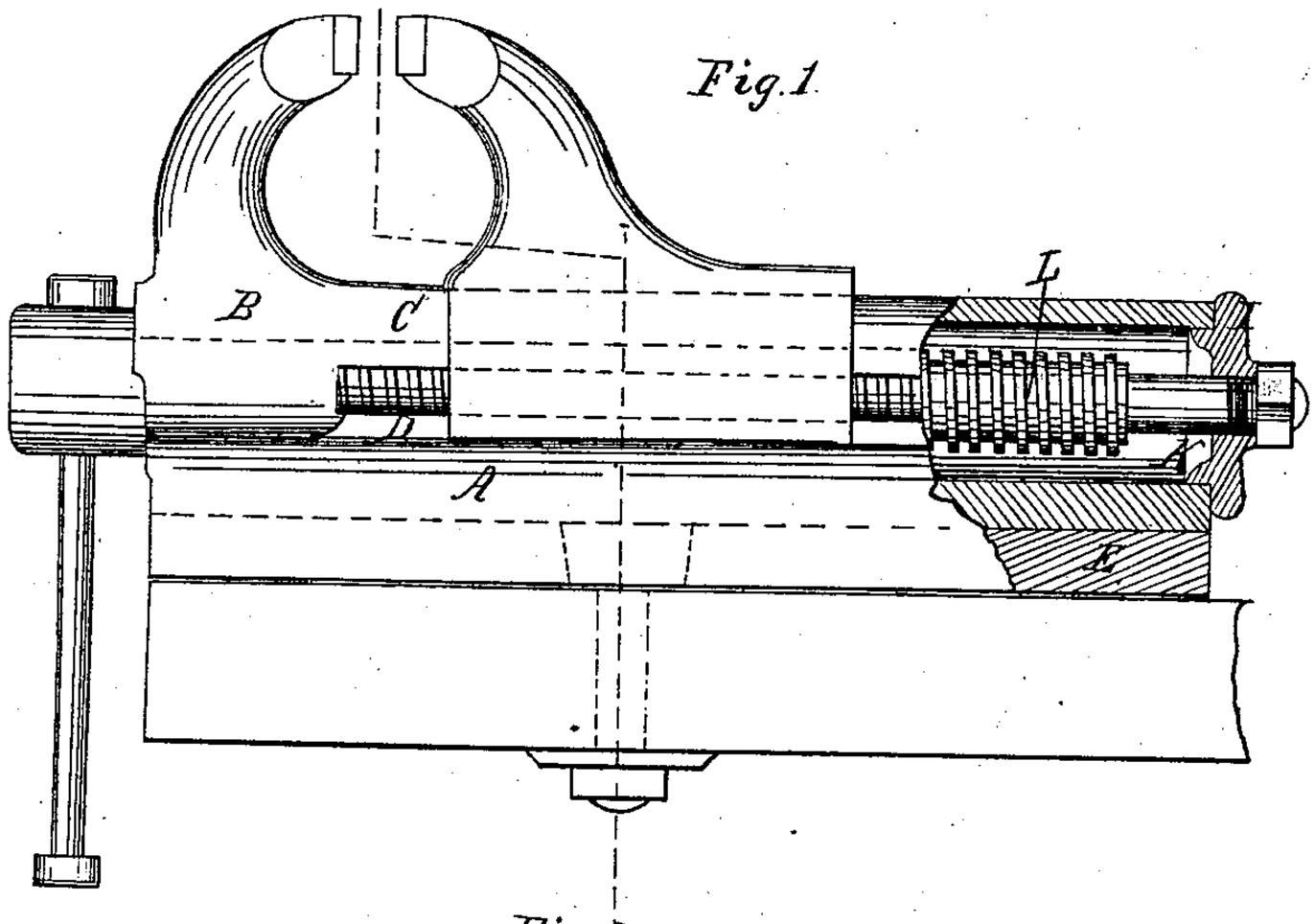
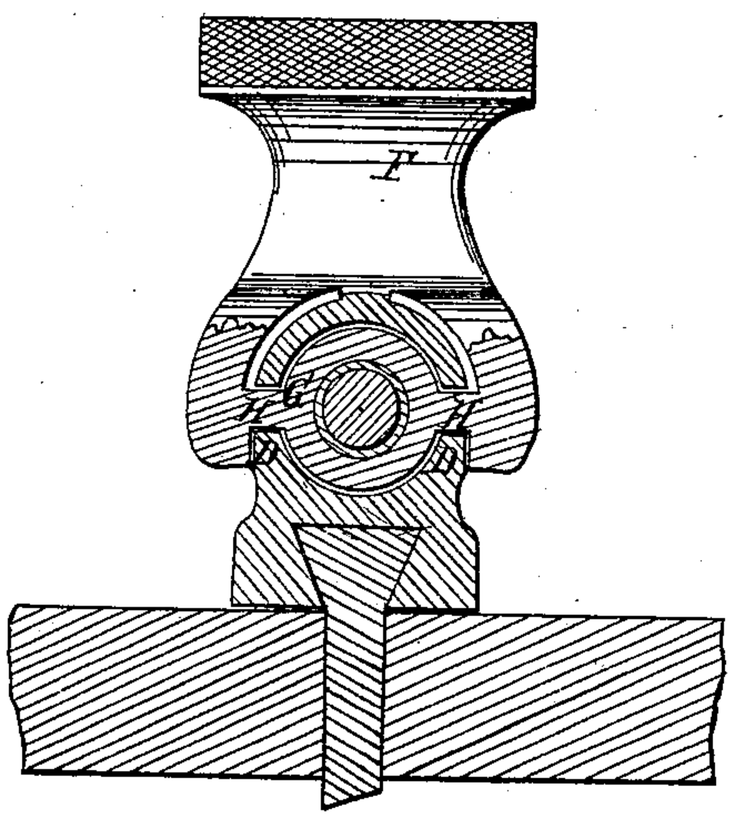


Fig 2.



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JOHN C. CRUMPTON, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 83,045, *dated October* 13, 1868.

IMPROVEMENT IN VISES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOHN C. CRUMPTON, of Philadelphia, in the county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Vises; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a side elevation of my improved vise, with a part broken away.

Figure 2 represents a cross-section of the same.

Similar letters of reference indicate like parts.

The object of this invention is to provide a vise which may be constructed more cheaply, and which will be more durable and convenient than those now in use.

It consists in the arrangement of the front jaw, bed-piece, and shield for the screw, in one piece; also in the arrangement of the sliding jaw in connection with the said bed-piece and shield; and also in the method of adjustably connecting the vise to the bench.

A represents the bed-piece of the vise, which, together with the front stationary jaw, B, and the shield C, for the screw, are all cast together, with the slots D D on each side, and with the dove-tailed slot E, in the bottom, for the head of the holding-down bolt. The slots D D, in the sides, are extended to the rear end of the bed and screw-guard.

F represents the sliding jaw, which is cast with a nut, G, and a circular space between it and the body of the jaw, suiting the configuration of the screw-shield.

That portion of the metal, H, which connects the nut with the body of the jaw, is calculated to be of the proper size and shape to fit and slide freely in the slots D, which may be planed or otherwise fitted for the purpose.

The sides of the body of the jaw project below the slots D, and may be fitted to work against the planed sides of the bed.

I represents a cap, fitted to the rear end of the bed-piece and shield, so as to serve as a support for the shield and for the rear end of the screw. It is supported in its position by a flange, K, entering the hollow space between the bed-piece and the shield, and by the end of the screw which passes through the centre of the same, and is provided with a nut, which holds it from working out. By the same arrangement the screw is held in position at that end.

By means of the dovetailed slot E, in the bottom of the bed-piece, and a bolt having a head formed to fit therein, the vise may be held down to the bench, so as to be adjusted to or from the operator, or at any desired angle, and in consequence of the extended bearing-face of the bed, being the whole length of the same, the vise is more easily prevented from moving around on the axis of the bolt, by the action of the file, when being applied to the work at one side of the longitudinal axis of the vise, as must be frequently done.

By reason of this construction, it may also be used with great facility as a holder in planing-machines, by clamping it by means of one or more holding-bolts to the bed of a planer, and securing the article to be planed in the jaws of the vise.

Having thus described my invention,

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

1. The bed-piece A, jaw B, and shield C, when cast in one piece, and provided with the slots D D, substantially as and for the purpose described.

2. The combination, with the same, of the sliding jaw F, when fitted to operate in connection therewith, and provided with the nut G, substantially as and for the purpose described.

3. The arrangement of the cap I, and screw L, and stationary jaw B, with the remaining parts of the vise, in the manner and for the purpose described.

The above specification of my invention signed by me, this 9th day of July, 1868.

JOHN C. CRUMPTON.

Witnesses:

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