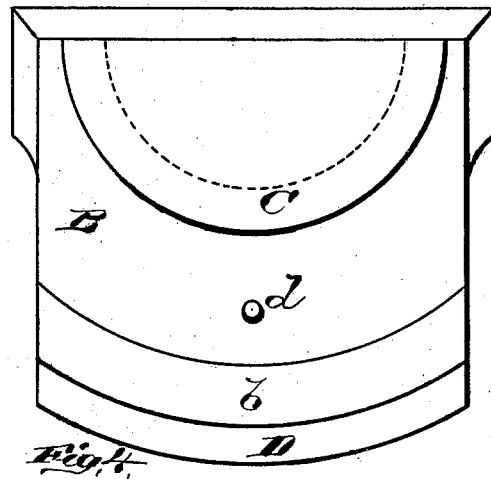
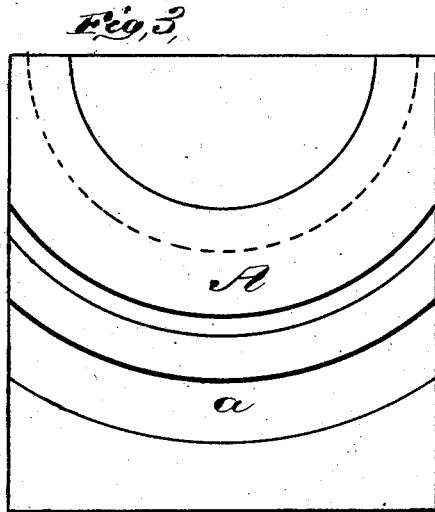
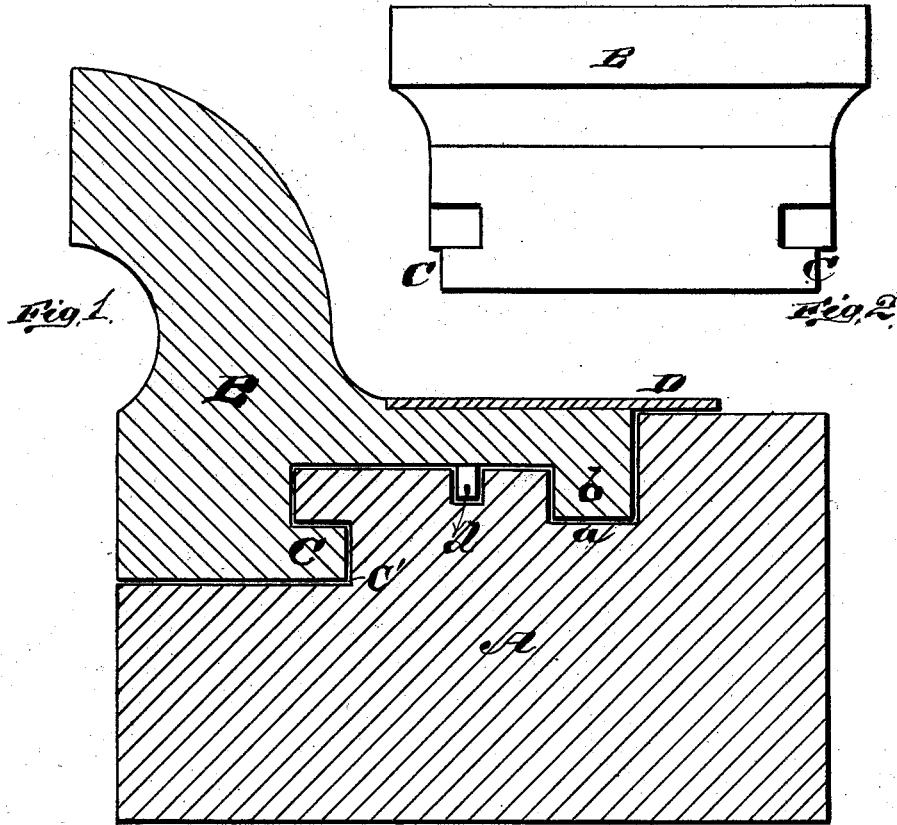


E. P. COOK & J. F. HALL.

Vise

No. 199,517.

Patented Jan. 22, 1878.



WITNESSES
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ELBERT P. COOK AND JAMES F. HALL, OF HAVANA, NEW YORK.

IMPROVEMENT IN VISES.

Specification forming part of Letters Patent No. **199,517**, dated January 22, 1878; application filed August 25, 1877.

To all whom it may concern:

Be it known that we, ELBERT P. COOK and JAMES F. HALL, of Havana, in the county of Schuyler and State of New York, have invented a new and valuable Improvement in Vises; and we 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 longitudinal vertical sectional view of our vise. Fig. 2 is a front view of the jaw. Fig. 3 is a plan view of the bed-piece, and Fig. 4 is a bottom plan view of the jaw.

This invention is designed as an improvement on the vises shown in Letters Patent granted to M. Prentiss, dated March 17, 1868, No. 75,576, and W. P. Harwood, dated April 11, 1871, No. 113,656. In Prentiss's vise it will be seen that the back jaw is formed with a horizontal flange upon its rear edge, which enters a recess or groove formed in the bed of the vise, and the forward movement of the jaw is prevented by means of a slot and a pin. By this construction a slot and a joint are formed between the jaw and bed-piece to collect the filings and other foreign matter, which are liable to clog and interfere with the working of the jaw. In Harwood's vise the rear jaw is provided with a pendent flange at its rear edge, which enters a recess or groove formed in the top of the bed-piece, with a beveled lip fitting over the inclined portion of the flange. By this construction an inclined joint, extending forward facing the jaws, is formed to catch the filings and other foreign matter that fall upon the curved portion of the rear jaw, thereby clogging up this joint in a very short time, and preventing the jaw from being used.

The object of my improvement is to remedy these defects; and the novelty consists in the construction of the bed-piece and the movable jaw with an overlapping projection, as will be hereinafter more fully set forth, and pointed out in the claim.

A represents the bed-piece, and B the movable jaw. The latter is, at its front end, provided with a semicircular flanged projection, C, to enter a corresponding recess, C', in the front of the bed-piece. The rear part of the

movable jaw B is provided with a circular pendent tongue, *b*, and the bed-piece A with a corresponding circular groove, *a*.

In practice this groove may be either in the upper piece, the jaw, or the lower piece—the fixed bed-piece and the tongue in the opposing piece.

Instead of a circular tongue, a simple lug or pin, *d*, may be used. The groove may have perpendicular sides or slanting sides—that is, be either square-sided, V-shaped, or dove-tailed—and the engaging tongue or pin have corresponding shape.

By these means it will readily be seen that any forward movement of the jaw upon the bed-piece is utterly impossible.

The jaw is, at the back end, provided or formed with a lip, D, which shuts over the joint and prevents filings and other foreign matter from getting into the joints and clogging up the same. This lip, on smaller vises, is made of a metal plate, riveted or otherwise permanently secured to the jaw, while on heavier vises the lip will be cast with the jaw in one piece.

The movable jaw, constructed as above described, serves a twofold purpose, to wit, keeping the jaw-frame from moving forward and preventing filings or other foreign matter from entering the joints between the jaw and bed-piece. The latter point of novelty is essential and very important, as by this construction we are able to prevent the clogging, so that the vise can work freely.

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

In a vise, the combination of the bed-piece A, having the semicircular recess C' and circular groove *a*, and the movable jaw B, having the semicircular flanged projection C, the circular pendent tongue *b*, or its equivalent, and the overlapping lip D, all constructed to operate in the manner as described, and for the purpose set forth.

In testimony that we claim the above we have hereunto subscribed our names in the presence of two witnesses.

ELBERT P. COOK.
JAMES F. HALL.

Witnesses:

H. H. HUNTINGTON,
WILLIS H. TRACY.