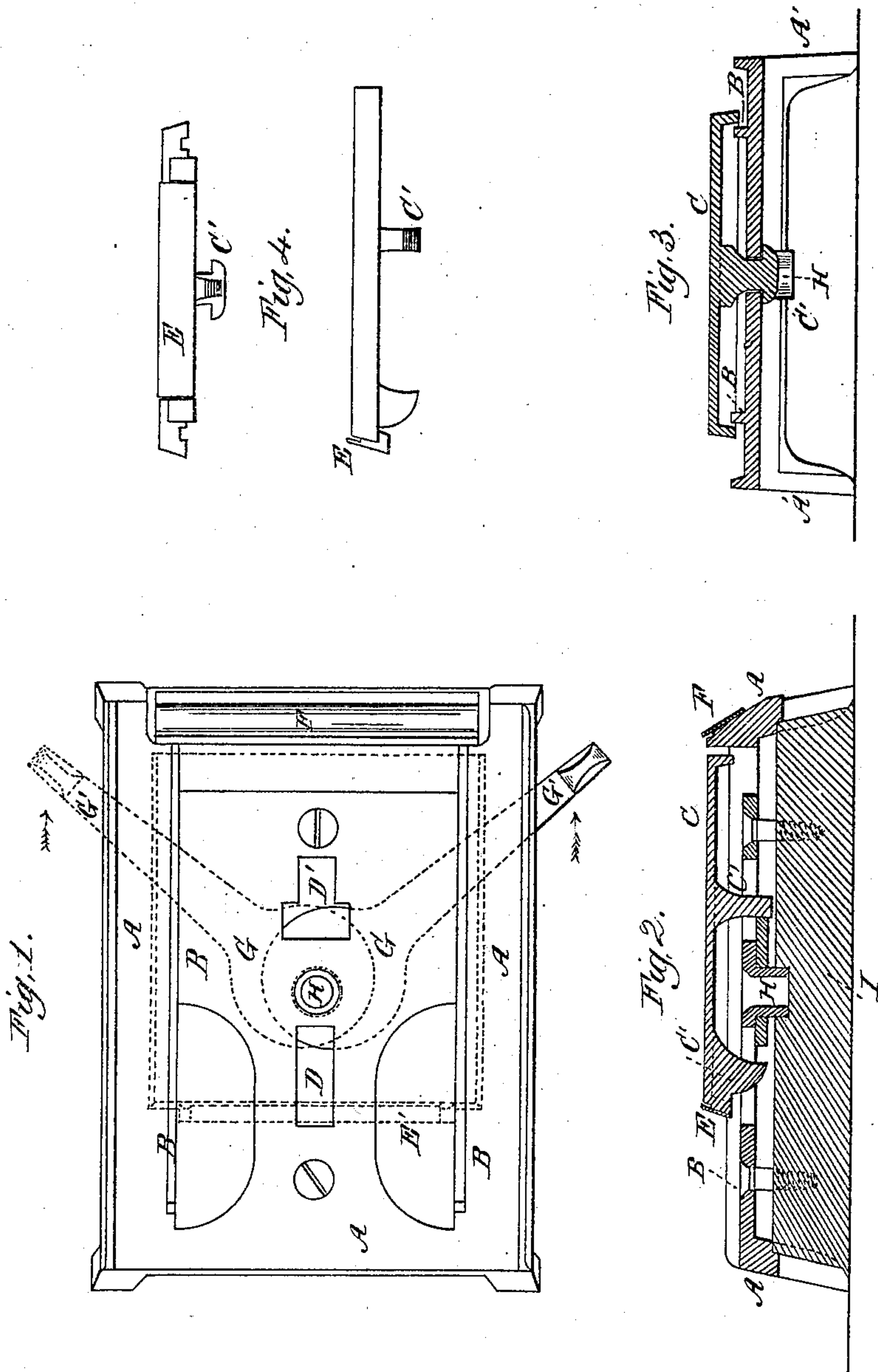


C. W. Stimpson,
Vise for Photographic Plates,
No 10,433. *Patented Jan. 17, 1854.*



UNITED STATES PATENT OFFICE.

C. W. STIMPSON, OF CLEVELAND, OHIO.

IMPROVED PHOTOGRAPHIC-PLATE VISE.

Specification forming part of Letters Patent No. 10,433, dated January 17, 1854.

To all whom it may concern:

Be it known that I, C. W. STIMPSON, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented new and useful Improvements in the Construction of Plate-Vises for Photographic Use; and I do hereby declare that the following is a full, complete, and accurate description of the construction and operation of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, like letters referring to like parts.

The nature of my invention consists in such a construction of the vise that all the surface of the plate is exposed to the action of the polishing wheel or buffer with no part of the instrument projecting above the surface of the plate, and so compact and complete within itself that it can be used in the hand upon a wheel or be fixed stationary to the bench.

I construct the vise of cast-iron or other suitable metal, the several parts being represented in Figures 1, 2, and 3.

Fig. 1 is a top view. Fig. 2 is a side view, and Fig. 3 is an end view.

The frame-work of the vise is shown by the letters *a a a*, &c., in the several figures. Its general figure is of a rectangular form. At the four corners there are feet, (marked *a' a'*,) the space thus formed being filled with a piece of wood. On the top of the plate *A* near the sides are two elevations or ways running longitudinally and marked *B B*, &c., in the several figures. Upon these ways the carriage-plate *C* slides back and forth, and is indicated in its relative position by the red lines in Fig. 1. In Figs. 2 and 3 are seen a side and end view. In Fig. 4 the same plate is seen detached from the other parts. On the under side of this plate are two projections, (shown at *C' C'*, Fig. 4,) which pass through the slots *D D'*, Fig. 1. One of these projections has a T-head which passes under the plate *A* and serves to hold the carriage-plate *C* from rising out of its place. At the left-hand end of this plate, as seen in Fig. 2 at *E*, is a lip that projects about the thirtieth part of an inch above the face of the carriage-plate *C* and

extending nearly across the width of the plate, and is shown by the red lines at *E'*, Fig. 1, and also at *E*, Fig. 4. The use of this lip, which curves inward toward the plate *C*, is to clasp one end of the photographic plate while being polished, the other end of the photographic plate being secured in a like manner by a lip *F*, Figs. 1 and 2, attached to the right-hand end of the frame *A*. The distance between the lips *E* and *F* is regulated by means of a cam-lever *G*, Fig. 1. This cam *G* articulates upon the pin *H*, the eccentric circle resting against the projections *C' C'*. When the arm of the lever *G'* is moved to the right in the direction of the arrow, the lips *E* and *F* are brought nearer together by the sliding of the carriage-plate *C* on the ways *B B*, the cam or eccentric head of the lever being of such a form that it will set at any point, by which means a photographic plate is held firmly between the lips *E* and *F*, the under side of the plate resting firmly upon the upperside of the carriage-plate *C*. By a reverse movement of the lever *G'* the plate is released.

A number of carriage-plates *C*, varying in size to suit the several sizes of the photographic plates, may be fitted to each vise. These can be easily changed by bringing the lever to the extreme left in Fig. 1, when the T-head projection will pass through the slot *D'* and the carriage-plate can be removed and a larger or smaller one introduced.

This vise may be used upon a buff-wheel and held in the hand of the operator, or it may be firmly attached to a bench or table and used in the ordinary manner by hand without a wheel, as it serves either purpose equally well.

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

1. The bed-plate *A*, with the ways *B B*, in combination with the carriage-plate *C*, with its projection, and T-head and lip *E*, operating in conjunction with the lip *F* upon the main frame *A*, the manner of securing the carriage-plate *C* to the ways *B B* by means of the slot and T-head and moving the same

backward and forward upon the ways BB by means of the eccentric or cam-lever in the manner specified.

2. The arrangement by which the carriage-plates can be changed from one size to another simply by bringing the lever-arm back to its farthest point to the left, or in the direction opposite to the course indicated by the arrow.

I disclaim the lips E and F and the cam-lever separately considered; but I do claim the several parts in combination, as herein set forth.

C. W. STIMPSON.

Witnesses:

JEHU BRAINEN,
GEORGE W. TIBBITTS.