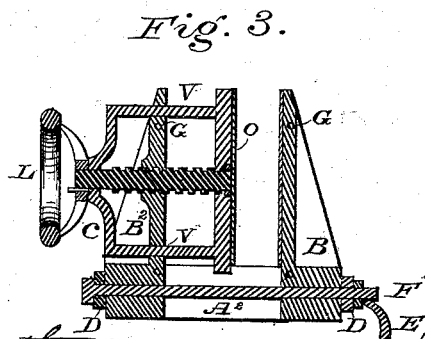
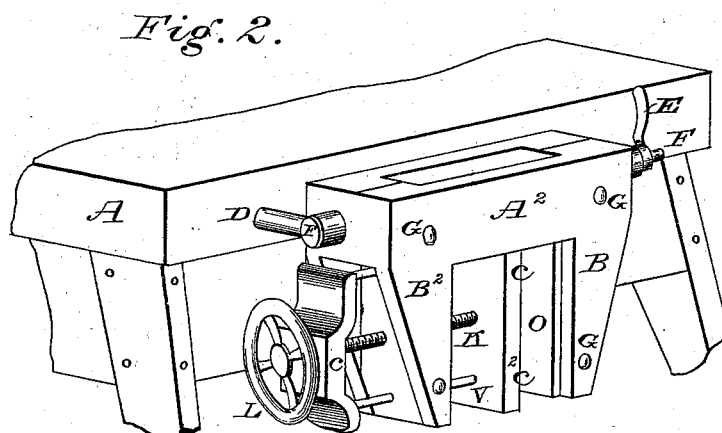
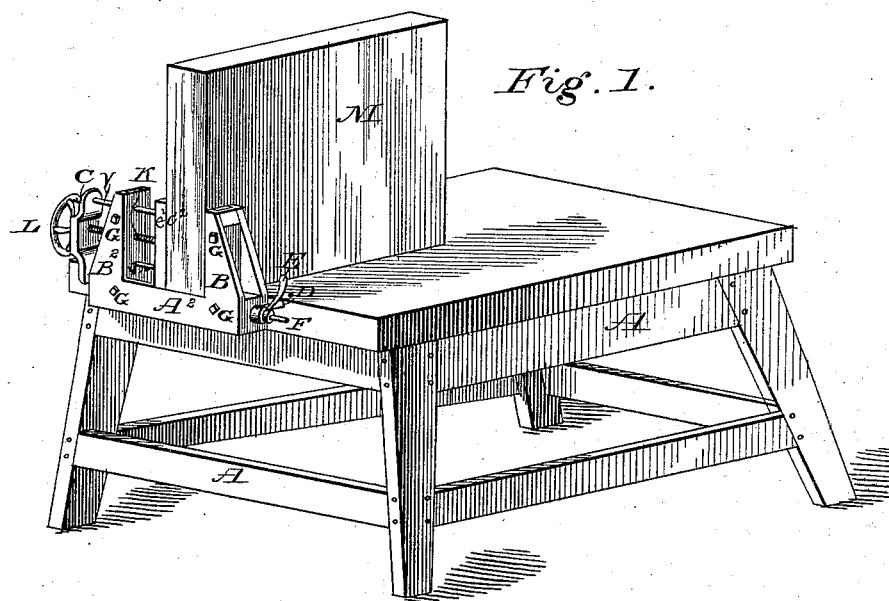


J. L. FERGUSON.
Vise for Holding Marble or Stone while being Cut.
No. 215,514. Patented May 20, 1879.



Witnesses:

O. H. Woodworth
G. E. Stough

Inventor

James L. Ferguson

UNITED STATES PATENT OFFICE.

JAMES L. FERGUSON, OF COLUMBIA CITY, INDIANA.

IMPROVEMENT IN VISES FOR HOLDING MARBLE OR STONE WHILE BEING CUT.

Specification forming part of Letters Patent No. **215,514**, dated May 20, 1879; application filed September 18, 1878.

To all whom it may concern:

Be it known that I, JAMES L. FERGUSON, of Columbia City, in the county of Whitley and State of Indiana, have invented a new and Improved Vise for Holding Marble or other Stone while being Cut, Dressed, or Polished, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

The object of my invention is to furnish a safe, practical, and convenient device for holding marble or other stone in position for cutting, dressing, or polishing.

Figure 1 is a perspective view of my device attached to the bench. Fig. 2 is an end view, showing the device folded down; and Fig. 3 is a vertical sectional view.

A represents the stone-cutter's bench, to one end of which is attached the vise A² by means of the eyes D D, screwed into the end of the bench, as shown. The rod F extends from one eye to the other through the whole length of the vise, and is provided with a screw-thread at one end, to which the tail-burr E is applied. The other end of rod F is squared to prevent its turning in its eye D. On this rod F the vise is free to turn up or down, and can be held in any desired position by tightening it between the rods D D by means of the tail-burr E.

The vise proper is usually made of cast-iron, with two projections, B and B². The projection B is the permanent jaw of the vise, and B² acts as a support and guide for the sliding frame C C C, as shown. B² is also tapped for the reception of screw K, the inner end of which is loosely attached to the inner upright portion of sliding frame C C C, (shown at C².) Screw K has no thread where it passes through the outer portion of frame C C C.

The inner upright portion of frame C C C, as shown at C², acts as the movable jaw of the vise. The vise is usually cast in two equal parts longitudinally, and then the two parts are securely bolted together by bolts G. The upper and lower guides, V V, which are parts of frame C C C, move freely through projection B, and hold the frame in position while it is propelled back and forth by the application of hand-power to wheel L, which is firmly

attached to the outer end of screw K, as shown.

The inner surfaces of both jaws are faced with wood or other soft or yielding material, as shown at O O. The facing is held in place by suitable grooves or other appropriate means. The use of a facing of wood or other soft or yielding material protects the marble from damage by contact with the iron jaws B and C².

The marble M is placed on bench A and held in vise A², between the permanent jaw B and the movable jaw C², as shown in Fig. 1. The vise can be adjusted by means of the tail-burr E to stand upright, as shown; or it may be adjusted with an inclination from or toward the bench, as may be desired.

When not in use the vise can readily be turned down below the surface of the bench, as shown in Fig. 2. When thus turned down it is practically out of the workman's way, and leaves the bench free for other operations.

By my construction and arrangement of the vise, and my mode of attaching it to the bench, great economy of space, safety, and convenience in handling and working marble and other stone are secured.

The jaws of the vise are always parallel, and the use of the wooden or other suitable facings prevents breakage.

The vise may be made to admit any thickness of stone desired, and it may be applied to the holding of other articles.

It will be apparent that by the use of this vise the workman will have a great advantage as compared with the old methods of holding marble or other stone in position for cutting, dressing, or polishing.

I claim as my invention—

1. The combination of the two rigid projections or jaws B and B² with the sliding frame or jaw C, substantially as described.

2. The combination of the projection or jaw B² with screw K, guides V V, hand-wheel L, and sliding frame or jaw C.

JAMES L. FERGUSON.

Witnesses:

H. A. HOUSEL,

H. BROWNEWELL.