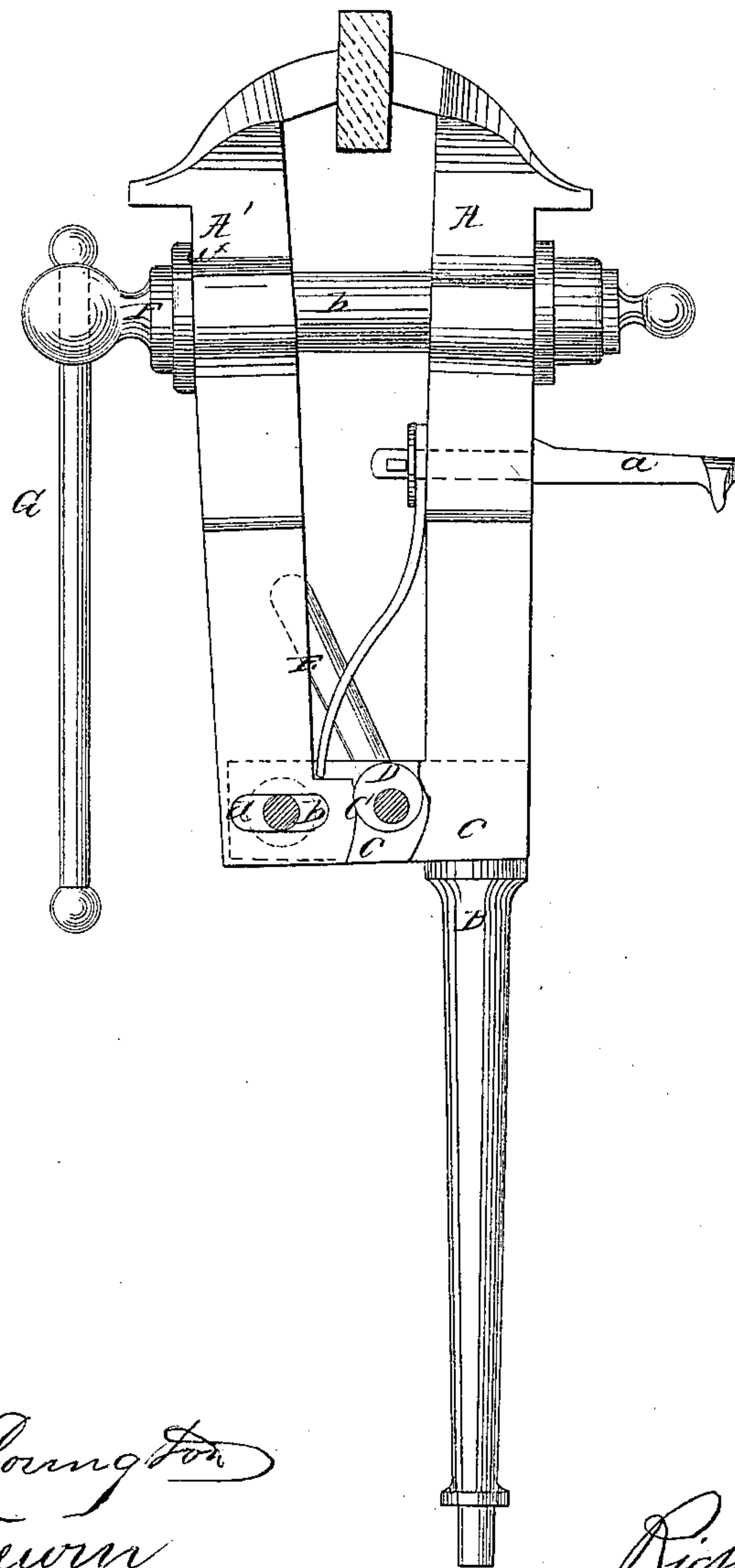


R. Jones,

Vise.

N^o 53,738.

Patented Apr. 3, 1866.



Witnesses,

J. W. B. Corington
Wm. Frewer

Inventor,

Richard Jones
Per Munroe
Attorneys

UNITED STATES PATENT OFFICE.

RICHARD JONES, OF PATERSON, NEW JERSEY, ASSIGNOR TO HIMSELF AND
THOMAS BROMLEY, OF SAME PLACE.

IMPROVED BENCH-VISE.

Specification forming part of Letters Patent No. 53,738, dated April 3, 1866.

To all whom it may concern:

Be it known that I, RICHARD JONES, of Paterson, in the county of Passaic and State of New Jersey, have invented a new and Improved Bench-Vise; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification.

The drawing represents a side view of a bench-vise having my improvement applied to it.

This invention consists in the application of an eccentric or cam, or an equivalent device, to a bench-vise in such a manner that when an article is grasped in the device as firmly as possible under the action of the screw an additional power may be applied, so as to cause the jaws to grasp the article more firmly.

Bench-vises are, as a general thing, subjected to hard treatment. Articles are not only rasped and filed in them with coarse implements, but are frequently hammered and pounded, and often divided and cut in two by filing or sawing them partially through, and then breaking them off by the blow of a hammer. It is therefore important that the article be firmly held, and by my improvement that result is obtained.

A represents the stationary jaw of a vise, and A' the movable jaw, the stationary jaw being provided with the usual standard B, the lower end of which is fitted in a step on the floor and the jaw A secured to the bench by a bracket, *a*.

The movable jaw A' is secured by a pivot-bolt, *b*, between arms *c c*, which project horizontally from the lower part of the stationary

jaw A, the bolt *b* passing through an oblong horizontal slot, *d*, in the lower end of the jaw A', as clearly shown in the drawing.

C is a shaft which passes horizontally through the arms *c c*, between the lower ends of the two jaws A A'. This shaft C has an eccentric or cam, D, upon it, which is between the arms *c c*, and the shaft C has a handle, E, on one end of it.

The movable jaw A' is operated by the usual screw F and lever G, and when an article has been grasped between the two jaws A A' as tightly as possible, through the medium of the screw F, the eccentric D is turned by actuating the handle E, and the eccentric acts against the lower end of the jaw A' and causes the article to be grasped still firmer.

It will be seen that a considerable leverage power is obtained in operating with the eccentric D against the lower end of the jaw A', owing to the distance of the lower end of said jaw from the collar *a*^x on the nut *b*^x, in which the screw works, the collar *a*^x serving as a fulcrum for the jaw A' when acted upon by the eccentric.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The eccentric or cam D, or its equivalent, applied to a bench-vise, to operate in the manner substantially as and for the purpose herein set forth.

RICHARD JONES.

Witnesses:

^{his}
JOHN + FREDRICKS,
^{mark.}
H. C. HUDSON.