I. Cogswell,

Vise.

No. 93,416. Patented Aug. 10, 1869.

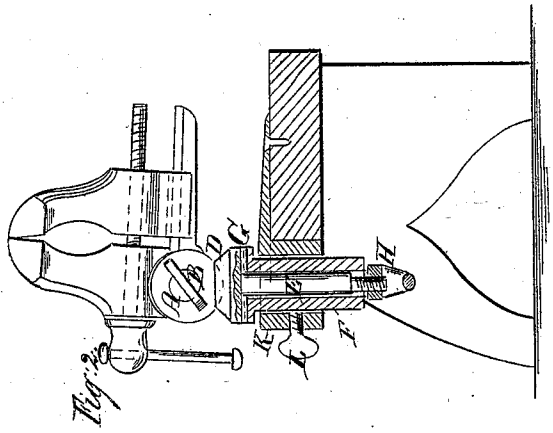


Fig. 2.

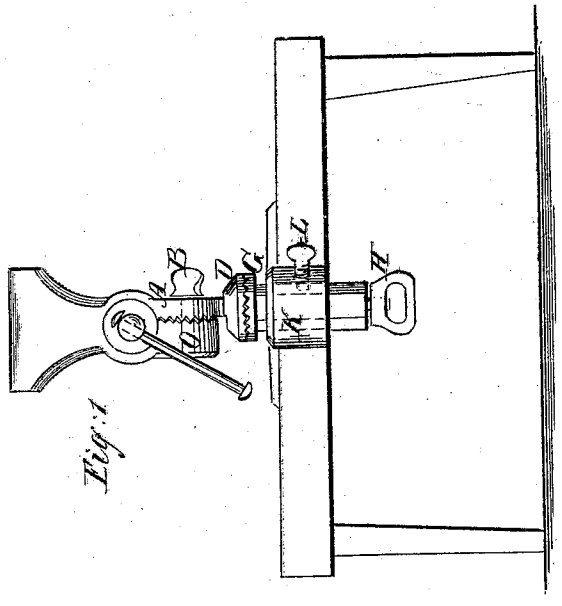


Fig. 1.

Witnesses:

Kinchman

Wm. H. Brooks

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United States Patent Office.

IRA COGSWELL, JR., OF LA SALLE, ILLINOIS.

Letters Patent No. 93,416, *dated August* 10, 1869.

IMPROVED VISE.

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, IRA COGSWELL, Jr., of La Salle, in the county of La Salle, and State of Illinois, 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 those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to improvements in bench-vises, designed to provide for conveniently adjusting the holding-jaws to any required position for holding the work to advantage.

It consists in an arrangement for adjusting them as to height; also in horizontal and vertical planes.

Figure 1 represents a front elevation of my improved vise, and

Figure 2 represents a side elevation, partly in section.

Similar letters of reference indicate corresponding parts.

The jaws are connected to the support A by a horizontal pivot-bolt, B, so as to permit the said jaws to oscillate in a vertical plane, and the surfaces of both parts surrounding the holes for the pivot-bolt are serrated, to prevent slipping, when clamped together by the pivot-bolt, which screws into the part C of the fixed jaw.

The vertical support A is provided with an enlarged collar, having a serrated face, also with a round shank passing through a tubular holder F, and provided with a tightening-nut, H, below the bottom of the said holder.

The upper end, G, of the holder is enlarged, and also serrated, so that when the nut H is tightened up, the vise will be held firmly against oscillating in the horizontal plane, in which this arrangement is intended for adjusting it.

The tubular holder is supported in another holder, K, permanently connected to the bench or other support, and arranged to be adjusted vertically thereon, and sustained at any point by a set-screw, L.

By these arrangements it will be seen that my improved vise may be readily adjusted to any position that may be required for any kind of work.

Having thus described my invention,

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

The combination of the adjustable connection of the jaws with the support A, the adjustable connection of the holder A with the holder F, and the adjustable connection of the holder F with the permanent holder K, all substantially as specified.

IRA COGSWELL, JR.

Witnesses:
H. M. HISCOCK,
L. H. WELLER.