

T. G. HALL.  
Adjustable Faced Vise.

No. 219,719.

Patented Sept. 16, 1879.

Fig. 1

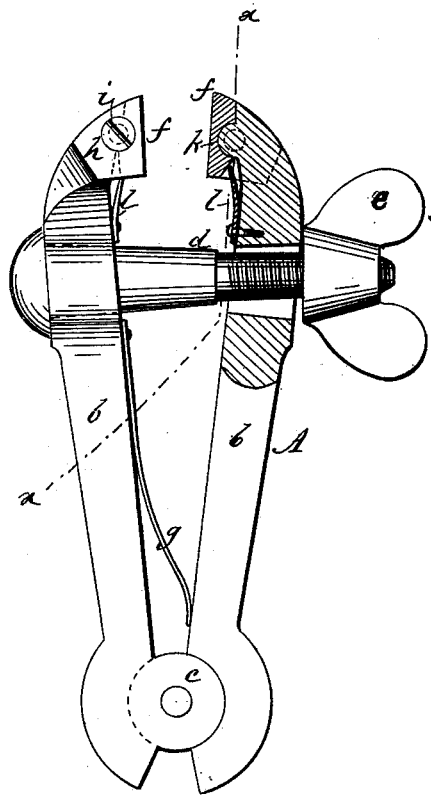
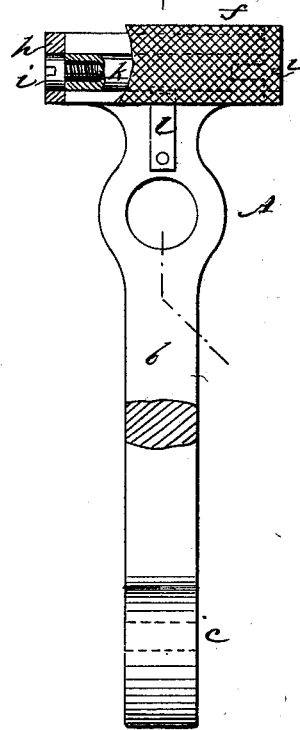


Fig. 2



WITNESSES:

*C. Neveu*  
*C. Butcher*

INVENTOR:

*T. G. Hall*

BY

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# UNITED STATES PATENT OFFICE.

THOMAS G. HALL, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF, WILLIAM Q. JUDGE, AND AUGUSTUS GUSTAM, OF SAME PLACE.

## IMPROVEMENT IN ADJUSTABLE-FACED VISES.

Specification forming part of Letters Patent No. **219,719**, dated September 16, 1879; application filed January 3, 1879.

*To all whom it may concern:*

Be it known that I, THOMAS G. HALL, of the city, county, and State of New York, have invented a new and Improved Adjustable-Faced Vise, of which the following is a specification.

My invention relates to that class of vises provided with adjustable faces.

It has for its object to render said faces capable of ready attachment to the jaws, easy in their movements of adjustment, and strong in their bearings; and with these ends in view my invention consists of a vise having the upper ends of its jaws formed with longitudinal ribs, the metal above and below said ribs being cut on an angle, and the ends of the jaws being bored and threaded, and combining therewith adjustable face-plates having semi-cylindrical grooves in their rear sides and projecting end ears perforated and adapted to lie over the ends of the jaws and coincide with the tapped holes in the ends thereof, the jaws and face-plates being connected by screws, so that the heads thereof shall serve as pivots, and any binding of the ears against the jaw ends avoided, as will be hereinafter and in detail explained.

In the drawings, Figure 1 is an elevation and partial section of a vise embodying my invention; and Fig. 2 is a sectional elevation on the line *x x* of Fig. 1.

Similar letters indicate like parts in both figures.

A is the vise, of the ordinary hand order. *b b* are the jaws, jointed at *c* in the usual manner.

The jaws are operated through the medium of an ordinary screw, *d*, and butterfly-nut *e*, a spring, *g*, being interposed between the jaws for an obvious purpose.

The inside faces of the upper termini of the jaws *b b* are formed with longitudinal semi-cylindrical ribs *k*, the metal each side of the ribs *k* being cut at an angle to a line drawn from the axis of motion of the jaws through the center of the pivot-screws *i*, in order that

the face-plates may vibrate to adjust themselves to the work confined between them, and the ends of the jaws are bored and screw-tapped a suitable depth at a point which is the true center of the arc of the rib *k* to receive the threaded ends of screws *i*, which pass through end ears *h*, formed on self-adjusting face-plate *f*. These face-plates *f* are formed with semi-cylindrical grooves in their rear sides adapted to surround the ribs *k* on the jaws, and the end ears *h* are bored, so as to permit the passage of the screws *i*. The holes in the ears *h* are sufficiently large to permit the heads of the securing-screws to pass into the same and serve as the pivots upon which said face-plates vibrate, and so that the said ears will not be bound against the ends of the jaws.

A spring, *l*, may be applied, as shown, to keep the upper edges of the face-plates pressed backwardly at their upper edges.

It will be observed that, while the screws *i* serve as the pivots upon which the plates *f* vibrate, the ribs *k* and corresponding grooves in the plates serve as auxiliary pivots, and at the same time support and stiffen the face-plates through their whole length.

I am aware that it is not new, broadly, to provide a vise with adjustable jaws or face-plates, and do not wish to be understood as making any such claim; but

What I do claim, and desire to secure by Letters Patent, is—

A vise having the upper ends of its jaws formed with longitudinal ribs *k*, the metal above and below said ribs being cut on an angle, and with their ends tapped, as described, in combination with the face-plates *f*, provided with semi-cylindrical grooves and end ears, the face-plates and jaws being secured in operative relation by screws *i*, in the manner and for the purpose set forth.

THOMAS G. HALL.

Witnesses:

GEO. D. WALKER,  
C. SEDGWICK.