

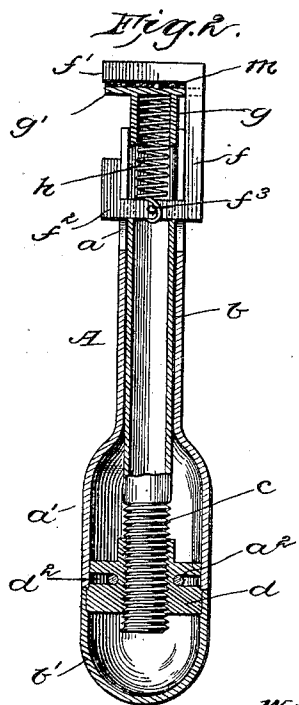
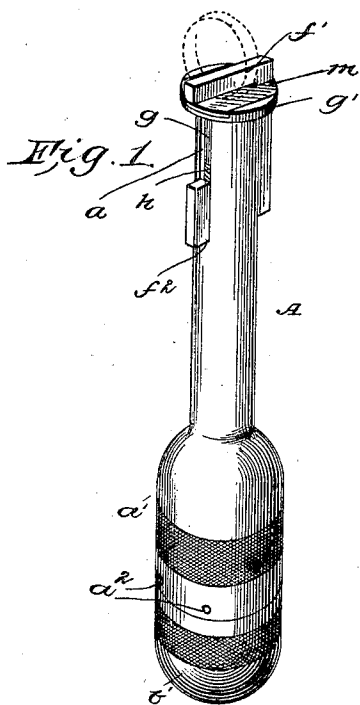
No. 679,257.

Patented July 23, 1901.

W. H. FORD.  
VISE.

(Application filed Oct. 19, 1900.)

(No Model.)



Witnesses.  
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# UNITED STATES PATENT OFFICE.

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## WISE.

SPECIFICATION forming part of Letters Patent No. 679,257, dated July 23, 1901.

Application filed October 19, 1900. Serial No. 33,648. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM H. FORD, a citizen of the United States, and a resident of Lowell, in the county of Essex and State of Massachusetts, have invented an Improvement in Vises, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

10 This invention has for its object the production of a novel vise for holding articles to be filed or finished, the vise being adapted to hold, among other things, finger-rings and the like.

15 My novel vise contains a yielding or spring-sustained support and a horn-like jaw to enter the space in the hollow article to be filed, the support acting, preferably, against the outer side of the article.

20 Figure 1 in elevation shows my novel vise holding a finger-ring; and Fig. 2 shows the vise in longitudinal section, the vise being in position to receive a ring.

The vise shown embodying my invention in one good form may comprise a hollow handpiece A, which may be slotted at one end, as at *a*. The handpiece is shown as receiving within it a shank *b*, made hollow to decrease its weight, and provided with a screw-thread *c*, which is engaged by a nut *d*, which enters the enlarged end *a'* of the handpiece, the nut having swiveled or united fixedly to it an engaging portion *b'*, so that by rotating the engaging device the nut may be turned on the shank *b* to move it longitudinally in the handpiece. The nut is free to be rotated in the handpiece, and to prevent it from longitudinal movement therein the nut has been provided with an annular groove *d<sup>2</sup>*, which is entered by a suitable pin or pins *a<sup>2</sup>*, fixed in the handpiece. The shank has secured to its unthreaded end a jaw *f*, having a horn-like end *f'*, to enter the hollow article, as a ring, to be filed or polished.

45 The lower part *f<sup>2</sup>* of the jaw is secured to the shank *b* in suitable manner, as by a pin *f<sup>3</sup>*, the jaw entering and being movable in the slot *a* as the nut *d* is turned. The upper end of the handpiece receives within it the stem *g* of a support *g'*, the said stem being represented as hollow and as receiving one end of

a suitable spring *h*, which acts to sustain the support yieldingly that it may be depressed or moved away from the horn *f'* when a ring is put into the vise, the spring causing the vise to hold the ring while it is being put into the desired position to be clamped firmly. The spring *h* is shown as connected at one end with the jaw *f*. To prevent marring the exterior of the ring, I provide the support *g'* with a piece of leather *m*.

With the vise in the condition, Fig. 2, the support *g'* may be depressed to open a space between it and the horn *f'* for the entrance of the ring, and the ring having been inserted the spring will cause the ring to be grasped and retained loosely in position while the ring is adjusted into the desired position. This done, the nut *d* may be rotated on the shank, causing the jaw to enter farther the slot *a*, such movement of the jaw serving finally to seat the under side of the support *g'* on the end of the handpiece, and any further rotation of the nut then clamps and holds the ring firmly for filing.

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

1. A vise, composed of a support, a horn-like jaw, means to move the same relatively one to the other and clamp a hollow article inside and outside, and elastic means for forcing the support toward the horn-like jaw to loosely hold an article between them while being adjusted in position.

2. In a vise, a handpiece, a support, a threaded shank, a jaw having a horn-shaped end to engage the inner side of a hollow article, a nut to move the jaw longitudinally with relation to the handpiece to clamp a hollow article between them, and elastic means for forcing the support toward the horn-like jaw to loosely hold an article between them while being adjusted in position.

3. In a vise, a hollow handpiece slotted at one end, a hollow threaded shank within said handpiece, a horn-like jaw connected with said shank, a nut on said shank to slide it in said handpiece, and an independent movable and elastic support having a projection and adapted to be seated on said handpiece.

4. In a vise, a handpiece, a spring-pressed

support carried thereby and normally projected beyond the end of the handpiece, a horn-like jaw, and means to move said support and jaw relative to each other to clamp  
5 an article between them and to seat the spring-pressed support upon the end of the handpiece.

5. A vise composed of a bodily-movable spring - pressed support, a horn - like jaw  
10 against which the said support is normally

pressed, and means to move the said support and jaw relatively one to the other to clamp a hollow article inside and outside.

In testimony whereof I have signed my name to this specification in the presence of  
15 two subscribing witnesses.

WILLIAM H. FORD.

Witnesses:

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EDITH M. STODDARD.