No. 805,792. PATENTED NOV. 28, 1905.

T. HADDEN.

VISE.

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Fig. 3.

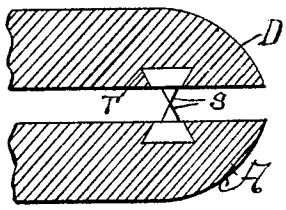
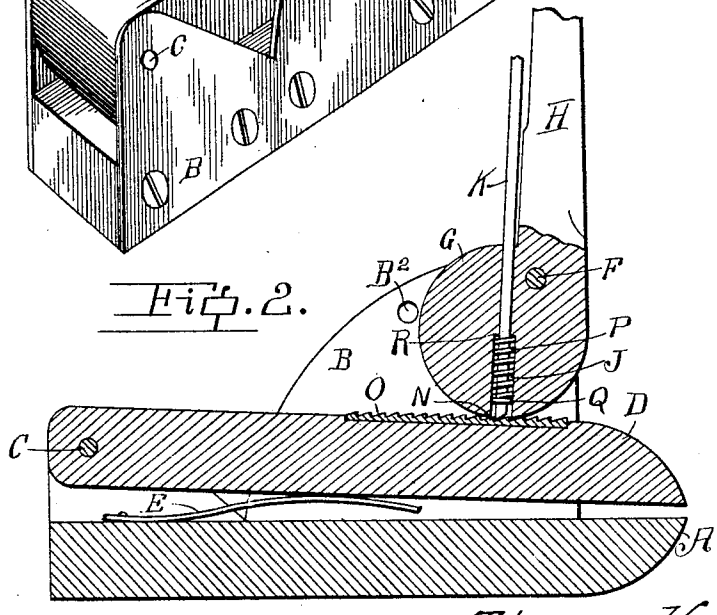


Fig. 1.

Fig. 2.



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Witnesses

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UNITED STATES PATENT OFFICE.

THOMAS HADDEN, OF FERGUSON, KENTUCKY.

VISE.

No. 805,792. Specification of Letters Patent. Patented Nov. 28, 1905.

Application filed March 23, 1905. Serial No. 251,635.

To all whom it may concern:

Be it known that I, THOMAS HADDEN, a citizen of the United States, residing at Ferguson, in the county of Logan and State of Kentucky, have invented certain new and useful Improvements in Vises, of which the following is a specification.

My invention relates to improvements in vises; and one object of the invention is the provision of a vise which can be operated with ease and which will exert great pressure in clamping an object and which will have means for cutting a pipe, bar, or strip of metal as circumstances require.

Another object of my invention is the provision of a vise which may be used with ease in an upright or horizontal position and which will instantly grasp the object, which is capable of various adjustments to suit requirements, and which will be of durable, inexpensive, and practical construction.

With these objects in view my invention consists of a vise or clamp embodying novel features of construction and combination of parts, substantially as disclosed herein.

Figure 1 represents a perspective view of a vise or clamp constructed in accordance with and embodying my invention. Fig. 2 represents a central longitudinal sectional view, and Fig. 3 represents a detail sectional view of the jaws provided with cutters.

My vise or clamp is of extremely simple construction and comprises the stationary jaw A, to which is secured the pair of plates B, in which is pivoted at C the movable jaw D, between the jaws being placed the spring E, and the pair of plates are provided with extended portions B′, provided with a series of openings B^2 to receive the fulcrum or pivot F of the cam-head G, having the lever H. This cam-head is provided with a bore or passage J, through which passes the rod K, whose upper end is connected at L to the pivoted angular hand-lever M and whose lower end is formed with a tooth or point N for engaging the rack O on the pivoted jaw, and a spring P surrounds the rod and bears against the flange Q on said rod and the wall R of the cam-head.

From the foregoing description, taken in connection with the drawings, the operation of my vise will be readily understood, and it is evident that when the lever, with cam-head, is operated the cam engages the pivoted jaw and forces the jaws against the object and the spring-rod engages the rack and holds the jaws upon the object with a strong grip, and to cut a strip of metal I employ the pair of cutters or knives S, which fit in recesses T of the jaws, the lever-cam bringing the cutters upon the object and cutting the object with a smooth clean cut, as is evident.

It will be observed that the fulcrum or pivot of the lever-cam may be changed to any one of the series of openings in the plates according to the pressure to be applied; also that the vise may be used in a horizontal or vertical position and that it will perform its functions in an efficient and practical manner.

I claim—

1. A vise or clamp, consisting of a pair of clamping-jaws, a rack carried by one of said jaws, a lever-cam engaging one of the jaws, and means for retaining said lever-cam consisting of a spring-actuated rod arranged in the cam of the lever and adapted to engage the rack.

2. A vise or clamp consisting of a pair of jaws, a rack carried by one of said jaws, a lever-cam and a rod carried by the lever and having a concealed spring for forcing said rod into engagement with said rack for securing the jaws in the adjusted position.

3. A vise or clamp consisting of a stationary jaw, a pair of plates carried by said jaw, a pivoted jaw mounted in said plates, a rack carried by the pivoted jaw, a lever-cam adjustably fulcrumed in said plate, a spring-actuated rod arranged within said cam, and a pivoted handle-lever connected to said rod for disengaging it from the rack of the pivoted jaw.

4. A vise or clamp consisting of a pair of jaws provided with knives or cutters, a lever-cam engaging one of the jaws, a rack carried by the jaw engaged by said cam, and a rod passing through said cam and engaging the rack for securing the jaws in adjusted position.

5. A vise or clamp, consisting of a pair of pivoted jaws, a pair of plates secured to one of the jaws and provided with a series of openings, a lever having a cam adapted to be fulcrumed in any of the series of said openings, a rack on one of the jaws, and a spring-actuated rod carried by the cam and engaging the rack to retain the lever.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS HADDEN.

Witnesses:

WM. N. MOORE,

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