C. E. SHIELDS.

BENCH VISE.

APPLICATION FILED JUNE 15, 1911.

1,036,155. Patented Aug. 20, 1912.

Fig. 1.

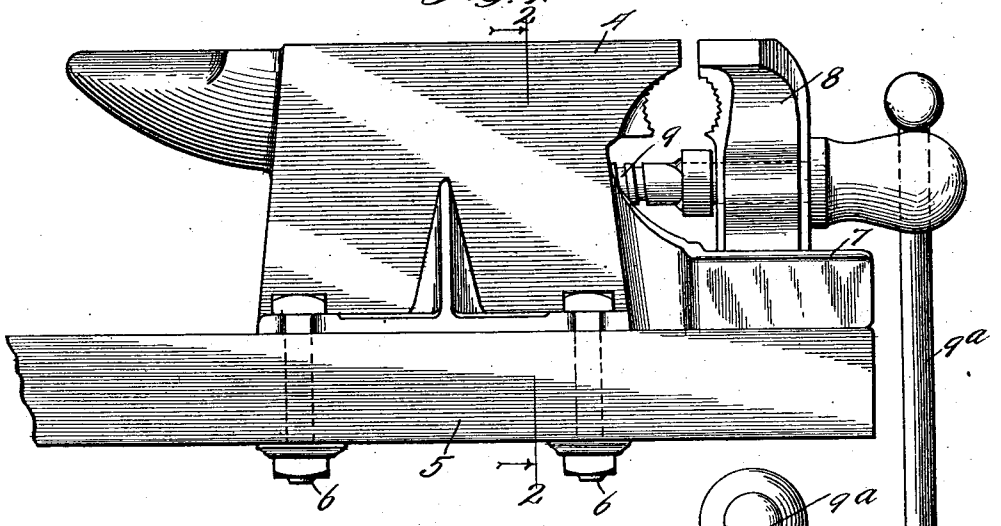


Fig. 2.

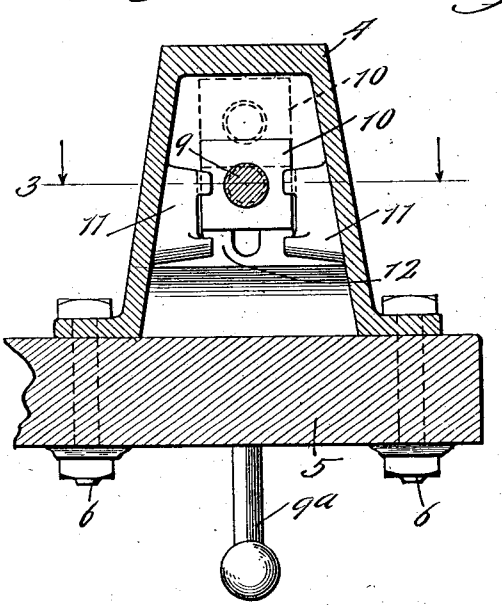
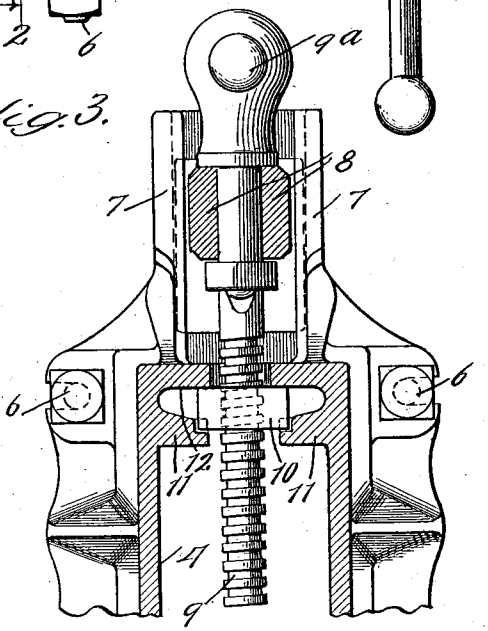


Fig. 3.



Witnesses:

Jas. P. Barry

H. A. Swenarton

Inventor:

Carl E. Shields

By Bulkley & Dunand

Atty's

UNITED STATES PATENT OFFICE.

CARL E. SHIELDS, OF ROCK ISLAND, ILLINOIS.

BENCH-VISE.

1,036,155. Specification of Letters Patent. Patented Aug. 20, 1912.

Application filed June 15, 1911. Serial No. 633,251.

To all whom it may concern:

Be it known that I, CARL E. SHIELDS, a citizen of the United States of America, and resident of Rock Island, Rock Island county, Illinois, have invented a certain new and useful Improvement in Bench-Vises, of which the following is a specification.

My invention relates to bench vises, and more particularly to an improved and efficient construction of the same, whereby the number of the parts is reduced and the cost correspondingly diminished.

My invention relates especially to that type of bench vises in which the movable jaw is adjusted with respect to the stationary jaw by means of a threaded rod carried by the movable jaw and which rod passes through a part of the stationary jaw and engages with a threaded nut, which nut is held against lateral movement within said stationary jaw. In prior constructions this nut has been held against such movement by means of a cap or the like, which was secured by means of screws or bolts to the stationary jaw. This necessitated the provision of a number of parts including this cap and fastening screws which were liable to become lost or misplaced, and which furthermore unnecessarily increased the cost of construction.

By my invention, I overcome the above objectionable features by providing a pair of lugs integral with the stationary jaw, by means of which the nut is prevented from having lateral movement. These and other objects of my invention will be more clearly understood by reference to the accompanying drawings, in which similar reference characters refer to similar parts, and in which—

Figure 1 represents a side elevation of a bench vise embodying the features of my invention. Fig. 2 represents a cross-sectional elevation taken on the line 2—2 of Fig. 1. Fig. 3 represents a cross-sectional plan view taken on the line 3—3 of Fig. 2.

Referring to the drawings: I have there shown a bench vise consisting of the stationary jaw and anvil 4 mounted upon a suitable support 5, and secured thereto by means of bolts 6—6. The stationary jaw 4 is provided with a suitable guide-way 7 along which the movable jaw 8 is adapted to slide. The movement of this jaw 8 is regulated by means of the threaded rod 9 which is rotatably mounted in this jaw 8, the threaded end portion of this rod passing through an opening in the side of the anvil of the stationary jaw 4 and engaging with a threaded nut 10. An operating handle 9^a of any suitable construction is provided in the end of the rod 9.

Cast integrally with the anvil and extending inwardly therefrom are a pair of lugs 11, as shown in Figs. 2 and 3. These lugs are positioned a sufficient distance from the interior end surface 12 of the anvil to allow sufficient space for the nut 10, and are a sufficient distance from the top of the interior surface to permit the insertion of this nut, as shown in dotted lines in Fig. 2.

It will be noticed that when the jaws are being brought together, at which time the greatest pressure is brought to bear upon the two jaws, the nut 10 bears against the end wall 12 of the anvil. It is only when the jaws are being separated that the nut bears against the lugs 11, and for this reason such great strength is not necessary for these lugs, as they have only to counteract the weight of the movable jaw while it is being retracted.

It will thus be seen that I have constructed a very efficient and simple means for confining the engaging nut, and while I have shown one particular embodiment of my invention it is to be understood that I do not wish to be limited to such a construction.

What I claim as my invention is:

In a vise, a stationary jaw including an anvil portion having side and end walls, one or more lugs on the interior of said side walls and integral therewith, near one end thereof, a nut confined between said lugs and end wall, said lugs bearing beneath and on the sides of said nut thus preventing lateral or downward movement of the same, a movable jaw, and a threaded rod carried thereby engaging said nut, whereby the position of said movable jaw can be adjusted with respect to said stationary jaw.

Signed by me at Rock Island, Illinois, this 6th day of June, 1911.

CARL E. SHIELDS.

Witnesses:
L. C. LOWNING,
F. W. THIESEN.