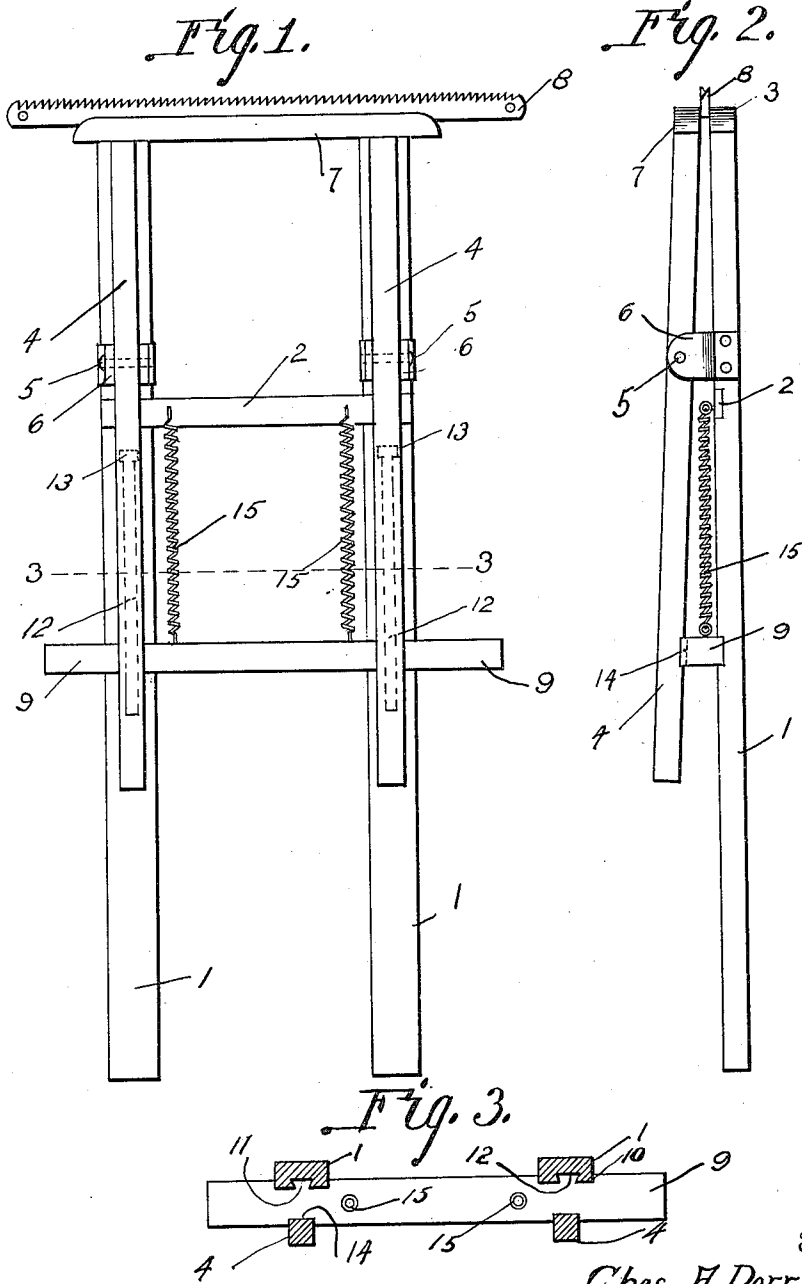


C. A. DORR, JR.
SAW VISE.
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1,064,622.

Patented June 10, 1913.



Witnesses

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SAW-VISE.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CHARLES A. DORR, JR., a citizen of the United States, residing at Montello, in the county of Plymouth and State of Massachusetts, have invented certain new and useful Improvements in Saw-Vises, of which the following is a specification.

This invention comprehends improvements in vises and relates more particularly to saw vises.

The primary object of the invention is to provide a saw vise including a pair of legs having a jaw secured thereto, a pair of pivoted levers connected to said legs, a cooperating jaw carried by said levers, and a spring actuated wedge adapted to force the two jaws together.

The invention also aims to provide a device which shall be of extremely simple construction, cheap to manufacture, strong, and durable.

With these and other objects in view, as will become more apparent as the description proceeds, the invention consists in certain novel features of construction, combination, and arrangement of parts, as will be hereinafter described and claimed.

For a complete understanding of my invention, reference is to be had to the following description and accompanying drawings, in which,

Figure 1 is a front elevation of an improved saw vise constructed in accordance with my invention, Fig. 2 is a side elevation of the same, and, Fig. 3 is a transverse sectional view taken upon the plane of line 3—3 of Fig. 1.

In the following description and accompanying drawings, similar parts will be referred to and designated by like reference characters.

The two legs 1 of my vise are secured in parallel spaced relationship by means of the transverse brace bar 2, which is fitted within recesses formed in the front faces of said legs. A jaw 3 is secured transversely across the upper ends of said legs and assists in securing them firmly in parallel relationship to each other. A pair of levers 4 are pivotally secured intermediate their ends to the legs 1 by means of pivotal connections 5 passing through the same and through suitable ears 6, which are rigid with the legs. A jaw 7 is secured to the upper ends of the levers 4 and coöperates with the

jaw 3 to hold a saw 8 or any other desired article.

To force the jaw 7 tightly against the saw 8, I employ a wedge bar 9, which is adapted to slide between the legs 1 and the lower portions of the levers 4. As clearly shown in Fig. 3, the wedge bar is provided upon its rear face with transverse recesses 10 to receive the legs 1, said recesses being formed intermediate their ends with dovetail projections 11, which slide with correspondingly shaped grooves 12 formed in the front faces of the legs 1. These grooves are enlarged at their upper ends, as indicated at 13, to permit the insertion of the dovetail projections 11. The front face of the wedge bar 9 is formed with transverse recesses 14 to receive the levers 4. The rear walls of said recesses are slightly inclined, as indicated by the dotted lines in Fig. 2 to better accommodate the levers 4.

A pair of very strong contractile spiral springs 15 are attached to the transverse bar 2 and to the wedge bar 9 and tend to raise said wedge bar so as to close the jaws of the vise.

It will be noted that the wedge bar 9, besides serving to force the jaws together, acts as a brace to prevent the free ends of the levers and legs 1 from spreading. The dovetail projections 11 serve to retain the wedge bar squarely in engagement with the forward faces of the legs 1. It will be seen from the foregoing description in connection with the accompanying drawings, that I have provided a vise which can be readily assembled, which is very strong and simple, and which is locked against an object by means of a wedge block.

The means I have provided for securing the wedge bar in position are very simple as well as efficient and the spiral springs 15 exert a tightening influence upon the jaws 3 and 7.

It is to be understood that while I have shown and described the preferred embodiment of my invention, I do not wish to be limited to this exact construction, combination, and arrangement of parts, but may make such changes as will fall within the spirit and scope of the invention as defined by the appended claims.

Having thus described my invention, what I claim is:—

1. A vise comprising a pair of legs, a jaw secured thereto, a pair of levers pivoted to

said legs, a jaw secured to said levers, a wedge bar slidably mounted between said levers and legs, and spring means adapted to move said wedge bar in one direction, 5 whereby the jaws are forced toward each other.

2. A vise comprising a pair of legs, a jaw connected to said legs, a pair of pivoted levers also secured to the legs, a jaw mounted 10 upon said levers, a wedge bar having recesses formed in its rear edge for engagement with said legs, and spring means for drawing the wedge bar toward the pivot points of the levers, whereby the jaws are forced toward 15 each other.

3. A vise comprising a pair of legs, a jaw connected to the pivoted ends thereof, a pair of levers pivotally secured intermediate their ends to said legs, a jaw secured to the piv- 20 oted ends of said levers, the legs being

formed with longitudinal recesses in their front faces, a wedge bar having its rear edge recessed to receive said legs and formed with dove-tail projections adapted to fit 25 within said longitudinal recesses, the forward edge of the wedge bar being transversely recessed for engagement with the lower ends of the levers, a brace connecting said legs, and contractile spiral springs se- 30 cured to said brace and wedge bar, whereby the latter is drawn toward the pivot points of the levers to force the second mentioned jaw toward the first.

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

CHARLES A. DORR, Jr.

Witnesses:

ERLAND R. PORTER,
LUCY A. OLIVER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."