No. 723,789. PATENTED MAR. 24, 1903.

C. R. WALTER.

SAW CLAMP OR VISE.

APPLICATION FILED JUNE 16, 1902.

NO MODEL. 2 SHEETS—SHEET 1.

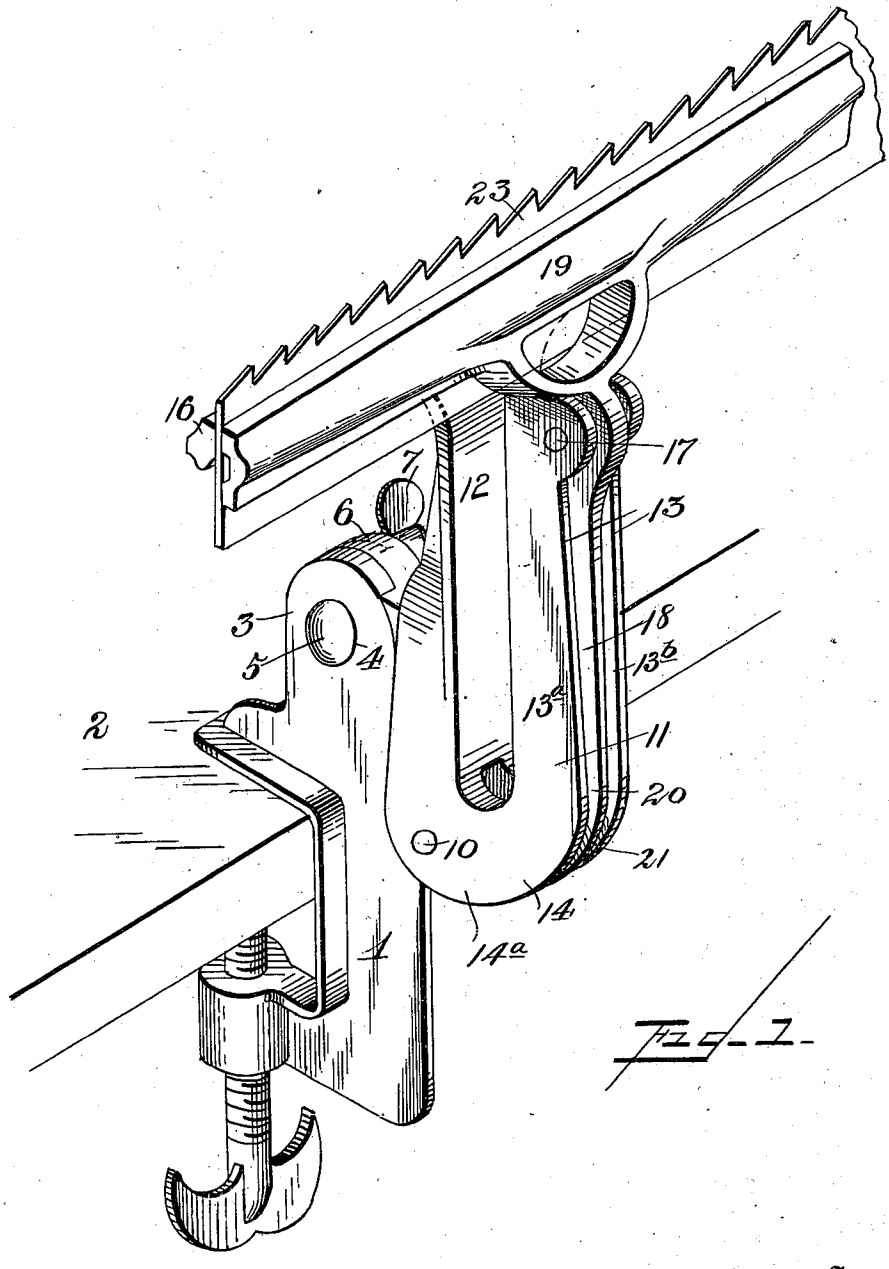


Fig. 1.

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

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NO MODEL. 2 SHEETS—SHEET 2.

Fig. 2.

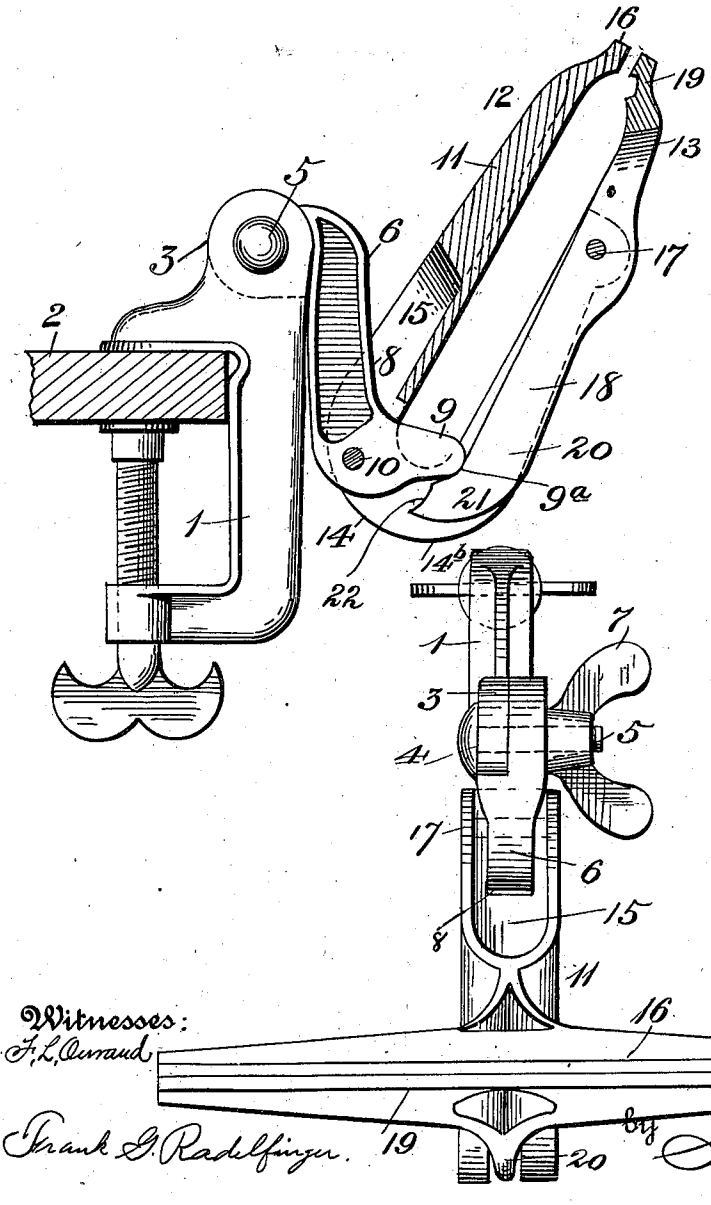


Fig. 2.

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UNITED STATES PATENT OFFICE.

CHARLES ROSTAN WALTER, OF FREDERICKTOWN, OHIO, ASSIGNOR TO JAMES B. FOOTE AND COMPANY, OF FREDERICKTOWN, OHIO, A FIRM.

SAW CLAMP OR VISE.

SPECIFICATION forming part of Letters Patent No. 723,789, dated March 24, 1903.

Application filed June 16, 1902. Serial No. 111,914. (No model.)

To all whom it may concern:

Be it known that I, CHARLES ROSTAN WALTER, a citizen of the United States, residing at Fredericktown, in the county of Knox and State of Ohio, have invented new and useful Improvements in Saw Clamps or Vises, of which the following is a specification.

My invention relates to saw clamps or vises; and the object of the same is to construct a device of this character which can be operated by grasping and rocking the jaws of the vise, and thereby avoid having to set the saw with one hand and operate a lever or set-screw with the other hand to clamp the saw. By my construction both hands are left free to adjust the saw, for both saw and jaws can be grasped at the same time.

The simple and novel construction employed by me in carrying out my invention is fully described in this specification and claimed, and illustrated in the accompanying drawings, forming a part thereof, in which—

Figure 1 is a perspective of my vise holding a saw. Fig. 2 is a transverse section of my vise unclamped. Fig. 3 is a plan view of the vise clamped.

Like numerals of reference designate like parts in the different views of the drawings.

The numeral 1 designates a bench-clamp for use in securing my device to a support 2, such as a bench. The clamp 1 has an ear 3 formed integral therewith, which ear is perforated at 4 to accommodate a bolt 5, on which an arm 6 is hinged. A thumb-nut 7, fitted on the bolt 5, serves to clamp the arm 6 against all movement. The arm 6 is bent downwardly to form a body 8, which normally extends parallel to the back of the clamp 1, and then outwardly at right angles to the body 8 thereof, forming a catch 9, rounded off at 9^a.

Pivoted to the arm 6 on a cross-pin 10 is a U-shaped member 11, having upwardly-extending arms 12 and 13, connected by a curved cross-bar 14. The arm 12 is traversed by a groove 15 throughout a portion of its length, which groove accommodates the body 8 of the arm 6, and the bottom serves as a stop to limit the pivotal movement of the member 11 about the pin 10. Formed integral with the upper end of the arm 12 is a jaw 16. The arm 13 and cross-bar 14 are longitudinally slotted throughout their lengths, and, in fact, each consists of two parallel members 13^a 13^b and 14^a 14^b, respectively. Fulcrumed on a cross-pin 17, connecting the upper ends of the members 13^a and 13^b, is a lever 18, bearing a jaw 19 on its upwardly-extending short arm and having a downwardly-extending longer arm 20. The arm 20 extends substantially parallel to the members 13^a and 13^b and is curved around to form a tail 21, which is cut off on the end to form a concave face 22. The tail 21 is located just opposite to the rounded catch 9 in position to be engaged thereby to operate the jaw 19 to clamp a saw 23, placed between the jaws.

In operation my device is attached to a support 2 by means of the bench-clamp 1. A saw 23 which it is desired to file is then set between the jaws 16 and 19, supposed open, and adjusted to bring the teeth the proper distance above the said jaws, using both hands in the operation and resting them on the ends of the jaws. When this has been accomplished, the ends of the jaws are grasped with both hands, while still retaining the hold on the saw, and the jaws pushed from you toward said support, which action will bring the catch 9 into engagement with the curved tail 21, thereby closing the jaws and clamping the saw, when a further movement in the same direction will bring the catch 9 in contact with the face 22 and firmly lock the device and secure it against all danger of slacking off. After saw 23 has been secured the nut 7 can be slackened off to release the arm 12, so that it may be set in a vertical position, after which the nut 7 is again tightened. This adjustment once made need never to be disturbed. To release the saw, the movement is reversed.

I do not wish to be limited as to details of construction, as these may be modified in many particulars without departing from the spirit of my invention.

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

1. In a vise, the combination with a supporting-arm bearing a catch, a member pivoted to said arm and bearing a jaw, a lever fulcrumed on said member and bearing a jaw on one arm, the other arm being located to

be engaged by said catch to operate said jaws to clamp them, substantially as described.

2. In a device of the class described, the combination of a support bearing a catch, a member bearing a jaw and pivoted to said support, a lever bearing a jaw, said lever being located to be engaged by said catch to operate said jaws when the said pivoted member is rotated on its pivot as an axis, substantially as described.

3. In a vise, the combination of a support, a member pivoted to said support and bearing a pair of jaws, and means constructed to operate said jaws by the rocking of said pivoted member, substantially as described.

4. In a vise, the combination with a support, of a member pivoted to said support and bearing a jaw, a lever fulcrumed on said member and bearing a jaw, and means constructed to operate said jaws to clamp them by the rocking of said pivoted member, substantially as described.

5. In a saw-clamp the combination of a supporting-arm bearing a catch, a U-shaped member pivoted to said supporting-arm and bearing a jaw on one arm, a lever fulcrumed on the other arm of said U-shaped member, said lever being located to be engaged and operated by said catch when said U is rocked about the said pivot in said supporting-arm, substantially as described.

6. In a saw-vise, the combination of a supporting-arm bearing a catch, a U-shaped member bearing a jaw on one arm, the other arm being slotted, said jaw-bearing arm being pivoted to said supporting-arm, a lever fulcrumed on said slotted arm and bearing a jaw, said lever located in said slot in position to be engaged by said catch, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

CHARLES ROSTAN WALTER.

Witnesses:
S. W. BENT,
CHAS. E. ACKERMAN.