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Patented Dec. 20, 1898.

G. W. FERNSIDE.

SAW CLAMP.

(Application filed Sept. 12, 1898.)

(No Model.)

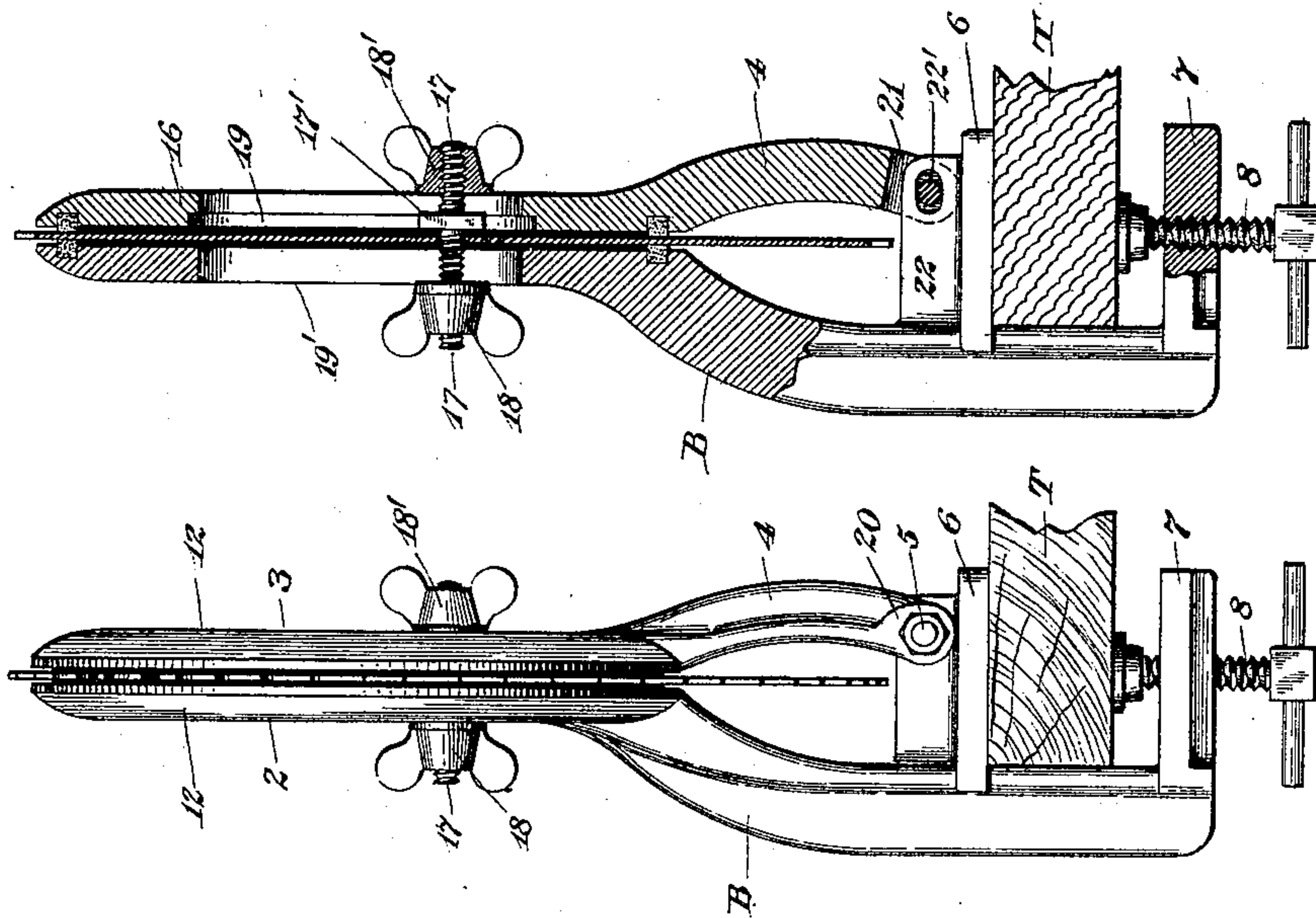


Fig. 3.

Fig. 2.

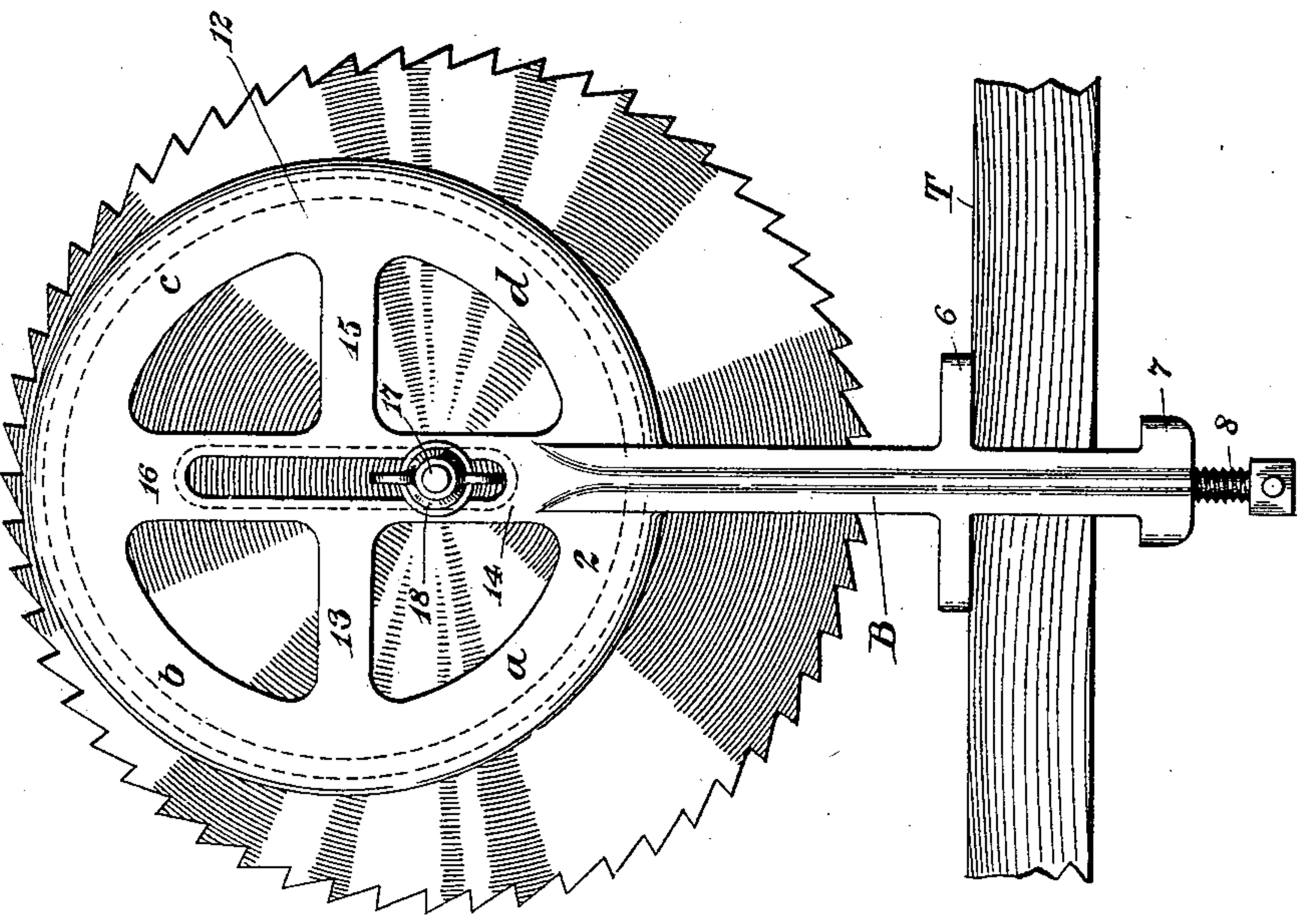


Fig. 1.

Witnesses:

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Inventor:

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By his Attorney

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# UNITED STATES PATENT OFFICE.

GEORGE W. FERNSIDE, OF EAST HARTFORD, CONNECTICUT, ASSIGNOR OF  
ONE-HALF TO JOHN A. STOUGHTON, OF SAME PLACE.

## SAW-CLAMP.

SPECIFICATION forming part of Letters Patent No. 616,305, dated December 20, 1898.

Application filed September 12, 1898. Serial No. 690,755. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE W. FERNSIDE, a citizen of the United States, residing in East Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Saw-Clamps, of which the following is a specification.

This invention relates to saw-clamps; and the object of the invention is to provide an improved device of this character which consists of a minimum number of parts and which can be manufactured at a low cost.

My improved saw-clamp embodies, in connection with a body portion or standard provided with a fixed jaw and a movable jaw, each of which consists of a circular rim and a series of transverse arms, the arms and rims of the two jaws registering and the rims at the places between the arms constituting portions to be grasped by the hand, by which the device may be dismounted or detached from a support, and the vertical arms having registering longitudinal slots, a bolt having a guide portion sliding in one of the slots and extending through the other slot and a nut on the extended portion of the bolt.

The body portion or standard is provided with means of a suitable nature by which the device can be secured to a support or work-table.

By reason of the construction just pointed out when a saw is to be mounted in the clamp it is simply necessary to detach the nut on the bolt, when the pivoted jaw can be swung down to permit the arbor of the saw to be placed over said bolt, which serves as a center for the saw while being operated upon. When the saw is thus placed, the pivoted jaw is returned to its primary position and the nut is placed on the bolt and turned upon the same until the pivoted jaw firmly clamps the saw in place. By reason of the longitudinal slots in the cross-arms of the two jaws the bolt can be easily adjusted without removing said bolt, thereby to adapt the device to saws of different diameters.

In the drawings accompanying and forming part of this specification, Figure 1 is a front elevation of my improved saw-clamp. Fig. 2 is a side elevation of the same, and Fig. 3 is a longitudinal central section.

Similar characters designate like parts in all the figures of the drawings.

My improved device includes a body portion or standard, as B, terminating at the upper end in the fixed jaw 2, the complementary and movable jaw being designated by 3 and having the downwardly-extending arm 4, pivoted, as at 5, to the body portion B. Said body portion is provided near its lower end with the offsets or projections 6 and 7, the lower one of which carries a thumb-screw 8, which serves to hold the device in place upon a table or other support, as T, inserted between the two lugs.

Each of the jaws consists of a circular rim, as 12, and a series of radial transverse arms, as 13, 14, 15, and 16, the two jaws resembling spoked wheels, and each having a series of segments, as *a*, *b*, *c*, and *d*, which conveniently serve as a means for grasping the jaws at different places for the purpose of more easily dismounting the device, and this construction also possesses extreme lightness.

The means for clamping a saw in place between the two jaws consists of the bolt 17 and its nut 18, said bolt having, preferably, a squared part 17', which slides in the longitudinal slot 19, formed in the upright or vertical arms of the pivoted jaw 3, the threaded portion of the bolt being extended through a similar longitudinal slot 19', which registers with the slot 19, and said extended portion is provided with the nut 18. The bolt 17 passes through the central hole of the saw and serves as a convenient support upon which the saw may be rotated to bring the unsharpened portions thereof into convenient positions for treatment and at the proper distance above the top of the two jaws, and this without the necessity of removing the saw or detaching any of the parts of the clamp. All that is necessary to effect this operation is simply to loosen slightly the nut 18, when the saw can be readily turned. The bolt 17, in connection with its nut, also serves as a means for clamping the saw in place between the two jaws. By raising or lowering the pivot and clamping-bolt 17 the clamp is thereby equally well adapted for holding saws of different diameters. The bolt 17 is also provided with nut 18'.



The movable jaw 3 of the clamp has an adjustment independent of its pivotal motion, so as to permit its being moved bodily toward and from the companion jaw 2 for the purpose of gripping and firmly holding saws of different thicknesses.

The arm 4, which carries the pivot 5, is bifurcated at its lower end, and the two branches 20 and 21 thereof straddle the lug 22 on the projection 6, and the pivot 5, which consists, preferably, of a bolt, passes through and slides in the longitudinal slots 22' in said lug, by reason of which the jaw as a whole can be moved readily toward or from its mate.

While my improved device is intended, primarily, for clamping circular saws, it is adapted also for firmly holding straight saws, as the rims of the two jaws, by reason of their curved shape, are adapted to cover a large area of such straight saws.

Having described my invention, I claim—

1. A saw-clamp embodying a body portion provided with a fixed jaw and a movable jaw, each of which consists of a circular rim and a series of transverse arms, said arms and rims of the two jaws registering, the rims at the places between the arms constituting gripping portions, and the vertical arms of the jaws having registering longitudinal slots; a bolt having a guide portion disposed in one

of the slots, and said bolt extending through the other slot; and a nut on the bolt.

2. A saw-clamp embodying a body portion provided with a fixed jaw and a movable jaw, each of which consists of a circular rim and a series of transverse arms, said arms and rims of the two jaws registering, the rims at the places between said arms constituting gripping portions, and the vertical arms of the jaws having registering longitudinal slots; a bolt having a squared part fitted for sliding movement in one of the slots, said bolt extending through the other slot; a nut on the bolt; and means carried by the body portion for clamping the same to a support.

3. A saw-clamp embodying a body portion provided with a fixed jaw and a pivoted jaw having a loose connection at its lower end, each jaw having a saw-clamping portion and also having a longitudinal slot; a bolt having a guide portion fitted for sliding movement in one of the slots, and said bolt extending through the other slot; and a clamping device carried by the bolt.

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Witnesses:

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