

J. AUER.
SAW CLAMP.
APPLICATION FILED APR. 18, 1908.

971,815.

Patented Oct. 4, 1910.

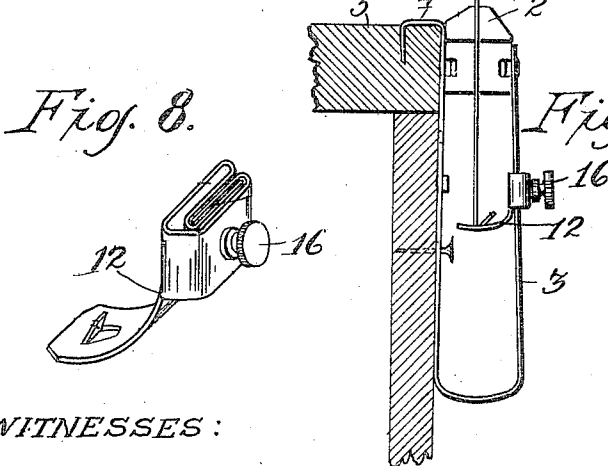
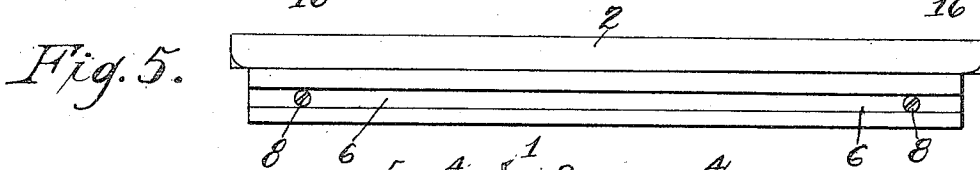
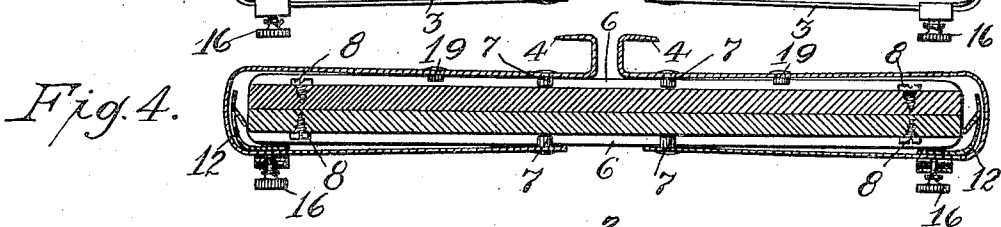
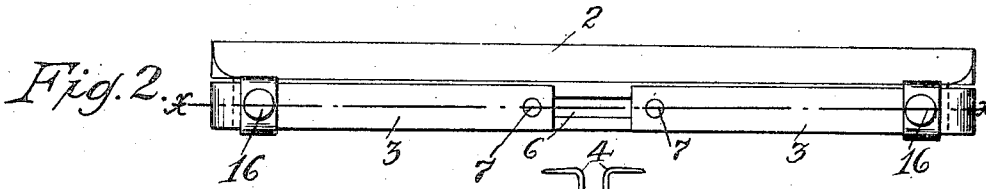
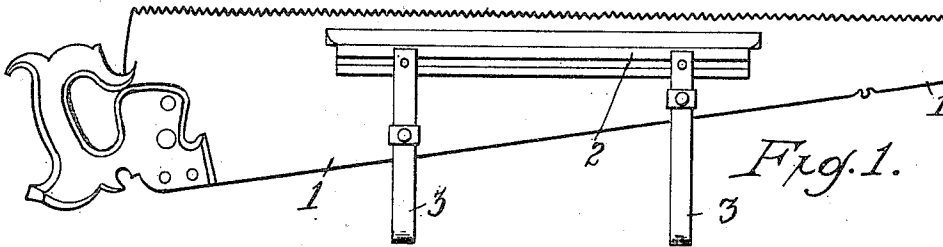
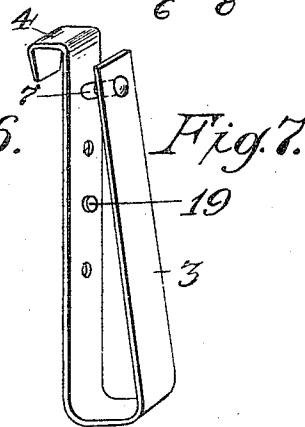
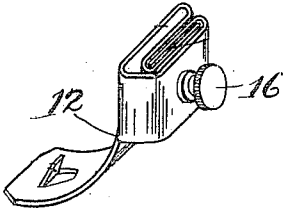


Fig. 8.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN AUER, OF SAN FRANCISCO, CALIFORNIA.

SAW-CLAMP.

971,815.

Specification of Letters Patent.

Patented Oct. 4, 1910.

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To all whom it may concern:

Be it known that I, JOHN AUER, citizen of the United States, residing in the city and county of San Francisco and State of California, have invented new and useful Improvements in Saw-Clamps, of which the following is a specification.

My invention relates to a clamping device or holder for saws, and is particularly designed to hold the saw, with the teeth presented for filing, or for other purposes.

It consists in the combination of parts, and in details of construction which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 is a side elevation of the clamp showing a saw in position. Fig. 2 is an enlarged side elevation of the saw clamp showing the U-shaped springs folded thereupon. Fig. 3 is a plan view of Fig. 2. Fig. 4 is a longitudinal sectional view on the line X—X of Fig. 2. Fig. 5 is a side elevation of the clamp showing the U-shaped springs removed. Fig. 6 is an end view of the clamp attached to a bench or support, a portion of the latter being shown in section. Fig. 7 is a perspective view of one of the U-shaped springs. Fig. 8 is a perspective view of one of the clamps 16.

It is the object of my invention to provide an extensible device comprising clamping jaws, elastic arms by which sufficient pressure is brought upon the jaws, said device being capable of folding and shortening to a size convenient for transportation, and extensible and turnable into a position for use. In conjunction with these arms are supplemental adjustable supports for the back of the saw, and means for fixing the apparatus to a bench or other support for use.

2 are two jaws which may be made of wood or other suitable material, and have contiguous surfaces between which the saw blade 1 is designed to be clamped with the teeth upwardly. Near the bottom and outside on the faces of these jaws are formed grooves or channels 6.

3 are U-shaped springs, the open ends of which lie upon opposite sides of the two jaws, and the elasticity of these springs is such that the pressure serves to hold the contiguous faces of the jaws close together, and to clamp the saw when the latter is between the jaws. Near the open ends of the

springs are pins 7, the inner ends of which enter the channels 6.

8 are stops fixed in the channels, and designed to limit the outward movement of the pins 7. When these parts are assembled, the pins 7 enter the channels 6 between the stops 8, and the U-shaped springs 3 may be turned on these pins so as to stand in line with the channels, and when thus in line with the channels, they may be pushed toward each other, with their ends nearly or quite meeting; the outer curved portion of the spring fitting against the ends of the clamping jaws 2 which may, if desired, have the lower portions cut away so that when the springs have been closed against the ends of the jaws, the bight or curvature of the springs will fit against the cut-away portions of the jaws, while the extended parts of the jaws are substantially flush with the springs, thus making a neat and compact device. In order to hold the springs in this position and to guide them when being drawn out, or closed into place, I have shown pins 19 fixed in the springs, and projecting inwardly sufficiently so that when the springs are pushed toward each other to close them upon the gripping jaws, these pins will slide into the slots or channels 6 following in line with the pins 7, and when the springs are closed in place, the pins 19 prevent the springs from being turned out of line with the jaws.

In order to prepare the device for use, the springs are first drawn out from each end of the jaws until the pins 7 contact with the stops 8; then the springs are turned down to stand at right angles with the jaws 2. The open ends of the springs upon one side are turned over so as to form downwardly projecting sharpened hooks 4, and these may be driven into a bench or other support 5, so that the clamp is firmly held in place without other attachment. The saw is introduced between the clamping jaws, and pressed down to the desired point, which will preferably be with the teeth edge substantially parallel with the upper edges of the jaws.

In order to easily insert the saw without the necessity of any supplemental attachment, I have shown the ends of the jaws as being slightly beveled outwardly so as to form a slot or channel of sufficient width to

allow the back of the saw to be pressed in between the jaws, and this action will extend or separate the jaws so that the blade can easily be introduced, with its length lying between the jaws.

In order to insure a firm support for the saw back when in place, I employ clamps 16 which are slidable upon the spring arms 3. From the inner side of these clamps project the arms 12, and when the clamps are loosened and raised, these arms will come in contact with the back of the saw which projects below the jaws 2, and the set screws being turned, and the clamps fixed in place, the back of the saw will rest upon the supports 12, and will be firmly held, independent of the clamping effect of the jaws.

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

1. In a saw clamp of the character described, jaws having grooves or channels upon their outer sides, U-shaped springs, the ends of which press upon opposite sides of the jaws, pins projecting from the spring ends into the channels, said pins forming pivots about which the springs may be turned to stand in line with the jaws, and slidable in the channels to allow the springs to be closed against the ends of the jaws.

2. In a saw clamp of the character described, parallel jaws having grooves or channels upon the outer sides, U-shaped springs between the ends of which the jaws are held, pins projecting from the spring ends into the channels of the jaws forming pivots about which the springs may be turned to stand vertically when in use, or to stand in line with the jaws, said pins being slidable within the channels to close the

springs against the ends of the jaws, and stops fixed in the channel to limit the outward movement of the pins, when the springs are extended in readiness to be turned into working position.

3. In a saw clamp of the character described, parallel saw-holding jaws having grooves or channels upon their outer sides, U-shaped springs, the ends of which press upon the outer sides of the jaws, pins projecting from the spring ends into the grooves or channels, forming pivots about which the springs are turnable to a working position at right angles with the jaws, or into line with the jaws, said pins being slidable in the grooves or channels to allow the bights of the springs to close against the ends of the jaws, guide pins projecting from the springs intermediate of their length, said pins entering the grooves or channels when the springs are closed against the ends of the jaws, and forming locks to prevent their being turned out of line.

4. In a saw holding clamp, U-shaped spring arms between the open ends of which the clamping jaws are pivotally carried, said arms having the open ends on one side, bent to form rigid integral hooks, slidable adjustable supports carried upon the opposite arms, said arms and supports being closable to register with the ends of the clamps.

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

JOHN AUER.

Witnesses:

EUGENE G. TUCKER,
EDWARD QUIVE.