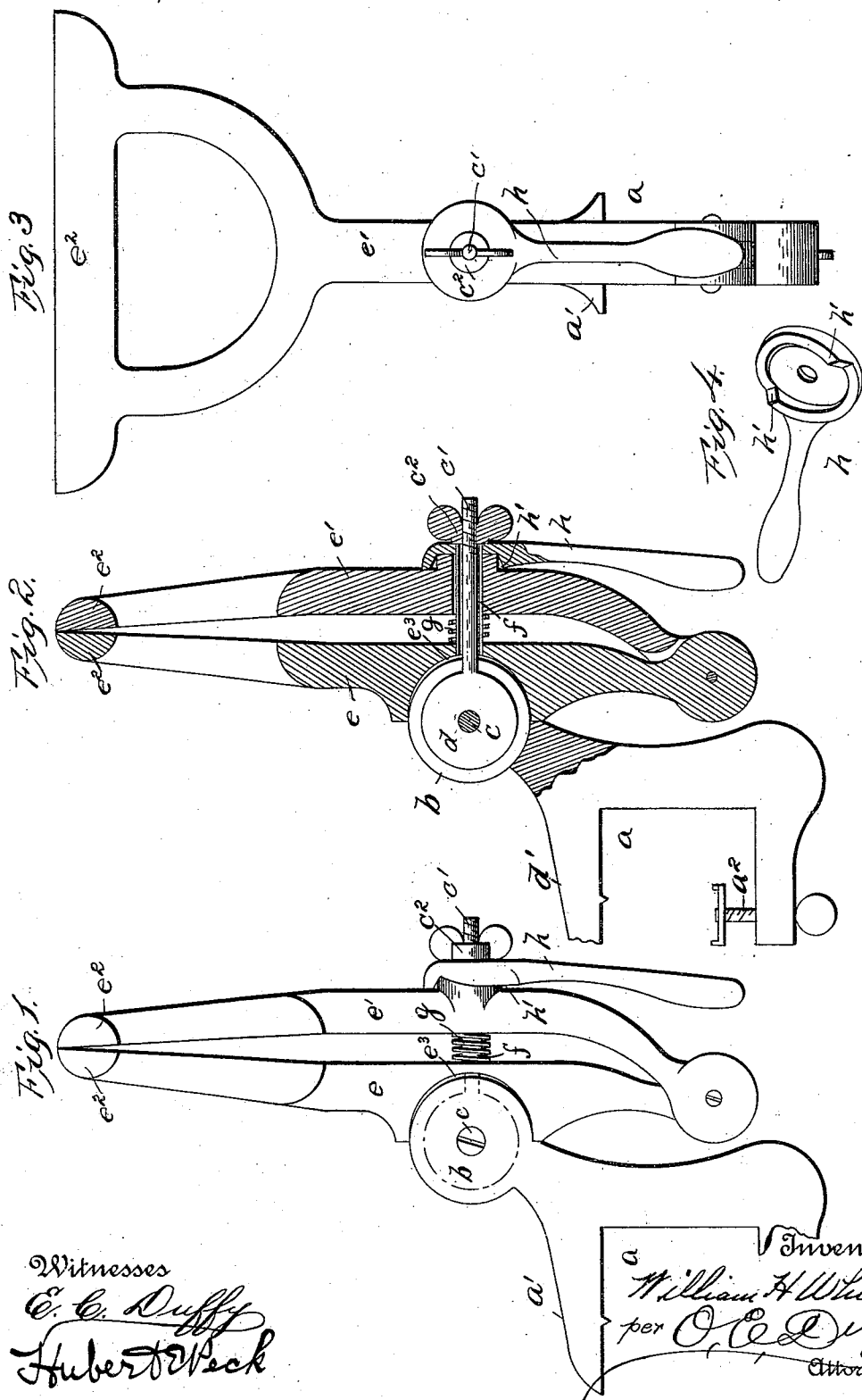


(No Model.)

W. H. WHISLER.
SAW CLAMP.

No. 550,148.

Patented Nov. 19, 1895.



Witnesses
E. C. Duffy
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UNITED STATES PATENT OFFICE.

WILLIAM H. WHISLER, OF MUSCATINE, IOWA, ASSIGNOR TO HIMSELF,
FREDERICK E. LOFGREEN, AND CHARLES W. BRIDGMAN, OF SAME
PLACE.

SAW-CLAMP.

SPECIFICATION forming part of Letters Patent No. 550,148, dated November 19, 1895.

Application filed March 19, 1895. Serial No. 542,386. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. WHISLER, of Muscatine, in the county of Muscatine and State of Iowa, have invented certain new and useful Improvements in Saw-Clamps; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

This invention relates to certain improvements in saw-clamps.

The object of the invention is to provide an improved saw-clamp exceedingly strong, durable, simple, and effective in construction and capable of varied adjustments to hold the saw at any inclination or angle desired.

The invention consists in certain novel features of construction and in combinations and arrangements of parts more fully and particularly described hereinafter, and pointed out in the claims.

Referring to the accompanying drawings, Figure 1 is an edge elevation of the improved clamp, showing the parts held in clamped or locked position. Fig. 2 is a vertical central section through parts of the clamp in the position shown in Fig. 1. Fig. 3 is a side elevation. Fig. 4 is a detail perspective of the locking-lever looking at the inner cam-face thereof.

In the drawings, *a* is a support, here shown as a U-shaped clamp, formed integral with the rigid jaw *a'*, and the clamping-screw *a²*, passing through the opposite jaw. This clamp is preferably formed integral with the outwardly and upwardly extending ears *b b* at its upper corner. These ears are rounded at their edges or formed circular and separated a suitable distance.

c is the pivot-bolt, passing centrally and transversely through the ears and through the rocking head *d*, fitted between said ears and having the threaded bolt *c'* rigid therewith and extending radially therefrom.

e e' are the two shanks of the jaws *e²* for clamping the saw. These jaws are elongated and formed with edges to bite the saw. The

upper portions of the shanks are usually bifurcated, as shown, so as to extend opposite portions of each jaw. The shanks are fulcrumed together at their lower or opposite ends. The outer shank *e'* is bulged or curved outwardly between its ends, while the inner shank on the inner side of its central portion is formed with concaved seat *e³* to fit and turn on the circular edges of the ears *b b*. This seat is preferably so formed as to engage said ears on opposite sides of the center thereof and to extend about half-way around the same, although I do not specifically limit myself to any such particular arrangement. The two shanks are transversely perforated from the center of said seat, and a tube or bushing *f* is inserted in the opening in shank *e* and extends loosely through the opening in shank *e'*. A coiled expansive spring *g* surrounds said bushing between the shanks and tends to separate the same. The bolt *c'* extends loosely through said bushing and the shanks, and at its outer end has the nut *c²*. Between said nut and the rounded outer face of the shank *e'* the head of the clamping-lever *h* is arranged and mounted on the bolt. This head has the double cam-edge *h'*, engaging the rounded face of the shank, so that when the lever *h* is turned so that the depressions of the cam fit the surface of the shank the spring *g* forces the shanks and jaws apart, and when the lever is turned through an arc of about ninety degrees the highest portions of the cam ride up on the shanks and thereby force the shanks toward each other and the jaws together or tightly against the saw, and also forces the shank *e* rigidly against the circular ears of the support, so as to hold the shanks at the desired angle. When the jaws are released, the shanks can be moved around on the ears to the desired angle anywhere from a vertical to a horizontal position to hold the saw as desired, so that any desired bevel can be easily imparted to the saw-teeth.

Each shank and its jaw can be cast integral, so that a minimum number of parts are necessary in the complete device.

By means of the nut on the bolt the clamp can be adjusted to receive saws of varying thicknesses.

By reason of the peculiar construction and

arrangement of this clamp it can be controlled by rocking the single cam-lever, and it is exceedingly durable and strong in construction as the strain is equally distributed throughout the shanks and jaws.

It is evident that various changes might be made in the form, arrangement, and construction of the parts described without departing from the spirit and scope of my invention. Hence I do not wish to limit myself to the exact construction herein set forth, but consider myself entitled to all such changes as fall within the spirit and scope of my invention.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A support, in combination with the two jaws pivotally joined at their lower ends, a friction joint pivotally mounting the jaws at an intermediate point between their upper and lower ends, on the support, and a single locking means controlling said joint and the jaws, substantially as described.

2. In a saw clamp the combination of a support, a pair of jaws pivotally joined at one end, and the clamping bolt passing through intermediate portions of said jaws and pivotally joined to the support and arranged to lock the jaws at the desired angle on the sup-

port and to clamp them together, substantially as described.

3. The combination of a support, a pair of jaws pivoted together, and a bolt pivotally joined to the support and passing through the jaws and provided with clamping means, substantially as described.

4. A support, in combination with a clamp comprising the two jaws pivotally joined, and mounted to rock on the support by a friction joint, a bolt pivotally joined to the support and passing loosely through the jaws, and a cam lever thereon to lock the jaws together and lock them in the desired position on the support, substantially as described.

5. A support having the circular ears a head pivoted to rock between them and having the radial bolt the two pivotally joined spring actuated jaws through which said bolt loosely passes, one jaw having a rounded seat receiving and arranged to turn on said ears, and means to lock the jaws and said seat against said ears, substantially as described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

WILLIAM H. WHISLER.

Witnesses:

DENHAM LOGAN,

EDWIN M. S. FISHER.