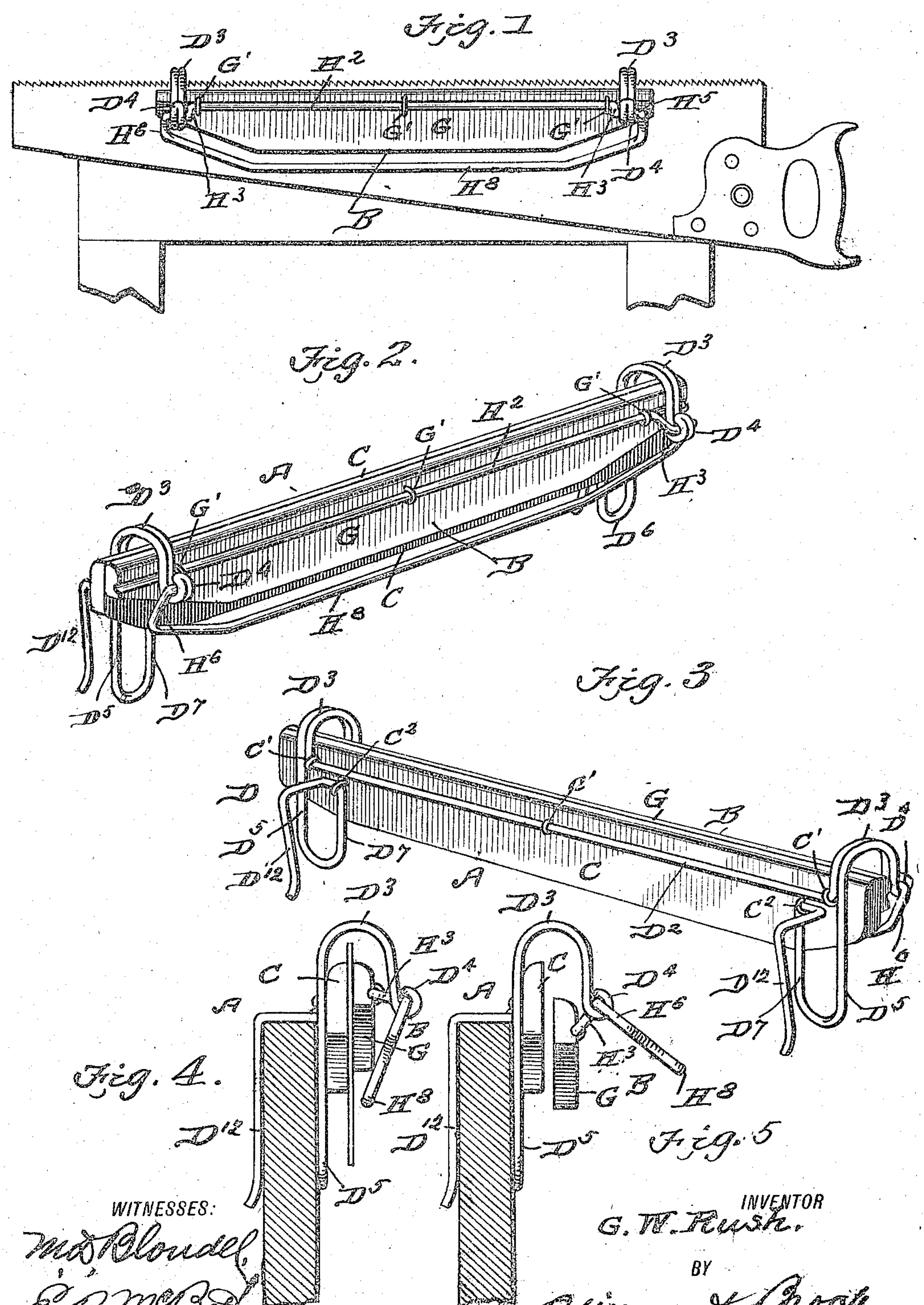
No. 885,084. PATENTED APR. 21, 1908.

G. W. RUSH.

SAW CLAMP.

APPLICATION FILED JAN. 10, 1906.

2 SHEETS—SHEET 1.



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2 SHEETS—SHEET 2.

Fig. 6a

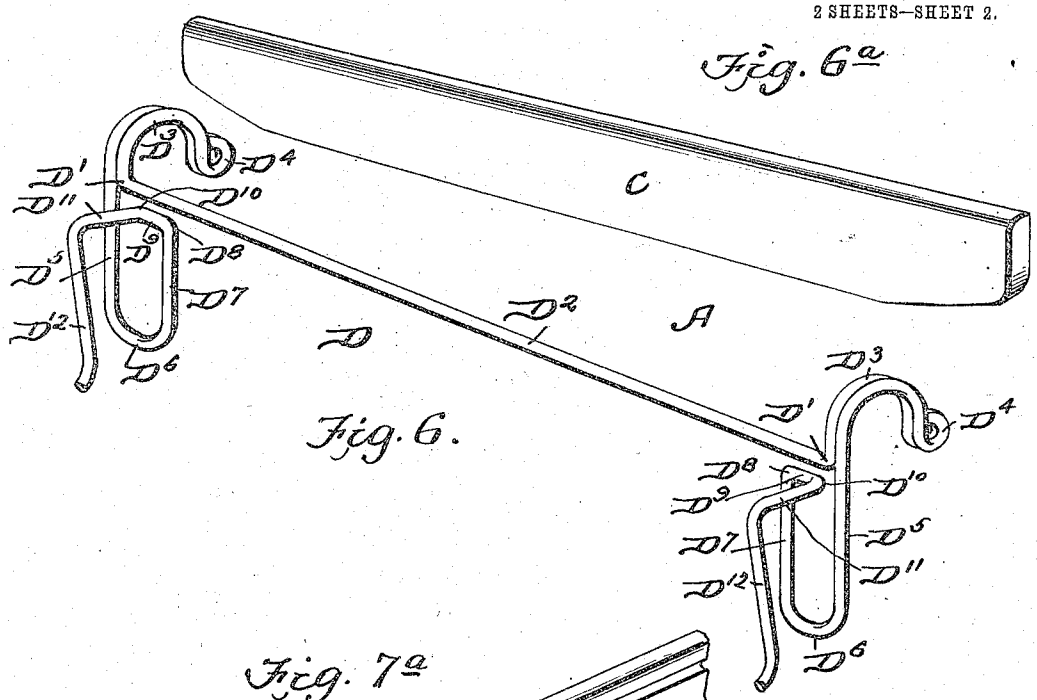


Fig. 6.

Fig. 7a

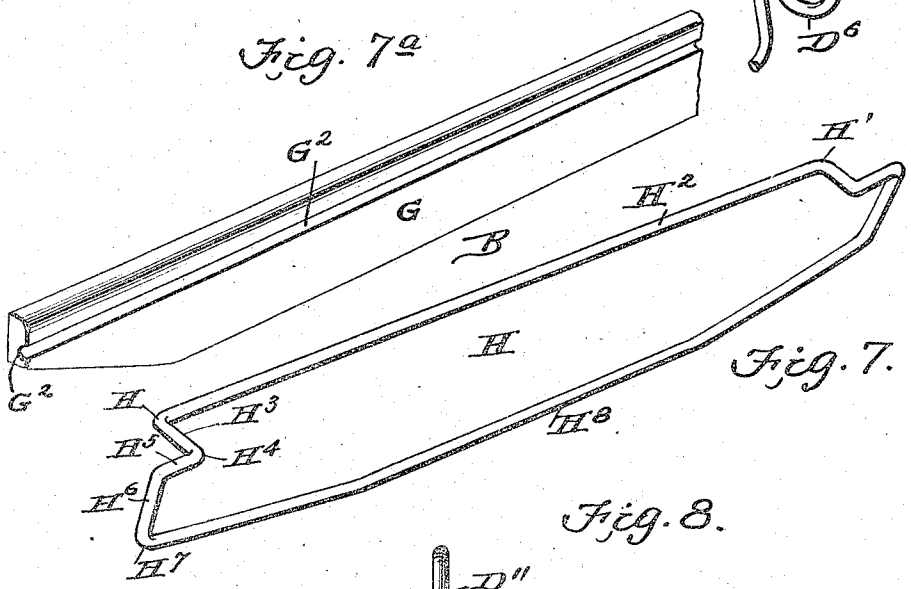
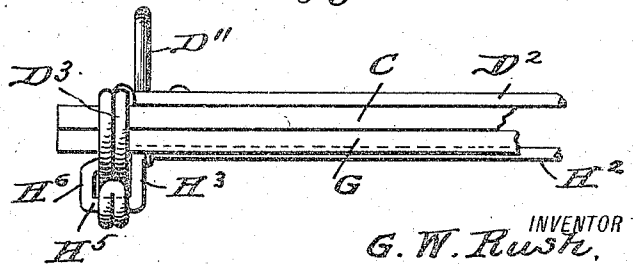


Fig. 7.

Fig. 8.



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SAW-CLAMP.

No. 885,084. Specification of Letters Patent. Patented April 21, 1908.

Application filed January 10, 1906. Serial No. 295,457.

To all whom it may concern:

Be it known that I, GEORGE WASHINGTON RUSH, a citizen of the United States, residing at New York, in the county and State of New York, have invented a new and useful Improvement in Saw-Clamps, of which the following is a specification.

My present invention relates to an improvement in clamps especially adapted for use in holding saws to facilitate the sharpening and setting of the teeth, and the object thereof is to provide a strong, durable, cheap, and simple device, capable of ready attachment to a support and equally capable of adjustment to securely clamp a saw-blade in position to be operated upon.

A further object of the invention is to provide an arrangement in which saw-blades of various thicknesses may be held without necessitating a special adjustment, and still a further object is to provide for a quick and ready adjustment for clamping the blade in position and to facilitate its removal from or its adjustment within the clamp.

With these briefly stated objects in view, the invention also comprises certain details of construction and peculiar combination and arrangement of parts as will be fully set forth in the following specification and pointed out in the claims, reference being had to the drawings, in which:—

Figure 1 is an elevation of my improvement showing a saw held therein. Fig. 2 is a detail perspective view of the clamp. Fig. 3 is a similar view looking at the opposite side to that shown in Fig. 2. Fig. 4 is an end view of the clamp showing it held upon a suitable support and a saw-blade locked in position. Fig. 5 is a similar view showing the clamping-jaw open and the saw-blade removed. Fig. 6 is a detail perspective view of the frame of the supporting bracket, and, Fig. 6^a is a detail view of the panel carried by the frame. Fig. 7 is a detail perspective view of the clamping lever, and, Fig. 7^a is a detail view of the panel carried by the lever, and, Fig. 8 is a detail plan view of one end of the clamp.

In constructing a clamp in accordance with my invention, I employ a stationary member A, and a movable clamping member or jaw B. The member A, comprises a panel C, and a supporting bracket D, which also serves as a support for the clamp as a whole, and by which the clamp may be readily connected to a bench, chair-back, board, and in fact any suitable support.

The bracket D, is constructed of a single strand of stout spring steel wire which is bent intermediate its ends at the points D′, to provide a straight section D^2, to which the panel C, is connected by means of staples C^2, as shown most clearly in Fig. 3 of the drawing. From the points D′, each end is bent upwardly in a semi-circular form as at D^3, to provide arch members, and at the extreme outer ends of the arches, the wire is twisted into eyes D^4, which provide journal bearings for the movable section or jaw as will be explained later on.

From the points forming the eyes, the ends are extended backwardly parallel and immediately adjacent the arch members, and each end is continued past the points D′, in a vertical direction as shown at D^5, to a point D^6, from which the ends are bent upwardly as at D^7, parallel with the section D^5, to points D^8, thence over as at D^9, to the point D^{10}, about midway between the parallel sections, and from the points D^{10}, D^{10}, the ends are extended outwardly as at D^{10}, and thence downwardly as at D^{12}, thus providing substantially U-shaped clamping members which are adapted to fit over a suitable support. The ends D^{12}, are bent slightly inwardly providing spring clamps to prevent the stationary section slipping from its support, and in order that the clamp may be readily attached to the support, I bend the extreme ends outwardly as shown most clearly in Fig. 6. of the drawing.

In practice, I also employ staples C^2, at the points D^8, to insure a firm attachment for the panel, and it will of course, be understood that the staples are clenched at their ends to prevent them being pulled out.

The movable clamping section or jaw B, comprises a panel G, of substantially even length as the panel C, and an operating lever handle H, and the lever handle is also constructed of a single strand or a loop of steel spring wire which is bent intermediate its ends at the points H′, H′, to provide a longitudinal section H^2, to which the panel G, is connected by means of staples G′, and in order to prevent the strain being applied to the staples, I provide the panel G, with a longitudinal groove G^2, in which the section H^2, of the handle is held. From the points H′, the wire is bent outwardly and down-

wardly as at H^3, to points H^4, from which the wire is extended outwardly as at H^5, in parallel direction with respect to the section H^2, thus providing crank arms H^3, and shaft portions H^5, which latter are journaled in the eyes D^4, of the bracket D. From the outer ends of the shafts, the wire is bent downwardly as at H^6, to point H^7, from which extends the remaining portion of the wire to provide a handle-section H^8.

After the parts have been assembled as shown in Figs. 1 to 5 inclusive, the device is ready for use and by inserting the U-shaped members over a support and drawing the lever handle outwardly as shown in Fig. 5, the panel G of the clamping-jaw is moved away from the panel C, of the stationary jaw, permitting the easy insertion of a saw-blade, and when adjusted to its proper position, the handle section is drawn downwardly which forces the panel G, against the saw and against the tension of the arch members which securely binds the saw in position.

By reference to Fig. 4, it will be seen that when the handle is thrown to its extreme lower position, the portion H^2, will be arranged above the shaft portions or journals H^5, or above a horizontal line which provides a locking device that will prevent the accidental movement of the movable jaw, and is held in this position by reason of the arch members being pushed or sprung out of their normal position.

It will thus be seen that the arch members serve the double purpose of providing a journal for the movable jaw and also a spring clamp which permits of the ready accommodation of saw-blades of various thicknesses, thus obviating the necessity of a separate adjustment for this purpose.

From the fore-going, it will be readily appreciated that I provide an exceedingly cheap, strong, durable, and simple device for the purpose for which it is employed.

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

1. A saw clamp comprising a stationary and a movable member, said stationary member consisting of a panel, a supporting bracket secured to said panel and supporting the entire clamp, said bracket having arching members terminating in eyes, a second movable panel adapted to work beneath said arches, and having a longitudinal groove, and an operating lever, said lever being journaled in the eyes of the bracket, and having a member in engagement with the groove of the second mentioned panel.

2. A device of the kind described comprising a stationary section which is constructed of a single strand of spring wire bent intermediate its ends to provide a straight section which terminates at each end in arches, the ends of which are bent into eyes to form journal bearings, the extreme ends being bent to provide U-shape supporting members, and a panel connected to the straight section, and an operating lever section also constructed of a single piece of wire and bent to provide a longitudinal section, the ends of which terminate in crank arms, and shaft portions, said shaft portions being journaled in the bearings of the stationary section, and a panel connected to the longitudinal section.

3. A device of the kind described comprising a stationary section having yielding journal bearings, a panel carried by the section, and a clamping section or jaw journaled in the bearings of the stationary section, said clamping section or jaw being constructed of a single piece of wire bent to form crank arms, shaft portions, and a handle section, the said shaft portions being held in the yielding bearings of the stationary section, and a panel carried by the said section or jaw.

4. A device of the kind described comprising a stationary section, and a clamping section or jaw pivotally connected to the stationary section, said stationary section being formed of a single strand of spring wire which is bent at its ends to provide arch portions, the extreme ends of which are bent into journal bearings which provide supports for the clamping section or jaw and having each end bent to provide substantially inverted U-shape supporting members.

GEORGE WASHINGTON RUSH.

Witnesses:
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