W. C. BURGE.

HACKSAW.

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1,051,193.

Patented Jan. 21, 1913.

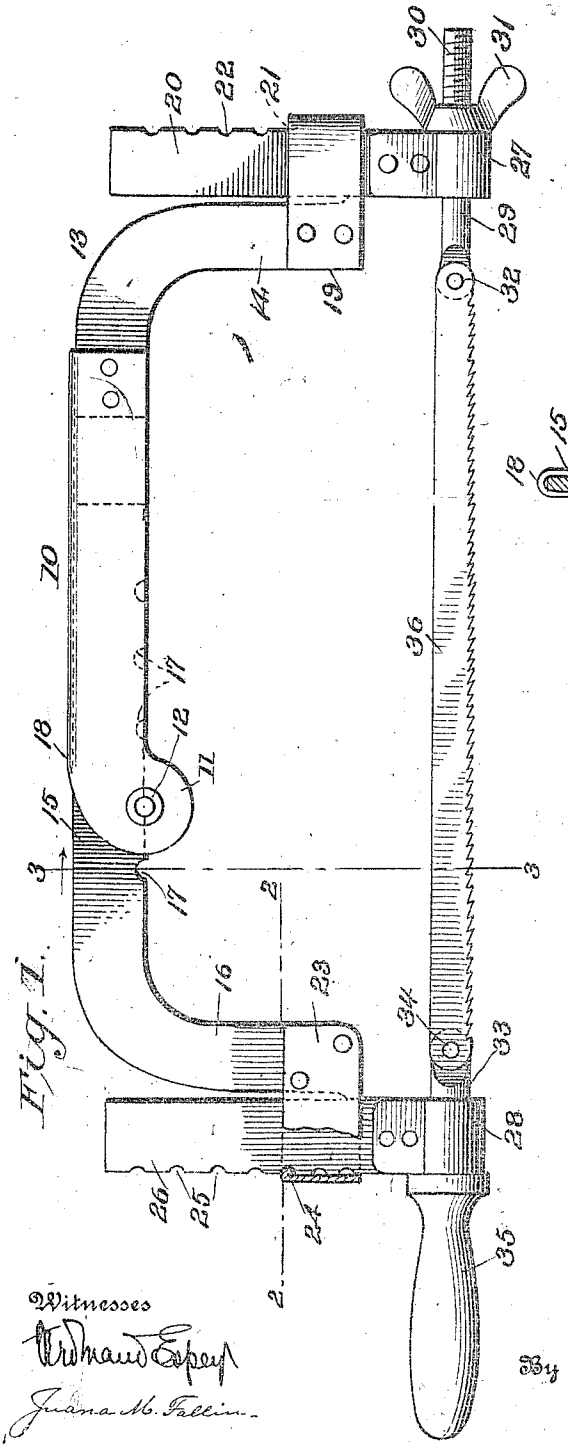

Fig. 1.

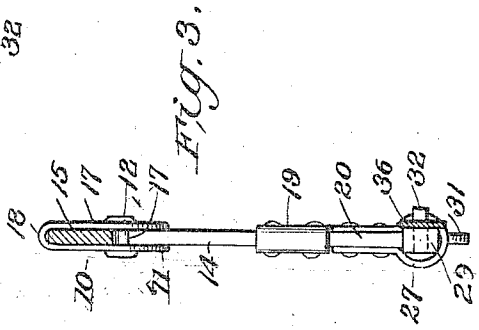

Fig. 3.

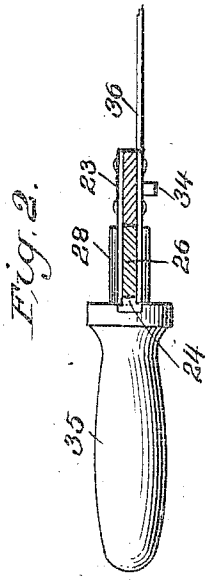

Fig. 2.

Witnesses

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HACKSAW.

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To all whom it may concern:

Be it known that I, WILLIAM C. BURGE, citizen of the United States, residing at Greensboro, in the county of Guilford and State of North Carolina, have invented certain new and useful Improvements in Hacksaws, of which the following is a specification.

This invention relates to improvements in hack saws and similar implements, and has for one of its objects to provide a simply constructed device which may be readily adjusted to receive saws of various sizes and the frame adjusted to change the location of the saw.

With these and other objects in view, the invention consists in certain novel features of construction as hereinafter shown and described, and then specifically pointed out in the claims, and in the drawings illustrative of the preferred embodiment of the invention: Figure 1 is a side elevation of the improved device; Fig. 2 is a plan view in section on the line 2—2 of Fig. 1; Fig. 3 is a transverse section on the line 3—3 of Fig. 1.

Corresponding and like parts are referred to in the following description and indicated in all the views of the accompanying drawings by the same reference characters.

The improved device comprises a frame formed in two portions longitudinally adjustable to enable saws of various lengths to be employed and likewise provided with means for adjustment to locate the saw nearer to or farther from the body of the frame. The body of the frame comprises an intermediate member 10 preferably formed from metal plate bent into flat U-shape and extended laterally at one end in the form of spaced ears 11 through which a stop pin 12 extends. Rigidly secured between the sides of the intermediate member 10 at the end opposite to the ears 11, is a terminal member 13 which is directed at right angles to the member 10 as shown at 14. Slidable within the member 10 is another body member 15 having a laterally directed extension 16 corresponding to the extension 14 of the member 13. The body member 15 completely fills the space between the sides of the intermediate member 10 and is provided with a plurality of notches 17 spaced apart adapted to engage one at a time over the inner side of the pin 12. The outer portion of the member 10 is cut away opposite the pin 12 as indicated at 18 so that when the member 15 is released and turned at an angle to the member 10, the space between the pin 12 and the cutaway portion 18, will be sufficient to permit the removal or the adjustment of the member 15, but when the member 15 is arranged in longitudinal alinement with the intermediate member 10 with its outer edge against the inner side of the bend of the member 10, one of the notches 17 will engage over the pin 12 and thus lock the member 15 from movement longitudinally of the member 10. By this simple means the member 15 may be adjusted longitudinally of the member 10 to any extent within the range of the notches 17 and without detaching any of the parts.

At its outer end the downturned portion 14 of the frame is provided with a clip device 19 formed of a flat U-shaped plate riveted to the opposite sides of the extension 14 and extending outwardly therefrom and forming a guide to receive an end member 20. At its bend the member 19 is formed with a small lip or projection 21 which is bent over between the sides of the member 19 and forms a stop lug which engages in one of the series of notches 22 in the member 20. The member 20 is slightly less in width than the socket within the member 19 so that when strain is removed from the member 20, it can be moved longitudinally of the member 14, but will be locked within the member 19 through the co-action of the lug 21 and the notches 22 when strain is applied to the outer end of the member 20.

A clip device 23 similar to the clip device 19, is connected to the extension 16 of the member 15 and is provided with a lip lug 24 to engage in notches 25 in an end member 26. The two end members 20—26 are precisely alike, and are provided respectively at their lower ends with sockets 27—28. The socket 28 supports an adjusting pin 29 threaded at its outer end as shown at 30 and provided with a wing nut 31 bearing against the outer face of the socket 27, and with a pin 32 at its inner end. The socket 28 supports a rod 33 having a pin 34 at its inner end and a handle 35 at the outer end. The pins 32—34 are designed to support the saw represented conventionally at 36. By this simple means it will be obvious that when

the parts are assembled, and the wing nut 31 actuated, strain will be applied longitudinally to the saw 36, and will likewise clamp the members 20—26 firmly against the stop lugs 21—24, and also firmly clamp the members 15—10 together through the action of the stop pin 12. By this arrangement also it will be obvious that the members 20—25 may be adjusted relative to the body of the frame to dispose the saw 36 nearer to or farther from the member 10, and thus increase or decrease the space between the saw and the frame and adapt it to various uses or various sizes or forms of the material. It will also be obvious that by adjusting the body members 10—15 that saws of various lengths may be connected to the frame.

The improved device is simple in construction, can be inexpensively manufactured, and formed wholly of plate metal preferably steel and pressed and stamped into the required shape, and does not require the employment of expensive machinery to manufacture the parts.

Having thus described the invention, what is claimed as new is:

1. A hack saw frame comprising an intermediate body formed of coacting longitudinally adjustable members, end members movably connected respectively to the body members, a saw carried by said end members, means for applying strain longitudinally to said saw, and locking means carried by said body members and engaging said end members and rendered operative by the strain applied to the saw.

2. A hack saw frame comprising an intermediate body formed of coacting longitudinally adjustable members having the end portions directed at right angles thereto, clips engaging the end portions, end members slidable through said clips, a saw carried by said end members, means for applying strain longitudinally to said saw, locking means carried by said body members, and locking means carried by said clips and end portions, said locking means being rendered operative by the strain applied to the saw.

3. A hack saw frame comprising an intermediate body formed from a plate bent upon itself longitudinally to form spaced sides, a laterally directed terminal connected to said body at one end, another body member slidable between the sides of the intermediate body and having a laterally directed terminal, end members movable relative to said body terminals, a saw carried by said end members, means for applying strain longitudinally to said saw, locking means carried by said body members, and locking means carried by said end members, said locking means being rendered operative when strain is applied to the saw.

4. A hack saw frame comprising an intermediate body formed from a plate bent upon itself longitudinally to form spaced sides with the sides extended at one end, a pin extending through the extended portions of the sides, a laterally directed terminal connected to said body at one end, another body member slidable between the sides of the intermediate body and having a laterally directed terminal and notches for engaging one at a time over the pin, a saw supported from said terminals, and means for applying strain longitudinally to said saw.

5. A hack saw frame comprising an intermediate body formed of co-acting longitudinally adjustable members having laterally adjustable terminals, straps embracing said terminals and forming sockets, each socket having an inwardly directed stop, an end member slidable in each of said sockets and having notches engaging one at a time with the stops, a saw carried by said end members, and means for applying strain longitudinally to said saw.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM C. BURGE. [L. S.]

Witnesses:

L. B. COBLE,

J. R. HUTTON.