

D. L. MURCHEY.
HACKSAW FRAME.
APPLICATION FILED DEC. 29, 1911.

1,063,828.

Patented June 3, 1913.

Fig. 1.

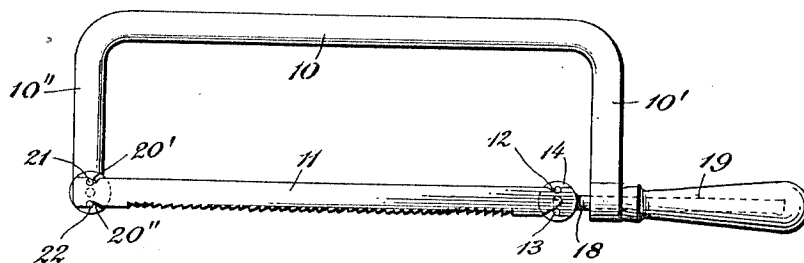


Fig. 3.

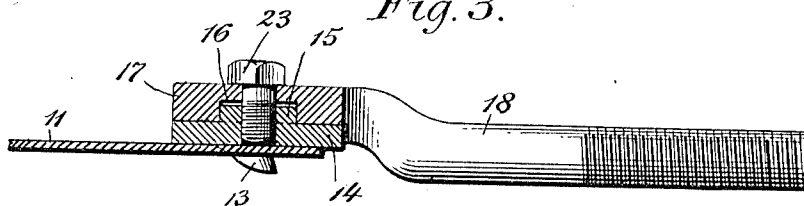
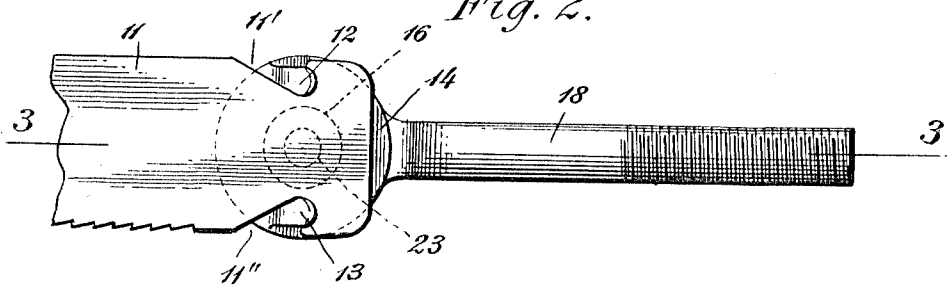


Fig. 2.



WITNESSES:

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HACKSAW-FRAME.

1,063,828.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, DAVID L. MURCHEY, a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Hack-saw-Frames, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to saw-frames and more particularly to that class generally known under the name of "hack-saw frames," and it has for one of its objects the provision of a frame in which the saw may
15 be held so as to bring both marginal edges of the blade under equal tension.

The invention has, furthermore, for its object the improved organization and construction of the saw-holder, as will be hereinafter described and be particularly defined
20 in the claims.

The invention has been clearly illustrated in the accompanying drawings, in which,

25 Figure 1 is a side view of hack-saw frame embodying my invention; Fig. 2 is an enlarged front view of one end of the saw-holder *per se*; Fig. 3 is a horizontal section of line 3, 3 of Fig. 2.

30 Briefly stated, the present invention has for its particular object the provision of a saw-holder which engages both longitudinal edges of the saw-blade in such a manner that all unevenness of tension, or buckling of the edges is avoided. I accomplish this object by supporting the saw as near in alignment with both of said edges as possible, and the holder which carries the holding device
35 is swiveled so as to serve as an equalizer, one of such devices being preferably provided at each end of the saw and attached to the frame.

40 Referring to the drawings, 10 denotes a hack-saw frame which may be of any ordinary or desired construction, and has drop-arms 10', 10'' adapted to receive the ends of a saw-blade 11, which latter may be stretched tightly in proportion to the resiliency of the arms 10', 10''. In the present instance the saw-blade 11 has each of its ends provided

with notches 11', 11'' (see Fig. 2), to fit over 50 and be engaged by a pair of undercut hook-shaped projections or lugs 12, 13, formed on a plate 14 which has a central hub 15 in diametrical alinement with said lugs, and rotatable in a corresponding recess 16 provided therefor in the saw-holder proper. 55 The latter comprises a head 17, and a shank 18 the outer end of which is screw-threaded as shown to receive a nut-handle 19 exteriorly of the saw frame arm 10' and so arranged that a rotation of the handle 19 in 60 one direction will draw the head toward that end, and with it the disk 14. The other end of the saw-blade 11 is similarly formed with notches 20' and 20'' adapted to be engaged 65 by a pair of hook-shaped members 21, 22, respectively, mounted on a disk similar to the disk 14 above described. The latter is similarly supported in the frame arm 10'', and each disk is held in position by a bolt 23 70 passing freely through an aperture in the head 17, or in the arm 10'', as the case may be; while it is in screw-threaded engagement with the saw-supporting disk pertaining to that particular end of the saw. 75

From the foregoing description it will be evident that, inasmuch as each disk 14 is at perfect liberty to turn on its hub, both longitudinal margins of the saw will be subjected to tension, and this tension will be 80 the same in both instances by virtue of the swivel-support of the disks 14. Practice has demonstrated that these supports for the saw not only lengthen the "life" of the same but keep the blade in proper form. 85

It should be understood that means may be provided on the frame whereby the plane of the saw may be varied relative to the frame, as is common in devices of this character. It should also be understood that 90 many changes can be made in the particular construction of the supporting swivels, and also in the frame itself, without departing from the spirit of the invention.

I claim:—

95 The combination with a frame, and a saw holder carried thereby and having in its side face a recess, of a disk having a hub enter-

ing said recess and journaled therein, means
for holding said disk against the holder, a
saw having notches in its opposite marginal
edges, and a pair of devices projecting from
5 the side of said disk at diametrically-oppo-
site points of the disk-axis and engaging
said notches, respectively.

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

DAVID L. MURCHEY.

Witnesses:

CHAS. F. SCHMELZ,
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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
