

A. G. FROST.
 HACKSAW.
 APPLICATION FILED NOV. 4, 1916.

1,227,902.

Patented May 29, 1917.

Fig. 1.

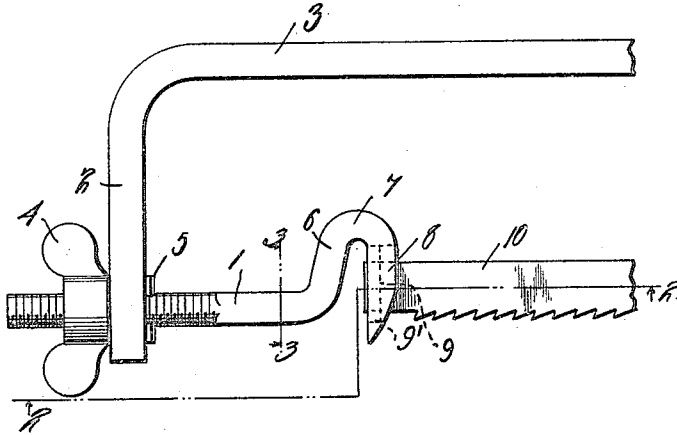


Fig. 2.

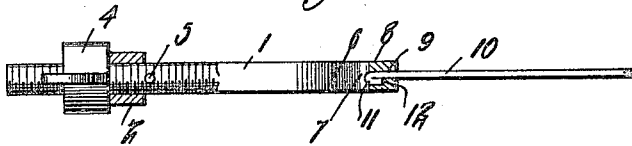


Fig. 3.

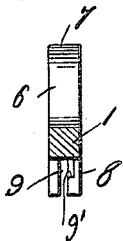


Fig. 4.

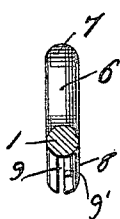
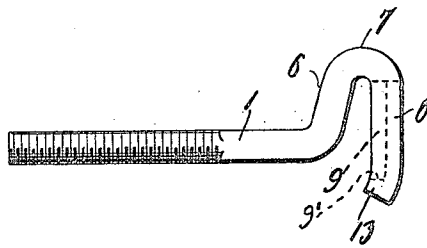


Fig. 5.



WITNESSES

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HACKSAW.

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To all whom it may concern:

Be it known that I, ARTHUR G. FROST, a citizen of the United States, residing at Bellevue, in the county of Campbell and State of Kentucky, have invented certain new and useful Improvements in Hacksaws, of which the following is a specification.

This invention comprehends certain new and useful improvements in saws and relates more particularly to that class of tools known as hack saws.

The primary object of the invention resides in the provision of an adjustable connection between one end of the saw blade and the end of the frame by the employment of a novel form of hook adapted to be adjustably secured in the frame and provided with locking recesses in its bent back or hook end to hold the end of the saw blade.

For a further object, the invention contemplates the provision of a saw blade support and connection of the above stated character, which will be highly efficient in use, especially adapted to power hack saws and inexpensive.

With these and other objects in view, as will appear as the nature of the invention is better understood, the same consists in the novel combination and arrangement of co-operating elements as shown in the accompanying drawings, set forth more specifically in the following paragraphs and finally pointed out in the appended claim.

In the accompanying drawings, forming a part of this application and in which like designating characters refer to corresponding parts throughout the several views,

Figure 1 is an elevation of one end of a hack saw with my invention applied thereto.

Fig. 2 is a detail section substantially on the plane of line 2—2 of Fig. 1, looking in the direction indicated by the arrows.

Fig. 3 is a detail section on the plane of line 3—3 of Fig. 1, looking in the direction indicated by the arrows.

Fig. 4 is a view similar to Fig. 3, showing the body and end of the hook as being of rounded form in cross section, and

Fig. 5 is a detail elevation of the threaded hook.

Referring more in detail to the drawings, 1 designates the shank of the connecting hook which has its outer end threaded and extended through a suitable opening provided for the same in the end 2 of the frame

3. A thumb nut 4 is adjustably mounted upon the outer extremity of the threaded shank 1 for binding engagement with the outer face of said end 2 to clamp the hook in adjusted position. A pin 5 may be positioned transversely through the shank 1 to limit outward movement of the same as shown in Fig. 1, if desired.

The inner or hook end of the shank 1 is formed by extending the same at an angle, as shown at 6, then turning the same as shown at 7 and directing the extremity 8 at such an angle with respect to the portions 6 and 7 as to form the last leg of an inverted U-shaped member and which is disposed in a plane at right angles to shank 1. In this free leg of the U or extremity 8, is formed a longitudinal slot 9, opening through its free end and within which the end of the saw blade 10 may be engaged. The extremity of blade 10 is bent back upon itself as shown at 11 and adapted to seat in a recess formed in one side of the slot 9 and which opens through the inner face of said leg and provides the shoulder 12 for engagement by the end 11 of blade 10, thereby preventing longitudinal inward movement of the blade in the hook end of the securing member, but permitting it to move longitudinally outward for disengagement. The opposite sides of the extremity 8 are tapered to a point at the lower end of the slot 9 and as said lower end of the slot 9 is open, it will be evident that the end of the saw blade 10 may be readily inserted or removed when tension upon the same is relieved. It will be apparent, however, that after the end of the blade 10 is secured in the extremity 8 and the thumb nut 4 tightened upon the frame 3, the end of the blade will be prevented from working out of the slot 9.

In order to further guard against displacement of the extremity 11 of the blade 10 during use of the saw, the point of the leg or extremity 8 may be turned back slightly, as shown at 13 in Fig. 5 and the lower end of the slot 9 also turned in this direction. This will eliminate all possibility of the extremity 11 of the blade 10 dropping out of the slot 9 accidentally.

By referring to the drawings, particularly Figs. 1, 3, 4 and 5, it will be seen that the lower end of the portion of the slot in which the turned end 11 of the blade 10 is con-

nected, is closed, thereby providing a lower shoulder 9' which will prevent the end of the blade 10 from dropping out of the slot 9.

5 While the preferred form of the invention has been shown and described it is nevertheless to be understood that minor changes in the details of construction and arrangement of parts may be made therein without departing from the spirit of the invention.

10 What is claimed as new is:—

The combination with a saw frame having an aperture therein; of a shank adjustable longitudinally in said aperture and having an inverted U-shaped member arranged at
15 right angles thereto at its inner end with a longitudinally extending slot opening through the free end of the outer leg thereof, said slot having a recess in one side wall

opening through the inner face of said leg with its inner wall forming a shoulder 20 spaced from the outer face of said leg and its lower wall an end shoulder, and a saw blade having a lateral projection at one end designed to seat in the recess of said leg and be supported on said end shoulder and to 25 engage said first mentioned shoulder and the blade proper to lie in the slot whereby the blade is held against inward longitudinal movement and against movement trans- 30 versely.

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

ARTHUR G. FROST.

Witnesses:

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