

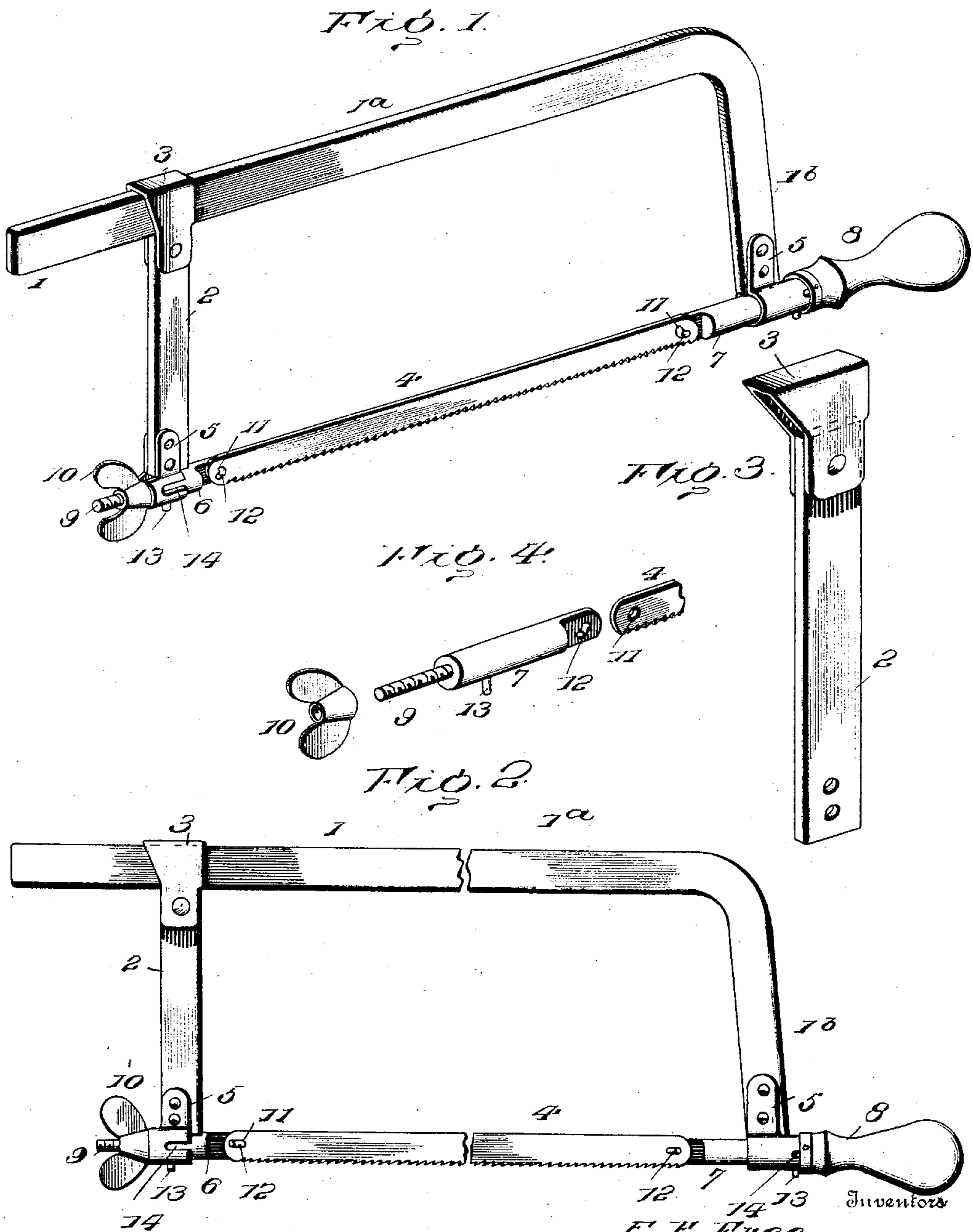
No. 765,294.

PATENTED JULY 19, 1904.

H. A. MOSHER & E. E. FREE.
HACKSAW.

APPLICATION FILED OCT. 9, 1903.

NO MODEL.



Witnesses

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HACKSAW.

SPECIFICATION forming part of Letters Patent No. 765,294, dated July 19, 1904.

Application filed October 9, 1903. Serial No. 176,423. (No model.)

To all whom it may concern:

Be it known that we, HUGH A. MOSHER, residing at Dubois, in the county of Clearfield and State of Pennsylvania, and EDWARD E. FREE, residing at Ithaca, in the county of Tompkins and State of New York, have invented certain new and useful Improvements in Hacksaws, of which the following is a specification.

This invention relates to that type of saws embodying the use of a U-shaped frame and having one of the arms of the frame adjustably mounted, so as to permit ready removal of the saw as well as to secure a nicety of adjustment thereof relative to the frame. The invention is involved in the peculiar mounting of the removable arm from the frame and the detail structure by which the saw is secured to the frame.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and drawings hereto attached.

While the essential and characteristic features of the invention are susceptible of modification, still the preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a saw embodying the invention. Fig. 2 is a side elevation of the saw. Fig. 3 is a detail view of the movable arm alone. Fig. 4 is a detail view of the member supported by the movable arm and directly connected with the saw.

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

The frame of the saw consists of the rigid bar 1, which is of approximately L-form, and the movable arm 2, the latter being mounted for adjustable movement upon the longer arm of the bar 1, as clearly shown. The arm 2 is held rigidly to the frame-bar 1 by frictional clutch action of the same against said bar. This action is secured by the provision of a yoke 3, movable upon the long bar 1^a of the frame, the said yoke embracing the said bar

and having the movable arm 2 pivoted between the spaced members thereof. The mounting of the arm 2 relative to the yoke permits of a binding action of the end portion of the said arm against the under side of the long bar 1^a of the frame, this engaging the bar frictionally to such an extent that the same is rigidly secured at the desired adjustment when pressure is exerted at the outermost portion of the arm which carries one end of the saw-blade 4. Yokes 5 are rigidly secured to corresponding ends of the arm 2 and the short bar 1^b of the frame. The yokes 5 receive the saw-blade-supporting members 6 and 7, the member 7 being provided with a handle 8, by which the saw is operated. The member 6 is provided with an outer threaded end 9, upon which a thumb-screw 10 is disposed, which is adapted for manipulation to so actuate the member 6 that the saw-blade is held securely in position. By adjustment of the thumb-screw 10 pressure is likewise exerted upon the outer end of the movable arm 2, which pressure causes the binding action of the end of the said arm within the yoke 3. The saw-blade is provided at the end portions thereof with openings 11, which receive projections 12, extended from the inner ends of the members 6 and 7. The members 6 and 7 are adapted for an independent adjustment, being rotatably mounted in the brackets or yoke elements 5 to fix the members in an ascertained adjustment, which adjustment determines the angle of the saw-blade 4 relative to the frame-bar 1. Lugs 13 are extended from the said members, and these lugs cooperate with notched portions 14, provided in the yokes to prevent movement of the members 6 and 7.

The movable arm 2 is adjusted generally to support the saw-blade in the frame, after which the thumb-screw 10 is manipulated so as to effect a nicety of adjustment to cause the binding action of the end portion of the movable arm against the long bar 1^a of the frame as well as to tighten and rigidly hold the saw-blade in position.

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

1. In a saw of the class described, the combination with a rigid frame-bar, an element

movably mounted upon the bar, and an arm pivoted to the said element and adapted to engage the frame-bar aforesaid.

2. In a saw of the class described, the combination with a rigid frame-bar, a supporting-bracket slidable upon the said bar, and an arm pivoted to the said bracket and adapted to engage the bar.

3. In a saw of the class described, the combination with a rigid frame-bar, a bracket slidable upon the said bar, an arm pivoted to the bracket to engage the bar, and means cooperating with said arm to hold same in engagement with the bar.

4. In a saw of the class described, the combination with a rigid frame-bar, a yoke slidably mounted upon the said bar, an adjustable arm pivoted to the yoke adjacent one end thereof and adapted to bind in frictional engagement with the rigid frame-bar, and a saw-blade secured to the frame-bar and the adjustable arm.

5. In a saw of the class described, the combination with a rigid frame-bar, a yoke slidably mounted upon the bar, a movable arm pivoted at one end to the yoke and adapted to frictionally engage the bar, a saw-blade se-

cured at one end to the opposite end of the movable arm and at the other end to the frame-bar, and actuating means carried by the movable arm aforesaid for tightening the saw-blade in position and for causing the binding engagement of the movable arm against the rigid frame-bar.

6. In a saw of the class described, the combination with a rigid frame-bar, a yoke slidably mounted upon the said bar, a movable arm pivoted to the said yoke at one end and adapted to frictionally bind against the rigid bar, yoke-brackets carried by corresponding ends of the rigid bar and movable arm, saw-supporting members rotatably supported in the said brackets, and a saw-blade carried by the said members.

In testimony whereof we affix our signatures in presence of witnesses.

HUGH A. MOSHER. [L. s.]

EDWARD E. FREE. [L. s.]

Witnesses to Mosher's signature:

J. H. SPENCER,

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Witnesses to Free's signature:

HORACE MACK,

THOMAS TREE.