July 7, 1931. F. H. BUNDY 1,812,928

HACK SAW

Filed June 10, 1930

Fig. 1.

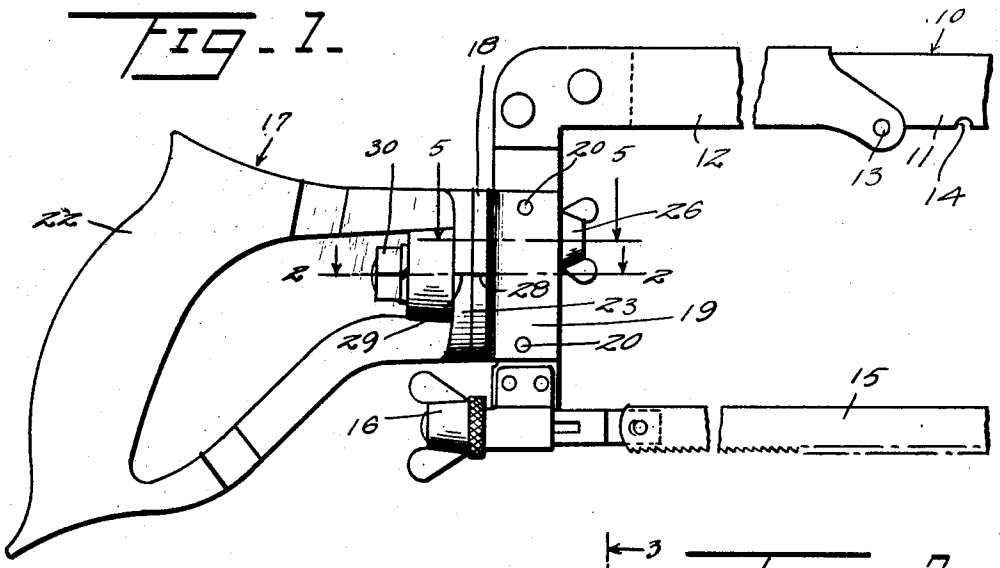


Fig. 2.

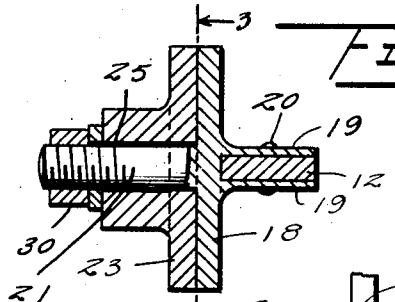


Fig. 3.

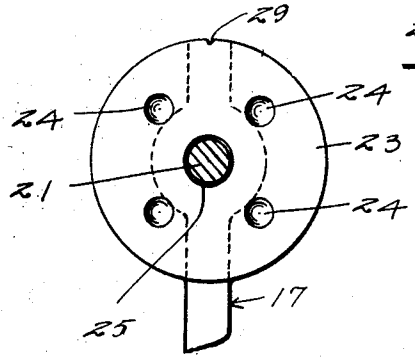


Fig. 4.

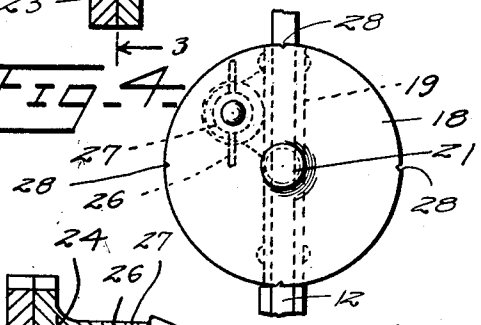
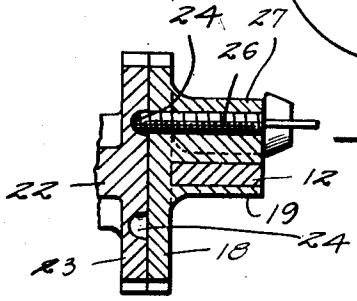


Fig. 5.



Inventor

F. H. Bundy

By Watson E. Coleman

Attorney

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UNITED STATES PATENT OFFICE

FRED H. BUNDY, OF MANHATTAN, KANSAS

HACK SAW

Application filed June 10, 1930. Serial No. 460,270.

The present invention relates to saws and more particularly to an adjustable handle for a hack saw.

An object of this invention is to provide a handle structure which may be readily secured to a conventional hack saw frame, the handle structure being such as to permit adjustment of the handle with respect to the frame.

Another object of this invention is to provide in an adjustable hack saw handle means for locking the handle in adjusted position with respect to the frame.

The above and various other objects and advantages of this invention will in part be described in and in part be understood from the following detailed description of the present preferred embodiment, the same being illustrated in the accompanying drawings:—

Figure 1 is a fragmentary detail side elevation of a device constructed according to the preferred embodiment of this invention;

Figure 2 is a sectional view taken on the line 2—2 of Figure 1;

Figure 3 is a fragmentary end elevation of the handle;

Figure 4 is a fragmentary end elevation of the attaching plate mounted on the hack saw frame; and

Figure 5 is a sectional view taken on the line 5—5 of Figure 1.

Referring to the drawings wherein like numerals of reference designate corresponding parts throughout the several views, the numeral 10 designates a hack saw frame which comprises a front section 11 and a rear section 12, the front section being slidably and adjustably mounted in the rear section, being held in adjusted position by a pin 13 which is adapted to engage in selected recesses 14 in the front frame.

A hack saw blade 15 engages against the front frame member 11 and the rear frame member 12 being held in taut position by means of a thumb bolt 16 carried by the frame 10.

A handle structure generally designated as 17 is adapted to be adjustably mounted on the rear frame section 12, the handle 17 being adjustably secured to a fixed plate 18 of disc-like construction which is provided with forwardly projecting arms 19, the arms 19 being mounted in spaced relation to each other on the forward face of the disc 18 and adapted to engage about the opposite sides of the frame section 12. The arm members 19 are secured to the rear frame 12 by means of rivets 20 or the like.

A stud or threaded bolt 21 is secured axially to the plate 12 and extends rearwardly therefrom, and a handle body 22 having a disc 23 at the forward end thereof is adapted to be mounted on the stud or bolt 21, the forward face of the disc 23 engaging against the rear face or surface of the disc 18. The disc 23 is provided with a plurality of spaced recesses 24 which are positioned concentrically about the axial opening 25 therein and a locking bolt 26 is threadably mounted in an outstanding lug 27 on one of the arms 19, the locking bolt 26 extending through the disc 18 and into selected recesses 24 so as to hold the handle 22 against rotary movement with respect to the plate 18.

The plate 18 is provided with suitable marks or depressions 28 in the periphery thereof, and, in like manner, the plate 23 is provided with a mark or indicia 29 by means of which the angular position of the handle 22 with respect to the frame 10 can be readily adjusted and so as to determine the position of the plate 23 with respect to the plate 18 so that the locking member 26 may readily position at the rear end thereof in the selected recess 24.

It will be obvious from the foregoing that the plate member 18 may be secured upon any conventional hack saw frame structure and that when the fixed portion 18 has been mounted on the frame 10 the handle 17 may be readily adjusted to any desired angular position with respect to the frame 10.

In the operation of this device, the plate member 23 may be positioned on the bolt 21 and held thereupon against longitudinal movement by a threaded nut 30 but permitted to have relative rotary movement upon the bolt 21. The thumb bolt 26 may be rotated reversely so as to permit the ready

rotation or swinging of the handle 17 upon the bolt 21 and when the check mark 29 registers with the desired mark 28 on the disc 18 the thumb bolt 26 may be rotated so as to move the inner end of the bolt into the recess 24 which is in register or alignment with the bolt 26 when the mark 29 registers with the mark 28. When the locking bolt 26 is in engagement with the selected recess 24 the handle is held upon the frame 10 against rotary or swinging movement and the hack saw may be used in the conventional manner.

It is, of course, understood that various changes and modifications may be made in the details of construction and design of the above specifically described embodiment of this invention without departing from the spirit thereof, such changes and modifications being restricted only by the scope of the following claim:

What is claimed is:—

An attachment for connecting an adjustable handle with a hack saw U-frame comprising a plate member having forwardly projecting spaced arms engaging one of the arms of the U-frame above the saw end engaging means, means for securing said arms to said hack saw frame arm, a threaded bolt secured to said plate and extending rearwardly therefrom, a handle loosely mounted on said bolt and having a face with recesses therein, means engaging said bolt for yieldably holding said handle against longitudinal movement, and a thumb bolt threadably mounted in said plate and adapted to engage in a selected recess of said handle whereby to hold said handle upon said bolt against circumferential movement.

In testimony whereof I hereunto affix my signature.

FRED H. BUNDY.