

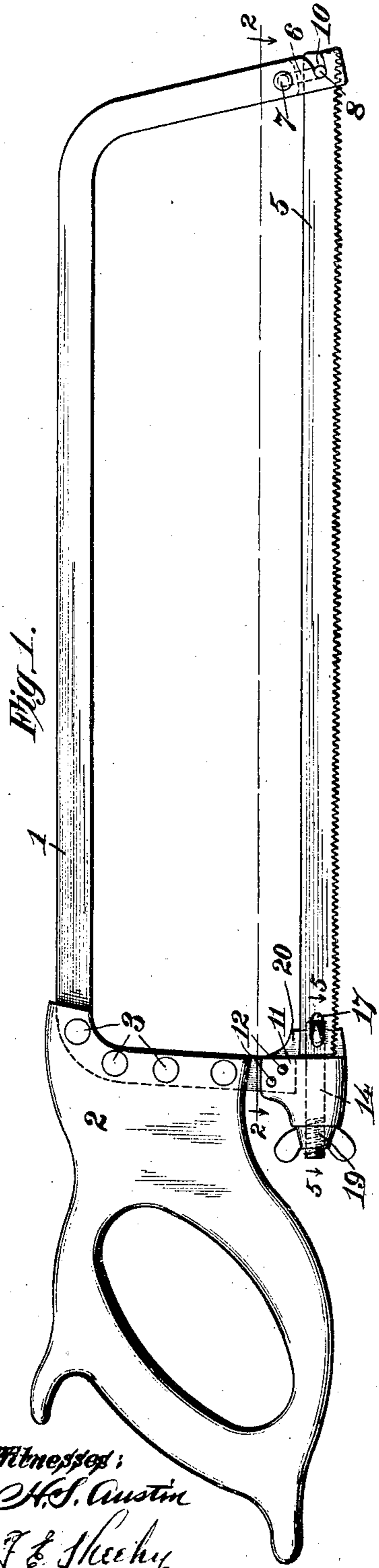
W. W. MITCHELL.

SAW.

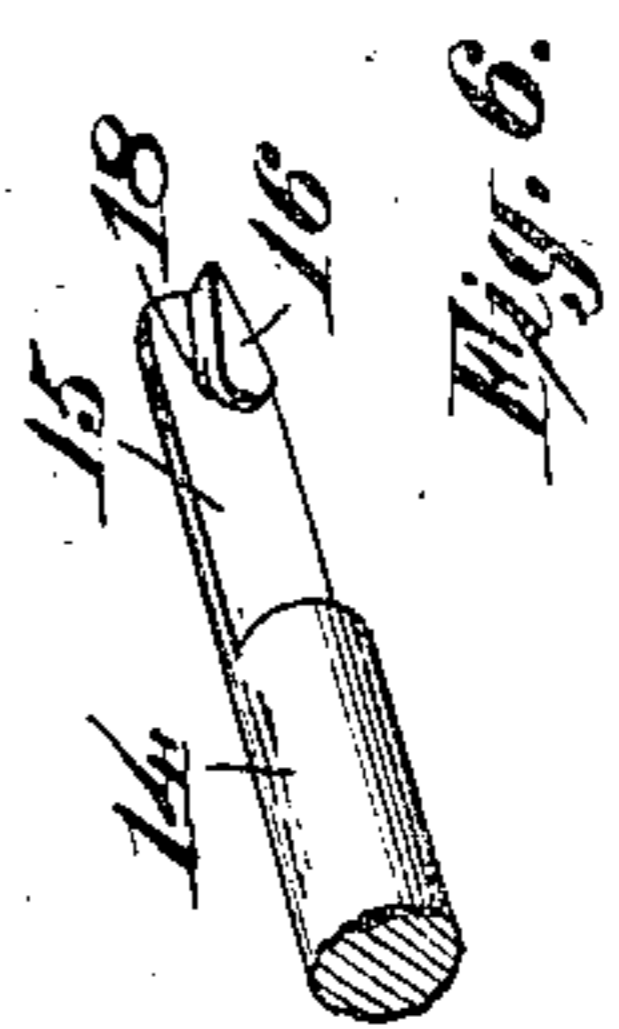
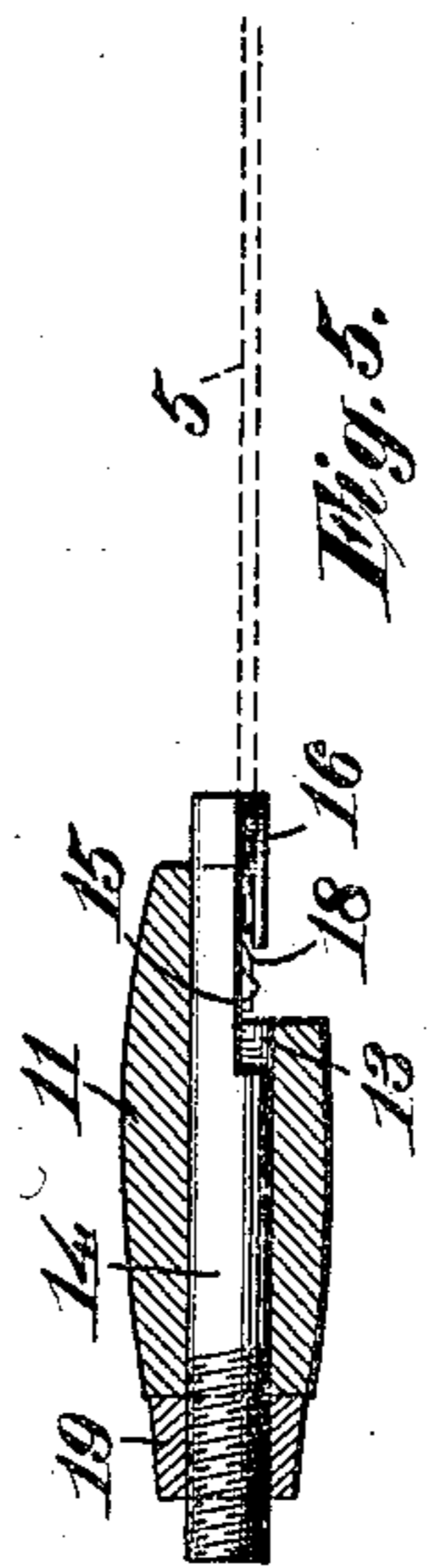
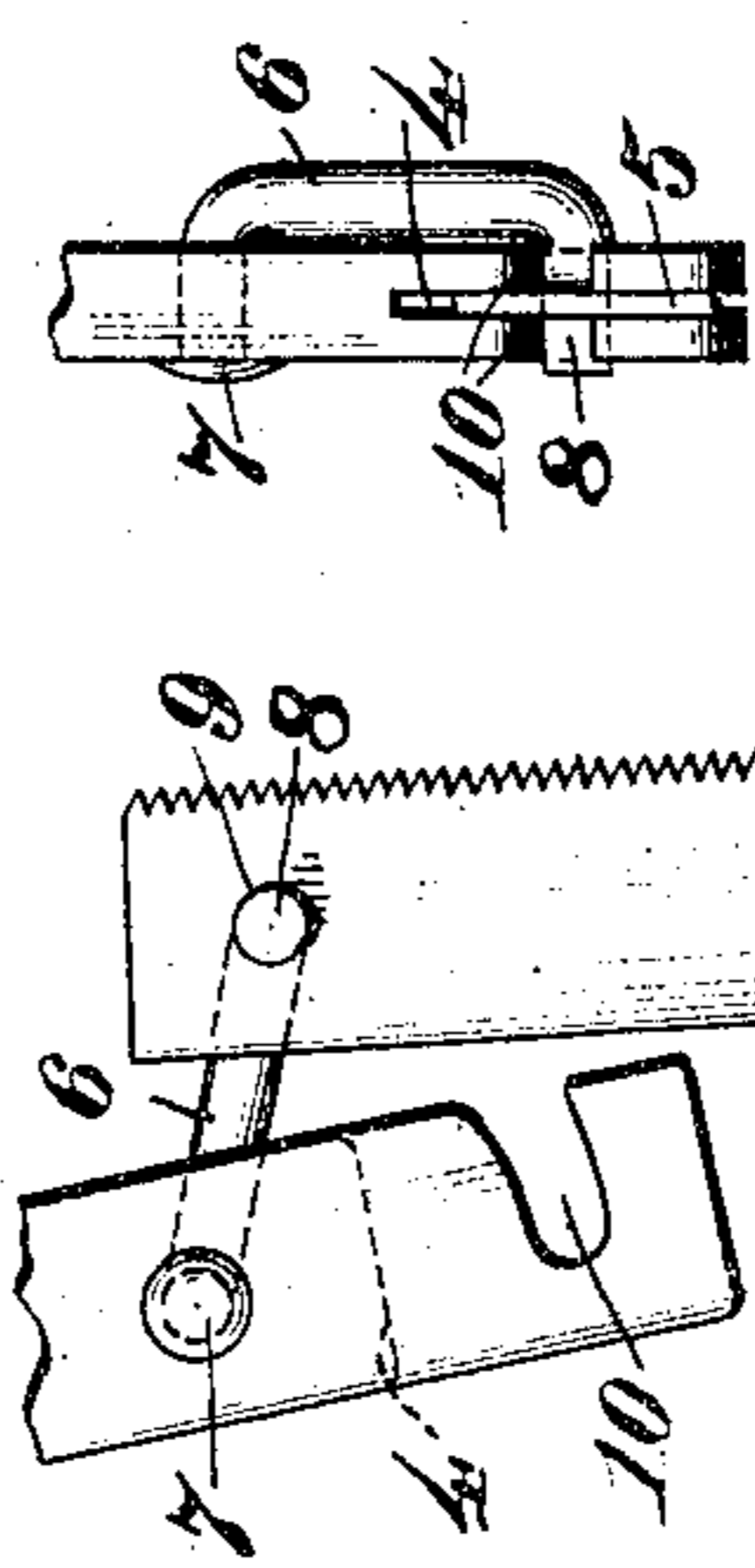
APPLICATION FILED JUNE 3, 1907.

903,603.

Patented Nov. 10, 1908.



Witnesses:
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UNITED STATES PATENT OFFICE.

WILLIAM WALLACE MITCHELL, OF CHICAGO, ILLINOIS.

SAW.

No. 903,603.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WILLIAM WALLACE MITCHELL, a citizen of the United States, residing at 3523 South Hoyne avenue, in the city of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Saws, of which the following is a specification.

My invention relates to saws and has particular reference to butchers' or meat saws.

The objects of my invention are to provide a saw of the class mentioned, of such improved construction that the blade may be readily and quickly removed from the frame, for the purpose of sharpening or repair, and as readily replaced; and to provide a saw having a detachable blade, as mentioned which shall have no loose parts, to get mislaid or lost such as the rivets, which are usually provided at the end of the blade.

A further object is to provide a saw as mentioned, in which all of the parts designed for attaching the blade to the frame shall be permanently fixed to the frame, to the end that the blade shall be free from all such devices, rendering the same more easily packed and less liable to injury.

Further and particular objects will appear hereinafter.

With these objects in view my invention is embodied in the saw illustrated in the drawings and fully described hereinafter.

My invention will be more readily understood by reference to the accompanying drawings forming a part of this specification and in which,

Figure 1 is a side view of a saw embodying my invention in its preferred form, Fig. 2 is a section of the line 2—2 of Fig. 1, Fig. 3 is a detail end view upon an enlarged scale illustrating the device used for attaching one end of the blade to the outer end of the frame, Fig. 4 is a side view of the same, showing the blade and connecting link swung into detaching position, Fig. 5 is a detail sectional view upon an enlarged scale, the same being taken on the line, 5—5 of Fig. 1, and Fig. 6 is a perspective view of the end of the tension bolt.

Referring to the drawings, 1 indicates the frame of the saw, and 2, the handle secured thereto as by rivets, 3. The outer end of the frame is provided with a kerf, 4 to receive the outer end of the blade, 5. Pivotally connected to the frame 1, a short dis-

tance above the kerf, 4, is a link, 6, by means of which the end of the blade is attached to the frame. The link 6 comprises a short steel bar riveted into a hole in the frame as at, 7, it is then bent downwardly, then inwardly, terminating in a pin portion, 8, which is adapted to be inserted in a hole, 9, formed in the end of the blade. The pin portion, 8 normally rests in notches 10 formed in the end of the frame, but the link is of sufficient length to permit the blade to be swung free of the kerf, 4, as shown in Fig. 4. When the link is swung into the position, shown, it is obvious that the blade may be readily attached or detached therefrom.

Upon the opposite end of the frame, and directly beneath the handle, is the tension device. This comprises a suitable casting secured to the frame, a bolt slidable therein, means for connecting the bolt to the blade and means for drawing the bolt longitudinally against the tension of the blade. 11 indicates the casting secured to the frame by rivets, 12. This is provided with a longitudinal bore, 13, to receive a bolt, 14. The end of the bolt is cut away, as shown, at 15 and is provided with a lug or boss, 16. The blade, 5 is provided with an elongated hole or slot, 17, which receives the lug, 16 and the lug is provided with a notch, 18 to prevent the blade from slipping off. Upon the end of the bolt, 14 is a nut, 19. This impinges against the end of the casting, 11, and serves to tighten the blade. The nut may be a wing nut, as shown or the usual tail nut may be employed.

It should be noted that the bolt, 14, is slightly off center, in order that the blade, 5 may be perfectly centered upon the frame. The outer portion of the forward end of the casting, 11, is cut away flush with the face of the portion 15 of the bolt forming a plane face, 20, against which the end of the blade, 5 rests. This portion being cut away, the blade may be readily slipped onto the lug, 16, without the use of bolts or clamps. This prevents the blade from twisting with torsional strain, especially as the connection between the bolt and the blade serves to place the greatest tension upon the edges of the blade.

To detach the blade, the nut, 19 is loosened until the blade is readily disengaged from the lug, 16, after which the blade and link, 6 are swung into the position shown in Fig.

4. The blade is then slipped off of the pin portion, 8 of the link. The detached blade is perfectly flat, having no devices connected to it for attaching the same to the frame.

5 Hence, a large number of them may be packed into a small space, and that without liability of injuring the blades.

To attach a blade to the frame, the blade is first slipped on the pin portion of the link,

10 6. The blade and the link are then swung until the blade is in the kerf, 4 and the pin, 8 rests in the notches, 10. The hole, 17 is then passed over the lug, 16 and the bolt, 14 is tightened by the nut, 19.

15 Having described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In a saw, a frame having a suitable handle attached thereto, in combination with a
20 blade having a hole in each end, a kerf in the outer end of said frame to receive one end of said blade, a link pivoted to said frame above said kerf, and having a pin formed thereon to engage the walls of one of
25 said holes, notches to receive said pin, a casting secured to the other end of said frame beneath said handle, a bolt sleeved in said casting and having longitudinal movement only therein said bolt and said casting

being flattened upon one side for a portion 30 of their length, a notched lug upon the flat face of said bolt to engage one of the holes in said blade, said blade being held by said lug only and free to move laterally from said bolt and casting except when engaged by 35 said lug, substantially as and for the purpose described.

2. In a saw, a frame having a handle, in combination with a blade having a hole or slot at each end, means pivoted to the outer 40 end of the frame for attaching the blade thereto, a casting secured to the other end of the frame, a bolt sleeved in said casting, said casting and said bolt being flattened upon one side forming together a plane surface 45 against which the end of the blade rests, and a notched lug on said bolt for holding said blade against said plane surface and for tightening the same, substantially as described. 50

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM WALLACE MITCHELL.

Witnesses:

F. E. SHEEHY.

H. S. AUSTIN.