D. W. WILLIAMS.

SAW.

APPLICATION FILED FEB. 23, 1915.

1,146,468. Patented July 13, 1915.

Fig. 1.

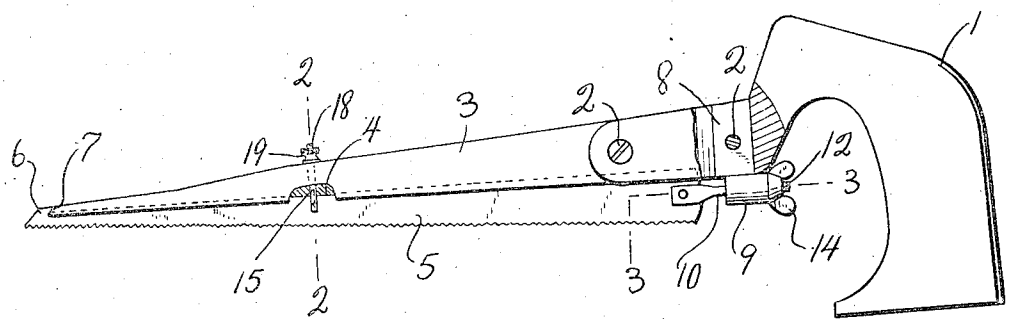


Fig. 2.

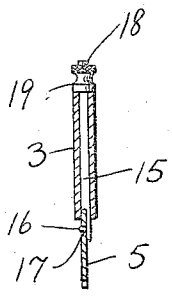


Fig. 4.

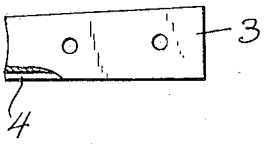
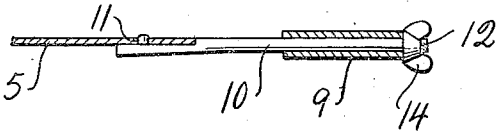


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

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To all whom it may concern:

Be it known that I, DANIEL W. WILLIAMS, a citizen of the United States, residing at Tulsa, in the county of Tulsa and State of Oklahoma, have invented certain new and useful Improvements in Saws, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to certain improvements in saws and has relation more particularly to a device of this general character especially designed and adapted for use in connection with metals; and an object of the invention is to provide a novel and improved device of this general character including means whereby the cutting blade is readily and conveniently applied to or removed from operative position.

Furthermore, it is an object of my invention to provide a device of this general character having novel and improved means whereby increased rigidity is imparted to the cutting blade and whereby interchangeable blades may be employed in conformity with the requirements of practice as necessitated by the character of the work.

The invention consists in the details of construction and in the combination and arrangement of the several parts of my improved saw whereby certain important advantages are attained and the device is rendered simpler, less expensive and otherwise more convenient and advantageous for use, all as will be hereinafter more fully set forth.

The novel features of the invention will be carefully defined in the appended claim.

In order that my invention may be the better understood, I will now proceed to describe the same with reference to the accompanying drawings, wherein—

Figure 1 is a view, partly in elevation and partly in section, of a saw constructed in accordance with an embodiment of my invention; Fig. 2 is a sectional view taken substantially on the line 2—2 of Fig. 1; Fig. 3 is a sectional view taken substantially on the line 3—3 of Fig. 1; and Fig. 4 is a fragmentary elevational view of the inner or heel portion of the back herein included.

As disclosed in the accompanying drawings, 1 denotes a handle having secured thereto through the medium of fastening screws 2 the elongated back 3 having its longitudinal edges disposed in converging planes with the reduced extremity thereof remote from the handle. The under longitudinal edge of the elongated back 3 is grooved, as indicated at 4, to receive the upper marginal portion of a cutting blade 5, the forward extremity of which is provided with a lateral extension 6 having its inner shoulder undercut, as at 7, and with which coacts the forward or pointed extremity of the elongated back 3. The handle 1 has its forward extremity bifurcated and within the kerf of the bifurcation is positioned an extremity of the elongated back 3. Also projecting within the kerf is a plate 8 through which is disposed one of the securing screws 2 whereby said plate is maintained in applied position. Formed with the outer extremity of the plate is a barrel 9 positioned rearwardly of and disposed in a direction longitudinally of the blade 5 when in applied position and disposed through said sleeve or barrel 9 is an elongated shank 10, the forward extremity whereof being enlarged and adapted to overlie the adjacent extremity of the blade 4 and provided with a lateral projection adapted to be received within a perforation 11 produced in the rear or heel portion of the blade. The opposite extremity of the shank is threaded, as indicated at 12, and coacting with said threaded portion 12 and the sleeve 9 is the winged nut 14 whereby it will be readily perceived that upon axial rotation being imparted to said nut 14 the forward extremities of the back 3 and the blade 5 will be caused to interlock in a manner which is believed to be self-evident.

At a point intermediate its length the back 3 has disposed transversely therethrough the shank 15, one extremity of said shank overlying the inner longitudinal marginal portion of a blade 5 when in applied position and said shaft is provided with a lateral projection 16 adapted to be received within a perforation 17 suitably positioned upon the blade 5. The opposite extremity of the shank 15 is threaded and coacting with said threaded portion 18 and the outer longitudinal edge of the back 2 is the milled nut 19, whereby it will be readily perceived that upon a requisite axial rotation of the nut 19 the blade 5 will be effectively clamped in applied position with its upper marginal por-

tion positioned within the groove or channel 4 whereby a blade when in applied position will possess a maximum of rigidity.

It will also be readily perceived that, as herein embodied, a blade may be readily applied or removed from operative position relative to the back 2 which arrangement permits the use of blades of various sizes in accordance with the character of the work.

From the foregoing description, it is thought to be obvious that a saw constructed in accordance with my invention is of an extremely simple and comparatively inexpensive nature and is particularly well adapted for use by reason of the convenience and facility with which it may be assembled, and it will also be obvious that my invention is susceptible of some change and modification without material departure from the principles and spirit thereof and for this reason I do not wish to be understood as limiting myself to the precise arrangement and formation of the several parts herein shown in carrying out my invention in practice.

I claim:

A saw consisting of a back provided with an elongated groove, a saw blade set within said groove, one extremity of the blade being provided with an extension engaging the adjacent extremity of the back, tensioning means carried by the back engageable with the opposite extremity of the blade, and a clamping means carried by the back intermediate the length thereof and engageable with the blade for maintaining said blade within the groove.

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

DANIEL W. WILLIAMS.

Witnesses:
FRED RAINS,
JNO. I. LYONS.