

No. 685,291.

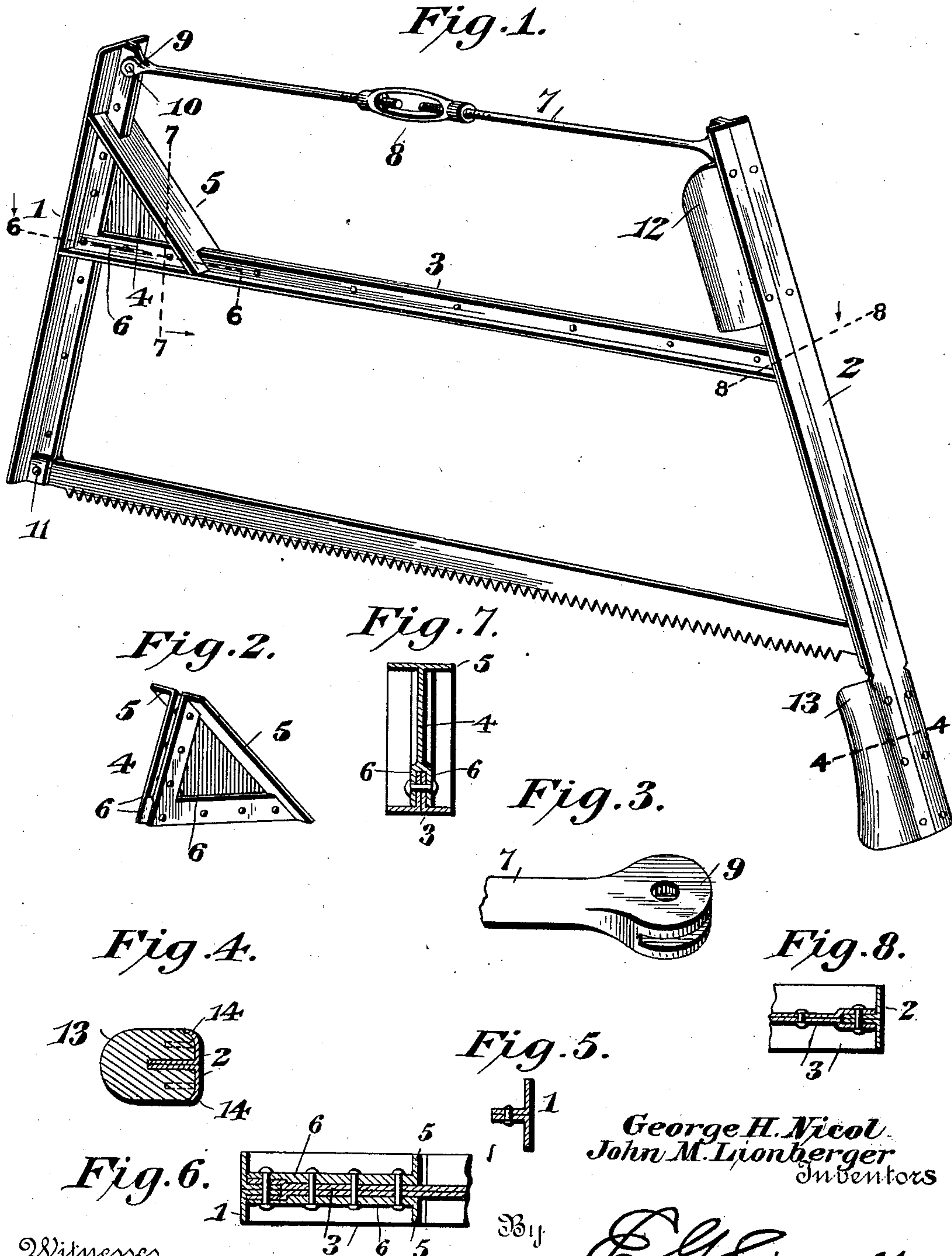
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G. H. NICOL & J. M. LIONBERGER.

BUCKSAW.

(Application filed July 13, 1901.)

(No Model.)



Witnesses
Jas. K. McLaughlin
R. M. Elliott.

George H. Nicol
John M. Lionberger
Inventors

By *E. J. Siggers*
Attorney

UNITED STATES PATENT OFFICE.

GEORGE HENRY NICOL AND JOHN MELVIN LIONBERGER, OF DALLAS CITY,
ILLINOIS.

BUCKSAW.

SPECIFICATION forming part of Letters Patent No. 685,291, dated October 29, 1901.

Application filed July 13, 1901. Serfal No. 68,187. (No model.)

To all whom it may concern:

Be it known that we, GEORGE HENRY NICOL and JOHN MELVIN LIONBERGER, citizens of the United States, residing at Dallas City, in the county of Hancock and State of Illinois, have invented a new and useful Bucksaw, of which the following is a specification.

This invention relates to bucksaws, and has for its object to present a metallic bucksaw that shall combine in a practical and feasible manner great strength and durability in use with lightness and simplicity of construction.

A further object is to improve the manner of assembling the clipper-rod with the frame, whereby when the turnbuckle is loosened to permit removal of the saw-blade said rod will not become detached from the frame.

A further object is to provide a novel form of corner-brace for connecting the cross-brace and front arm of the frame, the said corner-brace to be of such construction as to present highest rigidity against yielding with the greatest lightness.

A further object is to provide an effective means for assembling the hand-grips with the handle-arm of the frame, the assemblage to be such that while being held securely against accidental displacement in use they may be readily removed should they become damaged to permit replacement with new ones.

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 construction and combination of parts of a metallic bucksaw-frame, as will be hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which like numerals of reference indicate corresponding parts, we have illustrated a form of embodiment of our invention capable of carrying our ideas into effect, it being understood that the manner of construction and arrangement of parts herein shown may be varied or changed without departing from the spirit of the invention, and in the drawings—

Figure 1 is a view in perspective of a bucksaw-frame provided with a saw, the frame exhibiting the preferred embodiment of our in-

vention. Fig. 2 is a detached detail view in perspective of the corner-brace. Fig. 3 is a detail view showing a portion of the clipper-rod and exhibiting the manner in which the same is associated with the frame-arms. Fig. 4 is a sectional view taken on the line 4 4 of Fig. 1. Fig. 5 is a transverse sectional view through one of the frame members, showing the manner in which the same is constructed. Fig. 6 is a transverse section on the line 6 6, Fig. 1. Fig. 7 is a transverse section on the line 7 7, Fig. 1. Fig. 8 is a transverse section on the line 8 8, Fig. 1.

The great resisting power against bending or flexure, combined with lightness in weight, is a characteristic inherent to and one that is well understood with regard to metal T-bars, and owing to this fact the saw-frame of the present invention is made of metal that is T-shaped in cross-section. In the practical manufacture of the frame the parts may be made of solid T-metal or they may be constructed of two strips of metal rolled to an L shape and assembled to present a T-shaped structure, and from the standpoint of readiness of manufacture and cheapness of production it is generally preferred to construct the frame-iron in the latter manner. In carrying our invention into effect two pieces of L-shaped metal are assembled either by bolts or rivets and are cut into requisite lengths to present the front arm, handle-arm, and cross-brace of the frame, the cross-brace being assembled with the front arm and handle-arm in any desired manner, as by being riveted or bolted thereto. The front arm 1 and handle-arm 2 have their webs disposed toward each other, as shown in Fig. 1, while the web of the brace-arm 3 is disposed upward, this for the purpose of facilitating the assemblage therewith of the corner-brace 4, which may be a straight piece of T-shaped metal secured to the upper extremity of the front arm 1 and to the cross-beam 3, but, by preference, this brace is made of a solid triangular piece of metal with flanges 5 on its rear edge and having its front and bottom edge swaged, as at 6, to fit over or on each side of the web of the front arm and of the cross-brace and to be held assembled therewith by rivets or bolts.

The clipper-rod 7 is constructed in two sections, each having one of its ends threaded to be engaged by a turnbuckle 8 in the usual manner, the outer ends of the clipper-rod being provided with bifurcated heads 9, the bifurcations to straddle the web of the front arm and handle-arm and to be held assembled in connection therewith by bolts or rivets 10. By this novel manner of assembling the clipper-rod with the front and handle-arm of the frame, should it be desired at any time to remove the said blade from the frame the clipper-rod will not become disengaged from the frame when the turnbuckle is loosened, as with the ordinary form of clipper-rod, wherein its ends are provided with loops to embrace the said arms. While it is preferred to employ the form of clipper-arm herein described, it is to be understood that the invention is not to be limited to its employment, as it will be obvious that the ordinary form of clipper-rod—that is to say, one having loops at its end to engage the front arm and the handle-arm—may be employed and still be within the scope of our invention. The means of assembling the saw-blade with the front arm consists in passing the extremities of the blade between the webs of the two arms and holding them there by removable pins 11.

The handle-grips 12 and 13, carried by the handle-arm 2, comprise each a piece of wood having a longitudinal recess therein to fit over the web of the arm and to bear against the flat surface thereof and held assembled therewith by bolts or screws passed through the walls of the arms and into the hand-grips. The walls of the handle-arm adjacent to the hand-grip 13 are turned around and over the hand-grip, as at 14 in Fig. 4, thereby to cause this grip to be comfortable in handling and to prevent any danger of injury to the hands of the user.

As stated at the outset of the specification, the members of the frame may be constructed of rolled T-iron, and when this form of T-iron is used the parts will be assembled substantially in the manner as described or in any other preferred way. The built-up T-iron—that is to say, the iron composed of two L-sections having their webs assembled by bolts or rivets—will generally be preferred, as it will present a lighter structure and one that will possess a strength equal to that of the solid rolled T-iron.

It will be seen from the foregoing that the only parts of the saw-frame of our invention that are of wood are the grip-handles, so that it will be obvious that when a saw-frame is constructed in accordance with our invention it will practically be non-destructible and may be exposed to the elements without any deteriorating effect, especially if the frame be painted or otherwise protected by a waterproof substance.

From the foregoing it is thought that the construction, operation, and many advantages of the herein-described invention will be

apparent to those skilled in the art without further description, and it will be understood that various changes in the size, shape, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

What we claim is—

1. A bucksaw having its frame members constructed of T-metal produced by assembling two strips of metal L-shaped in cross-section.

2. A bucksaw having its frame members constructed of T-metal produced by riveting together two strips of metal L-shaped in cross-section.

3. A bucksaw comprising a front arm, a handle-arm and a cross-brace, the parts being T-shaped in cross-section, the webs of the two arms being disposed toward each other, and the web of the cross-brace being disposed upward, and a corner-brace straddling the webs of the front arm and the cross-brace and rigidly associated therewith.

4. A bucksaw comprising a front arm, a handle-arm and a cross-brace, the parts being T-shaped in cross-section, the webs of the two arms being disposed toward each other, and the web of the cross-brace being disposed upward, and a triangular cross-brace straddling the webs of the front arm and the cross-brace and rigidly secured thereto.

5. In a bucksaw, a front arm and a handle-arm T-shaped in cross-section with the webs disposed toward each other, in combination with a clipper-rod having its ends bifurcated to straddle the webs, and bolts or rivets for connecting the ends to the webs.

6. In a bucksaw having its frame members constructed of metal that is T-shaped in cross-section, the combination with the handle-arm, of hand-grips having recesses to straddle the web of the arm, and means for associating the hand-grips with the said arm.

7. In a bucksaw, having its frame members T-shaped in cross-section, the combination with the lower portion of a handle-arm, of a handle having a recess to straddle a web of the said arm, the middle of the base of the arm being curved around the handle, and means for associating the handle with the arm.

8. A bucksaw comprising a front arm, a handle-arm, and a cross-brace, the parts being T-shaped in cross-section, the webs of the front arm and handle-arm being disposed toward each other, and the cross-brace straddling, at its ends, the webs of the front and handle arms.

9. A bucksaw comprising a front arm, a handle-arm, and a cross-brace, the parts being T-shaped in cross-section and the webs of the front arm and handle-arm being disposed toward each other, and a corner-brace straddling the webs of the front arm and the cross-brace and rigidly associated therewith.

10. A bucksaw comprising a front arm, a

handle-arm, and a cross-brace, the parts being T-shaped in cross-section and the webs of the two arms being disposed toward each other, and a corner-brace made of a solid triangular piece of metal provided with flanges which embrace the webs of the front arm and cross-piece and are riveted thereto.

11. A bucksaw comprising a front arm, a handle-arm, a cross-brace, and a corner-brace, the latter being constructed of a solid triangular piece of metal with flanges on two

of its edges which embrace the front arm and cross-brace and are riveted thereto.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

GEORGE HENRY NICOL.

JOHN MELVIN LIONBERGER.

Witnesses:

J. M. McKIMEY,

WM. H. WALTER.