

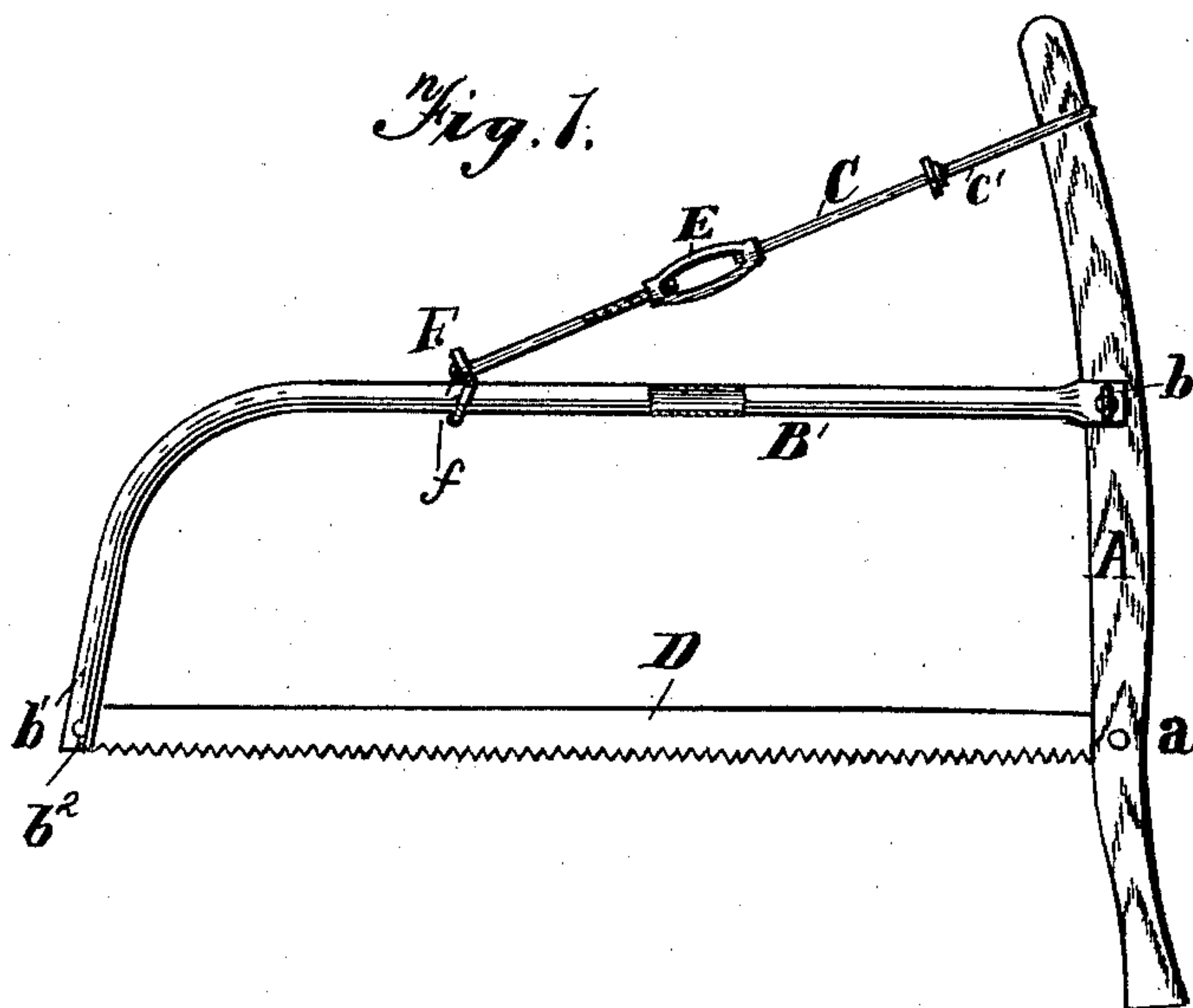
No. 610,900.

Patented Sept. 20, 1898.

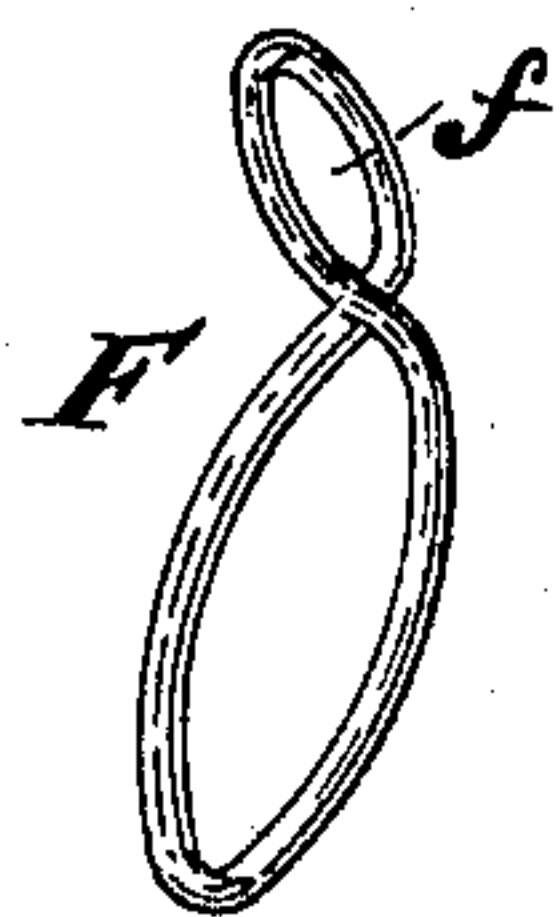
J. W. HELTON.  
HANDSAW.

(Application filed May 26, 1898.)

(No Model.)



*Fig. 2.*



WITNESSES:

*A. D. Breckenridge*

*M. E. Kennedy*

*John W. Helton*  
INVENTOR

BY  
*G. C. Kennedy*  
ATTORNEY.

# UNITED STATES PATENT OFFICE.

JOHN W. HELTON, OF WATERLOO, IOWA, ASSIGNOR TO LOUIS E. EICKELBERG.

## HANDSAW.

SPECIFICATION forming part of Letters Patent No. 610,900, dated September 20, 1898.

Application filed May 26, 1898. Serial No. 681,786. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN W. HELTON, a citizen of the United States of America, and a resident of the city of Waterloo, county of Black Hawk, and State of Iowa, have invented certain new and useful Improvements in Handsaws, of which the following is a specification.

In the accompanying drawings, forming part of this specification, Figure 1 represents a side view of a bucksaw embodying my invention, and Fig. 2 is a perspective detail of the clamp.

My invention relates, essentially, to the frames of bucksaws; and it consists of the construction and combination of devices which I shall hereinafter fully describe and claim.

To enable others skilled in the art to which my invention appertains to make and use the same, I will now describe its construction and indicate the manner in which the same is carried out.

In the accompanying drawings, A represents a bucksaw-handle of the usual form, and D is the saw-blade, removably secured at one of its ends to the handle by a pivot *a* and at its other end to the frame-bar B. This bar is made of tubular metal and has its outer end bent downwardly at right angles to form the vertical arm *b'*, the lower extremity of which is forked or bifurcated to receive the outer end of the saw-blade, which is removably held within said forked end by means of a pin or rivet *b*<sup>2</sup>. The inner end of the bar B is also split and spread to form a fork which receives the saw-handle A and is pivotally secured to said handle by means of a screw-bolt *b*. This fork forms a hinge-joint and on account of its being a part of the frame-bar B is stronger, simpler, and more easily adjusted than some other devices.

In order that the saw may be kept under the required tension, I pass over the upper extended end of the handle A a wire or other loop *c'*, whose lower end is swiveled to the upper section of a two-part rod C, the inner ends of whose sections are oppositely threaded to receive a turnbuckle E in any well-known manner. The lower end of the lower section of the rod C is passed loosely through the eye *f* of a wire sleeve or clamp F, which

is of approximately 8 shape in elevation, its smaller upper portion constituting said eye and its larger lower portion or body preferably standing at a slight angle to the eye and constituting a ring, which when at right angles thereto is fitted to slide upon the horizontal arm of the tubular bar B, but when canted slightly is adapted to bind thereon, as will be clear. This construction insures great rigidity to the saw-frame when the saw-blade is under proper tension, and by means of the adjustable wire sleeve or clamp and the pivotally securing of the handle to said bar at the hinge *b* I am enabled to adjust the frame to saws of different lengths. The sleeve F, being constructed of wire and with its body of the shape above described, will, when canted slightly and under tension, be drawn out into a tight loop, surrounding the frame-bar B at an angle to its length, grasping said bar strongly, but easily released by means of the turnbuckle. Also by screwing up the screw-bolt at *b* I am enabled to maintain the horizontal portion of the bar B and the saw-blade in a position parallel with each other, and by loosening this bolt and turning the turnbuckle I am enabled to regulate the tension of the saw-blade and adjust the frame for other saw-blades, as before mentioned.

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

1. In a handsaw, the combination with the handle, the blade pivoted at one end thereto, and the tubular frame-bar also pivoted at one end to the handle and at the other end to the remote end of the blade; of the clamp comprising a ring loosely surrounding said frame-bar when at right angles thereto and an eye at the top of the ring, and a tightening device substantially as described extending from the eye to the upper end of the handle, as and for the purpose set forth.

2. In a handsaw, the combination with the handle, the blade pivoted near one end thereto, and the tubular frame-bar also pivoted near one end to the handle and having its other end bent downward and pivoted to the blade near its remote end; of the clamp comprising a ring loosely surrounding said frame-bar and



an eye at the top of the ring and bent out-  
ward beyond the plane thereof, a loop con-  
nected with the upper end of the handle, a  
two-part rod leading from said loop to said  
5 eye, and a turnbuckle connecting the adja-  
cent ends of the parts of this rod, as and for  
the purpose set forth.

Signed by me, at Waterloo, Iowa, this 23d  
day of May, 1898.

JOHN W. HELTON.

Witnesses:

A. L. BRECKENRIDGE,  
GUSTAV KRETZSCHMAR.