

No. 831,662.

PATENTED SEPT. 25, 1906.

J. GIVES.  
BUCKSAW FRAME.  
APPLICATION FILED OCT. 5, 1905.

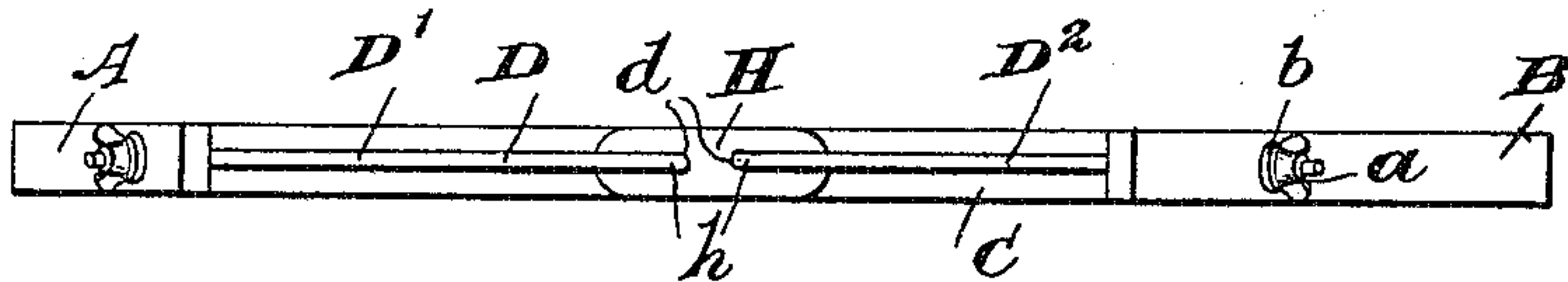


Fig. 2.

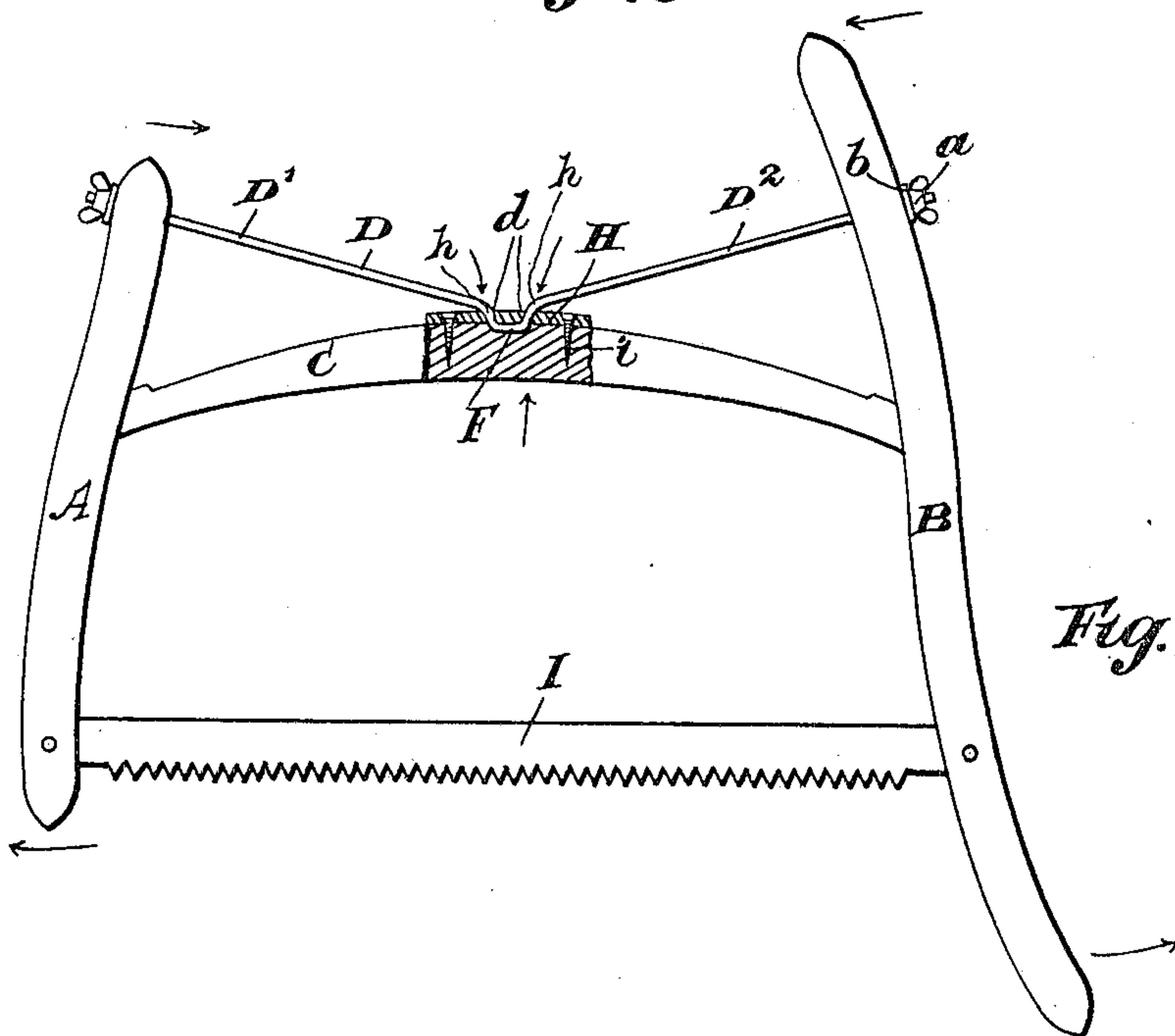


Fig. 1.

Witnesses.  
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# UNITED STATES PATENT OFFICE.

JOHN GIVES, OF GALT, ONTARIO, CANADA.

## BUCKSAW-FRAME.

No. 831,662.

Specification of Letters Patent.

Patented Sept. 25, 1906.

Application filed October 5, 1905. Serial No. 281,427.

*To all whom it may concern:*

Be it known that I, JOHN GIVES, saw-maker, a subject of the King of Great Britain, residing in the town of Galt, in the county of Waterloo, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Bucksaw-Frames, of which the following is a specification.

My invention relates to improvements in bucksaw-frames; and the object of my invention is to provide improved means for bracing the saw-frame and tightening the saw-blade.

My invention consists in attaching to the brace of the frame a plate, which is secured on the edge of the brace centrally thereof and in such manner as to strengthen and stiffen the brace, and in connecting to this plate a tightening-rod, the ends of said tightening-rod being supported by the short and long ends of the saw-frame above the points where said brace is secured thereto and said rod being provided with means for exerting traction on the ends thereof, and thereby tightening the saw-blade in the saw-frame.

Figure 1 is a side elevation of a suitable saw-frame provided with my preferred form of invention, portion of same being shown in section. Fig. 2 is a plan view of Fig. 1.

In the drawings like characters of reference indicate corresponding parts in each figure.

A is the short end of the saw-frame, B long end of same, and C a suitable brace secured to said ends. In my preferred form of invention the tightening-rod D is made in one piece and is passed up through the holes *d* in any suitable plate H, thus forming a loop F, whereby said tightening-rod is secured to said plate, and hence to the brace C. As will be seen from the drawings, the portions D' and D<sup>2</sup> of the tightening-rod branch off from said loop at an upward-inclined angle and are supported by the ends A and B above the brace C in any suitable manner, so that the saw-frame may be braced and the saw-blade I tightened. According to the construction shown for this purpose the ends of these portions are threaded and passed through the ends A and B and extend a suitable distance therebeyond. By means of suitable nuts, preferably butterfly-nuts *a*, the frame is braced and the blade tightened. In order to prevent unnecessary wear on the saw-frame, washers *b* are interposed between the butterfly-nuts *a* and the ends A and B. It will be

understood that when the butterfly-nuts *a* are tightened up the upper ends of the ends A and B are moved in the direction indicated by arrows and the lower ends thereof moved in the direction indicated by arrows, thus bracing the saw-frame and tightening the saw-blade I.

I do not confine myself to attaching the tightening-rod D to the brace C by means of any particular construction of plate. It must further be understood that the plate or other means used for attaching the tightening-rod to the brace may be secured thereto or gripped therearound after any suitable manner. It is my object, though, to attach the supporting plate or element for the tightening-rod to the brace, so as to weaken said brace as little as possible. Although I use screws *i* for securing the plate H in position, it must be understood that the holes formed thereby are very small and will not materially weaken the brace.

When the butterfly-nuts are screwed up, the action of the forces on the preferred form of tightening-rod cause the said tightening-rod to exert a buckling force in the direction indicated by arrow on the brace C, (see Fig. 1,) but this buckling force is resisted by the plate H, which, as shown in the drawings, extends a considerable distance on each side of the center of the brace. The plate H therefore serves to stiffen and strengthen the brace and prevent any buckling or possible fracturing thereof at the center, which is the portion of the brace subjected to the greatest amount of strain.

What I claim as my invention is—

The combination with the long and short ends of a bucksaw, a brace connecting said long and short ends, a plate provided with holes mounted on said brace, a tightening-rod extending through the holes of said plate, a portion of said tightening-rod passing under the space intervening said holes, each end of said tightening-rod passing through one of the side bars and being provided with means for exerting tension upon said plate through means of said tightening-rod.

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

JOHN GIVES.

Witnesses:

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R. BARRIE.