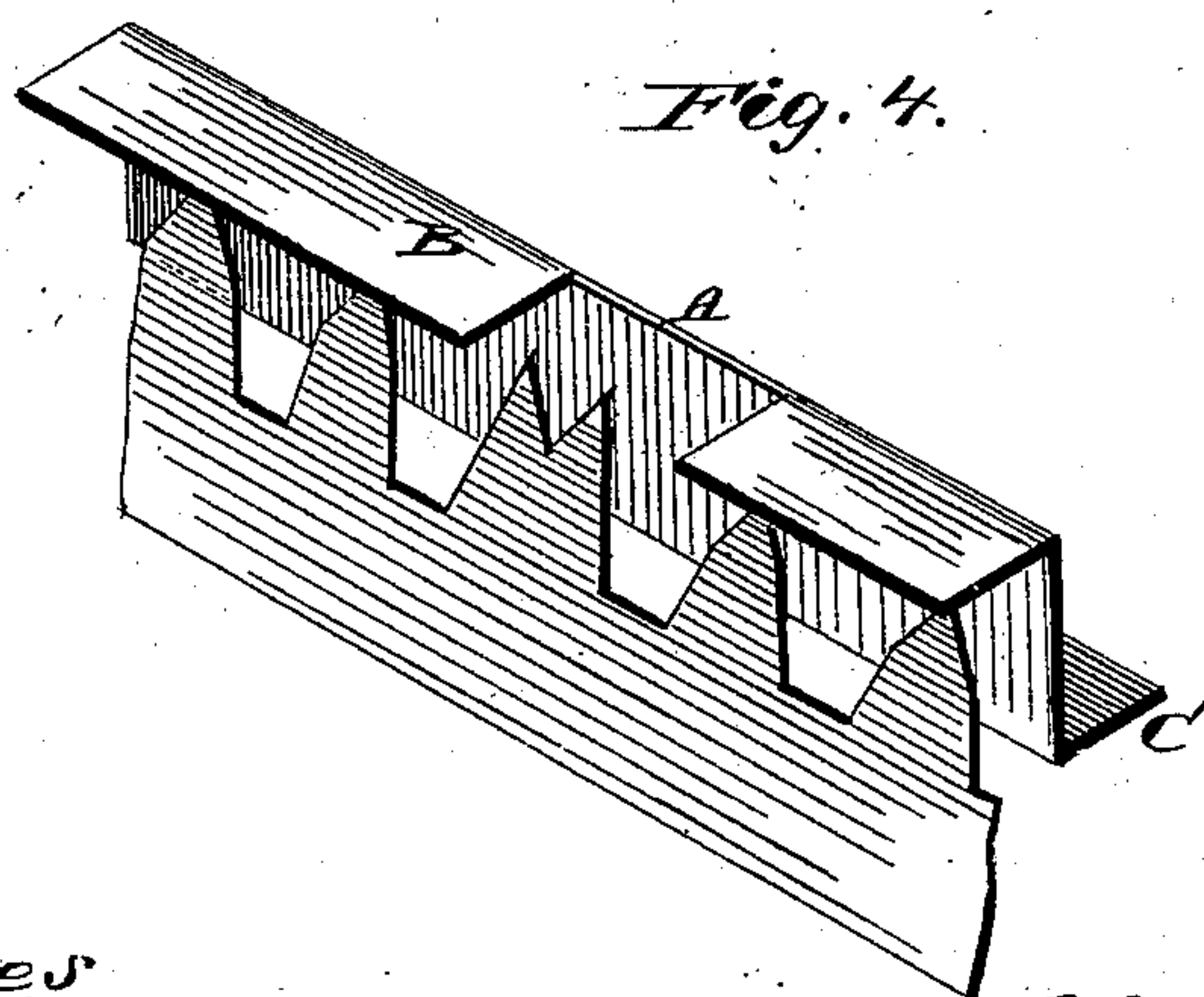
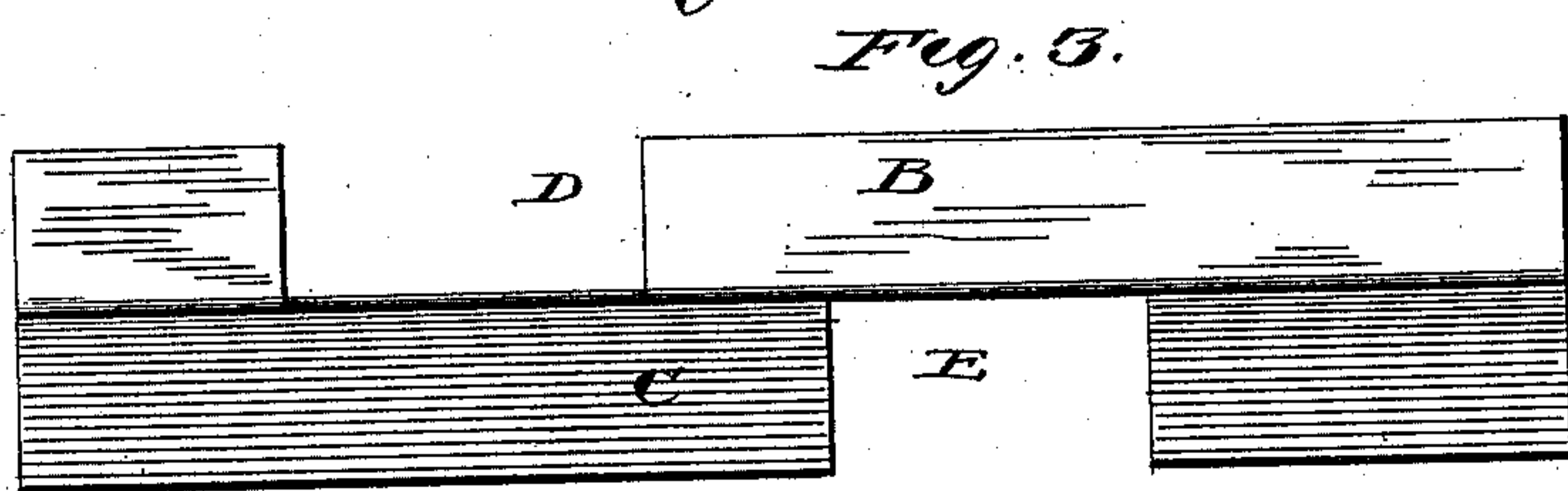
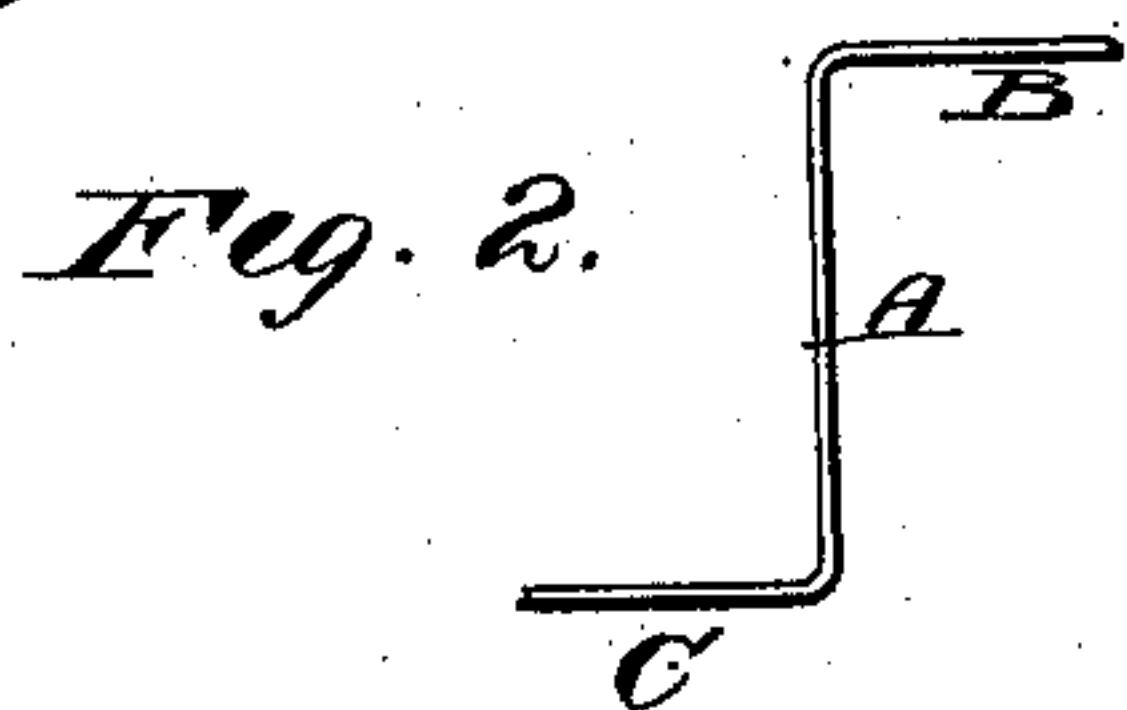
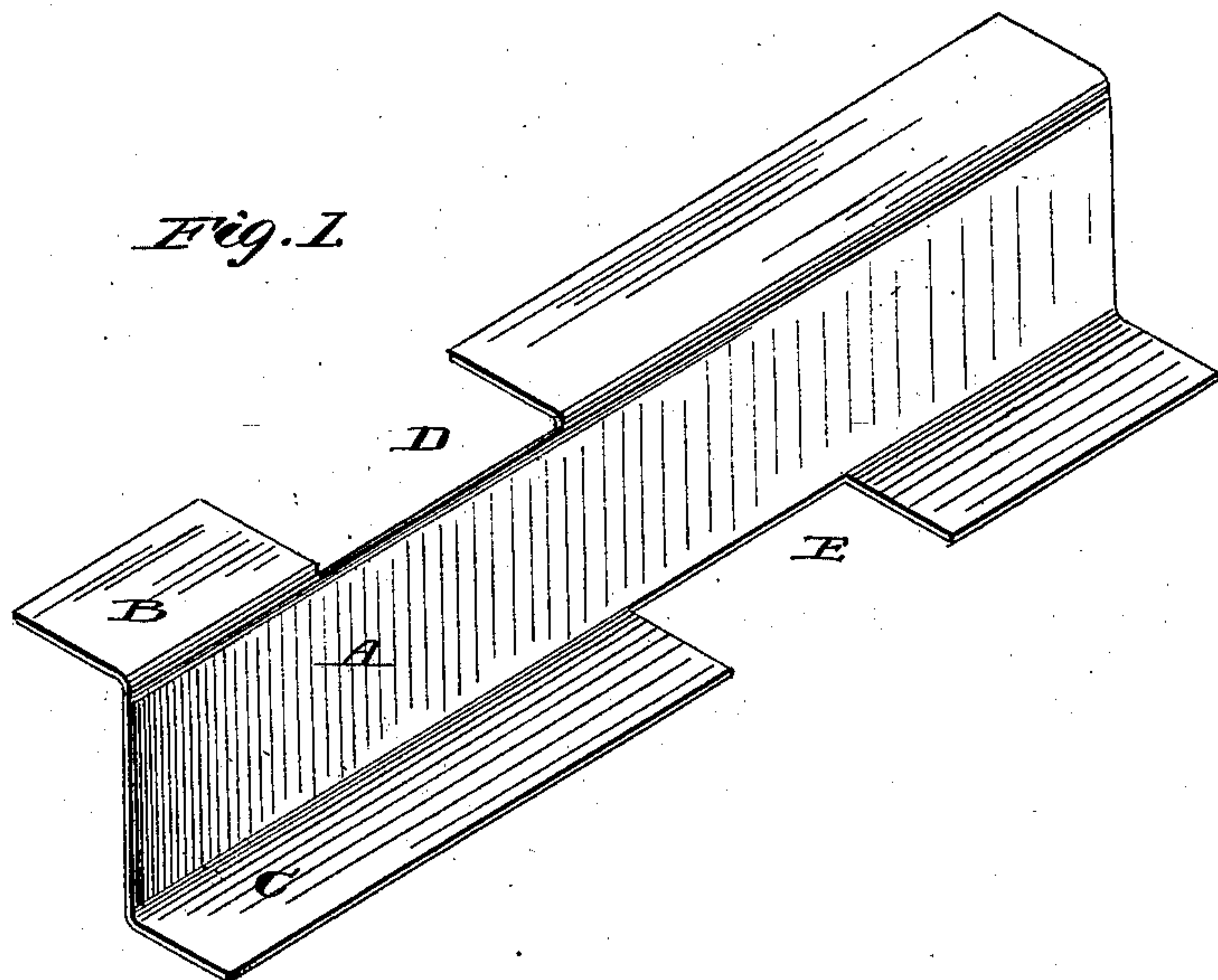


C. A. HURLBURT.  
Saw-Gage.

No. 209,399.

Patented Oct. 29, 1878.



Witnesses  
Fred. G. Dieterich  
George. Binkenburg

Inventor  
Charles A. Hurlburt  
per C. A. Snow & Co.  
attys.

# UNITED STATES PATENT OFFICE.

CHARLES A. HURLBURT, OF YPSILANTI, MICHIGAN.

## IMPROVEMENT IN SAW-GAGES.

Specification forming part of Letters Patent No. **209,399**, dated October 29, 1878; application filed August 23, 1878.

*To all whom it may concern:*

Be it known that I, CHARLES A. HURLBURT, of Ypsilanti, in the county of Washtenaw and State of Michigan, have invented certain new and useful Improvements in Saw-Gages; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Figure 1 is a view, in perspective, of a gage for gaging the clearers of crosscut-saws, embodying the improvements in my invention. Fig. 2 is an end view, and Fig. 3 is a plan view, of the same. Fig. 4 shows the gage applied to the saw.

This invention has relation to gages for gaging the clearers of crosscut-saws; and consists in the improvements in the construction of the same hereinafter fully described, and particularly pointed out in the claim.

In the accompanying drawings similar letters of reference indicate corresponding parts in the several figures.

The vertical portion A of the gage has the upper and lower flanges, B C, extending in opposite directions. Either of the flanges may become the upper or lower flange, at pleasure.

The clearers are commonly called the "drag-teeth" of crosscut-saws.

In practice, the clearers for soft wood are required to be shorter than for hard wood.

The ordinary gage can only be used for the kind of clearers that it may be fitted for.

This invention is a combined gage for hard and soft wood. It may be made of metal or

of wood, and, if made of wood, should have a metal plate screwed upon the vertical portion A, to prevent the file from wearing the wood away. The opening D in the flange B extends slightly into the vertical portion A, so that the clearers may be made shorter than through the opening E in the flange C, thus fitting them for cutting soft wood. The other opening E is intended for fitting the clearers for hard wood, and by this simple construction a combination-gage is made whereby the clearers can be fitted for either hard or soft wood.

I am aware of the patents to Robson, April 19, 1870, and Atkins, November 17, 1874. The former of these requires to be adjusted by set-screws, and the latter is only a single, while mine is a double or combination, gage. It will also be observed that the flange upon my improved gage which is opposite to the one in use furnishes a convenient handle for manipulating the tool.

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

The combination-gage for gaging the clearers of crosscut-saws, consisting of the vertical portion A, provided with the flanges B C, having the openings D E, of unequal depth, constructed and operating substantially as and for the purposes set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

CHARLES A. HURLBURT.

Witnesses:

THOS. C. STRINGER,  
WILLIAM H. SHORT.