

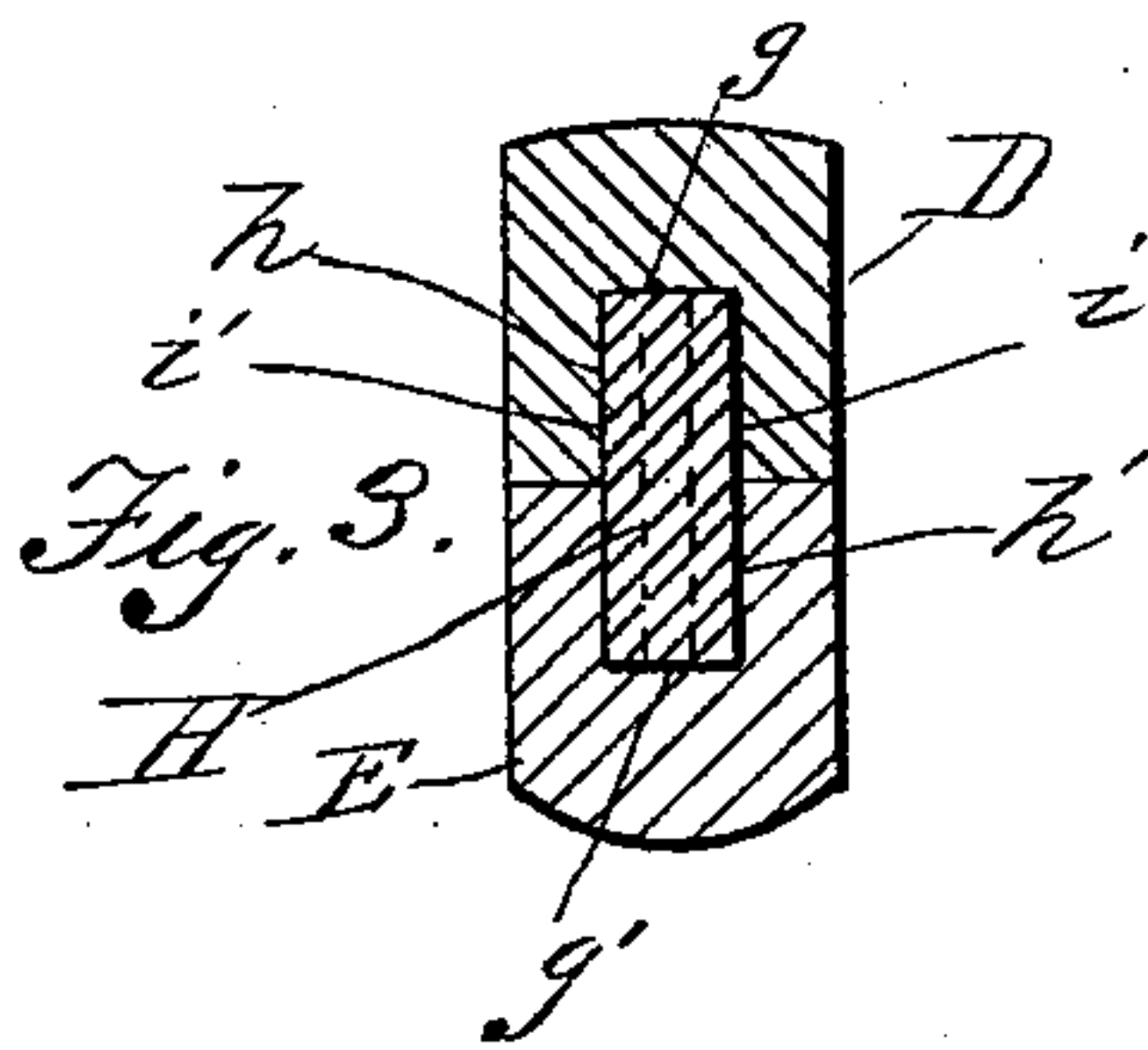
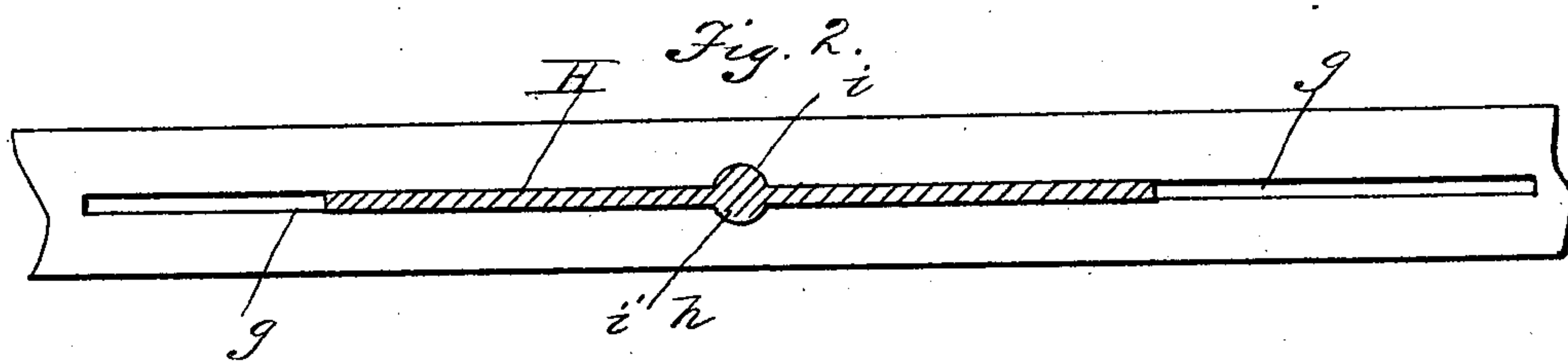
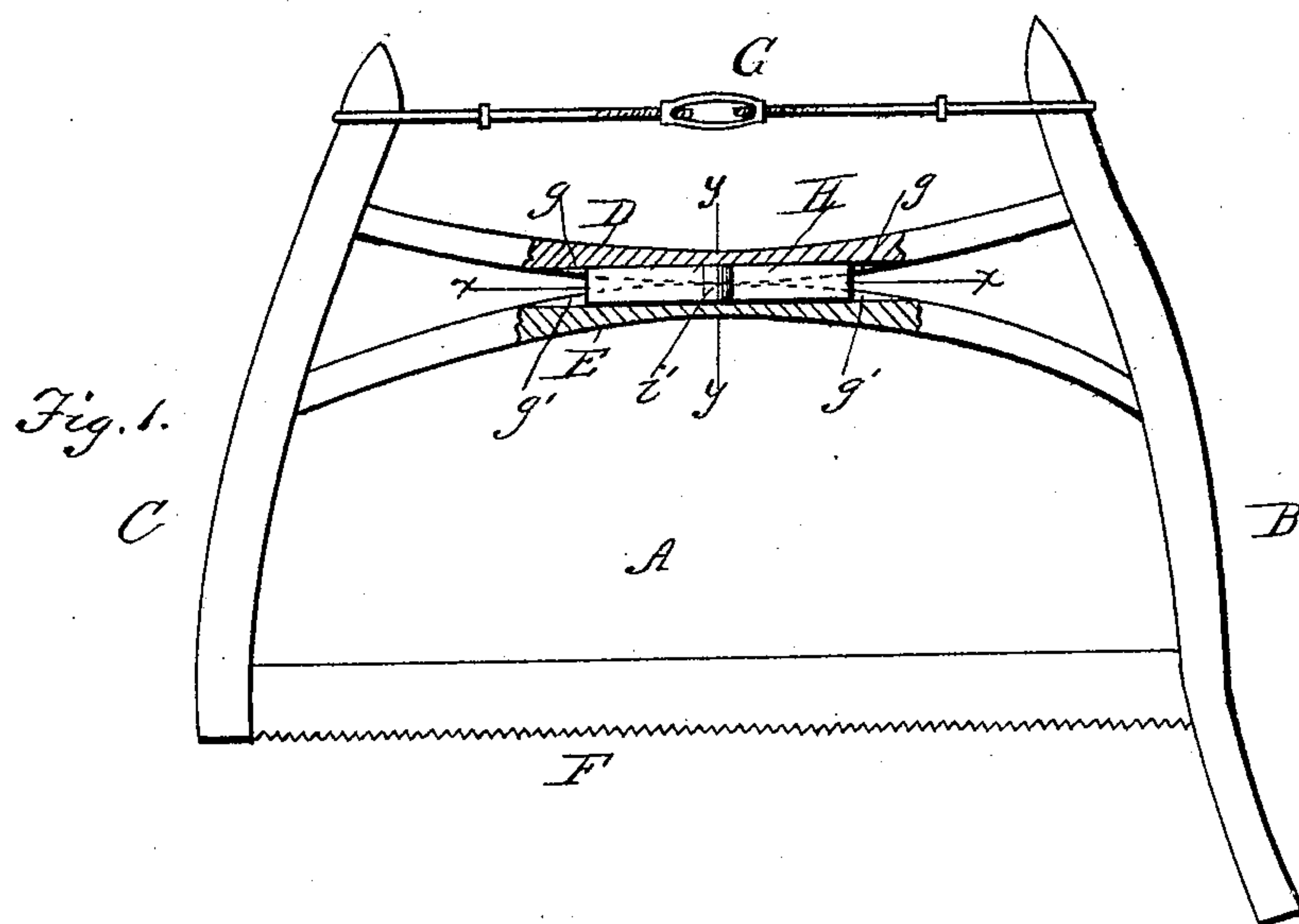
(No Model.)

C. TENNEY.

SAW FRAME.

No. 390,996.

Patented Oct. 9, 1888.



WITNESSES,

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# UNITED STATES PATENT OFFICE.

CORNELIUS TENNEY, OF NEW YORK, N. Y.

## SAW-FRAME.

SPECIFICATION forming part of Letters Patent No. 390,996, dated October 9, 1888.

Application filed January 20, 1888. Serial No. 261,410. (No model.)

*To all whom it may concern:*

Be it known that I, CORNELIUS TENNEY, a citizen of the United States, residing at New York, in the State of New York, have invented  
5 certain new and useful Improvements in Saw-Frames; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use  
10 the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in  
15 saw-frames; and it consists of the peculiar combination and construction of parts, as will be hereinafter described, and particularly pointed out in the claims.

A common objection to the saw-frames of  
20 ordinary construction is that the frame is liable to bend or bulge laterally or sidewise after use for a short time, so that the tension device cannot be tightened up to its fullest capacity, owing to the dislocation of the parts of the  
25 frame, and thus strain the latter and hold the blade under considerable tension.

The object of my invention is to provide a saw-frame with a novel brace for strengthening the frame at its weakest point and effectually  
30 preventing lateral displacement of the parts of the frame, so that all the parts remain in their true aligned positions, and thereby adapting the tension device to be readily tightened up to exert the greatest possible longitudinal strain  
35 on the saw-blade.

In the accompanying drawings, Figure 1 is an elevation, partly in section, to show my improved brace. Fig. 2 is a horizontal sectional  
40 view on the line  $x x$  of Fig. 1. Fig. 3 is a vertical transverse sectional view on the line  $y y$  of the same figure.

Referring to the drawings, in which like letters of reference denote corresponding parts in all the figures, A designates the saw-frame,  
45 of ordinary construction, which in the present instance consists of the head and foot pieces B C, which are connected together by means of longitudinal brace rods or bars D E, a saw-blade, F, and a tension device, G, for straining  
50 the upright pieces B C of the frame, and thus exerting longitudinal strain on the saw-blade.

These parts are constructed and arranged in the ordinary manner, and the longitudinal braces D E of the frame converge at or near the middle, so that they are in contact with  
55 each other.

In the opposing contact-faces of the longitudinally-curved bars or braces D E, I cut or form coincident grooves or channels  $g g'$ , respectively, which are arranged longitudinally  
60 of the braces, and at or near the middle of these grooves or channels are formed enlargements  $h h'$ , which are of greater transverse diameter than the corresponding diameter of the grooves, the function of which will presently  
65 appear.

H designates the brace of my invention. In constructing this brace I take a flat piece of metal of a suitable length and of such width  
70 as to fit snugly in the longitudinal channels or grooves of the braces D E, and at the middle of this flat brace I form lateral shoulders  $i i'$ , which project from both sides of the brace.

In putting the frame together the longitudinal brace H of my invention is first fitted in  
75 the longitudinal channels or grooves of the braces D E, so that the shoulders thereof fit in the enlargements of the grooves, to thereby prevent endwise movement or displacement of the brace. The other parts of the frame are  
80 properly fitted and adjusted together in the ordinary manner and the adjusting device tightened to properly strain the frame. As the longitudinal bars or braces D E meet or abut together for some distance at the middle of the  
85 frame and the metallic brace H is fitted in channels or grooves in the opposing contact-faces of the bars, the said brace is almost entirely concealed from view and protected from  
90 injury, while at the same time it is prevented from endwise movement in the channels and prevented from becoming displaced through the open ends of the channels by the lateral shoulders thereon fitting in the enlargements  
95 of the channels.

By securing the brace bar or plate to the longitudinally-curved bars or braces D E at the point where they meet or come in contact I strengthen and brace the frame at its weakest point, and by arranging said brace length-  
100 wise of the bars I afford the greatest possible security and strength thereto.



With the use of my invention the frame cannot bend or bulge laterally and become distorted, even after use for a long time, and the tension device can be readily adjusted to  
5 exert the greatest possible strain on the frame and saw-blade.

I do not desire to confine myself to the exact details of construction and form and proportion of parts herein shown and described as an  
10 embodiment of my invention, the essential feature of which consists of a brace fixed to the longitudinal bars or braces D E of the frame and arranged lengthwise thereof.

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

1. In a saw-frame, the combination of the bars or braces D E, having the coincident longitudinal grooves formed centrally in their opposing faces or edges, and a flat brace arranged  
20

lengthwise of said bars and fitted snugly throughout its entire length in the groove or channel of each bar, to thereby brace both bars against lateral strain, substantially as described.

2. In a saw-frame, the combination of the bars or braces of a saw-frame, having the channels or grooves provided with lateral enlargements, and a brace fitted in the channels lengthwise of the bars and having the shoulders inserted in the enlargements to prevent  
25 endwise displacement of the brace, substantially as described. 30

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

CORNELIUS TENNEY.

Witnesses:

CHAS. CARLTON,  
ALBERT E. BROWN.