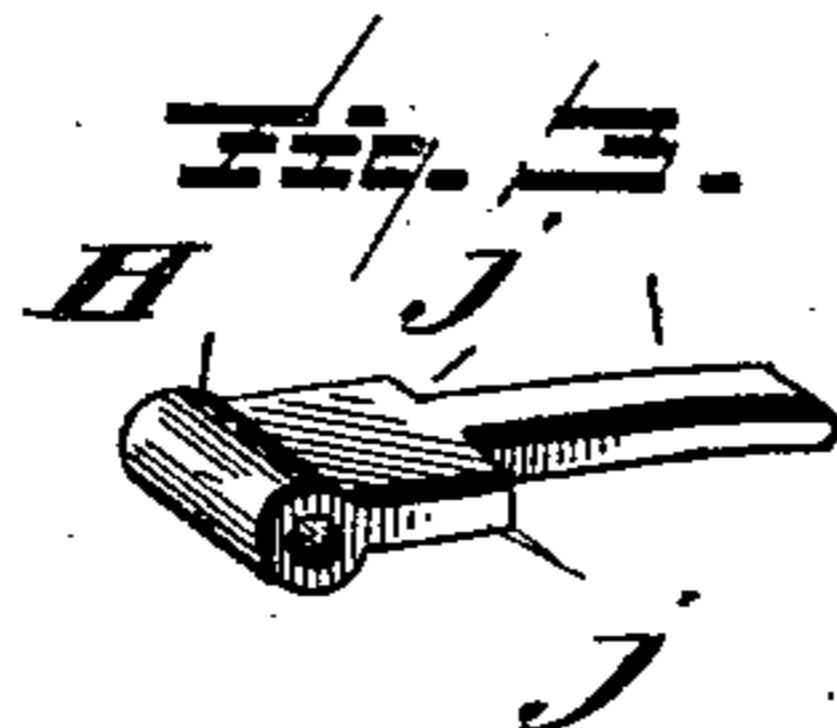
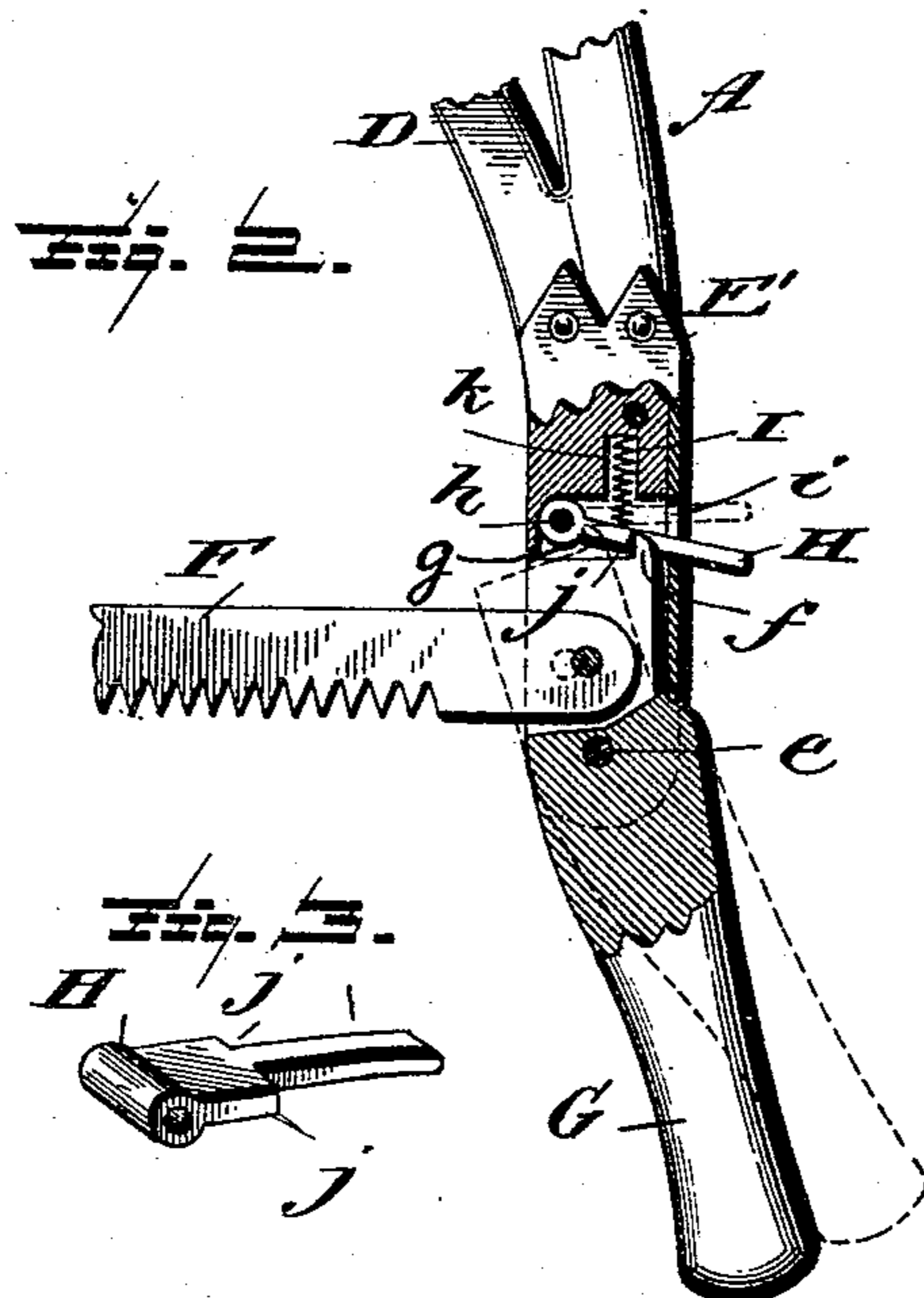
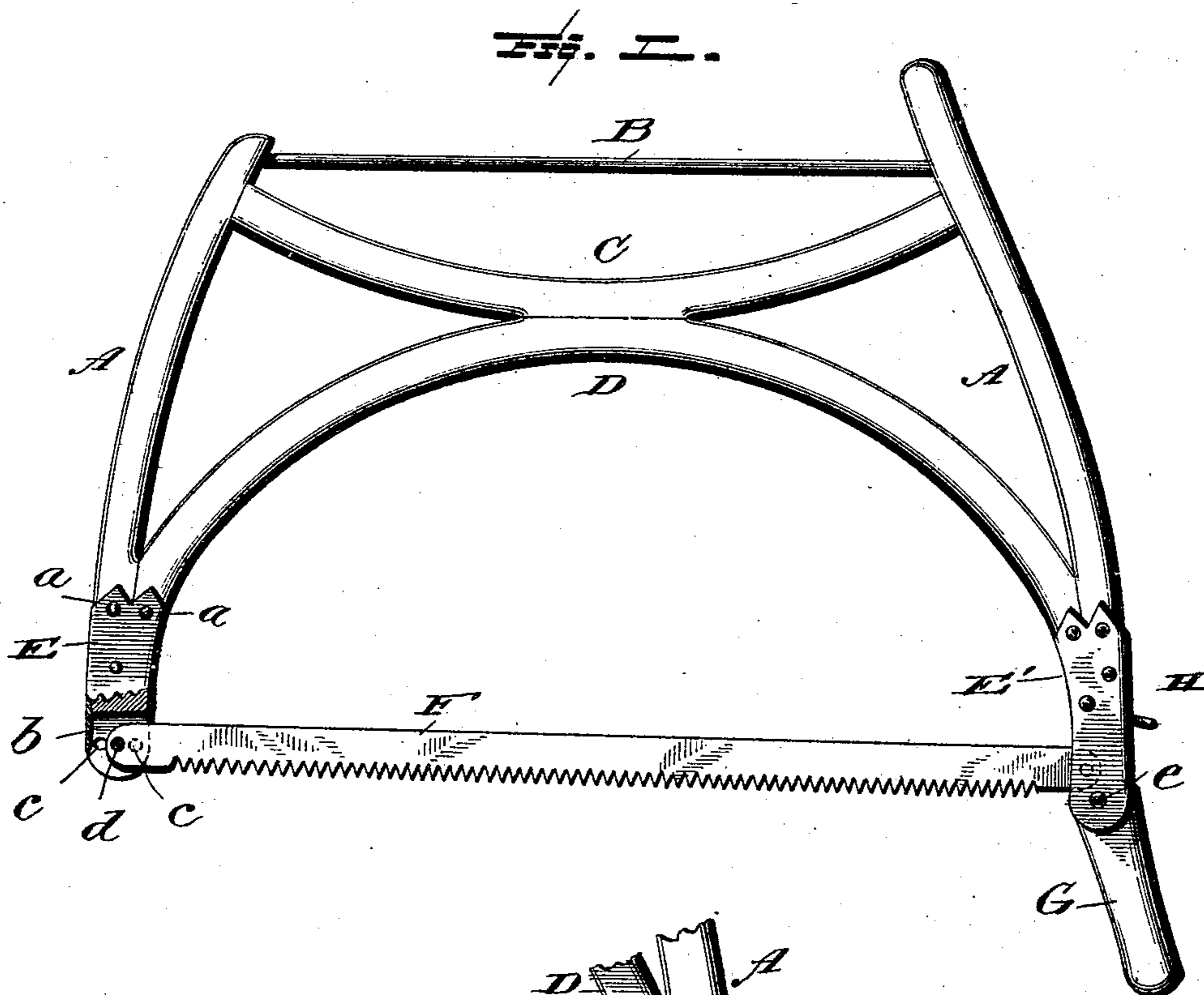


(No Model.)

G. R. HARDISON.  
BUCK SAW.

No. 459,399.

Patented Sept. 15, 1891.



Witnesses  
L. C. Hills.  
E. H. Bond.

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per Cha. W. Fowler  
Attorney

# UNITED STATES PATENT OFFICE.

GEORGE ROLAND HARDISON, OF GOULDSBOROUGH, MAINE.

## BUCK-SAW.

SPECIFICATION forming part of Letters Patent No. 459,399, dated September 15, 1891.

Application filed May 20, 1891. Serial No. 393,405. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE ROLAND HARDISON, a citizen of the United States, residing at Gouldsborough, in the county of Hancock and State of Maine, have invented certain new and useful Improvements in Buck-Saws; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

This invention relates to certain new and useful improvements in buck-saws; and it has for its objects, among others, to provide an improved saw of this character wherein all of the parts of the frame yield under strain, thus making the strain more enduring and the frame more durable. The elasticity of the saw to work with than where the two end posts only give, as heretofore.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be specifically defined by the appended claim.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a side elevation of my improved saw with a portion broken away. Fig. 2 is an enlarged detail view, partly in side elevation and partly in section, with portions broken away, showing the straining mechanism. Fig. 3 is a perspective view of the pawl removed.

Like letters of reference indicate like parts in all of the views where they occur.

Referring now to the details of the drawings by letter, A designates the end posts of the frame, which are slightly curved, the upper ends being connected by the stay B, of any approved form.

C is the upper cross-bar, which is formed upon a curve, as shown, and D is the lower cross-bar, which is substantially semicircular in form, so as to provide the maximum room for the purpose of permitting a deeper kerf to be sawed, and these two cross-bars are oppositely curved and at their junction are united in any suitable manner. The upper

bar is connected to the end posts in any suitable manner.

At the junction of the ends of the lower cross-bar with the end posts I provide the metallic sockets E and E', the former being secured to the end post and cross-bar by means of rivets or other analogous means *a*, and below the socket which receives the end post and cross-bar it is formed with a socket *b* for the reception of one end of the saw-blade F, the side walls of the said socket *b* being provided with a plurality of coincident holes *c*, so that by means of the removable pin *d* the end of the saw-blade may be changed when occasion should require for the purpose of straining it; but this provision will hardly be necessary if the saw is unstrained each time after use by the straining and unstraining means provided at the other end post.

G is the lower handle, pivoted between the bifurcations of the lower end of the socket E' on a pivot *e*, and to that portion of the said handle within the bifurcations is attached the end of the saw-blade in any suitable manner. The upper end of the movable handle is formed with a notched extension *f*, in the notch of which works the pawl H, which is pivoted at *h* within a chamber *g* in the socket E', as seen in Fig. 2, the end of the pawl extended through an opening *i* in the socket-wall, as seen in said figure, and the pawl being provided with shoulders *j*, as seen best in Fig. 3.

I is a spring arranged within a recess *k* in the end post and arranged to act upon the pawl to keep it to its work, as seen in Fig. 2.

With the parts thus constructed the operation will be readily understood. Each one of the ends of the cross-bars acts as a fulcrum, and said bars having the circular form described it will be seen that every part of the frame proper, including the cross-bars themselves, yields when the saw is strained, thus rendering the strain more enduring and the frame more durable. The saw is strained by pushing the movable lower handle into the position shown by full lines in Fig. 2, when the pawl engages the teeth of the handle and automatically holds the saw strained. By lifting upon the extended end of the pawl the saw will be unstrained. As soon as the pawl is disengaged from the handle the spring of

the saw will immediately throw the parts into the position shown by dotted lines in said Fig. 2.

What I claim as new is—

- 5 The combination, with the saw-frame and the socket secured to the end post thereof, and having bifurcated lower end, of the movable lower handle pivoted between the bifurcations of said socket and having notched upper end,  
10 the pawl pivoted within a recess within the socket and having shoulders and its end ex-

tended through the wall of the socket, and the spring located within the socket and bearing upon the pawl, substantially as shown and described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

GEORGE ROLAND HARDISON.

Witnesses:

CHARLES H. PREBLE,  
AUGUSTUS B. JELLISON.