

(No Model.)

H. C. SWENSON.

BUCKSAW.

No. 549,167.

Patented Nov. 5, 1895.

Fig. 4.

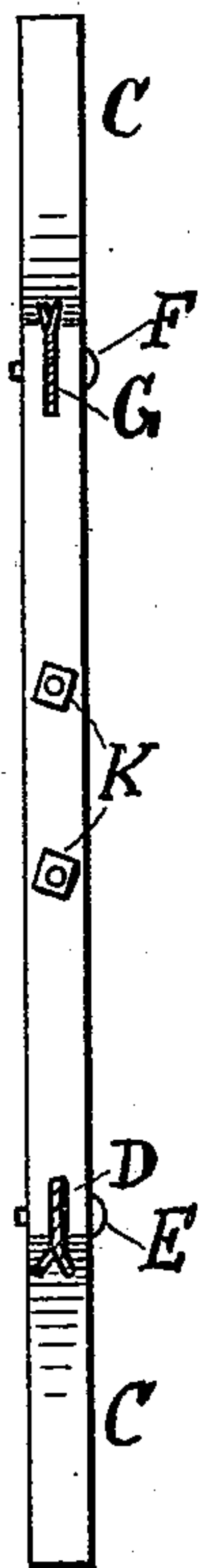


Fig. 3.

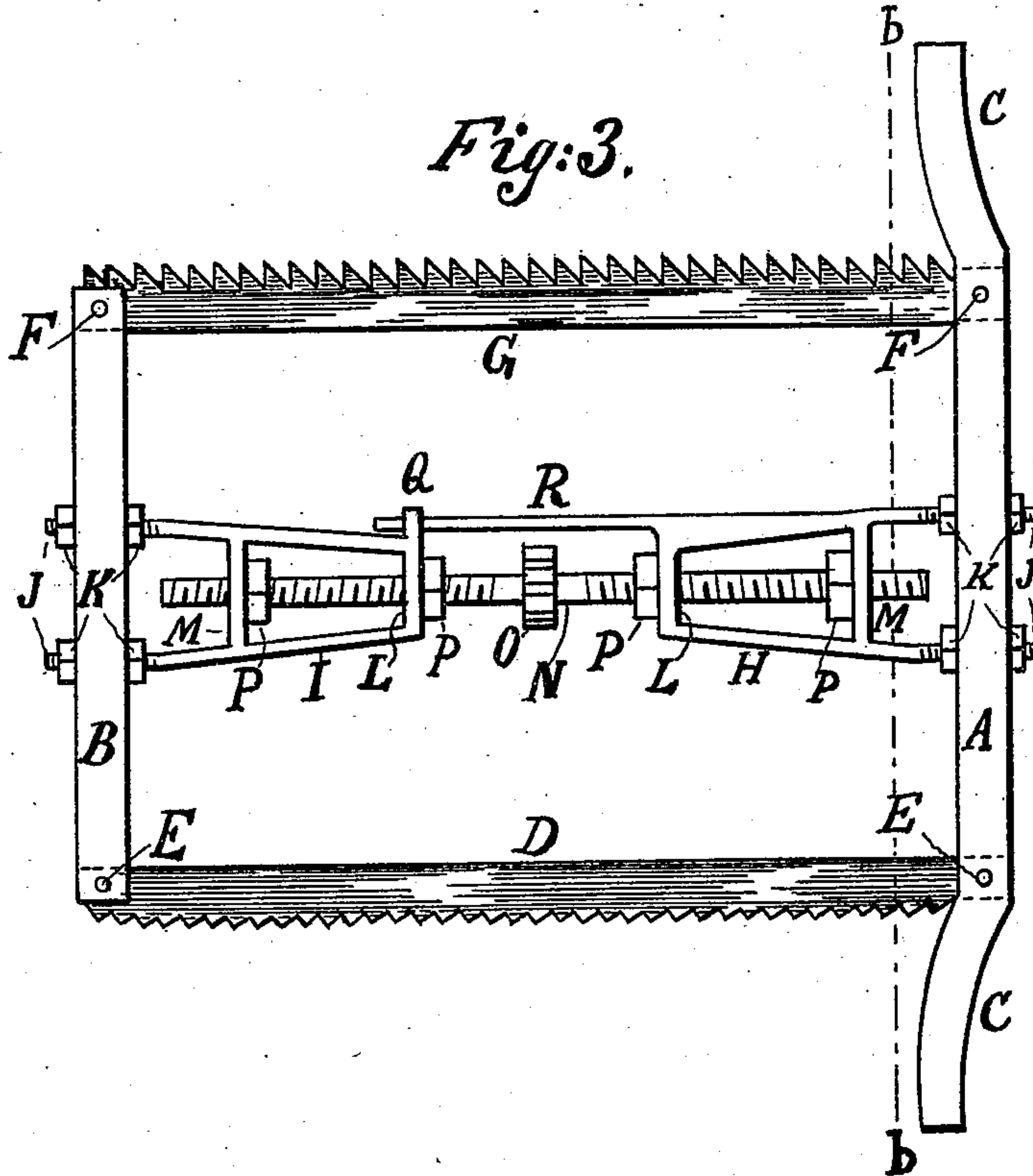


Fig. 2.

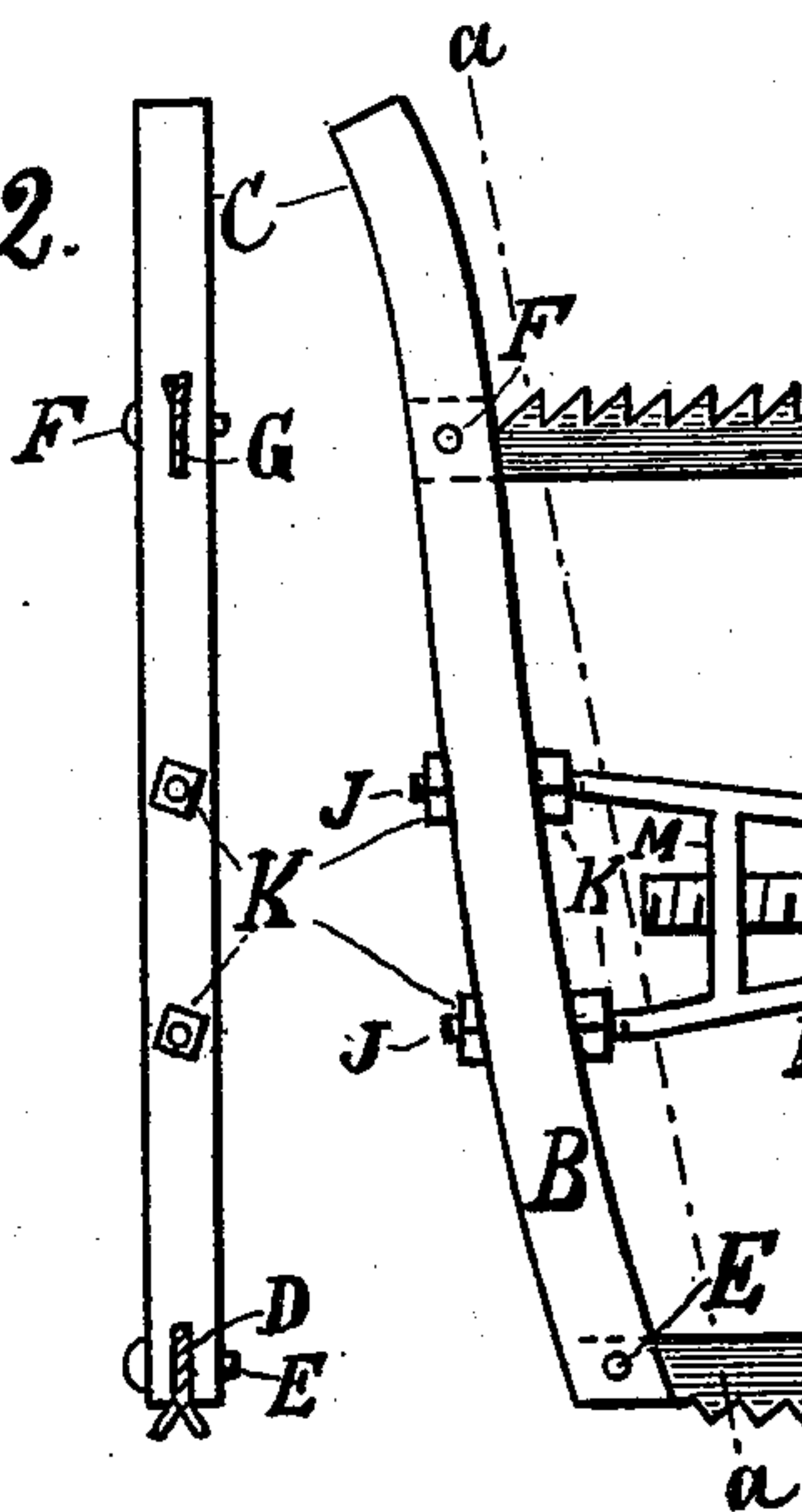
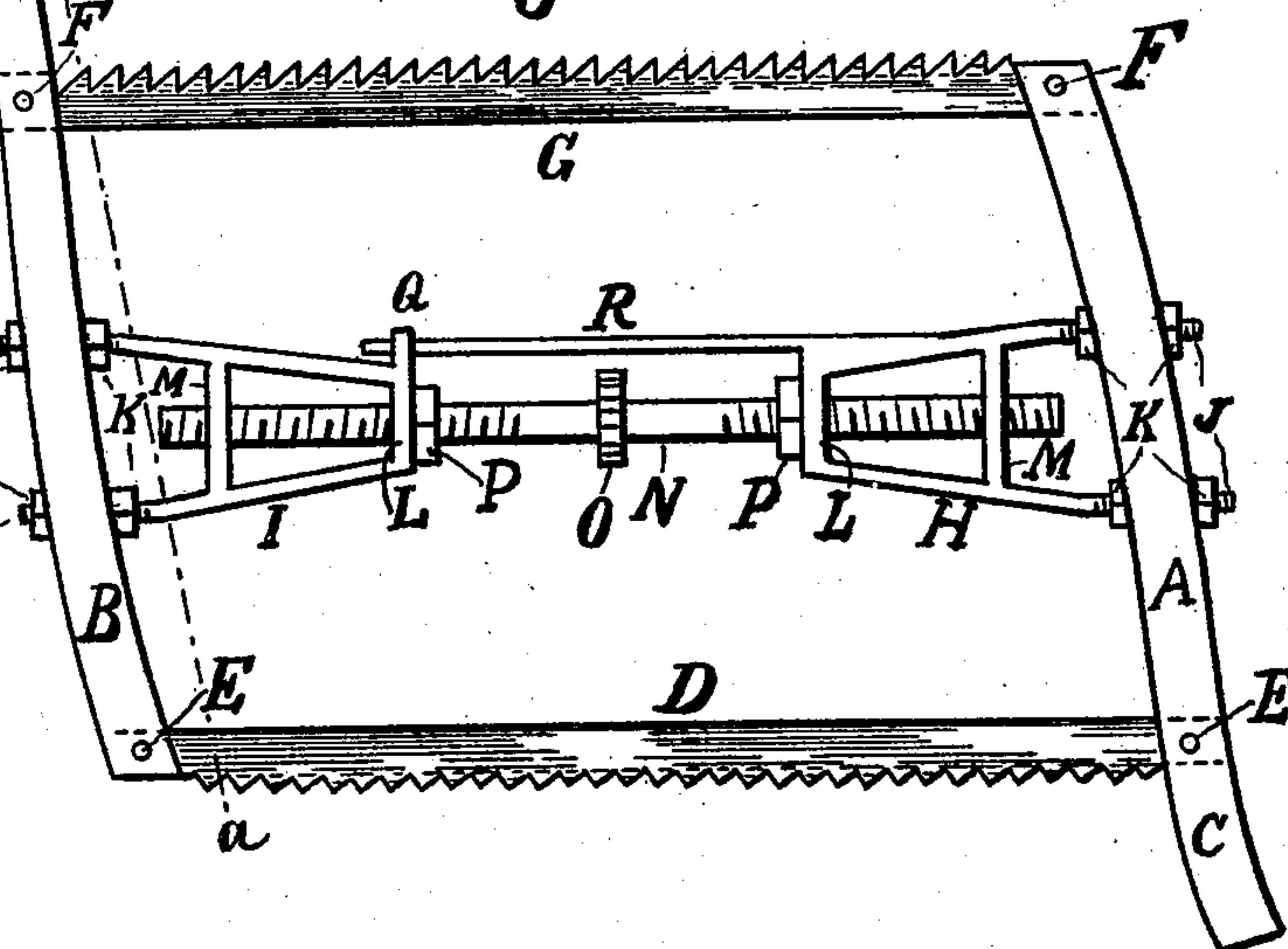


Fig. 1.



WITNESSES:

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BUCKSAW.

SPECIFICATION forming part of Letters Patent No. 549,167, dated November 5, 1895.

Application filed February 21, 1895. Serial No. 539,311. (No model.)

To all whom it may concern:

Be it known that I, HERMAN C. SWENSON, a citizen of the United States, residing at Bernadotte, in the county of Nicollet and State of Minnesota, have invented certain new and useful Improvements in Bucksaws; 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 the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in bucksaws, and has for its main object to provide a bucksaw which combines in one frame two saw-blades, of which one is but slightly set and is adapted for sawing hard wood, and the other blade is more set and is adapted for sawing soft wood, or the two serve as cross-cut-saw and rip-saw, and thus make one frame answer the purpose of two frames as heretofore used.

With the above and other minor objects in view, my invention consists in the novel construction and arrangement of parts illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of my complete bucksaw. Fig. 2 is a sectional view on the line *a a* in Fig. 1, looking from right to left. Fig. 3 is a side elevation of a modification of my saw. Fig. 4 is a sectional view on the line *b b* in Fig. 3, looking from left to right.

Referring to the various parts in the drawings by letters of reference, A and B designate the end pieces of the frame, of which C are hand-holds or handles projecting beyond the saw-blades.

D is the saw-blade for cutting soft wood, and is considerably set, as shown in Figs. 2 and 4, so as to clear itself in the soft wood, which has a tendency to close upon and squeeze the blade back of the teeth unless the cut is made wide by the extra-wide setting of the saw-teeth. This blade is secured in the end pieces of the frame by the pivots or pins E. In the opposite ends of the end pieces A B, I secure at F the saw-blade G, which has its teeth very slightly set and is

adapted for sawing hard wood, in which there is no tendency to squeeze or pinch the saw, but where a narrow cut is desirable, because it diminishes the amount of wood to be cut away by the saw, and thus reduces to a minimum the labor of sawing the wood. The two saw-blades are kept in a stretched position by interposing between the end pieces A and B of the frame an extensible frame-bar, consisting of the metallic yokes H and I, each of which has its ends J screw-threaded and inserted in the end pieces of the frame, in which they are adjustably held by the nuts K, so that the two yokes may be set in central line with each other and receive in central screw-threaded holes in their cross-bars L M the round screw-threaded rod N, which upon its middle is provided with a rigid thumb-piece O, by which to turn the rod. The ends of the rod N are provided one with right and the other with left hand screw-threads fitting the jam-nuts P, which serve to hold the rod N steady, and also to help prevent twisting off the entire saw-frame. For the latter purpose I also provide one of the yokes with a lug, as Q, in which slides guidingly the arm R, extending from the opposite yoke, to which it is rigidly secured or forms a part.

Ordinarily I make the saw as in Fig. 1, with the teeth of the two saw-blades sloping in reverse directions and with the handles C C at opposite sides and ends of the saw; but where parties so prefer I leave the two handles C C on the same end but at opposite sides of the saw, as shown in Fig. 3, in which instance the teeth of the two saw-blades slant in the same direction.

In operation the saw-blades are stretched by turning the rod N, so as to push the two yokes H and I away from each other, and the jam-nuts P are then adjusted. In using the saw the operator changes from the use of the one blade to the use of the other by simply inverting the saw-frame and taking hold of the other handle C.

From the above description it will be seen that I provide a cheap and simple bucksaw in which one frame holds in good and convenient position two saw-blades, which may differ either in quality or capacity, or both—such as saw for hard and soft wood, or rip-

saw and crosscut-saw or old and new saw, or two of the same kind to succeed each other in use when one gets dull.

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

1. In a buck saw the combination with two saw blades as D, and G, having each a different grade of teeth, which are turned in opposite directions; an extensible central frame bar and the end bars A, and B, secured to the blades and being secured upon the ends of the extensible bar and having two reversedly arranged handles as C, formed integral with the end bars of the frame, substantially as and for the purpose set forth.

2. The buck-saw having two oppositely-located and reversedly arranged saw blades for hard wood and soft wood, or as rip-saw and cross-cut saw, the end frame bars A, and B,

secured thereto as shown, the extensible frame bar interposed between said end bars and consisting of the yokes H, and I, of which one has an arm as R, guiding in a lug as Q, provided upon the other yoke, the central screw rod N, having the one end screw-threaded with right-hand threads into one of the yokes and the other end screw-threaded with left-hand threads into the other yoke, the jam-nuts P, the thumb piece O, or its equivalent for turning the rod N, and the nuts K, for setting the yokes in line with each other, substantially as set forth.

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

HERMAN C. SWENSON.

Witnesses:

C. C. NELSON,
L. G. BACKLUND.