

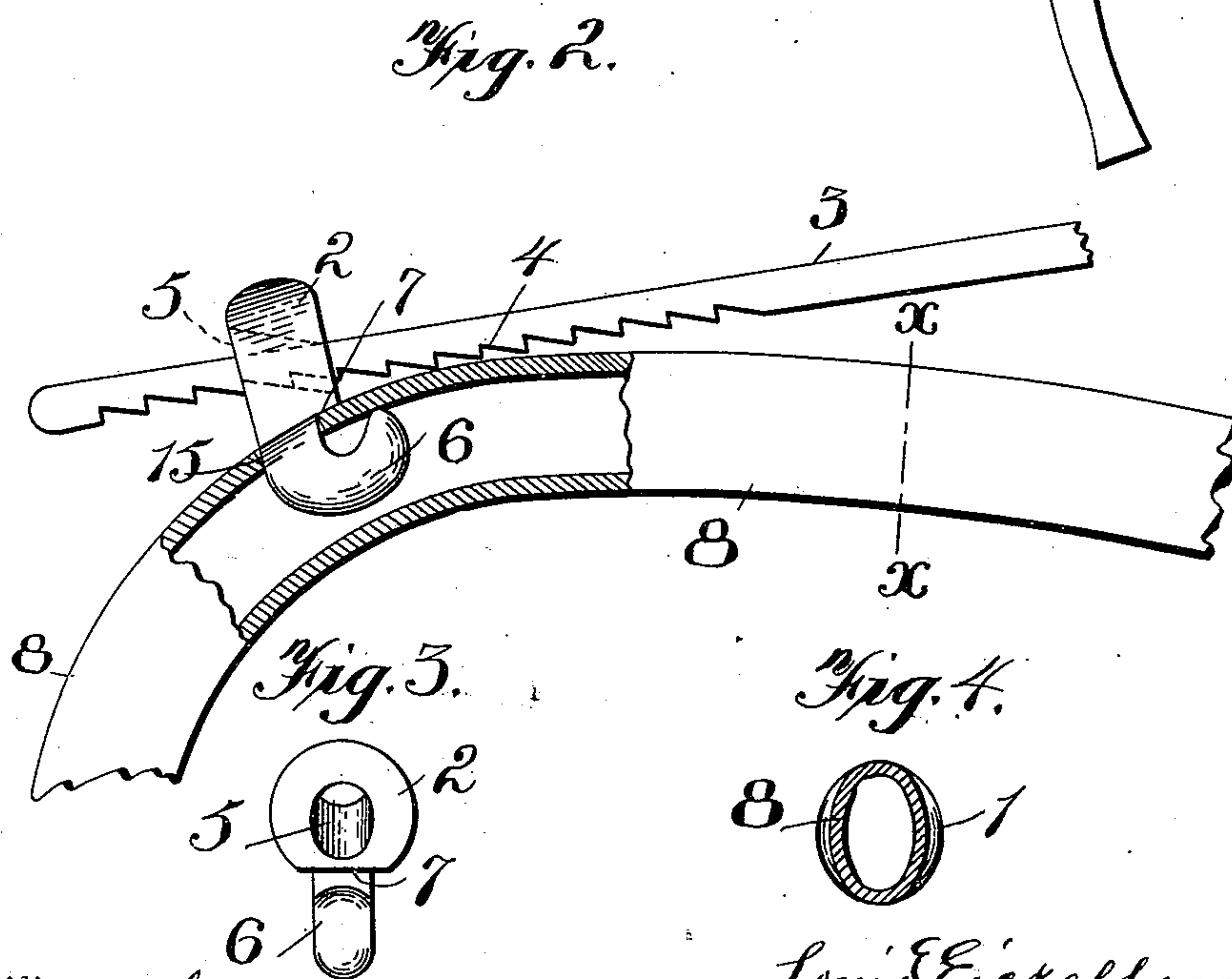
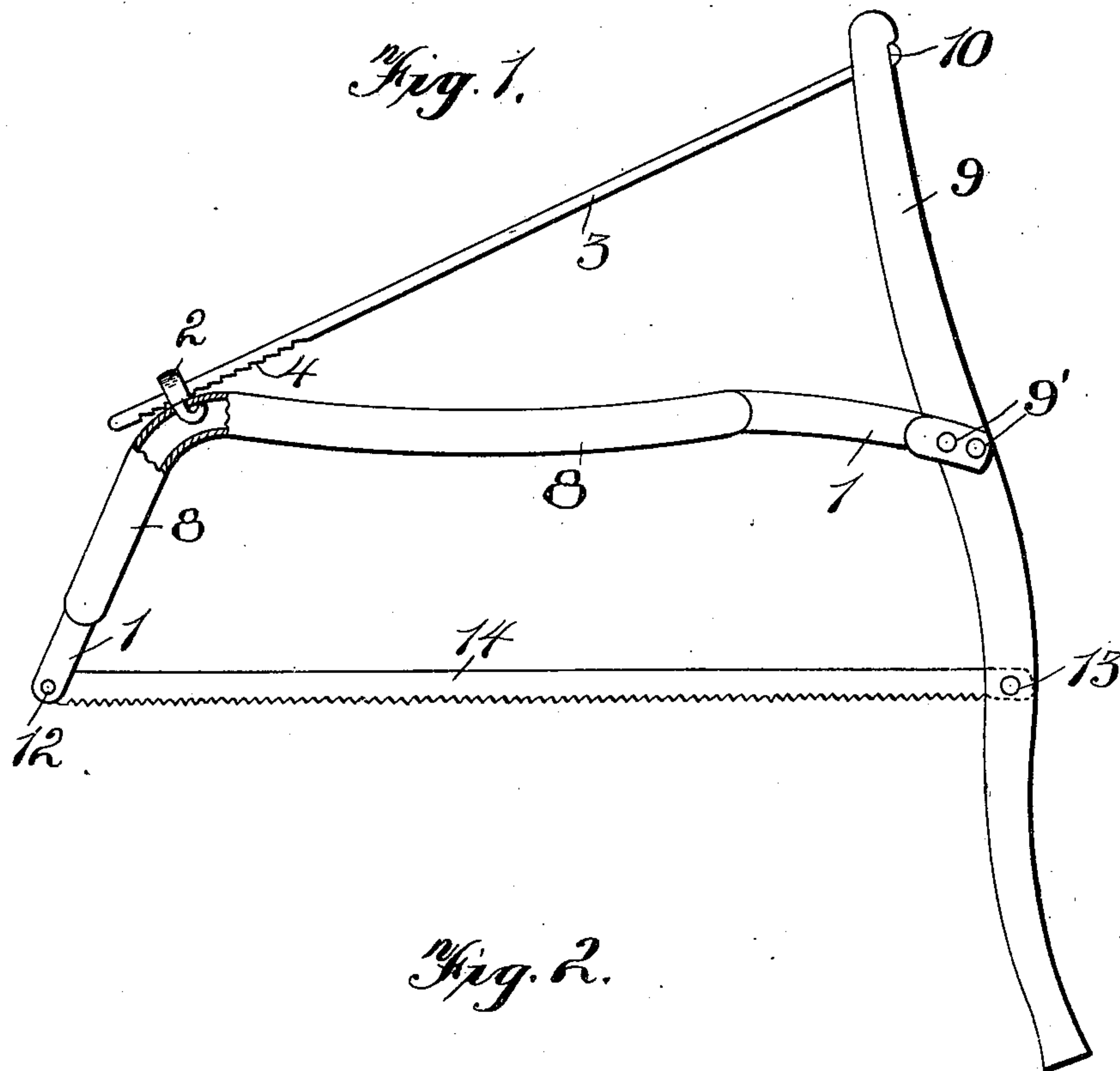
No. 652,838.

Patented July 3, 1900.

L. E. EICKELBERG.
BUCKSAW FRAME.

(Application filed Dec. 11, 1899.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

LOUIS E. EICKELBERG, OF WATERLOO, IOWA.

BUCKSAW-FRAME.

SPECIFICATION forming part of Letters Patent No. 652,838, dated July 3, 1900.

Application filed December 11, 1899. Serial No. 740,023. (No model.)

To all whom it may concern:

Be it known that I, LOUIS E. EICKELBERG, a citizen of the United States of America, and a resident of Waterloo, Blackhawk county, State of Iowa, 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 wherein tubular beams are used and regulating devices for adjusting the saw-blades into proper tension; and the object of my improvement is to provide a strengthened tubular frame, with a friction-clutch as a connection between the beam and regulating-rod. I attain this object by the means illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of my improved bucksaw-frame, having friction-clutch attached. Fig. 2 is an enlarged sectional view of a portion of the beam, friction-clutch, and regulating-rod. Fig. 3 is a view of the friction-clutch as seen from the handle side of frame; and Fig. 4 is a vertical sectional view of the flattened portion of beam on the line *x x*, Fig. 2.

Similar numerals refer to similar parts throughout the several views.

The tubular beam 1 is represented as being pivotally connected with the saw-handle 9 at the hole 9'. The holes 9' 9' in the bifurcated end of beam permit adjustment at those places. The other extremity of the beam is connected with the forward end of saw-blade by means of the bolt 12. At suitable distances from its ends the beam 1 is slightly flattened vertically to render it more resistant to buckling vertically when unusual stress is brought to bear upon it.

3 is a regulating-rod which may be connected in any suitable manner with the upper end of the saw-handle 9, as at 10. The lower extremity of this rod is ratcheted for a suitable distance on its lower side, having the angles of the teeth inclined when in position toward the saw-handle.

2 is a clutch having its upper part perforated obliquely from front to rear and its lower portion on the rear formed into a flange or offset at 7, below which is a hook with curve

directed to the rear and slightly upward, as at 6.

The beam 1 is provided with a hole 15 on its upper surface at a point slightly below the middle part of the curve, where it is bent downward to connect with the saw-blade. The beam 1 is also represented as curved downward at its other extremity, where it is bifurcated to connect with the saw-handle 9.

When it is desired to connect up and adjust the frame for use, the ratcheted end of the regulating-rod 3 is passed through the opening 5 from rear to front of the clutch 2 and the hook 6 of the latter introduced into the hole 15 in the upper curved surface of the beam 1. When suitable pressure is brought upon the end 10 of the rod 3 and that portion of the beam 1 which lies below the hole 15, the teeth in the lower side of the regulating-rod, as at 4 4, are caused to engage with the lower front portion of the edge of opening 5. When the pressure is removed, the elasticity of the beam locks the connection between the rod and beam by drawing the rod back until the flange 7 of the clutch engages with the rear upper edge (in the beam 1) of the opening 15, and the rod being drawn into close contact with the beam 1 at a point tangential to the curve, where beam is bent toward the blade, a tight connection with three bearing-points is furnished to overcome the various strains brought to bear thereon.

The slight concavity in the horizontal portion of beam, together with the flattening, produces sufficient rigidity without interfering with the elasticity of frame between the connections with handle and saw-blade, respectively.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a bucksaw-frame, the perforated and hooked clutch 2, in combination with the notched rod 3, the flattened tubular beam 1 provided with the perforation 15 and adjustable bifurcated end with holes 9' 9', the handle 9 and saw-blade 14, provided with suitable connections substantially as described.

2. In a bucksaw-frame, the perforated and hooked clutch 2, in combination with the notched rod 3, the beam 1 having concavity

upward in its longer limb and depressed end
to connect with handle, and in the upper por-
tion of curve of shorter limb provided with
the opening 15, the handle 9 and blade 14,
5 having suitable connections, substantially as
described.

3. In a bucksaw-frame, a perforated and
hooked clutch 2, notched rod 3 and beam pro-

vided with the perforation 15, with suitable
connections, substantially as described. 10

Signed by me at Waterloo, Iowa, this 27th
day of November, 1899.

LOUIS E. EICKELBERG.

Witnesses:

M. E. KENNEDY,

A. I. BRECKENRIDGE.