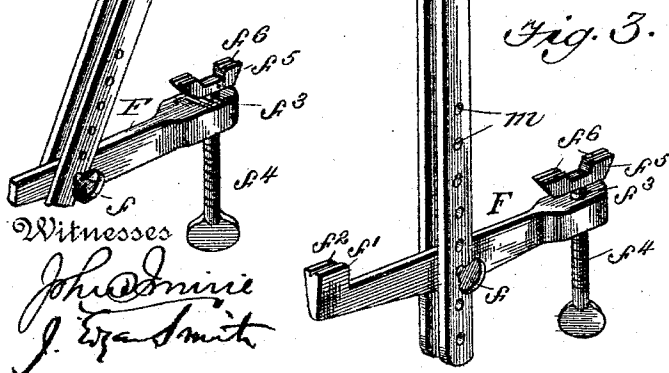
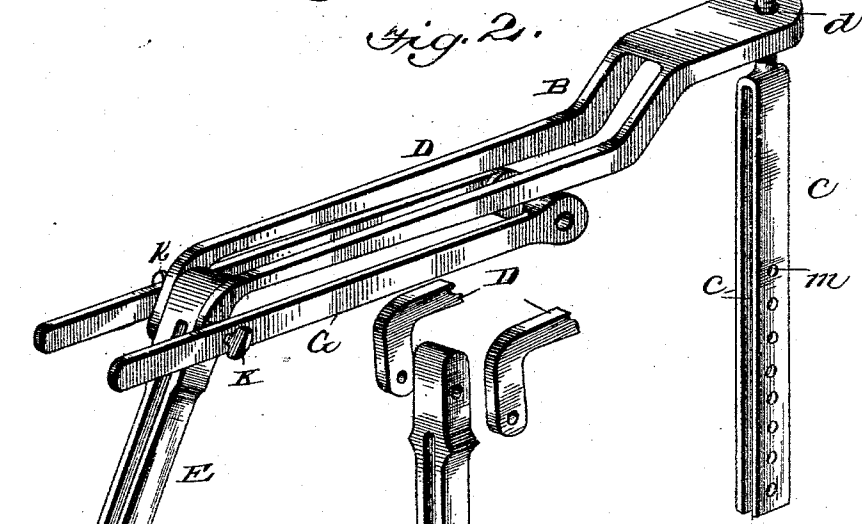
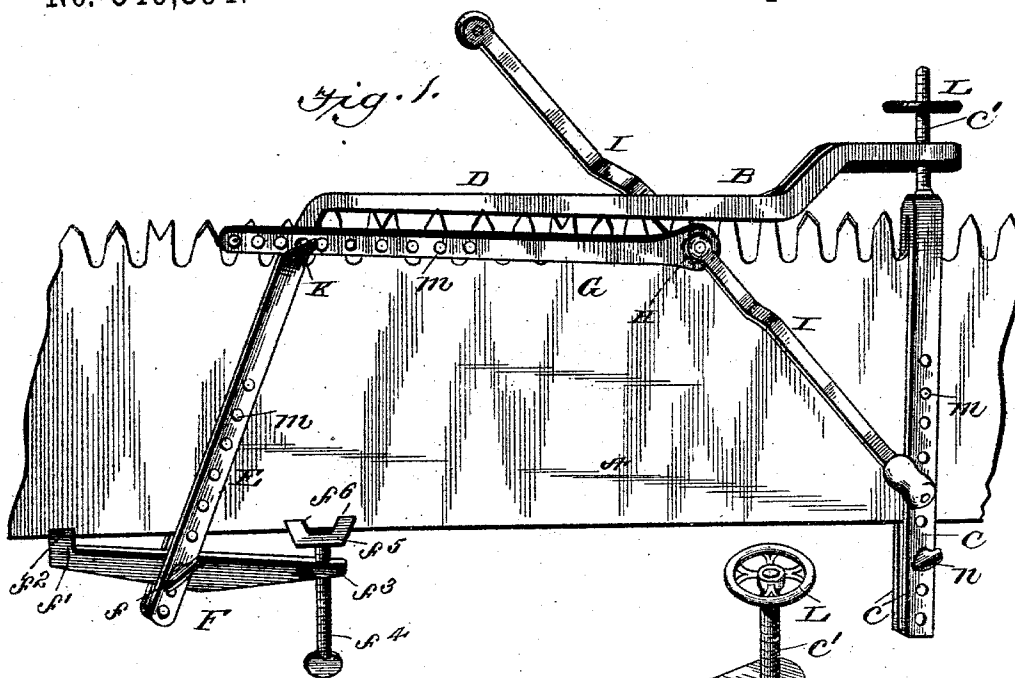


(No Model.)

B. C. BRADLEY & G. EWING.
SAW GUMMER.

No. 546,394.

Patented Sept. 17, 1895.



Witnesses
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UNITED STATES PATENT OFFICE.

BENJAMIN C. BRADLEY AND GEORGE EWING, OF RIPLEY, TENNESSEE.

SAW-GUMMER.

SPECIFICATION forming part of Letters Patent No. 546,394, dated September 17, 1895.

Application filed May 13, 1895. Serial No. 549,052. (No model.)

To all whom it may concern:

Be it known that we, BENJAMIN C. BRADLEY and GEORGE EWING, citizens of the United States, residing at Ripley, in the county of Lauderdale and State of Tennessee, have invented certain new and useful Improvements in Saw-Gummers; and we do hereby declare the following to be a full, clear, and exact description of our 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.

This invention is an improvement in saw-gummers and is especially adapted for gumming crosscut-saws.

The objects of the invention are to provide a saw-gummer which may be rigidly attached to the saw at any point, and in which the reamer or cutting-tool may be adjusted to cut several teeth after the device has once been clamped to the saw without removing the parts.

The invention has for further objects to provide a saw-gummer which will be easy of adjustment, readily operated, and of inexpensive construction.

With these objects in view the invention resides in the various novel details of construction, in the combination of the parts, and in the device as a whole.

The invention is illustrated in the accompanying drawings, in which like letters of reference indicate corresponding parts.

In the drawings, to which reference is hereby made, Figure 1 is a perspective view of the device, showing it in position upon a crosscut-saw. Fig. 2 is a perspective view showing the device detached from the saw, and Fig. 3 shows the details of construction of some of the parts.

In the drawings, the letter A indicates a crosscut-saw, and B the saw-gummer as a whole. The saw-gummer consists of an adjustable bifurcated clamp C, a bifurcated brace D, an adjustable bifurcated clamp E, a lever F secured to the clamp E by means of a thumb-screw or the like, and the reamer-arms G, the reamer H, and the cranks I.

The bifurcated clamp C, the bifurcated clamp E, and the reamer-arms G are all provided with openings *m* arranged to correspond on the opposite portions of each, and these

openings are adapted to receive a bolt, a thumb-screw, or the like. These openings are of any convenient distance from each other to facilitate adjustment of the parts to the saw.

The bifurcated brace D and the adjustable bifurcated clamp E are provided with openings in their ends, the brace D having the said openings through the ends of its legs and the clamp E having an opening in its upper closed end, and a bolt K is passed through the said openings and also through any pair of openings in the reamer-arms G, and has on its outer end a thumb-nut *k*. By means of the bolt K and the nut *k*, the brace D, the clamp E, and the reamer-arms G are pivotally secured to each other, with the bolt K as a center and their adjustment with relation to each other and to the saw made easy.

The clamp C is bifurcated nearly its entire length in order to straddle the saw-blade, the legs *c* being provided with the openings *m* opposite each other and adapted to receive a thumb-screw or the like *n*. When the clamp C straddles the saw-blade, as in Fig. 1, and the thumb-screw *n* is tightened, the legs *c* are drawn toward each other and hold the clamp C rigidly to the saw. The clamp C has at its upper closed end a screw-threaded projection *c'*, which is adapted to receive the hand tap or nut L.

The brace D is provided with an opening *d* at its closed end, which opening is sufficiently large to fit loosely over the screw-threaded projection *c'* of the clamp C. As shown in the drawings, this opening *d* is round, but it may be of any shape and perhaps its best construction would be an elongated oval or slot. The nut L is adapted to press upon and limit the movement of the brace D.

The clamp E is adapted to fit easily over the saw-blade, its upper closed end resting in one of the depressions between the teeth of the saw. This clamp E is not made rigid to the saw-blade by means of thumb-screws or the like, as is the case with the clamp C, but the openings *m* in its legs are provided for the pivoting to it of the lever F by means of a bolt or thumb-screw, a number of such openings being provided so that saws of various widths may be operated upon. This lever F is near its center pivoted to the clamp E by

the thumb-screw f , and has at one end the raised portion f' provided with a longitudinal groove f^2 on its face for the back of the saw to rest in. The other end of the lever has a screw-threaded vertical opening in it f^3 , adapted to receive the screw f^4 , which has loose upon its upper end the rest f^5 , provided with forks f^6 to receive the back of the saw. By means of the lever F the clamp E may be held firmly to the saw-blade, the upper closed end of the clamp E resting in a depression between the teeth of the saw and the screw f^4 being turned.

The reamer-arms G have the reamer H mounted between them at their outer ends. The reamer or cutting-tool H may be of any desired or usual construction, but is by preference of steel. The cranks I are secured to the cutting-tool in any suitable manner.

The operation of the device is very simple and effective. The clamp C is first adjusted to the saw-blade and the clamp E allowed to rest in one of the depressions between the saw-teeth. The lever F is given a downward pull upon the clamp E by turning the screw f^4 until the whole is tight. The cutting-tool or reamer is now adjusted to the portion of the saw to be gummed and held in place by depressing the brace D until it bears upon

the enlarged ends of the reamer-arms, holding it there by means of the hand tap or nut L . The gumming of the next tooth necessitates the elevation of the brace D and the adjustment of the reamer-arms by means of the bolt K and the openings m .

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a saw-gummer the combination with the reamer suitably mounted in adjustable arms, of an adjustable frame, adapted to be secured to a saw the said frame consisting of a bifurcated clamp C , a bifurcated brace D , a bifurcated clamp E and a lever F , all substantially as and for the purpose set forth.

2. In a saw-gummer the combination with the reamer arms of the bifurcated brace D adapted to rest upon the said reamer arms, the said brace being held in position by the nut L substantially as and for the purpose set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

BENJAMIN C. BRADLEY.
GEORGE EWING.

Witnesses:

JO C. MARLEY,
JAMES OLDHAM.