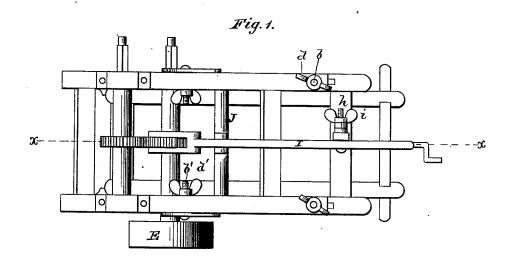
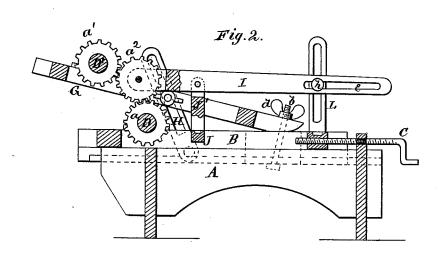
## R. M. LEFTWICH & J. W. CROSSLEY.

SAW-GUMMERS.

No. 190,599.

Patented May 8, 1877.





WITNESSES

INVENTOR

R.M. Leftwich.
and
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## UNITED STATES PATENT OFFICE.

RICHARD M. LEFTWICH AND JOHN W. CROSSLEY, OF LITHONIA, GEORGIA.

## IMPROVEMENT IN SAW-GUMMERS.

Specification forming part of Letters Patent No. 190,599, dated May 8, 1877; application filed April 9, 1877.

To all whom it may concern:

Be it known that we, RICHARD M. LEFT-WICH and JOHN W. CROSSLEY, of Lithonia, in the county of De Kalb, and in the State of Georgia, have invented certain new and useful Improvements in Saw-Gummers; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of our invention consists in the construction and arrangement of a saw-gumming machine, as will be hereinafter more

fully set forth.

In order to enable others skilled in the art to which our invention appertains to make and use the same, we will now proceed to describe its construction and operation, referring to the annexed drawing, in which-

Figure 1 is a plan view of our machine. Fig. 2 is a longitudinal vertical section of the same

through the line x x, Fig. 1.

A represents the bed-frame of our machine, which frame is to be secured to a bench or other suitable support.

On the bed-frame A is a longitudinallysliding frame, B, moved back and forth by

means of a crank-screw, C.

In suitable bearings on the frame B is a cross-shaft, D, near the front end, said shaft having at one end the driving-pulley E for attachment to the power by belt or otherwise, as desired. In the center of the shaft D is a gear-wheel, a, and the other end of the shaft projects a suitable distance beyond the machine to receive a burr. The other burr is placed above and forward of this burr on the projecting end of another shaft, D', which is placed in bearings on an adjustably-inclined frame, G.

The rear end of the frame G is held to the frame B by means of bolts b and thumb-nuts d, as shown in Fig. 2, and said frame G held at any angle desired by means of bolts b' and thumb-nuts d', holding it at any height in longitudinally-slotted standards H pivoted to

the frame B.

On the shaft D' is a cog-wheel,  $a^1$ , corresponding with the cog-wheel a on the shaft D.

The two cog-wheels  $a a^1$  are geared together by means of an intermediate idle cog-wheel, a2, mounted in the end of a lever, I, which is pivoted in an arm, J', projecting upward from a rock-shaft, J, having its bearings in the sides of the adjustable frame B. The other end of the lever I has a longitudinal slot, e, and is adjusted back and forth and up and down to a vertically slotted standard, L, on the rear end of the frame B by means of a bolt, h, and thumb-nut i, so that the cogwheel  $a^2$  can be adjusted to gear with both the wheels a and  $a^{i}$  at whatever angle the frame G may be set.

By this construction of the machine, it may be adjusted to suit any distance of the sawteeth, and it is moved to and from the saw by the crank-screw C. It is a power gummer, and cuts two teeth at the same time.

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 bed-frame A of the sliding frame B, carrying the shaft D with one burr, and operated by the crank-screw C, and the inclined frame G, carrying the shaft D' with the other burr, said frame G adjustable at different angles on the frame B, substantially as and for the purposes herein set forth.

2. The combination, with the frames B and G, of the bolts b, thumb-nuts d, the pivoted slotted standards H, and the bolts b', with thumb-nuts d', substantially as and for the

purposes herein set forth.

3. The combination, with the shafts D D' and cog-wheels a a' thereon, of the intermediate cog-wheel a2, lever I with slot s, rockingshaft J with arm J', and the slotted standard L, bolt h, and thumb-nut i, all substantially as and for the purposes herein set forth.

In testimony that we claim the foregoing we have hereunto set our hands this 24th day of

March, 1877.

R. M. LEFTWICH. J. W. CROSSLEY.

Witnesses:

A. W. HOWARD, Jr., A. W. HOWARD, Sen.