G. WILLETT.

Improvement in Saw-Mill Edgers.

No. 130,887. Patented Aug. 27, 1872.

Fig. 1.

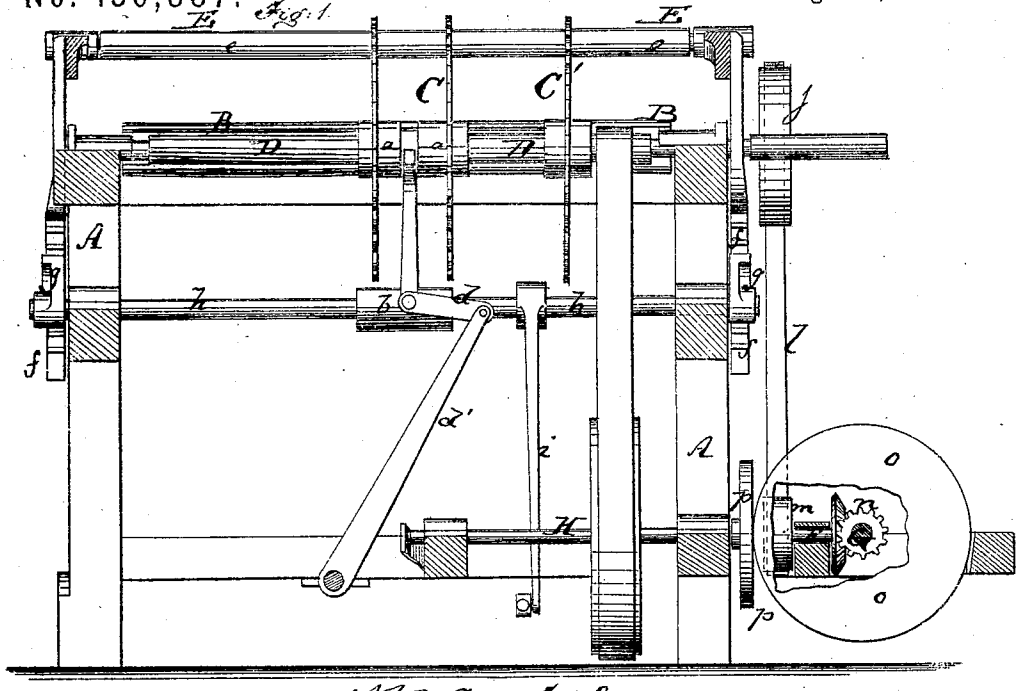
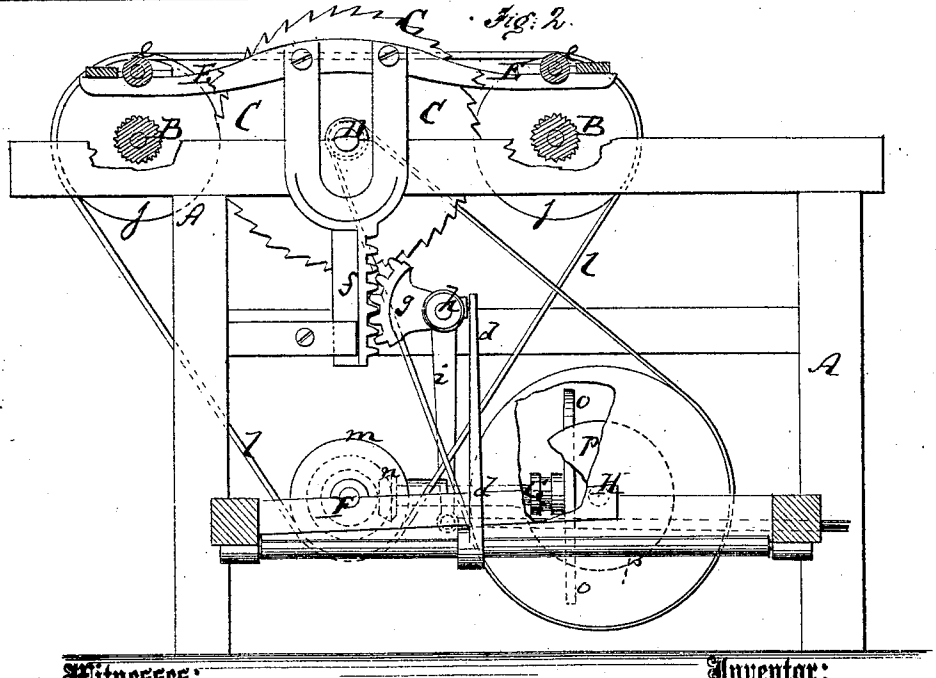


Fig. 2.



Witnesses:

Chas. Nichols

C. Sedgwick

Inventor:

G. Willett

Per Munn & Co

Attorneys.

UNITED STATES PATENT OFFICE.

GEORGE WILLETT, OF FRIENDSHIP, NEW YORK, ASSIGNOR TO HIMSELF AND J. W. HILTON, OF BRADFORD, PENNSYLVANIA.

IMPROVEMENT IN SAW-MILL EDGERS.

Specification forming part of Letters Patent No. **130,887**, dated August 27, 1872.

Specification describing a new and Improved Saw-Mill Edger, patented by GEORGE WILLETT, of Friendship, in the county of Allegany and State of New York.

In the accompanying drawing, Figure 1 is a vertical longitudinal section of my improved saw-mill edger. Fig. 2 is a sectional side elevation of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to a new means for adjusting the top frame of a saw-mill edger, and also to a new mechanism for regulating the speed of the feed-rollers and reversing their motion.

The invention consists, first, in providing the top frame with pendent racks at the ends, and in combining therewith toothed segments on a rock-shaft, so that when the latter is turned the frame will be evenly elevated or lowered, to be adjusted to the thickness of the board to be edged.

A in the drawing is the frame of the edger. B B are the feed-rollers of the same, hung horizontally in the frame A and parallel with each other. C C′ are the circular saws arranged between the feed-rollers on the shaft D. They can be made adjustable on the shaft D singly or in pairs, or in larger numbers, and are for that purpose mounted on bosses *a a*, which can slide on the shaft D and are connected with a sliding sleeve *b* and adjusting-levers *d d′*, as clearly indicated in Fig. 1. E is the top frame, having rollers *e e* directly above the feed-rollers B B, respectively. From the ends of the frame E project downward toothed racks *f f*, into which mesh toothed segments *g g* mounted upon a rock-shaft, *h*. When the latter is turned, by means of a lever, *i*, or otherwise, the segments move the racks up and down, thereby raising or lowering the frame E and adjusting the space between the rollers B *e* to thicker or thinner boards. The pulleys *j j*, at the ends of the feed-rollers, receive motion by a band, *l*, from a pulley *m*, whose shaft F is by gearing *n* connected with a shaft, G. The latter receives rotary motion by a pair of friction-disks, *o* and *p*, from the driving-shaft H. The two shafts G and H stand at right angles to each other, as shown, the disk *p* being rigidly mounted to the end of the shaft H. But the disk *o*, whose edge bears against the face of *p*, can be lengthwise adjusted on the shaft G. The nearer the edge of the disk *o* is brought to the center of the disk *p* the slower will be the motion imparted to the feed-rollers, and if the disk *o* is moved past the center of *p* the motion is reversed. The disk *o* connects by groove and feather, or equivalent means, with its shaft G, to revolve the same. The means herein shown for transmitting motion from the shaft G to the feed-rollers may be varied at pleasure without affecting the invention.

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

The top frame E carrying the rollers *e e* and racks *f f*, and combined with the segments *g g* on the rock-shaft *h*, substantially as herein shown and described.

GEORGE WILLETT.

Witnesses:
A. I. BLOOD,
PERRY WHALEY.