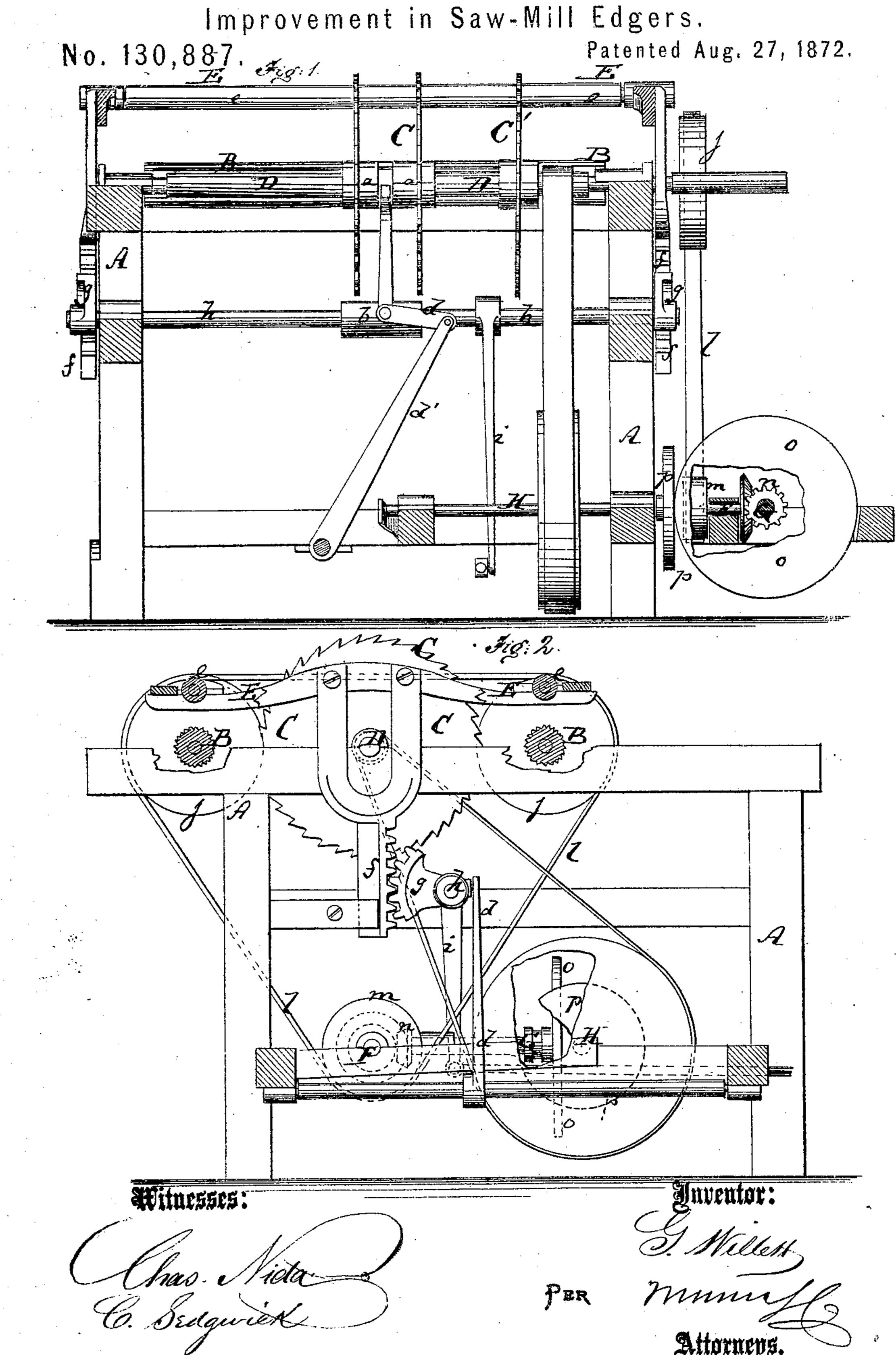
G. WILLETT.



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 corre-

sponding 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 adjustinglevers d d', as clearly indicated in Fig. 1. E is the top frame, having rollers e e directly above the feed-rollers BB, 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 nconnected 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 Pat-

ent—

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

GEORGE WILLETT.

Witnesses:

A. I. BLOOD, PERRY WHALEY.