W. T. WAYNE.

Saw-Mill.

No. 165,521. Patented July 13, 1875.

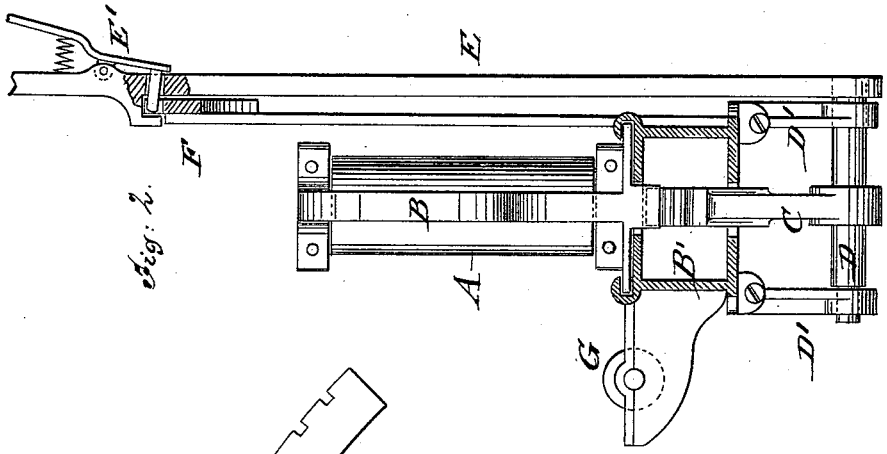

Fig. 2.

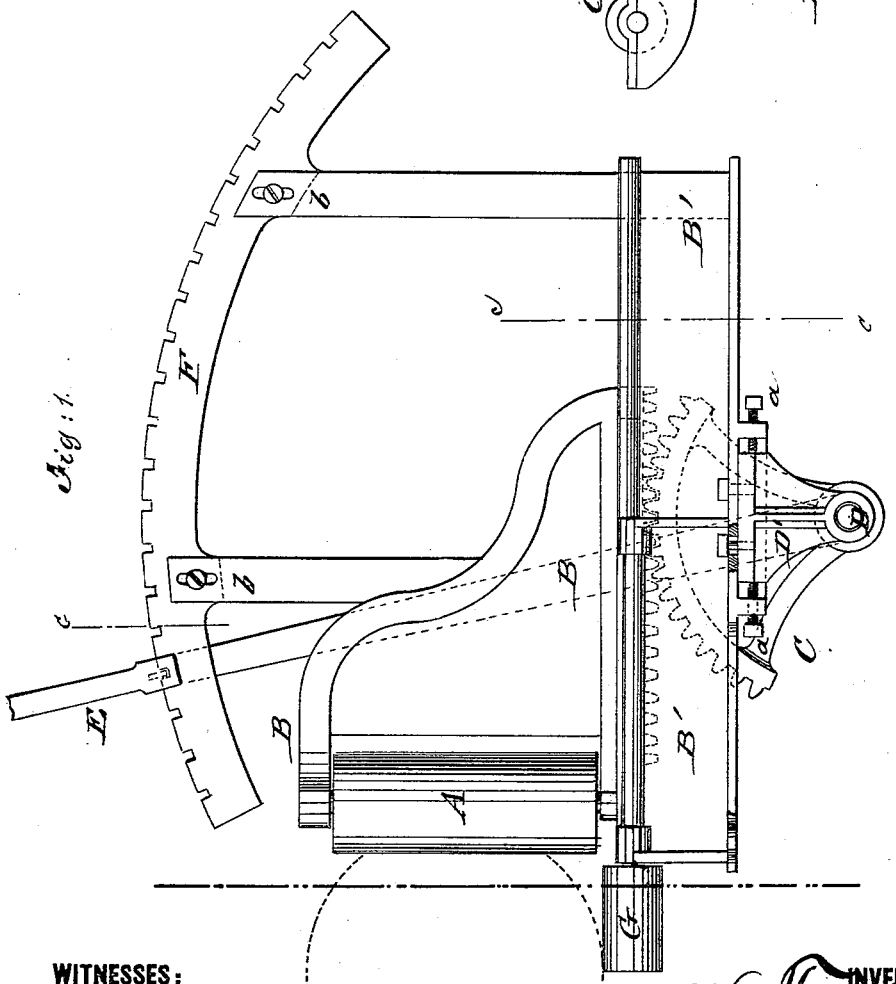

Fig. 1.

WITNESSES:

Chas. Nieta.

A. F. Perry

INVENTOR:

W. T. Wayne

BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM T. WAYNE, OF CONYNGHAM, PENNSYLVANIA.

IMPROVEMENT IN SAW-MILLS.

Specification forming part of Letters Patent No. **165,521**, dated July 13, 1875; application filed May 22, 1875.

To all whom it may concern:

Be it known that I, WILLIAM T. WAYNE, of Conyngham, in the county of Luzerne and State of Pennsylvania, have invented a new and Improved Guard Attachment to Saw-Mills, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a side elevation, and Fig. 2 a vertical transverse section on the line *c c*, Fig. 1, of my improved guard attachment to saw-mills.

Similar letters of reference indicate corresponding parts.

The invention relates to apparatus applied to the bed-frame of a saw-mill for the purpose of bearing against or holding the log while being cut.

The invention consists of a vertical guide-roller, turning in a sliding standard-frame, adjusted by rack, sector-pinion, and lever mechanism. The lever is locked by a spring-latch to an arc-shaped rack, and adjusted with the sector-pinion to the exact position of a horizontal supporting-roller by set-screws of the supporting-hangers.

In the drawing, A represents the guide-roller of my saw-mill attachment, which revolves vertically in bearings of standard-frame B, that slides by its flanged base in a supporting-frame, B′. Frame B′ is attached by perforated bottom flanges and fastening-bolts to the bed-frame of the mill, back and sidewise of the saw, to bear against the side of the log, and hold the cut-off board in position to prevent its springing, and, consequently, the uneven cutting of the saw. A horizontal supporting-roller, G, is applied to a shaft turning in bearings of frame B, and placed at right angle to the vertical guide-roller, to bear on the bottom part of the log and carry it, in connection with the dogs and vertical guide-roller, in regular and steady position in forward direction. The under side of standard B is provided with rack-teeth, into which a sector-shaped pinion, C, that is keyed to a lateral shaft, D, turning in hangers, D′, at the lower side of frame B′, gears, for moving the roller-frame forward or backward toward the log, according to the thickness of boards to be cut. A hand-lever, E, is keyed to the shaft D, and secured to an arc-shaped guide-rack, F, by a spring-latch, E′, of the lever. The roller may by the lever be quickly set into the exact position against the log, and facilitates the rapid and even working of the saw to a considerable degree. For the purpose of adjusting the roller more minutely previous to its being moved by the lever, so as to assume its exact position in relation to the line of saw, the shaft-hangers D′ may be set by means of screws *a*, the bolts by which the hangers are attached being movable in slots of the supporting-frame B′. Rack F is also adjustable by means of slots and set-screws *b*, as shown in Fig. 1, to be accurately set concentrically to the altered position of the center shaft, and into correct position for the working of the operating-lever.

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

The roller-carrying frame, having bottom rack, in combination with swinging sector-pinion, turning in adjustable hangers, an operating hand-lever with spring-latch, and an adjustable arc-shaped guide-rack, substantially as and for the purpose set forth.

WILLIAM T. WAYNE.

Witnesses:

C. BACHMAN,

JOHN M. KNOX.