

(No Model.)

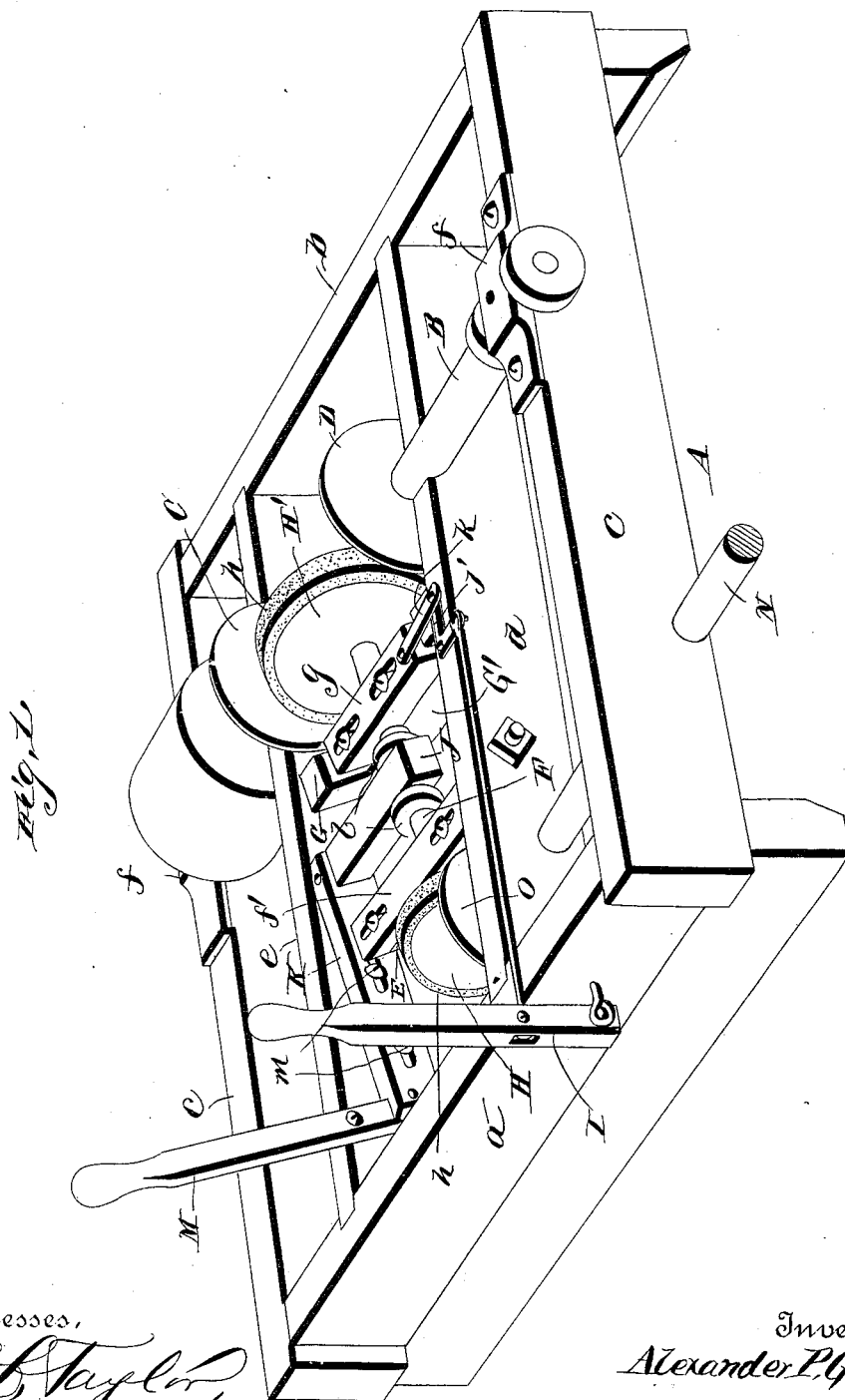
2 Sheets—Sheet 1.

A. P. GIBSON.

FEED MECHANISM FOR SAW MILLS.

No. 386,195.

Patented July 17, 1888.



Witnesses,

C. Taylor,
E. J. Gigney.

Inventor,

Alexander P. Gibson.

By his Attorneys,

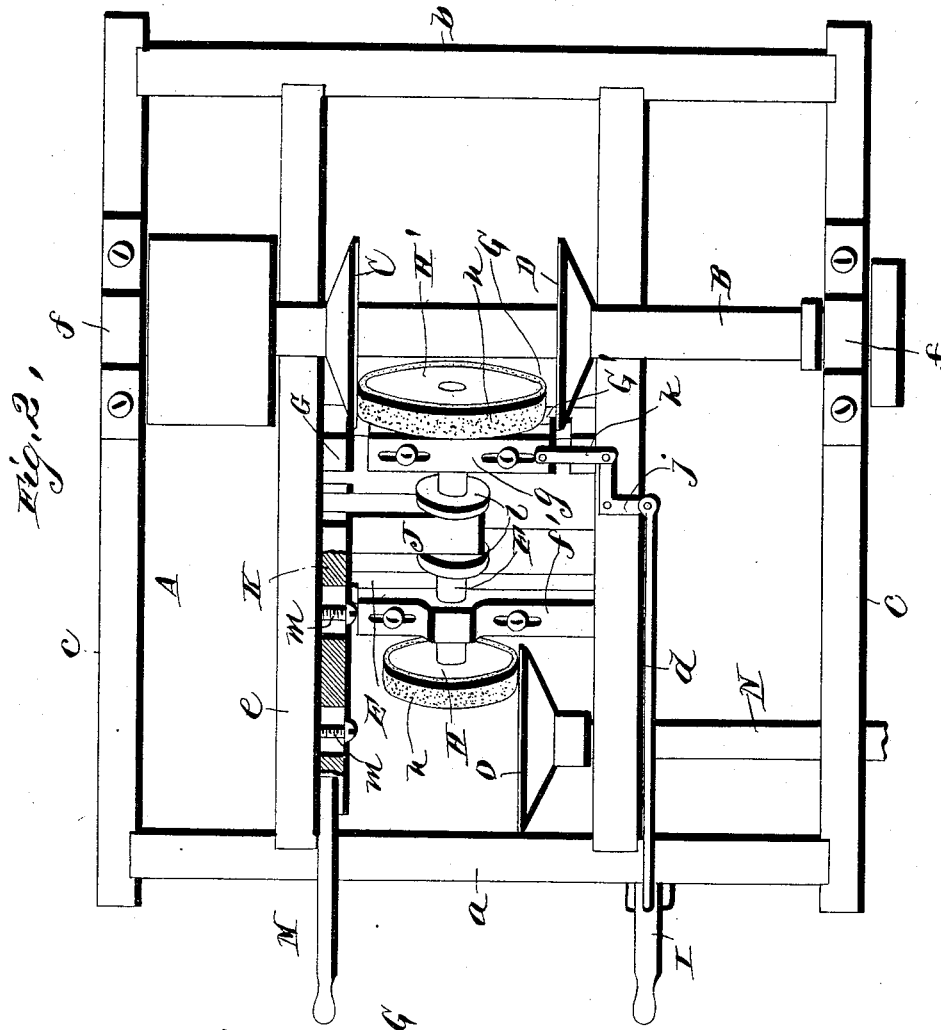
C. H. Snow & Co.

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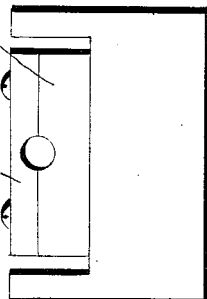
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Fig. 3,
of G



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UNITED STATES PATENT OFFICE.

ALEXANDER PITMON GIBSON, OF MOUNT IDA, WEST VIRGINIA.

FEED MECHANISM FOR SAW-MILLS.

SPECIFICATION forming part of Letters Patent No. 386,195, dated July 17, 1888.

Application filed February 27, 1888. Serial No. 265,430. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER PITMON GIBSON, a citizen of the United States, residing at Mount Ida, in the county of Fayette and State of West Virginia, have invented a new and useful Improvement in Feed Mechanism for Saw-Mills, of which the following is a specification.

This invention has reference to feeding devices for saw mills and machines; and it consists in the improvements hereinafter described, whereby an efficient and positively-actuated apparatus is provided.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective view. Fig. 2 is a plan view showing the parts adjusted to reverse the carrying-feed, and Fig. 3 is a detail view of one of the bearings.

A designates the frame of the machine, which is suitably supported, and comprises the end bars, *a b*, side bars, *c*, and intermediate parallel bars, *d e*. The upper edges of the bars *d e* are recessed in transverse line, with bearing-boxes *f* located on the upper side of the said bars *c c*. A transverse shaft, *B*, turns in said bearings and is provided between the bars *c c* with a pulley suitable for communicating movement to the feed-carriage. Adjacent to the inner side of each of the bars *d e* on the shaft *B* are located metal disks *C D*, the inner faces of which are vertical and planed smooth, while the outer side of each is convex. Between the intermediate bars, *d e*, is located an inclined block, *E*, which is recessed on its upper side to form a central bearing for a longitudinal shaft, *F*, retained in position by a section, *f'*, bolted to the block *E*. A block, *G*, is also located between the bars *d e*, and is inclined parallel with the block *E*, and said block *G* is also recessed to form a bearing for a smaller box, *G'*, a section, *g*, bolted on the box *G'*, forming a closed bearing. The said shaft *F* is provided at its ends with the wheels *H H'*, the wheel at the inner or upper end having the greater diameter. Each wheel *H H'* is provided with a friction-periphery, *h*, which may be built up of paper or otherwise, as may be desirable. A horizontal bell-crank lever, *j*, is pivoted upon the upper face of the bar *d* and has one of its ends connected by a link, *k*, with the box *G'*, while

the other end is attached to a vertical lever, *I*, provided at one end of the frame. Two collars, *l*, are formed upon the shaft *F* between the blocks *E* and *G*, and said shaft, between said collars, is embraced by the transverse portion *J* of an angle-frame, *K*, the longitudinal portion of which is horizontally slotted for the passage of guide-bolts *m*. The free end of the frame has connected thereto the lower end of a lever, *M*, which is pivoted on the inner side of the bar *e*.

N designates the drive-shaft, which is journaled in the bars *c d* and is adapted to be driven from any desirable power source, and is provided on its inner end with a disk, *O*, plane-faced upon its inner side to afford a proper frictional bearing for the wheel *H*.

By operating the lever *M* so as to shift the frame *K* on its guide-bolts the shaft *F* may be shifted longitudinally, so as to bring the wheel *H* in its contact with the disk *O* farther from or nearer to the center of said disk, and thus vary the degree of rotation at which the shaft is driven. If the movement of the shaft is toward the center of the disk, then the shaft *F* will be driven at a greater speed. The increased diameter of the inner wheel, of course, in moving back, makes provision for the difference that would be occasioned by changing the contact of the said wheel with the disks on the feed-shaft. By moving the lever *I* the bell-crank-lever connections will serve to transversely move the shaft in block *G*, so as to change the contact of the wheel *H'* from disk *C* to *D*, or vice versa.

From the preceding description it will be seen that the device is not only of simple and durable construction, but that its parts may be readily operated to secure the various adjustments with but little attendant vibration.

Having thus described my invention, I claim—

1. The combination, with the feed-shaft provided with the disks *C D*, of the transversely-movable bearing-boxes, a shaft, *F*, journaled in said boxes and longitudinally movable therein, friction-wheels *H H'*, of different diameters, secured on said shaft, a lever connected to said shaft *F* to move the same in its bearings, and a drive-disk contacting with the wheel *H*, substantially as specified.

2. The combination, with the feed-shaft pro-

vided with the disks C D, of the shaft F, bearing in bars and longitudinally movable therein, friction-wheels H H', of different diameters, secured on said shaft, a frame, K, slotted to
5 play on guide-bolts and having a portion embracing said shaft F, and a lever for shifting said frame and shaft, substantially as specified.

3. The combination of the longitudinally-movable shaft F, having the friction-wheels
10 H H', a drive-shaft having a disk contacting with the wheel H, a journal-box receiving the shaft F, a horizontal bell-crank lever arranged

near one end of said journal-box, a link connecting said lever to the journal-box, and an operating-lever connected to the bell-crank
15 lever, as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

ALEXANDER PITMON GIBSON.

Witnesses:

E. G. SIGGERS,

J. H. SIGGERS.