

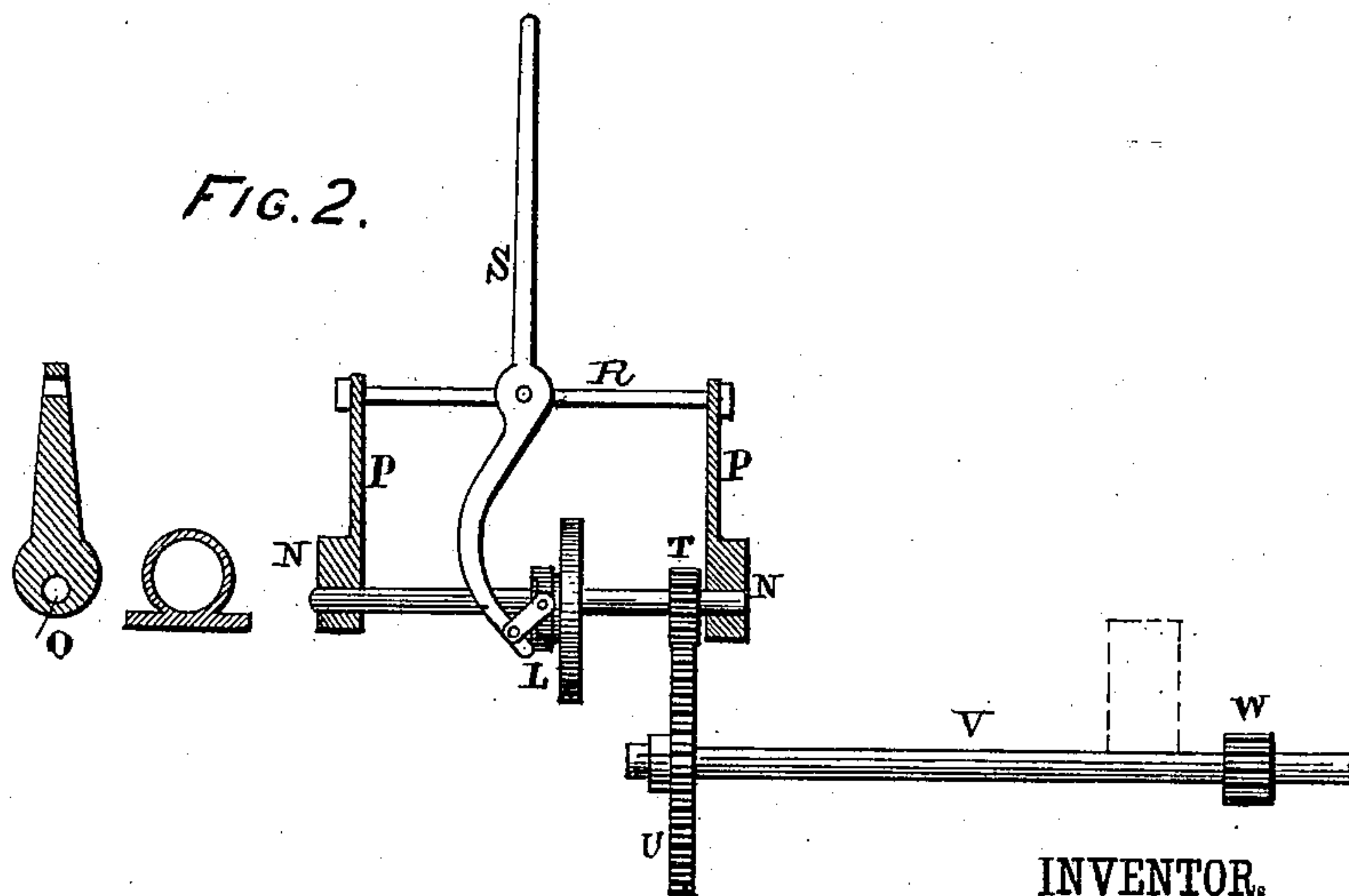
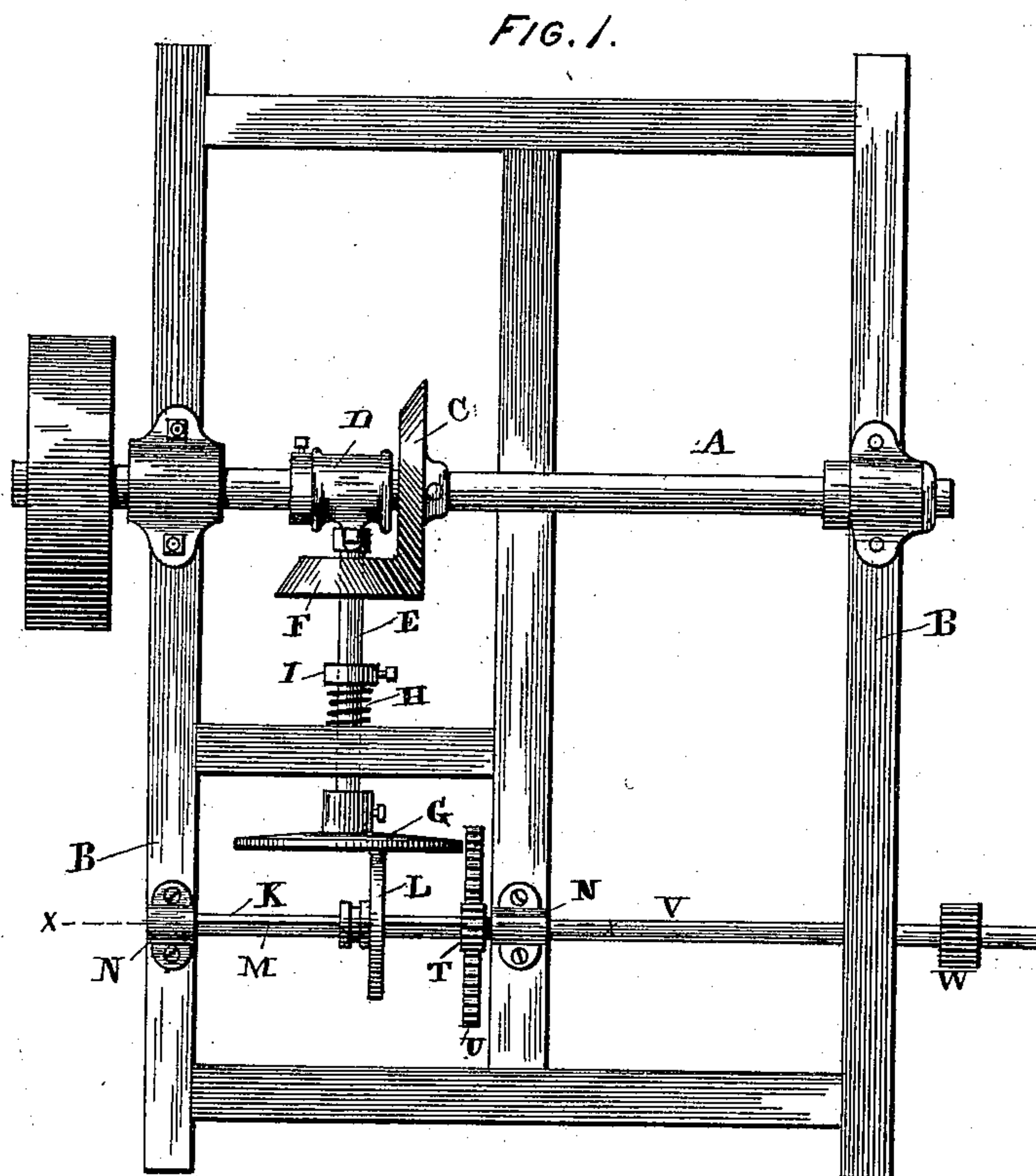
(No Model.)

T. J. REAMY.

FEED MECHANISM FOR SAW MILLS.

No. 334,285.

Patented Jan. 12, 1886.



WITNESSES:

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THOMAS J. REAMY, OF NASHVILLE, TENNESSEE.

FEED MECHANISM FOR SAW-MILLS.

SPECIFICATION forming part of Letters Patent No. 334,285, dated January 12, 1886.

Application filed September 23, 1885. Serial No. 177,949. (No model.)

To all whom it may concern:

Be it known that I, THOMAS J. REAMY, of Nashville, in the county of Davidson and State of Tennessee, have invented certain new and useful Improvements in Feed Mechanisms for Saw-Mills; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in feed mechanisms for saw-mills; and it consists in the general combination and arrangement of parts, as hereinafter set forth, and particularly pointed out in the claim.

Figure 1 represents a plan view of the device; Fig. 2, a transverse vertical section through *x x* of Fig. 1.

The saw-arbor A is properly journaled on the frame B, and carries a bevel friction-pulley, C, which is constructed of some comparatively soft material—such as paper or wood—paper being the preferable material. To one side of the saw-pulley C the shaft or arbor carries a loose collar, D.

Journaled in the frame at right angles to the arbor is a shaft, E, one end of which has a bearing in the collar D, in which bearing it has more or less longitudinal play. Near the end of the said shaft E corresponding to the arbor is secured a bevel friction-pulley, F, of some hard material, such as iron. The shaft E also carries at the other end from that carrying the pulley F a disk or flange, G, and also carries a spring, H, and nut I.

Parallel to the arbor, and at right angles to the shaft E, is a shaft, K, carrying a disk, L, having longitudinal movement thereon, but turning with the said shaft, a key, M, being provided for the purpose. This disk or pulley L is preferably constructed of paper, while the disk or flange G is formed of metal. This shaft K is journaled eccentrically in boxes N, which turn in suitable bearings, Q, on the frame. From each of the said boxes N extends an arm, P, said arms being connected by a bar, R. On the said bar R is pivoted a lever, S, having its lower end connected by a link to the disk

L. On one end of the said shaft K is a pinion, T, which meshes with a gear, U, on a shaft, V, which carries at the end coinciding with the saw a pinion, W, operating the carriage.

The operation of the device is as follows: The saw-arbor being in constant motion, the pulley F is kept in contact with the pulley C by the spring on the shaft E, the nut thereon regulating, if it be desired, the pressure of contact. This will keep the shaft E and disk or flange G in constant motion. By moving the frame formed of the arms P and bar R, by means of the lever S, the boxes N are caused to move in their bearings, and thus throw the disk or pulley on the shaft K in or out of contact with the face of the disk or flange G. By moving the lever on its pivot the pulley on the shaft K is carried to one side or the other of the flange G, and thus causes the shaft to reverse its motion. This shaft imparts its movement to the shaft V, which causes the carriage to travel.

The operation of this device is very direct, and is such as to prevent shock. The shaft E being in motion, and the pulley on the shaft K being slowly advanced to the flange G by means of the eccentric bearings, the movement to the carriage will be gradually imparted and all shock obviated, as stated. The slight longitudinal play of the shaft E in its bearings allows sufficient adjustment of the same to obtain the requisite friction on the contact-points of the said pulleys. The drive-pulley is made of soft material and the driven pulley of hard material, in each instance to prevent wear and always present a true surface. Should the driven pulley be stopped for any reason, the drive-pulley, being of a softer material, will not affect it nor wear any portion thereof flat, while the said drive-pulley, should it be worn, will wear true.

Having thus described my invention, I claim—

The combination of the saw-arbor having a driving-pulley secured thereto, the shaft E, journaled at its inner end in a collar applied to the arbor A, and provided with the pulley F at one end and the friction-disk at the other, the collar I and spring H, applied to the shaft E, to keep the shaft pressed endwise,

and the pulleys E C, always in operative contact with each other, the friction - pulley L, placed upon a shaft of its own, a lever for moving the pulley back and forth in contact
5 with the friction - disk, a shaft to move the carriage, and gears for connecting the two disks together, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS J. REAMY.

Witnesses:

JNO. E. PROSPERI,
ELLA JOHNSON.