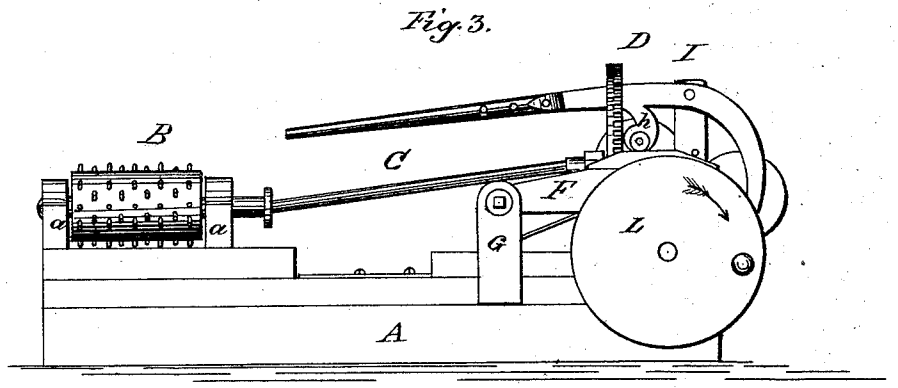
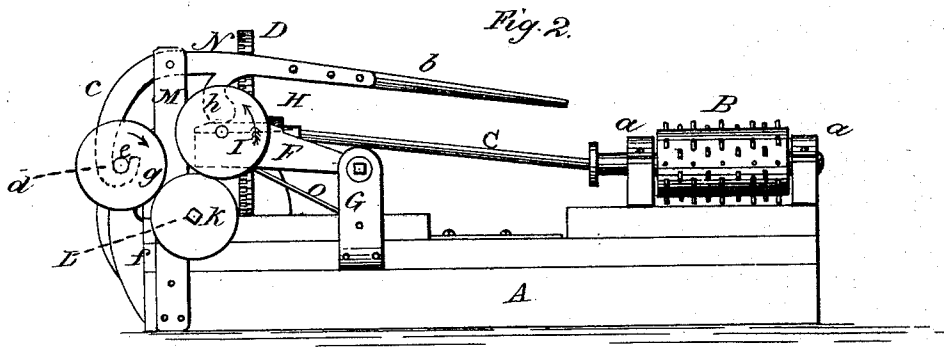
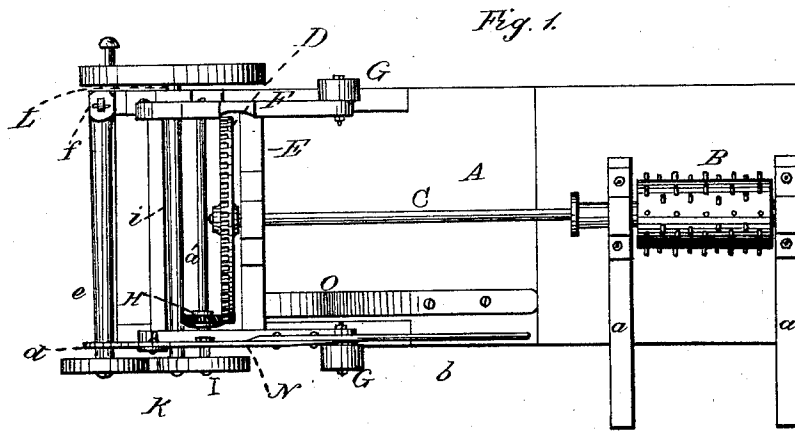


C. H. HORTON.
Sawing-Machines.

No. 156,160.

Patented Oct. 20, 1874.



Witnesses:

M. L. Scoill
G. E. Barner

Inventor:

C. H. Horton.

UNITED STATES PATENT OFFICE.

CHARLES H. HORTON, OF ROCHESTER, OHIO.

IMPROVEMENT IN SAWING-MACHINES.

Specification forming part of Letters Patent No. **156,160**, dated October 20, 1874; application filed May 4, 1874.

To all whom it may concern:

Be it known that I, CHARLES H. HORTON, of Rochester, in the county of Lorain and State of Ohio, have invented certain new and useful Improvements in Sawing-Machine Gigs, of which the following is a specification:

This invention relates to devices for feeding lumber to sawing-machines, by which the lumber can be made to move rapidly or slowly, and its forward motion be reversed when necessary, as hereinafter described.

The invention consists in a toothed roller journaled in a suitable frame, and operated by a rock-shaft connected at one end to said roller and at its opposite end with a bevel-gear wheel, which meshes with a pinion adapted to receive movement by means of a disk on the shaft of said pinion being brought into frictional contact with a disk or pulley on the operating-shaft, and said pinion being capable of a reverse movement by causing a third pulley or disk controlled by a hand-lever to come into frictional contact with the pulleys or disks, as hereinafter described.

In the drawings, Figure 1 is a plan view of my improvement; and Figs. 2 and 3 are side elevations of the same, looking from different sides of the machine.

The letter A represents the base of the machine, at one end of which is a toothed roller, B, journaled between guides *a a* on the base A. To the said roller is connected one end of a shaft, C, which is provided at its opposite end with a bevel-gear wheel, D, the end of the shaft being journaled in a cross-head, E, attached at its ends to bars or rods F pivoted to standards G. A shaft, *a'*, is also journaled between said bars F, and provided with a pinion, H, which meshes with the bevel-gear wheel, as shown; and the journal of said pinion is extended beyond one of the bars F, and is provided with a pulley or disk, I, which can be caused to rotate in frictional contact with a pulley or disk, K, on the end of the operating-shaft L, which is journaled in the end of the machine, and provided with a fly-wheel, by which motion is imparted to the several working parts of the machine. To a vertical post or standard, M, is pivoted a lever, N, having a horizontal arm, *b*, and an arm, *c*,

curved downwardly, and provided with a hook, *d*, which embraces the shaft *e*. Said shaft is pivoted at one end to a post, *f*, and is provided at its other end with a disk or pulley, *g*, by which means the said shaft can be brought into contact with the disk K on the operating-shaft, and be removed therefrom by raising or lowering the said lever, the purpose of which will hereinafter appear.

The operation of my invention will be readily understood.

When motion is imparted to the operating-shaft it will revolve the disk K, and by depressing the disk I—which is done by depressing the lever N and causing its foot *h* to bear on the bar F, thus forcing the same down and causing the disks I and K to be in frictional contact—the pinion H is revolved, and the gear-wheel D and toothed roller B operated to move the lumber forward. In order to reverse the movement of the lumber the lever N is raised, when a spring, O, will throw the bars F upward, raising the disk I from contact with the disk on the operating-shaft, and cause the disk *g* on the pivoted shaft *e* to come in contact with the two disks I and K, said disk *g* thus serving to communicate the motion to the pinion and bevel-wheel. It will thus be seen that, when the disks are in the position last described, the disk K will impart motion to the disk *g* in the direction of the arrow, Fig. 2, and it will, in turn, impart motion to the pulley I in the direction of the arrow on said pulley in Fig. 2, thus reversing the motion of the pinion and of the toothed wheel, and carrying the lumber backward.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination, with the roller B, its operating-shaft, and bevel-gear wheel, of the pinion H and disk I, carried by the pivoted bars F, and the lever N, provided with the disk *g*, for operation; in respect to the disk on the operating-shaft L, substantially as and for the purposes described.

C. H. HORTON.

Witnesses:

M. L. SCOVILL,
L. S. BARNES.