(No Model.) 2 Sheets—Sheet 1.

M. HODGSON.

CIRCULAR SAWING MACHINE.

No. 436,420. Patented Sept. 16, 1890.

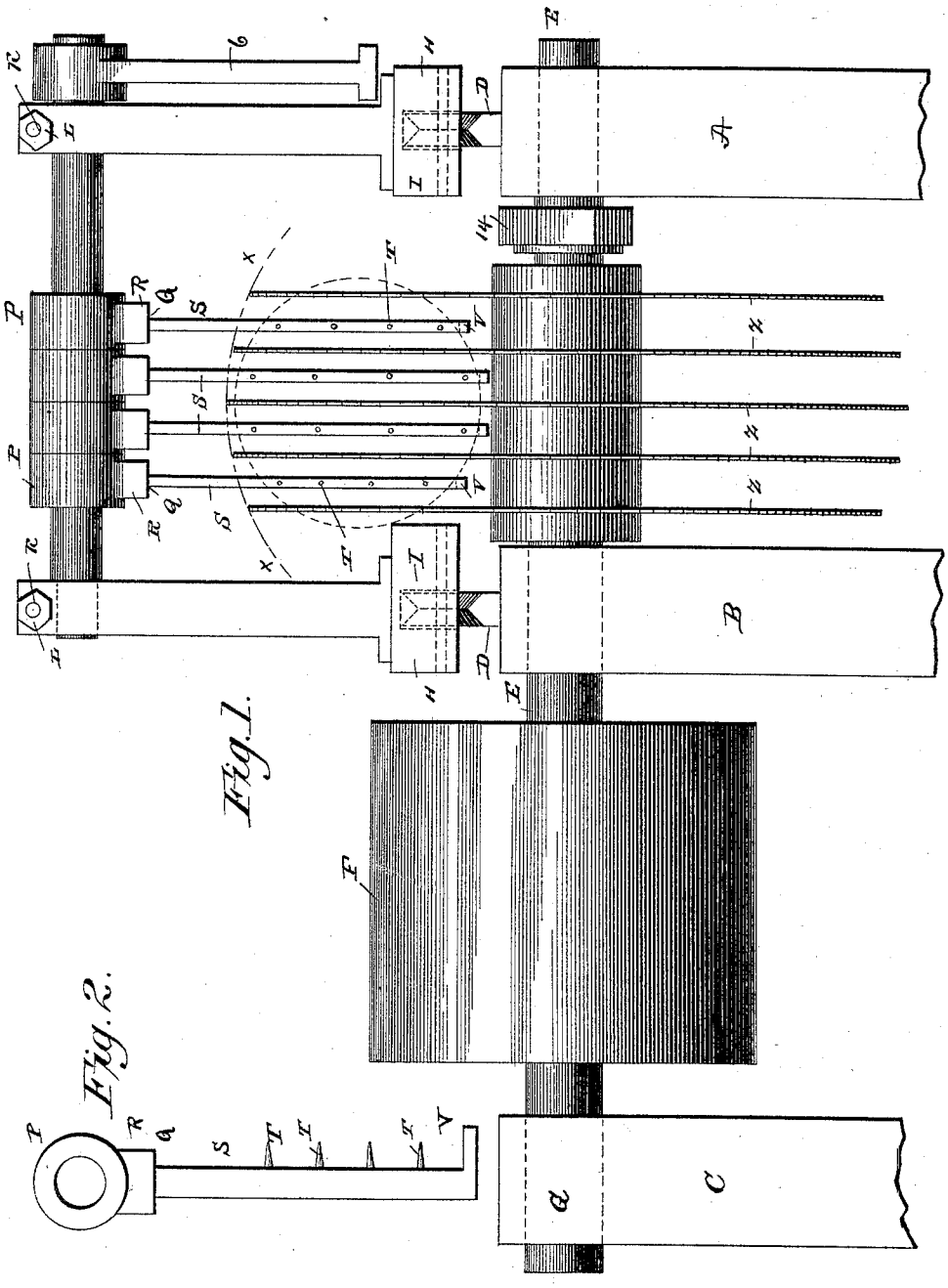


Fig. 1.

Fig. 2.

Witnesses:
A. D. Wall
Jno. A. Goodman

Inventor:
Mark Hodgson

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

(No Model.)

2 Sheets—Sheet 2.

M. HODGSON.

CIRCULAR SAWING MACHINE.

No. 436,420. Patented Sept. 16, 1890.

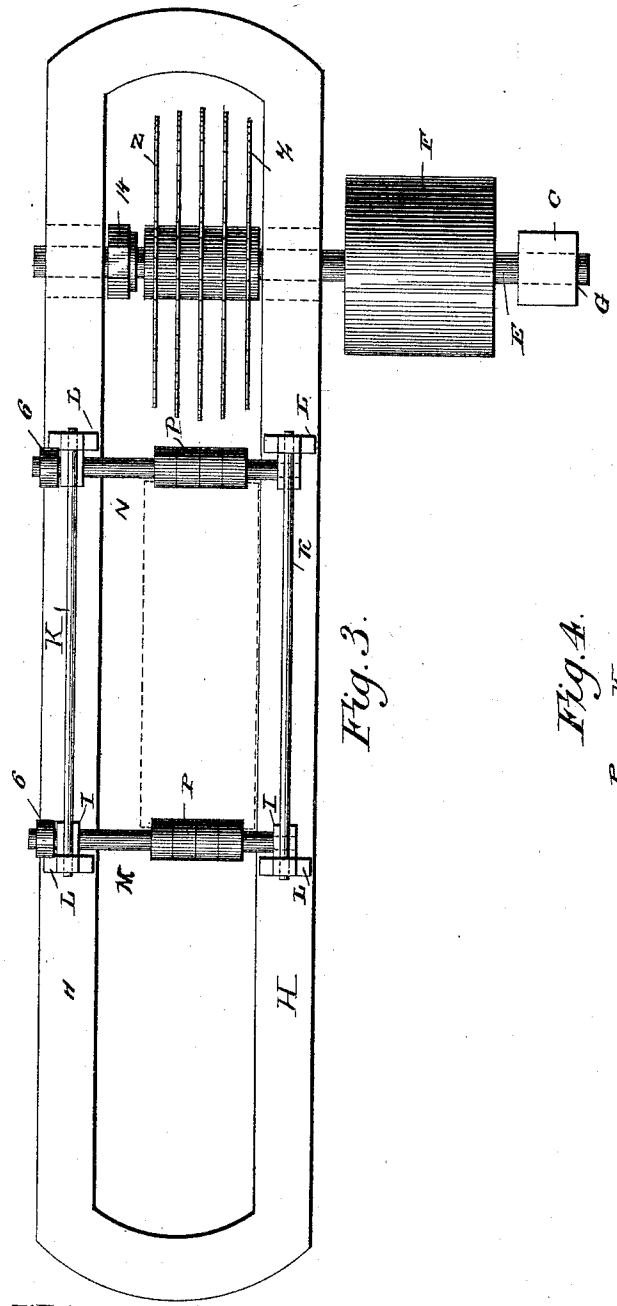


Fig. 3.

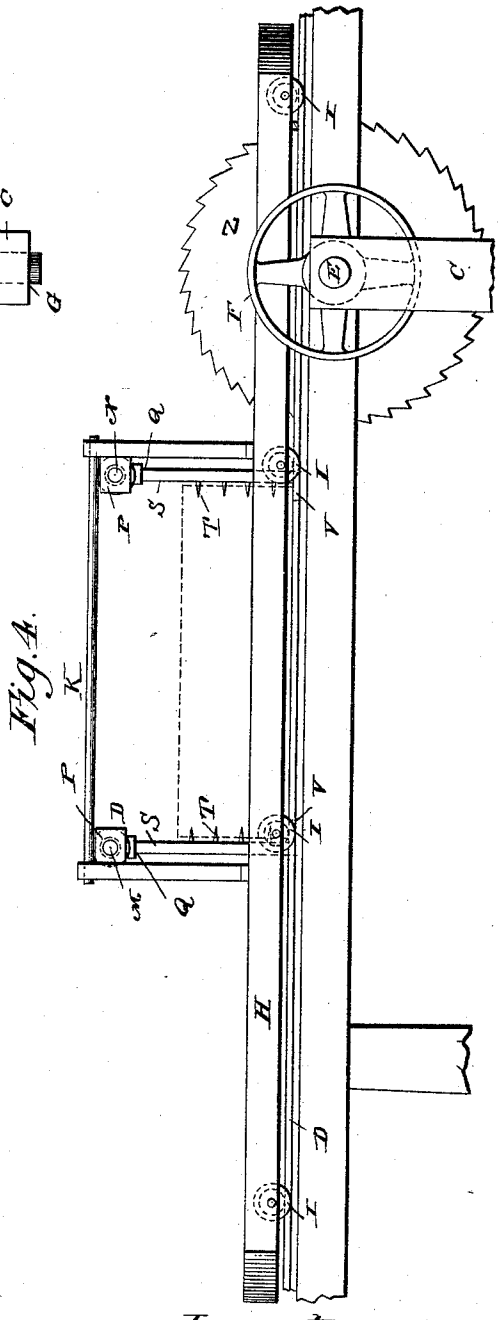


Fig. 4.

Witnesses
P. C. Knell
Jno. H. Goodman

Inventor
Mark Hodgson

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

MARK HODGSON, OF LEADVILLE, COLORADO.

CIRCULAR SAWING MACHINE.

SPECIFICATION forming part of Letters Patent No. 436,420, dated September 16, 1890.

Application filed April 29, 1889. Renewed June 28, 1890. Serial No. 357,098. (No model.)

To all whom it may concern:

Be it known that I, MARK HODGSON, a citizen of the United States, residing at Leadville, in the county of Lake and State of Colorado, have invented certain new and useful Improvements in Circular Sawing Machines; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention relates to circular sawing machines; and it consists in the construction and novel combination of parts, as will be hereinafter fully described and claimed.

In the drawings, Figure 1 is a partial front elevation of a circular sawing machine embodying my improvements. Fig. 2 is a vertical side view of one of the dogs that are used herein to engage or bite the end of the log which is to be sawed into slabs. Fig. 3 is a plan view of the track, mounted saws, and the truck on which the log to be cut into slabs is carried or fed to the saws; and Fig. 4 is a side elevation of a portion of the track, showing a side view of the saws and driving-pulley, the standards carrying the track-wheels, and the dogs engaging the log, the latter being shown in dotted lines.

Referring by letters and figures to the said drawings, A, B, and C designate the posts or uprights upon which the track-rails D D and the shaft E for supporting the saws Z and the driving-pulley F are mounted. The shaft E is mounted or supported in bearings, two of which are immediately beneath the track-rails, the other bearing G being aligned therewith, but in the post C at the left in Fig. 1. The truck-frame is composed of longitudinal bars or sills H, in which the grooved supporting-wheels I—four in number—are journaled, and the upper ends of the posts or uprights on each side are connected by parallel rods K K, having proper securing-nuts L L. Transversely of these uprights or posts and parallel to the saw-shaft mandrel are provided shafts M N, which pass through the aligned eyes P in recesses Q, in the projecting arms R of which the suspending and holding bars S, having teeth or pikes T, are hung, and are provided at their lower ends with toes V, upon which the slabs rest when dropped into or upon the carriage.

In Fig. 1 the end of the log is shown in dotted lines, the edge of the spaced saws in full lines, and the circumferential arc of the saws Z is shown in dotted lines X, in order to give an idea of the diameter of the saws relatively to the other parts of the machine and to the log shown in dotted lines, which log is to be cut into slabs preparatory to presenting them to a lath-cutting machine, which, however, forms no part of this invention.

At one end of each of the shafts M N, on which the holding-bars S are hinged and supported, are levers 6, for oscillating or moving the bars S to cause their teeth to be engaged with or disengaged from the end of the log on the truck when it may be necessary to place it in position on the truck, shift it thereon, or remove it therefrom.

In operation the carriage is placed on the track in front of the saws, the log of timber is placed on the carriage and rests upon the toes V of the holding-bars S, and the dogs are pressed into the ends of the log by moving the lever 6 for this purpose, which causes the spurs or teeth to be forced firmly into the ends of the log and holds the latter firmly while the saws are passing through it, after which the dogs are withdrawn by reversing the levers 6.

A nut 14 is provided on the main shaft for locking the saws and separating-collars in place, the shaft being threaded for the reception of the nut, so that the saws and collars may be firmly bound or secured together on said shaft.

Having thus fully described my invention, what I desire to claim, and secure by Letters Patent of the United States, is—

1. The combination, with the uprights or posts supporting the main shaft and the track, of the saws mounted upon said main shaft, separated by collars and secured in place by a lock-nut and having a band-pulley mounted thereon, the carriage mounted on the track and having uprights connected by supporting-bars, and transverse shafts at the upper ends of the uprights having collars thereon provided with depending bars having supporting-toes at their lower ends, and teeth or dogs intermediate of their ends to engage the ends of the log to be sawed into slabs by the saws, substantially as specified.

2. The combination, with the supported

driving-shaft and the truck mounted upon the upper ends of supports, of the saws on the main shaft, and the truck supporting the transverse shafts provided with collars having depending bars provided with toes at their lower ends and dogs or teeth intermediate of their ends, and levers at the ends of the arm-supporting shaft for throwing the dogs into and out of engagement with the ends of the log on the truck, substantially as specified.

MARK HODGSON.

Witnesses:
NED STEEL,
F. W. HURD.