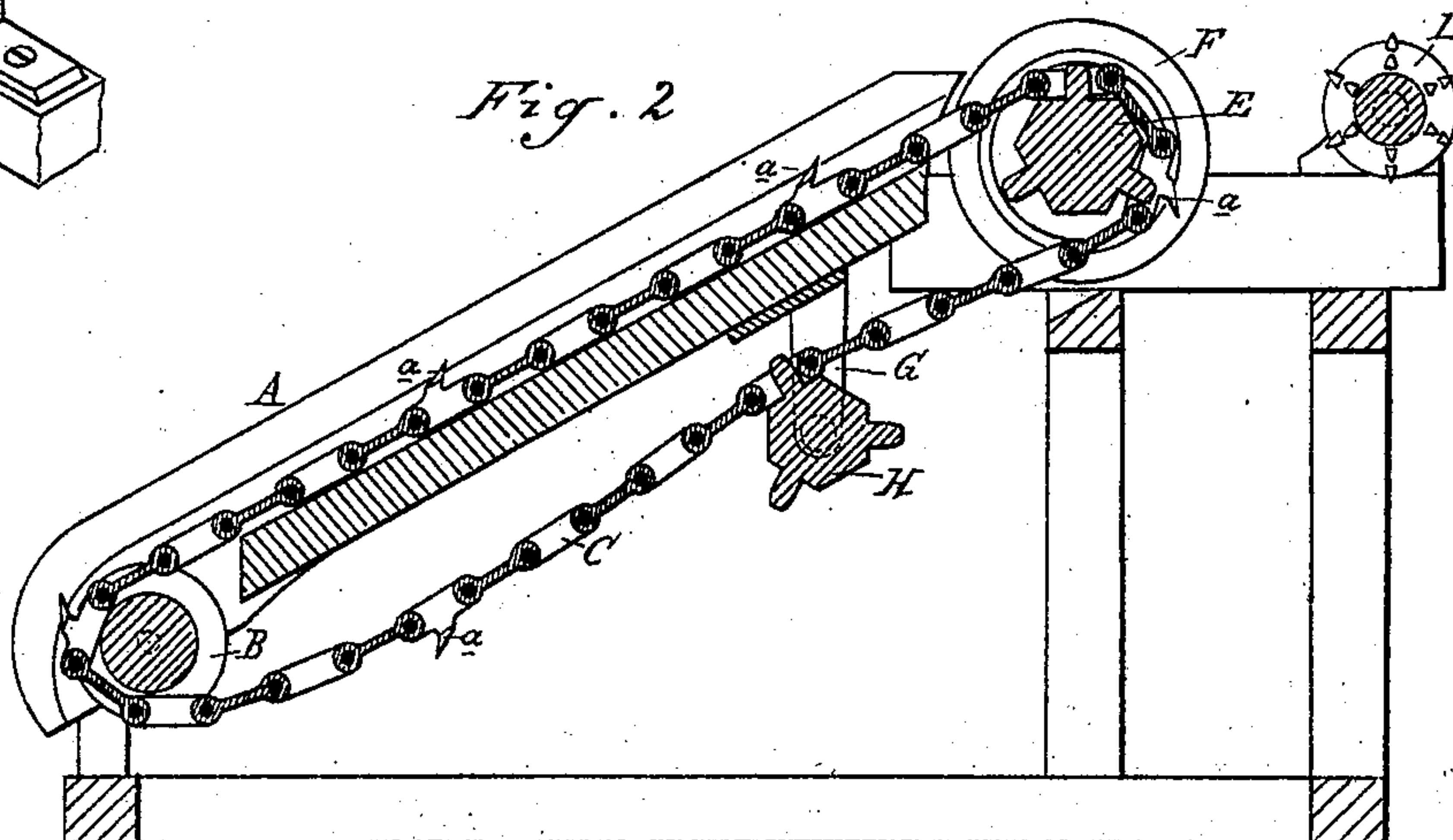
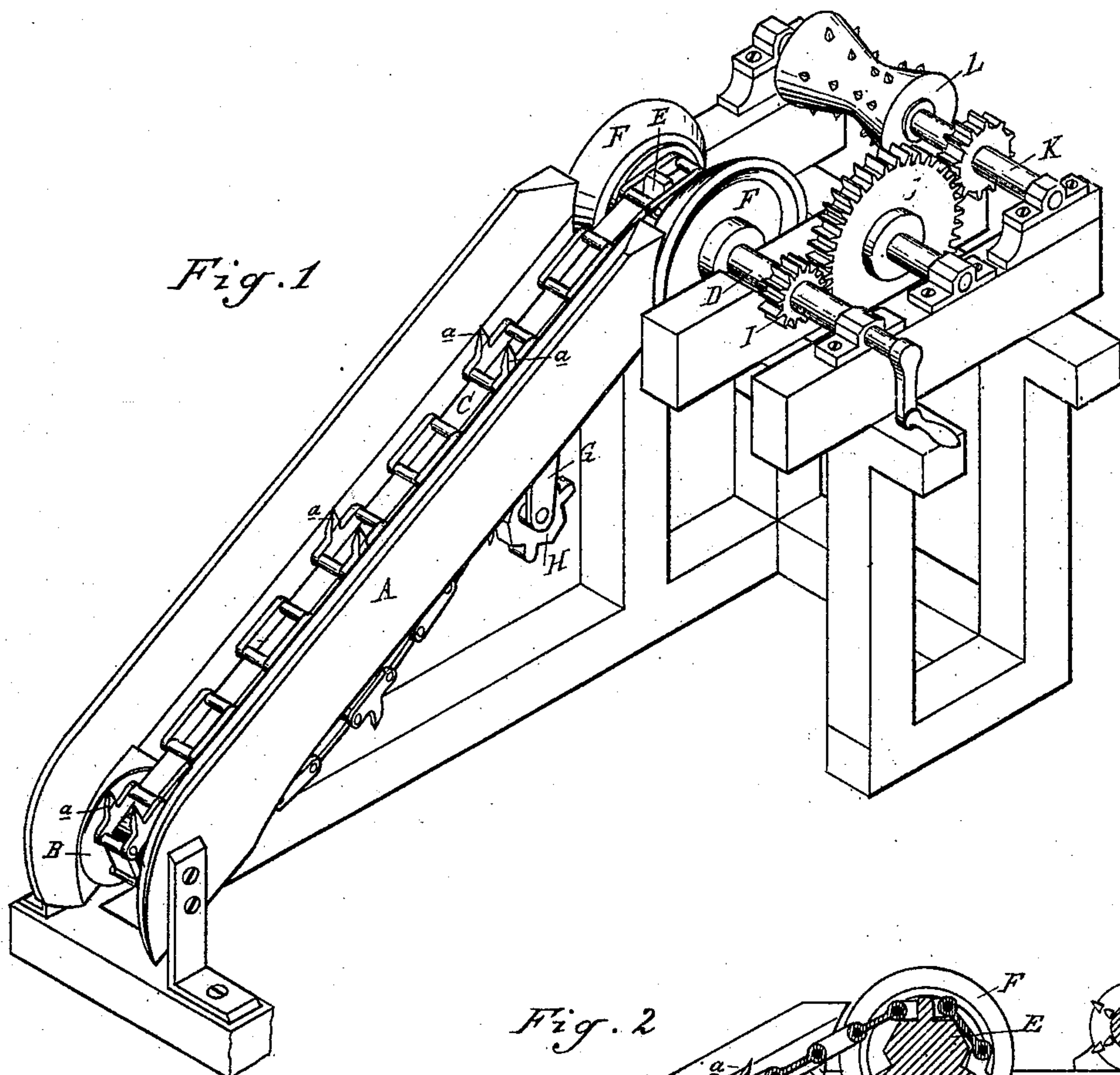


J. TORRENT.

Log-Carrying Device for Saw-Mills.

No. 211,605.

Patented Jan. 21, 1879.



*Attest:*

*A. Barthel*  
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# UNITED STATES PATENT OFFICE.

JOHN TORRENT, OF MUSKEGON, MICHIGAN.

## IMPROVEMENT IN LOG-CARRYING DEVICES FOR SAW-MILLS.

Specification forming part of Letters Patent No. **211,605**, dated January 21, 1879; application filed October 7, 1878.

*To all whom it may concern:*

Be it known that I, JOHN TORRENT, of the city and county of Muskegon, and State of Michigan, have invented an Improvement in Log-Carrying Devices for Saw-Mills, of which the following is a specification:

The nature of my invention relates to new and useful improvements in devices for taking logs into the mill from the boom or yard.

The invention consists in the novel construction and arrangement of parts for the purpose, as more fully hereinafter described.

Figure 1 is a perspective view of my improved device. Fig. 2 is a vertical longitudinal section.

In the accompanying drawings, which form a part of this specification, A represents a trough or way, with inwardly-inclined inner sides, with its lower end secured in the yard or boom from which it is desired to draw the logs, and with its upper end secured at or near the mill-floor, and in proper position to deliver the logs on said floor. At the lower end of the trough or ways is journaled a flanged smooth-faced pulley or sheave, B, to carry the endless chain C. A shaft, D, is journaled in proper bearings on the mill-floor. This is the driving-shaft, and upon it is secured a sprocket-wheel, E, over which the chain C passes. Upon each side of the sprocket-wheel there are secured the heavy collars or guards F, sufficient to keep in place and give direction to logs of any size which may be carried up by the chain. A portion of the links of the chain are provided with spurs *a*, which project upwardly when said chain is passing through the trough, to hold the log in place while being conveyed up into the mill. Journaled in hangers G below the trough is a sprocket or stelliform carrying-wheel, H.

To the main driving-shaft D is secured the pinion I, which communicates motion, by

means of the intervening spur-wheel J, to the shaft K, upon which is secured the spurred roller L, which is V-shaped in cross-section, and its longitudinal center in line with the center of the log-carrying trough through which the chain passes.

The sides of the trough form guides to prevent the log from rolling off while passing upward, and deliver the advancing end thereof between the collars or guards on the main shaft, and these collars give direction to the log and deliver it to the spurred roller, which carries it forward onto the log-deck of the mill. This deck is slightly elevated above the mill-floor, with sides inclined toward the carriage, so that the logs may be rolled partly by their own gravity from the deck to the carriage.

In place of the spurs on the chain, the same purpose may be accomplished by securing transversely across said chain cross-bars, from the upper face of which there may project spurs. In place of the spurred roller, fluted or other rollers may be used without interfering with the spirit of my invention.

What I claim as my invention is—

1. In a saw-mill, the combination, with the logway and elevating-chain, of the concave spurred roller L, placed in line with the logway, constructed and arranged substantially as described and shown.

2. In a saw-mill, the combination of the logway A, spurred elevating-chain C, the sprocket-wheel E and collars F on the driving-shaft D, the concave spurred roller L on shaft K, and gears connecting the driving-shaft with the shaft K, all constructed and arranged substantially as described and shown, for the purpose set forth.

JOHN TORRENT.

Witnesses:

GEORGE ARMS,  
J. W. FRY.