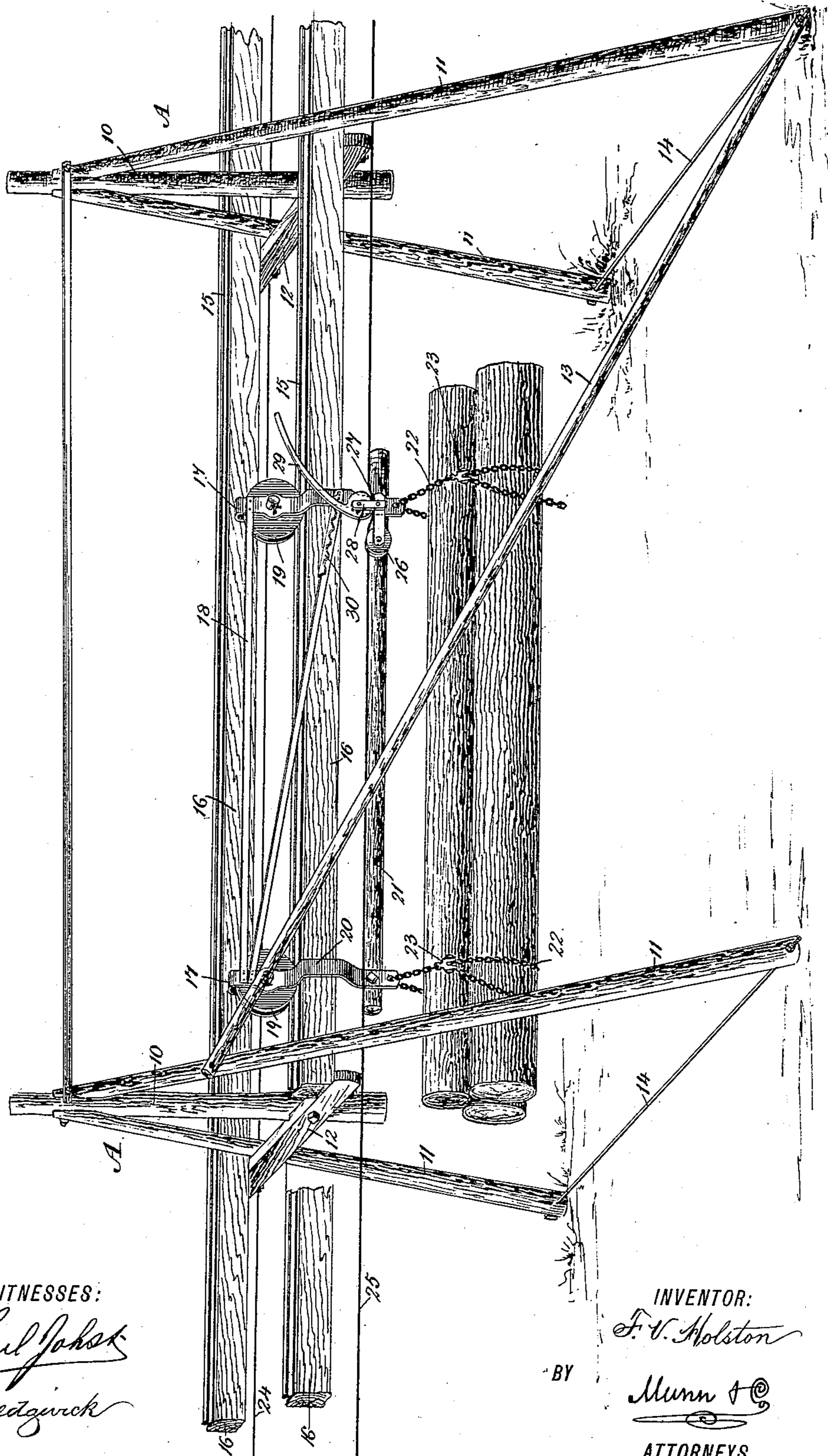


(No Model.)

F. V. HOLSTON.  
LOGGING RAILWAY.

No. 426,727.

Patented Apr. 29, 1890.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

FRANK V. HOLSTON, OF BAYFIELD, WISCONSIN.

## LOGGING-RAILWAY.

SPECIFICATION forming part of Letters Patent No. 426,727, dated April 29, 1890.

Application filed July 26, 1889. Serial No. 318,755. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK V. HOLSTON, of Bayfield, in the county of Bayfield and State of Wisconsin, have invented a new and useful Improvement in Logging-Railways, of which the following is a full, clear, and exact description.

My invention relates to an improvement in logging-railways, and has for its object to provide a railway of simple construction capable of being expeditiously and conveniently built at any point required from material at hand; and the invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawing, forming a part of this specification, in which the figure represents a perspective view of a section of the railway, illustrating logs being carried thereon.

In carrying out the invention the supports or standards A comprise a central perpendicular log or metal bar 10, to the opposite sides of which, at or near the upper end, a log 11 is securely bolted, and the upper contacting ends of the said side logs are beveled, so that the body of the respective logs will extend at an inclination outward in opposite directions from the lower extremity of the central log or bar 10, which latter log or bar is about one-half the length of the said logs 11. When so constructed, the standards partake, essentially, of the shape of the letter A, and this contour is more particularly imparted to the standards by reason of the attachment to the central bar or log 10 of a cross bar or beam 12. In attaching this cross bar or beam, which is preferably made of hewed timber, the upper side whereof only need necessarily be straight, a transverse recess is cut in one face of the central bar or log 10 at or near the lower end, and the cross-beam is introduced into the said recess and firmly secured in position by a bolt, screws, or other equivalent fastening device or devices.

When occasion may demand, two opposed standards may be connected by a brace-log 13, secured to the lower end of one of the side logs 11 and at or near the upper end of the equivalent side log of the opposite standard. This brace-log 13 is not on all occasions nec-

essary. To strengthen the standards, I sometimes connect the members thereof at the lower extremity with a brace 14 of any approved form.

The tracks 15, if two are employed, are laid upon stringers 16, which stringers are made to rest upon the several cross-bars 12—one near each end of the same—whereby one track is brought outside of the standard and the other track between the central member and the opposite outer member of the same, as illustrated.

Upon the tracks a carriage is held to travel, comprising two or more hangers 17, connected by one or more rods or bars 18, which hangers are bent upon themselves at their upper ends, and between the members thus obtained a grooved wheel 19 is pivoted, adapted to travel upon the rail or track. At or near the lower edge of the wheels the hangers are bent to an essentially U shape, as shown at 20, whereby the center of the hangers is carried out from the stringers, so that if the carriage is given any side movement the hangers will not contact with the stringers. The lower ends or extremities of the hangers are carried inward beneath the track and connected, preferably, by a log 21.

To the lower extremities of each of the hangers a chain 22 is secured, which chains are usually made to pass through apertures in the said lower ends, and to one end of each chain a grab-hook 23, of any approved construction, is fastened, whereby, when the other end of the chain is passed around the logs to be carried and upward between the members of the grab and manipulating the latter, the logs may be securely supported from the carriage at an elevation from the ground.

To the upper curved extremity of one hanger a cable 24 is attached, whereby the carriage may be drawn in one direction—for instance, return from the delivery of a load—and a second cable 25 is carried beneath the track and over a grooved roller 26, secured to a horizontal arm 27, attached in any approved manner to one of the hangers between the curved side portion thereof and the lower extremity.

From the arm 27 a bracket 28 is upwardly projected, in which bracket a lever 29 is piv-

oted at the head, the said head having a cam-surface, as illustrated.

After the logs have been loaded upon the carriage, or before they have been loaded thereon, by pressing the lever 29 downward, so that the cam-surface thereof will clamp the cable 25 between it and the arm 27, the carriage is held firmly in contact with the cable. When the logs have been securely attached to the carriage, it is obvious that by drawing upon the cable 25 the carriage and logs may be carried to any desired point.

A rack 30 may be provided upon any of the cross-bars connecting the brackets of the carriage for the reception of the handle of the lever 29.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. A standard comprising a central log or bar, side logs of greater length attached to the central log or bar near the upper end and extending in opposite directions at an angle therefrom, and a cross-beam attached to the central log or bar of each standard adapted to support a track, substantially as shown and described.

2. In a logging-railway, the combination, with standards comprising a central log or bar, side logs of greater length attached to the central log or bar near the upper end and extending in opposite directions at an angle therefrom, and a cross-beam attached to the central log or bar of each standard, of a track or tracks secured to the said cross-bars of the standards, substantially as and for the purpose specified.

3. In a logging-railway, the combination, with standards comprising a central log or bar, side logs of greater length attached at their upper ends at or near the top of the central log or bar and extending in opposite directions at a right angle therefrom, and a cross-bar attached to and inserted in the central log or bar of each standard, of a track or tracks supported upon the cross-bars of the standards, a carriage held to travel upon the said track or tracks provided with a cam-faced lever, and an arm below the said lever, whereby a cable may be gripped between the said arm and cam-face of the lever, all combined for operation substantially as shown and described.

4. In a logging-railway, the combination, with an elevated rail, of a carriage comprising connected hangers having their central portion curved outward from the track-support and provided at the upper end with a grooved wheel capable of traveling upon the track, an arm projected from the lower end of one hanger carrying a friction-wheel, a bracket attached to the said arm, a lever fulcrumed upon the said bracket having a cam-faced head opposed to the bracket-arm, a cross-bar connecting the lower ends of the hangers beneath the track-support, and one or more cross-bars connecting the hangers at or near their upper end, substantially as shown and described.

FRANK V. HOLSTON.

Witnesses:

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