

(No Model.)

3 Sheets—Sheet 1.

W. A. FLETCHER.
LOG HAULING LOCOMOTIVE.

No. 605,413.

Patented June 7, 1898.

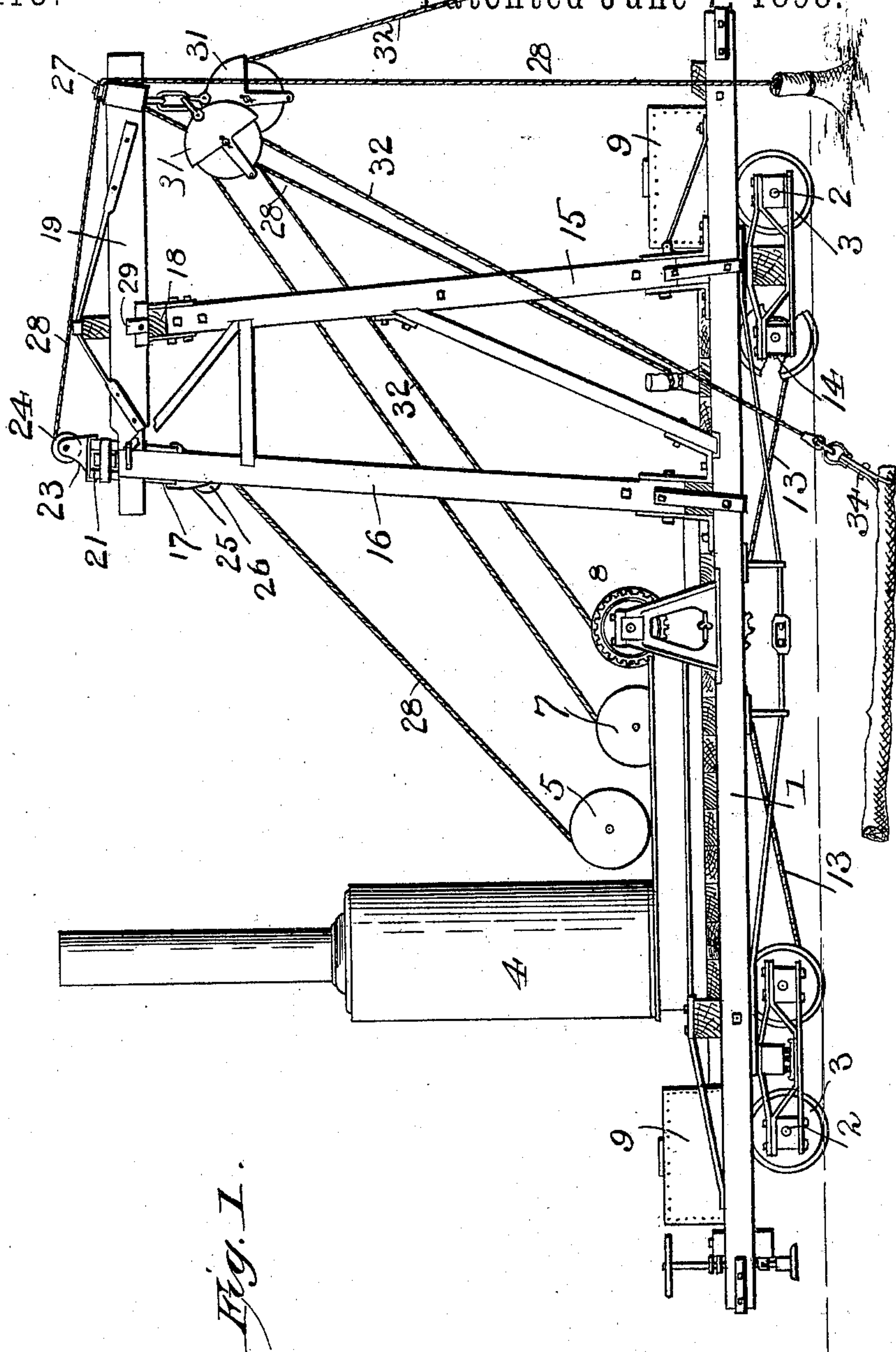


Fig. 1.

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By Louis Bagge & Co.
Attorneys.

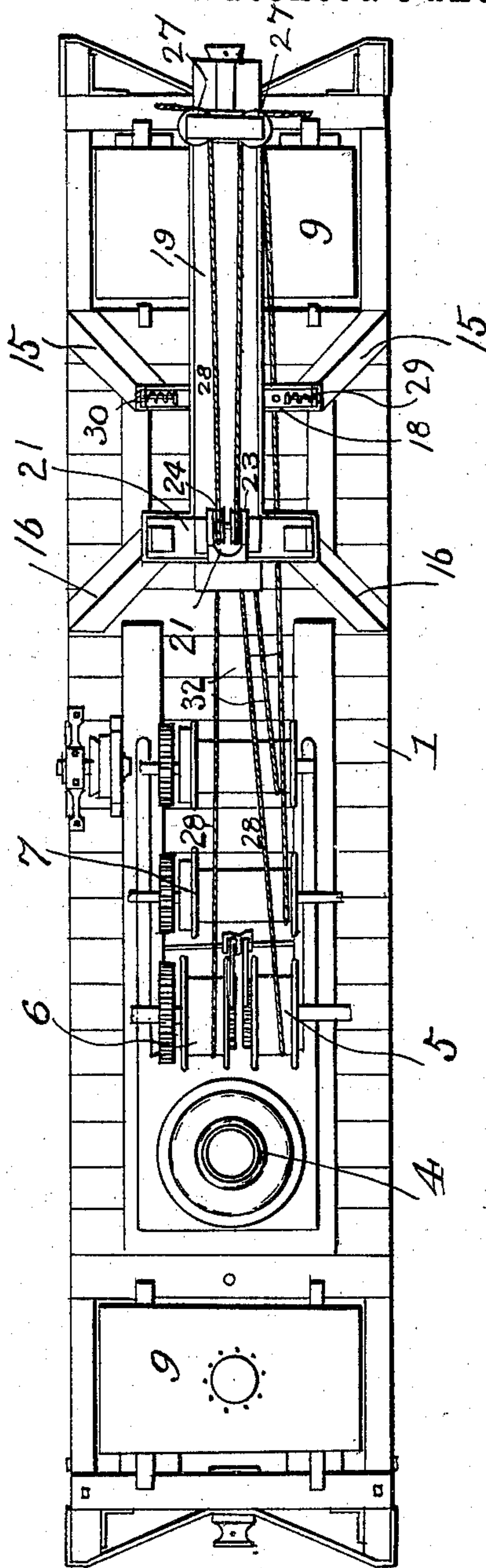
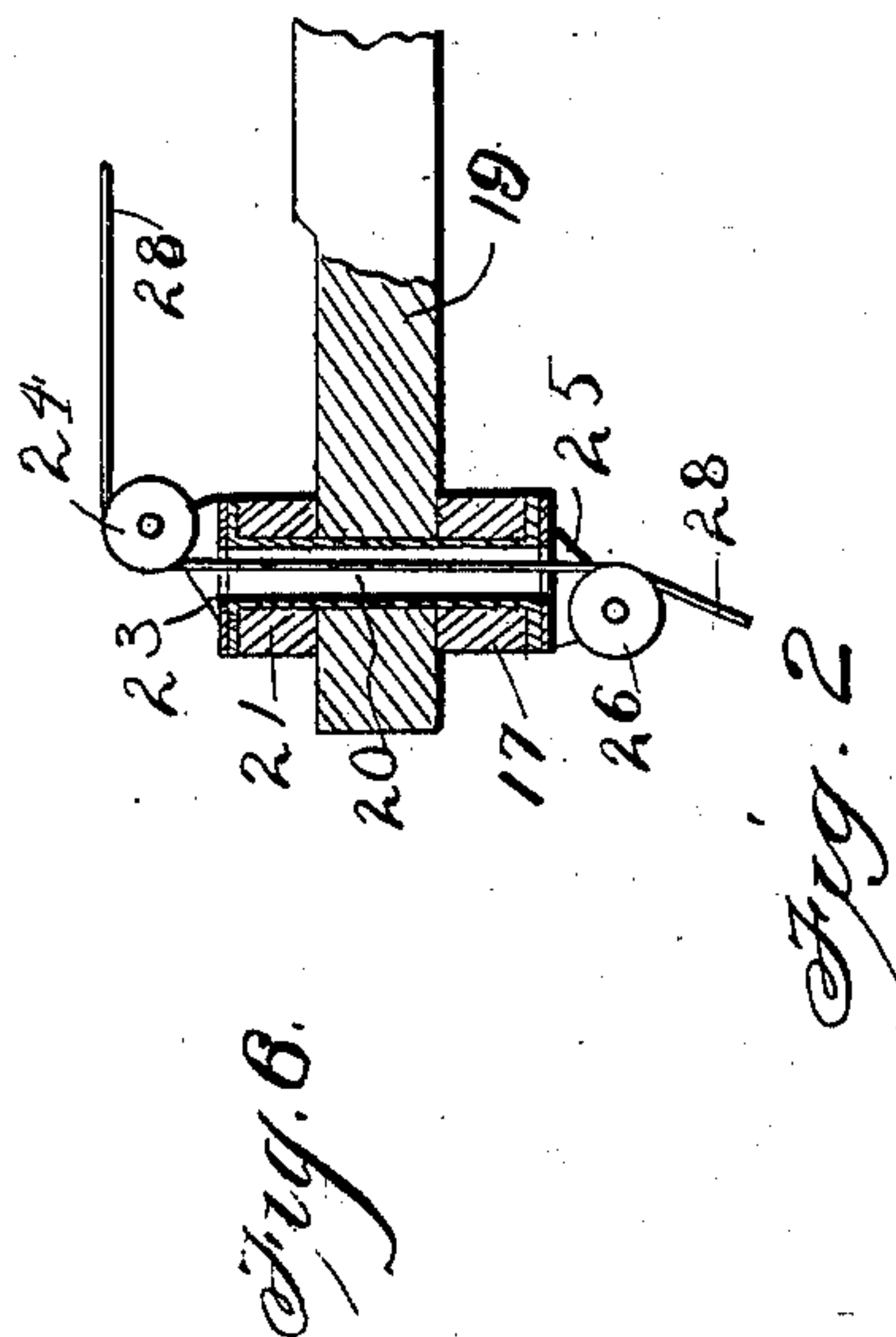
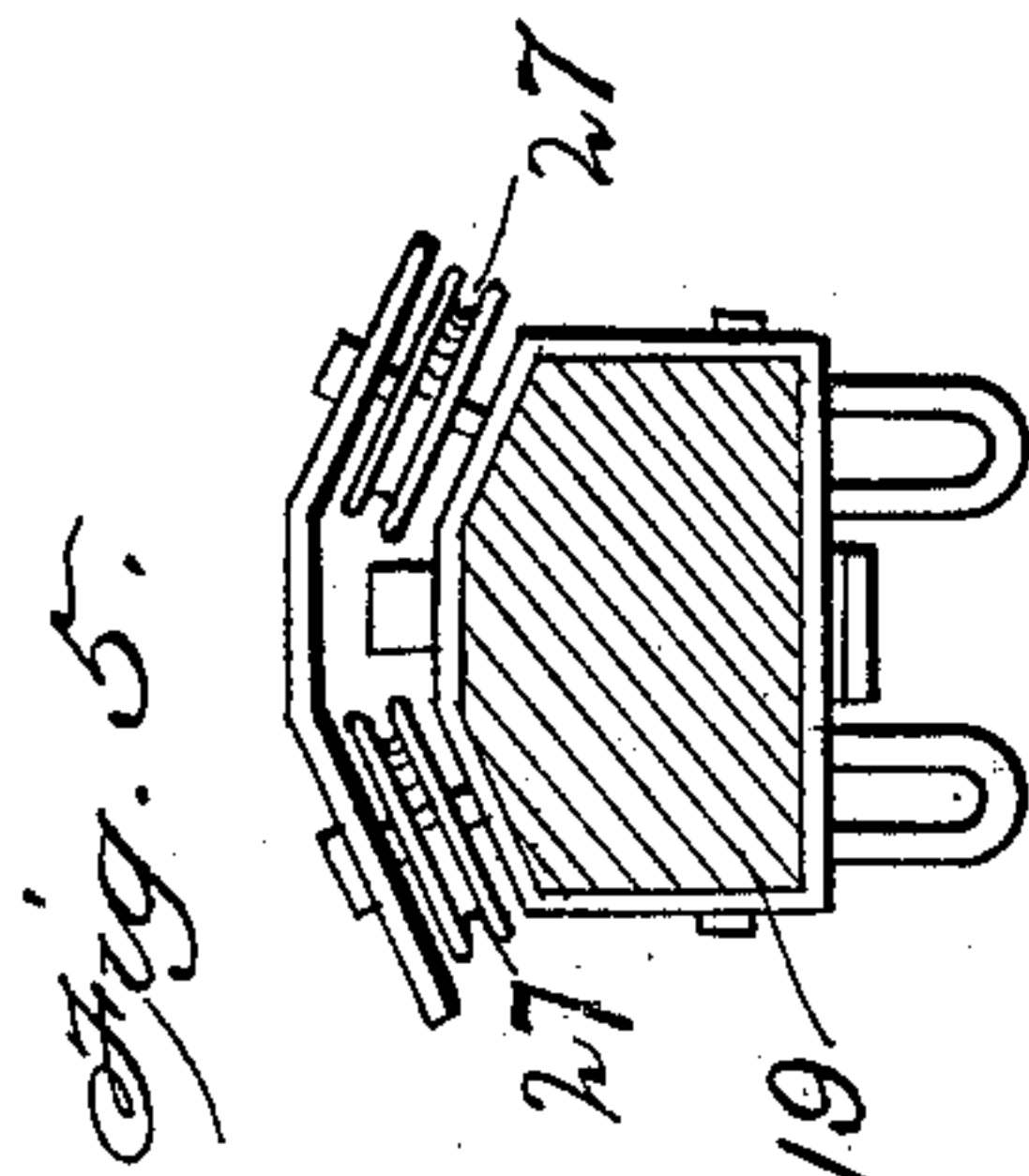
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LOG HAULING LOCOMOTIVE.

No. 605,413.

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(No Model.)

3 Sheets—Sheet 3.

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Fig. 4.

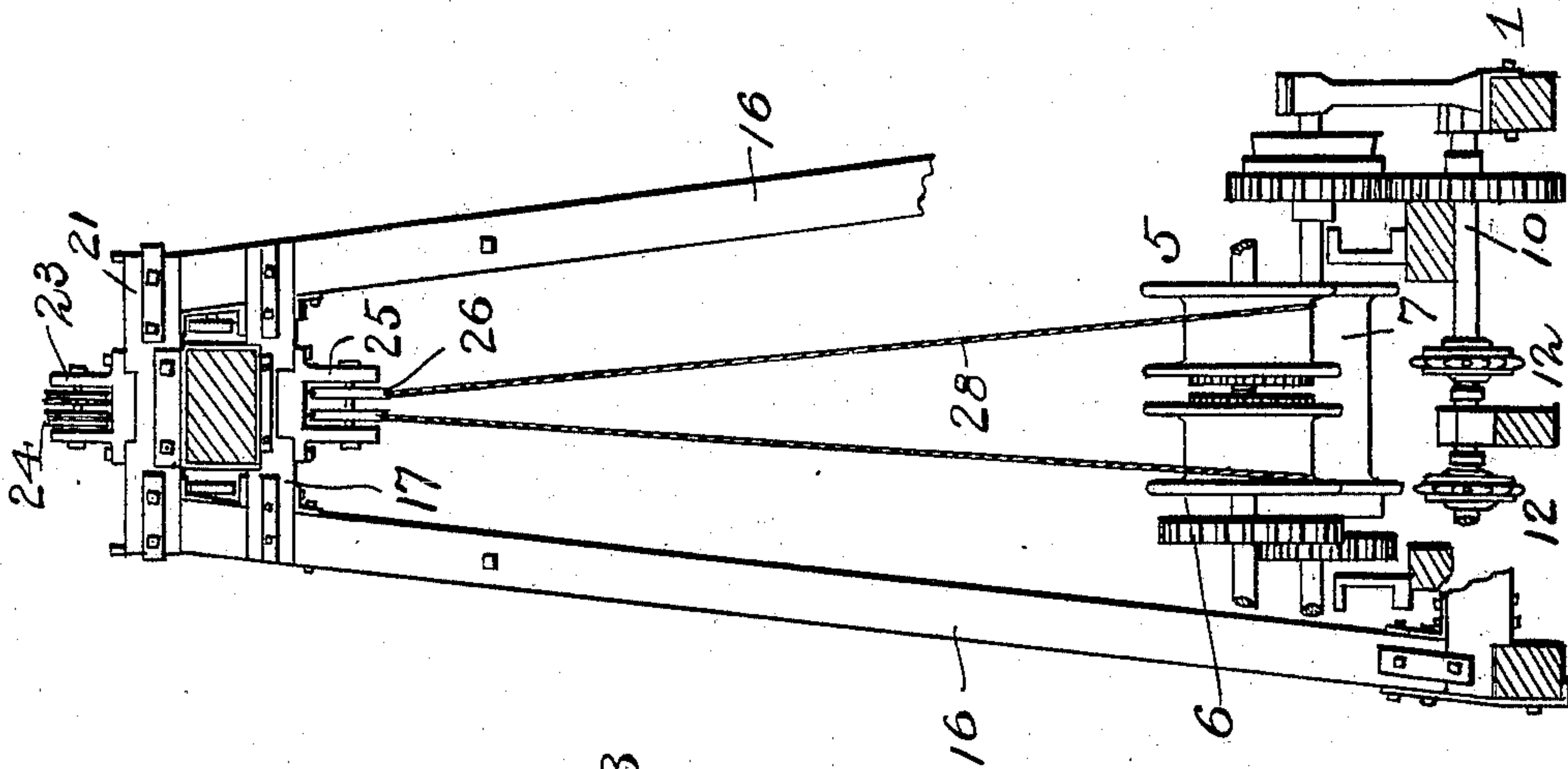
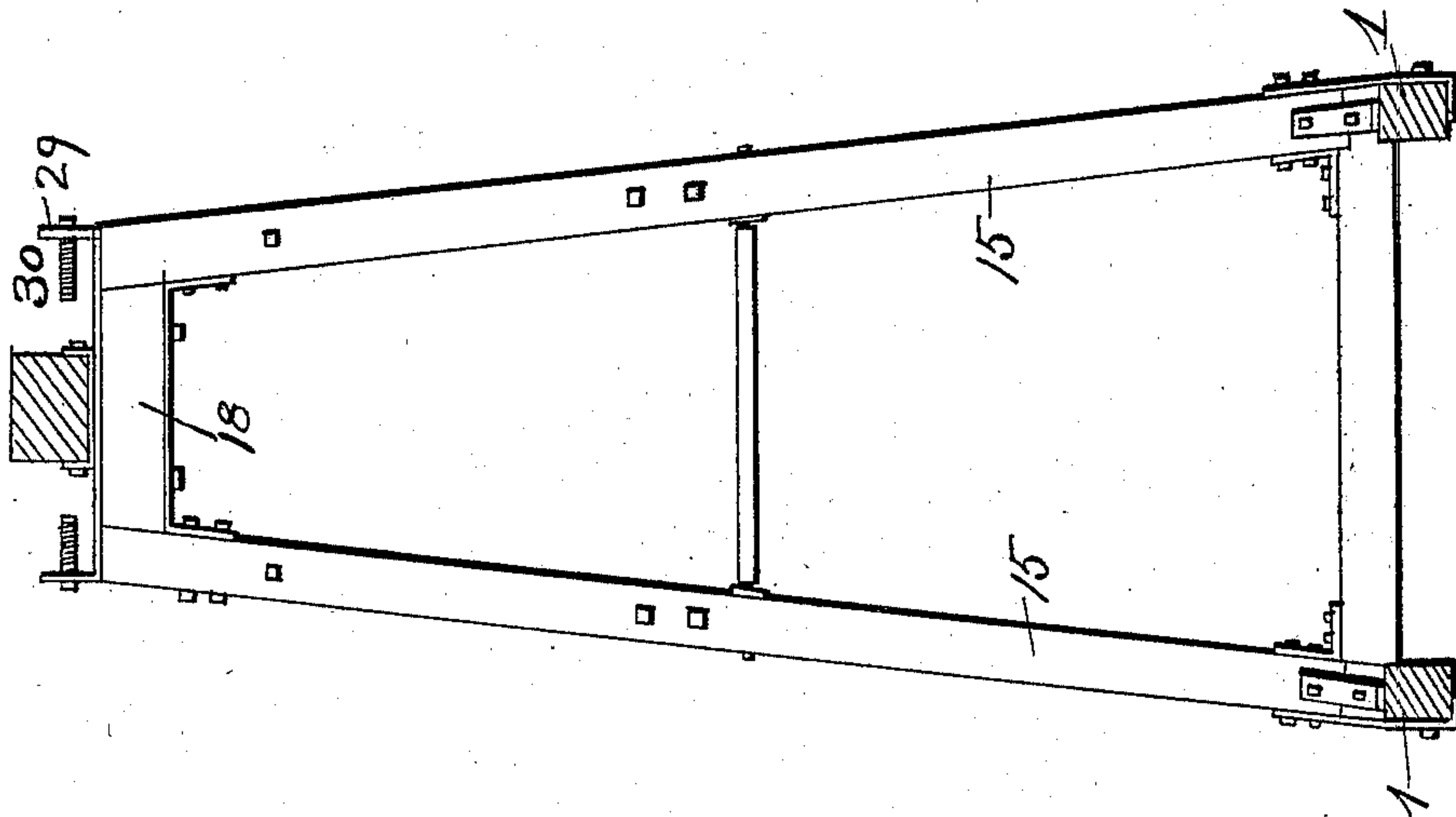


Fig. 3.

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UNITED STATES PATENT OFFICE.

WILLIAM ANDREW FLETCHER, OF BEAUMONT, TEXAS.

LOG-HAULING LOCOMOTIVE.

SPECIFICATION forming part of Letters Patent No. 605,413, dated June 7, 1898.

Application filed October 22, 1897. Serial No. 656,048. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM ANDREW FLETCHER, a citizen of the United States, and a resident of Beaumont, in the county of Jefferson and State of Texas, have invented certain new and useful Improvements in Log-Hauling Locomotives; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to log-hauling locomotives adapted to travel on an ordinary railway and provided with means whereby logs or other objects may be pulled or conveyed to a common point in close proximity to the track.

The object of the invention is to provide an improved construction of locomotive for hauling logs or other objects or material of any description, whereby the guys can be quickly adjusted to the pulling-in crane, the strain equally distributed, and the machine generally rendered more efficient in operation.

The invention consists in the novel construction and combination of parts herein-after fully described and claimed.

In the accompanying drawings, Figure 1 is a side elevation of a locomotive constructed in accordance with my invention. Fig. 2 is a plan view of the same. Fig. 3 is an end view. Figs. 4, 5, and 6 are detail views.

In the said drawings the reference-numeral 1 designates the platform of the locomotive, provided with axles 2 and flanged wheel 3, mounted upon trucks of any ordinary or suitable construction. Mounted upon said platform is a steam-boiler 4, provided with an engine, (not shown,) which engine is provided with two drums 5 and 6 on the same driving-shaft for tightening the guy ropes, chains, or cables and with two drums 7 and 8, with which the chains for pulling in the logs or other objects are connected. The said engine is provided with suitable mechanism for throwing the drums into and out of operation; but as they form no part of the present invention illustration of the same is not necessary.

The numeral 9 designates a water-tank secured to the platform.

Secured to a transverse axle 10 underneath the drum 8 are two sprocket-wheels 12, which are connected by sprocket-chains 13 with sprockets 14 on the front and rear axles, respectively.

At the front end of the platform is a frame comprising the front shears 15 and rear shears 16. These shears consist of two upwardly-extending inclined beams, the lower ends of which are secured to the platform and the upper ends connected by transverse beams 17 and 18. Said shears are connected and braced by suitable brace-bars. Resting upon said beams 17 and 18 is a forwardly-extending crane 19. The rear end of this crane is pivoted to a hollow pin 20, which passes there-through and has its lower end secured to beam 17 and its upper end secured to an upper cross-beam 21. Secured to said upper beam 21 is a bracket 23, in which is journaled two grooved sheaves 24, the rear sides of which are in alinement with said hollow pin. Secured to the lower beam 17 is a similar bracket 25, provided with grooved sheaves 26, the front sides of which are alined with said hollow pin. At the front end of the crane are two grooved sheaves 27 at an angle to the sheaves 24.

The numeral 28 designates guys consisting of ropes, chains, or cables, which are connected, respectively, with the drums 5 and 6. These guys pass up in front of the sheaves 26, engaging with the grooves thereof, then up through the hollow pin, and thence up in rear of and over the sheaves 24, from whence they extend forwardly to and around the angle-sheaves 27, and from thence are carried downward and secured to a tree, stump, or other object. By operating the drums the guys are drawn taut, so that the crane is securely held in position. The cross-beam 18 is provided with brackets 29, provided with spring-actuated buffer-pins 30 to take up the shock of the crane when it is turned on its hollow pivot-pin. Connected with the front end of the crane are sheaves 31, around which pass hauling chains or cables 32, connected with the drums 7 and 8, respectively. The free ends of these chains are provided with grapples 34 of any suitable construction.

The operation is as follows: The winding-drum being thrown out of operative condition, the locomotive may be propelled by the engine and the sprocket gears and chains to any point desired on the track. Said gears are then thrown out of operation and the guys secured to trees, stumps, or other stationary objects and are drawn taut by the drums, with which they are connected. The crane being pivoted to the frame, its front end can be swung to the right or left, as desired. By means of the hollow pivot-pin and the location of the sheaves 24 and 26, whereby they engage with opposite sides of the guys and the angle-sheaves, the strain in hauling in the logs, as hereinafter described, will in a great measure be taken off the crane and be sustained by the guys. The hauling-chains are then connected with the logs by means of the grapnels, and the drums 5 and 6 being operated the logs will be hauled into close proximity to the locomotive.

It will be seen from the above that the guys can be quickly adjusted and tightened, securely holding the crane against turning on its pivot, also aids in supporting it against the downward pull of the hauling-ropes.

Having thus fully described my invention, what I claim is—

1. In a log-hauling locomotive, the combination with the platform, the connected shears and the crane, of the hollow pin secured to the rear shears, passing through said crane, the sheaves connected with said shears above and below the crane, the sheaves at the front of the crane at an angle to the sheaves connected with the shears, the guys passing around the sheaves connected with the shears, at opposite sides thereof and through the hollow pin, and around the sheaves connected with the cranes, and the drums with which

said guys are connected, substantially as described.

2. In a log-hauling locomotive, the combination with the platform, the connected shears, the crane, the hollow pivot-pin passing through said crane, the grooved sheaves connected above said shears above and below the crane and in different vertical planes, the sheaves at the front of the crane at an angle horizontally to the sheaves of the shears, the guys and the drums to which they are secured, of the sheaves connected with the under side of the crane at the front end thereof, the hauling-chains, and the drums with which they are connected, substantially as described.

3. In a log-hauling locomotive, the combination with the platform, the axle provided with sprocket-pinions, the sprocket-chains, the transverse shaft, the sprocket-wheels thereon, the guy-rope drums mounted on a common shaft, the hauling-rope drums located in rear thereof and means for operating the same, of the connected shears, the crane, the hollow pin secured to the rear shears, passing through said crane, the sheaves connected with said shears above and below the crane, the sheaves at the front of the crane at an angle to the sheaves connected with the shears, the guys passing around the sheaves connected with the shears at opposite sides thereof and through the hollow pin and around the sheaves connected with the cranes, and the hauling-chains, substantially as described.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

WILLIAM ANDREW FLETCHER.

Witnesses:

THOMAS WHITMARSH CURLEY,
LE ROY PARKER.