

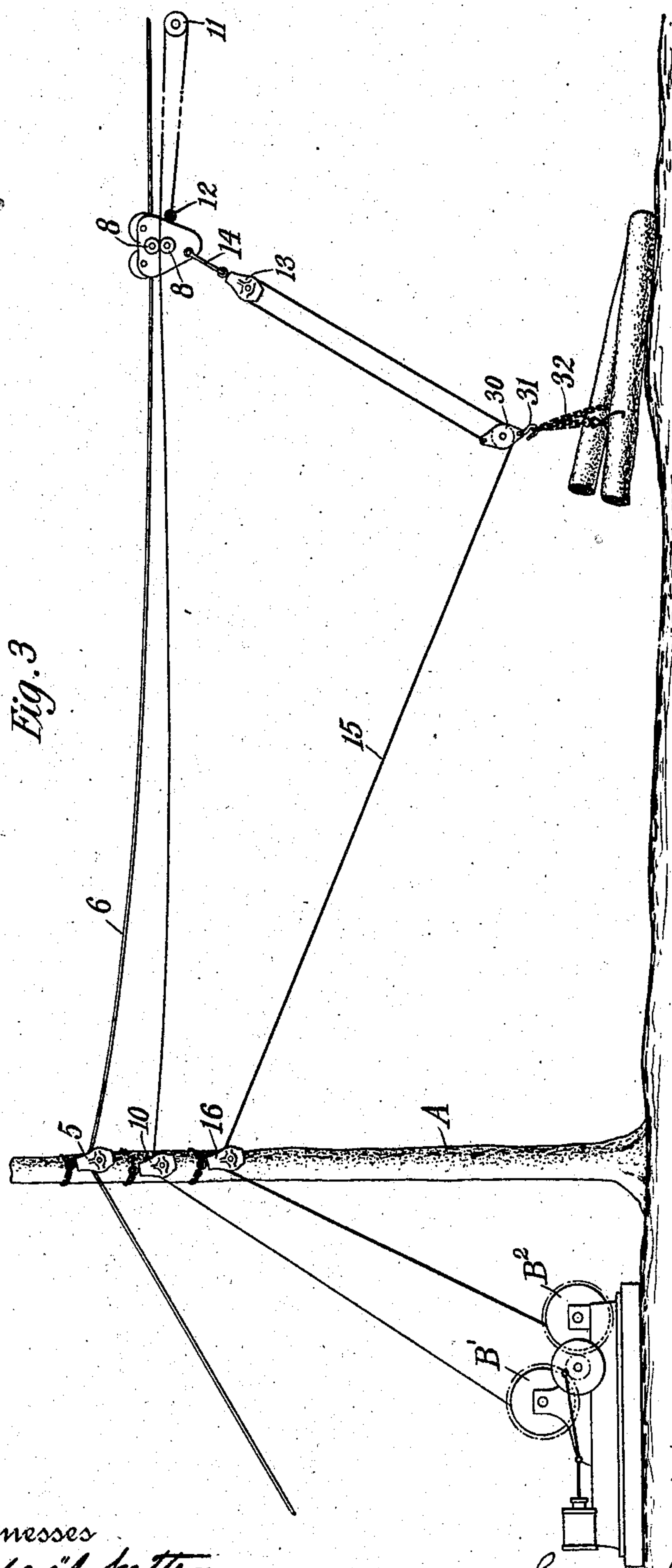
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J. H. DICKINSON.
HOISTING AND CONVEYING APPARATUS.

APPLICATION FILED JUNE 27, 1905.

2 SHEETS—SHEET 2.



Witnesses
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UNITED STATES PATENT OFFICE.

JOSEPH H. DICKINSON, OF MONTCLAIR, NEW JERSEY.

HOISTING AND CONVEYING APPARATUS.

No. 885,025.

Specification of Letters Patent.

Patented April 21, 1908.

Application filed June 27, 1905. Serial No. 267,194.

To all whom it may concern:

Be it known that I, JOSEPH H. DICKINSON, a citizen of the United States, and a resident of Montclair, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Hoisting and Conveying Apparatus, of which the following is a specification.

This invention pertains to hoisting and conveying means and has particular application to certain novel and useful improvements in logging apparatus.

In the present invention I have primarily in view the provision of a logging apparatus wherein sufficient slack may be maintained in the hoisting and skidding line to enable the gripping devices to be readily attached to the logs at a desired point. At the same time with my improvement I dispense with the use of one engine drum, for, as will be seen from the drawings, I may employ but two drums in connection with my apparatus, one for the out-haul or traction rope of the carriage, and the other for the hoisting and skidding rope. Heretofore it has been customary to employ a third drum for operating a slack pulling rope, and it is this drum which I by my improvement dispense with. I have also in contemplation the provision of a logging apparatus which will embody the desired features of simplicity, and durability and economy of installation and operation.

With these ends in view, my invention consists in the construction, combination and arrangement of parts set forth in and falling within the scope of the appended claims, and while I have herein shown and described a preferred embodiment of my invention, I wish it to be understood that I do not confine myself to all the precise detail which, for the purpose of illustration, I have delineated.

In the accompanying drawings like characters of reference indicate like parts in all the views; and Figure 1 is a view showing one form of my invention in condition for use; Fig. 2 is a detail view showing the pulley block accompanying two portions of the skidding line and maintaining a slack loop within the same; Fig. 3 is a view showing a slightly modified form of apparatus.

Referring now to the accompanying drawings in detail, the letter A indicates the head or spar-tree, carrying a sheave block 5 over which passes the main cable 6, such cable extending to the tail-tree (not shown.)

7 designates the conveyer carriage travel-

ing on said cableway and having at the sides thereof the small guide sheaves 8, 8, supporting the outhaul or traction rope 9. This traction rope, as will be seen, extends from the drum B' of the engine B upward to the sheave 10 at the head-tree and thence past the carriage 7 around the pulley 11 at the tail-tree and back to the carriage where it is secured as at 12. This carriage is provided with a pilot sheave 13 suspended therefrom by the connection swivel link 14. The hoisting and skidding line of the apparatus is designated by 15 and extends from the drum B², up over the sheave 16, and thence to the pilot sheave 13. The outer end of the skidding rope 15 is passed through the sheave 13 and at its end portion 17 is connected to the eye 18 secured to the frame 19 of the pulley block 20 so that, to all intents and purposes, the end of the line, after it has passed through the pilot sheave, carries this pulley block permanently suspended therefrom. Before running the rope 15 over the pilot sheave, it is passed under the pulley wheel 21 of the block 20, so that, as will be seen in Fig. 1, when the apparatus is completely installed the rope 15 is formed with a loop which is permanently maintained by the pulley block. In order to lock the rope to the pulley wheel 21, for the purpose of maintaining any desired length of loop, I have shown a locking means comprising a cam 22 pivoted at 23 in the frame of the block, and provided with an operating lever 24. The gripping device which in the present instance, is shown as a chain, may be suspended from the end of the block frame, opposite the pulley 21.

From the above description taken in connection with the accompanying drawings the construction and operation of the device will be readily apparent. Presuming the carriage to be at a position near the head-tree, if it be desired to haul the same outward for the purpose of skidding the log, the line 15 is unwound from the drum until a sufficient length of slack or loop is attained, when the lever 24 is moved to lock the wheel 21 fast against the run of rope passing over the same. The drum B' is then operated to wind the rope 9 and thus haul the carriage 7 outward along the cableway, the weight of the pulley block 20 and the gripping devices being sufficient to depress the rope 15 to bring the tongs near the ground as the skidding rope is unwound from the drum B². When the log has been reached, the winding of the rope 9

ceases and the lever 24 of the cam lock 22 is thrown to release the rope from the pulley 21. The gripping device is then attached to the log and the drum B² operated to wind upon the rope 15, thereby elevating the log the desired extent, inasmuch as the rope 15 is then free to run against the pulley 21. By inhauling upon the drum B² the skidding rope will be wound and the log may be drawn in toward the head-tree to any desired point of deposit.

In Fig. 3 I have shown a slightly modified form of construction, in this case the pulley block 30, maintaining the loop in the skidding rope, is shown as provided with a hook member 31, from which hook I suspend a plurality of gripping tongs 32. The operation of both the forms of device shown is the same.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. The combination of a cableway, a carriage traveling thereon, a traction rope for said carriage, a skidding rope, a drum for said traction rope, a drum for the skidding rope, and means carried adjacent to one end of the skidding rope and engaging with another portion of said rope on the opposite side of the carriage for maintaining slack in the skidding rope during the hauling of the carriage by the traction rope.

2. The combination of a cableway, a carriage thereon, a skidding rope connected to said carriage, and means for maintaining a slack loop in the skidding rope, such means comprising a pulley block secured to the end of the skidding rope and connecting such end with the main portion of the rope, and means for locking the pulley of the block against movement relative to the rope.

3. The combination with a trackway, a carriage traveling thereon, an outhaul rope for the carriage, a rope support on the carriage, a skidding rope extending through the rope support on the carriage, log-engaging means carried by the free end of the rope beyond the carriage, and means for connecting such free end of the rope back to the main portion of the rope.

4. The combination with a trackway, a carriage thereon, a traction rope for the carriage, a skidding rope forming a combined carriage inhaul and load-carrying rope, a drum for the outhaul rope, a drum for the inhaul rope, and means for forming a slack loop in the skidding rope.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOSEPH H. DICKINSON.

Witnesses:

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