

No. 768,402.

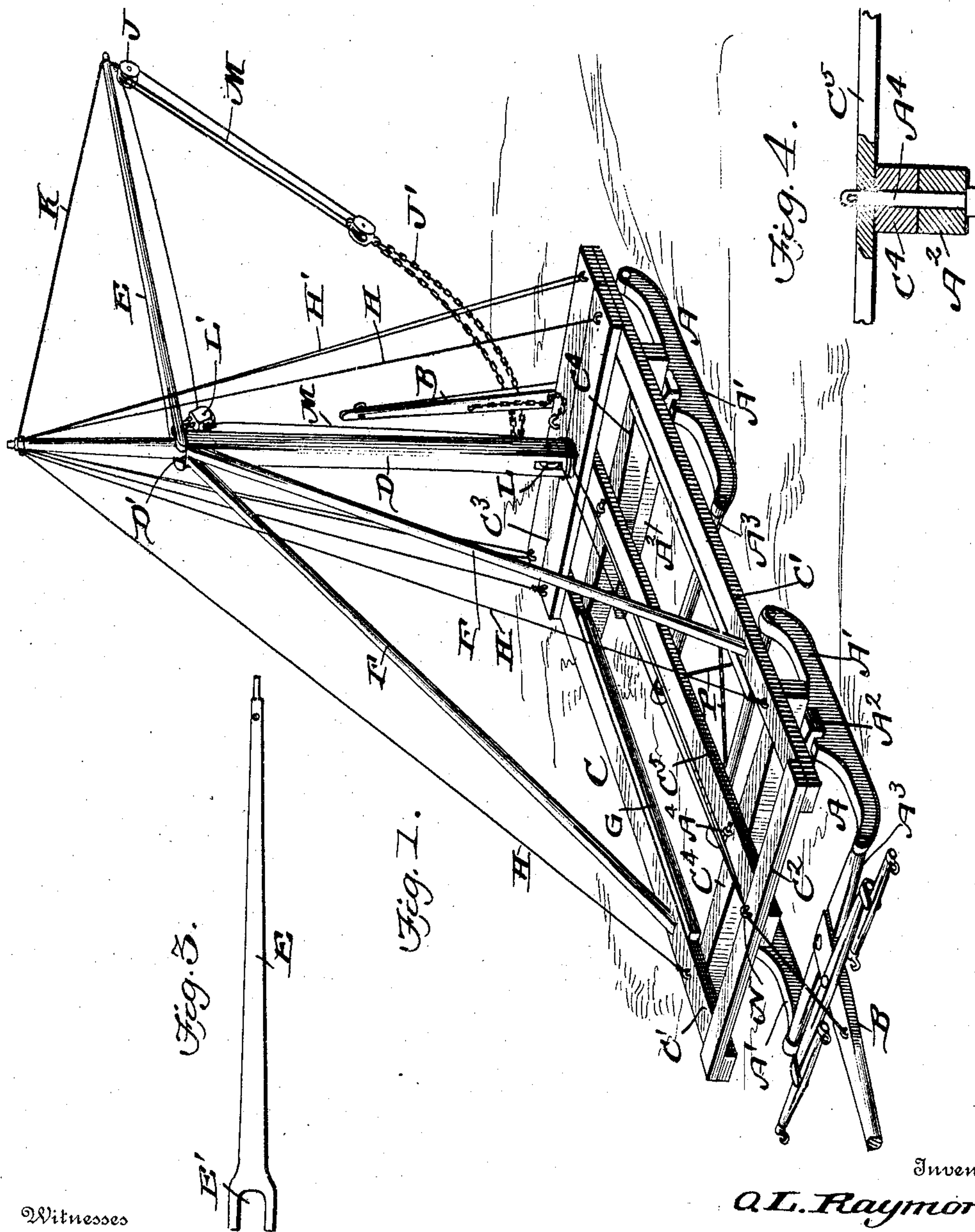
PATENTED AUG. 23, 1904.

O. L. RAYMOND.
LOG LOADER.

APPLICATION FILED NOV. 3, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



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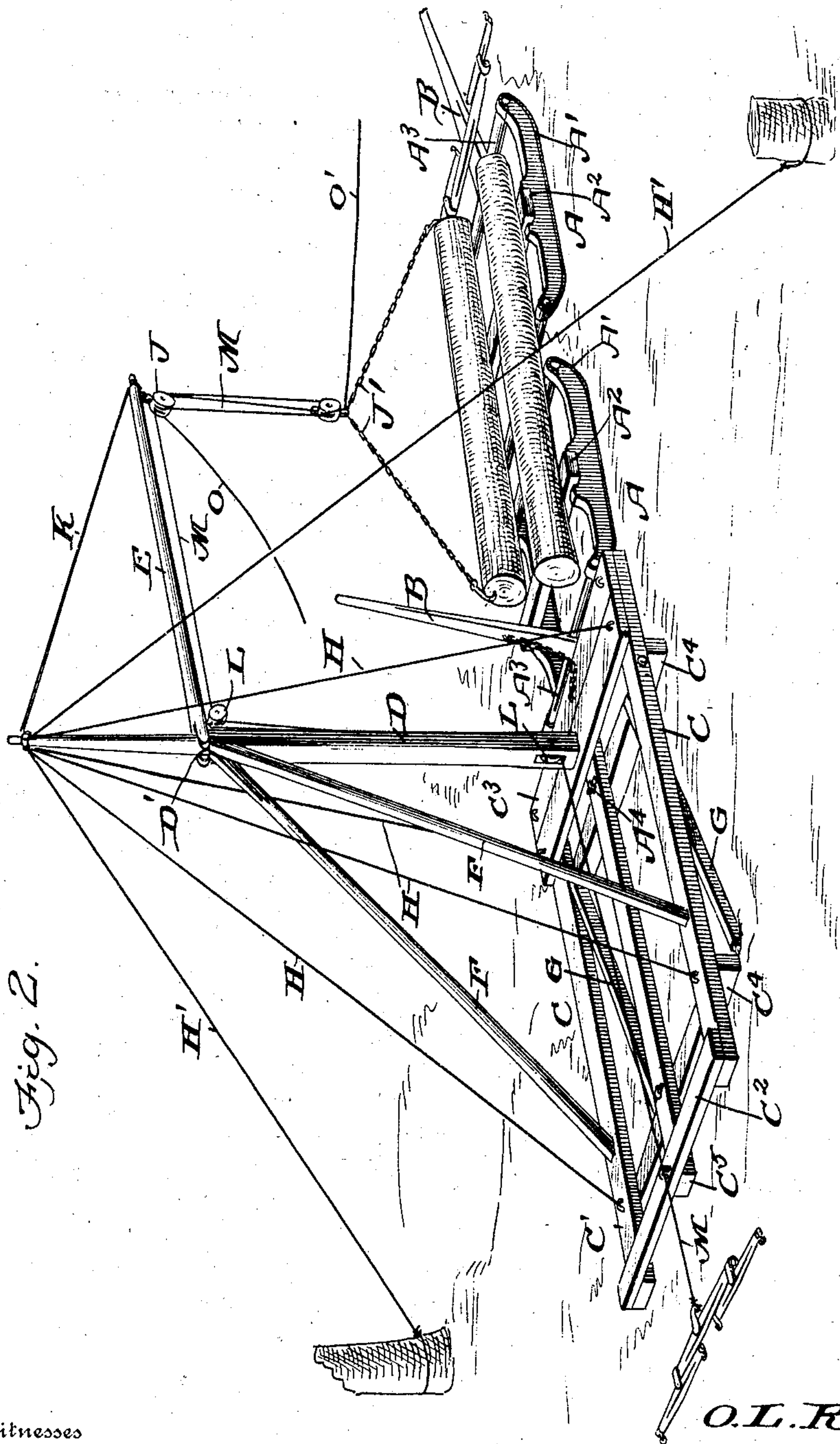


Fig. 2.

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UNITED STATES PATENT OFFICE.

OSCAR L. RAYMOND, OF BALLENTINE, MICHIGAN.

LOG-LOADER.

SPECIFICATION forming part of Letters Patent No. 768,402, dated August 23, 1904.

Application filed November 3, 1903. Serial No. 179,715. (No model.)

To all whom it may concern:

Be it known that I, OSCAR L. RAYMOND, a citizen of the United States, residing at Ballentine, in the county of Ontonagon and State of Michigan, have invented a new and useful Improvement in Log-Loaders, of which the following is a specification.

My invention relates to a device for loading logs on sleds and is adapted to be transported on runners from place to place.

The object of my invention is a portable logging-derrick by means of which logs may be picked up from either side of the sled on which they are to be loaded and placed in position on either the near or far side of said sled.

My invention consists in the novel features of construction and combination of parts hereinafter described, particularly pointed out in the claims, and shown in the accompanying drawings, in which—

Figure 1 is a perspective view of my improved derrick or log-loader. Fig. 2 is a perspective view showing the loader in operation. Fig. 3 is a plan view of a swinging boom. Fig. 4 is a detail view of construction, showing a king-bolt.

In the drawings, A represents the sleds, which are arranged tandem and comprise the runners A', a central cross-piece A², and suitable brace-rods A³, connecting the ends of the runners. One of these rods on each sled is rotatable, and to them are secured the poles B, adapted to be lifted into a vertical position, as shown in Fig. 1. These poles are at opposite ends of the device when the sleds are arranged tandem, so that the device may be drawn from either end, and it is not, therefore, necessary that it be turned around in order to move it from place to place.

Mounted on the sleds is a frame C, which frame comprises the side pieces C', an end piece C², a narrow platform C³ at the opposite end, and the under cross-pieces C⁴, a cross-piece C⁴ resting on each of the cross-pieces A². A king-bolt A⁴ pivotally connects the frame C to each of the sleds, the bolts passing through the cross-pieces A² and C⁴, the upper ends of the bolts projecting upward through a central longitudinal beam C⁵

and being perforated and held in place by a suitable key. By removing the key the bolts will drop out of place and the frame C may be readily removed from the sleds.

Arranged on the platform C³ is a derrick-standard D, reduced in its upper portion, a shoulder D' being formed at the lower end of the reduced portion. A swing-boom E is enlarged at its inner end and recessed to fit around the reduced portion, as shown at E' in Fig. 3, the inner end of the boom bearing on the shoulder D'. The boom tapers toward its free outer end and reduced at the end and also perforated adjacent the reduced end. The standard D is braced by the brace-rods F, which bear at their lower ends on the side pieces C'. To these side pieces are pivoted adjacent the platform C³, which is at the forward end, ends of brace-bars G, the free ends of these bars resting on the ground and preventing rear movement of the sled. The standard D is further braced and held rigid by suitable fixed guy-ropes H, and guy-ropes H' are also provided, by means of which the standard can be braced from either side by securing the ends of the ropes H' to stumps or trees, as shown in Fig. 2.

Connected to the free end of the boom is a block and tackle J, arranged in the usual manner, a pair of chains J', having hooks at their free ends, being carried by the lower block. The boom is braced by a cable K, connected at one end to the upper end of the standard D and having its lower forward end connected to the reduced portion of the boom, the cable first passing through the perforation, so that it is prevented from slipping off the reduced end of the boom. The lower portion of the standard is slotted, and a pulley L is arranged in the slot, and a block and pulley L' is arranged just under the boom adjacent its juncture with the standard. A cable M, forming a part of the tackle J, runs over the pulleys L' and L in the order named through an eye or staple N on the end piece C² and is connected to the pole B at that end of the device.

Suitable trees are pivotally connected to the pole, so that the device may be operated by horse-power, though, if desired, steam-

power may be used and the cable M wound on a drum in the usual manner. A rope O is attached to the boom, by which it is swung to the proper position over the logging-sled, and a rope O' is attached to the lower block of the tackle J, so that the chains may be drawn back after a log has been placed in position. When the device is being moved from place to place, the crotch-chains J' may be attached one to each of the front corners of the frame C, so as to prevent the boom from swinging from side to side. The two sleds used are also preferably connected by means of two chains P intersecting each other, as shown in Fig. 1.

In use the device may either remain on the sleds, as in Fig. 1, or it may be dismounted, as shown in Fig. 2, and the sleds used for the logs. When in operation, a man stands on the side opposite the skidway and by means of the rope O draws the boom to the proper position to place the log on the sled, and the log can be dropped either on the longitudinal center of the sled on the side nearest the skidway or it may be lifted over logs already on that side of the sled and lowered into position on the side farthest from the skidway.

When the log has been dropped into position and the hooks have been detached from the ends of the log, the chain J', and with it the boom E, is drawn back over the skidway by means of the rope O'.

It will be noted that this device is simple in construction, with but few parts and all of them essential, and that it is simple in operation and has no complicated trains of gears to break or get out of order.

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

1. A device of the kind described comprising a frame removably mounted on a plurality of runners, a standard on said frame, said standard being slotted adjacent its lower end, a pulley arranged in said slotted portion, a freely-swinging boom carried by said stand-

ard, a block and tackle carried by the boom, chains having hooks at their ends carried by the lower block, a pulley arranged adjacent the juncture of the boom and the standard, and a portion of said tackle running over the last-mentioned pulley and rearward over the pulley arranged in the slotted portion of the standard.

2. A device of the kind described comprising two sleds, said sleds comprising cross-pieces, rods connecting the ends of the runners, poles secured to a rod on each sled said poles extending in opposite directions, a frame having under cross-pieces resting on the cross-pieces of the sleds, a longitudinal beam carried by the frame, and king-bolts passing through the cross-pieces of the sleds and frame and through the longitudinal beam, means for holding said bolts in place, a derrick-standard supported by the frame, and means carried by said standard adapted to lift logs.

3. A device of the kind described comprising sleds arranged tandem, a rectangular frame removably arranged on the said sleds and serving to connect the sleds, a platform on the forward portion of the said frame, a standard mounted on the platform, said standard being reduced in its upper portion and having a shoulder formed at the lower end of the reduced portion, a boom having a recess formed at its rear end adapted to fit over the reduced portion of the standard and to turn on same, the said boom bearing on the shoulder carried by the standard, the boom being reduced adjacent its free end, a bracing-cable secured to the upper end of the standard and to the reduced portion of the boom, a block and tackle carried by the boom, crotch-chains carried by the tackle, means for swinging the boom horizontally, and means for bracing the standard, substantially as described, and for the purpose set forth.

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