(No Model.)

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J. DOLBEER.

LOGGING ENGINE.

No. 290,755. Patented Dec. 25, 1883.

Fig. 4.

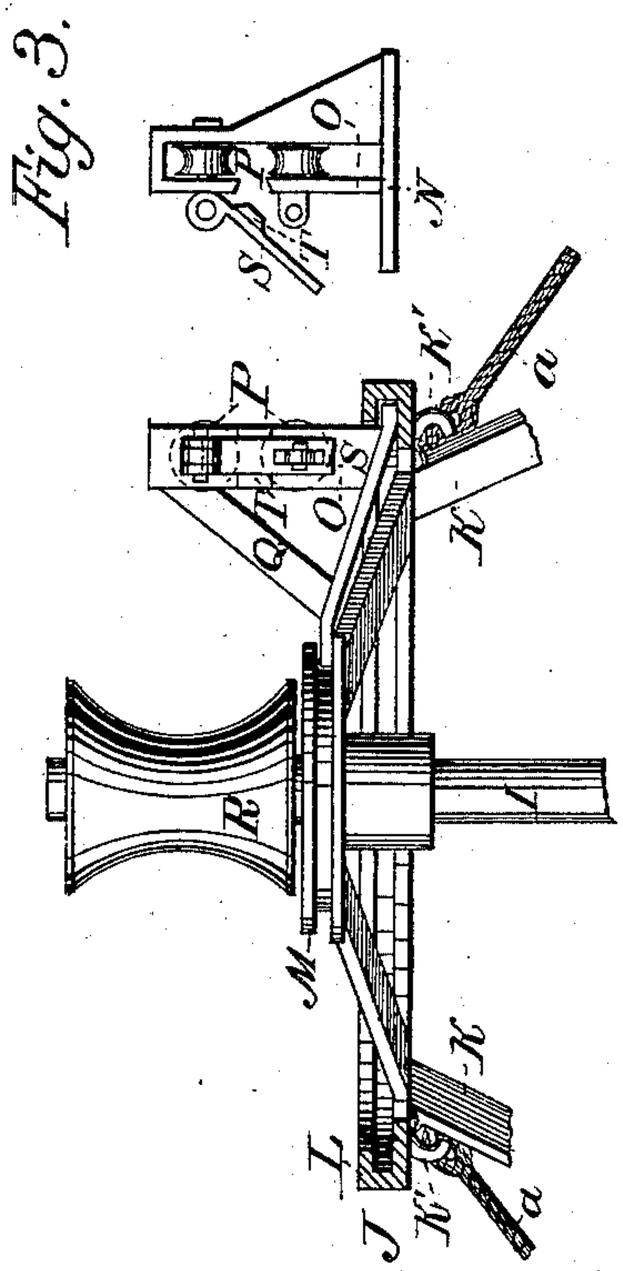

Fig. 1.

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J. A. Wood.

Inventor,
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attorneys

(No Model.)

2 Sheets—Sheet 2.

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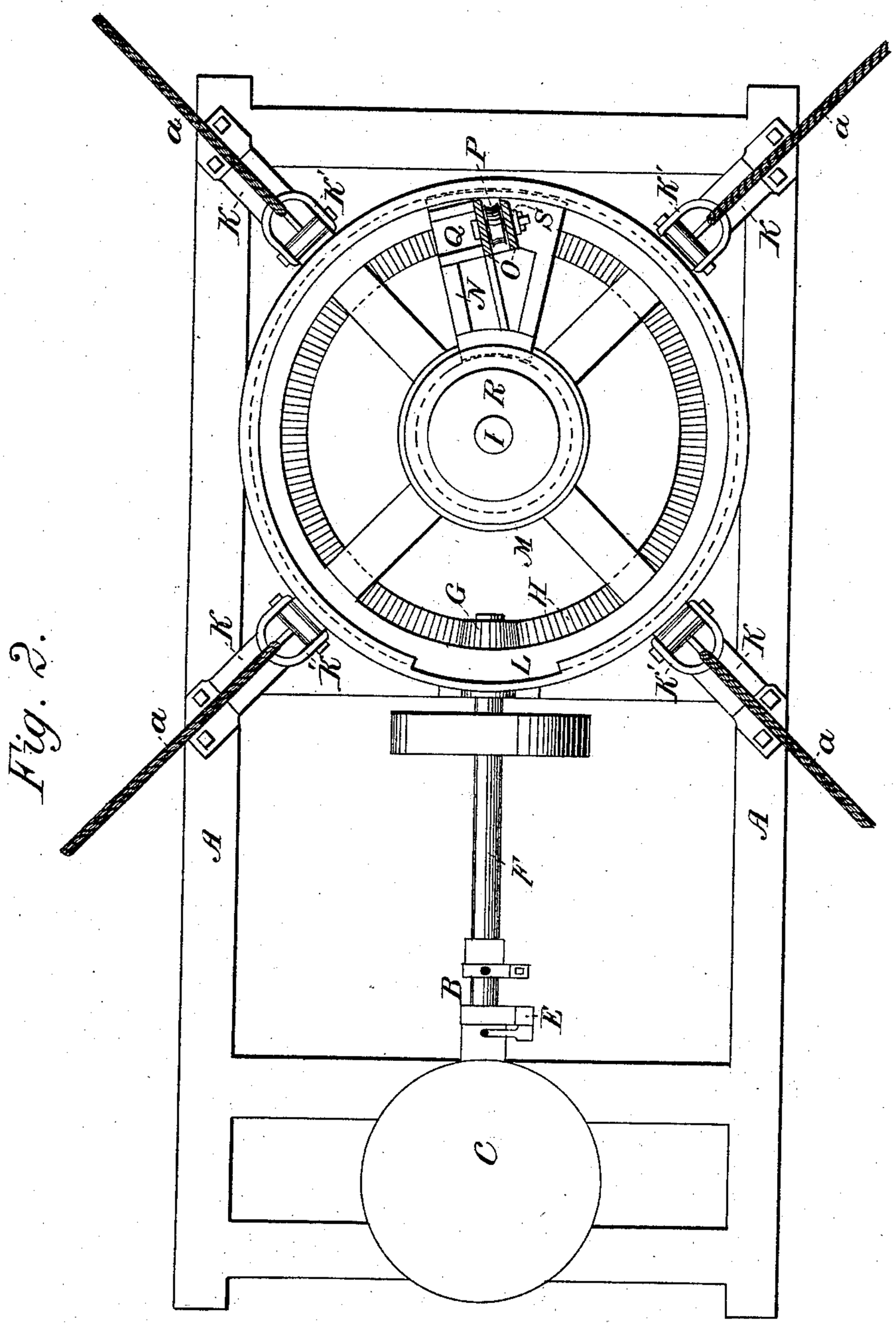

Fig. 2.

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UNITED STATES PATENT OFFICE.

JOHN DOLBEER, OF SAN FRANCISCO, CALIFORNIA.

LOGGING-ENGINE.

SPECIFICATION forming part of Letters Patent No. 290,755, dated December 25, 1883.

Application filed September 3, 1883. (No model.)

To all whom it may concern:

Be it known that I, JOHN DOLBEER, of the city and county of San Francisco, and State of California, have invented an Improvement in Logging-Engines; and I hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to a novel apparatus for moving logs or other heavy weights; and it consists of a vertical gipsy or winding device with gearing, by which it is connected with the engine, and a swiveling rope-guide, together with certain details of construction, all of which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 is a view of my engine and apparatus. Fig. 2 is a plan view, showing the arrangement of the rope-guide. Fig. 3 is a view of the guide opened to receive the rope. Fig. 4 is a section through the disk and an elevation of shaft and gipsy, and side elevation of the rope-guide.

A is a frame having an engine, B, and boiler C mounted upon it suitable for the work to be done. In the present case I have shown both to be of the vertical pattern, the connecting-rod from the engine being attached to the crank E upon the shaft F, which is thus driven from the engine. A bevel-pinion, G, is secured to the engine-shaft and engages with the teeth of a large horizontal bevel-wheel, H, which is fixed to a vertical shaft, I. This shaft turns in boxes upon the frame and on a raised circular disk, J, which is supported at a short distance above the frame and the gear-wheel by strong braces K, bolted to the frame, as shown. At each upper angle of the braces is fixed a strong shackle, K′, and guy-ropes *a* are secured to these shackles and lead to suitable anchors, so that the machine is prevented from upsetting when doing heavy work. This disk has a lip or flange, L, raised slightly above its upper face and projecting inward all around the outer edge, so as to form a horizontal circular channel beneath it. A stationary grooved ring, M, surrounds the central shaft just above the level of the disk J, and the rope-guide travels in these grooves. This rope-guide consists of a frame, N, which forms part of segments of circles fitting into the grooved ring M at the center and beneath the lip L at the periphery, radial arms joining the two. An upright yoke, O, receives the axle of the pulleys P, between which the rope travels, and a brace or braces, Q, extend from the top of the upright to the inner end of the frame N, the whole being cast in one piece and very rigid. Upon the upper end of the shaft I the gipsy R is received, and the rope is wound around this when it is rotated by the engine.

In order to introduce the rope between the pulleys P and keep it there, a plate, S, is hinged to the upper part of the yoke O above the opening through one side, and this plate has a block, T, fixed to it, which enters the slotted opening when the plate is closed down, thus closing it completely and preventing the rope from running off the pulleys. The plate S may be held by pin and staple or other suitable device. As the guide-frame is free to travel around in the channels or grooves at L and M, it will be seen that it adjusts itself to any position from which the rope may draw, but keeps the rope level, so that it is always delivered to the gipsy upon the same horizontal plane. By this arrangement of the vertical gipsy and the loose adjustable guide, it will be seen that the rope may arrive at the gipsy from any direction, and will not need guide-pulleys to direct it, nor is its range limited, as in the case of a horizontal gipsy, but merely those to keep it in its horizontal plane.

One side of the disk J may have the flange L cut out for a distance equal to the length of the outer segment of the frame N, so that the latter may be removed at any time by turning it around to this point, which, being in the direction of the boiler, would never be in the direction in which the rope would draw, and there would be no danger of its coming out while in use.

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

1. In a logging-engine having a portable bed or frame, a vertical shaft turning in journal-boxes and having a rope-winding drum or gipsy secured to its upper end and a bevel-gear wheel to its lower end, in combination with an engine and shaft having a bevel-pinion fixed to it and engaging with the teeth of the

gear-wheel, the whole forming an independent portable apparatus, substantially as herein described.

2. In a rope-winding apparatus, a winding drum or gipsy fixed to a vertical shaft, an engine by which power is produced, and intermediate gear and pinion by which the power is transmitted, in combination with a horizontal disk having central and peripheral guide-slots and a frame or standard traveling loosely in these slots and supporting rope-guiding pulleys, substantially as herein described.

3. In a rope-winding apparatus, a rope-winding drum fixed to a vertical shaft, an engine, and intermediate driving-gear, and a loosely-traveling rope-guide, as shown, in combination with a hinged plate, S, and block T, substantially as herein described.

4. In a logging-engine, a vertical rope-winding drum or gipsy, a driving-engine with intermediate connecting-gears, mounted upon a portable frame and having braces K, in combination with eyes or shackles K′, to receive guy-ropes to steady the machine, substantially as herein described.

In witness whereof I have hereunto set my hand.

JOHN DOLBEER.

Witnesses:
S. H. NOURSE,
H. C. LEE.