(No Model.)

W. V. ALLEN.

TRANSPORTING LOGS.

No. 504,191. Patented Aug. 29, 1893.

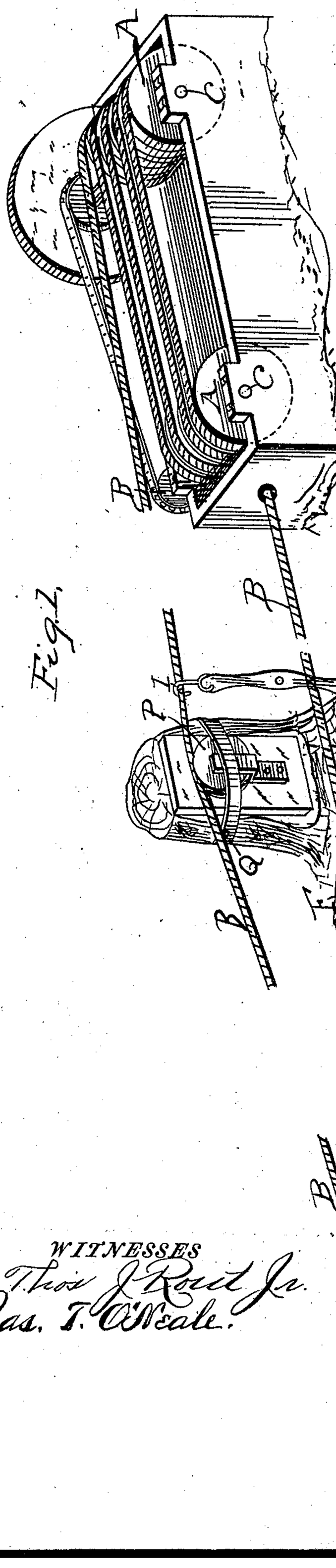

Fig. 1.

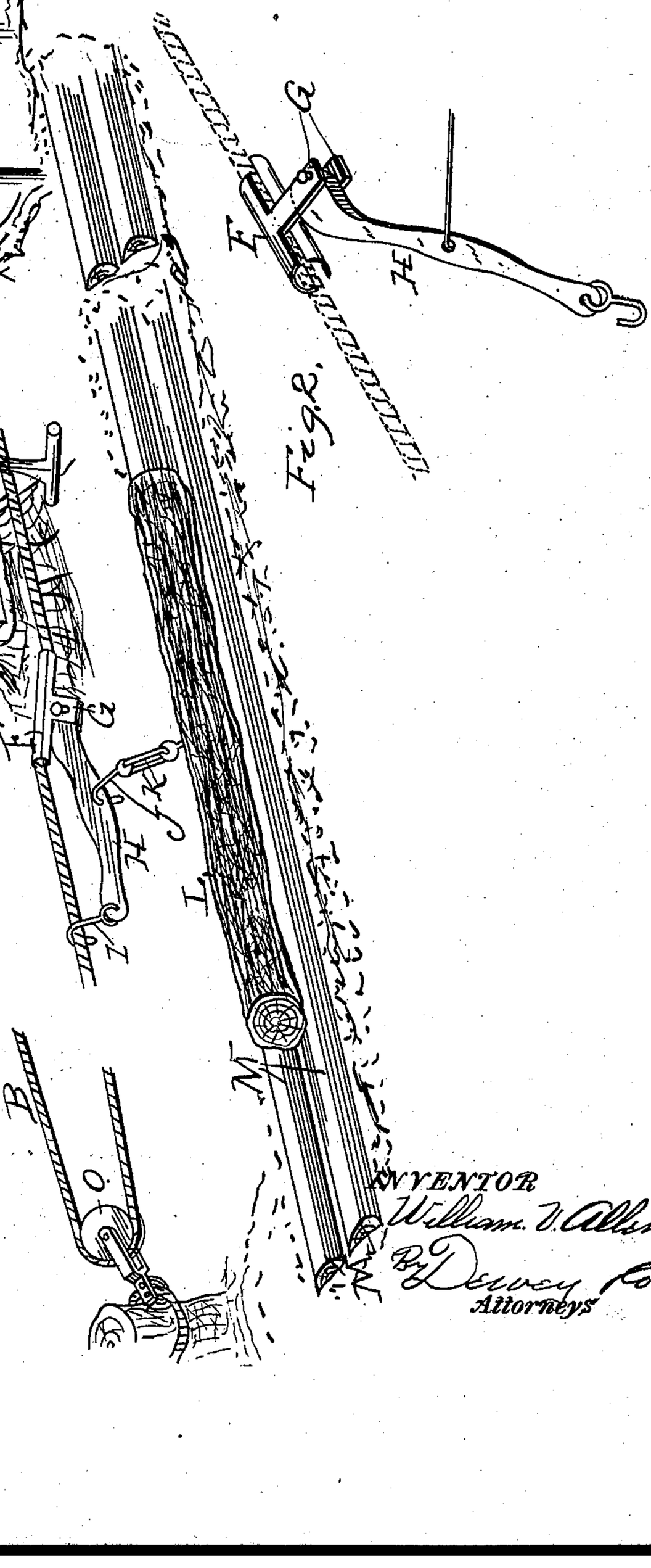

Fig. 2.

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UNITED STATES PATENT OFFICE.

WILLIAM V. ALLEN, OF CHICO, CALIFORNIA.

TRANSPORTING LOGS.

SPECIFICATION forming part of Letters Patent No. 504,191, dated August 29, 1893.

Application filed January 29, 1892. Serial No. 419,705. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM V. ALLEN, a citizen of the United States, residing at Chico, Butte county, and State of California, have invented certain new and useful Improvements in Apparatus for Transporting Logs; and I do hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to an apparatus which is especially applicable for the transportation of logs from the place where they are cut, to the mill or other point where they are to be used.

It consists of certain features of construction, and combination of parts of the same, which will be hereinafter described and claimed.

In the accompanying drawings: Figure 1, is a view of my apparatus, and Fig. 2, is a view of the clamping device.

In logging, the trees are often found in places which are almost or quite inaccessible, and it is extremely difficult to transport the logs after they are cut in proper lengths, to the mill or to the line of road over which they are to be transported. My invention is designed to overcome this difficulty, and to provide means for moving the logs from the place where they are cut to the mill, line of road, river, or other point where they are to be made available, without reference to gradients or other difficulties of the line.

A A are vertical grooved driving pulleys of which there is a sufficient number to give the proper grip and traction power to the cable B which passes around them. Power is supplied to the shaft C of one of these sets of pulleys by means of an engine or other available force, and the two sets of pulleys around which the cable passes are thus driven. In order to prevent the slippage which may take place between these parts, I employ gearing intermediate between the two shafts C C, or a sprocket wheel may be fixed upon each shaft and a chain passed around the sprocket wheel, so that power is transmitted from the engine directly to both shafts, causing them to rotate in unison. From this apparatus the cable B may extend as far as may be needed for the purpose, the distance being in some cases, several miles, and it may follow the undulations of the ground passing up hill, down, and over level places.

F, is a clamp which is adapted to grip the cable and it consists of two jaws, one of which has lugs G, between which the other jaw is guided. Between the lugs G, is a lever H which has a cam or eccentric at the end between the lugs, so that when the lever is turned in one direction, this cam or eccentric presses upon the movable lug, at the same time pulling the other toward it by means of the lug to which the lever is fulcrumed, so that the two jaws are forced to grip the rope with any desired pressure. By moving the lever in the opposite direction, the jaws are opened and the rope freed, and the clamp can be taken off the rope at any time by removing the fulcrum pin H′, and the movable jaw.

In order to hold the lever in place when it is clamped, I have shown a link I, the eyed end of which is secured to the lever, and the hook end supported by the cable, so as to hold the lever in position to maintain the grip of the jaws. J, is another link fastened to the lever at a suitable point, and having a short flexible rope, chain, or other connection to the end of which the dog K is fixed. This dog being firmly driven into the log, allows the power of the cable to be exerted to haul the log along. The log L is placed upon the ways N which are built parallel with the cable and are made sufficiently smooth so that the log will travel easily upon them.

By means of the flexible connections between the lever and the log, it will be manifest that while moving upon the level, or upon a hill, the power of the cable is directly applied to haul the log along, but if the log is moving down hill, where the grade is sufficient to allow it to move of its own momentum the loose connection will swing until the log has brought a tension upon it, in the other direction when it will act as a hold back, to prevent the log from moving too rapidly down grade. When the log reaches the point where it is to be disengaged from the hauling apparatus, the link I, is disconnected from the cable, and the lever is thrown back, and the grip loosened and removed from the cable, the dog knocked out of the log, and the apparatus is then hung by the link I, around

the opposite returning part of the cable to be carried back to the hauling point. The bight of the cable at the terminus, opposite the power, passes around a stout direction pulley O, suitably anchored at this point and the cable is thus returned upon itself as shown. It is understood that before the grips arrive at this pulley, which is at the end of the cable road, they are disengaged from the cable, and hooked upon the opposite returning part as above described.

Pulleys P, are attached and fastened to trees, stumps, or other suitable supports near the line of travel of the cable, which passes over these pulleys and is thus kept up off the ground so that the clamps are easily carried back upon the cable without dragging or catching upon the ground or upon other objects. At the point where each pulley is fastened, I have shown a curved guard Q, so fixed, that when the clamp or other article suspended from the cable reaches this point, the guard will force it to swing out to one side, clear of the pulley and thus prevent it becoming fouled by the pulley, the weight of the rope being sufficient to hold it in place in the groove of the pulley, when the hook end of the link is passing over the pulley. It will be manifest that the movement of the two parts could be reversed but there will be less friction, and the work will be more easily performed by hauling the logs toward the driving mechanism as herein described.

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

In a device for transporting logs, skids or ways adapted to follow the contour of the surface to be passed over, an endless traveling rope, with guiding and supporting pulleys, and one part approximately parallel with the guiding ways, a rope gripping device having a clamping lever, a link having at one end an eye, engaging the free end of said lever, and a hook to engage the cable, a dog to be fixed in the log, and a flexible connecting link secured to the dog, and the intermediate portion of the lever, and guards Q surrounding the pulleys, whereby the clamps which are hooked upon the rope to be returned, are prevented from fouling the pulleys, as specified.

In witness whereof I have hereunto set my hand.

WILLIAM V. ALLEN.

Witnesses:
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