

(No Model.)

W. SASS.
LOGGING CAR.

No. 514,499.

Patented Feb. 13, 1894.

Fig. 1.

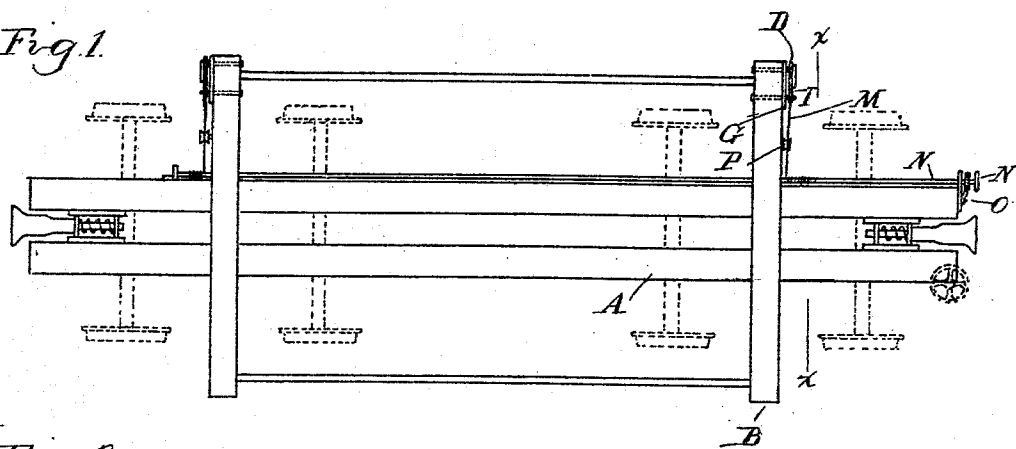


Fig. 2.

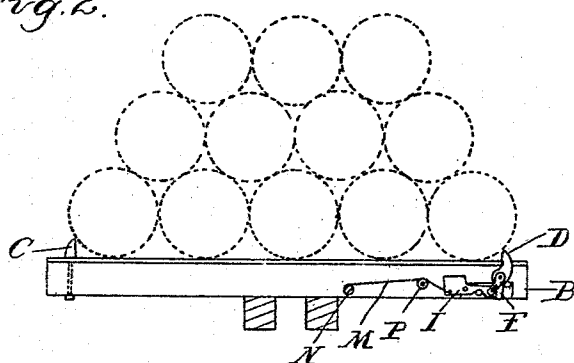
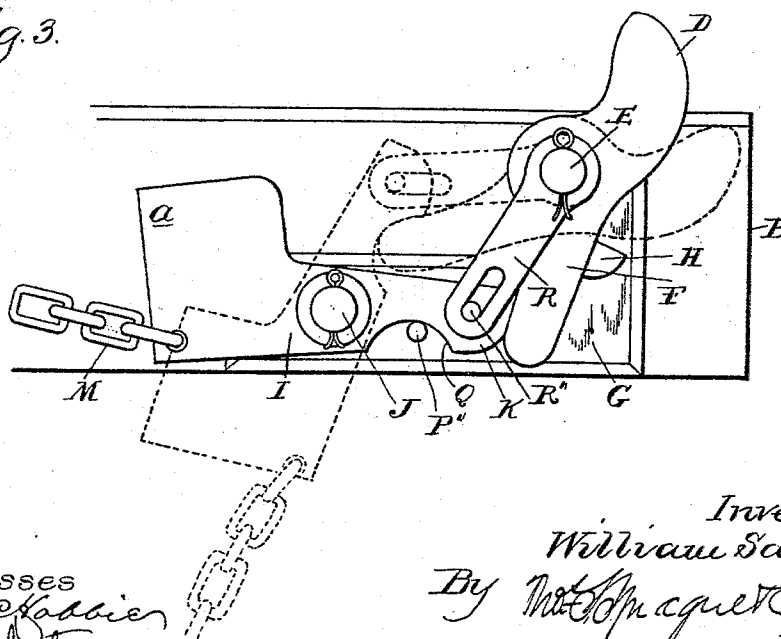


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM SASS, OF DETROIT, MICHIGAN.

LOGGING-CAR.

SPECIFICATION forming part of Letters Patent No. 514,499, dated February 13, 1894.

Application filed June 5, 1893. Serial No. 476,618. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM SASS, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Cars, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention consists in the peculiar construction of a side stake and actuating devices therefor, and is especially designed for use in connection with logging cars to which I have shown it applied.

My invention further consists in the peculiar construction, arrangement and combination of the various parts.

In the drawings, Figure 1 is a diagram plan view of a logging car with my improved stake applied thereto. Fig. 2 is a cross section on line $x x$, showing the stake and its actuating devices in elevation. Fig. 3 is an enlarged elevation of said devices, showing in dotted and full lines the different positions of the stake and its actuating mechanism.

The platform of the car I have shown as consisting of the sills A and the cross timbers or bunks B acting as a support for the logs, which I have shown in the usual loaded position in Fig. 2. At one end of the cross-timbers I preferably arrange stationary stakes C and at the opposite ends, the stakes D pivoted upon the pin E, and having an arm or extension F below the pivotal point.

G is a face plate on the side of the bunk which carries the pin E, preferably formed integral therewith and which also forms a wearing plate and supporting plate for the parts, being secured by bolts to the bunk.

H is a stop which limits the movement of the stake upward. When the stake is in this position it is held against movement by means of a lever I pivoted on the pivot pin J and having the abutting cam-shaped head K which bears against the extension F of the stake, as shown in full lines in Fig. 3. Secured to the rear end of this lever is the chain or cable M which at its other end is secured to the shaft N, extending longitudinally of the car, and provided at one or both ends with the hand wheel N', and a ratchet and pawl device O for holding it in its adjusted position. By turning this shaft the chain

will be wound about it, holding the lever I in the position shown in full lines, in Fig. 3, blocking the stake in its vertical position. 55

In order to give the necessary upward draft to the inner end of the lever I, the chain M is passed over a sheave P, the lever being drawn against a stop P'. One of these stakes is applied at the ends of each of the bunks, as shown in Fig. 1, and a single shaft N operated from the end of the car controls both. 60

To unload the car it is run as usual upon the transversely inclined track which tips the car toward the stakes D. The operator then standing at the end of the car raises the pawl from the ratchet wheel and allows the shaft N to unwind, thereby releasing the tension of the chain M. The lever I is weighted as by a weight a and as soon as its holding chain is released that lever will turn about its pivot, its end being withdrawn from the arm F of the stake, when the stake is free to turn about its pivot and rock to a position in which its upper end is beneath the side of the bunk, as shown in Fig. 3. I preferably arrange the stake at a point inside the car, so that when turned to the position, as shown in dotted lines in Fig. 3, its outer end will not project beyond the outer end of the bunk. The shoulder Q on the lever I acts as a stop for the stake, and the link R which is pivoted at one end upon the pin E and at the other end has a slot through which engages a pin R', acts as a stop for the lever I. This construction gives me a simple device with the requisite strength to sustain the load and yet when released clears the platform without danger of breakage, the stakes being controlled from the end of the car. 90

What I claim as my invention is—

1. In a logging car, the combination of the bunks, the stakes pivoted at the ends thereof, an extension of the stakes beyond the pivotal point, a locking lever pivoted beside the stake and adapted to abut against said extension, a link connection between the stake and locking lever and an actuating shaft for controlling the locking lever, substantially as described. 100

2. In a logging car, the combination with the bunks, of stakes pivoted at the ends thereof, an extension of the stakes beyond the pivotal point, a weighted locking lever pivoted beside

the stake, a cam shaped head on said locking lever abutting against the extension on the stakes, and means for actuating said lever, substantially as described.

5 3. In a logging car, the combination of the bunks, the stake pivoted near the end thereof, the extension F on said stakes below the pivotal point, the locking lever J pivoted beside the stake and adapted to abut with its end
10 against the extension of the stake, the shaft extending longitudinally of the car, having a hand wheel at the end of the car a ratchet and pawl device for locking the shaft in its adjusted position, and the chains M extend-
15 ing from the end of the levers I to the shaft and adapted to be wound about the same, substantially as described.

4. In a logging car, the combination with the

bunks, the plate G secured to the side thereof near the end, the stake D pivoted on said 20 plate, the extension F of the stake, the lever I adapted to abut against said extension, the links R and means for actuating said lever I, substantially as described.

5. In a logging car the combination with the 25 bunks, of stakes pivoted at the ends thereof having extensions beyond their pivotal points, an actuating lever slidingly engaging the extensions on the stakes, and means for actuating said lever, substantially as described. 30

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM SASS.

Witnesses:

M. B. O'DOGHERTY,
OTTO F. BARTHEL.