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E. W. KLINGENSMITH & F. W. LANE.

LOG CAR STANDARD.

APPLICATION FILED MAY 14, 1903.

NO MODEL.

FIG. 1.

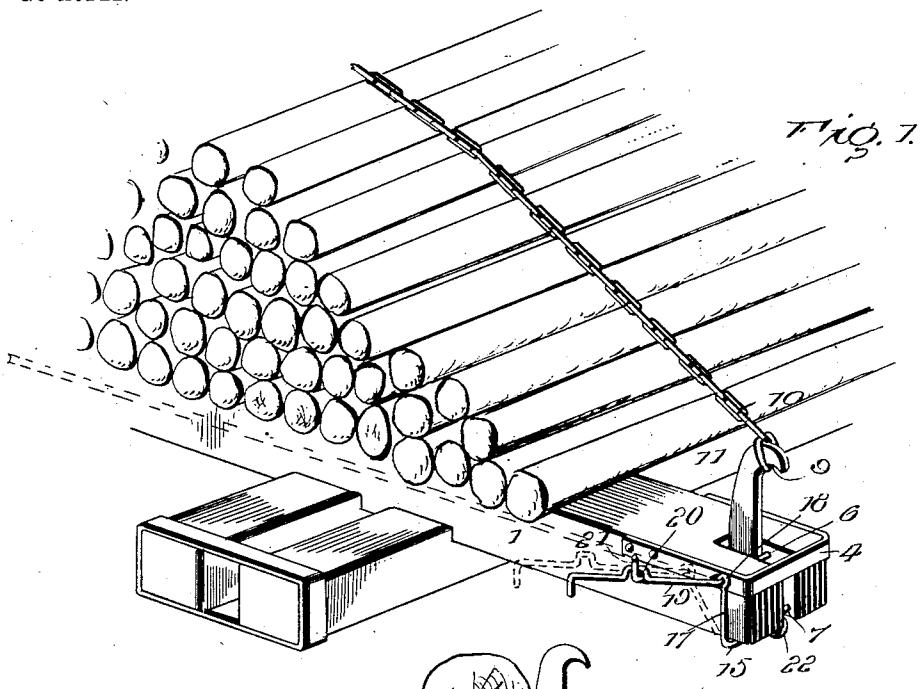



FIG. 6.

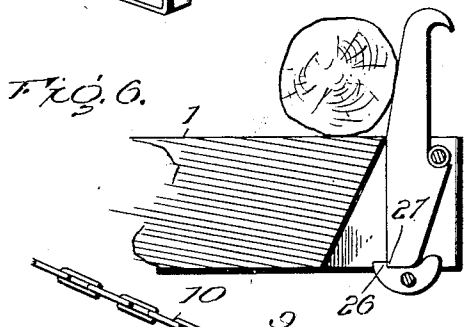



FIG. 4.

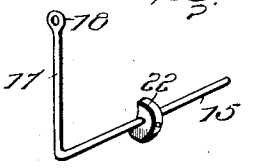



FIG. 2.

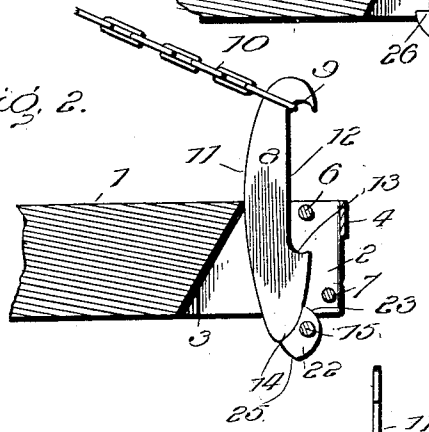



FIG. 3.

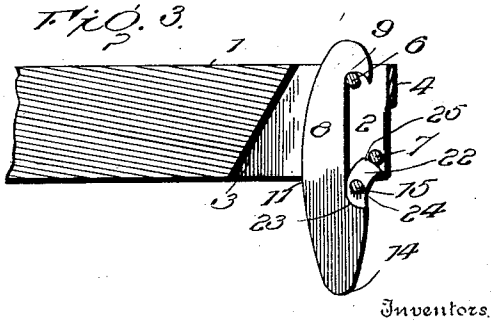
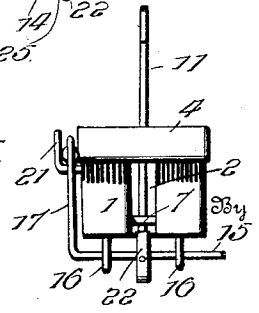



FIG. 5.




Witnesses

E. M. Brandt

F. M. Smith

Inventors.

E. W. Klingensmith

Frederick W. Lane

By E. M. Bond

Attorney

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 750,659. Patented January 26, 1904.

# UNITED STATES PATENT OFFICE.

EDWARD W. KLINGENSMITH AND FREDERICK W. LANE, OF CENTURY, FLORIDA.

## LOG-CAR STANDARD.

SPECIFICATION forming part of Letters Patent No. 750,659, dated January 26, 1904.

Application filed May 14, 1903. Serial No. 157,151. (No model.)

*To all whom it may concern:*

Be it known that we, EDWARD W. KLINGENSMITH and FREDERICK W. LANE, citizens of the United States of America, and residents of Century, in the county of Escambia and State of Florida, have invented certain new and useful Improvements in Log-Car Standards, of which the following is a specification.

This invention relates to certain new and useful improvements in standards for log-cars; and it has for its objects, among others, to provide a simple and cheap construction of standard readily applied to the bunk and supported in position by means which when actuated trip the standard and allow it to drop through a space in the bunk, leaving the top clear for loading or unloading logs and the like. The standard is provided at its upper end with a hook which serves for the attachment of the logging-chain and also serves a further function—that of preventing the standard from dropping entirely out of the bunk.

The device which serves to support the standard in its operative position serves also in connection with said standard to lock the same when in its inoperative position.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be particularly pointed out in the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the numerals of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a perspective view illustrative of the invention. Fig. 2 is a vertical section through the bunk with the standard in its operative position, showing the attachment of the chain thereto. Fig. 3 is a vertical section showing the standard in its lowermost position. Fig. 4 is a perspective detail of a portion of the tripping means. Fig. 5 is an end view of the bunk, the standard, and its actuating means. Fig. 6 is a view similar to Fig. 2, showing a modified form of standard and cam-lug.

Like numerals of reference indicate like parts throughout the several views.

Referring now to the details of the drawings, 1 designates the bunk of a logging-car of known construction, except as hereinafter specified. This bunk is provided with a vertical recess 2, the inner wall 3 of which is inclined, as shown in Figs. 2 and 3, and for the purpose of strengthening the same at the slotted end we provide the metallic band 4, which embraces the end and two sides, as shown, and secured thereto by suitable means, as bolts 5 or the like. This band, however, may be in some instances omitted.

6 is a bolt or rod extending transversely of the bunk and traversing the slot 2 therein, while 7 is another bolt or rod, also extending transversely of the slot in the bunk, but in a plane somewhat forward of the plane of the bolt or rod 6, as seen clearly in Figs. 2 and 3. These transverse rods or bolts serve a function which will be hereinafter explained.

8 is the standard. It is formed at one end with a hook 9, which is adapted to be engaged by the end of the locking-chain 10, which may be of any well-known or approved form of construction. The rear face of this standard is curved, as at 11, while its front face is cut away or recessed, as at 12, which recess extends substantially two-thirds of the distance of the height of the standard, being formed at its lower end with a hook formed with a rounded socket or shoulder 13, and the extreme lower end of the standard below said recess is rounded, as at 14. The standard is thus formed with a hook near each end.

15 is a transverse shaft mounted in suitable bearings, as 16, depending from the under side of the bunk, beneath the slotted end thereof, and one end of this rod has the right-angled extension 17, as shown, which terminates in an eye 18, in which is suitably engaged the operating rod or lever 19, which is provided with the band or offset portion 20, as seen clearly in Fig. 1. Upon the side of the bunk is a pin 21 or the like, with which this offset portion or bend is adapted to be engaged, as seen in Fig. 1 by full lines, when the standard is in its uppermost or operative position.

22 is a cam-lug on the rod 15, the said lug

having a convex portion 23 and a concave portion 24 and a square end 25, all as seen clearly in Figs. 2 and 3.

In practice when it is desired to load or unload the logs the standard is in the position in which it is shown in Fig. 3, being lowered so that its hook 9 engages over the rod or belt 6, and the actuating-lever 19 turns so as to rotate the rod 15 to bring the cam-lug in the position shown in Fig. 3, with its convex portion 23 engaged in the socket 13 of the standard and its square shoulder 25 engaging beneath the transverse rod or bolt 7, so as to lock the standard in such position, it being understood that the offset portion or bend 20 is disengaged from the pin 21 and the parts assume the position as shown by dotted lines in Fig. 1. When it is desired to place the standard into its operative position, (that seen in Figs. 1 and 2,) the rod 15 is turned so as to disengage the cam-lug from the standard, when the standard is raised into the position in which it is seen in Figs. 1 and 2 and the rod 15 rotating them so as to bring the concave portion 24 of the said lug into engagement with the rounded portion 14 of the lower end of the standard, as seen in Fig. 2, and the parts are then thus locked by engaging the bend or offset 20 of the actuating-lever 19 over the bend 21, as seen by full lines in Fig. 1. The standard is thus locked in its uppermost or operative position, where it will be held until the actuating-lever 19 is disengaged from its locking-pin and moved so as to turn the rod 15 to bring the cam 22 into position to allow the standard to drop, the rear curved wall of the slot in the bunk providing for the necessary movement of said standard.

From the above it will be seen that we have devised a very simple novel form of standard, but that the same is durable and efficient for the purpose for which it is intended.

Modifications in detail may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages.

The invention is applicable to flat-cars, wagons, logging-sleds, and other vehicles.

The cam-lug may be of different form—for instance, as shown in Fig. 6, where it is shown as provided with a square shoulder 26 to engage the square end 27 at the rear of the standard, so as to hold the standard vertically until the same is tripped. When in its uppermost position, the convex portion 13 or shoulder of the standard is engaged beneath the cross pin or bolt 6, as seen in said Fig. 6.

What is claimed as new is—

1. In a car, a loosely-mounted standard having a hook near each end combined with means for locking it in either its operative or inoperative position.

2. In a car, a standard loosely mounted within a slot in the bunk, and having a hook near each end combined with means for supporting and locking it in its operative position and for supporting and locking it in its inoperative position.

3. In a car, a bunk, a standard having a hook near each end and loosely mounted within a slot and unattached to said bunk, and means for holding the standard in its uppermost or lowermost position.

4. In a car, a standard mounted loosely within a slot and unattached to the bunk, combined with a rotatable shaft, and a cam-lug thereon to engage said standard.

5. In a car, a standard mounted loosely within a slot and unattached to the bunk, combined with a rotatable shaft, and a cam-lug thereon to engage said standard, said standard being hooked at one end.

6. In a car, a standard mounted loosely within a slot and unattached to the bunk, combined with a rotatable shaft, a cam-lug thereon to engage said standard, said standard being hooked at one end, and means traversing the slot in the bunk to engage said hook.

7. In a car, a slotted bunk, a standard having a hook near each end and mounted within said slot for bodily vertical movement, and means for supporting said standard either in its operative or inoperative positions and a tripping device for said means.

8. In a car, a slotted bunk, a standard having a hook near each end and mounted within said slot for bodily vertical movement, and means for supporting said standard in either its operative or inoperative positions, and a common means for locking it in either of said positions.

9. In a car, a standard mounted for bodily vertical movement in a slot in the bunk and having a hook at its upper end, a recess and a curved socket and convex lower end, and a cam-lug carried by a rotatable shaft and having a convex portion and a concave portion.

10. In a car, a standard mounted for bodily vertical movement in a slot in the bunk and having a hook at its upper end, a recess and a curved socket and convex lower end, a cam-lug carried by a rotatable shaft and having a convex portion and a concave portion, and a transverse rod traversing said slot.

11. In a car, a standard mounted for bodily vertical movement in a slot in the bunk and having a hook at its upper end, a recess and a curved socket and convex lower end, a cam-lug carried by a rotatable shaft and having a convex portion and a concave portion, and upper and lower transverse rods traversing said slot.

Signed by us at Century, Florida, this 11th day of May, 1903.

EDWARD W. KLINGENSMITH.
FREDERICK W. LANE.

Witnesses:
T. S. SAWEN,
A. N. PARKER.