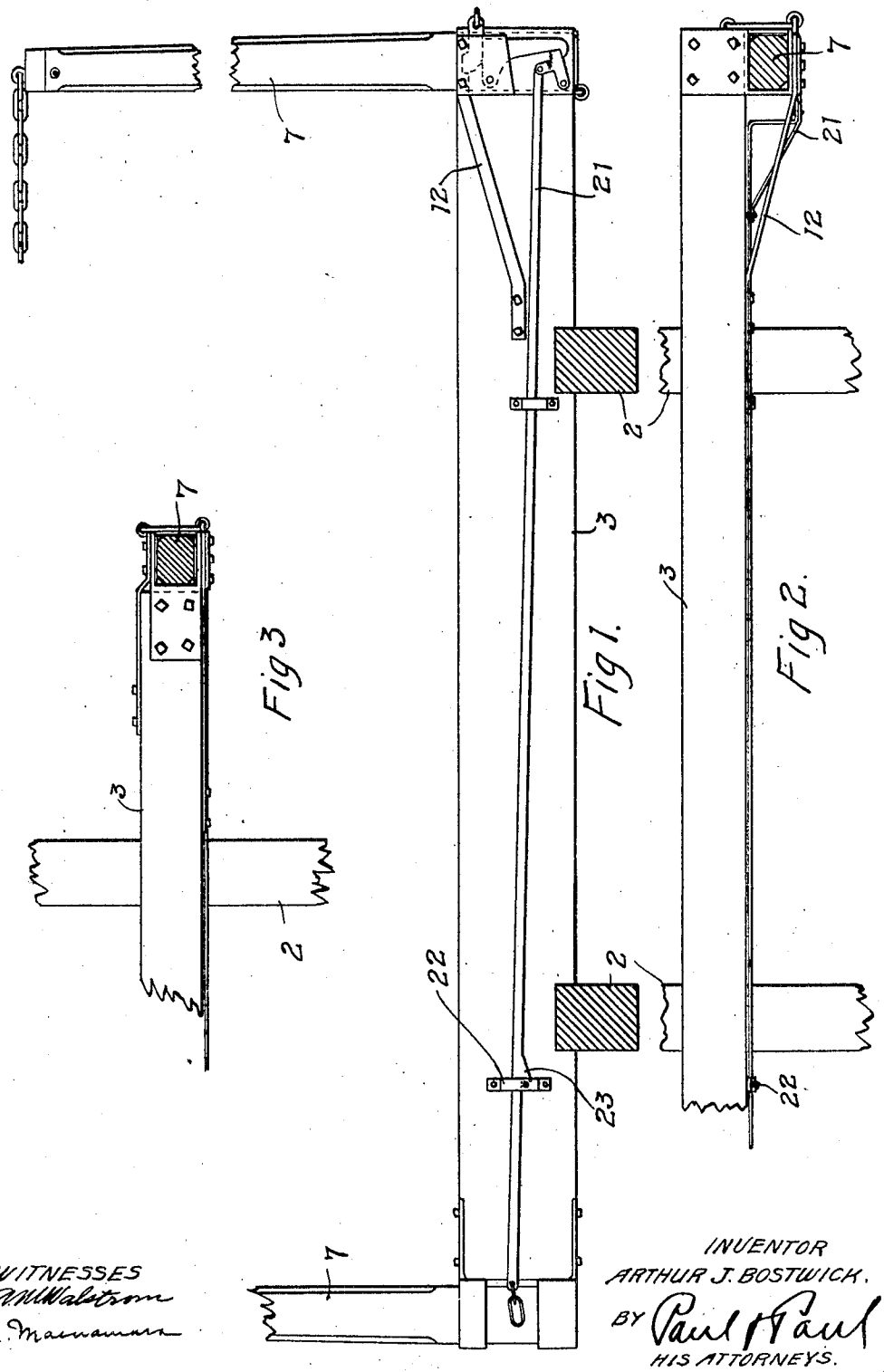
No. 844,775. PATENTED FEB. 19, 1907.

A. J. BOSTWICK.

STAKE HOLDER.

APPLICATION FILED FEB. 12, 1906. RENEWED NOV. 12, 1906.

2 SHEETS—SHEET 1.



WITNESSES
A. W. Walstrom
C. Marmann

INVENTOR
ARTHUR J. BOSTWICK.
BY Paul & Paul
HIS ATTORNEYS.

THE NORRIS PETERS CO., WASHINGTON, D. C.

No. 844,775. PATENTED FEB. 19, 1907.

A. J. BOSTWICK.

STAKE HOLDER.

APPLICATION FILED FEB. 12, 1906. RENEWED NOV. 12, 1906.

2 SHEETS—SHEET 2.

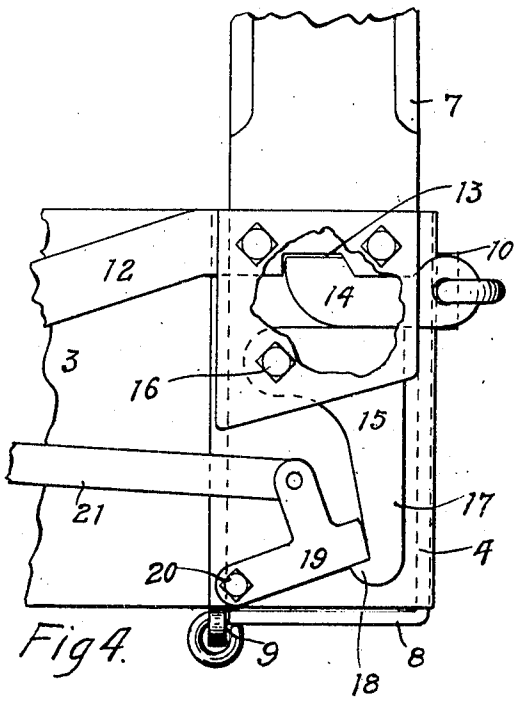


Fig 4.

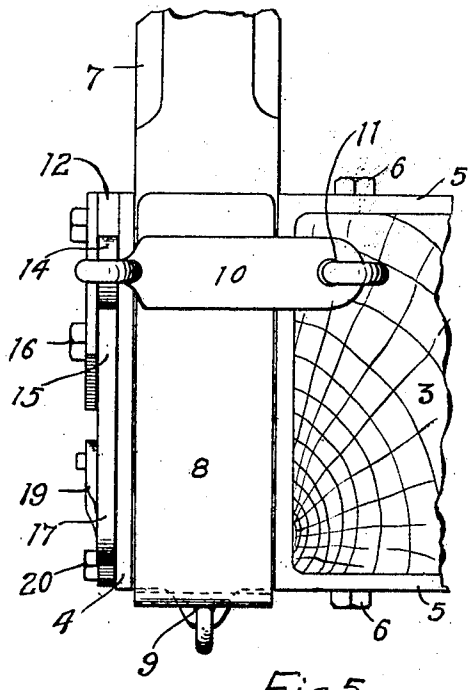


Fig 5.

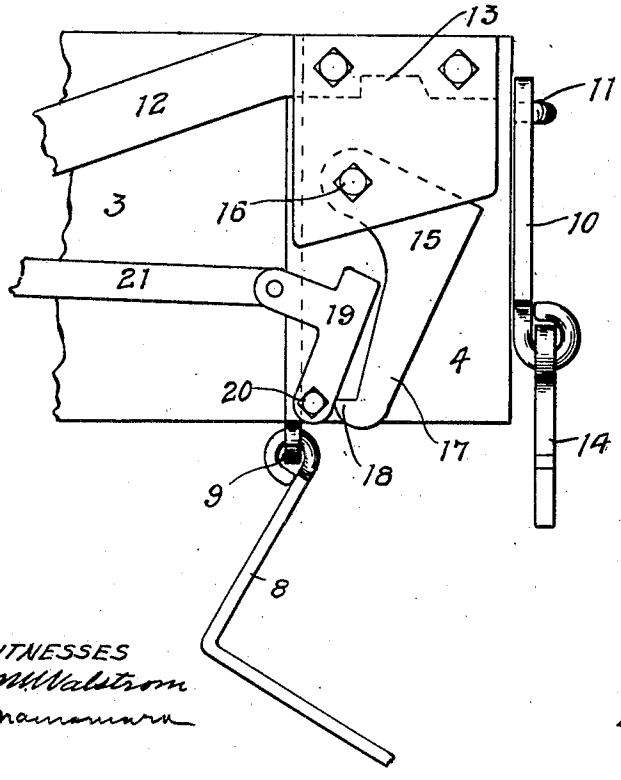


Fig 6.

WITNESSES

M. M. Valstrom

Marmaduke

INVENTOR

ARTHUR J. BOSTWICK.

BY Paul & Paul

HIS ATTORNEYS

THE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ARTHUR J. BOSTWICK, OF EAU CLAIRE, WISCONSIN.

STAKE-HOLDER.

No. 844,775. Specification of Letters Patent. Patented Feb. 19, 1907.

Application filed February 12, 1906. Renewed November 12, 1906. Serial No. 343,117.

To all whom it may concern:

Be it known that I, ARTHUR J. BOSTWICK, of Eau Claire, Eau Claire county, Wisconsin, have invented certain new and useful Improvements in Stake-Holders, of which the following is a specification.

My invention relates to stake-holders for use on logging sleighs or cars; and the object of my invention is to improve the stake-holder shown and described in Letters Patent of the United States, No. 807,082, issued December 12, 1905, to me and Cutler Lewis.

A further object is to provide means whereby the stake-holder can be released or unlocked from the opposite side of the sleigh or car.

The invention consists generally in various constructions and combinations, all as hereinafter described, and particularly pointed out in the claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a transverse sectional view of a logging sleigh or car frame, showing one of the bunks and my improved stake-holder mounted thereon. Fig. 2 is a plan sectional view of the same. Fig. 3 is a detail plan sectional view showing the box or holder mounted on the end of the bunk instead of the side thereof, as shown in Fig. 2. Fig. 4 is a detail view showing the stake-holder in its locked position and looking toward the side of the bunk and the holder. Fig. 5 is an end view of the bunk and holder illustrated in Fig. 4, also in its locked position. Fig. 6 is a view similar to Fig. 4, showing holder in its unlocked position.

In the drawings, 2 represents the longitudinal timbers of a sleigh or car, upon which a bunk or beam 3 is transversely arranged and whereon the logs are loaded in the usual way.

4 represents a stake-holder either of cast or sheet metal, as preferred, usually the latter, having flanges 5 rigidly secured to the end of the bunk by bolts 6 or other suitable means. This box or holder is flush with the end of the bunk and open on the side and bottom to allow the convenient insertion or discharge of a stake 7 therefrom. The open side and bottom of the box are normally closed by an angle-plate 8, hinged at 9 on the rear lower edge of the box, and adapted to swing upward and close the open side and the bottom. When released, the plate will swing down by gravity to the position shown in Fig. 6. A strap 10 is pivoted at 11 on the bunk and adapted to swing across the open side of the box and hold the plate 8 in its closed position therein. A brace 12 is secured to the top of the box at one end and to the bunk at its opposite end and is provided with a recess 13 in its lower edge, adapted to receive the hooked end of a latch 14, pivotally connected with the free end of the strap 10. A triangular gravity-lever 15 is pivoted at 16 on the side wall of the box or holder and is adapted to engage the lower edge of the latch 14 and hold it in the recess 13, thereby locking the strap 10 across the open side of the holder and preventing the fall of the plate 8 and the discharge of the stake. The lever 15 is eccentrically pivoted and has a depending end 17, provided with a toe 18. A latch 19 is pivoted at 20 on the holder and is adapted to engage the lower end 17 of the lever 15 and the toe 18 and hold the said lever in its locking position with its upper edge in engagement with the latch 14. In this position it will be impossible for the latch 14 to slip out of the recess 13 and allow the discharge of the stake from the holder. As soon, however, as the latch 19 is raised to release the lever 15 it will swing down by gravity to the position shown in Fig. 6, whereupon the latch 14 will also drop by gravity, and the strap 10 will swing out away from hinged plate 8 and allow it to drop and release the stake.

Any suitable means may be employed for tripping the latch 19; but I prefer to provide a bar 21, supported in a suitable guide 22 on the sleigh-bunk or car-beam and extending to the opposite end thereof to allow the operator to release the stake from the opposite side of the load, and thus avoid all danger incident to releasing the load while standing on the side toward which the logs are discharged. The rod 21 is provided with a lug 23, which normally engages the lower end of the guide 22 and locks the rod against lengthwise movement. Whenever desired, however, the rod may be swung upwardly to disengage the lug and allow the rod to be moved lengthwise to trip the latch 19. As indicated in Fig. 2, the rod 21 will be provided with a suitable offset where the holder is mounted on the side of the bunk or beam. When the holder is secured directly on the end of the bunk or beam, as shown in Fig. 3, the offset in the operating-rod will be unnecessary, the wall of the holder on which the latch 19 is mounted being flush, substan-

tially, with the side of its support. The construction of the holder shown in Fig. 3 is substantially the same as that of the one illustrated in the other figures.

The manner of using the stake-holder is as follows: The angle-plate 8 is raised to the position indicated by full lines in Figs. 4 and 5 and the strap 10 swung across the open side of the holder and secured, by means of the latch 14, to hold the said plate in position to close the side and bottom, and the stake is then inserted into the holder. The lower end of the stake will rest upon the plate 8 and will be braced against outward thrust of the lower end produced by the pressure of the skids on the upper end of the stake while the logs are being loaded. The plate also braces the stake when logs are piled on the chains connecting the opposite stakes. The gravity-lever device and the locking-latch 19 will form a positive lock for the latch 14, which cannot become accidentally released while the sleigh or car is in motion, but will operate quickly and surely to release the stake and allow the rapid unloading of the logs without danger to the operator when the latch 19 is tripped.

I claim as my invention—

1. A stake-holder having an opening in its walls of sufficient size to allow the discharge of a stake therethrough, means for preventing the discharge of a stake from said holder, a locking-latch connected with said means, a gravity-lever arranged to engage said latch and hold it in its locking position, and means arranged to be operated from the opposite side of the car for locking said lever or releasing the same, substantially as described.

2. A stake-holder having an opening in its side wall of sufficient size to allow the discharge of a stake therethrough, means preventing the discharge of said stake from said holder, a locking-latch connected with said means, a gravity-lever arranged to engage said latch and hold it in its locking position, said lever having a depending end provided with a toe, a lever-locking latch to engage said end and toe and lock said lever in engagement with said first-named locking-latch, and a longitudinally-movable rod connected with said lever-locking latch and extending to the opposite side of the car, substantially as described.

3. The combination with a sleigh-bunk, of a stake-holder mounted thereon and having an open side to permit the discharge of a stake therethrough, a strap arranged to extend across said open side and lock the stake therein, a latch pivotally connected with said strap, and having a hook at one end adapted to enter a recess on said holder, a gravity-lever arranged to engage said latch and lock it in said recess, and means arranged to be operated from the other end of the bunk for locking said lever, or releasing the same, substantially as described.

4. A stake-holder having an open bottom and side, and means for temporarily closing them, means extending across said open side for temporarily locking said closing means, a gravity-lever arranged to engage said locking means and hold it in its locking position, means for holding said lever in engagement with said locking means, and means for tripping said holding means, substantially as described.

5. A stake-holder having an opening in its walls of sufficient size to allow the discharge of a stake therethrough, means for preventing the discharge of a stake from said holder, a gravity-lever arranged to hold said means in its locking position and means arranged to be operated from the opposite side of the car for locking said lever or releasing the same.

6. A stake-holder having an opening in its walls of sufficient size to allow the discharge of a stake therethrough, means for preventing the discharge of a stake from said holder, means for holding said preventing means in its locking position, and a rod extending to the opposite side of the car and controlling the movement of said holding means, and said rod having suitable guides and a locking device to prevent premature longitudinal movement thereof, substantially as described.

7. A stake-holder having an opening in its side wall of sufficient size to allow the discharge of a stake therethrough, means preventing the discharge of said stake from said holder, a gravity-lever arranged to hold said means in its locking position, said lever having a depending end provided with a toe, a lever-locking latch engaging said toe and means extending to the opposite side of the car for operating said latch.

In witness whereof I have hereunto set my hand this 2d day of February, 1906.

ARTHUR J. BOSTWICK.

Witnesses:
C. L. TOLLES,
J. AMUNDSON.