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STAKE OR GATE HOLDER FOR TRUCKS

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Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

Fig. 5.

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By Lancaster Allen
To all whom it may concern:

Be it known that I, Leo E. Fisher, 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 Stakes or Gate Holders for Trucks, of which the following is a specification.

This invention relates to stake or gate holders for trucks and is particularly well adapted for use on motor trucks or vehicles whose body sides or end portions are constructed of the gate or rack type, or merely of a number of stakes.

Many motor trucks are now built of the above mentioned type, such as are commonly used for hauling lumber, barrels or boxes, live stock, etc., and it has often been the experience of drivers of such trucks to lose the sides or stakes when traversing a rough or bumpy road, thereby spilling part of their cargo, often breaking or entirely losing it, or losing the sides or stakes if travelling empty.

It is therefore the primary objects of this invention to provide novel means for holding these gates or stakes upon the deck or platform of trucks so as to prevent the falling out and losing of the same; and to provide holders which are easily and quickly unlocked and so retained as to permit both hands of a person to be used when removing the gate or stakes, and which will remain unlocked until released for further use.

Further objects of the invention are to provide a holder which may be applied to the stakes or gates of trucks, when they are manufactured, or may be manufactured complete and ready to be installed upon trucks already constructed and in use; and, which may be easily and cheaply installed and will be durable and efficient in use.

Further objects and advantages will appear in the following detailed description taken in connection with the accompanying drawings and in which drawings:

Figure 1 is a side elevation of a motor truck, such as ordinarily used, embodying the novel features of my invention as applied to stakes or gates when manufactured.

Figure 2 is an enlarged fragmentary side view of a gate showing the stake partly in section, and the holder in a locked position.

Figure 3 is a view similar to Figure 2, showing the holder in an unlocked position so that the gate or stake may be removed.

Figure 4 is a transverse sectional view, taken on the line 4—4 of Figure 2, showing the means whereby the holder may be held in an unlocked position.

Figure 5 is a transverse section taken on the line 5—5 of Figure 2.

Figure 6 is a side elevation of a motor truck similar to that shown in Figure 1, showing the holder as manufactured complete and applied thereto.

Figure 7 is an enlarged side view of one of the complete holders for application to a truck.

Figure 8 is a transverse section of the holder taken on the line 8—8 of Figure 7.

Figure 9 is a transverse section taken on the line 9—9 of Figure 7.

In the drawings, where similar characters designate corresponding parts throughout the several views, the letter A indicates a truck of any ordinary or preferred type including a deck or platform B, and a gate or rack C forming the sides of the truck and including rails D and stakes E; F the holder carried by the stake E for securely locking the gate C to the platform B; and H carrier for the holder F secured to the gate C for holding the same securely to the platform B as illustrated in Figure 6.

The deck B of the truck A may have attached thereto stake sockets or brackets 12 of an approved size and shape into which the lower portions 13 of the stakes E are fitted. In the example shown, the downward movement of these stakes E is limited by the bottom rail D' of the gate C.

Referring to the form shown in Figures 1 to 5 inclusive, wherein the holder F is carried by the stake E, a longitudinal recess 14 is formed in the lower portion 13 of the stake E open to one side thereof for the reception of the holder F; and extending inwardly from the marginal edge 15 of the recess 14 is a smaller transverse recess 16 forming a seat for a coil spring 17 and for a purpose to be subsequently set forth.

The holder F is pivotally secured in this recess 14 as by a bolt 18 having its head 19 and locking nut 20 countersunk and lying flush with the sides of the stake E so as
to preclude the possibility of catching either on the deck B or socket 12. This holder F preferably comprises a latch 21 having its bill 22 adapted to engage the underside of the socket 12 when in a locked position. A lug 23 is formed on the marginal edge opposite to that of the bill 22 intermediate said bill 22 and the pivotal connection 18, providing a seat for the coil spring 17 which in the instance shown is the means employed to normally project the bill 22 beyond the side of the stake under the socket 12. At the terminal of the latch 21 opposite to the bill 22 is provided an outwardly extending arm 24 having the one end portion reduced or cut away and defining a shoulder 25. If desired, a finger engaging portion 26 may be formed on the outer end of the arm 24 to facilitate in disengaging the bill 22 from under the socket 12. As suitable means for holding the bill in a retracted position, a ring or link 27 may be pivotally secured to the arm 24, and when said finger engaging portion 26 is pulled forward the link 27 is adapted to be swung around and positioned so that the one side thereof will lie intermediate the one side of the stake E and the shoulder 25, thereby holding the latch in an inoperative position, or in other words, with the bills retracted, so that the stake E may be removed.

When it is desired to remove the side or gate C of a truck equipped with holders, such as has been described, the finger engaging portion 26 of each holder is pulled forward thereby releasing the bill 22 from under the socket 12. The ring 27 is now dropped into the space between the shoulder 25 and the side of the stake E, thereby holding the latch in an inoperative position, and enabling a person to remove the gate C. When replacing the gate C, the ring 27 is swung away from the shoulder 25, thereby allowing the spring 17 to urge the latch 21 forward and hold the bill 22 under the socket 12 and in a locked position.

In the form shown in Figures 6 to 9 inclusive, the structure and operation of the holder are similar, with the exception that instead of the holder F pivotally secured to the stakes E of the gate C, it is carried by a suitable carrier H and secured to one of the rails D as at 28. A separate socket 29 secured to the disc B is provided for the reception of this carrier H, the holder F functioning therewith in substantially the same manner as with socket 12.

The advantages of providing a carrier having a holder such as is shown in Figure 7 will be apparent, for it can be seen that much can be made complete and ready to be installed on a truck that is already in use without the necessity of fitting the holder F in the stakes E.

Thus it can be seen that a holder has been provided which will securely hold a stake or gate securely to the deck of a truck and prevent its loss through vibration.

Various changes may be made to the form of the invention herein shown and described, without departing from the spirit of the invention or scope of the claims.

I claim:

1. The combination with a deck, of a stake socket carried by said deck, a stake fitted within said socket and removable therefrom, and a latch carried by said stake for engagement with said socket including means for yieldingly urging the latch to a locked position, and means for facilitating movement of the latch to an unlocked position, said means being movably carried by the latch for movement to a position for releasably retaining the latch in an unlocked position.

2. The combination with a deck, of a stake socket carried by said deck, a stake carried by said side and fitted in said socket, said stake having a longitudinal recess in its socket engaging portion, a latch pivoted in said recess including a bill at one terminal thereof for engagement under said socket, an outwardly extending arm at the other terminal thereof having a finger engaging portion for releasing said bill, and a device carried by said arm adapted to be swung into engagement with one side of said stake and hold the latch in an unlocked position.

3. The combination with a deck, of a stake socket carried by said deck, a stake carried by said side and fitted in said socket, said stake having a longitudinal recess in its socket engaging portion, a latch pivoted in said recess for engaging the under side of said socket and provided with an outwardly extending arm, said arm having its outer end enlarged and defining a shoulder, and a link carried by said enlarged portion of said arm and adapted to be swung so that a portion thereof lies intermediate one side of said stake and said shoulder, thereby holding said latch in an unlocked position.

4. The combination with a deck, of a stake socket carried by said deck, a stake carried by said side and fitted in said socket, said stake having a longitudinal recess in its socket engaging portion, a coil spring fitted in said recess, a latch pivoted in said recess and normally held in engagement with the under side of said socket by said coil spring, said latch provided with an outwardly extending arm, and a link carried by said arm adapted to be swung into engagement with one side of said stake and hold the latch in an unlocked position against the action of the spring.

5. As an article of manufacture, a holder for sides of trucks comprising a carrier having a longitudinal recess therein, a coil
spring fitted in said recess, a latch pivoted in said recess including a bill at one terminal, an outwardly extending arm at the other terminal, and a lug intermediate said bill and pivotal connection providing a seat for said spring, and a link carried by said arm adapted to be swung into engagement with one side wall of said carrier against the action of said spring.

6. The combination with a deck, of a stake socket carried by said deck, a stake fitted within said socket and removable therefrom, and a latch member carried by said stake for engagement with said socket including means for yieldably urging the latch to a locked position; and means movable relatively to said latch member adapted after the movement of said latch member to unlocked position, for movement into a position for retaining said latch member in unlocked position until movement of said movable means to another position.

7. The combination with a deck, of a stake socket carried by said deck, a stake fitted within said socket and removable therefrom, and a latch member carried by said stake, for engagement with said socket including means for yieldably urging the latch to a locked position; and swingably mounted means adapted after movement of said latch member to unlocked position for being swung into a position for retaining said latch member in unlocked position until movement of said swingable means to another position.

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