

O. F. REEVES.
 LOG BACK.
 APPLICATION FILED DEC. 15, 1910.

1,000,441.

Patented Aug. 15, 1911.

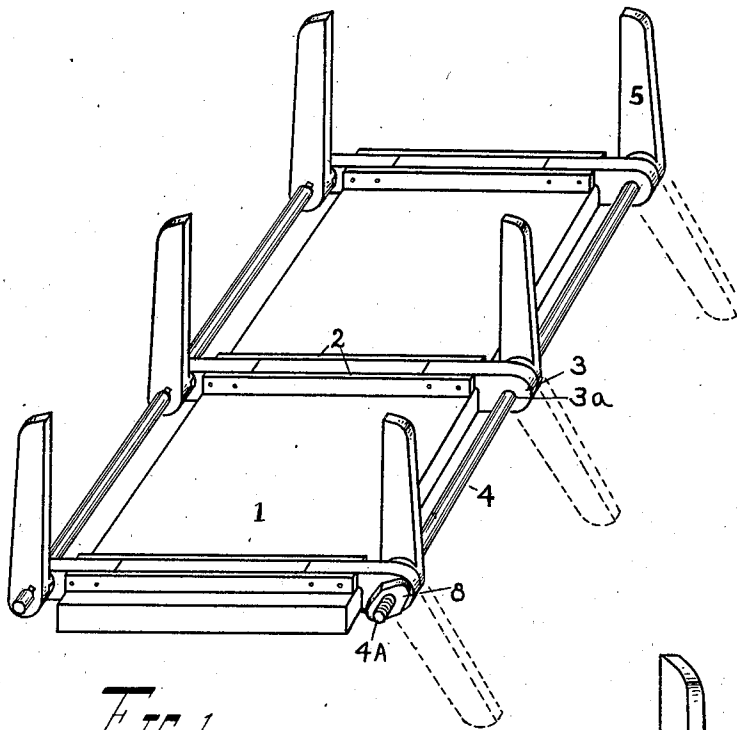


FIG. 1

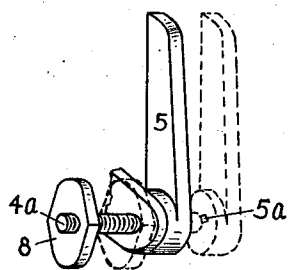


FIG. 2

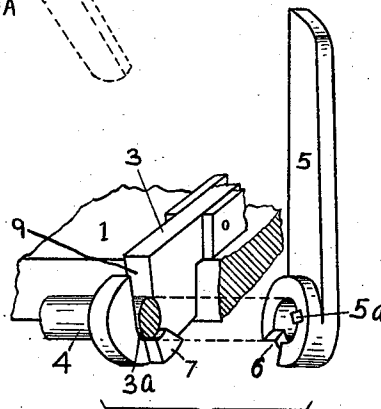


FIG. 3

WITNESSES:
J. Ray Abbey
Geo. W. Smith

Oscar F. Reeves INVENTOR.
 BY
Geo. B. Willcox ATTORNEY.

UNITED STATES PATENT OFFICE.

OSCAR F. REEVES, OF SAGINAW, MICHIGAN.

LOG-RACK.

1,000,441.

Specification of Letters Patent. Patented Aug. 15, 1911.

Application filed December 15, 1910. Serial No. 597,579.

To all whom it may concern:

Be it known that I, OSCAR F. REEVES, a citizen of the United States, residing at Saginaw, in the county of Saginaw and State of Michigan, have invented certain new and useful Improvements in Log-Racks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention is a car rack and pertains more particularly to racks adapted to be applied to flat cars for transporting logs.

The objects of my invention are, first, to provide a simple, strong and inexpensive rack that will securely hold a heavy load of logs in position and that can be readily unlocked by one man to dump the logs and unload the car, the unlocking device being so arranged that the man is out of the path of the falling logs while unlocking the rack.

A further object is to so construct a rack that the strains, due to the tendency of the load to spread, are taken up by the parts of the rack itself, thus enabling old cars with defective platforms to be safely used for transporting logs.

A still further object is to provide each stake with means for locking it in its upright position to its bearing, thereby avoiding all twisting strains on the shaft.

My invention further comprises means for moving the shaft lengthwise to lock the several arms to their bearings, as will be fully described in the specifications.

With these objects in view, my invention consists in the devices illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a flat car platform with my improved rack attached, the lowered position of the rack being indicated by dotted lines; Fig. 2 is a perspective detail of the locking nut and the parts actuated by it; and Fig. 3 is a perspective detail of one of the brackets and one of the rack arms.

As is clearly shown in the drawings, the device consists in the car platform 1, on which is secured a number of transverse bars 2 having brackets 3 secured to their ends, the brackets projecting beyond the side edge of the car platform. The row of brackets at each side of the car carries a shaft 4 to which is rigidly secured a plurality of arms

5 by means of a key 5^a or equivalent device, there being one arm to each bracket.

The shaft serves as a hinge by which all of the arms attached to it may be turned down simultaneously, as indicated by dotted lines in Fig. 1. The shaft is mounted in suitable bearings 3^a provided in the brackets 3 and is adapted to rotate and also to have a limited sliding endwise movement in the bearings. Each bracket is provided with a projection 7 adapted to be received in a recess 6 provided in the hub of arm 5, or if desired, the recess may be formed in the bracket and the projection formed on the hub. The projection and recess interlock when the shaft is moved endwise, to bring the bracket and hub of the arm close together. The recess and projection are arranged to interlock only when the arms are in their upright position. The shaft 4 is provided with a threaded end 4^a on which is screwed a nut 8, preferably elongated, as shown in the drawings, to better adapt it to be turned by the blows of a maul or ax.

The bars 2 may be of any suitable construction, but I prefer to make them of considerable height, say three inches or so, in order to keep the logs slightly off from the car platform, thus facilitating the unloading of the logs by enabling a peavey to be readily inserted under the log.

In the practical use of the invention the car is loaded, the arms along one side being lowered, as shown by dotted lines in Fig. 1. When the car is nearly loaded the arms are turned to their upright position, the nut 8 is screwed up, drawing the shaft 4 lengthwise and thereby interlocking each arm and its adjacent bracket. The loading is then completed. To unload it is only necessary to unscrew nut 8 by the use of a maul or ax, and drive the shaft 4 endwise through the bearings until the hubs of the arms are released from engagement with their corresponding bracket. The weight of the load pushes the arms outwardly and they drop down, as indicated in Fig. 1.

The bars 2 not only insure clearance between the logs and the platform, as above described, but also prevent straining the car platform by resisting the tendency of the arms to spread laterally under the weight of the load. The vertical depth of the bars also holds the overhanging brackets in place and prevents their bending down.

It will be understood that the bearing 3^a may be a round opening through the bracket, as indicated in Fig. 1, or it may be a slotted opening, 9, into which the shaft may be readily dropped, as shown in Fig. 3.

Having described my invention, what I claim and desire to secure by Letters Patent, is:—

1. In combination with a vehicle platform, a plurality of transverse bars, brackets secured to said bars and having bearings therein, a shaft received in said bearings and capable of both rotary and lengthwise movement therein, a plurality of arms fixed to said shaft, each arm being located adjacent to one of said bearings, and interlocking means carried by said bearings and arms and adapted to interlock by longitudinal movement of said shaft, together with means on said shaft for moving it longitudinally when the arms are in their vertical position.

2. In combination with a vehicle platform, a plurality of transverse bars, brackets secured to said bars and having bearings therein, a shaft received in said bearings and capable of rotary and lengthwise movement therein, a plurality of arms fixed to

said shaft and located adjacent said bearings, interlocking means carried by said bearings and arms adapted to interlock by longitudinal movement of the shaft when the arms are vertical, said shaft being formed with a threaded end, and a nut on said threaded end adapted to draw the shaft lengthwise to engage said interlocking means.

3. In combination with a car platform, a plurality of transverse bars, overhanging brackets secured to said bars and having bearings therein, a shaft received in said bearings and capable of rotary and lengthwise movement therein, a plurality of arms fixed to said shaft, said arms being formed with lateral recesses, lateral projections on said bearings being adapted to enter said recesses when the arms are vertical, and means for moving said shaft longitudinally to simultaneously interlock each arm with its adjacent bearing.

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

OSCAR F. REEVES.

Witnesses:

CHRISTINE A. BRAIDEL,
GEO. W. SMITH.