No. 819,585. PATENTED MAY 1, 1906.

J. S. O'NEAL.

FOLDING STANCHION FOR LUMBER CARS.

APPLICATION FILED FEB. 5, 1906.

Fig. 1.

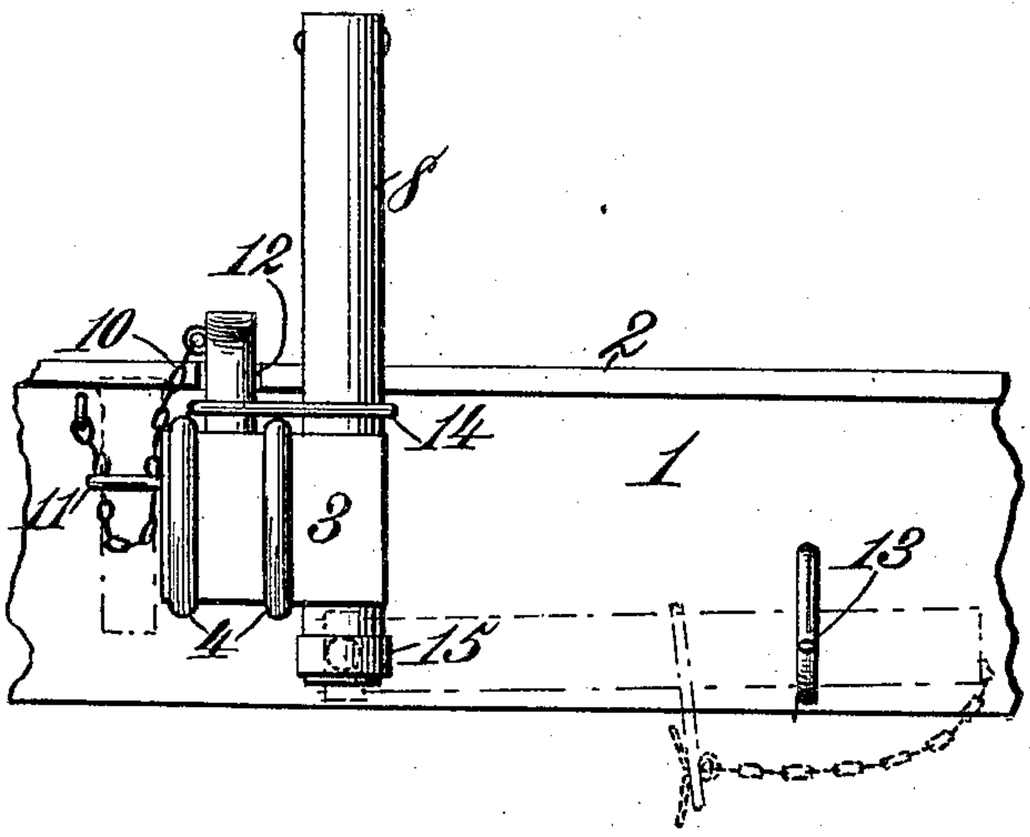


Fig. 2.

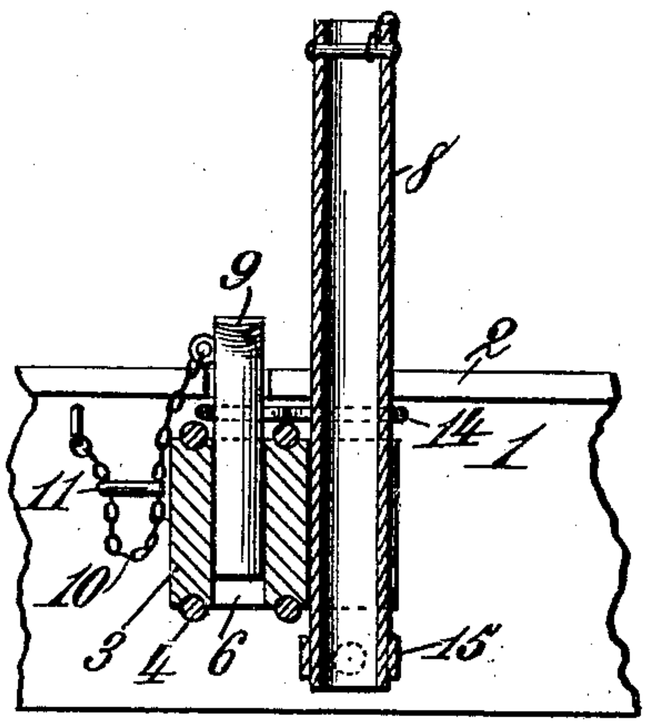


Fig. 3.

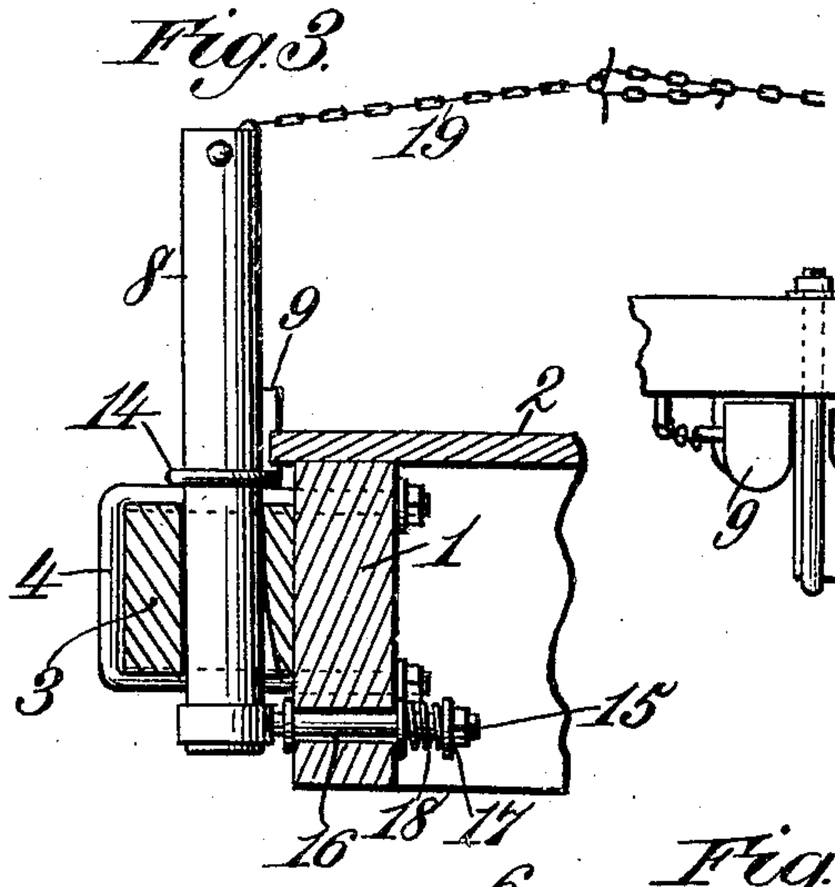


Fig. 4.

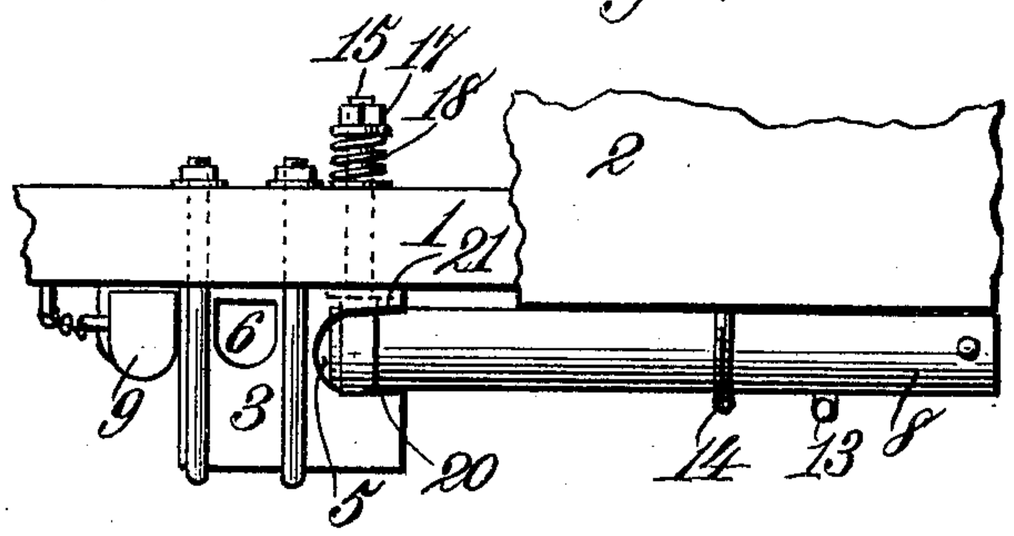
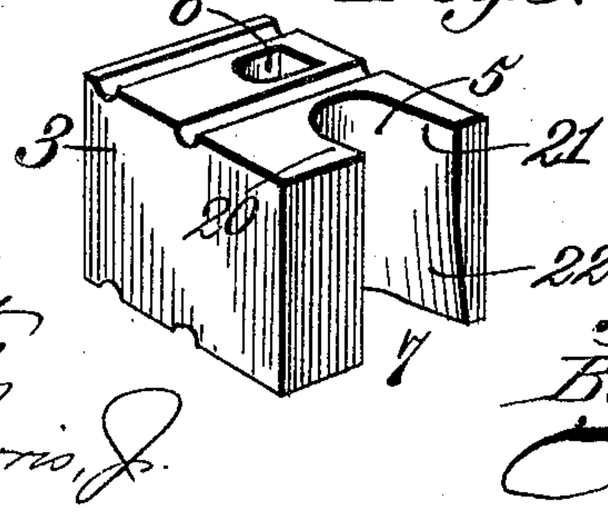


Fig. 5.



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UNITED STATES PATENT OFFICE.

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FOLDING STANCHION FOR LUMBER-CARS.

No. 819,585. Specification of Letters Patent. Patented May 1, 1906.

Application filed February 5, 1906. Serial No 299,532.

To all whom it may concern:

Be it known that I, JAMES S. O'NEAL, a citizen of the United States, residing at Valdosta, in the county of Lowndes and State of Georgia, have invented new and useful Improvements in Folding Stanchions for Lumber-Cars, of which the following is a specification.

This invention relates to a folding stanchion or stake for a lumber-car; and it consists, essentially, of a pivoted stanchion or stake which is adapted to be lowered and extend longitudinally with respect to the side of the car-body when not in use or to be raised and held in positive working position through the medium of a safety-key or detachable holding means which prevents the stanchion or stake from moving accidentally out of operative position.

The primary object of the invention is to provide a stanchion or stake of the class specified which is held against displacement from an operative position by the vibration, jar, or movement of the car and the weight of lumber thereon, but which may be readily thrown down to clear the platform of the car to facilitate loading and unloading operations.

In the drawings, Figure 1 is a side elevation of a portion of a car-body, showing the improved stanchion or stake applied thereto and illustrated in operative position in full lines and in lowered position in dotted lines. Fig. 2 is a longitudinal section through one of the stakes in upright position and the holding means or safety-key therefor. Fig. 3 is a transverse vertical section through the car-body and one of the stanchions or stakes, the latter being in erect position. Fig. 4 is a top plan view of a portion of the car-body, showing the stake or stanchion lowered and particularly illustrating the shape of the open portion of the socket for the stake or stanchion. Fig. 5 is a detail perspective view of one of the stake or stanchion blocks or members.

Similar numerals of reference are employed to indicate corresponding parts in the several views.

The numeral 1 designates a car-body having a flat bed 2 of that type usually employed in transporting lumber and analogous material or so constructed that loading and unloading operations may be expeditiously carried on with respect thereto. This class of cars is usually provided with stanchions or stakes arranged along opposite sides thereof at intervals for retaining the load in position on the bed. The improved form of stanchion or stake is removably held in a socket at the side of the car and frequently becomes lost or is replaced by a crude substitute, which materially affects the general car organization. Other types of stanchions or stakes have been used embodying improvements for movably holding the same in connection with the car-body, but such stanchions or stakes have been found by practical use to lack strength and durability as well as positiveness in retention in upright position or when in use and frequently become displaced by the weight of the load of lumber or analogous material on the bed of the car. The present invention contemplates the provision of double socket blocks or members 3 at opposite sides of the car, which are held in place by suitable clips or analogous devices 4. Each of the socket blocks or members has two vertically-disposed sockets 5 and 6 formed therein, the socket 5 being open at one side, as at 7, to receive the improved stanchion or stake 8, pivotally connected at its lower end in a manner which will be more fully hereinafter specified. The socket 6 is adapted to removably receive a safety-key 9, formed of wood or metal and held intact with the body of the car by a coupling-chain or other analogous device 10. This safety-key when removed from its socket 6 is held at one end of the block or member 3 and maintained in this position by a hooked arm 11, so that it may always be in convenient reaching distance for use in the block or member 3. The bed 2, in line with the socket 6, has a slight recess 12 formed therein to provide a seat for the reception of a portion of the safety-key 9, and thus assists in maintaining the said key in proper position in the block or member 3. When the stanchion or stake 8 is lowered, it is held by an outwardly-projecting hook 13, also secured to the side of the car at a suitable distance from the adjacent end of the block or member 3, and loosely surrounding and movable on the stanchion or stake is a coupling-link 14, comprising two loops, one of which is engaged by the stanchion or stake, and the other when the said stake or stanchion is erected is disposed over the socket 6

and has the safety-key 9 inserted therethrough to prevent the stanchion or stake from accidentally moving out of position, particularly after the parts have become worn and are liable to work loose.

The pivotal means for each stanchion or stake includes an eyebolt 15, the eye of which is secured on the lower end of the stanchion or stake and the bolt movably projected through an opening 16 and having a nut and washer 17 on its inner screw-threaded extremity. Washers are also placed against the outer and inner portions of the car-body where the bolt passes therethrough, and between the inner washers a spring 18 is interposed and permits the eyebolt to have a yielding action, and also compensates for wear and holds the lower end of the stanchion or stake in close relation to the car side. This particular pivot arrangement also permits the stanchion or stake to give way or yield slightly at its lower extremity during its reverse movements, and the tension of the spring can be regulated by adjusting the nut and washer at the inner extremity of each bolt, as will be readily understood.

The walls 20 and 21 of the socket 5 adjacent to the side opening 22 are inclined inwardly toward the side of the car-body. By this means the stake or stanchion is caused to slightly draw outwardly when elevated and engage said socket and set up a tight engagement with the stanchion and restriction as to loose movement of the latter by drawing against the spring engaging the eyebolt 15.

Each stanchion or stake 8 is preferably formed of metal and is tubular, and connected to the upper end thereof is a chain 19, the two chains of the opposite stanchions or stakes having coupling means for securing them over the load of lumber or other material. All the parts will be preferably constructed of metal, though wood may be used in the formation of the safety-key, and the double coupling-link is preferably of the lap-link type to facilitate the application thereof to the stanchion or stake. It is not essential, however, that the coupling-link be of this precise form or type of link, but may be produced in other ways. By forming the same with double loops or eyes it will be held in more convenient position for securing the stanchion or stake in upright position and facilitate the arrangement thereof across the block or member 3 so as to bring the disengaged loop thereof in alinement with the socket 6.

The improved stanchion or stake may be readily applied to cars now in use at a comparatively small expense, and it is obvious that the contour of the stanchion or stake may be modified at will and a corresponding change be made in the shape of each socket 5.

Having thus described the invention, what is claimed is—

1. A car-body having a stanchion or stake pivotally connected thereto, a coupling-link engaging the stanchion, and a safety-key for removably passing through a part of the said link to reliably hold the stanchion in upright position.

2. A car having a socket member with a socket therein open at one side of the member, a stanchion pivotally secured to the car and movable into and outwardly from the said socket, and a removable safety-key for holding the stanchion in immovable relation with respect to the socket member.

3. A car having a socket member secured to the side thereof and provided with two sockets, one of which opens through one end of the member, a stanchion pivotally connected to the car-body and movable into and out of the socket opening through one end of the member, a coupling-link carried by the stanchion, and a safety-key to engage the coupling-link and the remaining socket of the member.

4. A car having a member secured to the side thereof and formed with a socket opening through one side of the member, a stanchion pivotally held against the car side and movable inwardly and outwardly through the open side of the member and adjustable from an upright to a horizontal position, and a hooked arm secured to the side of the car adjacent to the member with a socket therein for receiving the stanchion when lowered to a horizontal position.

5. A car having a side socket member with two sockets therein, a stanchion or stake pivoted to the side of the car and movable into and out of one of the sockets, a coupling means carried by the stanchion or stake, a safety-key removably fitted in the remaining socket and insertible through the said coupling means to hold the stanchion or stake in positive upright position, and means for connecting and supporting the safety-key with relation to the side of the car.

6. A car having a stanchion or stake provided with pivotal means connected to the lower extremity thereof and including an eyebolt projected through the car side and having a spring on its inner portion.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JAMES S. O'NEAL.

Witnesses:
L. C. VARNESLOE,
C. C. CODY.