E. O. & M. L. BRADLEY.

CAR STANDARD.

(Application filed Mar. 10, 1902.) (No Model.) H.O. Bradley Inlentors
M.L. Bradley Hitnesses

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

United States Patent Office.

EMORY OTIS BRADLEY AND MELVIN LEROY BRADLEY, OF TACOMA, WASHINGTON.

CAR-STANDARD.

SPECIFICATION forming part of Letters Patent No. 705,200, dated July 22, 1902.

Application filed March 10, 1902. Serial No. 97,553. (No model.)

To all whom it may concern:

Be it known that we, EMORY OTIS BRAD-LEY and MELVIN LEROY BRADLEY, citizens of the United States, residing at Tacoma, in the county of Pierce and State of Washington, have invented a new and useful Car-Standard, of which the following is a specification.

Our invention is an improved standard and standard-operating means for logging and to other cars and vehicles; and it consists in the peculiar construction and combination of devices hereinafter fully set forth and claimed.

In the accompanying drawings, Figure 1 is a perspective view of a portion of a logging15 car provided with standards and operating meanstherefor embodying our improvements. Fig. 2 is a detail vertical sectional view of one of the standards. Fig. 3 is a detail front elevation of the same. Fig. 4 is a detail ele20 vation of the means for locking the operating and read.

ing-rod. In the embodiment of our invention we provide a bracket 1, which is formed with outstanding ears 2. The bracket has side flanges 25 3, which are in the plane of the base or inner side thereof and are provided with openings 4 for bolts or screws 5, which are employed to secure the bracket to one side of a logging or other car or vehicle. In the drawings, 30 Fig. 1, a portion of the frame of a loggingcar is shown. In the outer side of the base of the bracket is formed an inclined guide 6. Similarly-inclined guides 7 are formed on the inner sides of the ears 2 and are parallel with 35 and at a suitable distance from the guide 6. The said bracket forms a support for the standard 8, which is of suitable length and is provided at its upper end with a socket 9 to receive a stake, such as is indicated at 10 40 in dotted lines in Fig. 1, when it is desirable to increase the height of the standard. Ordinarily on logging-cars the stake is not necessarily employed; but on other cars and vehicles it is desirable and necessary to em-

45 ploy the stake, and hence we adapt the standard ard to receive and secure the stake, the same forming a vertical extension of the standard, as hereinbefore described.

The inner end of the standard is pivotally supported between the ears 2 on a pivot bolt 50 or pin 11, which is disposed in openings with which said ears are provided. The inner end of the standard is cylindrical in form, as at 12, and the same is provided with rack-teeth 13, which may be either of the form here 55 shown or of any other suitable form. A detent 14, which is located and operates between the ears 2, is provided on its sides with guideflanges 15, which travel in the ways formed between the guides 6 and guide-flanges 7. 60 The upper end of said detent is provided with rack-teeth, as at 16, to engage the rack-teeth on the cylindrical inner end of the standard when said detent is moved upwardly and maintained in the position shown in Fig. 2. 65 A cam 17 is mounted for revolution between the ears 2 and by engagement with the lower end of the detent serves when said cam is rotated to move the detent into or out of engagement with the inner end of the standard. 70 The said cam is here shown as of tubular form to receive an operating-rod 18, which extends therethrough and may be keyed or otherwise secured thereto, so that the cam may be turned by turning said rod.

In practice the car or vehicle is equipped with a number of our improved standards on each side thereof, and an operating-rod 18 on each side of the car or vehicle is connected to each of the revoluble cams, so that the 80 latter may be rotated simultaneously to actuate the detents by partly revolving said operating-rod. The latter has a bearing near one of its ends in a lock-plate 19, which is secured or bolted on one end of the car or ve- 85 hicle, as shown in Fig. 1, and the said end of the operating-rod which projects beyond the lock-plate is angular in cross-section. The lock-plate has ears 20, between which is pivoted a locking-hasp 21. The same at its outer 90. end is notched to engage the angular end of the operating-rod to secure the latter against rotation when the standards have been adjusted. Any suitable means may be employed to secure the locking-hasp in this po- 95 sition. We here show the locking-hasp provided with a slot through which a staple 22 extends when the locking-hasp is closed on the lock-plate, and the said staple may be engaged by the bolt of a padlock, as shown in Figs. 1 and 4, to thus secure the locking-hasp.

It will be understood that owing to the inner ends of the standards being cylindrical in form and provided with rack-teeth, and owing to the sliding detents being provided ro with matching teeth to engage those of the standards, the latter may be locked either in a vertical or inclined position and at any angle required. It will furthermore be understood that the standards on each side of 15 the car or vehicle may be adjusted or lowered simultaneously by means of the operatingrod hereinbefore described. In practice a suitable wrench will be employed to engage the angular end of the operating-rod and turn 20 the same, or the operating-rod may be provided with a suitable handle by which it may be turned.

We do not desire to limit ourselves to the precise construction and combination of devices herein shown and described, as it is evident that modifications may be made therein without departing from the spirit of our invention.

While in the drawings the car is shown as not provided with side boards, it will be understood that side boards may be used in connection with our improved standards and may be secured thereto, if desired, by means

of bolts or screws, which may engage openings 22, with which the standards are provided. 35

Having thus described our invention, we

claim—

1. In combination with a pivoted standard, a detent movable into and out of engagement therewith, to secure said standard at any desired adjustment, and means to operate said detent, substantially as described.

2. In combination with a pivoted standard, a detent movable into and out of engagement therewith, and a revoluble cam to operate 45

said detent, substantially as described.

3. In combination with a pivoted standard, a detent movable into and out of engagement therewith, a revoluble cam to operate said detent, an operating-rod, connected to the 50 cam, to turn the latter, and means to lock the operating-rod, substantially as described.

4. A car having a plurality of pivoted standards, detents movable into and out of engagement with the standards, cams to operate said 55 detents, an operating-rod connected to the cams, and means to lock the operating-rod, substantially as described.

In testimony that we claim the foregoing as our own we have hereto affixed our signa- 60 tures in the presence of two witnesses.

EMORY OTIS BRADLEY.
MELVIN LEROY BRADLEY.

Witnesses:

JAMES MCELROY HARRIS, Thos. D. HITCHCOCK.