

No. 808,129.

PATENTED DEC. 26, 1905.

J. R. WHEELER.

CAR STAKE.

APPLICATION FILED SEPT. 14, 1905.

Fig. 1.

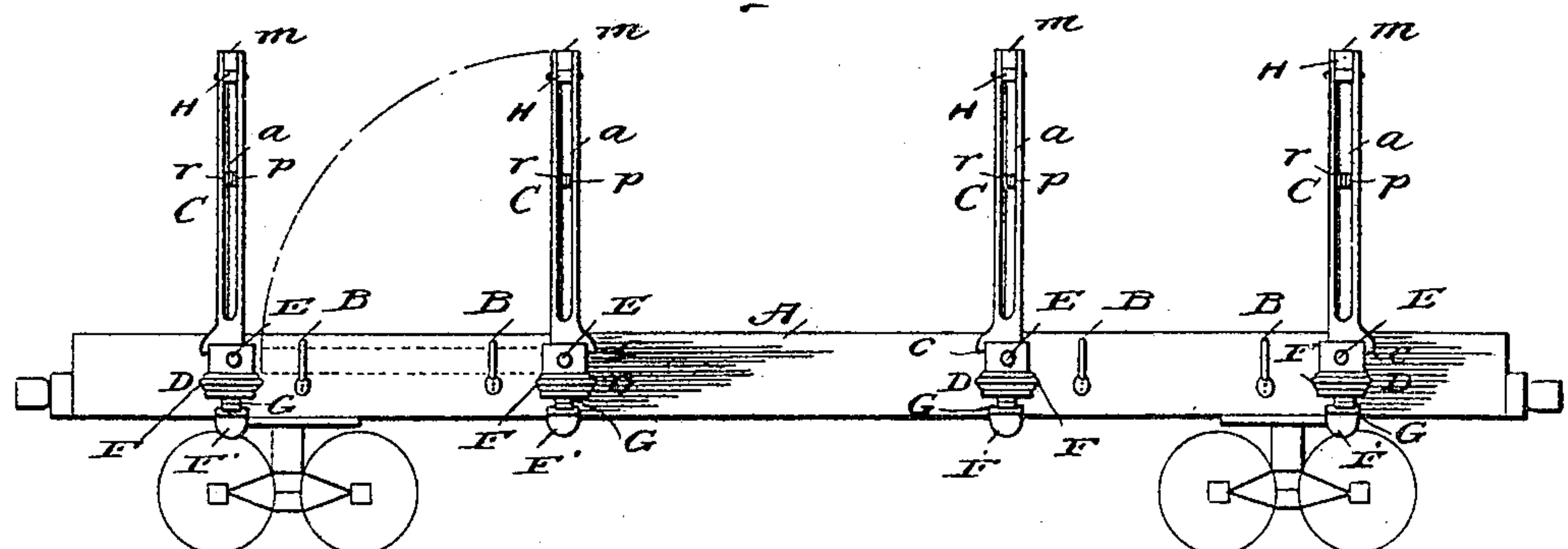


Fig. 2.

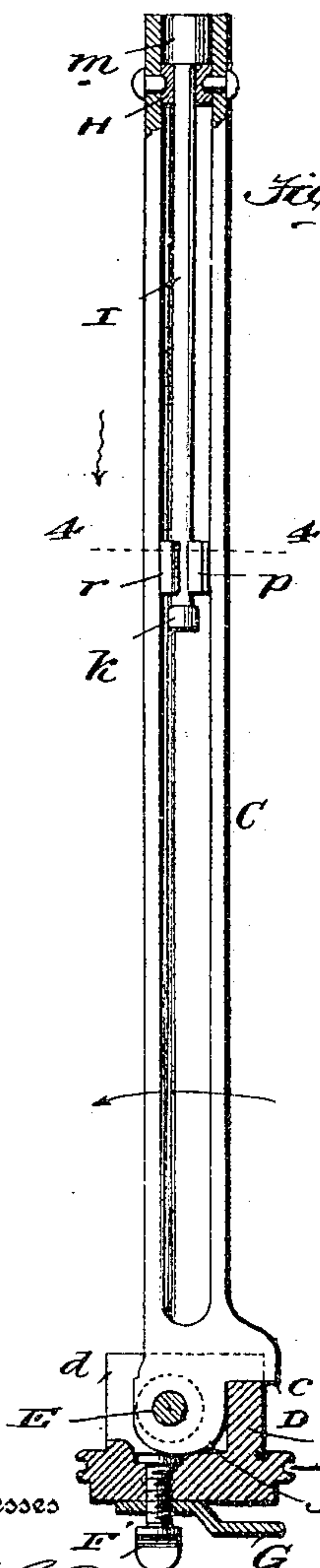


Fig. 3.

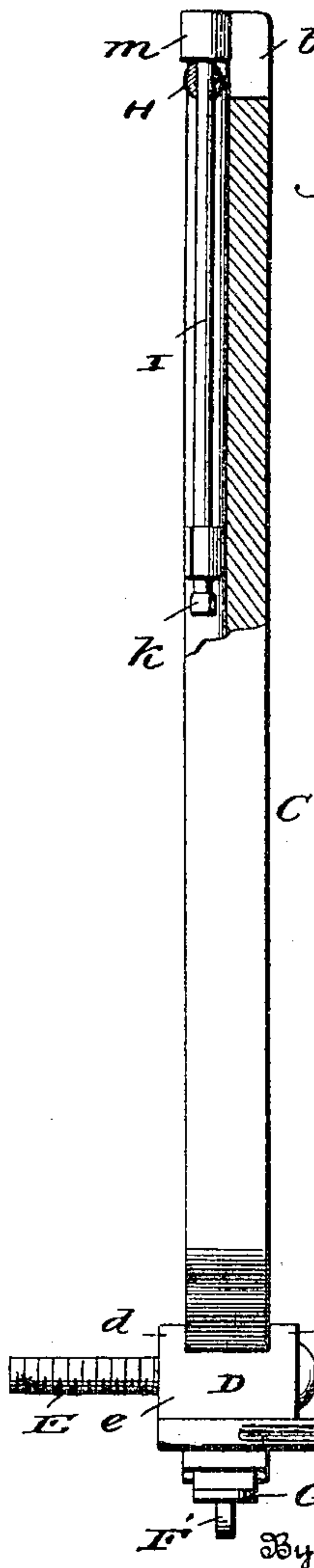


Fig. 4.

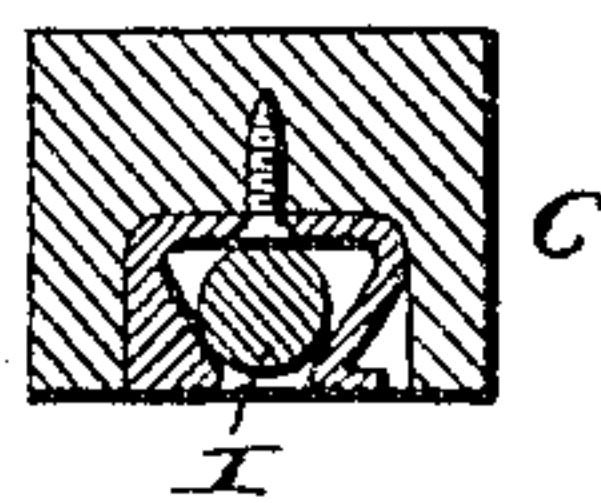


Fig. 6.

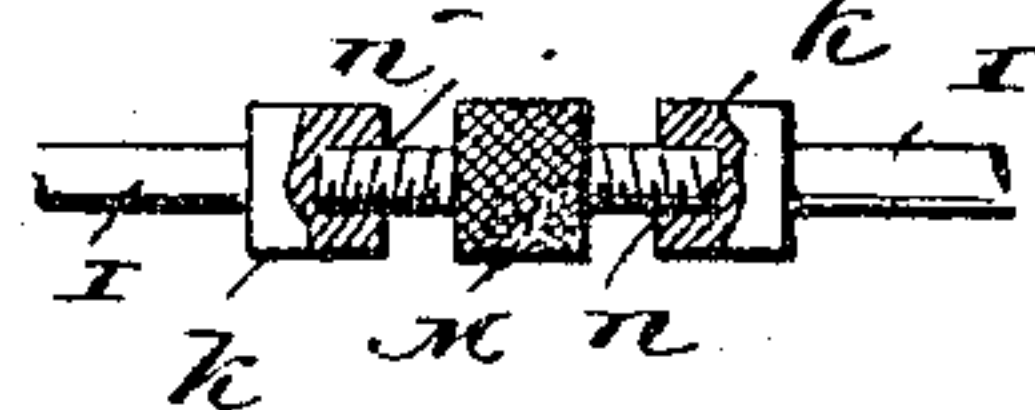
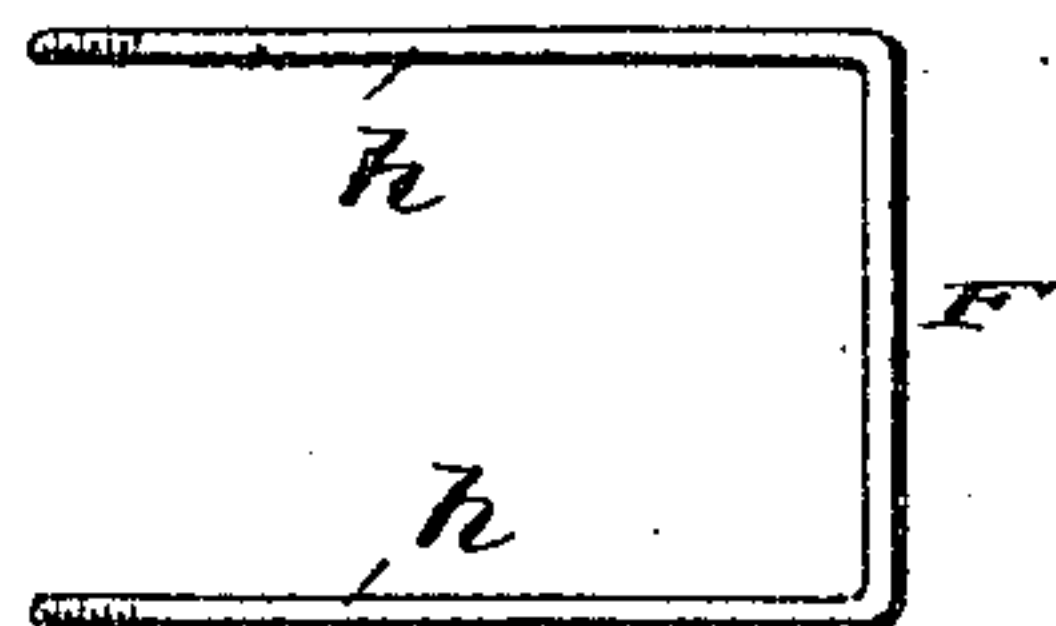


Fig. 5.



Witnesses

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CAR-STAKE.

No. 808,129.

Specification of Letters Patent.

Patented Dec. 26, 1905.

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To all whom it may concern:

Be it known that I, JOHN RICHARD WHEELER, a citizen of the United States, residing at Edenton, in the county of Chowan and State of North Carolina, have invented new and useful Improvements in Car-Stakes, of which the following is a specification.

My invention pertains to car-stakes; and it contemplates the provision of a car-stake adapted to be quickly and easily swung down and up and securely fastened in both positions.

The invention also contemplates the provision in connection with a stake of an adjustable brace which is carried by the stake and is adapted when the stake is in its upright position to be connected to a corresponding brace on a stake at the opposite side of a car.

Other advantageous features of the invention will be fully understood from the following description when the same is considered in connection with the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation of a car equipped with a plurality of the stakes constituting the present and preferred embodiment of my invention, one of the stakes being shown by dotted lines in its lower and idle position. Fig. 2 is an enlarged view, partly in side elevation and partly in section, of one of the stakes. Fig. 3 is a view of the said stake taken at right angles to Fig. 2 and illustrating the stake partly in elevation and partly in section. Fig. 4 is an enlarged cross-section, taken in the plane indicated by the line 4-4 of Fig. 2. Fig. 5 is a plan view of the yoke which assists in connecting the supporting-frame of the stake to the side of the car, and Fig. 6 is a detail view illustrative of one mode of connecting the brace of a stake at one side of the car to the brace of a stake at the opposite side of the car.

Similar letters designate corresponding parts in all of the views of the drawings, referring to which—

A is a freight-car. The car shown is of the flat type; but I desire it distinctly understood that it may be of the gondola or any other type compatible with my invention without affecting the latter.

B B are keepers connected to the side of the body of the car and having for their purpose to receive the stakes when the latter are swung down into their idle position. One of these

keepers is designed for use in connection with each stake, and in Fig. 1 one of the stakes is shown by dotted lines as resting in its complementary keeper.

C C are the stakes, and D D are the frames, through the medium of which the stakes are supported at the side of the car. The stakes C and the frames D are identical in construction, and therefore a detailed description of the stake and frame (shown in Figs. 2 to 5) will suffice to impart a definite understanding of all. The said stake C is made of metal and is provided in its outer side with a groove *a*, which extends from a point adjacent to its lower end to its upper end, as best shown in Figs. 2 and 3. It is also provided at its upper end with a bifurcation *b* and adjacent to its lower end has a shoulder *c* for a purpose presently set forth. The frame D mentioned is cast or otherwise formed of suitable metal and comprises side walls *d* and an end wall *e*, the said end wall *e* being lower than the side walls, as will be seen by reference to Fig. 2, and being designed to afford an abutment to the shoulder *c* of the stake with a view of assisting in the retention of the stake in its upright position. The lower end of the stake C, which is rounded, as indicated by *f*, is arranged between the side walls *d* of the frame D and is pivotally mounted on a threaded bolt E. This bolt E extends transversely through the frame D and stake C and, in addition to serving as the pivot of the stake, is designed to extend into the body of the car-body and effect connection of the said frame and stake thereto. In the connection of the frame D to the body of the car A the bolt E is assisted by a yoke F, which straddles and is seated in a groove *g* of the frame and has its legs *h* secured in any approved manner in the body of the car.

F' is a screw which bears in the lower portion of the frame D and is arranged to engage the stake C when the same is raised and also when it is in its lower position, and G is a jam-nut, preferably in the form of a lever, mounted on the screw F' below the frame D, as best shown in Fig. 2. The said jam-nut is designed when the screw is turned to the position desired to secure the said screw against casual loosening.

H is a journal mounted in the upper portion of the groove *a* in stake C and at a point opposite the bifurcation *b*, and I is a brace carried by the said journal and arranged to

swing with the journal and move endwise therethrough. The said brace I is provided at one end with an enlargement *k* and at its opposite end with a head *m*, in which is a threaded socket *n*. When the brace I is in the position shown in Figs. 2 and 3 relative to the stake C, it is held in such position by a spring *p* cooperating with a lug *r*, said spring and lug being secured in the groove *a* of the stake at an intermediate point in the length of the latter, Figs. 2 to 4. The spring *p* and lug *r* serve to hold the brace I against casual movement with respect to the stake C, and hence it will be apparent that when the stake is swung down into its idle position the brace will be retained in the groove of the stake. It will also be apparent that when the stake is in its upright position the brace may be withdrawn laterally out of engagement with the spring *p* and lug *r*, after which the lower end of the brace—i. e., the end bearing the enlargement *k*—may be swung upwardly, and the brace may be moved endwise through the journal H toward the opposite side of the car, so as to permit of the brace being connected by a turnbuckle M, such as shown in Fig. 6, or other suitable means to the brace of a stake at the opposite side of the car. It follows from this that when it is not desired to use the stake the brace I may be disconnected from the other brace mentioned and may then be returned to the position shown in Figs. 2 and 3 relative to the stake and secured in such position by the spring *p* cooperating with the lug *r*.

When the brace I is in the position shown in Figs. 2 and 3 with respect to the stake and it is desired to swing the stake down into its idle position, it is simply necessary to turn the screw F out of engagement with the stake and then swing the same in the direction indicated by arrow in Fig. 2 down into a horizontal or approximately horizontal position. With this done the screw F may obviously be again engaged with the stake in order to secure the latter against casual movement from its idle position. On the other hand, when it is desired to put the stake to use the screw F is disengaged from the stake and the stake is swung up into the position shown in Fig. 2, after which the screw F is again turned into engagement with the stake, when, as will be readily apparent, the stake will be secured in its raised position.

It will be gathered from the foregoing that my novel stakes may be expeditiously adjusted and adjustably fixed with but little effort on the part of attendants, also that the stakes are simple and inexpensive in construction and are well adapted to withstand the rough usage to which car devices are ordinarily subjected.

I claim—

1. In a car-stake, the combination of a frame secured to the side of a car and having

side walls and an end wall of a less height than the side walls, a stake pivoted between the side walls of said frame and having a lateral shoulder arranged to bring up against the upper edge of the end wall of the frame, and means for holding the stake against casual movement when the shoulder thereof is in engagement with the said end wall of the frame.

2. In a car-stake, the combination of a frame secured to the side of a car and having side walls and an end wall of a less height than the side walls, and also having a bottom wall, a keeper also secured to the side of the car, a stake pivoted between the side walls of the frame and having a lateral shoulder arranged when the stake is in an upright position to bear on the upper edge of the end wall of the frame, and a screw bearing in the bottom wall of the frame and arranged to engage the stake.

3. In a car-stake, the combination of a frame secured to the side of a car and having an abutment, a stake pivoted to the frame and having a shoulder arranged to bring up against the abutment thereof, and a screw for holding the stake against casual movement with respect to the frame.

4. In a car-stake, the combination of a frame secured to the side of a car and having an abutment, a stake pivoted to the frame and having a shoulder arranged to bring up against the abutment thereof, a screw for holding the stake against casual movement with respect to the frame, and a jam-nut mounted on said screw.

5. In a car-stake, the combination of a stake, a brace carried by the stake and arranged to rest in one position alongside the stake and in another position at an angle thereto, and means for holding the brace against casual movement from the first-mentioned position.

6. In a car-stake, the combination of a stake, a brace carried by the stake and arranged to rest in one position alongside the stake and in another position at an angle thereto, and a lug and a spring on the stake for holding the brace against casual movement from the first-mentioned position.

7. In a car-stake, the combination of a grooved stake, a journal mounted therein, and a brace carried by and arranged to swing with and move endwise through the journal.

8. In a car-stake, the combination of a grooved stake, a journal mounted in the stake, a brace carried by and arranged to swing with and move endwise through the journal; said brace being adapted to be connected with the brace of a stake on the opposite side of a car, and means on the stake for retaining the brace against casual movement.

9. In a car-stake, the combination of a frame secured to the side of a car, a stake

pivoted to the said frame and arranged to swing parallel to the side of the car, a brace carried by the stake and arranged to rest in one position alongside the stake and in another position at an angle thereto, and means
5 for holding the brace against casual movement from the first-mentioned position.

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

JOHN RICHARD WHEELER.

Witnesses:

T. D. BROWN,
H. C. PRIVATT.