S. W. MURRAY.

STAKE FOR RAILWAY CARS.

APPLICATION FILED JUNE 5, 1908.

912,149.

Patented Feb. 9, 1909.

2 SHEETS—SHEET 1.

Fig. 1.

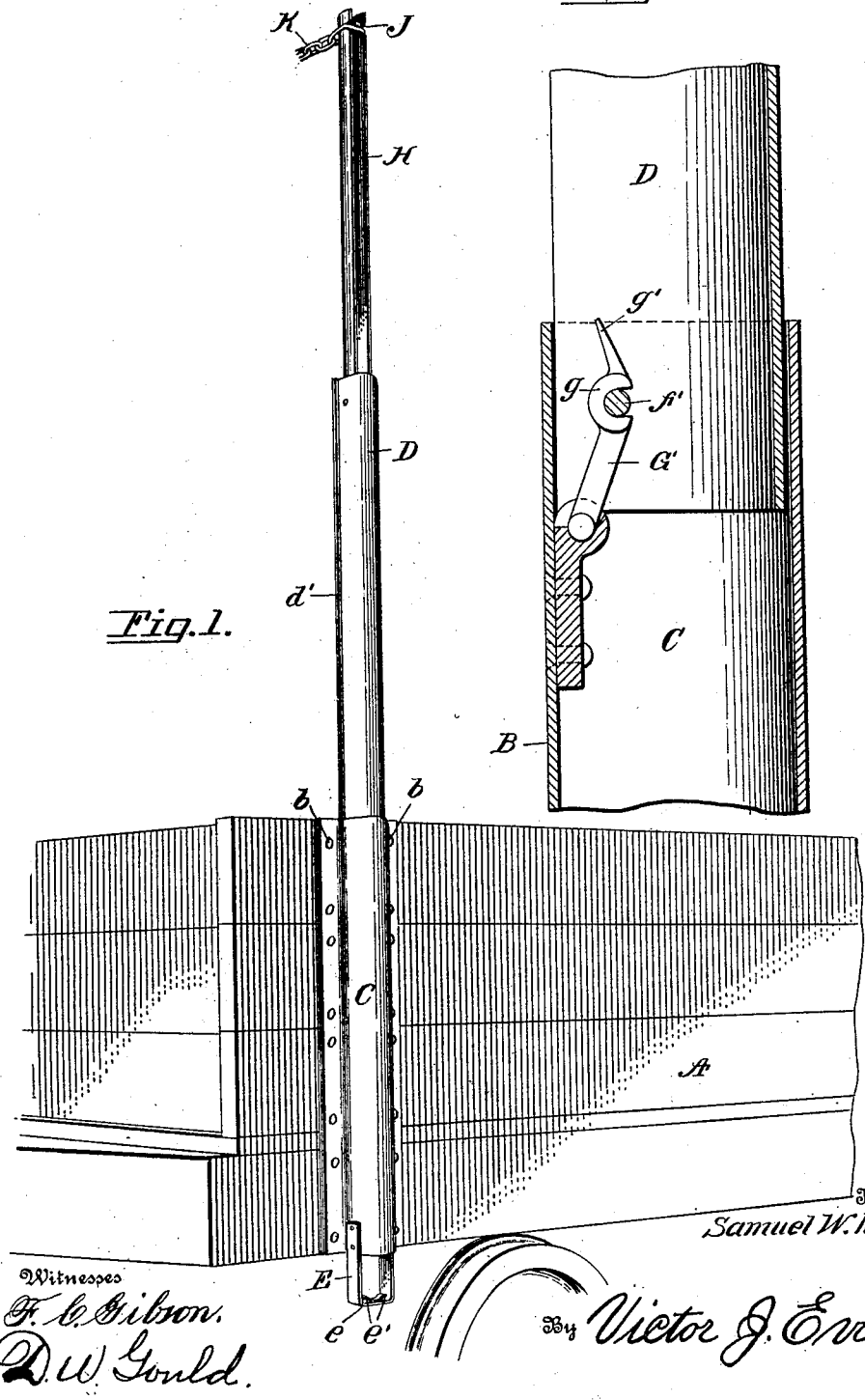


Fig. 6.

Witnesses

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2 SHEETS—SHEET 2.

Fig. 2.

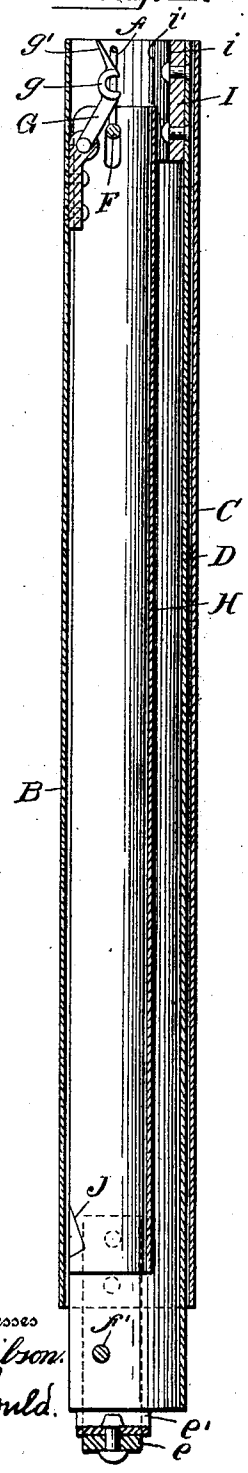


Fig. 3.

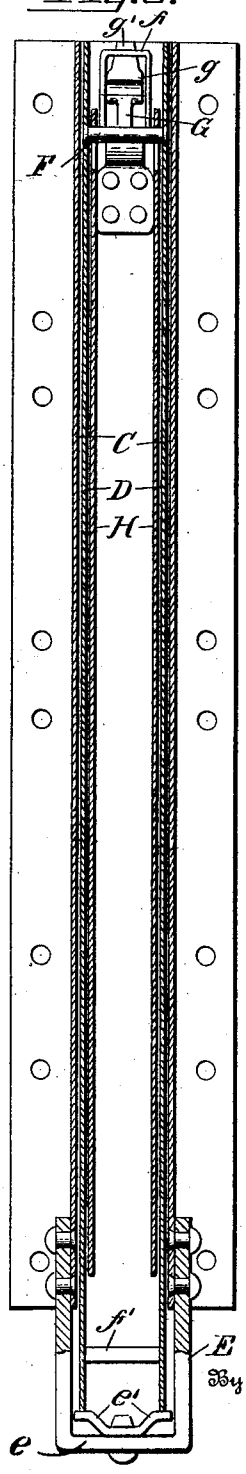


Fig. 4.

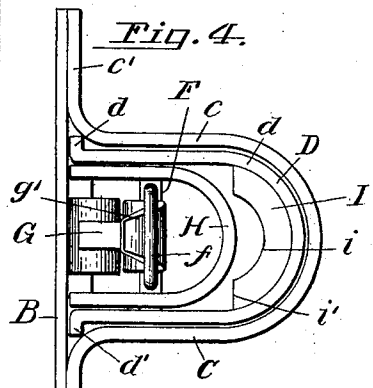
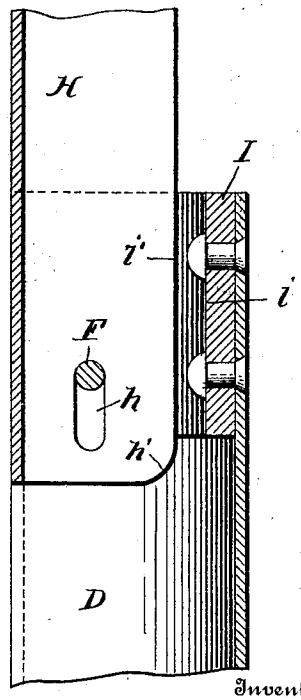


Fig. 5.



Witnesses

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UNITED STATES PATENT OFFICE.

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STAKE FOR RAILWAY-CARS.

No. 912,149. Specification of Letters Patent. Patented Feb. 9, 1909.

Application filed June 5, 1908. Serial No. 436,909.

To all whom it may concern:

Be it known that I, SAMUEL W. MURRAY, a citizen of the United States of America, residing at Milton, in the county of Northumberland and State of Pennsylvania, have invented new and useful Improvements in Stakes for Railway-Cars, of which the following is a specification.

The invention relates to an improvement in car standards, and is particularly directed to an extensible standard or stake having fixed connection with the car and arranged for convenient operation to extend the stake above the car body as desired.

The main object of the present invention is the provision of a car standard or stake including a series of telescopically connected sections, one of which is arranged for permanent connection to the car body, the remaining section being arranged for movable connection relative to the fixed section, whereby the sections may be relatively extended to provide a standard to support the load above the car body, while the sections may be relatively collapsed and housed within the fixed section to avoid obstruction when not desired for use.

The invention will be described in the following specification, reference being had particularly to the accompanying drawings, in which:—

Figure 1 is a perspective view of a portion of a car, my improved standard being shown in applied and extended position. Fig. 2 is an enlarged longitudinal section of the improved standard. Fig. 3 is a similar view taken at right angles to the line of section of Fig. 2. Fig. 4 is a top plan of the same. Fig. 5 is a broken enlarged sectional view showing the upper section arranged in extended form relative to the intermediate section. Fig. 6 is a similar view, showing the means for supporting the intermediate section in elevated or extended position relative to the base section.

In the accompanying drawings, wherein is shown the preferred details of construction of my improved car standard, the standard is adapted for application in any desired number to the side of a car A, which car, as illustrated, is intended to represent any style or type of car with which standards may be used.

In the preferred details of standard illustrated, B represents a base plate, preferably of rectangular form, designed to rest squarely against the side of the car body. Secured to the base plate is the lower or housing member of the standard, as C, which member is formed of a single sheet of metal bent into approximately U-form, as at *c*, the free edges of which are bent laterally and outwardly to provide flange *c'*, which are designed to rest squarely on the base plate B and to be secured thereto through the medium of bolts *b*, which bolts preferably extend through the material of the car body and serve to secure the housing member and base plate to each other and to the body.

Within the housing member C is arranged the second or intermediate member D of the standard, which member is also preferably constructed of a single sheet of metal bent into U-form, as at *d*, and having its free edges extended laterally to form guide flanges *d'*. The intermediate member is of greater length than the housing member and is supported when in inoperative position within the housing member by a hanger bar E, of U-shape, depending below the housing member and secured thereto, the cross piece *e* of the hanger bar being disposed transverse and below the housing member and provided with a spring buffer *e'* to receive the impact of the edges of the intermediate member and also to support the intermediate member in proper position within the housing member.

The intermediate member D is arranged for sliding movement within and relative to the housing member, the rounded portions of these members being arranged in juxtaposition, the guide flanges *d'* of the intermediate member being disposed between the base plate B and the curved portions of the housing member connecting the side walls of said member and the flanges *c'*, whereby the intermediate member is freely slidable within the housing member and is guided during such movement.

Secured transverse the intermediate member, near the upper end of the same is a supporting pin F, to which, within the plane of the intermediate member, is secured a loop-form handle *f*, for a purpose which will presently appear. A cross bar *f'* is secured transverse the intermediate member adjacent the lower end of the latter, and pivotally secured on the base plate B, within the plane of the intermediate member D and near the upper end of the latter is a gravity latch G formed with a semicylindrical keeper section *g*, of a form to engage the cross bar *f'*, the latch above the keeper section having an in-

clined finger piece g', for convenient operation of the latch member in releasing the parts.

Within the intermediate member D is arranged a third standard member H, hereinafter termed the upper member. The member H is also constructed of a single strip of sheet metal formed into approximately U-shape and of a size to slidably fit within the intermediate member D. The opposing side walls of the upper member H are formed near their upper ends with longitudinally disposed slots h designed to engage the supporting pin F, this connection permitting a limited independent longitudinal movement of the upper member H relative to the intermediate member D.

The upper member is arranged within the intermediate member so that the rounded portions of said members are adjacent, the upper member being of such dimensions, however, that the rounded portion thereof will, when the members are in assembled relation, be spaced a greater distance from the rounded portion of the intermediate member than the distance between the rounded portions of the intermediate and housing members. Secured on the inner surface of the rounded portion of the intermediate member, at the upper end of said member, is a stop block I, of approximately semicircular contour in section and of appropriate length. The central portion of the stop block is longitudinally cored on a plane concentric with the outer surface of the block, the central recess i thus provided permitting free movement of the upper member without interference, the square edges i' of the block forming abutments, for a purpose which will presently appear. The free edges of the upper member, adjacent their lower ends, are formed with transversely alined notches J to provide for the reception of a retaining strap or chain for securing the load in place on the car after extension of the standard sections.

With the parts constructed and arranged as described, and the standard members in collapsed relation, in which positions they are disposed within the housing member C, the operation of my improved car standard is as follows: The operator by drawing upon the handle f will elevate the intermediate member D, carrying with it the upper member H through the pin and slot connection, the movement being continued until the cross bar f' engages the keeper section g in the latch G, when the intermediate section may be locked in elevated position. The upper section is then swung on the supporting pin F as a pivot, the lower end of the upper member being by this movement arranged uppermost when the section is fully extended. The swinging movement of the upper member is, of course permitted through the open side of the intermediate member, it being understood that after the upper member is moved into operative position it is moved downward on the pivot pin F, the length of the slot h, by which movement the free edges of the upper member are caused to engage the abutment edges i' of the stop block I. The parts are returned to normal positions by obvious reversal of the above described operation, it being noted that the normally upper ends of the free edges of the upper member are rounded at h' to permit the necessary movement of the upper member on the pivot pin, without interfering with the stop block. After returning the upper member to normal position within the intermediate member, the latch member G is manually operated to release the intermediate member, whereupon said intermediate member and connected upper member gravitate to normal position within the housing member.

When in the elevated or extended position the notches J of the upper member are arranged in the relatively outer surface or edge of the member, in position to receive and retain the eye terminal of a retaining strap or chain K, the opposite end of which is similarly connected to the opposing car standard.

Having thus described the invention what is claimed as new, is:—

1. A railway car standard comprising a housing member, an intermediate member arranged for telescopic movement relative to the housing member, means for automatically locking the intermediate member in extended relation to the housing member, and an upper member movably connected to the intermediate member.

2. A railway car standard comprising a housing member, an intermediate member arranged for telescopic movement relative to and adapted to be normally inclosed within the housing member, and an upper member pivotally connected to the intermediate member and adapted to be normally housed within said intermediate member.

3. A railway car standard comprising a plurality of members, each of said members being constructed of a single sheet of material and of approximately U-form in section, said members being respectively nested in normal positions.

4. A railway car standard comprising a U-shaped housing member, a U-shaped intermediate member normally arranged within the housing member, a base plate closing the opening of the housing member, and guide flanges carried by the intermediate member and disposed between the housing member and the base plate.

5. A railway car standard comprising a base plate adapted to be connected to a car, a housing member adapted to be connected to the base plate, an intermediate member

slidably mounted within the housing member, and an upper member movably mounted within the intermediate member, said intermediate member being of greater length than the housing member, and a hanger bar depending from the housing member to receive and support the intermediate member.

6. A railway car standard comprising a housing member arranged to be fixed to the car, an intermediate member having telescopic relation with the housing member, means for securing the intermediate member in elevated position relative to the housing member, and an upper member pivotally connected to the intermediate member and normally housed within said intermediate member.

7. A railway car standard comprising a housing member arranged to be fixed to the car, an intermediate member having telescopic relation with the housing member, means for securing the intermediate member in elevated position relative to the housing member, an upper member pivotally connected to the intermediate member and normally housed within said intermediate member, and a stop block carried by the intermediate member to maintain the upper member in elevated position.

8. The combination with a car, of a car standard comprising a housing member secured to the side of the car, an intermediate member mounted for telescopic movement in the housing member and being open throughout its length on the side next the car, and an upper member pivotally connected to the intermediate member and movable through the open side of the latter, the open side of the intermediate member being closed by the car body to prevent movement of the upper member when the parts are in normal positions.

9. A railway car standard comprising a housing member, an intermediate member arranged for telescopic movement relative to the housing member, an upper member pivotally connected to the intermediate member, and means fixed to the intermediate member to engage the upper member when the latter is in elevated position and prevent movement of such upper member on its pivotal connection.

10. A railway car standard comprising a housing member, an intermediate member arranged for movement relative to the housing member and being open at one side, and an upper member pivotally connected to the intermediate member and movable through the open side of the latter, said upper member being open on one side and pivoted so as to dispose said open side in opposition to the open side of the intermediate member when the parts are extended.

11. A car standard comprising a housing member, an intermediate member movable relative to the housing member, an upper member pivotally connected with the intermediate member, and a stop block carried by the intermediate member to engage and prevent movement of the upper member when the latter is in operative position, said upper member being formed for limited independent longitudinal movement relative to the intermediate member to permit operation of the upper member to avoid engagement with the stop block in the pivotal movement of said upper member.

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

SAMUEL W. MURRAY.

Witnesses:
J. W. GARNER,
E. S. BOEHMER.