

No. 737,718.

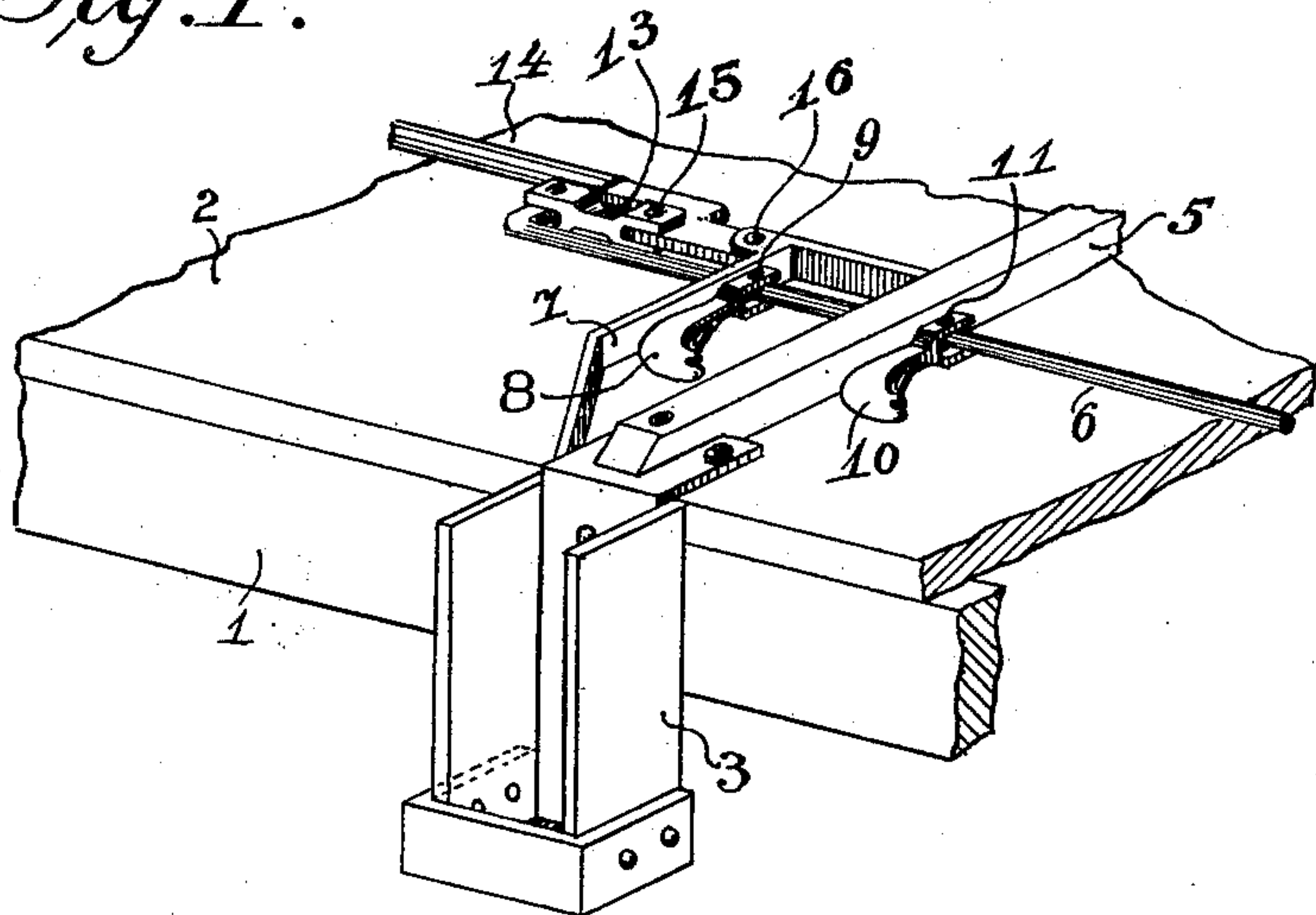
PATENTED SEPT. 1, 1903.

D. DONAGHY.  
POSITION GOVERNING MEANS FOR LOAD RETAINING STAKES.

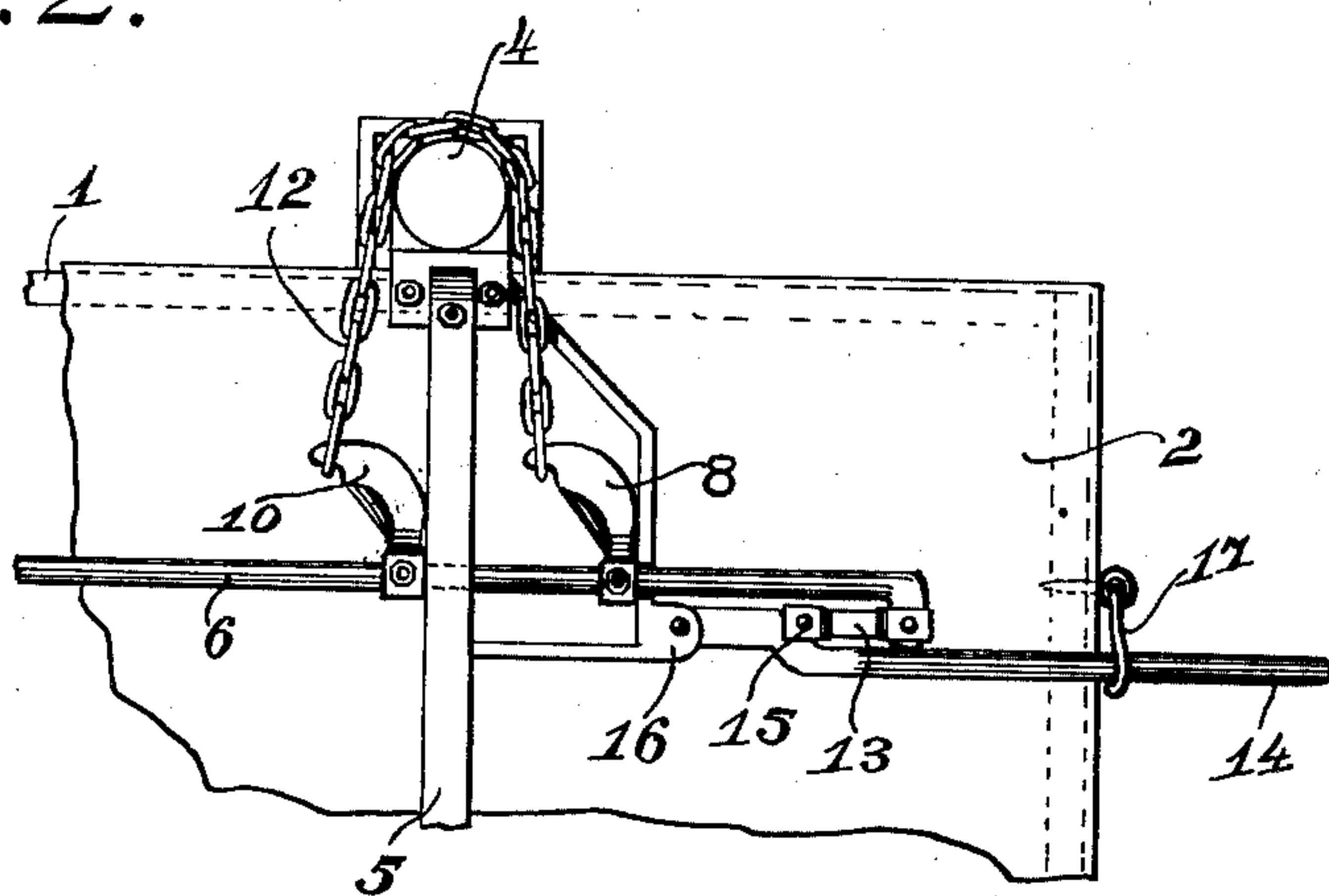
APPLICATION FILED JAN. 19, 1903.

NO MODEL.

*Fig. 1.*



*Fig. 2.*



WITNESSES:

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## UNITED STATES PATENT OFFICE.

DANIEL DONAGHY, OF DULUTH, MINNESOTA.

## POSITION-GOVERNING MEANS FOR LOAD-RETAINING STAKES.

SPECIFICATION forming part of Letters Patent No. 737,718, dated September 1, 1903.

Application filed January 19, 1903. Serial No. 139,497. (No model.)

*To all whom it may concern:*

Be it known that I, DANIEL DONAGHY, a citizen of the United States, residing at Duluth, in the county of St. Louis and State of Minnesota, have invented certain new and useful Improvements in Position-Governing Means for Load-Retaining Stakes; 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.

My invention relates to position-governing means for load-retaining stakes, and has for its object the provision of means which may be operated to release the load by an operator occupying a position of safety.

With this and other objects in view it consists in the combination, with a load-supporting structure, of a stake-supporting bracket secured thereto, flexible means adapted to partly encircle said stake, means for engaging the terminals of said flexible means, and means for operating said engaging means.

It also consists of certain other combinations, constructions, and arrangements of parts, as will be hereinafter described and claimed.

In the drawings, Figure 1 is a perspective view of a portion of a platform-car, showing my invention mounted thereon, omitting said stake and flexible means. Fig. 2 is a top plan view of the same, including said stake and flexible means.

In the drawings, 1 is the longitudinal sill of a platform-car, upon which in part is laid the platform 2. To the outer face of said sill I secure by any suitable means a stake-supporting bracket 3, preferably having a relatively low front wall, as at 3<sup>a</sup>, in which is erected the stake 4. Upon the platform of said car I lay a transverse sill 5 and through said sill longitudinally of the car project the draw-rod 6. At one side of said sill I secure to said platform a shallow box or housing 7 of any suitable construction, open at the top and preferably not higher than said transverse sill, through one wall of which housing said rod preferably extends. Within said housing I lay a hook 8 with its bill directed toward said transverse sill and the back of its bend loosely fulcrumed against the opposite wall of said housing, which said hook is

pivoted at its opposite end, as at 9, to said rod. At the opposite side of said transverse sill I lay the hook 10 upon said platform with the back of its bend loosely fulcrumed against said sill and the front of its bill directed away therefrom, which hook is pivoted at its opposite end, as at 11, to said rod. Flexible means of any suitable construction, as a chain 12, is in operative position loosely and removably attached at its opposite ends to said hooks, respectively, the loop of said flexible means being adapted to inclose said stake. To one end of said rod is pivoted a link 13, which in operative position lies parallel with said rod and is pivoted at its opposite end to an operating-lever 14, intermediate the ends of said lever, as at 15. One end of said lever is pivoted to any suitable anchorage upon or forming part of said load-bearing structure, as to a horizontal lug 16, formed upon or secured to said housing. The free end of said lever may be locked in position by any suitable means, as by a latch or hook 17, secured at one end to the end of said car and adapted to engage said lever.

In operation when the free end of said lever is released and thrown slightly out of parallel position to said rod the strain upon said hooks through said flexible means causes said hooks to slidably rock upon their respective fulcrums and draw said rod longitudinally of the car. The resultant position of the hooks is such as to permit the flexible means to disengage therefrom. The pressure of the load bearing against said stake now forces the same radially outward and downward, which stake, however, in its movement will usually jump the low front wall of said bracket and fall entirely free of said car.

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

1. In position-governing means for load-retaining stakes, the combination with a load-bearing structure, provided with a stake-supporting bracket and a load-retaining stake erected therein, of a longitudinally-directed rod slidably mounted thereon, a hook pivoted to said rod, means against which said hook is slidably fulcrumed, flexible means adapted, in operative position, to inclose said stake and loosely engaged at one of its ends by said



hook, means for securing the opposite end of said flexible means in operative position, and means for securing said rod in operative position against longitudinal movement, substantially as described.

2. In position-governing means for load-retaining stakes, the combination with a load-bearing structure, provided with a stake-supporting bracket and a load-retaining stake erected therein, of a longitudinally-directed rod slidably mounted thereon, a hook-lever pivoted to said rod, means against which the back of the bend of said hook is slidably fulcrumed, flexible means adapted in operative position to inclose said stake, and loosely engaged at one of its ends by said hook, a link pivoted at one of its ends to said rod, a lever, pivoted intermediate of its end to the opposite end of said link, an anchorage adjoining said rod and adapted to pivotally secure one end of said lever, and means for securing the opposite end of said lever in operative position parallel with said rod, substantially as described.

3. In position-governing means for load-retaining stakes, the combination with a load-bearing structure of a stake-supporting bracket, open at the top, with high side walls and low front wall, secured to said structure, a stake loosely erected in said bracket, flexible means adapted to inclose said stake, hori-

zontally-arranged hook-levers adapted, in operative position, to engage the opposite ends of said flexible means and, in retracted position, to disengage therefrom, means against which said levers are slidably fulcrumed, means for securing said hooks in operative position, and means for controlling said securing means, substantially as described.

4. In position-governing means for load-retaining stakes, the combination with a load-bearing structure of a stake-supporting bracket secured thereto, a stake loosely erected upon said bracket, flexible means adapted to inclose said stake, hook-levers adapted, in operative position, to engage said flexible means, and, in retracted position, to disengage therefrom, means against which said levers may be slidably fulcrumed, a slidable draw-rod, arranged at an angle to the shafts of said levers and pivoted thereto, and means for controlling the slidable position of said rod, substantially as described.

In testimony whereof I have hereunto affixed my signature in presence of two witnesses.

DANIEL DONAGHY.

Witnesses:

JAMES T. WATSON,  
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