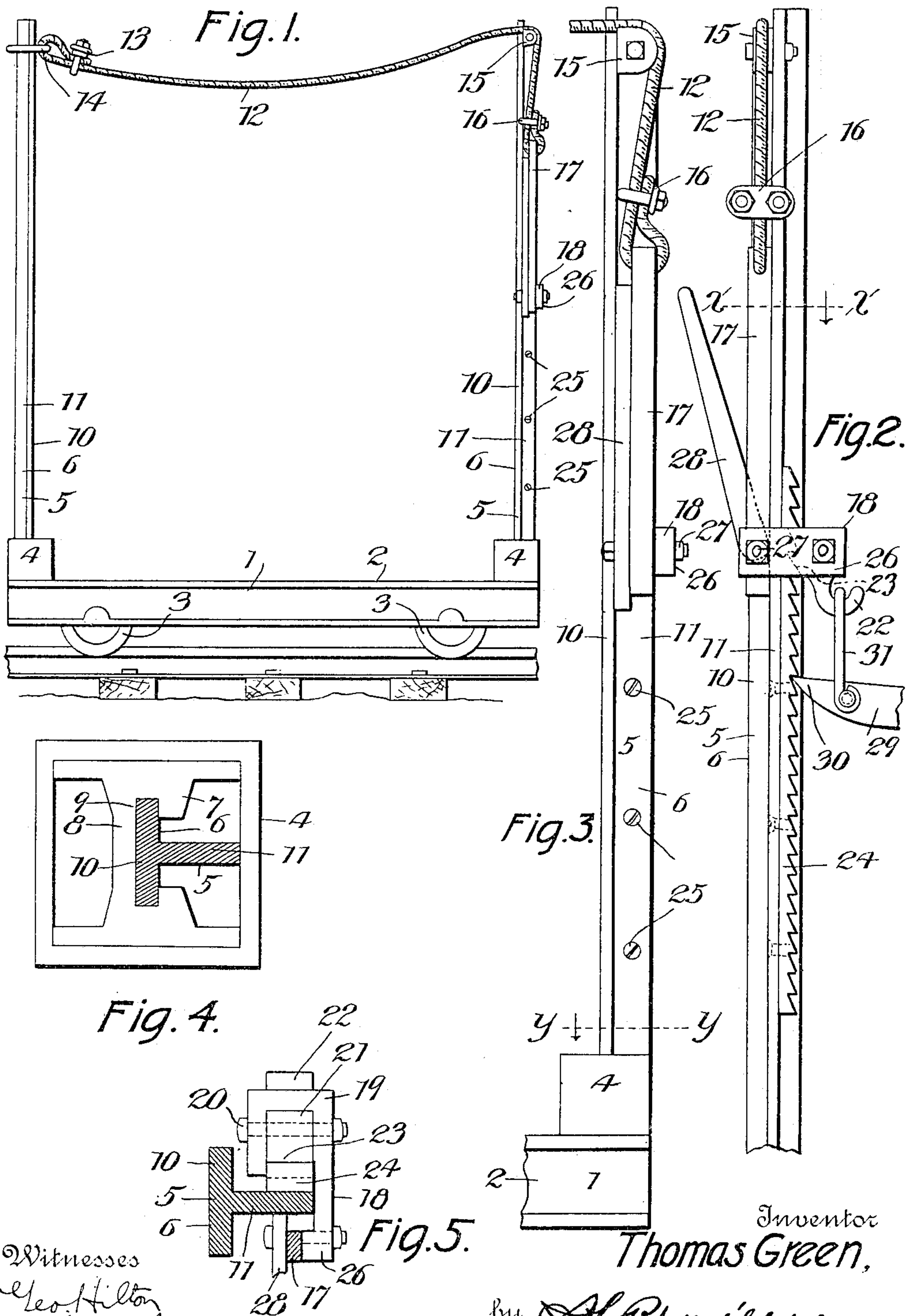


No. 819,216.

PATENTED MAY 1, 1906.

T. GREEN.
CAR STAKE AND LOAD BINDING DEVICE.

APPLICATION FILED NOV. 9, 1905.



Witnesses
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THOMAS GREEN, OF LA FAYETTE, INDIANA.

CAR STAKE AND LOAD-BINDING DEVICE.

No. 819,216.

Specification of Letters Patent.

Patented May 1, 1906.

Application filed November 9, 1905. Serial No. 286,628.

To all whom it may concern:

Be it known that I, THOMAS GREEN, a citizen of the United States, residing at La Fayette, in the county of Tippecanoe and State of Indiana, have invented certain new and useful Improvements in Car Stakes and Load-Binding Devices; and I do 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 improvements in metallic stakes and load-binding devices for cars or trucks used in kilns and the like.

The object of my invention is to provide a device of this character which will be simple in construction, durable in use, efficient in operation, and comparatively inexpensive to manufacture.

With this and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be more fully described, and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a vertical sectional view through a car equipped with my improved metallic stakes and load-binding device. Fig. 2 is a front view, on an enlarged scale, of one of the stakes and the load-binder. Fig. 3 is a side view of the same. Fig. 4 is a detail horizontal sectional view taken on the line *x x* of Fig. 2, and Fig. 5 is a detail horizontal sectional view taken on the line *y y* of Fig. 1.

Referring to the drawings by numeral, 1 denotes a car or truck adapted for use in a kiln or the like and preferably comprising a metallic body or frame 2, constructed of channel-bars, supporting-wheels 3, upon which said frame is mounted, and metallic pockets 4, adapted to receive my improved stakes or standards 5. The latter are preferably formed of straight metallic T-bars 6, which have their lower ends secured in bases 7, which latter are adapted to be removably secured in the pockets 4 upon the frame of the truck. These bases 7 are in the form of H-shaped castings of malleable iron or the like and have in their vertical cross portions 8 grooves or recesses 9 to receive the lower ends of the transverse or cross portion 10 of the T-bars 6, the main portion 11 of which projects midway between the flanges or sides of the base, as clearly shown in Fig. 4 of the drawings. The pockets 4 are preferably in

the form of square cast-metal boxes, in which the bases 7 may be frictionally retained, bolted, or otherwise removably secured.

The stakes 5, which are arranged in pairs at opposite points of the sides or ends of the car-frame 2, according to the disposition of the pockets 4, are connected by a cable, chain, or other flexible connection 12, which is preferably of metal and has one of its ends secured by a clip 13 to an eye 14 upon the upper end of one of the T-bars 6. From the eye 14 the wire or cable 12 extends to a guide 15, provided upon the upper end of the portion 11 of the T-bar of the other stake or standard. From this guide 15 the cable extends downwardly and is secured by means of a clip 16 to one end of a link 17. The latter has its opposite end secured to a device by means of which the cable is adjusted and secured, so as to retain a load upon the car. This adjusting and securing device comprises a block or body 18, which surrounds and is adapted to slide vertically and move transversely upon the main portion 11 of the T-bar 6. This block or body is of substantially rectangular form and has secured in one of its ends 19, by means of a bolt or the like 20, a dog or pawl 21, which has its lower end formed with a depending hook 22. Said dog or pawl has on its inner face a series of teeth 23, which are adapted to engage similarly-shaped teeth of a rack-bar 24. The latter is secured by screws or the like 25 upon one side of the portion 11 of the T-bar. In the opposite end 26 of the body or block 18 is pivotally secured, by means of a bolt 27, a cam-lever 28, which is adapted to engage the opposite side of the portion 11 of the T-bar for the purpose of holding the teeth 23 of the pawl in engagement with the teeth of the rack-bar. The bolt 27 also pivotally connects the link 17 to the block or body. When the lever is swung so that its cam-face is disengaged from the portion 11 of the T-bar, the block or body 18 may be moved transversely to disengage the teeth 23 of the pawl from the rack-bar 24, so that the block or body 18 may be moved or slid vertically upon the T-bar for the purpose of adjusting the cable 12, and when said lever 28 is swung in the opposite direction its cam-face will move the body or block 18 transversely and cause its pawl to lock it to the rack-bar 24.

In order to permit the adjusting device to be moved downwardly when in its released position, so that the cable 12 may be stretched,

I preferably provide a lever 29, which has a pointed end 30 to engage the teeth of the rack-bar 24 and a loop or bail 31, pivoted upon said end for the purpose of engaging the hook 22 upon the pawl. When the handle end of the lever 29 is depressed, it will be seen that the block or body 18 will be moved downwardly upon the T-bar to stretch the cable 12.

The use, operation, and advantages of my invention will be readily understood from the foregoing description, taken in connection with the accompanying drawings. It will be seen that the stakes will be greatly strengthened by the rope or cable 12, and the load will be firmly held upon the car by the same. The rope or cable may be quickly applied and removed, and it may be adjusted to a car of any width by means of the adjusting and securing device.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

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

1. In a device of the character described, the combination of a pair of stakes, a flexible connection attached to one of said stakes, a guide upon the other of said stakes for said flexible connection, a rack upon said stake, a sliding element upon said stake and attached to the free end of said flexible connection, a pawl upon said element adapted to engage said rack, and means for holding said pawl in engagement with said rack.

2. In a device of the character described, the combination of a pair of stakes, a flexible connection attached to one of said stakes, a guide upon the other of said stakes for said flexible connection, a rack upon said stake, a sliding element upon said stake and attached to the free end of said flexible connection, a

pawl upon said element adapted to engage said rack, and a cam-lever upon said element for holding said pawl in engagement with said rack.

3. The combination with a metallic stake, of a guide thereon, a flexible connection engaged with said guide, a rack upon said stake, a sliding body upon said stake and attached to said flexible connection, a pawl upon said body to engage said rack, and a cam-lever upon said body to hold said pawl in engagement with said rack.

4. The combination with a metallic stake, of a guide thereon, a flexible connection engaged with said guide, a rack upon said stake, a sliding body upon said stake and attached to said flexible connection, a pawl upon said body to engage said rack, a cam-lever for holding said pawl in engagement with said rack, a hook carried by said body, a lever adapted to engage said rack, and a bail carried by said lever and engaged with said hook.

5. The combination of a metallic stake of T form, a guide upon said stake, a flexible connection engaged with said guide, a block or body slidable upon the main portion of said T-bar, a rack-bar upon one side of said main portion, a pawl upon said body to engage said rack-bar, and a cam-lever carried by said body and adapted to engage the opposite face of the main portion of said T-bar.

6. A metallic stake for cars, or the like, comprising a straight T-bar and an H-shaped base formed in its cross portion with a recess to receive the lower end of said T-bar, substantially as described.

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

THOMAS GREEN.

Witnesses:

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E. M. BODENHEIMER.