

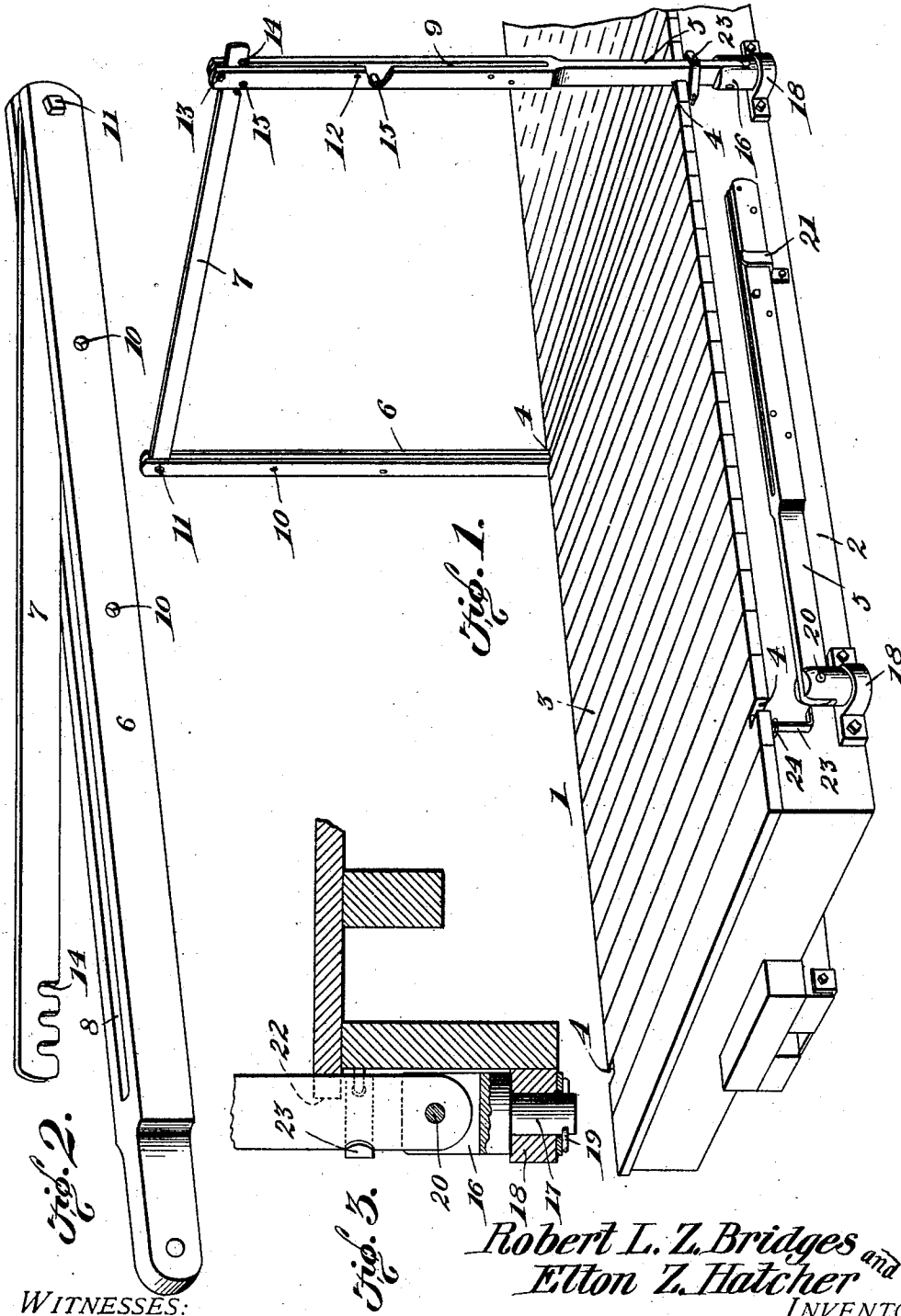
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R. L. Z. BRIDGES & E. Z. HATCHER.

CAR STANDARD.

APPLICATION FILED MAY 26, 1906.



WITNESSES:

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UNITED STATES PATENT OFFICE.

ROBERT LARKIN ZACHARY BRIDGES AND ELTON ZEBULIA HATCHER, OF
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CAR-STANDARD.

No. 832,588.

Specification of Letters Patent.

Patented Oct. 9, 1906.

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To all whom it may concern:

Be it known that we, ROBERT LARKIN ZACHARY BRIDGES and ELTON ZEBULIA HATCHER, citizens of the United States, residing at Brinson, in the county of Decatur and State of Georgia, have invented a new and useful Car-Standard, of which the following is a specification.

This invention relates to standards or stanchions for use in connection with flat freight-cars for carrying lumber, poles, logs, crated freight, and the like; and it has for its objects to provide a standard construction which is simple and inexpensive to manufacture, which is very readily applied to flat or sideless cars with practically no change in its construction, and which is easy to use and thoroughly reliable in operation.

With these objects in view and others, as will appear as the nature of the invention is better understood, the invention comprises various features of construction and arrangement of parts, which will be hereinafter fully described, and set forth with particularity in the claims appended hereto.

In the accompanying drawings, which illustrate one of the embodiments of the invention, Figure 1 is a perspective view of a portion of a flat-car, showing one set of standards in operative position thereon, the other set in inoperative position. Fig. 2 is a perspective view of one of the standards. Fig. 3 is a detail sectional view of a base portion of one of the standards.

Corresponding parts in the several figures are indicated throughout by similar characters of reference.

Referring to the drawings, 1 represents the body of a car of a flat type, the same being constructed of wooden sills 2 and a floor 3, as shown. If desired, however, the car-body can be made of pressed sheet metal, according to well-known practice. Along the side edges of the floor of the body are provided spaced slots or recesses 4, into which the standards are adapted to engage. When the car is provided with a wooden floor, these slots can be easily made by cutting out an angular piece at the ends of the floor-boards, as shown in Fig. 1.

The standards are arranged in sets, and each comprises a standard 5 and a standard 6, which latter is provided with a cross-bar 7, pivoted thereto. The standard 6, as shown

in Fig. 2, differs from the standard 5 (shown in Fig. 1) by having substantially its entire length slotted, as indicated at 8, so as to receive in its slot the cross-bar 7 when the latter is folded therein and not in use. In Fig. 2 the cross-bar is shown slightly raised out of the slot for more clearly illustrating the construction. If desired, however, the standards 5 can be slotted their entire length; but this is not found necessary. The slot 9 of each standard 5 extends about two-thirds of the length from the top end, and is adapted to receive the notched end of the cross-bar of the opposite standard 6. The standards are slotted, so as to permit of the cross-bar being adjusted to different heights to accommodate different loads on the car. For this purpose the standards 6 are provided with openings 10, suitably spaced apart, which are adapted to receive a bolt 11. The standards 5 are provided with openings arranged approximately on the same level with the openings in the standards 6. These openings are indicated at 12 and are adapted to receive a lock pin or bolt 13. The free end of each cross-bar 7 is cut with a series of notches 14, and these are adapted to engage pins 15, arranged adjacent to the openings 12. By this arrangement the cross-bar 7 is hooked over the desired pin 15, and the lock-nut or pin 13 is then inserted in the adjacent opening 12, so as to retain the cross-bar in the standard.

The lower end of each standard is pivotally mounted for movement in a vertical plane in a pivot or journal piece 16. This is provided with a reduced portion 17, forming a pintle, that is mounted in the eye or bearing 18, bolted or otherwise secured to the sill 2 of the car. These eye-bearings are located below and in line with the slots 4 in the top of the car. The pivots are held in place in the bearings by the cotter-pins 19, Fig. 3. The upper end of the pivot is bifurcated, so as to receive the lower end of a standard, which latter is secured thereto by the pivot 20. By this arrangement the standard is capable of movement on two right-angulantly-disposed axes—viz., that of the pivot 16 and that of the pivot 20. The object of so mounting the standards is to permit of their being folded up and supported along the sill of the car out of the way, yet always accessible and convenient. To support the standards when they are not in use, brackets 21 are provided on the sills 2,

one adjacent the free end of each standard. When it is desired to raise a standard, it is first disengaged from the bracket 21 by a slight vertical movement, and then the standard is moved around on the pintle 17 of the pivot 16 until it is clear of the edge 22, Fig. 3, of the top of the car, and then by a movement in a vertical plane on the pivot 20 the standard can be inserted into the adjacent slot 4. After the standard is placed in its respective slot 4 it is held by a hook 23, secured to the sill of the car by the staple or other device 24.

From the foregoing description the operation and advantages of the invention will be readily understood. In loading a car with lumber, for instance, the standards along one side of the car may be raised and held in position by their respective hooks 23. If desired, however, the standards along both sides may be raised, and again they need not be raised until the car is loaded. After the car is loaded the standards which were not raised during the loading are next raised and then the cross-bars 7 adjusted in position and locked. By reason of the several notches 14 on the cross-bars the standards can be moved toward or away from each other, according to the condition of the load, and by reason of the fact that the cross-bars are capable of being set to different heights different-sized loads may be carried with equal advantage with the present construction.

We have described the principle of operation of the invention, together with the apparatus which we now consider to be the best embodiment thereof, but we desire to have it understood that the apparatus shown is merely illustrative, and that various changes in the details of the parts and arrangements thereof may be resorted to as lie within the scope of the invention.

What is claimed is—

1. The combination with a car-body, of standards located on opposite sides of the body and provided with longitudinal slots, a single-piece cross-bar which engages at its ends in the said slots and having a plurality of notches adjacent one end, an adjustable device for supporting the unnotched end of the cross-bar at different heights on one of the standards, and stationary devices on the other standard adapted to be engaged by any one of the notches of the cross-bar, the said cross-bar being adapted to fold up in the slot of the standard having the said adjustable device when the standards are in knocked-down position.

2. The combination with a car-body, of two standards provided with longitudinal

slots extending in a plane transversely of the car-body, a cross-bar arranged with its ends projecting into the slots, separate means for securing the ends of the bar to the standards, one of the means comprising a pivot and the other comprising a notch on the cross-bar, a member on the standard engaging the notch, and a removable fastener on the standard engaging the cross-bar to hold the same with the notch engaging the said member.

3. The combination with a car-body, of a pair of standards each of which is provided with a plurality of spaced bolt-receiving openings, a cross-bar, means for connecting one end adjustably to one of the standards at the openings thereof, means for adjustably connecting the opposite end of the cross-bar to the other standard adjacent its openings, and a locking-pin cooperating with the said means for holding one end of the cross-bar in place.

4. The combination of a standard provided with a longitudinal slot and a series of openings, a pin arranged adjacent each opening, a cross-bar having notches adapted to engage any one of said pins, and a locking means for holding the cross-bar in engagement with a pin.

5. The combination with a car-body, of a longitudinal slotted standard mounted at one side of the car to swing on two axes disposed permanently at right angles to each other, a second slotted standard similarly mounted on the opposite side of the car, and a single-piece cross-bar having its ends extending into the slots of the standards and adjustably held therein.

6. The combination with a car-body, of a standard, a member on which the standard moves on a horizontal axis, means immovably fixed on the car for mounting said member to turn on a vertical axis, and a fastening device for holding the standard in an upright position.

7. The combination with a car-body provided with a slot, of a standard, a stationary bearing secured to the sill of the car at one side of the slot and in line therewith, a pivot member having a pintle mounted in said bearing to move in a vertical axis, and a connection between the standard and said member which permits the standard to be moved into or out of the slot.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

ROBERT LARKIN ZACHARY BRIDGES.
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Witnesses:

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