L. P. COOK.

WAGON RACK STANDARD.

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944,539.

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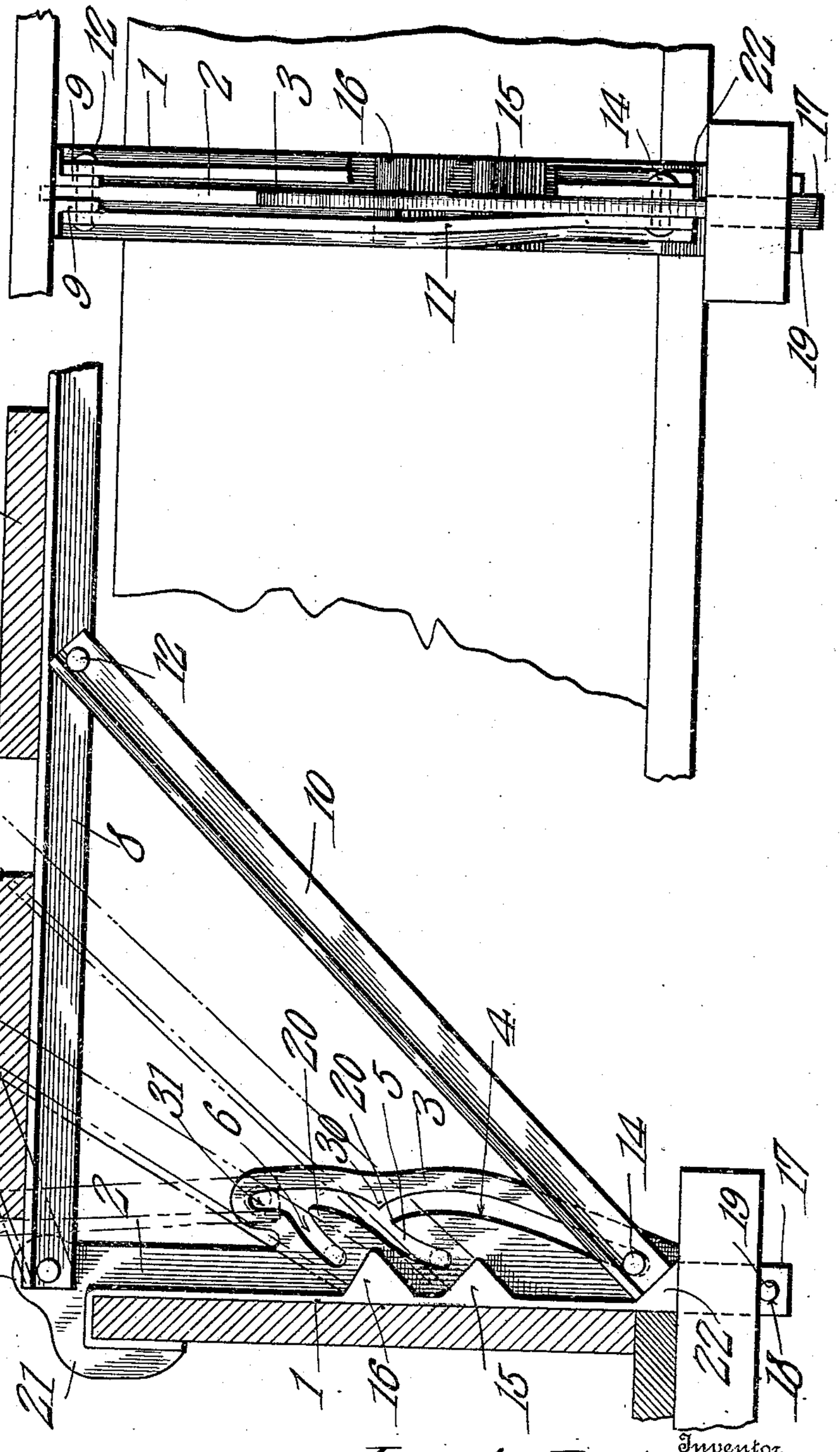
Fig. 2.



Witnesses

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WAGON-RACK STANDARD.

944,539. Specification of Letters Patent. Patented Dec. 28, 1909.

Application filed March 29, 1909. Serial No. 486,379.

To all whom it may concern:

Be it known that I, LOUIS P. COOK, a citizen of the United States, residing at Clarendon, in the county of Orleans and State of New York, have invented a new and useful Wagon-Rack Standard, of which the following is a specification.

The objects of the invention are, generally, the provision in a merchantable form of a device of the class above specified which shall be inexpensive to manufacture, facile in operation and devoid of complicated parts; specifically, the provision of a hanger of novel and improved construction the same being provided with a plurality of vertically spaced seats adapted to receive the lower terminal of a brace, the said hanger being provided with novel means for leading the terminal of the brace into abutment with the seats and for retaining it in position upon the seats; other and further objects being made manifest hereinafter as the description of the invention progresses.

The invention consists in the novel construction and arrangement of parts hereinafter described, delineated in the accompanying drawings, and particularly pointed out in that portion of this instrument wherein patentable novelty is claimed for certain distinctive and peculiar features of the device, it being understood, that, within the scope of what is hereinafter thus claimed, divers changes in the form, proportion, size, and minor details of the structure may be made, without departing from the spirit or sacrificing any of the advantages of the invention.

Similar numerals of reference are employed to denote corresponding parts throughout the several parts of the drawing.

In the accompanying drawings, Figure 1 shows my invention in side elevation; and, Fig. 2 is a front elevation.

In carrying out my invention, I provide primarily, a hanger, comprising a base plate 1 from which projects a rib 2, the base plate 1 and the rib being bent to form a hook 21 arranged to engage the upper edge of a wagon-box. The lower end of the hanger is diminished as denoted by the numeral 17 to pass through the frame of the wagon-box, and this diminished portion is apertured as denoted by the numeral 18 to receive a cotter pin, bolt or like device, denoted generally by the numeral 19, and arranged to assemble the hanger with the box of the wagon. The rib 2 is outwardly extended, in its lower portion, to form a flange 3. This flange 3 is provided with a longitudinally disposed main slot 4, the same branching to form a lower slot 5 and an upper slot 6, vertically spaced apart. These slots 5 and 6 which branch from the main slot 4, extend downward to form between them and the main slot, upstanding tongues 20. Opposite the mouth of the lower slot 5 the flange 3 is inwardly extended to form a lug 30.

The upper terminal of the hanger is enlarged in the rib portion 2 thereof to form a lug 7 to which is pivoted one end of the arm 8. As shown to best advantage in Fig. 2, this arm 8 comprises a pair of angle irons 9, disposed on either side of the lug 7. The brace 10 which is adapted to support the arm 8 comprises a pair of spaced members 11 which like the members 9 of the arm 8, are fashioned from angle irons. Between the members 11 of the brace are included the depending flanges of the angle irons 9 which go to form the arm 8, and the flange 3 of the hanger, a bolt 12 or like device being passed transversely through the upper ends of the angle irons 11 of the brace and through the flanges of the angle irons 9, to form a pivotal connection between the brace 10 and the arm 8. A bolt 14 is passed transversely through the lower ends of the angle irons 11 of the brace and through the slot 4 of the flange 3. Disposed upon either side of the flange 3, at the base of the main slot 4, is a lower seat 22, a similar intermediate seat 15 being disposed at the base of the slot 5, and an upper seat 16, similar to those beneath it, being disposed at the base of the slot 6. These seats are adapted to receive the lower end of the brace 10, and their outer faces are disposed normal to the axis of the brace 10 in order to receive squarely its thrust. When it is desired to raise the arm 8 and the side boards 23 which are carried thereby, from the position shown in solid line in Fig. 1 to one of the positions

shown in dotted line, the bolt 14, traveling the main slot 4, will enter one of the slots 5 or 6, as the operator may wish, the bolt 14 traversing the branch of the main slot and leading the lower terminal of the brace 10 into abutment with the seat which lies at the base of the slot into which the element 14 has entered. The lug 30 which the bolt 14 will encounter in its upward movement, serves to deflect the said bolt against the upper tongue 20, and from this position, in contact with said tongue, the bolt is positioned to be dropped downward into the slot 5, or to follow the contour of the upper tongue 20, to enter the upper slot 6. The tongues 20 serve to retain the brace against lateral displacement, and it will be seen that each of these tongues 20 is pointed at its upper terminal and that, as the brace 10 is raised, there is no opportunity for the bolt 14 to lodge temporarily upon the upper extremity of one of the tongues, from which position it might subsequently be displaced, allowing the arm 8 and its superposed load to fall downward with disastrous results.

It will be noted in the drawings, that the bolt 14 is so positioned in the brace 10, that, when the lower end of the brace is in abutment with one of the seats 22, 15, or 16, the said bolt 14 upon its lower face, does not contact with the hanger. By this construction, the entire weight of the arm 8 and its superposed load, is carried by the seat and not by the bolt 14.

It is to be understood that the main slot 4 may be provided with any number of ramifications, the slots 5 and 6 serving to illustrate one embodiment merely of the invention. It is to be understood likewise, that the length of the brace 10 may be varied to give the arm 8 any desired angle with respect to the hanger, when the lower terminal of said brace 10 is in abutment with a seat. Preferably, however, as shown in the drawings, the lower seat 22 will limit the arm 8 to a horizontal position; the upper seat 16 being designed to limit the arm 8 to a position substantially at an angle of 45° to the hanger; and the intermediate seat 15 being designed to limit the said arm 8 to a position substantially half-way between the two positions hereinbefore mentioned. The portion 31 of the main slot, which is disposed above the mouth of the slot 6 is designed to receive and house the bolt 14 when the arm 8 is in vertical alinement with the side of the wagon-box. In the accompanying drawings the positions of the arm 8 have been indicated in two instances only, it being thought that the foregoing description will render sufficiently clear, the other positions, without the necessity of specific illustration.

In the foregoing description certain parts of the device have been denominated "Angle irons" but it is to be understood that this term is intended to be descriptive of the shape of the part to which it is applied, and not as a designation of the material from which the device is of necessity to be constructed.

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

1. In a device of the class described, a hanger having a slot consisting of a plurality of vertically spaced downwardly extending ramifications, and being provided with a flat seat at the base of each ramification; an arm terminally pivoted to the hanger; and a brace having its upper end pivoted to the arm, its lower end being arranged to traverse the slot, and to engage the seats successively, the planes of the seats being normal to the brace when the latter is in contact therewith.

2. In a device of the class described, a hanger having a projecting flange provided with a slot consisting of a plurality of vertically spaced downwardly extending ramifications and with a flat transverse seat at the base of each ramification; an arm terminally pivoted to the hanger; a bipartite brace inclosing the arm and the flange between its terminals and being pivoted to the arm, the lower end of the brace being arranged to engage the seats successively normal to the planes thereof; and a transverse element mounted in the lower end of the brace and being arranged to traverse the slot.

3. In a device of the class described, a hanger having a slot consisting of a main portion and a plurality of vertically spaced downwardly extending auxiliary branches laterally inclined to form pointed upstanding tongues between the auxiliary branches and the main portion, said hanger having a flat seat at the base of each part of the slot; an arm terminally pivoted to the hanger; and a brace having its upper end pivoted to the arm, its lower end being arranged to traverse the branches of the slot and to move downward to the rear of the tongues into engagement with the seats normal to the planes thereof.

4. In a device of the class described, a hanger having a slot consisting of a main portion and a plurality of vertically spaced, downwardly extending auxiliary branches laterally inclined to form pointed upstanding tongues between the auxiliary branches and the main portion, the hanger being provided with an inwardly extending pointed lug having its apex disposed opposite the mouth of one of the auxiliary branches, the hanger being provided with a seat at the base of each auxiliary branch; an arm terminally pivoted to the hanger; and a brace

having its upper end pivoted to the arm, its lower end being arranged to traverse the branches of the slot and to move downward to the rear of the tongues into engagement successively with the seats, and to rest upon said seats normal to the planes thereof.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

LOUIS P. COOK.

Witnesses:
ELPHONZO D. COOK,
W. A. DOWNS.