

(No Model.)

2 Sheets—Sheet 1.

W. LEONHARDT.
DELIVERY WAGON.

No. 544,232.

Patented Aug. 6, 1895.

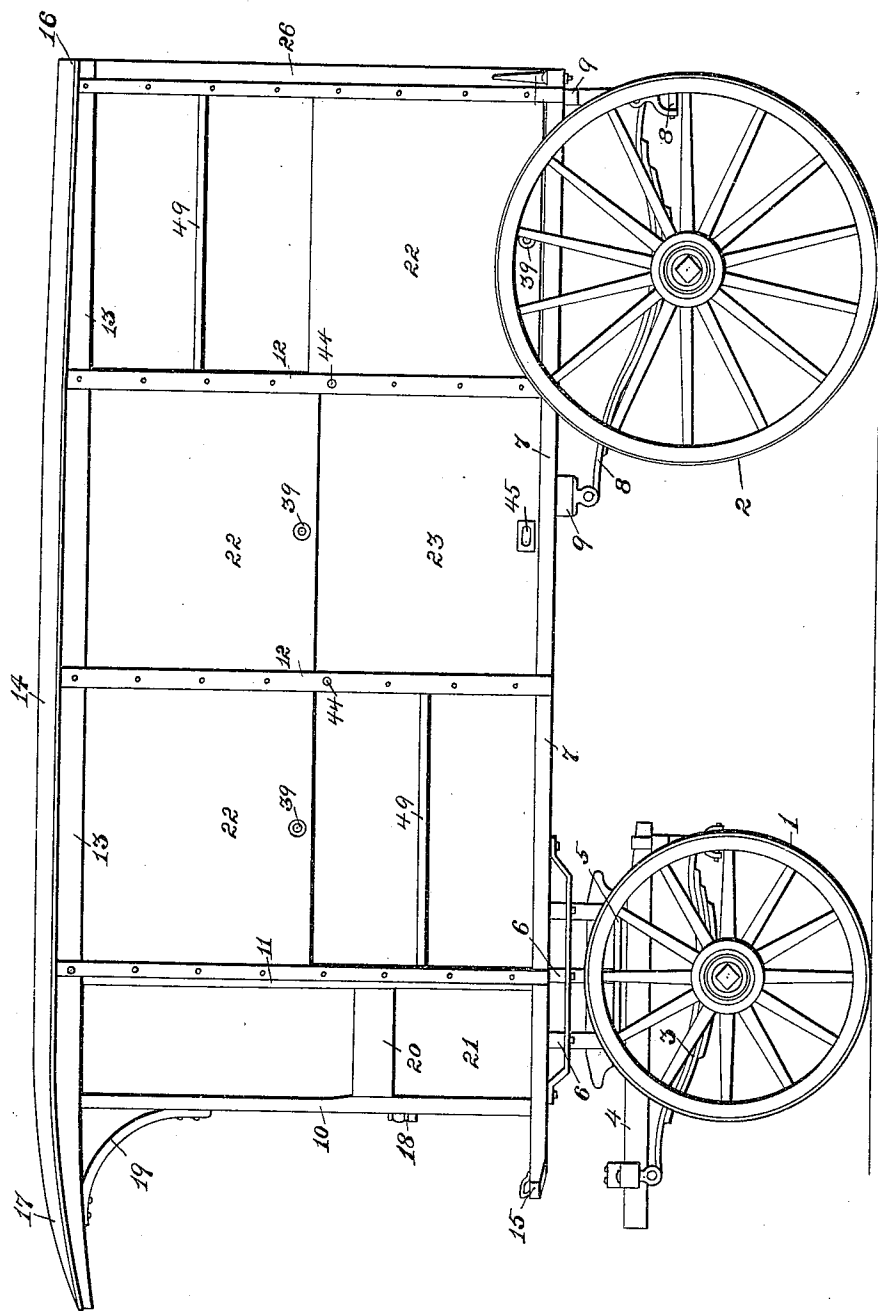


Fig. 1

Witnesses:

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Attorney.

(No Model.)

2 Sheets—Sheet 2.

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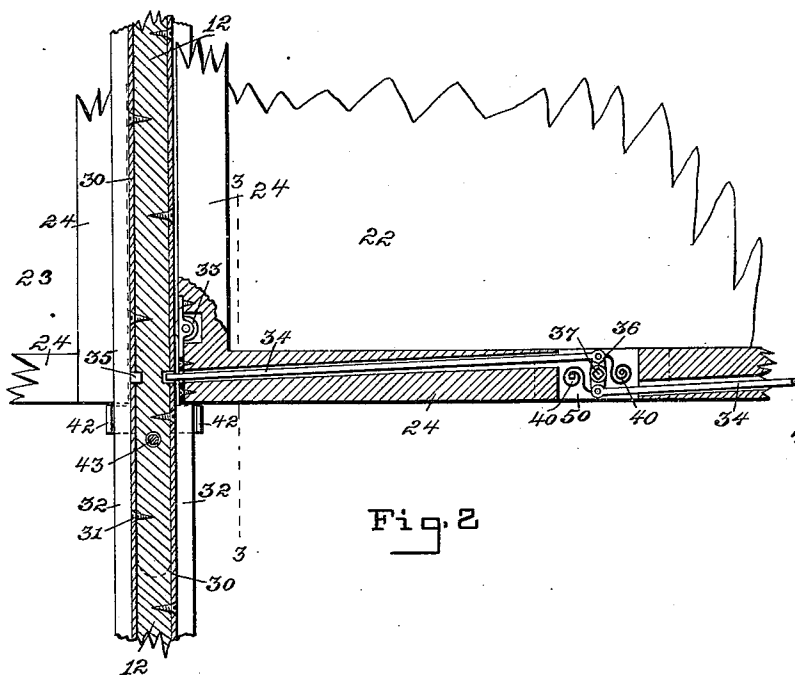


Fig. 2

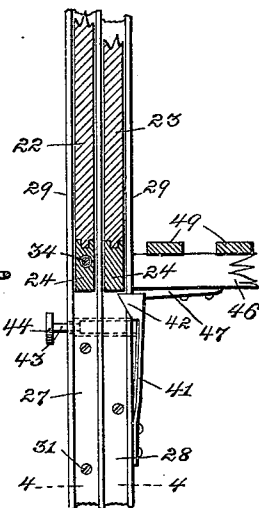


Fig. 3

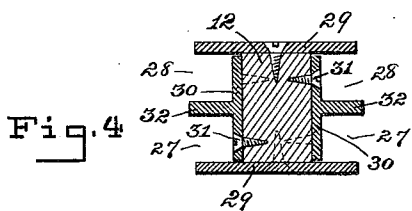


Fig. 4

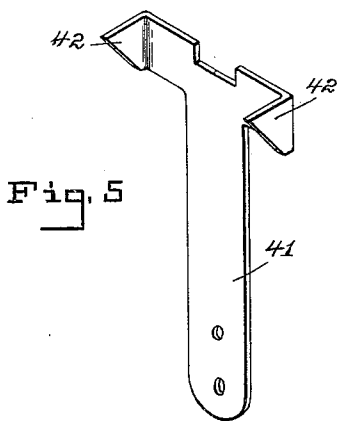


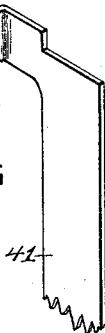
Fig. 5

Witnesses:

Fig. 6

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UNITED STATES PATENT OFFICE.

WILLIAM LEONHARDT, OF BALTIMORE, MARYLAND, ASSIGNOR TO THE
LEONHARDT WAGON MANUFACTURING COMPANY, OF SAME PLACE.

DELIVERY-WAGON.

SPECIFICATION forming part of Letters Patent No. 544,232, dated August 6, 1895.

Application filed October 25, 1894. Serial No. 526,920. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM LEONHARDT, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Delivery-Wagons; 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.

This invention has relation to wagons for the delivery of such merchandise as is usually contained in cases, boxes, pans, bottles, or other small packages; and this invention consists in the improved construction, arrangement, and combination of parts herein-after fully described, and afterward specifically pointed out in the appended claims.

In the accompanying drawings, Figure 1 shows a side view of a covered wagon with my improved side and vertically movable sliding doors. Fig. 2 is a longitudinal section through one of the top or roof-supporting standards or studs and a portion of the adjacent doors, one of which is partly in section, showing the spring-bolts for holding it up when raised. Fig. 3 shows a transverse section of the same parts on the line 3 3 of Fig. 2. Fig. 4 shows a cross-section of one of the top or roof-supporting standards taken on the line 4 4 of Fig. 3. Fig. 5 shows a perspective view of a double spring-latch for supporting the lower door when raised. Fig. 6 shows a similar view of a single latch for the same purpose.

Like numerals of reference mark the same parts wherever they occur in the various figures of the drawings.

Referring to the drawings by numerals, 1 and 2 designate the front and rear wheels of the wagon; 3, the front springs, which are attached to the lower section 4 of the front or swivel gearing. The upper section 5 of said gearing supports the cross-bars 6, which carry the front end of the two side sills 7 of the wagon-body. The rear or platform springs 8 connect with and support the cross-bars 9, which carry the rear ends of the two side sills 7, previously mentioned. Extending upward from the said side sills 7 are standards 10, 11, 12, and 26, in the present instance five in

number. It will be seen from the drawings that the last four, 11, 12, 12, and 26, are not only equidistant, but also farther apart from one another than the first two, 10 11, which latter carry the driver's seat 18, extending crosswise of the wagon-body and from one side to the other.

Upon the standards 10, 11, 12, and 26, referred to, the framework 13 of the roof 14 rests. The first or front one 10 of the standards just referred to is placed a short distance back from the end 15 of the side sills 7 to allow for a footboard, which extends across from one side sill to the other. The last or rear standard 26 is placed at the extreme end of the side sill, and upon it rests the extreme rear end 16 of the roof-framework 13. The roof 13 14 is longer than the side sills 7, and at its front end, from the front standard 10 forward, has a slight down curve 17, which forms a shield or hood for the driver's seat 18, already mentioned. A forwardly-projecting bracket 19 connects the front standard 10 near its upper end with the hood 17 and serves to support the front end of the latter. A longitudinal bar 20 just above the driver's seat connects the two adjacent standards 10 11 at each side of the wagon-body. The space below this bar 20 down to the sill 7 is provided with a panel 21.

Disposed in each of the spaces or sections, three in number, between the four equidistant standards 11, 12, and 26, is a pair of overlapping vertical sliding doors 22 and 23, the upper one 22 of which overlaps the exterior surface of the lower door 23, and each door consists of a frame 24, inclosing the door-panel.

The sliding doors 22 23, respectively, of any section have position in grooves or slideways 27 28, formed upon the edges of the standards 11 12 26 adjacent thereto. The grooves 27 28, referred to, are formed as follows: Upon the interior and exterior face of each of the upright standards is fastened a metal facing-plate 29, of greater width than the standard, which extend beyond the edges of the same and form a groove along the standard from the sill 7 to the roof-frame 13. In each of the grooves just mentioned and extending the entire length thereof is a strip of T-iron, having the base or double-webbed portion 30 fas-

tened to the standard, in the present instance by screws 31, to form the bottom for the grooves 27 28, previously mentioned. The other or single web 32 of the T-iron forms the division-wall between the said grooves 27 28. It will thus be seen that the said grooves are metal lined; furthermore, that the metal facing-plates 29 and the T-iron tend to give additional strength to the standards. It will also be seen that the standards 11 and 26 have the grooves 27 28, referred to, only on the edge which is adjacent to the sliding doors. Friction-rollers 33 (see Fig. 2) are let in the side edges of each of the door-frames 24, respectively, one near the top and the other near the bottom edge of the same. These rollers travel in the grooves 27 28 and bear upon the double web 30 of the T-iron, and thereby allow the door to move freely up and down.

The upper or outer door 22, when raised, is supported by two spring-bolts 34, projecting from the opposite ends of the bottom rail of the door-frame 24 and into sockets 35 in the bottom of the grooves 27, in which the door slides. The opposite ends of the said bolts are pivotally connected, respectively, with the ends of a lever 36, pivoted at its center upon a plate 50 at the center of the bottom rail referred to. This lever at its center has a key-socket 37, in the present instance square, which has position opposite a hole opening upon the outer surface of the door-frame, (see Fig. 1,) which is provided with an ordinary escutcheon-plate 39. Two spiral springs 40 respectively press against the opposite ends of the lever 36 and tend to normally keep the projecting end of each of the bolts 34 in the sockets 35, referred to. When it is desired to lower the upper door 22, it is necessary to draw the bolts 34 by a square-shank key inserted into the lever-socket 37, and then turned against the action of the springs 40.

The inside or lower door 23, when raised, is supported by a spring-latch 42, (see Figs. 2, 3, 5, and 6,) consisting of a plate 41, of spring metal, fastened at one end to the inner facing-plate 29 of the standards. The free or upper end of this spring-plate normally lies against the said facing-plate and has two lateral lips or projections 42, beveled on the under side, which take on either side of the standard and project in the pathway of the said lower door. It will now be seen that when the said door is raised it displaces the latch and keeps it so until the door has passed above the same, whereupon the latch resumes its normal position and prevents the door from again coming down until the spring has been displaced and forced out of the pathway of the door by some external force. A push-

bolt 43 passes loosely through each of the two standards 12, and has one end in contact with the free end of the spring-plate 41, and the other projecting beyond the outer surface of the facing-plate 29 and there provided with a push-button 44. It will now be seen that by pushing this button from the outside the spring-latch is released and the door consequently allowed to descend. A hand-pull 45 is placed near the lower edge of the lower door 23 to facilitate the raising and lowering of the same.

Connecting the respective standards 10, 11, 12, and 26 at opposite sides of the wagon-body are a series of cross-bars 46, one above the other and resting on brackets 47, fastened to the standards. Upon these cross-bars are placed longitudinally-extending boards 49, which form the shelves or platforms, three in the present instance, one above the other, upon which the goods or merchandise is placed. It will now be seen that by raising or lowering the respective doors 22 23 ready access is given to any article contained in the wagon.

In Figs. 1, 2, 3, 4, and 5 the spring-latch 41 for supporting the lower door is shown provided with two lips 42, which allows it to support two doors at the same time. It is obvious, however, that a spring-latch with only one lip 42 (see Fig. 6) might preferably be used to support only one door. It is also obvious that the rear end of the wagon could be provided with sliding doors, if desired.

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

1. In a delivery wagon the cover supporting uprights faced inside with metal plates extending beyond the edges thereof and having the front and rear sides faced with T-irons, whereby the uprights are incased in metal and formed into double sashes on each side, as set forth.

2. In combination two adjacent cover supporting uprights faced with metal inside and out and with T-irons front and rear, said T-irons forming metal faces and parting beads, two vertical sliding panels between said uprights, one on each side of the parting beads, roller bearings between the metal faces and panels, double acting bolts in the upper panel to hold it up, and single or double catches on the uprights to hold the bottom panels up, substantially as set forth.

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

WILLIAM LEONHARDT.

Witnesses:

C. RAYMOND WEAVER,
FRANK C. GROSS.