

E. LANGE.

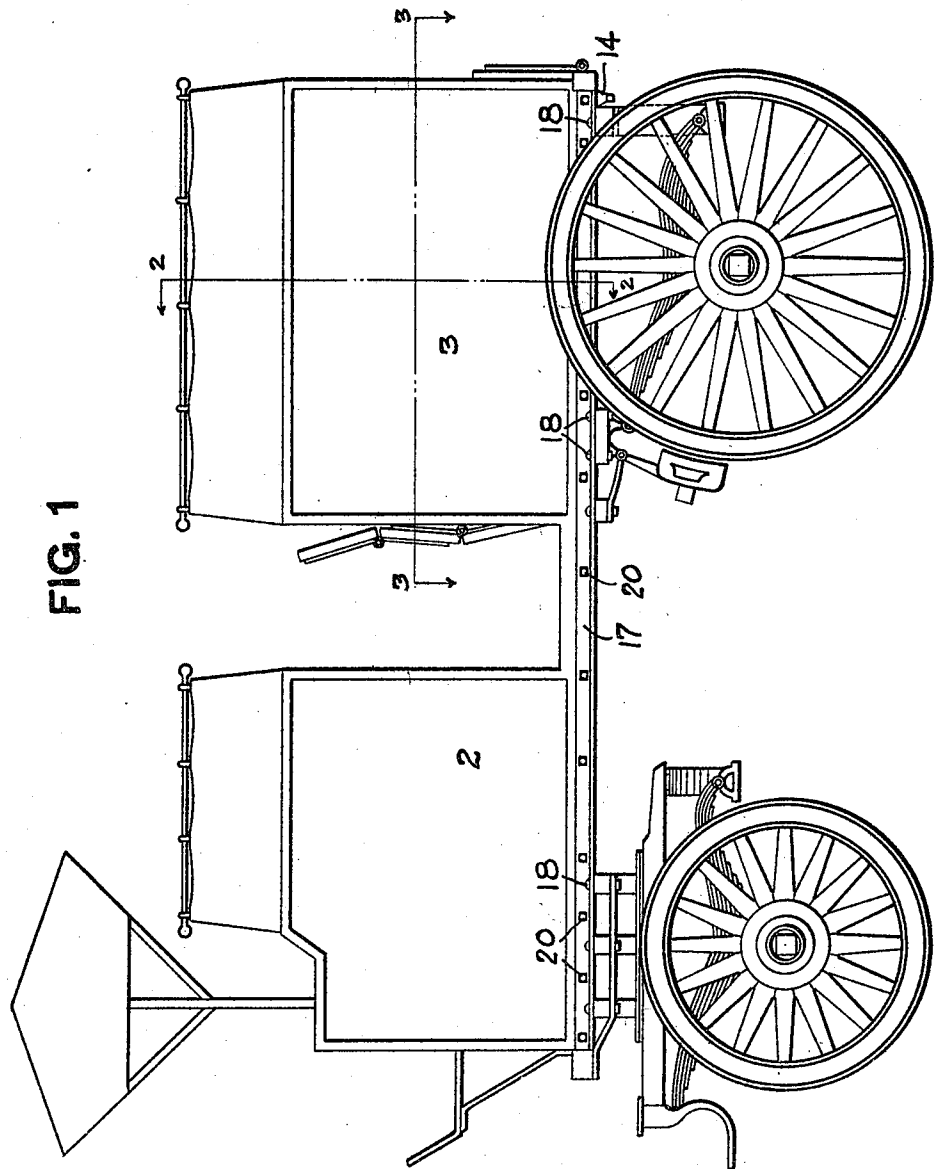
VEHICLE.

APPLICATION FILED DEC. 18, 1909.

962,229.

Patented June 21, 1910.

2 SHEETS—SHEET 1.



WITNESSES.

J. R. Keller
Robert C. Fother

INVENTOR.

Elias Lange
Ray & Fother
Attorneys

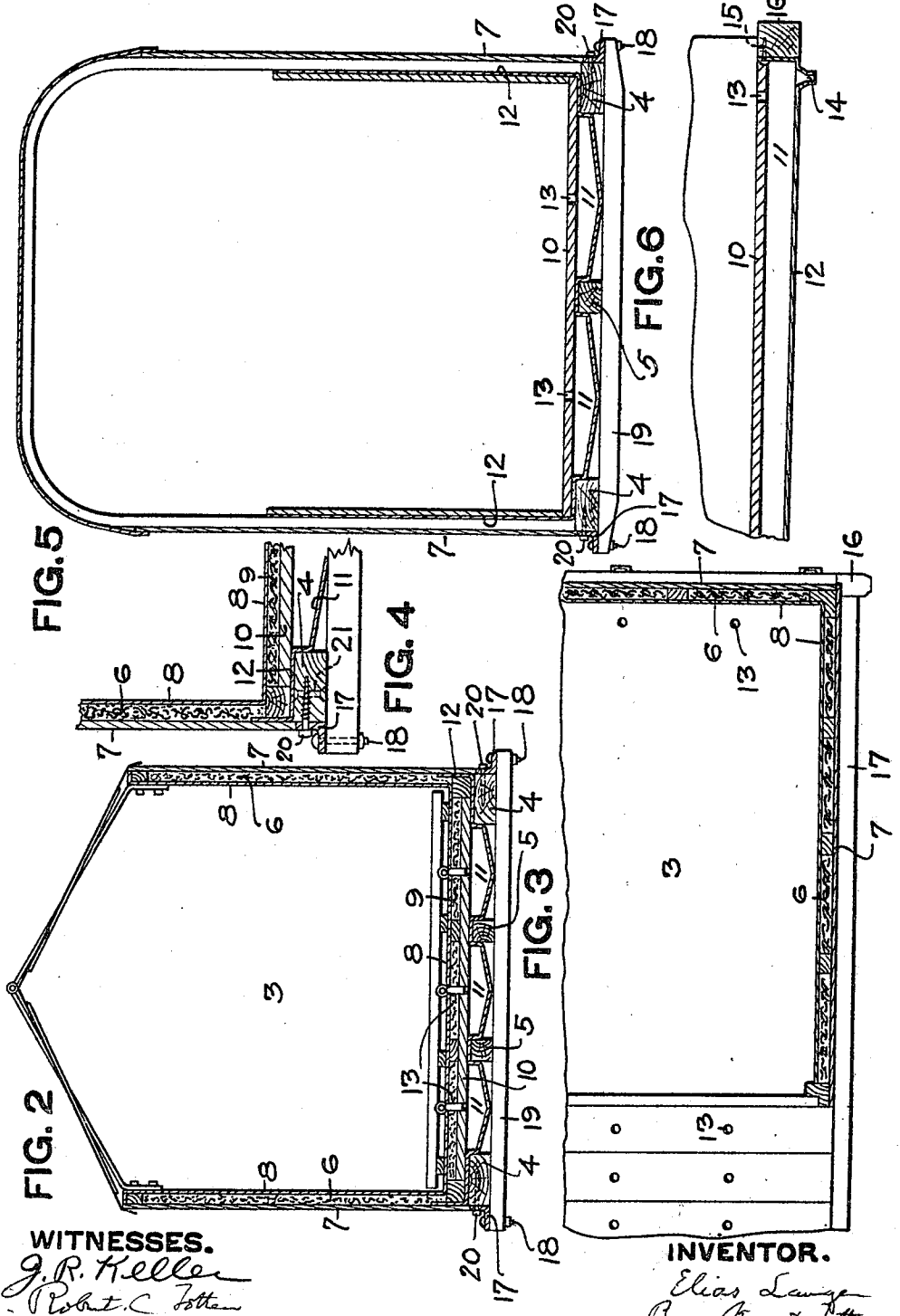
E. LANGE.
VEHICLE.

APPLICATION FILED DEC. 18, 1909.

962,229.

Patented June 21, 1910.

2 SHEETS—SHEET 2.



WITNESSES.

J. R. Keller
Robert C. Fother

INVENTOR.

Elias Lange
By Kay & Fother
Attorneys

UNITED STATES PATENT OFFICE.

ELIAS LANGE, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR TO H. LANGE WAGON CO.,
OF PITTSBURG, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

VEHICLE.

962,229.

Specification of Letters Patent. Patented June 21, 1910.

Application filed December 18, 1909. Serial No. 533,776.

To all whom it may concern:

Be it known that I, ELIAS LANGE, a citizen of the United States, and a resident of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Vehicles; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to vehicles, and more especially to vehicles of a type which are used for transportation of any substance from which there is a waste-fluid which gathers during transportation of the substance.

One of the class of vehicles to which my invention applies more particularly is what is known as an ice-cream wagon. These wagons are used for the delivery of ice-cream, which is carried in tubs or like receptacles and the fluid from the melted ice collects in the bottom of these wagons. In the present construction of such wagons the melted ice in which the ice cream is packed drips or seeps through the bottom of the wagon and the action of this water is to rot out the panels, sills and cross bars of the vehicle body, and so swelling them that the body becomes twisted and warped in a very short time and has to be abandoned. This rotting effect is accentuated by the fact that this water contains a large percentage of ammonia where manufactured ice is employed and this with the salt which is present drips onto the springs, axles and other parts of the running gears and such parts soon become corroded and have to be replaced. Under any conditions this water will at least rust the gear parts and shorten their period of service. These same difficulties arising in connection with the ordinary ice-cream wagon are in fact encountered in the use of any vehicle which is employed to haul or deliver goods or materials containing any fluid which is liable to spill or splash on the body of the vehicle. Efforts have been made from time to time to overcome these difficulties, and different schemes have been resorted to, such as painting all the parts with tar or some water-proof paint, or by the use of galvanized metal, but none of such schemes have been practical. Resort has even been made to the use of metal bottoms and sides both inside of the body and under the body, but the bolts used to connect the running gear of the body had

to penetrate this metal which permitted the water to seep through the cracks around the bolts, not only causing these bolts to corrode and rust but allowing the water to drip through onto the panels, sills and cross bars, resulting in the rotting and decaying of same.

The object of my invention is to provide a means for taking care of any liquid or fluid which may drip from the ice or other material and conveying it off in such a way that it cannot attack the sills or running gear of the vehicle and so protecting the parts from the rotting and corroding action of the liquid.

To these ends my invention comprises the novel features hereinafter set forth and claimed.

In the drawings Figure 1 is a side view of a vehicle to which my invention is applied; Fig. 2 is a cross section on the lines 2—2 Fig. 1; Fig. 3 is a section on the line 3—3 Fig. 1; Fig. 4 is an enlarged sectional detail; Fig. 5 shows a modified form of my invention; Fig. 6 is a detail showing the manner in which the end sills are protected.

In the drawing the numeral 2 designates what is generally termed an ice-cream wagon having the compartment 3 which contains the tubs for holding the cream. The side-sills 4 extend from one end of the truck to the other and between the side sills are the center sills 5.

In Fig 2 I have illustrated my invention in connection with a vehicle in which the compartment 3 has the cork-board or insulating material 6 interposed between the outer panels 7 and the inner metal lining 8. This metal lining may be formed of any suitable metal such as copper, galvanized iron, aluminum or any suitable non-corrosive metal, which forms the lining to the compartment 3, forming the bottoms and sides thereof. Like insulating material 9 is also inserted between the bottom plate 8 and the ordinary wooden bottom panels 10. The drip pan 11 is formed of the metal-sheet 12 of any suitable metal, and this metal sheet preferably in one piece extends from one side panel to the other and extends downwardly and along the top of the side beams 4 protecting said side beams. The metal is then bent downwardly to form the drip-pans and then passes up and over the center-sills 5 to cover and protect said cen-

ter-sills. In this form of my invention the drip-pan is formed between the center-sills and the center-sills and side-sills so as to receive any liquid which passes through the outlets 13. The pans 11 may incline slightly toward the rear end of the wagon so as to drain the liquid off at the rear where the outlets 14 are provided which are beyond the running gear or springs so that there is no danger of the liquid falling upon the same. The sheet-metal 12 is preferably secured by tacks to the side-panels and there is absolutely no chance for the leakage of fluid through any screw or bolt openings. The sheet-metal 12 at the front and rear ends is bent upwardly as shown in Fig. 6 and secured by tacks 15 to the end-sills 16. In this manner the side and center-sills are all protected by the metal sheathing and there is no possible way for the liquid having an opportunity to attack these sills. Extending longitudinally of the side-sills 4 are the angle-bars 17 which are bolted by the bolts 18 to the cross-sills 19 of the chasses or running gear. The vertical portion of the angle-bars 17 rests in contact with the outer faces of the side-sills 4 and lag-screws 20, or other suitable fastening devices, secure the angle-bars to the side-sills. In order to prevent the sills from splitting where the lag-screws enter, rivets 21 are placed on both sides of the entrance point of the lag-screws so as to hold the fibers of the wood together. In this manner the attachment of the body to the running gear is made without running any bolts or other fastening devices up through the floor of the body, which gives opportunity for the liquid to find its way in and around the bolt holes and attack the bolts as well as the wood-work. By my invention there is absolutely no chance of the liquid attacking any of the wood-work as the metal plates 12 so protect the wood-work that there is no liability of the water finding its way to such wood-work. Furthermore, by my manner of attaching the body to the running-gear by means of the lag-screws 20 entering the outer faces of the side-sills, the whole vehicle-body may be lifted from the running-gear by simply removing the bolts 18. Furthermore, this allows detaching the body from the running-gear without in any way interfering with the drip-pans when repairs or adjustments become necessary.

In Fig. 5 I have illustrated a modified form of my invention in which the insulating material is omitted and the metal lining is simply secured to the side-panels and extended up to any suitable height. This construction has all the points of advantage of that described above with the exception of the insulating material.

I wish to be clearly understood that my invention may be used with all different styles of wagons whether horse-drawn, motor propelled or operated by other power, and it is not limited to a street vehicle, but may be extended to railway cars or other rolling stock where in the transportation of any material there is any liquid whose escape might injure the body or running-gear.

What I claim is:

1. A vehicle comprising a compartment for the material to be transported, longitudinal sills, sheet-metal extending over the sills and forming a pan between same below the bottom of said compartment, said compartment having an outlet communicating with said pan.

2. A vehicle comprising a compartment to receive the material to be transported, longitudinal sills, sheet-metal secured to the side panels of said compartment and passing over the sills, and forming a pan between said sills below the bottom of said compartment, said compartment having an outlet communicating with said pan.

3. A vehicle comprising a compartment for receiving the material to be transported, sills, sheet metal extending over the sills and forming a pan between the same below the bottom of said compartment, angle-bars extending along the side-sills and secured thereto, and means for securing said angle-bars to the running gear.

4. A vehicle comprising a compartment for receiving the material to be transported, sills, sheet-metal extending over the sills and forming a pan between the same below the bottom of said compartment, angle-bars extending along the outer face of the side-sills and secured thereto, and means for securing said angle-bars to the running-gear.

In testimony whereof, I the said ELIAS LANGE have hereunto set my hand.

ELIAS LANGE.

Witnesses:

ROBERT C. TOTTEN,
J. F. WILL.