

No. 679,369.

Patented July 30, 1901.

A. J. DIGGINS.
VEHICLE BODY.

(Application filed Mar. 26, 1901.)

(No Model.)

Fig. 1.

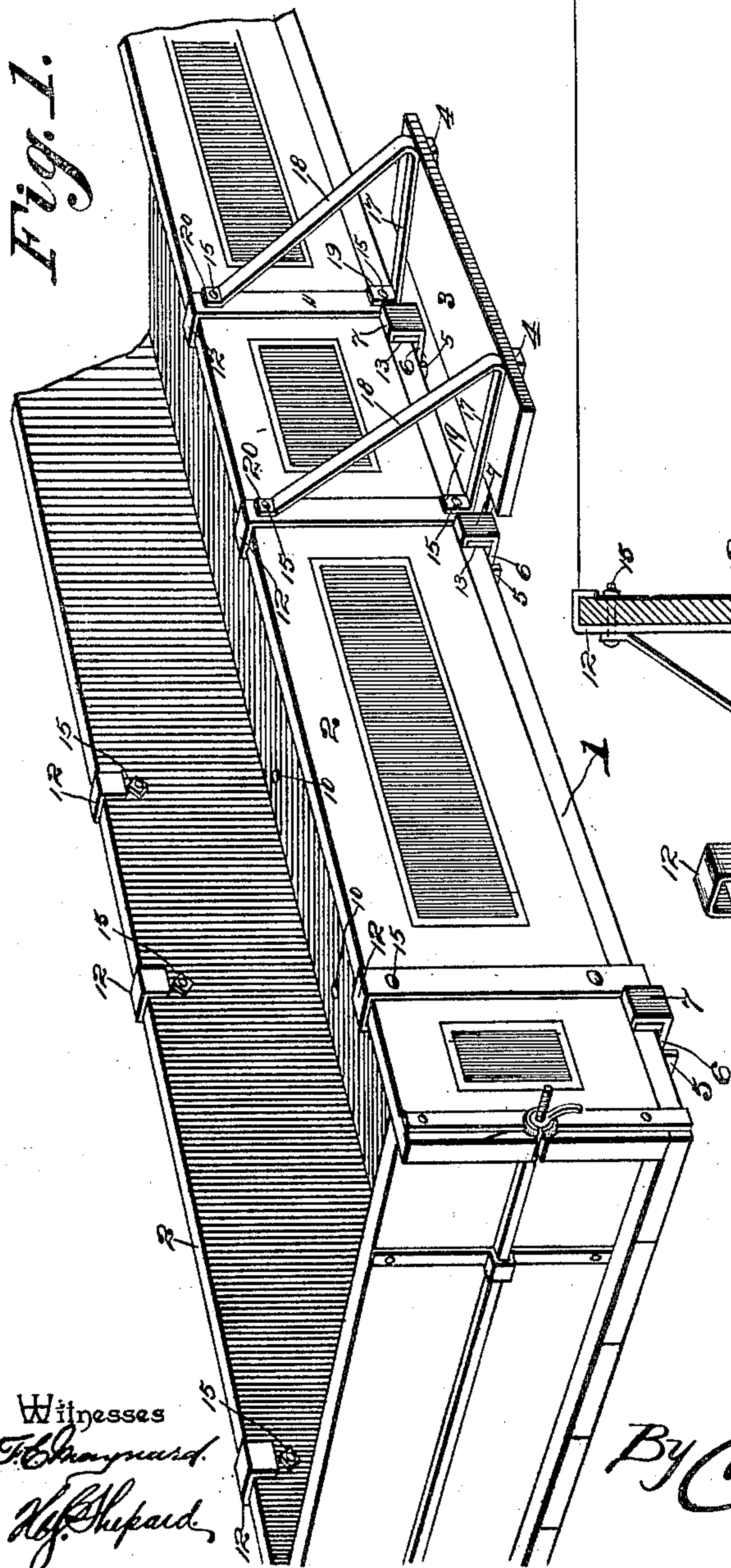


Fig. 2.

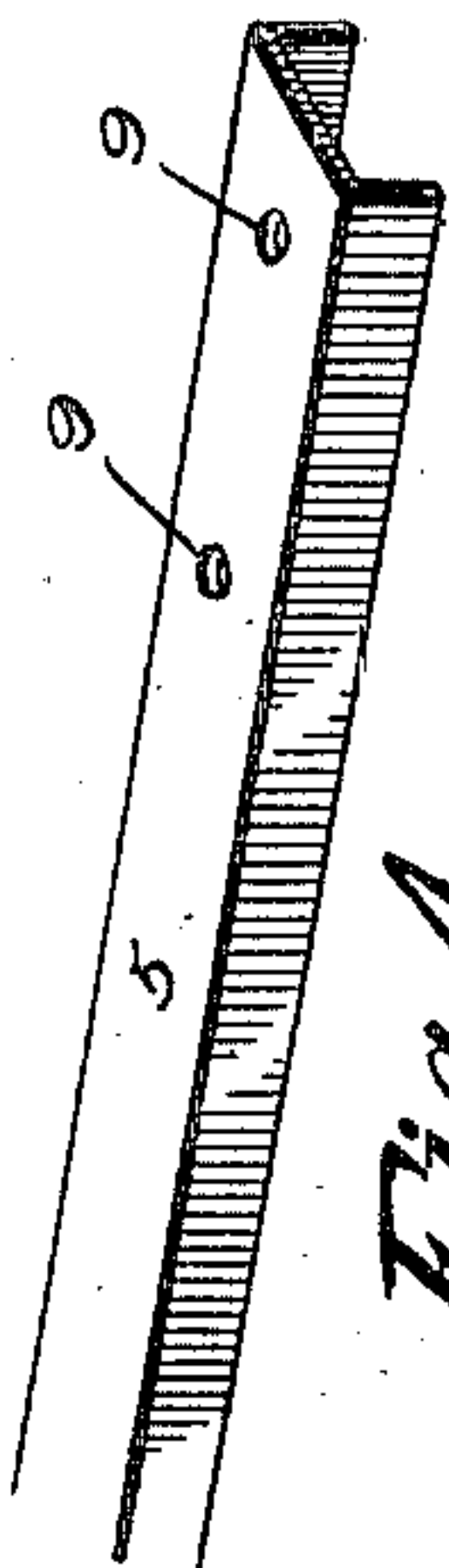
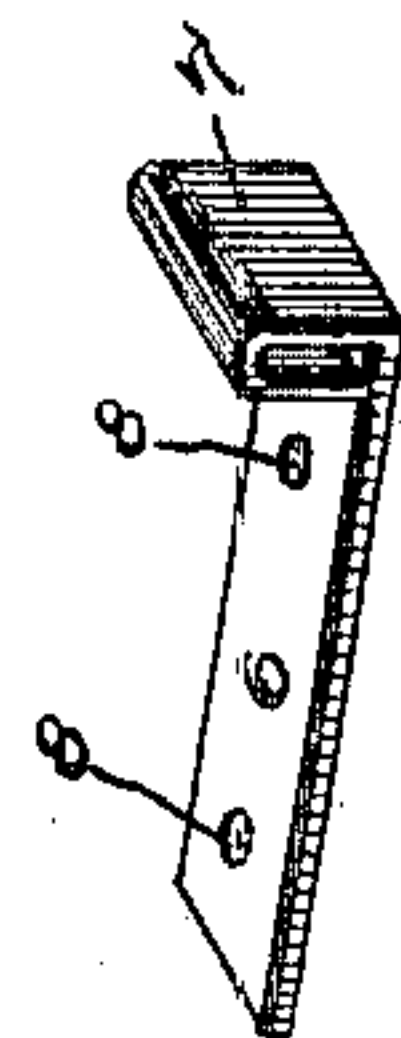
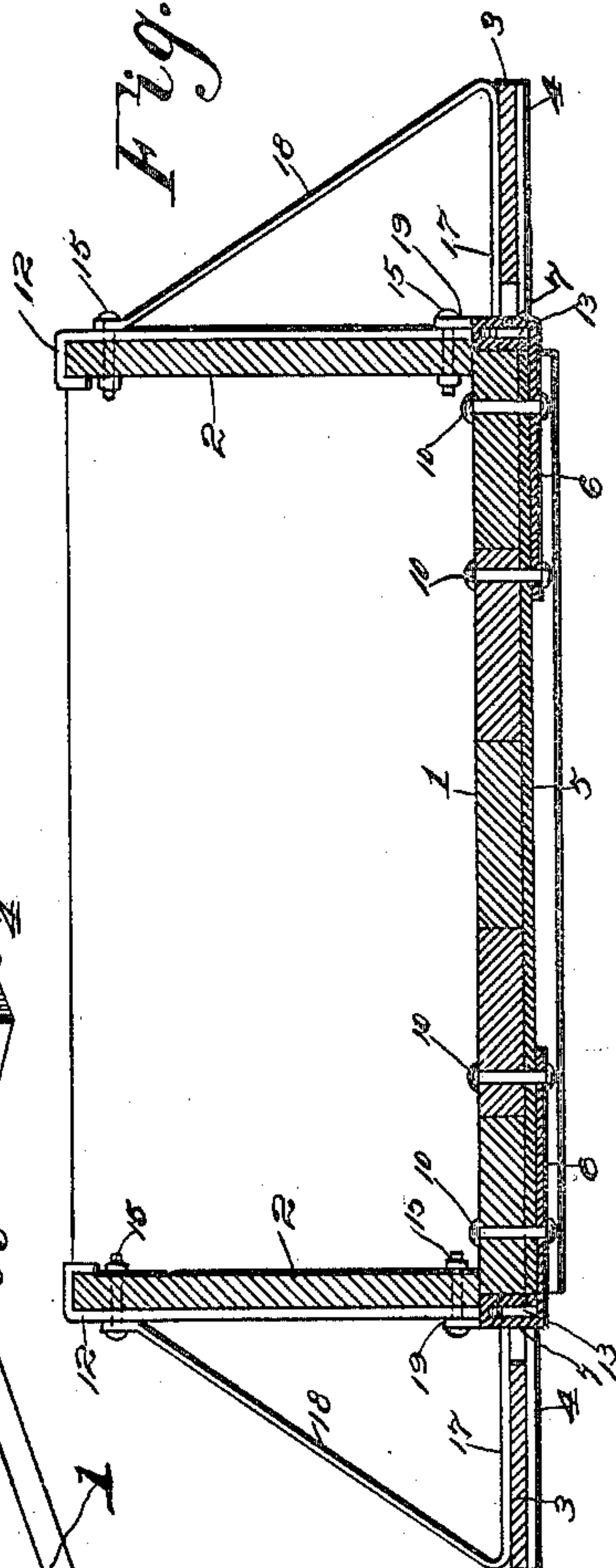
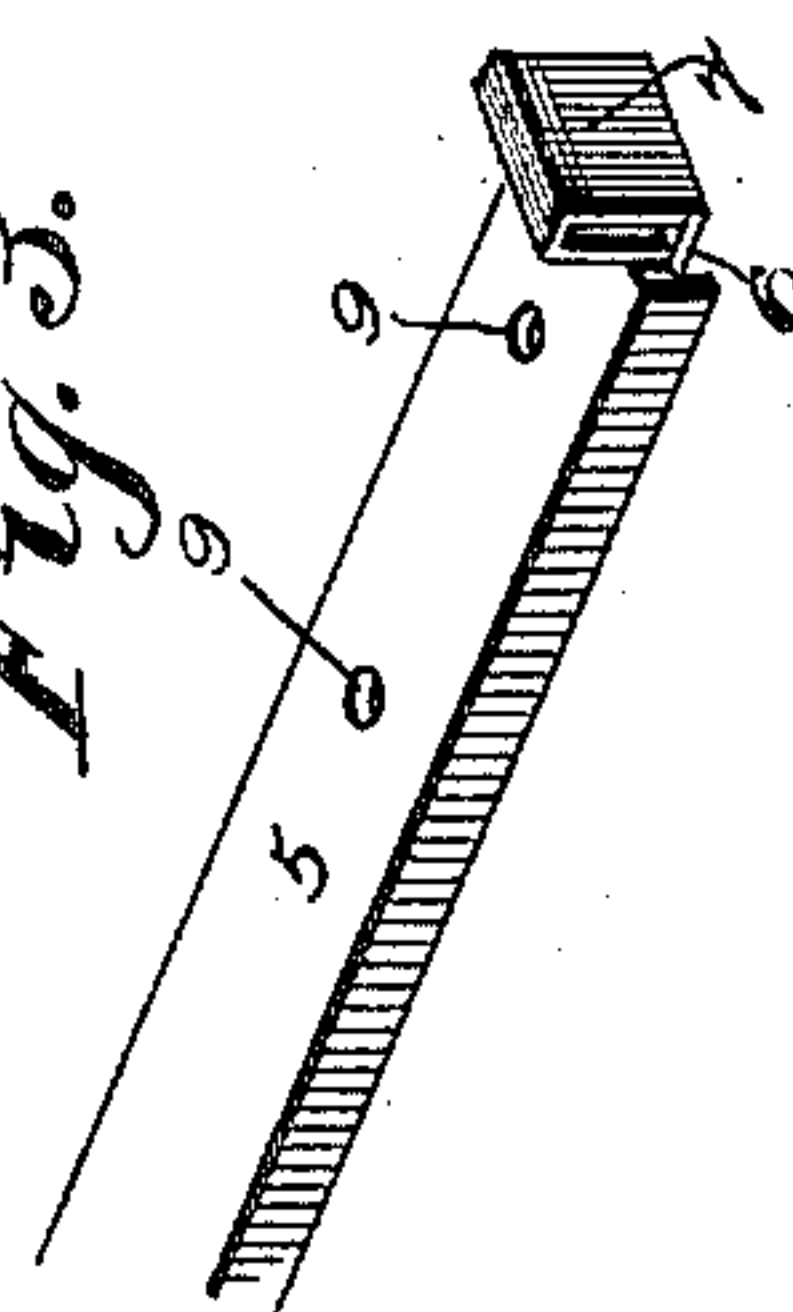


Fig. 4.

Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

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VEHICLE-BODY.

SPECIFICATION forming part of Letters Patent No. 679,369, dated July 30, 1901.

Application filed March 26, 1901. Serial No. 52,992. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER J. DIGGINS, a citizen of the United States, residing at Harvard, in the county of McHenry and State of Illinois, have invented a new and useful Vehicle-Body, of which the following is a specification.

This invention relates to vehicle-bodies, and has for its object to provide improved means for detachably connecting the sides thereof to the bottom of the body, so as to facilitate the application and removal of the sides whenever desired. It is furthermore designed to provide the detachable connections between the sides and the bottom of the vehicle-body in the nature of attachments or brackets which may be applied to any ordinary vehicle-body without altering or changing the same, and, finally, to arrange the pair of intermediate connections so as to form braces against outward strain upon the side-boards in coöperation with the usual intermediate side step of the vehicle.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a perspective view of a portion of a side and the rear end of a vehicle-body provided with the improved side-board fastenings. Fig. 2 is a sectional view taken transversely through the intermediate portion of the vehicle-body to illustrate the coöperative relation between the side step of the vehicle and the side-board fastenings. Fig. 3 is a detail perspective view of one of the connections with the parts thereof in readiness to be interconnected. Fig. 4 is a detail perspective view of the members of the connection that are applied to the vehicle-body.

Like characters of reference designate corresponding parts in all of the figures of the drawings.

In the accompanying drawings there has

been shown the bottom 1 of an ordinary vehicle-body having the usual opposite side-boards 2, the lower edges of which rest down flat upon the top of the vehicle-bottom. As is usual the body is provided at each side with a longitudinally-disposed side step 3, which is disposed slightly outward from the body and is supported at each end upon an arm or bar 4, that is connected to the under side of the bottom and projects at the edge thereof. These parts are common and well known and have been shown in the drawings to more adequately illustrate the application and use of the side-board fastenings.

In carrying out the invention there is provided a double flanged or channel iron 5, that is fitted flat against the under side of the vehicle-bottom and also extends transversely for the entire width thereof. Each end of the channel-iron is open and also flush with the adjacent edge of the bottom, so as to readily receive the stem portion 6 of the socket or slotted projection 7, rising at the outer end of the stem. The socket and stem are preferably formed from a single metal strap, which has its outer end bent at substantially right angles thereto and then re-bent toward the stem with its extremity resting upon the upper side thereof, so as to form a loop. The stem fits snugly within the channel-iron and is provided with a plurality of perforations 8 to correspond with the perforations 9 in the channel-iron and for the reception of the fastenings 10, (shown in Fig. 2,) whereby the same fastenings serve to hold the channel-iron to the bottom of the vehicle-body and to connect the socket to the channel-iron. It will be observed that the inner side of the socket lies within a notch in the edge of the vehicle-bottom, so that it offers but a slight projection, and the opening thereof is disposed in a direction front and rear or longitudinally of the vehicle.

The channel-irons are preferably arranged one adjacent to each end of the vehicle-body and a pair at the opposite ends of the side steps, whereby the bottom of the vehicle is braced and stiffened. Moreover, as the sockets are arranged in the opposite ends of the channel-irons, they are disposed in pairs at opposite sides of the vehicle.

The connection between each side-board

and one of the adjacent sockets is had by means of a bracket 11, having its upper end bent laterally into a hook 12 to take over the upper edge of the adjacent side-board and
 5 its lower end provided with a lateral extension or projection 13 in the plane of the bracket or strap and at substantially right angles to the hook, said projection being adapted to be inserted into the adjacent
 10 socket, so as to fit snugly therein and prevent upward displacement or movement of the side-board. In order that the bracket or strap may be carried by the adjacent side-board, it is provided with a plurality of perforations 14 for the reception of fastenings
 15 15, that are set through the board.

It will be understood that the projections of all of the brackets extend in the same direction, preferably rearwardly of the vehicle,
 20 the brackets being located at the forward sides of the sockets, so that the members of the side-board connections are interconnected by moving the side-boards rearwardly in an endwise direction and are disconnected by a
 25 reverse movement of the boards.

Each intermediate bracket is provided with a step-engaging brace formed from a metal strap, which is bent intermediate of its ends into a lower substantially horizontal arm 17
 30 and an upper inwardly-inclined arm 18, the terminals of the strap being bent into attaching perforate ears 19 and 20, which lie in the same vertical plane, so as to be applied flat against the outer side of the adjacent strap or bracket 11 and be secured thereto by
 35 means of the fastenings 15, that connect the strap to the side-board, the lower arm being arranged to rest flat against the upper side of the step, and thereby form a brace against
 40 outward strain upon the side-board. It will be understood that the braces are not connected to the step, but merely rest thereon, so that the side-boards may be removed without removing any fastenings from the braces
 45 and the steps.

What is claimed is—

1. A side-board fastening for vehicle-bodies, comprising a channel-iron for application to the under side of a vehicle-bottom, a socket
 50 comprising a stem to be fitted snugly in one end of the channel-iron, and having its outer end provided with an upstanding loop, and a bracket for application to a side-board, having an upper terminal hook to take over the
 55 upper edge of the side-board, and a lower terminal projection at substantially right angles to the hook and constructed to enter and interlock with the upstanding loop of the socket.

2. In a vehicle-body, the combination with
 60 a bottom, and opposite removable side-boards,

of a channel-iron secured transversely across the under side of the bottom, and having its ends terminating at or adjacent to the respective side edges of the bottom, opposite
 sockets having stems, which are fitted in the
 65 respective ends of the channel-iron and secured thereto by the same means that secures the iron to the bottom of the body, the sockets lying outwardly beyond the respective
 70 ends of the irons and within notches in the respective side edges of the vehicle-bottom, the openings of the sockets being disposed longitudinally of the vehicle-body, and opposite
 brackets secured to the outer faces of the
 75 respective side-boards, and having upper terminal hooks embracing the upper edges of the side-boards, and lower terminal projections arranged at substantially right angles to the
 hooks and removably entered into the respective
 80 sockets.

3. The combination with a vehicle-body having a removable side-board, and a side step supported by the bottom of the body and lying outwardly from the side-board, of a
 85 brace carried by the outer face of the side-board and removably resting upon the upper side of the step, the latter and the brace being otherwise free from mutual connection.

4. The combination with a vehicle-body, having a removable side-board, and a side
 90 step supported by the bottom of the body and lying outwardly from the side-board, of a brace, comprising an arm projected laterally outward from the side-board and resting freely upon the top of the step, and an in-
 95 clined arm extending from the outer end of the lower arm upwardly and secured to the side-board.

5. The combination with a vehicle-body, having a removable side-board, and a side
 100 step supported by the bottom of the body and lying outwardly from the side-board, of a strap secured to the outer face of the side-board and located intermediate of the ends of the step,
 105 a socket carried by the bottom of the body and receiving the lower end of the strap, and a brace formed from a metal strap which is folded intermediate of its ends into a substantially horizontal lower arm, and an upwardly and inwardly inclined upper arm, the
 110 terminals of the arms being secured to the strap, and the lower arm resting freely across the top of the step.

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

ALEX. J. DIGGINS.

Witnesses:

M. J. EMERSON,
 EUGENE SAUNDERS.