

Oct. 2, 1951

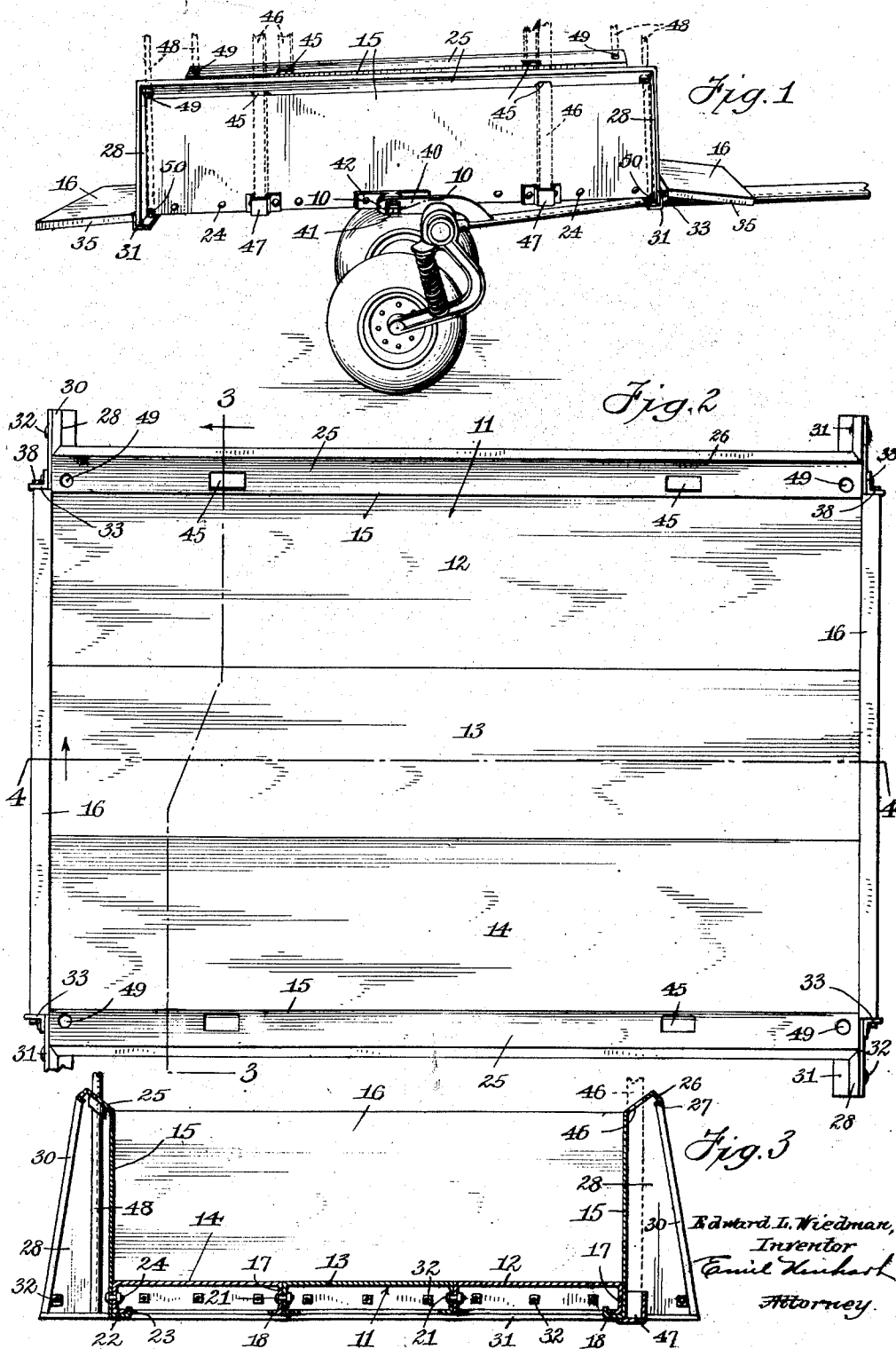
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2,569,965

TRUCK BODY

Filed Feb. 10, 1947

3 Sheets-Sheet 1



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Fig. 4

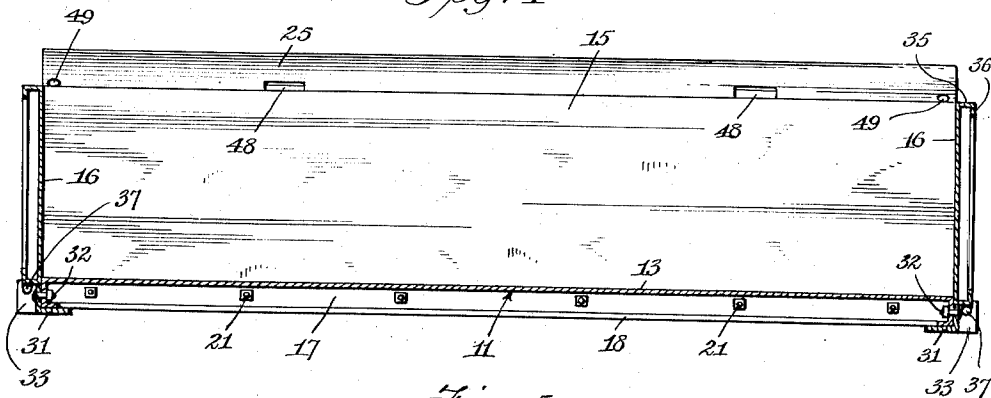


Fig. 5

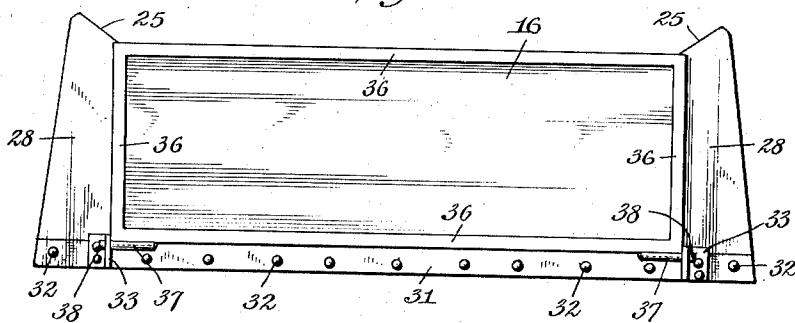


Fig. 6

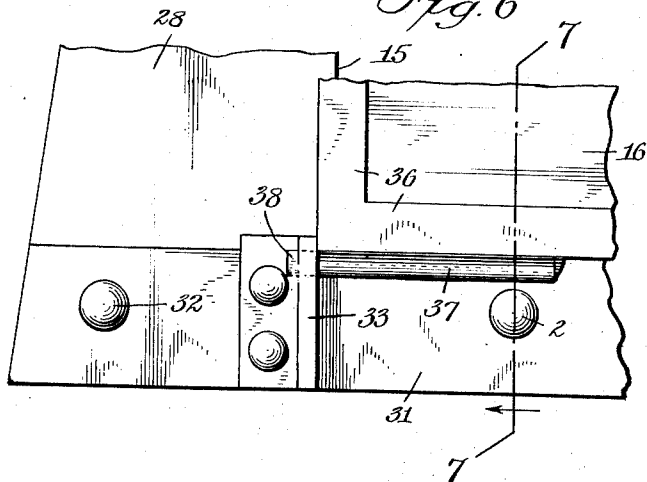
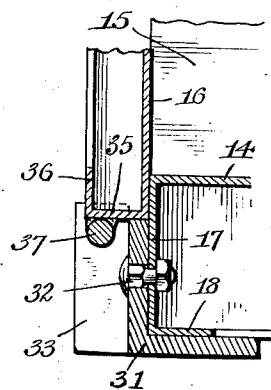


Fig. 7.



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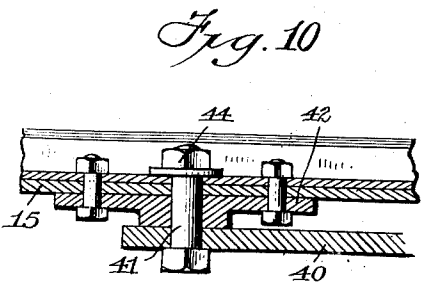
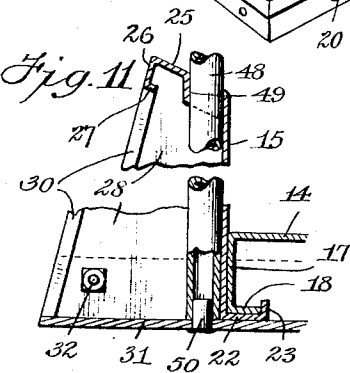
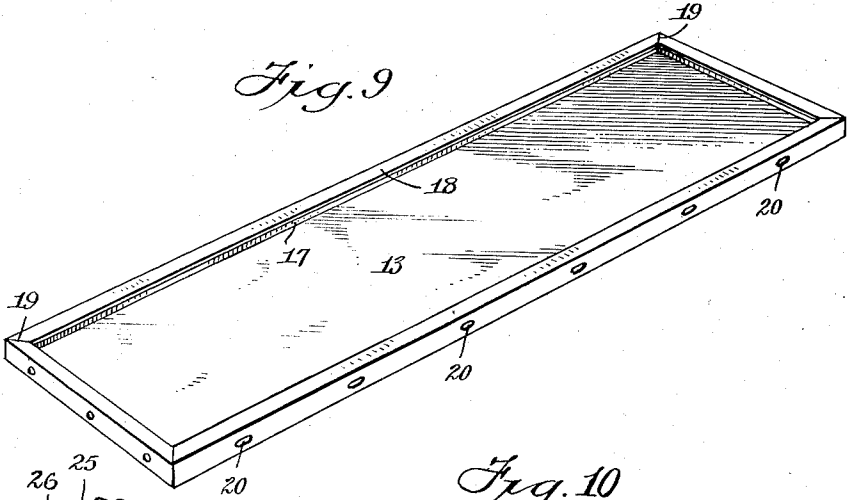
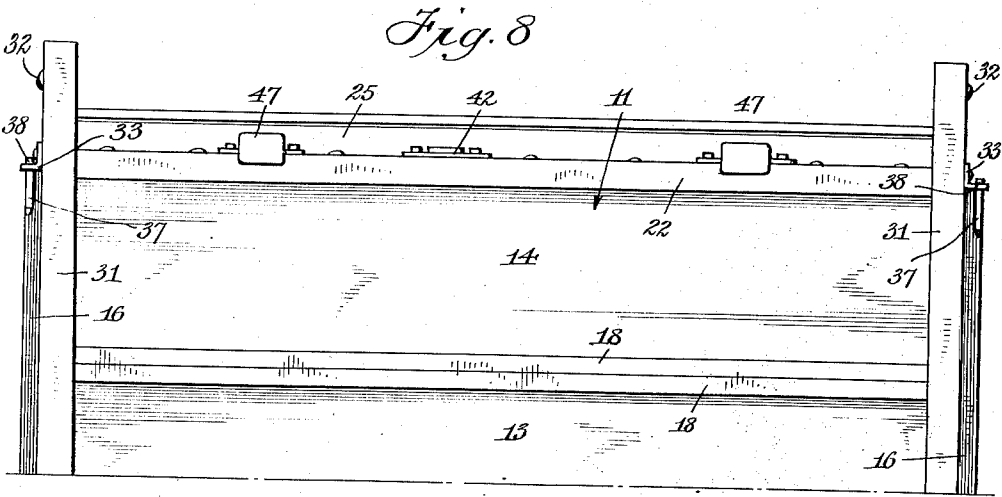
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TRUCK BODY

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3 Sheets-Sheet 3



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UNITED STATES PATENT OFFICE

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TRUCK BODY

Edward L. Wiedman, Tonawanda, N. Y.

Application February 10, 1947, Serial No. 727,716

3 Claims. (Cl. 296—28)

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This invention relates to a body for delivery trucks, and more particularly to the type of truck bodies used in trailers adapted to be attached to the rear bumper of a passenger automobile for delivery purposes.

One of the objects of my invention is to provide a body constructed of sheet-metal and formed in sections capable of being connected together by the purchaser or any inexperienced person, said sections when connected together forming a rigid structure capable of being attached to any type of trailer-chassis, but more particularly to one allowing the body to be pivotally attached thereto so that it may be used as a dump body.

Another object of my invention is to provide a cheap body which will withstand unusual wear and which is so constructed that when attached to an extensible trailer-chassis of the type illustrated and described in my co-pending application, Serial No. 727,717, filed February 10, 1947, and now Patent No. 2,525,506 granted October 10, 1950, the end boards or gates can be lowered and long lengths of lumber, pipes or other articles be conveniently transported therein.

With the above and other objects in view to appear hereinafter, this invention consists in the novel features of construction and in the arrangement and combination of parts to be hereinafter described and more particularly pointed out in the subjoined claims.

In the drawings:

Fig. 1 is a perspective view of the trailer body pivotally attached between its ends to a trailer-chassis.

Fig. 2 is a top plan view of the body.

Fig. 3 is a transverse section taken on line 3—3, Fig. 2, looking in the direction of the arrow crossing said line.

Fig. 4 is a longitudinal section taken on line 4—4, Fig. 2 looking in the direction of the arrow crossing said line.

Fig. 5 is an end view of the trailer body.

Fig. 6 is an enlarged end view of the lower left-hand corner of the trailer body viewed from the rear.

Fig. 7 is a vertical section taken on line 7—7, Fig. 6, looking in the direction of the arrow crossing said line.

Fig. 8 is a bottom view of one-half of the width of the body.

Fig. 9 is a detached perspective view of one of the floor or bottom sections of the body.

Fig. 10 is an enlarged section taken on line 10—10, Fig. 1.

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Fig. 11 is a sectional detail view showing the application of the tubular stakes.

In the main, the body comprises a bottom 11 formed of a plurality of sections, in this instance three in number, designated by the numerals 12, 13, 14. 15 designates the sides and 16 the ends, and more particularly the end boards or gates. As clearly shown in Fig. 9, the bottom or floor sections are each constructed of a sheet of metal having its marginal portions bent downwardly, as at 17, and thence inwardly, as at 18, to form L-shaped depending flanges. The sheets of metal are cut away at their four corners so that a miter joint 19 is provided at each corner, which is welded to maintain these flanges in rigid form.

The downwardly bent portions 17 of the longitudinal L-shaped depending flanges, or vertical webs as they may be termed, are provided with bolt-slots 20 through which bolts 21 are passed for connecting the sections together and permitting their being adjusted lengthwise relatively and thus form a substantial bottom or flooring for the body, having the end edges of its sections aligned and being capable of carrying a considerable load. Since all of the longitudinal L-shaped flanges of the sections of the bottom are provided with such slots, these sections may be taken up at random and connected together; and so arranged, the outermost longitudinal flanges of the plurality of connected sections will have such bolt-slots positioned to be utilized in connecting the sides 15 to the bottom.

Each of the sides is formed of a single sheet of metal bent inwardly at its lower end, as at 22, and thence upwardly, as at 23. These sides lie in contact with the inwardly-bent portions 18, or the horizontal webs as they may be termed, of the outer bottom sections and bolts 24 are passed through bolt-holes in the sides and through said bolt-slots to receive nuts that impinge against the inner side of the vertical webs 17. The lower marginal portions of the sides 15, therefore, embrace the depending L-shaped flanges at the outer longitudinal edges of the outermost sections of the bottom and thus these sides are rigidly connected to the bottom by the bolts 24. In event of the bolts 24 becoming loose or lost, due to excessive strains applied to the body, the upwardly bent portions 23 at the lower marginal portions of the sides 15 prevent movement of the sides away from the bottom and in some instances loss of any loose material, such as grain, soil, etc., being transported.

It will be apparent from the foregoing that re-

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gardless of the disposition of the sections of the bottom, an L-shaped depending flange will be at contiguous longitudinal edges of said sections and also at the outer longitudinal marginal portion of the bottom, and consequently the bottom sections 12, 13 and 14 may be selected at random and used interchangeably with assurance that the portions of the sides embracing the outermost L-shaped flanges of the bottom will exactly interlock, regardless of the bottom sections placed at the sides of the bottom.

The sides are co-extensive with the bottom of the body and are bent outwardly along their upper portions, as at 25, to form upwardly and outwardly flaring aprons, the upper marginal portion of the latter being bent at substantially a right-angle thereto, as at 26, and thence inwardly, as at 27, to form an L-shaped stiffening flange along the upper edge of each side. At each end of each side the metal is bent outwardly at a right-angle to form a stiffening or brace-web 28 which is gradually widened downwardly or flared and the outer marginal portion of each web is provided with an L-shaped stiffening flange 30. The ends of the sheet of metal are cut so that when they are bent at a right-angle to provide the stiffening or brace-web 28, they meet the ends of the flared apron 25, at which points the parts so forming the joint are welded together.

Applied to the ends of each of the assembled bottom or floor sections of the body and the lower ends of corresponding brace-webs 28 of the sides 15 is a reinforcing member in the form of an angle-iron 31, the vertical web of which lies against the end edges of said sections and the outer faces of said brace-webs, while the horizontal web extends underneath said sections and the sides, including the brace-webs of the latter. These angle-irons are secured to the ends of the several sections of the bottom and to the brace-webs of the sides 15 by means of bolts 32, thus rigidly tying the front and rear ends of the sides of the body to the bottom of the latter, the vertical web of the angle-iron 31 at each end of the body terminating short of the upper surface of the bottom.

Secured to the outer face of the vertical web of each angle-iron 31 are spaced-apart brackets 33, the space between them being somewhat greater than the space between the sides 15 of the body. Arranged to lie against the brace-webbed ends of the sides 15 and the ends of the bottom above the angle-iron at each end of the body, are the end boards or gates 16, both serving to close the ends of the body. Each of these gates is formed of a rectangular sheet of metal having its marginal portions bent at a right-angle, as at 35, and thence rebent, as at 36, to form an L-shaped stiffening flange for the same, the stiffening flange being on the outer side thereof so that the flush surfaces of the gates face inwardly and thus with the flush surfaces of the sides and the bottom sections provide an interior surface for the body which can be easily cleaned in the event of any matter adhering thereto.

These gates are pivotally attached at opposite ends to the brackets 33 so that they may be swung in an arc of a circle reaching from their closed positions to a completely depending position. For the pivots of these gates I utilize short lengths of rod-material 37 and weld the same to the lower edges of the gates in a manner to create free pivot portions 38 which ex-

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tend beyond the end edges of the gates and through the brackets 33. These pivot rods are preferably welded to the outer half portion of the lower edges of the gates so that when closing the latter, the lower edges of the gates will rest upon the upper edges of the vertical webs of angle-irons 31. Thus arranged, the gates close against the front and rear edges of the bottom and against the webbed ends of the sides 15 and enable bulk material such as sand, gravel and other fine material to be transported without the possibility of loss by seepage at the rear or front end of the body. Moreover, by placing the pivots forward of the centers of the lower edges of the gates, freedom in swinging movement of the latter is assured and a tighter contact of the gate with the remainder of the body assured. Any suitable catches may be provided to hold the gates in closed positions.

It will be apparent from the foregoing that the body may be used in what may be termed box-form, wherein upstanding walls are provided at both the sides and ends, also that either of the gates may be lowered into open position so that material carried may extend forwardly from the body or rearwardly and that both gates may be lowered and material, such as lumber, pipes and other long objects may be transported while extending both forwardly and rearwardly from the body.

I also provide means of tilting the body so that it may be used as a dump body and with this in view, a trailer-chassis constructed in accordance with my co-pending application Serial No. 727,717, filed February 10, 1947, or otherwise, is provided with supporting arms 40 at opposite sides of the body, to which the latter is pivotally attached by means of pivot bolts 41 passed through reinforcing plates 42 which are bolted to the sides of the body and have openings through which, the supporting arms and the L-shaped flanges along the outer edges of the bottom the pivot bolts 41 are passed, nuts 44 being applied to said bolts so as to hold the body pivotally between the supporting arms 40. To prevent accidental tilting or dumping of the body, any means may be provided at the front end of the latter for attachment of the body to the trailer-chassis.

I also provide means for utilizing the body as a stake-body for the purpose of carrying loads which extend above the upper edges of the sides and the end gates and with this in view, the flaring aprons 25 at the upper ends of the sides 15 are provided with stake-openings 45, through which stakes 46, shown in dotted lines in Fig. 1, are passed and have their lower ends entered in sockets 47 fastened to the sides of the body. These stakes may be of any length, depending on the height which the load carried extends above the sides of the body and they are particularly of advantage in carrying long and light articles of various kinds.

For carrying long and heavy articles, I prefer to increase the number of the stakes and to place some of the strain of the load on the angle-irons 31 at opposite ends of the body and to use pipes or similar tubular elements as stakes, which I have designated by the numeral 48. For this purpose I form downwardly flanged openings 49 in the flaring aprons 25 in line with the horizontal webs of the angle-irons 31 and weld upstanding pins 50 in said webs which are axially aligned with said openings. The pipes or tubular stakes are passed through said openings and the

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lower ends thereof receive said pins, all as shown in detail in Fig. 11 and thus provide stakes well anchored at the bottom and near the top, and by reason of their tubular form and the manner of anchoring them can withstand any outward strain caused by the portion of the load above the sides of the body.

From the foregoing it will be apparent that I have produced a knock-down trailer body, the parts of which can be loosely assembled within a comparatively small space for shipment and when not in use for a prolonged period of time, space being unavailable, can be easily disassembled and stored in a small space.

Having thus described my invention, what I claim is:

1. A trailer body having a bottom formed in sections of equal length and extending from end to end of the body, each section being constructed of a sheet of metal having its marginal portions bent downwardly and inwardly to form L-shaped depending flanges, bolts passed through contiguous flanges of said sections to fasten said sections together, sides formed of sheet-metal having their lower portions bent inwardly and thence upwardly to embrace the L-shaped flanges at the outer longitudinal edges of said bottom, securing bolts passed through said sides along their lower ends and through said last-mentioned L-shaped flanges, the upper portion of each of said sides being flared upwardly and outwardly and the marginal upper portions of said flared portions being bent downwardly and inwardly at a right-angle, thence rebent to form L-shaped flanges, the ends of said sides having brace-webs formed by bending the metal at a right-angle and said brace-webs having their outer edges bent inwardly and thence rebent to form L-shaped flanges, an angle-iron at the rear end of said body having one web thereof lying in contact with the ends of said bottom sections and the other web extending underneath the L-shaped flanges at the rear ends of said bottom sections and underneath the brace-webs at the rear ends of said sides, bolts securing said angle-iron to the L-shaped depending flanges at the rear ends of said bottom sections and to the lower end of said last-mentioned brace-webs, means for closing the forward end of the body, and a gate pivotally connected to said angle-iron for opening or closing the rear end of said body.

2. A trailer body comprising a sheet-metal bottom formed of sections having their marginal portions bent downwardly and thence inwardly to form L-shaped depending flanges at all edges thereof, said sections being arranged edge to edge and fastened together at contiguous edges, sides extending upwardly from the outer edge of said bottom, also formed of sheet-metal and having their lower edges bent inwardly and thence upwardly to embrace the depending L-shaped flanges at the outer edges of said bottom, fastening means passed through said sides and through said last-mentioned L-shaped flanges, said sides having their ends bent outwardly at a right-angle to form brace-webs, an angle-iron at each

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end of the bottom having one web thereof in contact with the adjacent ends of said bottom sections and with the lower ends of said brace-webs and its other web extending underneath said bottom sections and said brace-webs, securing means passed through said angle-iron and through the depending L-shaped flanges at said last-mentioned ends of said bottom sections and through said last-mentioned brace-webs, a pair of brackets secured to the angle-iron at each end of the body, and a gate at each end of said body formed of sheet-metal and having pivots passed through said brackets, said pivots being formed of rod material welded to the bottom edges of said gates.

3. A trailer body comprising a sheet metal bottom formed of sections having their marginal portions bent downwardly and thence inwardly to form L-shaped depending flanges at all edges thereof including the outer longitudinal edges of said bottom, said sections being arranged edge to edge and fastened together at contiguous edges, sides extending upwardly from the outer edge of said bottom formed of sheet-metal and having their lower edges bent inwardly and thence upwardly to embrace the depending L-shaped flanges at the outer longitudinal edges of said bottom under any disposition of the sections of said bottom, fastening means passed through said sides and through said last-mentioned L-shaped flanges, said sides having their ends bent outwardly at a right-angle to form brace-webs, a pair of brackets secured to and projecting from each end of said body, and a gate at each end of said body having pivots passed through said brackets.

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