No. 795,868. PATENTED AUG. 1, 1905.

W. E. STEWART.

VEHICLE BODY.

APPLICATION FILED MAR. 31, 1905.

Fig. 1.

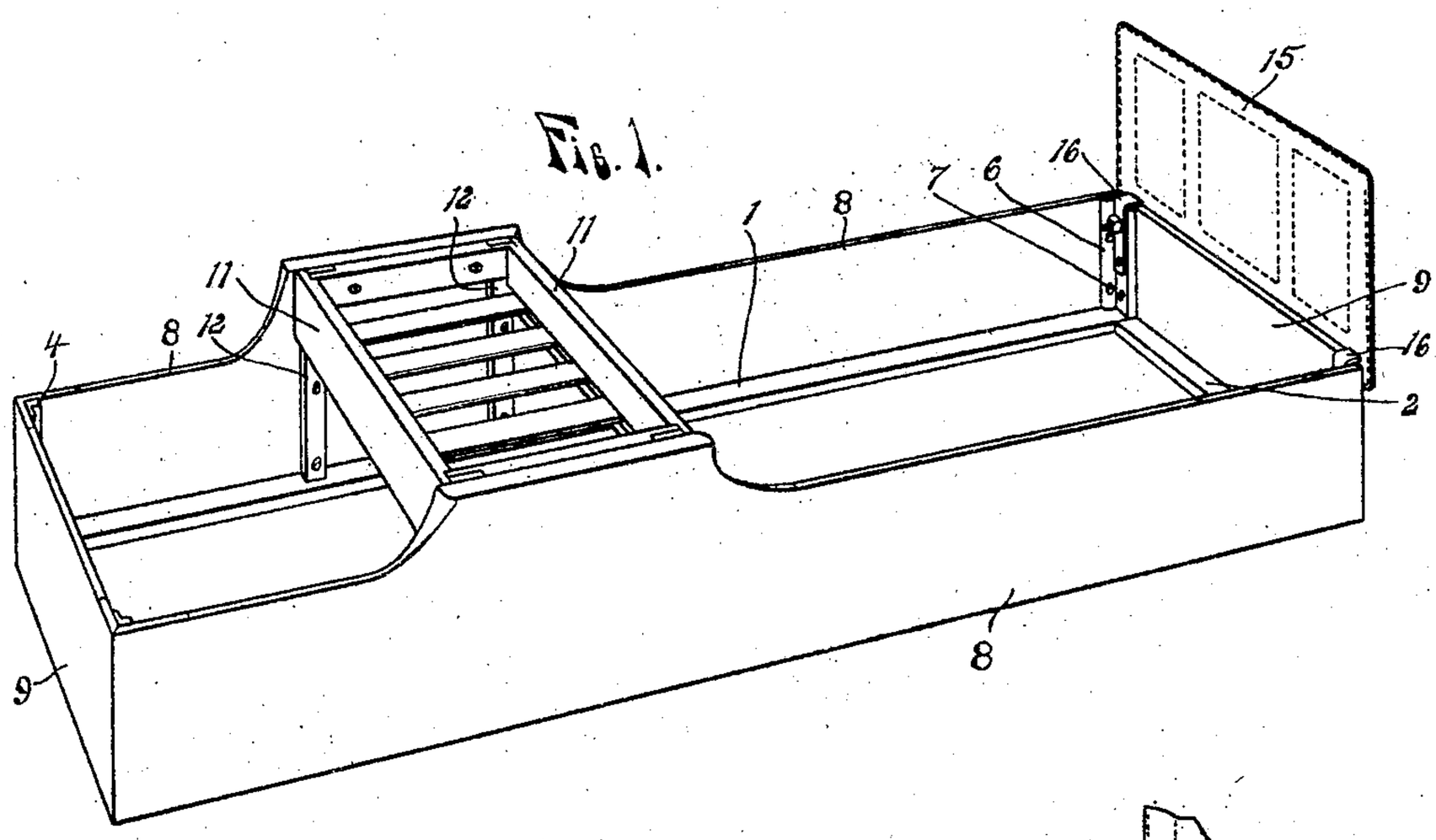

Fig. 4.

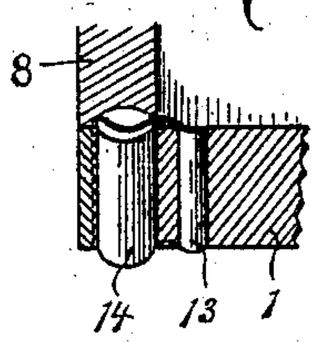

Fig. 5.

Fig. 3.

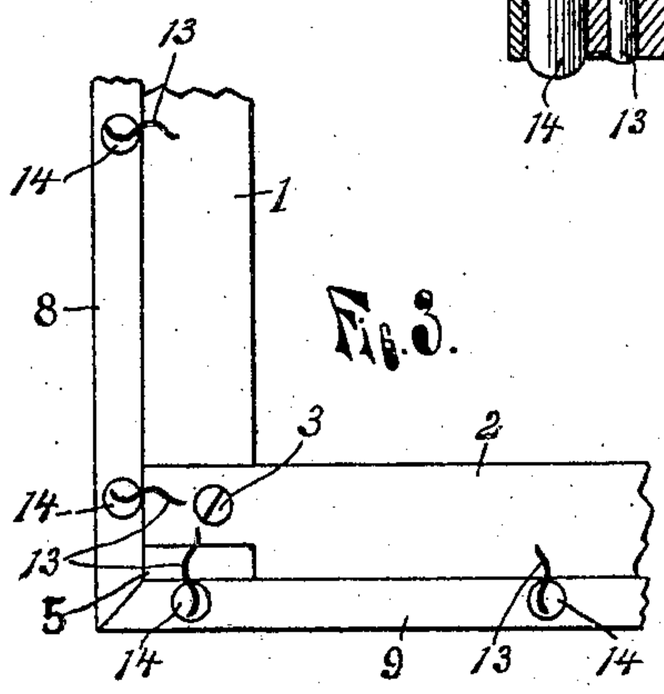

Fig. 2.

WITNESSES:

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VEHICLE-BODY.

No. 795,868. Specification of Letters Patent. Patented Aug. 1, 1905.

Application filed March 31, 1905. Serial No. 253,075.

To all whom it may concern:

Be it known that I, WILLIAM E. STEWART, a citizen of the United States of America, residing at Flint, in the county of Genesee and State of Michigan, have invented certain new and useful Improvements in Vehicle-Bodies, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to improvements in vehicle-bodies; and its object is to provide cheap and efficient means for securing the sides or panels of the body to the frame without marring or disturbing the outer surface of the panels in any way, and which means are especially adapted for so securing panels formed of soft wood.

A further object of the invention is to provide the body with suitable corner-posts so formed that the panels may be conveniently secured thereto by inside screws and so as to provide a suitable place of attachment for the ordinary stock dash-irons and to provide a plugless body so constructed that no special stock or machining is required or special attachments necessary.

To this end the invention consists in the construction, arrangement, and combination of parts, all as hereinafter more fully described, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of a body embodying the invention; Fig. 2, an enlarged detail of one corner of the same; Fig. 3, an inverted plan view of one corner; Fig. 4, a detail perspective showing the means for securing the panels to the frame; and Fig. 5, a perspective view of one of the corrugated-metal fasteners.

As shown in the drawings, 1 represents the side, and 2 the end, sills, which together form a bottom frame for the body, said sills being joined at their ends by a lap-joint and secured by a screw 3, extending upward through the overlapping ends. 4 represents corner-posts secured to the frame by being provided with tongues 5, engaging grooves in the ends of the bottom frame at each corner, and each post is formed with a flange 6, extending therefrom in the direction of the side sills 1, through which flange holes are bored for the countersunk screws 7, which extend into but only part way through the side panels 8 to secure the ends of said panels to the posts. The end panels 9 are secured to said posts in a similar manner by screws 10, extending through the posts from the inside into the panels a short distance, and 11 is a seat-frame supported by uprights 12, mortised at their ends into the seat-frame and side sills and secured to the side panels by screws extending therethrough into said panels.

The sills, corner-posts, seat-frame, and uprights together form the body-frame and are preferably made of firm hard wood, such as white oak, for the sake of strength; but the panels, for the sake of cheapness, lightness, &c., are usually formed of a soft brittle wood such as whitewood, basswood, &c. To secure these soft-wood panels along their lower edges to the sills, fasteners 13, formed of metal strips corrugated longitudinally, are provided, which may be driven endwise into the lower side of the sill and panel, one half engaging each, and as the corrugations extend longitudinally of the fasteners they will prevent them from being pulled laterally from the wood and will hold the panels to the sills; but as the fibers of the soft wood are not very firm and compact they are liable to be torn or broken down instead of cut by the fastener as it is driven in, and therefore I prefer to bore holes in the lower edge of each panel at intervals and in these holes insert pins 14, made of hard wood, the pins being of a size to fit in the holes and are set in glue therein. Before the glue sets the fasteners are driven in, one side cutting or splitting the pin longitudinally and the other cutting into the edge of the sill. The fastener acts as a wedge when driven into the pin, expanding the same in its hole, so that it will not come out, and the pin being made of hard wood and extending across the grain of the panel will hold the fastener securely and will have a firm hold on the panel. When the pin is used, the fastener will drive in much more easily and without injury to the panel, as the fastener will cut with the grain of the pin instead of cutting squarely across the grain of the panel.

The flanged corner-post is substantially the same thickness and shape as the post ordinarily used, with the flange added, and therefore serves as a place for attaching the dash 15 and its irons 16, which may be stock articles, and the flange permits the fastening of the end of the side panel to the post by screws inserted from the inside outward without interfering with the securing of the dash-iron to the post.

By this construction a plugless body is secured without the use of special stock in the

construction of the frame or panels and no special machining is required, and owing to the fact that the fastening means may be very quickly and easily applied and may be manufactured at a slight cost a construction is secured which is as cheap as the ordinary plug-body.

Having thus fully described my invention, what I claim is—

1. The combination with a member formed of hard wood, of a second member adapted to be secured to the first member, and formed of soft wood and provided with a hole, a hard-wood pin in the hole, and a fastener driven into the first member and into the pin to unite the said members.

2. The combination with a member formed of wood, of a second member also formed of wood and provided with a hole adjacent to its surface which is in contact with the first member, a wooden pin of a diameter less than that of the hole, and a fastener adapted to engage the first member and to be driven into the pin to expand the same in its hole and to unite the said members.

3. The combination with a member formed of wood, of a second member also formed of wood and provided with holes adjacent to its surface which is in contact with the first member, wooden pins in said holes, and fasteners formed of strips of sheet metal corrugated longitudinally and adapted to be driven to unite said members, with one edge of each fastener engaging the first member and its opposite edge engaging one of said pins.

4. In a vehicle-body, the combination with a bottom frame consisting of side and end sills joined by lap-joints at the corners, of corner-posts having tongues at their lower ends engaging grooves in the ends of the bottom frame, dash-irons secured to the inner sides of said posts, a flange on each post extending from one edge thereof at one side of the dash-iron, side and end panels provided with a series of holes in their lower edges, screws extending through the posts and flanges into the panels with their heads countersunk in the inner surfaces of said posts and flanges, wooden pins in the holes in the lower edges of the panels, and corrugated strips forming fasteners, driven into the sills and pins across the line of the meeting surfaces of said sills and panels.

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

WILLIAM E. STEWART.

Witnesses:
FRANK S. TURNER,
LLOYD D. CHAPEL.