

No. 629,498.

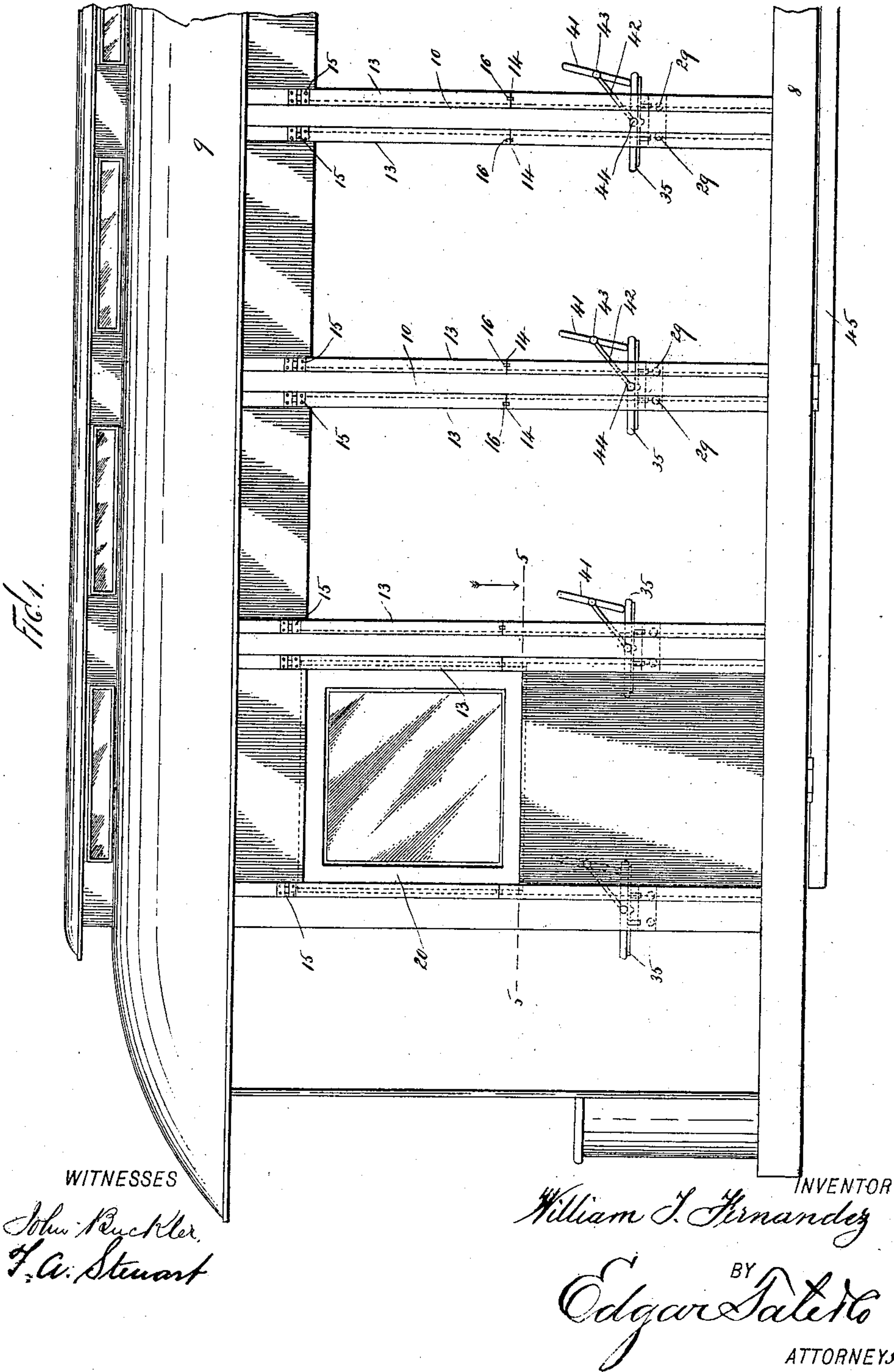
Patented July 25, 1899.

W. T. FERNANDEZ.
STREET CAR.

(Application filed Feb. 9, 1899.)

(No Model.)

3 Sheets—Sheet 1.



No. 629,498.

Patented July 25, 1899.

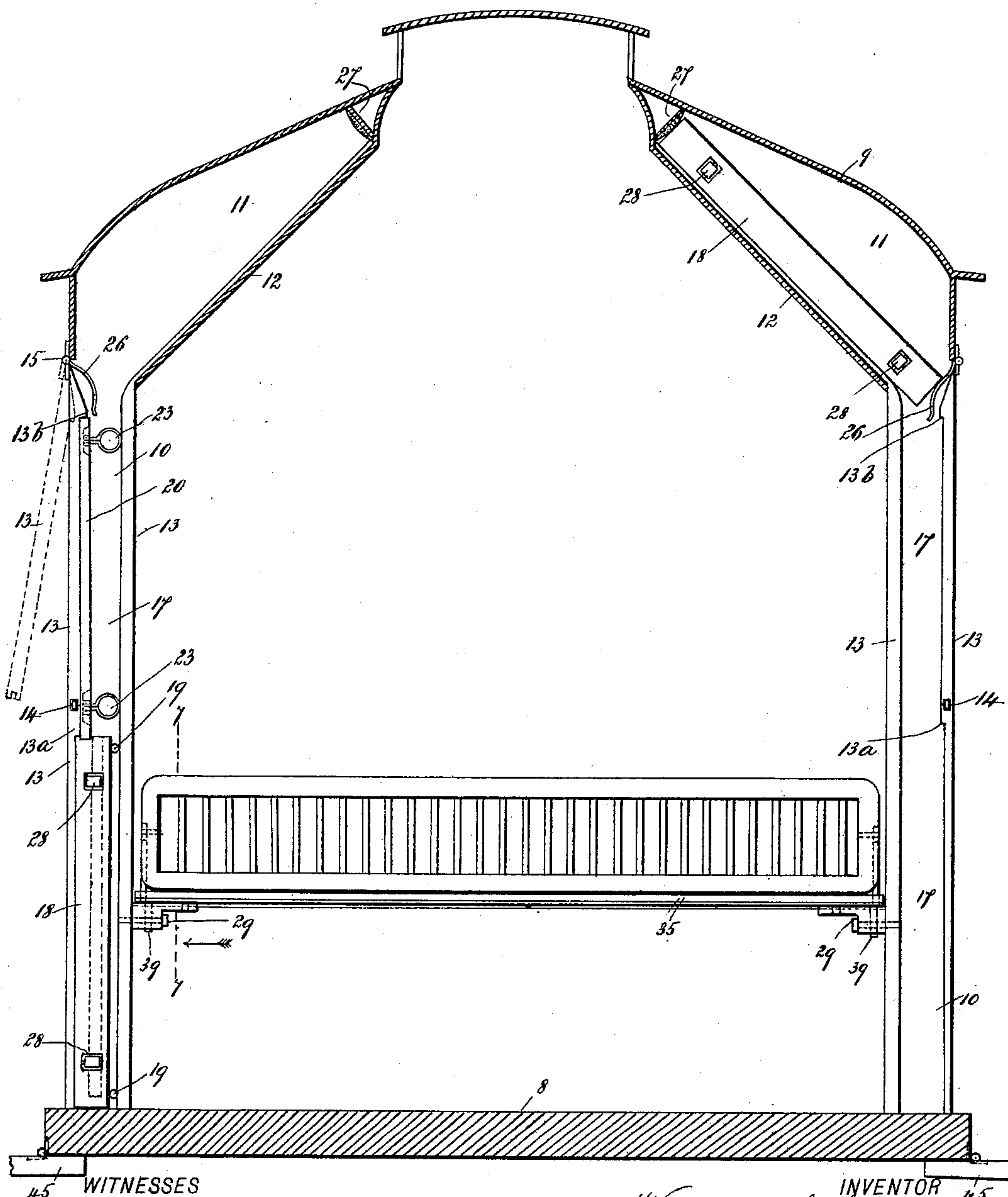
W. T. FERNANDEZ.
STREET CAR.

(Application filed Feb. 9, 1899.)

(No Model.)

3 Sheets—Sheet 2.

Fig. 2.



WITNESSES

John Buckler,
J. A. Stewart

INVENTOR

William T. Fernandez

BY

Edgar S. Sater,
ATTORNEYS

No. 629,498.

Patented July 25, 1899.

W. T. FERNANDEZ.

STREET CAR.

(Application filed Feb. 9, 1899.)

(No Model.)

3 Sheets—Sheet 3.

FIG. 3.

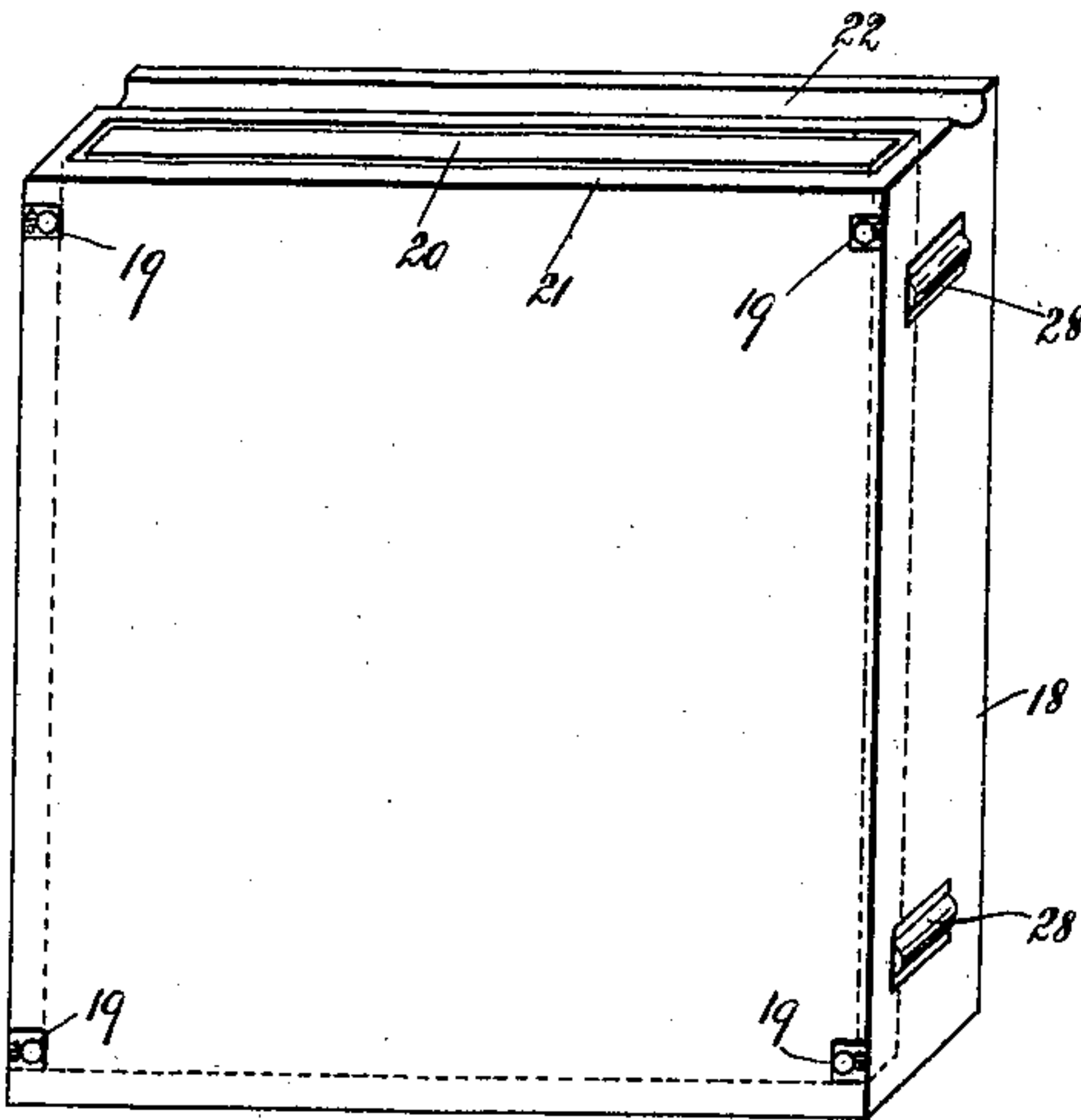


FIG. 4.

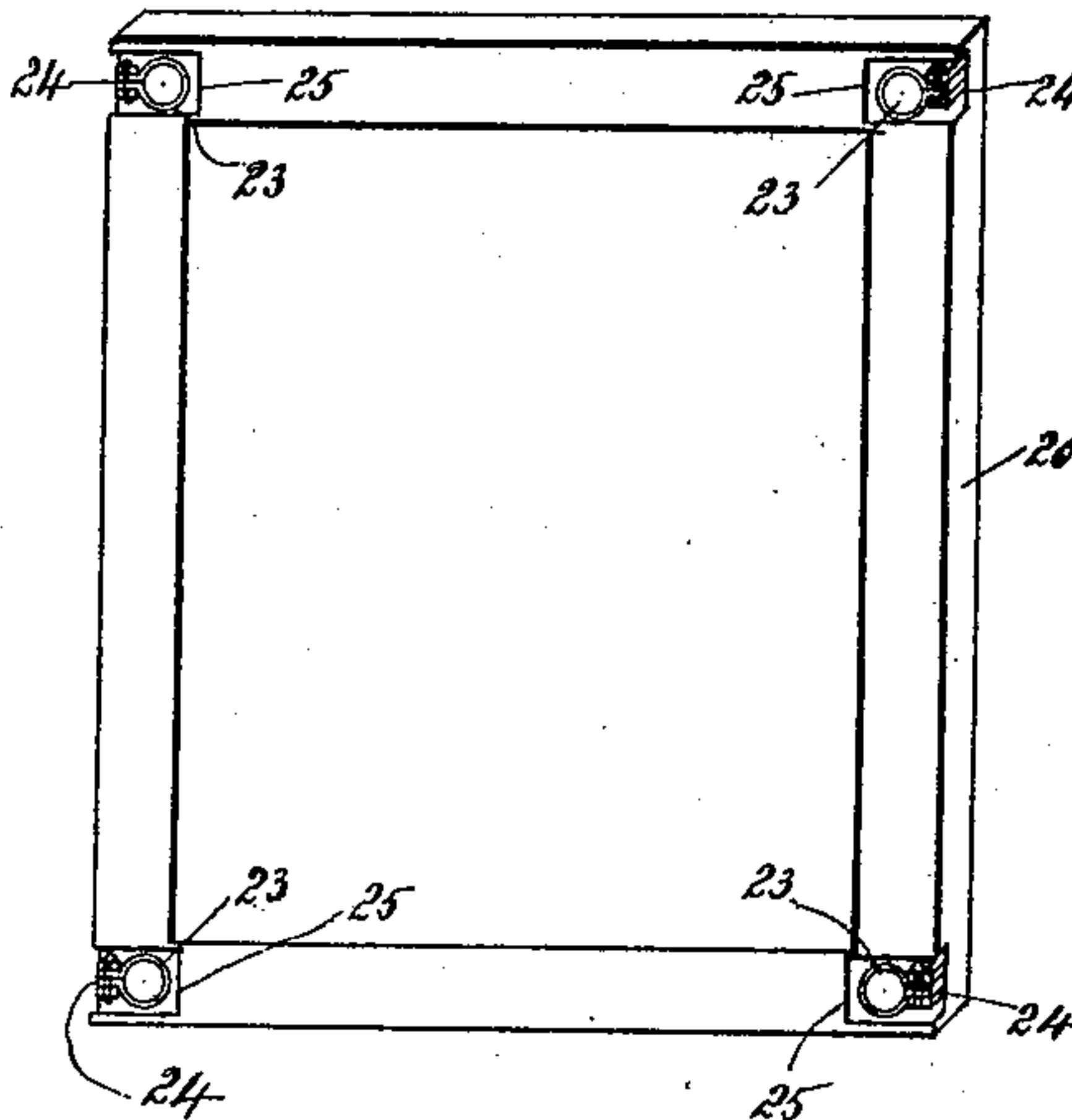


FIG. 5.

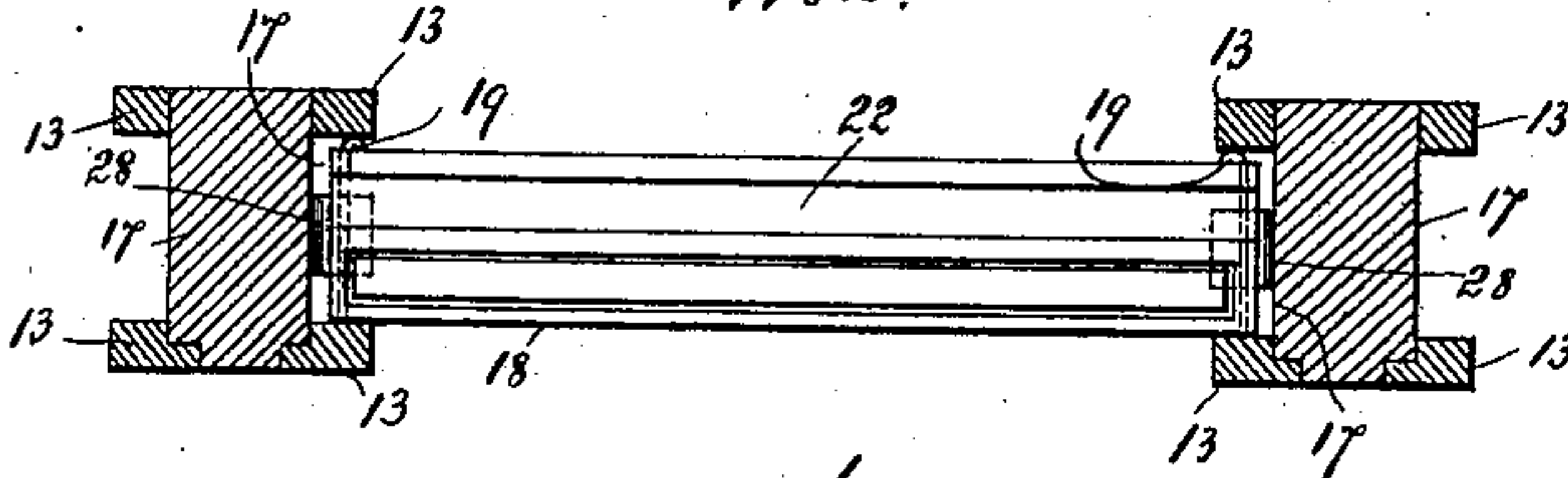


FIG. 6.

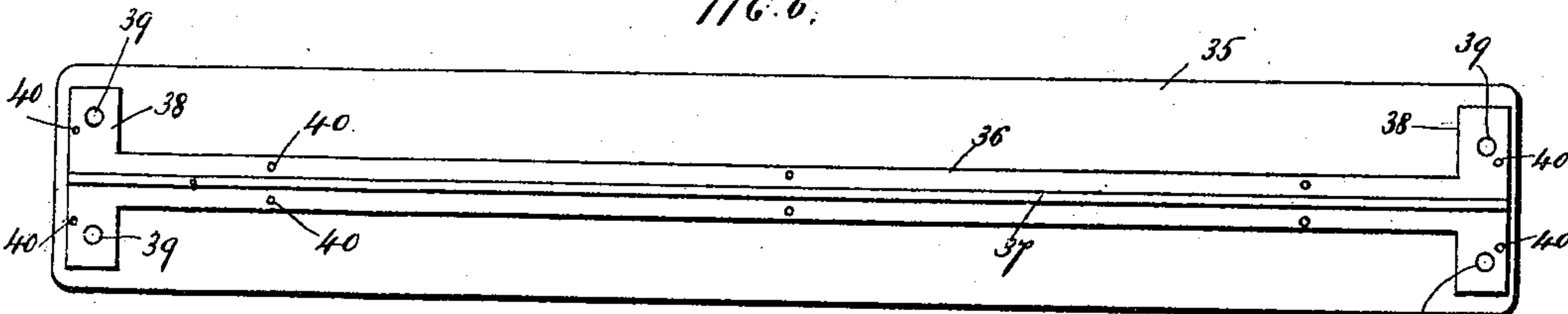


FIG. 7.

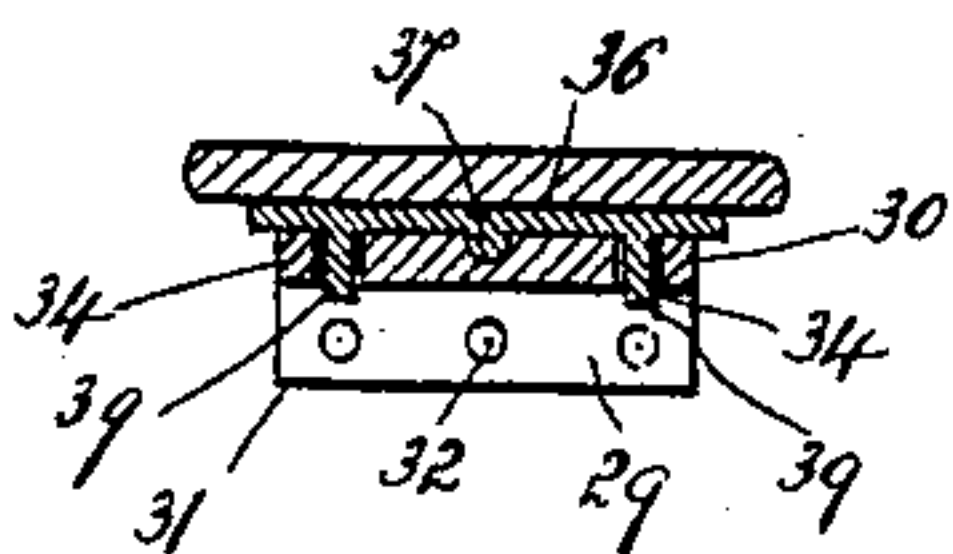


FIG. 8.

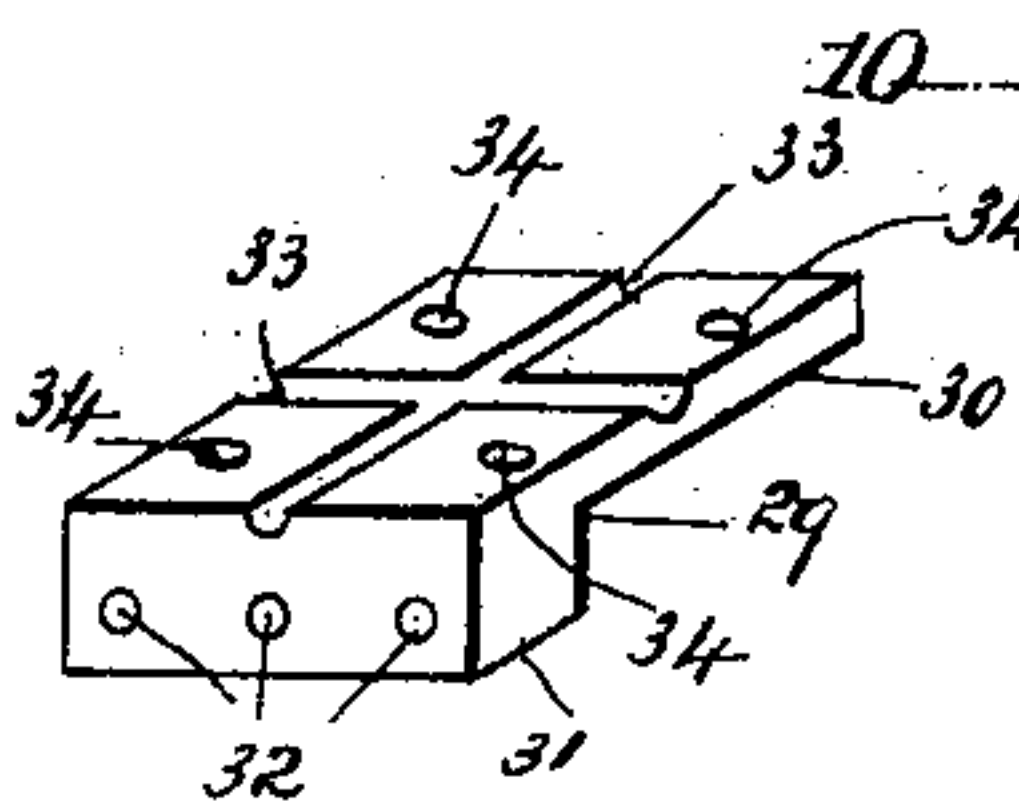


Fig. 9.

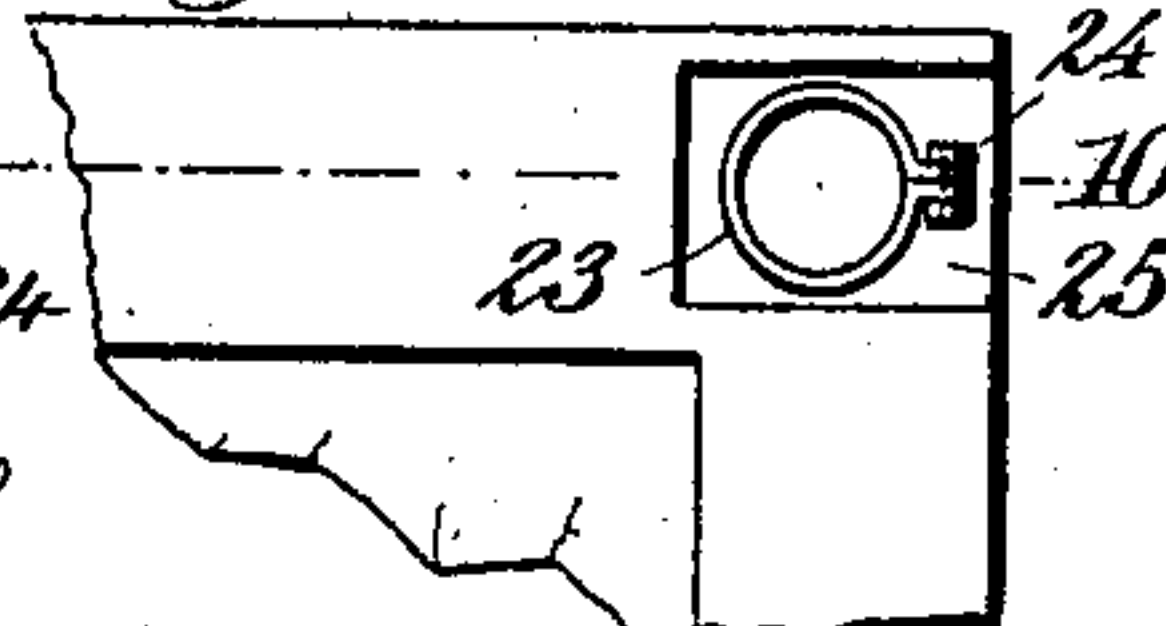
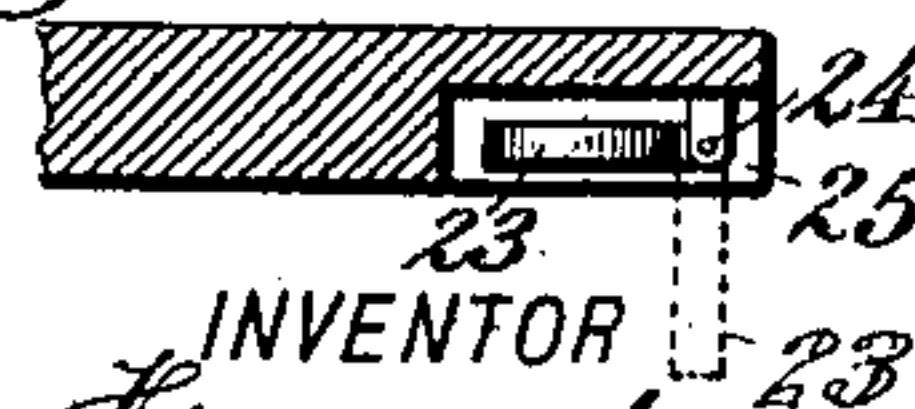


Fig. 10.



WITNESSES

John Buckler,
J. A. Stewart

William T. Fernandez

BY

Edgar Saleto
ATTORNEYS

UNITED STATES PATENT OFFICE.

WILLIAM TALAVERA FERNANDEZ, OF NEW YORK, N. Y., ASSIGNOR OF
TWO-THIRDS TO JENNIE C. KEATOR, OF BENSONHURST, NEW YORK,
AND JOHN A. UBSDELL, OF PORT EADS, LOUISIANA.

STREET-CAR.

SPECIFICATION forming part of Letters Patent No. 629,498, dated July 25, 1899.

Application filed February 9, 1899. Serial No. 705,017. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM TALAVERA FERNANDEZ, a citizen of the United States, residing at New York, (Brooklyn,) in the county of Kings and State of New York, have invented certain new and useful Improvements in Street-Cars, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to street-cars; and the object thereof is to provide an improved car of this class which is adapted for use either as a closed or open car and the construction of which is such that it may be quickly and easily changed from one form to the other whenever desired, a further object being to provide a car of the class specified with removable side panels and means for storing the same in the top of the car and also with seats which may be employed either as transverse or side seats.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which—

Figure 1 is a side view of a car constructed according to my invention; Fig. 2, a transverse section thereof; Fig. 3, a perspective view of one of the sash-casings which I employ; Fig. 4, a similar view of a window-sash which is adapted to be stored in said sash-casing; Fig. 5, a transverse section on the line 5 5 of Fig. 1; Fig. 6, a bottom plan view of one of the seats which I employ; Fig. 7, a transverse section of said seat and the support thereof on the line 7 7 of Fig. 2; Fig. 8, a perspective view of said support; Fig. 9, a side view of one corner of a sash, showing a detail of construction on an enlarged scale; and Fig. 10, a partial section on the line 10 of Fig. 9.

In the drawings forming part of this specification the separate parts of my improvement are designated by the same numerals of reference in each of the views, and in the practice of my invention I provide a car of the class described, the general form of which is shown in Figs. 1 and 2. The body portion of my improved car is composed of a bottom

8, a top 9, and vertical side posts 10, which are firmly connected with the bottom and top in the usual or any preferred manner and which form a support for the top.

The top of the car is provided at each side with longitudinal spaces 11, formed by longitudinal side casings 12, which constitute a false top, and the vertically-movable and removable side panels which are employed are adapted to be stored in the space 11.

The side posts 10 are provided, as shown in Figs. 1, 2, and 5, with side cleats or strips 13 both at the inner and outer sides thereof, and the outer cleats or strips 13 of each post are divided centrally, as shown at 14, and the upper sections thereof are hinged at 15, and catches of any desired form or construction are provided at 16 to hold the lower ends of said cleats or strips in position.

By means of the cleats or strips 13, connected with the posts 10, vertical spaces 17 are provided, in which are placed vertically-movable sash-casings 18, which normally rest in the bottom of the panel-spaces between the posts 10, and these sash-casings are preferably provided on their inner side and adjacent to each corner with small spring-cushions 19 of any desired form or construction, which press upon the inner beads or strips 13 and prevent the sash-casings from rattling and cause the same to fit snugly in the spaces in which they are placed. I also provide window-sashes 20, one of which is shown in perspective in Fig. 4, and the sash-casings 18 are provided with vertical chambers 21, which open upwardly and are adapted to receive the window-sashes 20, and the sash-casings 18 are also provided at the top thereof and inside of the chambers 21 with a groove 22, in which the window-sashes 20 are adapted to rest. The window-sashes 20 are provided at each corner with a circular or coil spring cushion 23, and these spring-cushions are hinged or pivoted at 24, and the corners of the sash are provided with a recess 25, in which the said cushions are hinged and into which they are adapted to be folded, and said cushions are also adapted to be turned outwardly away from the sash and to project inwardly and to

bear upon the inner cleats or strips 13, so as to hold said sashes firmly in place when in their highest position and also to prevent the rattling thereof. The sashes 20 may be raised and lowered in the usual manner when the car is used as a closed car, and when lowered they occupy the chambers 21 in the sash-casings 18, and when raised they fill the space between the posts 10 above the sash-casings. It will thus be seen that the sash-casings 18 and the window-sashes 20 constitute the side panels of the car, which fill the space between the posts 10, and whenever desired the said sashes may be lowered into the sash-casings by turning the spring-cushions 23 into the recesses 25 and dropping said sashes into the casings 18, and the said sashes may be raised into the position shown in Figs. 1 and 2 and held in such position by pressing the bottoms thereof outwardly and dropping them into the grooves 22 of the sash-casings, and by then turning the spring-cushions 23 inwardly the sashes 20 will be held firmly in the position shown in Fig. 2.

The lower ends of the upper sections of the outer cleats or strips 13 are adapted to be swung outwardly, as shown in dotted lines in Fig. 2, and secured to the tops of said cleats or strips are curved springs 26, and arranged in the upper portions of the spaces 11 of the top of the car are cushions 27, and when the lower ends of the cleats 13 are swung outwardly, as shown in dotted lines in Fig. 2, the sashes 20 may be dropped into the sash-casings 18, and said sash-casings may be moved or slid up into the spaces 11, as shown in said figure, and when in this position the said sash-casings are held and prevented from movement by the cushions 27 and the springs 26. The sash-casings 18 are also provided at the sides thereof with antifriction-rollers 28, which bear on the posts 10 when said casings are in the position shown in Figs. 1 and 2 and assist in preventing the rattling of said casings and also facilitate the movement thereof between the posts 10 when said casings are raised and pass into the spaces 11 in the top of the car.

The lower sections of the cleats or strips 13 are provided near their upper ends with an inwardly-directed shoulder or projection 13^a, and the upper hinged sections of said cleats or strips are provided near their upper ends with an inwardly-directed shoulder or projection 13^b, and when the sash-casings and sashes are in the position shown in Fig. 2 the upper end of the sash-casings fits beneath the shoulder or projection 13^a and the upper end of the sashes under the shoulder or projection 13^b, and said shoulders or projections prevent the vertical movement of said sash-casings, and the latter are held firmly in place by the antifriction-bearings 19 and 23.

My improved seat-supports 29 are of the form shown in Fig. 8, and consist of horizontal plates 30, provided at their outer ends with downwardly-directed extensions 31, through which bolts or screws are passed at

32 in order to secure said seat-supports to the posts 10. The horizontal plates 30 of the seat-supports are rectangular in form and provided in the upper surface with a transverse and a longitudinal groove 33, and these grooves intersect each other at right angles centrally of said plates, and said horizontal plates 30 are provided adjacent to each corner with holes 34, which are equidistant in both directions.

The seats 35 are of the usual form, and secured to the bottom thereof is a longitudinal metal strip 36, provided centrally with a longitudinal bead 37, and said strips 36 are provided at each end with a cross-head 38, and these cross-heads are provided with downwardly-directed pins 39, and the strips 36 and cross-heads 38 are secured to the bottom of the seat 35 by pins or screws 40, any desired number of which may be employed.

The seats 35 may be arranged either transversely, as shown in Figs. 1 and 2, this being the position in which they are placed when the car is used as an open car, or they may be arranged as ordinary side seats when the car is used as a closed car. When the said seats are used as transverse seats, as shown in Fig. 1, the pins 39 pass down through the holes 34 in the outer end of the seat-supports and firmly hold the seats in place, and when said seats are arranged as side seats the pins 39 at the opposite ends thereof pass down through the holes 34 in the sides of the seat-supports, and the ends of the seats terminate midway of the seat-supports. In either position of the seats the longitudinal bead 37 in the bottom of the strips 36 fits in one of the grooves 33 in the top of the seat-supports, and by means of the said beads and the pins 39 the seats are held firmly in place. The seats 35 are also provided with backs 41, which are provided with end arms 42, pivotally connected with the ends thereof at 43 and with the ends of the seats at 44, whereby the backs may be turned forwardly or backwardly in the usual manner, this construction being similar to that usually employed.

The sides of the car, as shown in the drawings, are provided at the bottom thereof with hinged steps 45, which may be turned down for use, as shown in Fig. 1, when the car is used as an open car or folded vertically when the car is used as a closed car, or said side steps may be removed altogether when the car is used as a closed car.

By means of the construction herein described my improved car may be quickly and easily changed from a closed to an open or from an open to a closed car whenever desired, and when used as an open car the side panels, consisting of the window-sashes 20 and sash-casings 18, are always stored in the top thereof and ready for use.

It will be apparent that changes in and modifications of the construction described may be made without departing from the spirit of my invention or sacrificing its ad-

vantages, and I reserve the right to make all such alterations therein as fairly come within the scope of my invention.

Having fully described my invention, I claim as new and desire to secure by Letters Patent—

1. A car, provided with spaces in the top thereof and with seats which are adapted to be arranged transversely thereof or longitudinally of the sides thereof, and with side panels consisting of sash-casings and sashes, said casings being adapted to receive said sashes and to be raised into the spaces in the top of the car, and devices for holding said casings in said spaces, substantially as shown and described.

2. A car which is adapted for use either as an open or a closed car, and which is provided with seats having longitudinal bottom beads and transverse end pieces provided with pins, said seats being adapted for use either as transverse or side seats, and with seat-supports comprising grooved and pierced plates, said car being also provided with side panels composed of sash-casings and sashes, said casings being adapted to receive said sashes, and said casings being adapted to be raised and stored in the top of the car, substantially as shown and described.

3. A car constructed as herein described and provided with longitudinal spaces in the top thereof, side posts, side panels consisting of window-sashes and sash-casings, the sash-casings being adapted to receive the sashes and also to support the same, said side panels being held in place by cleats or strips secured to said posts, the outer cleats or strips being divided centrally and adapted to move outwardly, substantially as shown and described.

4. A car provided with side posts, and cleats or strips secured to the sides thereof, and forming spaces to receive side panels, the outer cleats or strips being divided centrally, and the upper sections thereof hinged at the top, substantially as shown and described.

5. A car provided with side posts, and cleats or strips secured to the sides thereof, and forming spaces to receive side panels, the outer cleats or strips being divided centrally, and the upper sections thereof hinged at the top, and side panels mounted in said spaces, and consisting of sash-casings and sashes, said casings being adapted to receive said sashes, substantially as shown and described.

6. A car constructed as herein described and provided with seats which are adapted to be used as transverse or side seats, and seat-supports secured to the sides of the car, and consisting of plates having transverse grooves in the top thereof, and equidistant holes in said plates, the seats being provided with a longitudinal bottom strip having a longitudinal bead, and transverse end pieces provided with pins which are adapted to enter said holes, substantially as shown and described.

7. A car which is adapted for use either as

an open or closed car, and which is provided with vertical side posts which are provided with side cleats or strips forming panel-spaces, sash-casings and sashes mounted in said spaces, said casings being provided with chambers open at the top, and adapted to receive said sashes, and with grooves arranged inside of said chambers adapted to receive the lower ends of said sashes and support the same, said casings being adapted to be raised into spaces in the top of the car and supported therein, substantially as shown and described.

8. A car which is adapted for use either as an open or closed car, and which is provided with vertical side posts which are provided with side cleats or strips forming panel-spaces, sash-casings and sashes mounted in said spaces, said casings being provided with chambers open at the top, and adapted to receive said sashes, and with grooves arranged inside of said chambers, adapted to receive the bottoms of said sashes and support the same, said casings being adapted to be raised into spaces in the top of the car and supported therein, and seats adapted to be placed either transversely of the car or longitudinally of the sides thereof, substantially as shown and described.

9. A car provided with vertically-movable side panels consisting of sash-casings and sashes, said casings being adapted to receive said sashes, and spaces in the top of the car into which said casings are adapted to be raised, said spaces being provided with springs, and cushions for holding the said casings in place, substantially as shown and described.

10. A car constructed as herein described and provided with longitudinal spaces in the top thereof, side panels consisting of window-sashes and sash-casings, the casings being adapted to receive the sashes and also to support the same, said side panels being held in place by cleats or strips, the outer cleats or strips being divided centrally and hinged at the top, substantially as shown and described.

11. A car provided with seat-supports which are secured to the sides thereof, and provided with holes or sockets, and seats which are adapted to be connected with said supports either transversely of the car or longitudinally of the sides thereof, said seats being provided at their ends with pins which enter said holes or sockets, substantially as shown and described.

12. The herein-described seat-support for a car, consisting of plates having longitudinal and transverse grooves in the top thereof, and holes formed therein, substantially as shown and described.

13. The herein-described seat-support for a car, consisting of plates having longitudinal and transverse grooves in the top thereof, and holes formed therein, and seats provided with bottom strips having a bead, and transverse end pieces hav-

ing pins 39, substantially as shown and described.

14. A car constructed as herein described and provided with side posts, cleats or strips
5 secured to the sides of said posts, sash-casings and sashes mounted in the spaces formed by said cleats or strips, said sashes being provided with recesses and pivoted spring-cushions mounted in said recesses and adapted to
10 bear on said cleats, said sash-casings being adapted to receive said sashes, and also to support the same and being provided with spring-cushions adapted to bear on said cleats, and the outer beads or strips being provided
15 at the top of the sash-casings with inwardly-directed shoulders or projections, substantially as shown and described.

15. A car constructed as herein described and provided with side posts, cleats or strips
20 secured to the sides of said posts, sash-casings and sashes mounted in the spaces formed

by said cleats or strips, said sash-casings being adapted to receive said sashes, and also to support the same, and the outer beads or strips being provided at the top of the sash- 25 casings and at the top of the sashes with inwardly-directed shoulders or projections, said sashes and said casings being provided with spring-cushions, said car being also provided in the top thereof with spaces into which the 30 sash-casings are adapted to be raised and with devices for holding said sash-casings in said spaces, substantially as shown and described.

In testimony that I claim the foregoing as 35 my invention I have signed my name, in presence of the subscribing witnesses, this 25th day of January, 1899.

WILLIAM TALAVERA FERNANDEZ.

Witnesses:

F. A. STEWART,
R. W. BLAKESLEE.