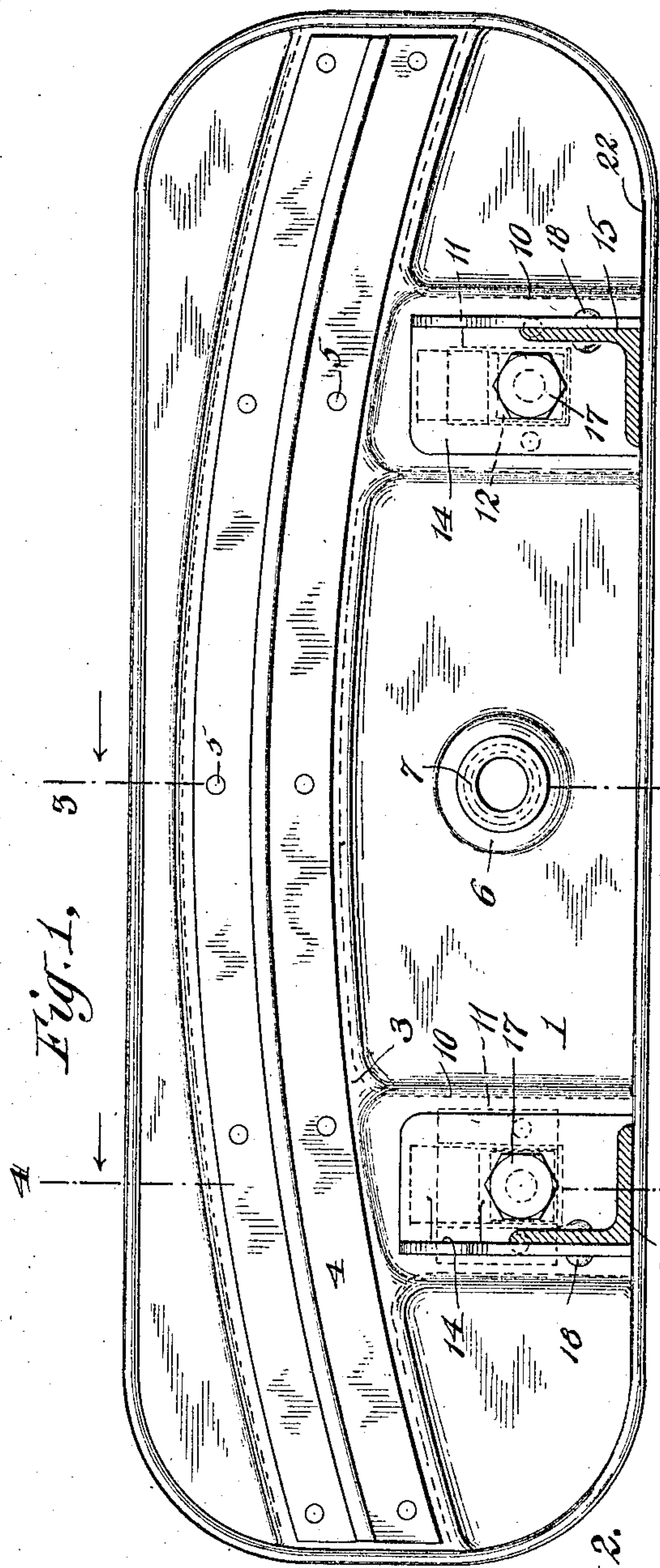


No. 849,596.

PATENTED APR. 9, 1907.

E. G. BUDD.  
SEAT END.

APPLICATION FILED JULY 18, 1906.



WITNESSES:

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Fig. 2.

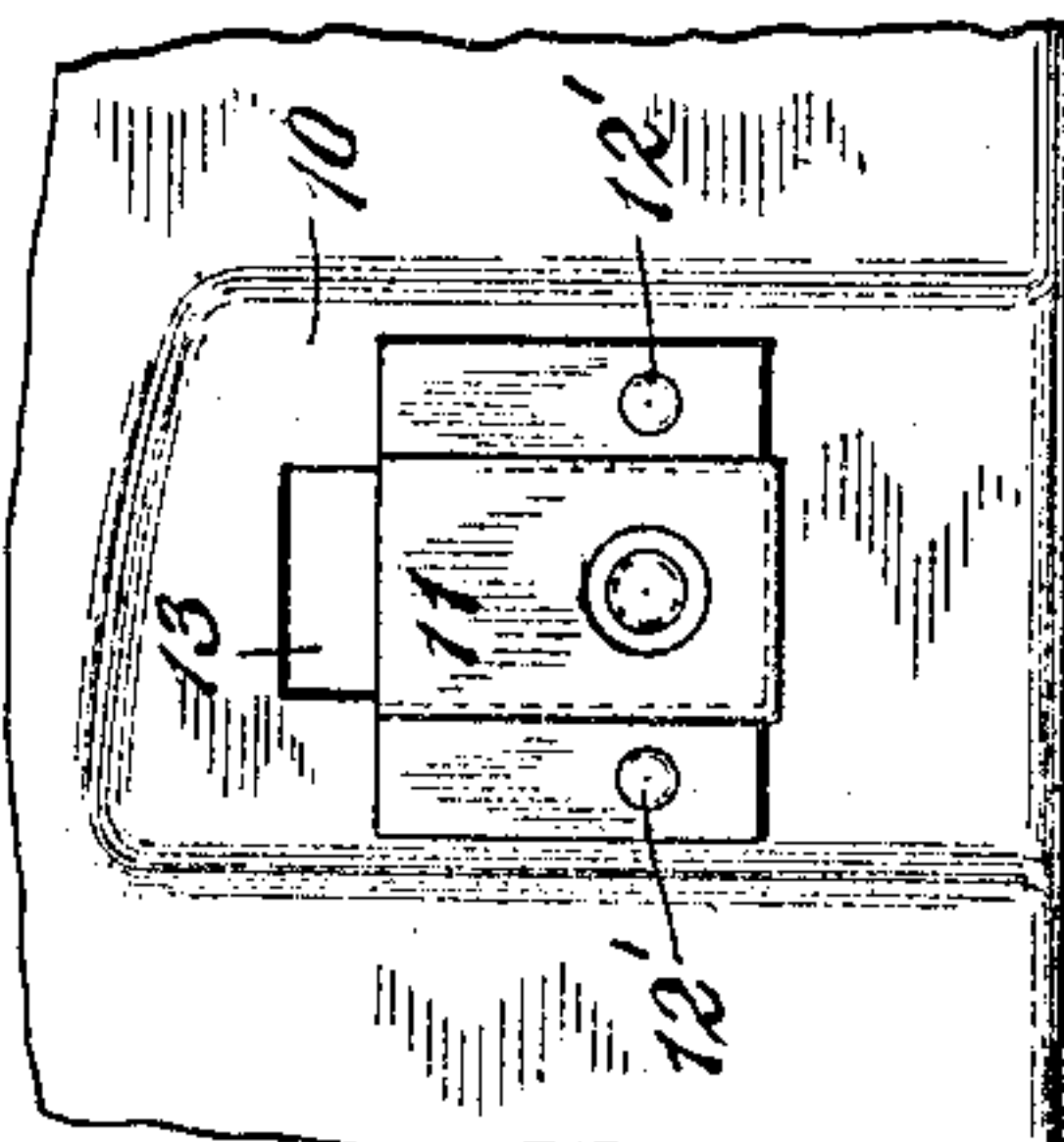


Fig. 3.

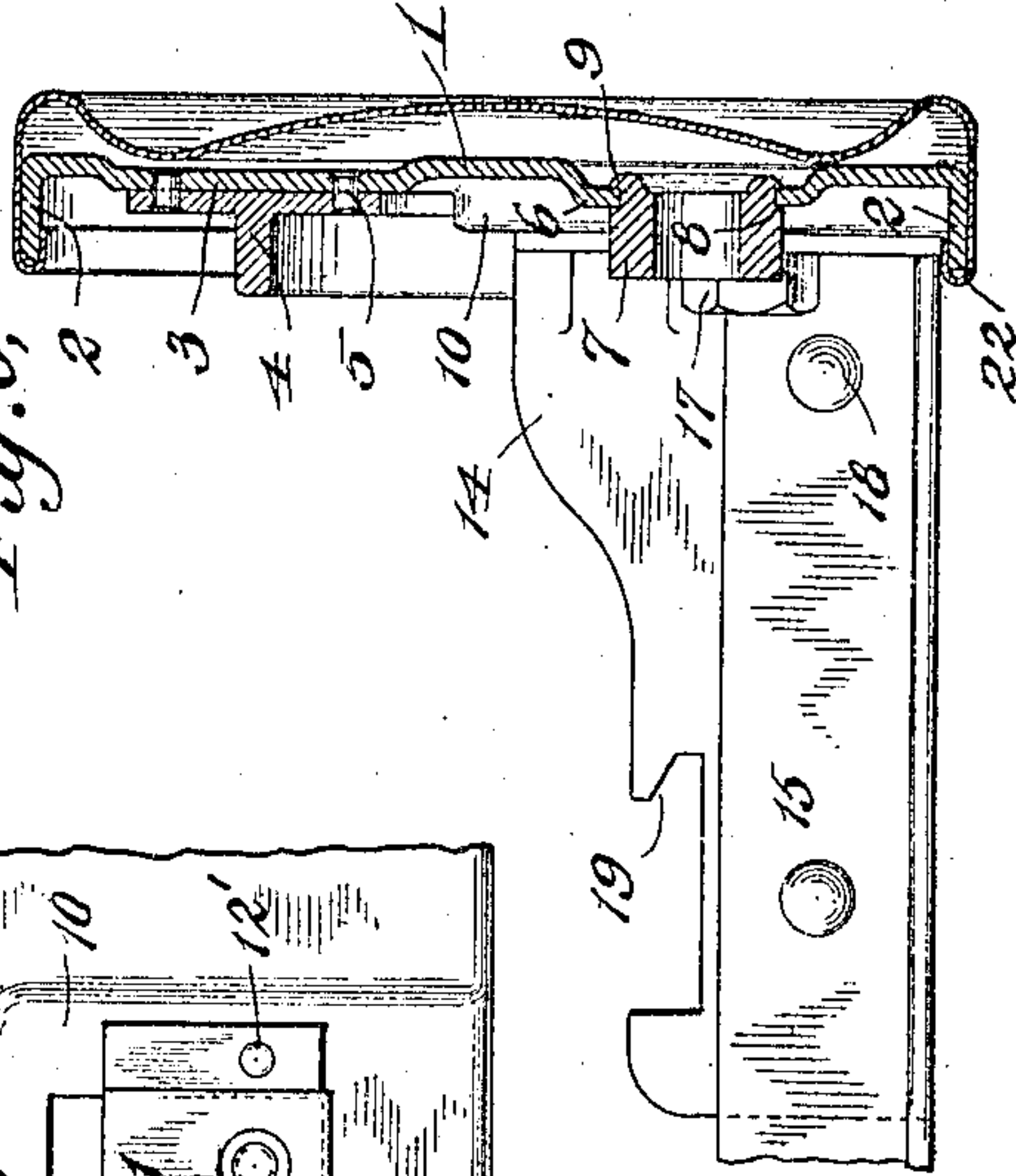


Fig. 4.

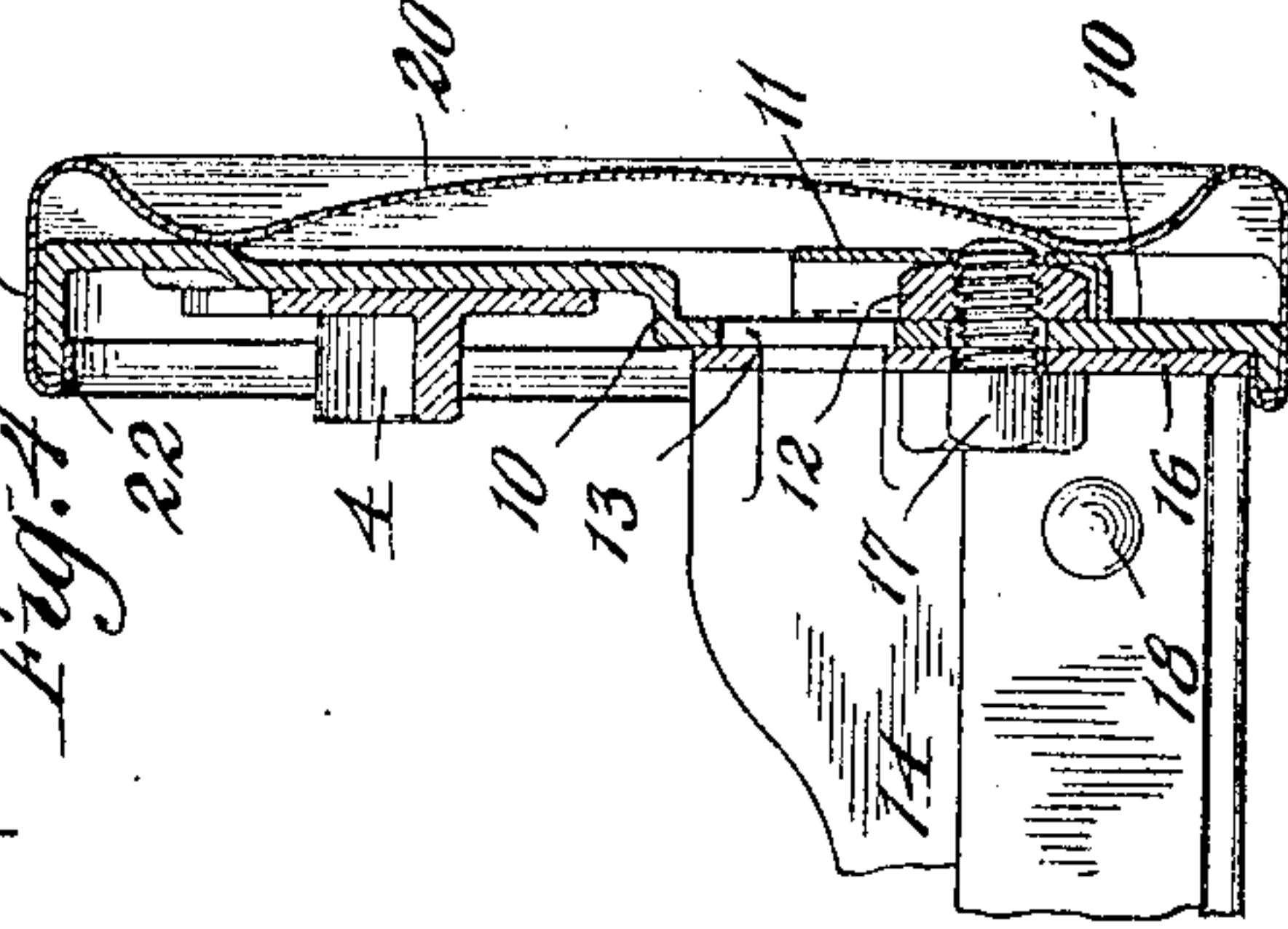
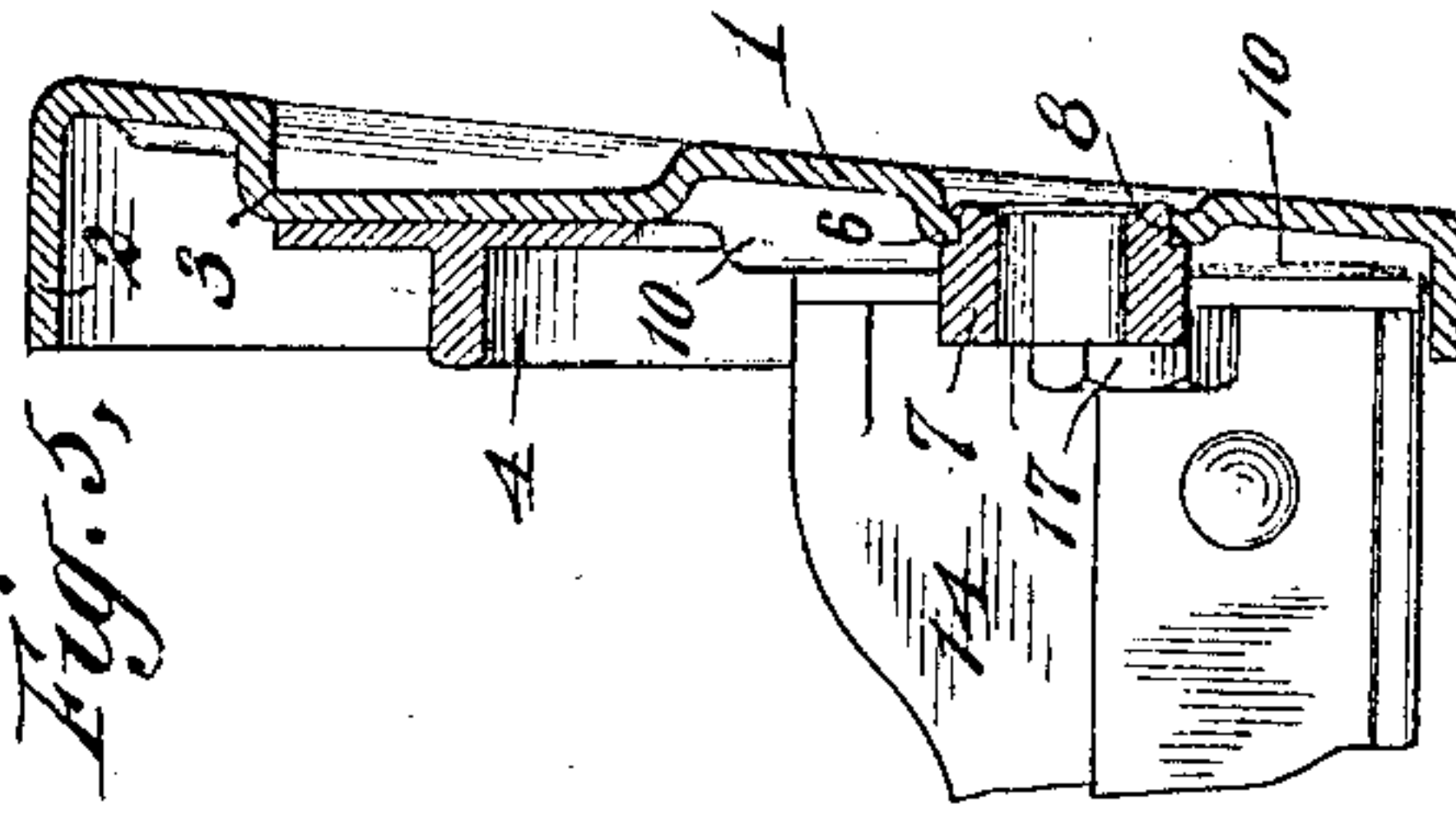


Fig. 5.



INVENTOR

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# UNITED STATES PATENT OFFICE.

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## SEAT END.

No. 849,596.

Specification of Letters Patent.

Patented April 9, 1907.

Application filed July 18, 1906. Serial No. 326,720.

*To all whom it may concern:*

Be it known that I, EDWARD G. BUDD, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Seat Ends, of which the following is a specification.

This invention relates to seat ends adapted more particularly for use in the manufacture of seats such as are in general use in cars.

The object of the invention is to effect certain improvements in seat ends of this type to the end that a seat end is provided which possesses great strength, which can be manufactured at small cost, and which is arranged to facilitate the application thereto of a cover adapted to conceal the parts of the seat end and to improve the appearance of the structure.

My improved seat end also permits of permanently attaching the wall-plate to the side of the car and allowing it to remain there after the seat is taken down, this being particularly desirable in steel cars.

The features of my invention will be best understood by reference to the accompanying drawings, which show the preferred embodiment thereof, and in which—

Figure 1 is an elevation of the inner side of the seat end. Fig. 2 is a detail view herein-after referred to. Fig. 3 is a section on line 3 3 of Fig. 1. Fig. 4 is a section on line 4 4 of Fig. 1; and Fig. 5 is a view similar to Fig. 3, illustrating a modification.

Referring to the drawings, the seat end consists of a plate 1, cut from sheet metal of a weight sufficient to give the required strength and pressed to the desired shape. At the periphery of the plate is an inwardly-turned flange 2. Extending across the upper portion of the plate is an arc-shaped raised portion or pad 3 of such shape as to receive thereon the arc-shaped T-section rail 4, which is adapted to guide and support the lower end of one of the back-supporting arms of the seat. One web of the rail 4 is secured to the pad 3 by means of bolts or rivets 5, and the other extends inwardly of the seat, as shown in Figs. 3 and 4. Below the pad 3 and preferably at the center of the seat is a circular raised portion or pad 6, the center of which is cut away to provide a circular open-

ing therethrough. Secured in this opening is a sleeve 7, the end of which is reduced to form a shoulder 8, which abuts against the surface of the pad adjacent to the opening therethrough in order to position the sleeve. The end of the sleeve extending through the opening is turned over at 9 against the other side of the pad to hold the sleeve firmly in position. The sleeve thus mounted forms a bearing in which is adapted to rotate the rod actuated by the movement of the seat-back to move the rockers for supporting the seat-cushion.

On either side of the raised portion 6 and below the arc-shaped raised portion 3 is a raised portion or pad 10. These may merge into the pad 3, as shown in Fig. 1, or be entirely distinct therefrom. To the under side of each pad 10 is secured a light sheet-metal piece 11, bent so that when in position, as shown in Figs. 2 and 4, it forms a nut-pocket adapted to receive and support a nut 12, with the threaded opening therethrough in substantial alinement with an opening in the pad 10. The piece 11 has wings at its sides, which are secured by rivets 12' to the pad 10.

Above the opening in the pad above mentioned is a second opening 13, which is preferably square or hexagonal to correspond with the shape of the nut 12. This opening is near the top of the nut-pocket 11, so that when a nut 12 is inserted through this opening it will fall into position in the bottom of the pocket and its flattened sides will coact with the walls of the pocket to prevent turning of the nut. To these pads 10 are secured the end-connectors 14 for the rails 15. Each end-connector has a rear wall 16 lying against the pad 10 and secured thereto by a bolt 17, extending through an opening in wall 16 and the opening in the pad and coacting with the nut 12 to secure the end-connector to the plate 1. Also the nut-pocket 11 may have an opening in its rear wall, through which the end of bolt 17 may extend, if necessary. Extending outward from wall 16 are one or more walls, to which the rail 15 is secured, as by rivets 18. The vertical wall of the end-connector or that of the rail may have a rocker-run 19 cut therein to receive and guide the rocker.

Extending over and covering the entire outer side of the seat end is a cover 20, of thin



sheet metal turned inwardly at its edges to form a flange 21. This flange is adapted to engage the flange 2 of plate 1, and its extreme edge is folded at 22 over that of flange 1 to hold the cover in position. The body of cover 20 may be pressed to any desired design—as, for instance, that shown in the drawings—to improve the appearance of the seat end.

In some cases it is desirable that the plane of the seat end be inclined somewhat to the vertical. For instance, at the wall end of a car-seat the seat end is sometimes secured directly to the structure of the car, and this may be at a slight angle to the vertical. A seat end constructed in accordance with my invention is readily adapted for this use, as shown in Fig. 5, in which it will be seen that the body of the seat end is at an angle to the vertical, while the surfaces of the pads 3, 6, and 10 are in vertical planes which are displaced one from another by the same amount as those of the pads of Figs. 1, 3, and 4. By this construction the seat end will lie against and can be secured firmly to a supporting structure which is mounted at somewhat of an angle, and the surfaces of the pads are all vertical, so that the parts are held in the relation insuring the best results.

A seat end constructed in this manner possesses many advantages. Besides having ample strength it is of attractive appearance, since the cover-plate conceals the ends of the operating parts and the supports therefor and can be pressed to any desired configuration. By the provision of the raised pads for supporting the various parts which are mounted on the seat end the parts projecting through these pads do not extend beyond the plane of the seat end, and even though the cover be brought down to that plane there is no danger of disfiguring it. The nut-pockets facilitate assembling the parts, as they hold the nuts in proper relation and prevent turning thereof and can be readily withdrawn if it is necessary to substitute a new one. Most of the parts being of sheet metal, which can be readily pressed to the desired form, the seat end can be produced at small cost.

Having described my invention, what I

claim as new, and desire to secure by Letters Patent, is—

1. A seat end formed of sheet metal and having an integral raised pad provided with an opening and a sleeve supported in said opening, the end of said sleeve extending through the opening being turned over against the side of said pad, substantially as described.

2. A seat end formed of sheet metal and having integral raised pads, a part secured to one side of each of said pads and forming a nut-pocket, a nut in each of said pockets and means coacting with said nuts to secure the ends of connecting rails to said pads, substantially as described.

3. A seat end having a part secured thereto and forming a nut-pocket and an opening for a nut in said seat end communicating with said pocket, substantially as described.

4. A seat end formed of sheet metal and having integral raised pads with openings therethrough, parts secured to said seat end one adjacent to each of said openings and forming a nut-pocket, a nut in each of said pockets, and means extending through said openings and coacting with said nuts for securing parts of the seat structure to said seat end, substantially as described.

5. A seat end formed of sheet metal and having openings therethrough, parts formed of sheet metal and secured to said seat end one adjacent to each of said openings, said parts forming nut-pockets, a nut in each of said pockets, and means extending through said openings and coacting with said nuts to secure parts of the seat structure to said seat end, substantially as described.

6. A seat end formed of sheet metal and having integral raised pads to which the parts of the seat structure are secured, the surface of said seat end being inclined to the planes of the tops of said pads, substantially as described.

This specification signed and witnessed this 14th day of July, 1906.

EDWARD G. BUDD.

Witnesses:

P. T. TUCKER,  
M. GETZ.