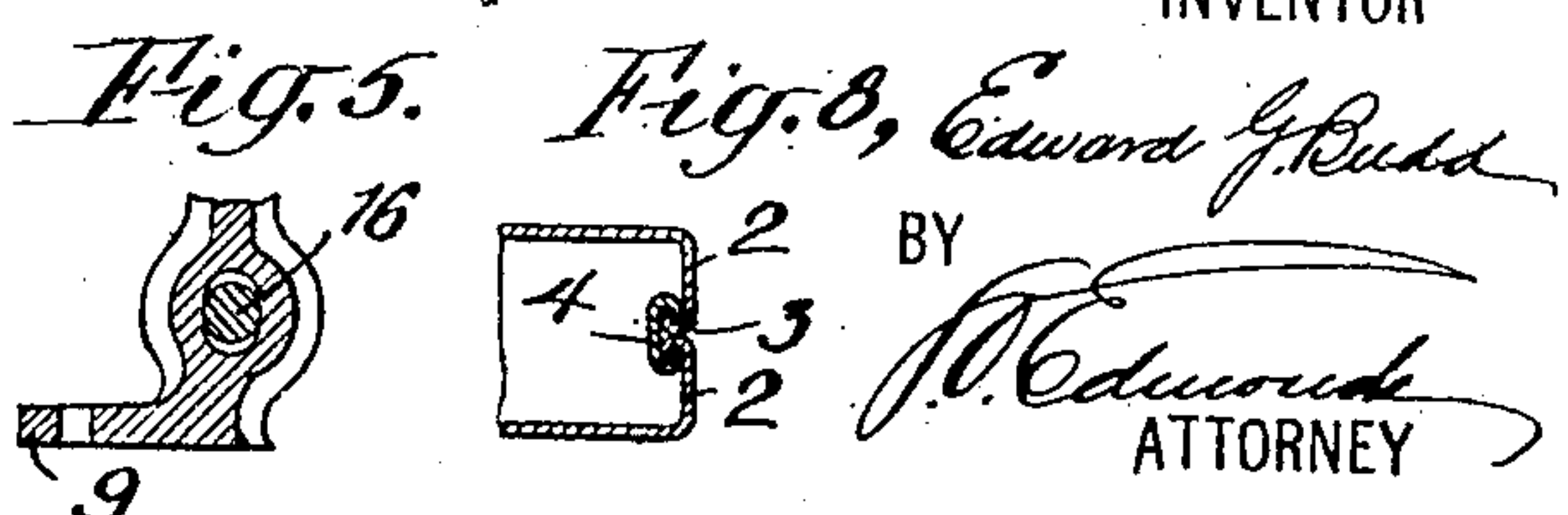
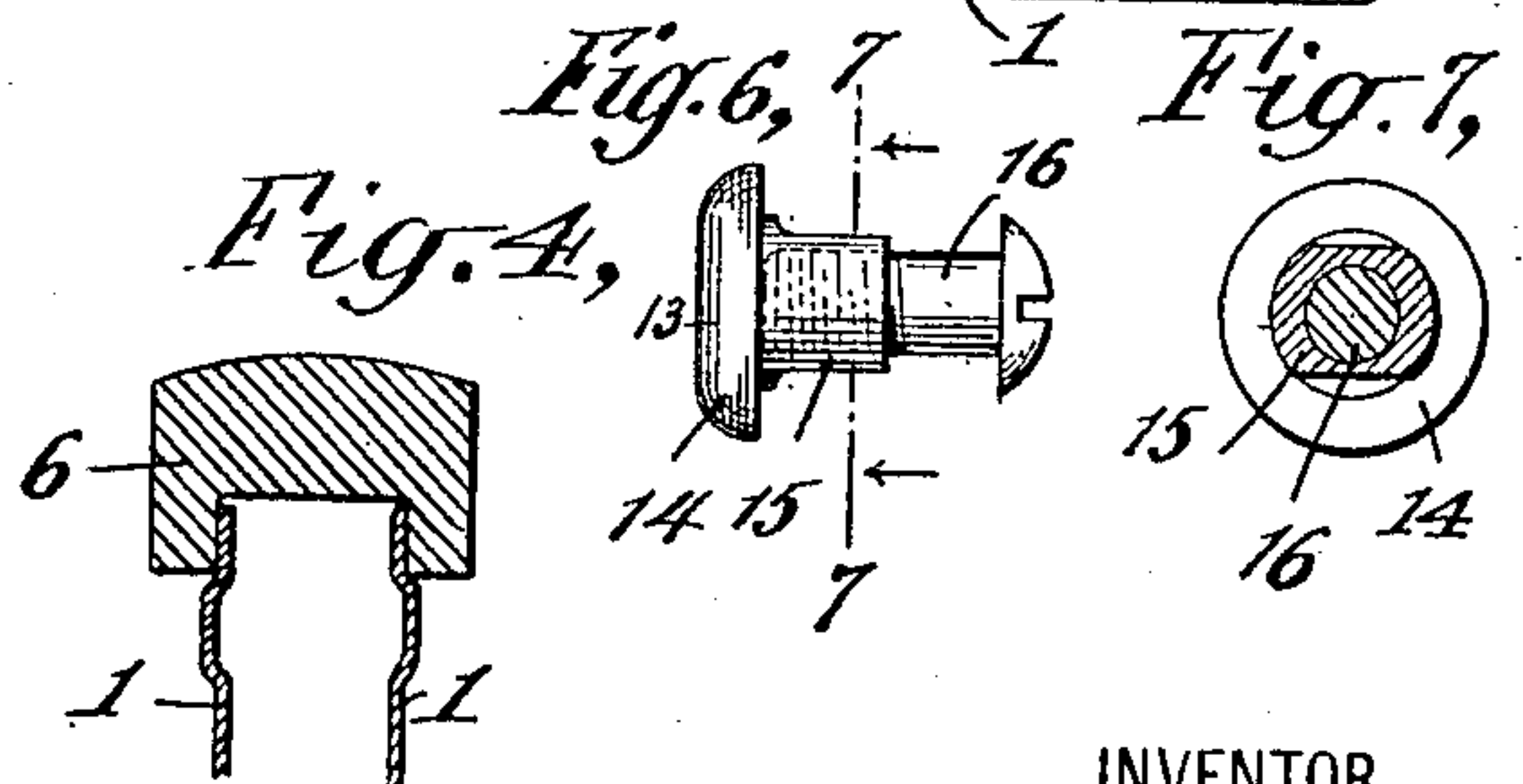
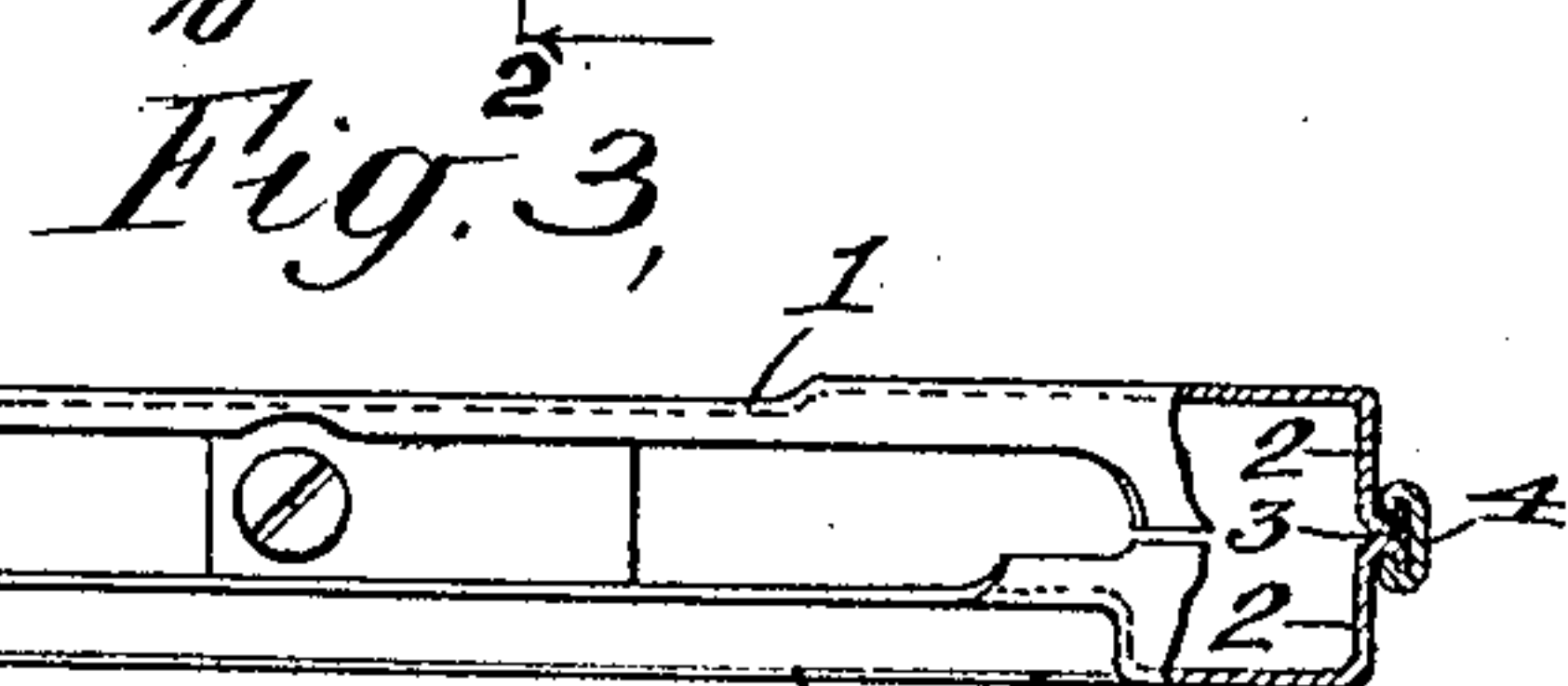
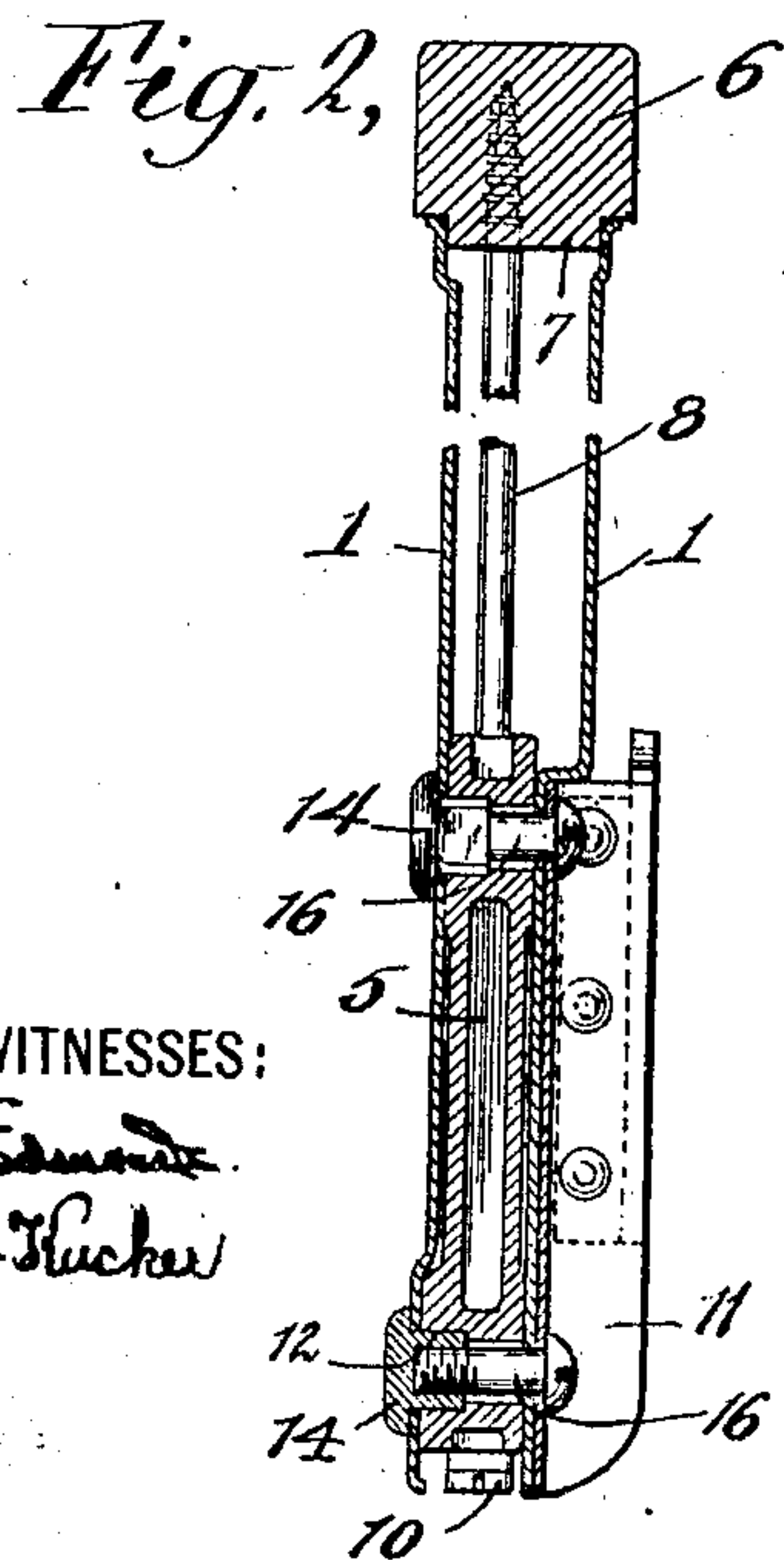
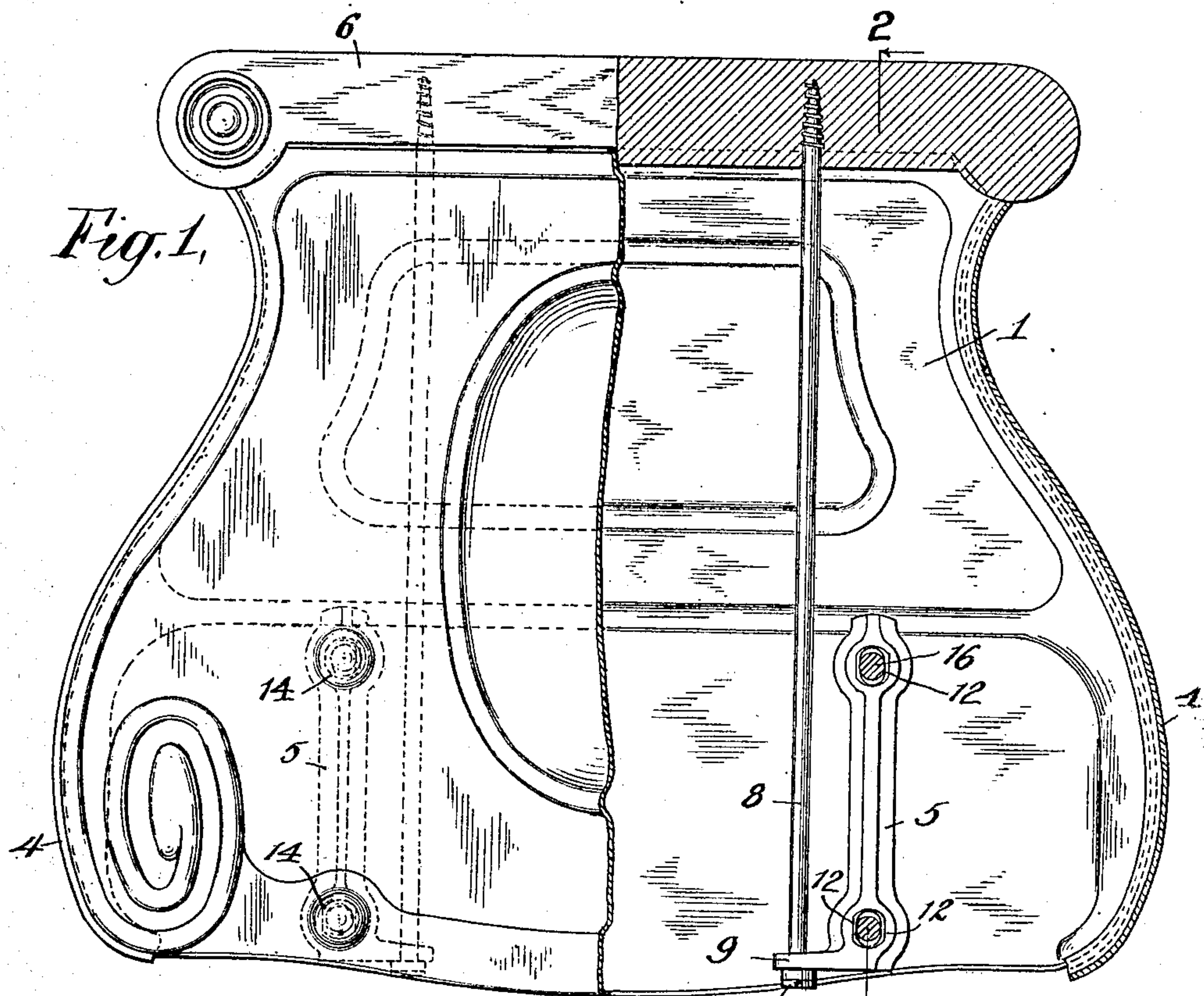


E. G. BUDD.
SEAT END.

APPLICATION FILED MAY 1, 1908.

916,416.

Patented Mar. 30, 1909.



WITNESSES:
Edmund
E. G. Budd

INVENTOR

Fig. 6,

Fig. 7,

Fig. 8,

BY *Edmund*
ATTORNEY

UNITED STATES PATENT OFFICE.

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SEAT END.

No. 916,416.

Specification of Letters Patent.

Patented March 30, 1909.

Application filed May 1, 1906. Serial No. 314,659.

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 concerns car-seats and refers more particularly to the construction of the seat-ends employed in such seats.

The object of the invention is to so improve the construction of such seats as to provide a seat-end of ample strength and attractive appearance, having an arm-rest which is securely held on but readily detachable from the seat-end, and in which the devices for securing the seat-end to its supporting structure present on the outer side of the seat-end no rough edges which may catch the clothing of persons passing the end of the seat.

In accordance with my invention, the seat-end is constructed of two plates, preferably of sheet-metal pressed into form and having flanges at the lateral edges bent to close the lateral edges of the seat-end. The plates are secured together at the lateral edges by connecting strips coacting with portions on these flanges and also at points intermediate of their edges, one or more spacers of suitable construction being interposed between the plates. An arm-rest is secured on the upper edge of the seat-end, and in order to prevent displacement of the arm-rest, I provide one or more undercut portions on its underside into which the seat-end extends so as to interlock the arm-rest and seat-end. The arm-rest is held on the seat-end by means of screws, and to permit of readily detaching the arm-rest, these screws are made removable through the seat-end. In the preferred form of the invention, the heads of these screws lie adjacent to the lower edge of the seat-end and their upper threaded ends enter openings in the bottom of the arm-rest, so that by applying a wrench or screw-driver to the heads of the screws they may be quickly loosened and the arm-rest removed without removing the seat-end or any of the other parts of the seat. The seat-end is secured to a suitable supporting structure, such as the pedestal of the car-seat or the plate which supports the operating mechanism of the seat. For this purpose I employ devices of peculiar form, such that they extend only a

slight distance beyond the plane of the outer side of the seat-end and present a smooth exterior, thus avoiding all danger of catching the clothing on these securing devices as, for instance, when walking down the aisle of a car.

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

Figure 1 is an elevation of the seat-end broken away and sectioned in part; Fig. 2 is a section on line 2—2 of Fig. 1; Fig. 3 is a bottom view of a portion of the seat-end broken away and sectioned in part; Fig. 4 is a section of a modified form of arm-rest; Fig. 5 is a section of a portion of one of the spacers; Fig. 6 is an elevation of one of the securing bolts and its nut; Fig. 7 is a section on line 7—7 of Fig. 6; and Fig. 8 is a section through one of the lateral edges of a modified form of seat-end.

Referring to these drawings, the seat-end comprises two sheet-metal plates 1, 1, pressed to the desired form and having flanges 2, 2, at their lateral edges, each bent toward the other. At the edges of these flanges are folds 3, and connecting strips 4, 4, having similar folds at their edges, coact with the folds 3 to hold the two plates 1, 1, together at their lateral edges, thus closing the lateral edges of the seat-end. The folds 3 on the flanges 2, 2, of the plates, may be turned outwardly as shown in Figs. 1 and 3, in which case the connecting strips 4, 4, will be on the outside of the seat-end, or the construction may be reversed as shown in Fig. 8, in which case the connecting strips 4 will be concealed. In order to hold the plates 1, 1, in the proper relation, perforated spacers 5, 5, are interposed between the plates, and bolts extend through the openings in these spacers to secure the plates firmly thereto.

Supported on the upper edge of the seat-end is an arm-rest 6, preferably of wood. This arm-rest is interlocked with the seat-end so that displacement thereof relatively to the seat-end is prevented. For this purpose, the bottom of the arm-rest at the edges thereof may be cut away so as to form a tongue 7, which extends down into the seat-end, as shown in Fig. 2. This same result may be obtained by providing a central slot in the bottom of the arm-rest, into which the top of the seat-end may extend, as shown

in Fig. 4. The arm-rest is held in position on the upper edge of the seat-end by screws which are removable through the seat-end and which may be operated without removing any of the parts of the seat, in order to release the arm-rest. In the drawings, I have shown screws 8 extending through openings in ears 9 formed integral with the spacers 5, the threaded upper ends of these screws entering openings in the bottom of the arm-rest 6. It will be seen that the heads 10 of the screws 8 lie adjacent to the bottom of the seat-end, and these heads may be slotted or provided with flattened sides, so that the screws may be readily turned by means of a screw-driver or wrench to withdraw them and release the arm-rest.

The supporting structure to which the seat-end is secured is indicated at 11, in Fig. 2. The form of this support may vary in car-seats of different types, and its construction is immaterial so far as my present invention is concerned.

Each of the spacers 5 is provided with one or more openings, the walls of which are flattened as indicated at 12, 12, (Figs. 1 and 2), and in the plates 1, 1, are openings alining with the openings in the spacers 5. Nuts 13 are provided, having smooth rounded heads 14 and shanks 15 flattened on opposite sides (Figs. 6 and 7) and of such width that they fit within the openings in the spacers 5, the flattened walls of the shanks 15 coacting with those of the openings in the spacers to prevent the nuts from turning. Threaded openings are provided in the shanks 15, but these openings do not extend entirely through the nuts. When it is desired to secure the seat-end to the supporting structure 11, the nuts 13 are positioned in the openings in the outer plate 1 and the spacers 5, and bolts 16 are then inserted through the openings in the supporting plate 11, the inner plate 1 and the spacers 5, their threaded ends entering the threaded openings in the nuts 13. The portions of the openings in spacers 5 through which the bolts 16 extend may be of smaller cross-section as shown in Figs. 1 and 5, to hold the bolts more firmly. The bolts 16 are then tightened up by means of a screw-driver or wrench to secure the parts firmly together, but in doing this, it is unnecessary to hold the nuts 13 against rotation since their flattened walls and those of the spacers preclude turning. In this way, the parts are secured together without marring the exposed faces of the nuts 13, and the heads 14 of these nuts can be highly polished and of such design as not to detract from the appearance of the seat. Also the heads 14 of the nuts are free from rough edges which are apt to catch the clothing and which would be present if a wrench had been used on them and they may be much thinner than would

be convenient if they were to receive a wrench.

What I claim as new and desire to secure by Letters Patent is:

1. In a car-seat, a seat-end consisting of two sheet-metal plates pressed into form and secured together, said plates having flanges at their lateral edges closing the lateral edges of the seat-end and the seat-end being open at the bottom edge thereof, an arm-rest at the upper edge of said seat-end and screws securing the arm-rest upon the seat-end, the ends of said screws entering the under-side of said arm-rest and their heads lying adjacent to the lower open edge of the seat-end, substantially as described.

2. In a car-seat, a seat-end comprising two sheet-metal plates pressed into form and secured together, a spacer between said plates, flanges at the lateral edges of said plates closing the lateral edges of the seat-end, said seat-end being open at the bottom edge thereof, an arm-rest at the upper edge of the seat-end and screws extending through said spacer and their ends entering the under side of the arm-rest, the heads of said screws lying adjacent to the lower open edge of the seat-end, substantially as described.

3. In a car-seat, a seat-end comprising two sheet-metal plates, a spacer between them, means securing the plates together, an arm-rest on the upper edge of the seat-end and screws extending through said spacer and into said arm-rest, substantially as described.

4. In a car-seat, a seat-end comprising two sheet metal plates and a spacer between them, said plates and spacer having an opening therethrough the walls of which are flattened, a support having an opening therethrough, and means for securing the seat-end to said support including a nut and bolt extending through said openings in the seat-end and support, one of said parts lying on the outer side of the seat-end and having a smooth imperforate head and one of said parts being provided with flattened walls coacting with said flattened walls of the spacer, substantially as described.

5. In a car-seat, a seat-end comprising two metallic plates and a spacer between them, said spacer having an opening therethrough, the walls of which are flattened and said plates having openings therethrough alining with the opening in said spacer, a support having an opening therethrough and a nut and bolt extending through said openings to secure the support and seat-end together, one of said parts having flattened walls coacting with those of the opening in said spacer to prevent said part from turning, substantially as described.

6. In a car-seat, a seat-end comprising two metallic plates and a spacer between them, said spacer having an opening there-

through the walls of which are flattened and
said plates having openings therethrough
alining with the opening in said spacer, a
support having an opening therethrough ly-
5 ing adjacent to the seat-end, a nut having a
smooth head and a shank having flattened
walls, said shank entering said opening in the
spacer, and a bolt extending through the
opening in said support and coacting with

said nut to secure the support and seat-end 10
together, substantially as described.

This specification signed and witnessed this
24th day of April, 1906.

EDWARD G. BUDD.

Witnesses:

P. J. TUCKER,
M. GETZ.