

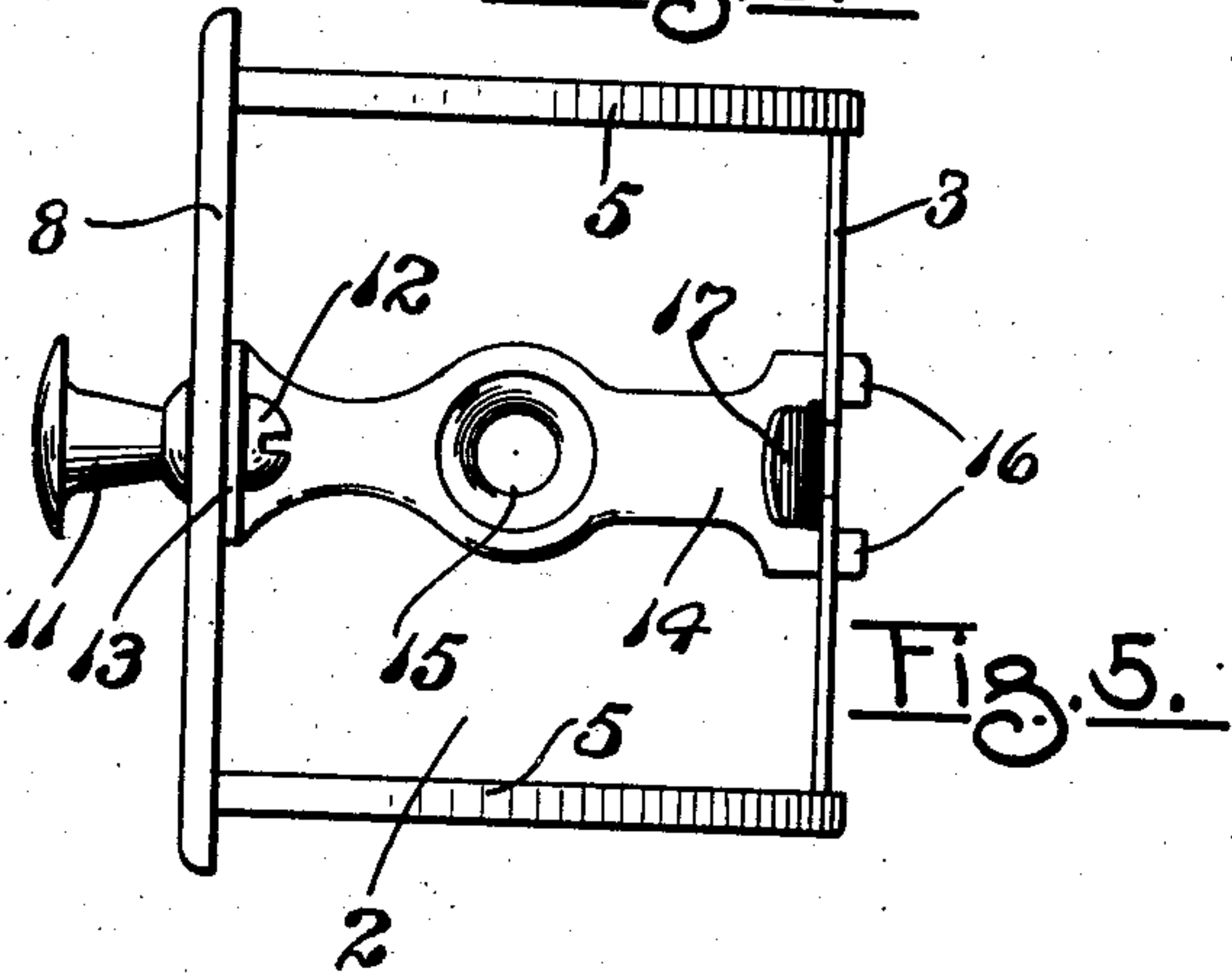
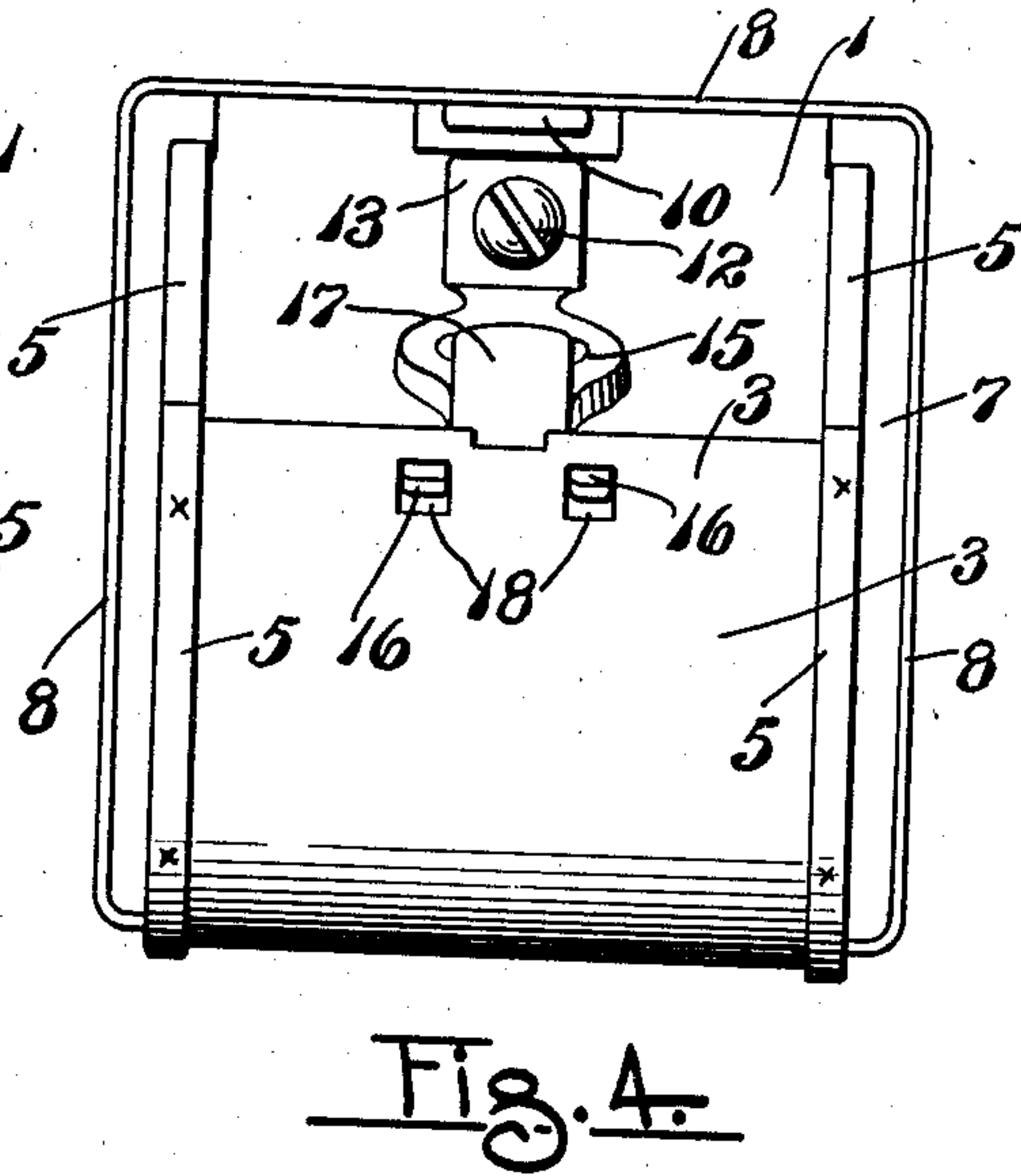
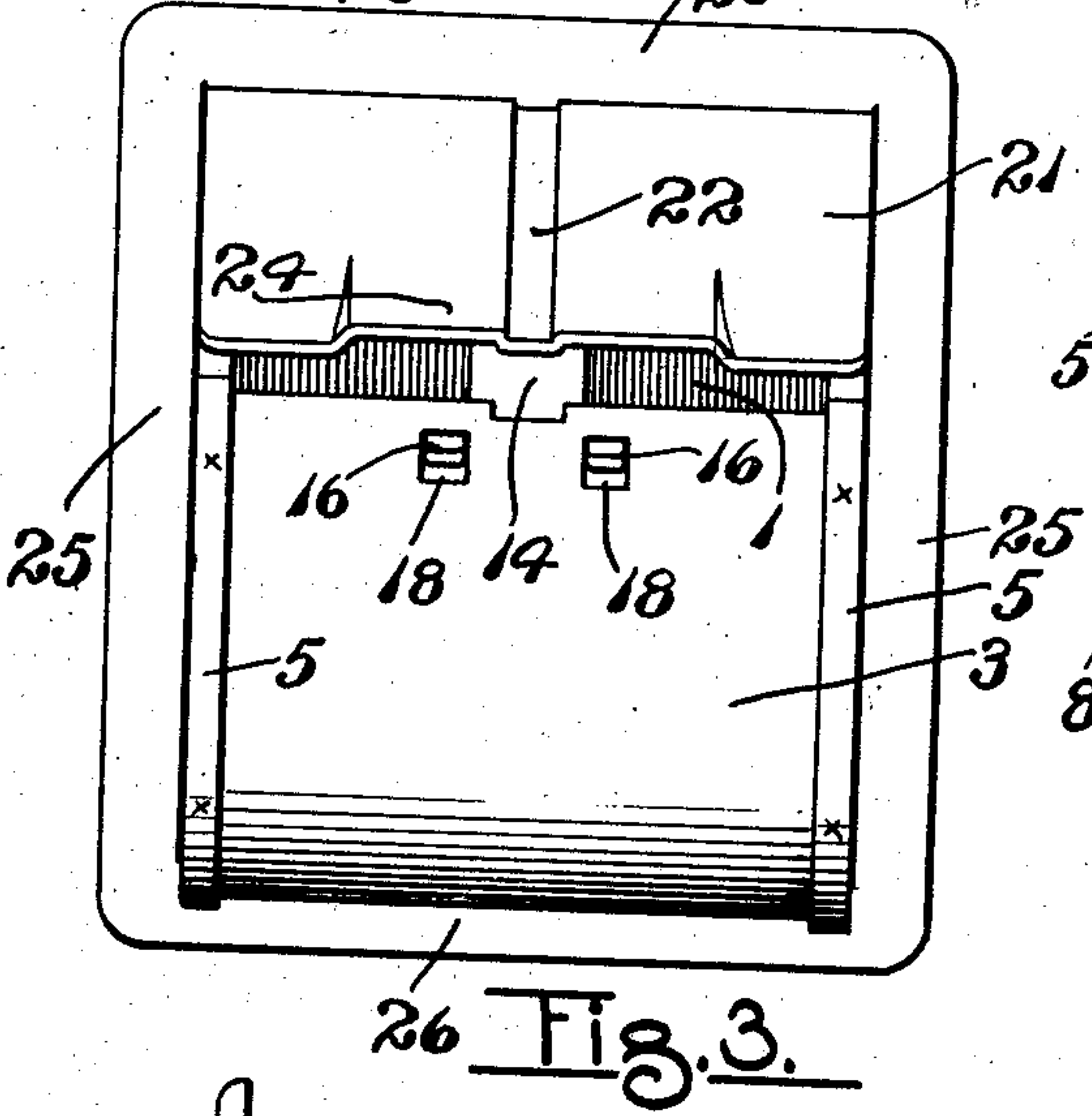
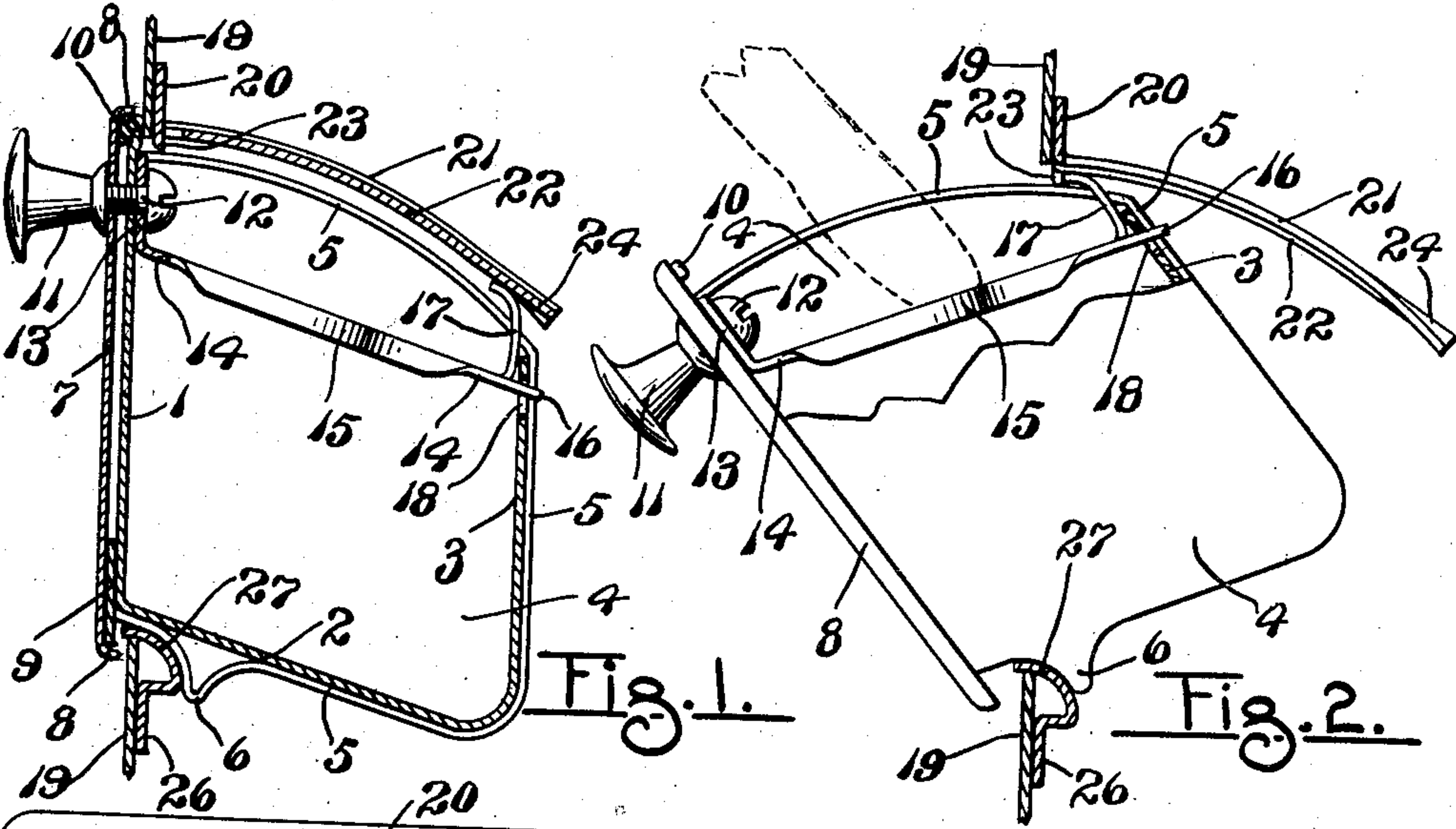
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ASH RECEIVER

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## UNITED STATES PATENT OFFICE

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## ASH RECEIVER

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10 Claims. (Cl. 206—19.5)

This invention relates to ash receivers of the bin type, that is, those which are mounted on a vertical support, for example, the vertical dash of an automobile extending through an opening therein and adapted to take a closed vertical position, but which may be tilted forwardly about a lower horizontal axis to open position for the reception of ashes, matches or cigarette and cigar butts. Devices of this character need to be mounted in such a manner that they will be retained securely on the dash or other support on which they are mounted, both in their closed and their tilted position, but also be readily detachable for removal to empty the ash receiver from time to time as it is needed, and then be quickly and readily replaced without the use of tools.

The present invention is directed to an ash receiver of the type or character described, and is concerned with novel improvements for stopping the ash receiver at a tilted position so that it will not normally disengage from its support, but which stopping means is easily operated by manual pressure so as to disengage the stopping means from each other for removal; and which by use of the same manual pressure will permit the reinsertion of the ash receiver in place. The invention is directed to many novel details of construction and arrangements of parts for the economical production of an ash receiver which will have an ornamental outer or front side which is presented for observation when the ash receiver is closed, as it is most of the time, and wherein the receiver is yieldingly held in a closed position and will automatically take such closed position when it has been moved nearly to its closed position.

An understanding of the invention for the attainment of the ends stated, as well as many others not enumerated, may be had from the following description, taken in connection with the accompanying drawing, in which,

Fig. 1 is a central vertical section through the ash receiver as mounted upon its support and with the receiver in closed position.

Fig. 2 is a fragmentary section and side elevation, with parts broken away, showing the ash receiver tilted to forward position in which position it is adapted to receive ashes and the like, and also it is in this position that it is adapted to be disengaged and removed from its support.

Fig. 3 is a rear elevation of the ash receiver of my invention in connection with the immediate supporting frame therefor.

Fig. 4 is a similar rear elevation with the immediate supporting frame removed, and

Fig. 5 is a plan view of the ash receiver minus said supporting frame.

Like reference characters refer to like parts in the different figures of the drawing.

In the construction of the ash receiver, a body is made up from a length of sheet metal bent so as to provide a vertical front side 1, a downwardly and rearwardly inclined bottom 2 and a vertical back 3. The receptacle in which ashes and other waste material are received is completed by both ends 4 of sheet metal which are provided with inwardly extending flanges 5 at their top, bottom and rear edges, which flanges are spot welded or otherwise permanently secured to the bottom 2 and back 3. The lower flanges 5, toward their forward ends, are projected downwardly substantially in V-shape as indicated at 6, the sides being preferably of curved form as shown, and of course, the metal of the sides 4 likewise extends downwardly with said projections.

The receptacle thus made is faced at its outer side with an ornamental cover plate 7 of any desired design, at the edges of which are intumed short flanges 8. Said plate is spaced from the front 1 at its lower portion by a flat bar 9, spot welded to the plates, and between the upper parts of the front 1 and the plate 7 a rubber bumper 10 is clamped. The plates are held together by a screw connection between a pulling knob 11 located at the outer side of the ornamental covering 7 and a screw 12 which passes through the front 1 of the receptacle and threads into the knob. At the same time such screw 12 passes through the upwardly extending or vertical end portion 13 of a bar 14 of spring material, which is bent rearwardly and downwardly at an acute angle to the vertical part 13 and extends to the back 3. Between its ends it is downwardly flanged at its sides for strength and resistance against bending and, preferably is formed with a snuffer portion 15 substantially midway between its ends. The rear end is provided with two spaced apart fingers 16 between which a continuation of the bar is curved upwardly and at its end portion forwardly as indicated at 17. The fingers 16 pass through openings 18 made in the back 3, which openings are of a height considerably greater than the thickness of the metal of the bar 14, so that by manual pressure applied from above by a finger on the spring, as indicated in dotted lines in Fig. 2, said bar 14 may be moved downwardly at its rear portion a distance, or until the fingers 16 strike the bottoms of the openings 18.



The ash receiver is adapted to be mounted on a vertical sheet metal support such as indicated at 19 and which in practice may be the sheet metal dash of an automobile. The ash receiver is mounted within a surrounding immediate supporting frame which is made from a single plate of sheet metal and has an upper horizontal bar 20. The metal of the plate is cut on three sides, that is, both vertical sides and at the bottom from said plate and bent upwardly and formed into a curved member 21 which normally lies over and covers the open upper end of the ash receptacle when it is in closed position, as shown in Fig. 1. The member 21 midway between its side edges and from front to rear is provided with a downwardly pressed groove 22 at its upper side. The free end portion of the spring member 17, under normal conditions, bears against the metal at the underside of the groove. At the juncture of the bar 20 with the member 21 a tongue 23 is struck from the member 21 and extends downwardly in vertical alinement with the bar 20 as shown in Fig. 1 in a position such that when the receptacle is tilted forward as shown in Fig. 2 the end of the part 17 strikes against the tongue 23 thereby stopping the receptacle from further outward movement or disengagement from the immediate supporting frame on which it is mounted. At its rear free part and between its side edges the member 21 is upwardly embossed, as indicated at 24, whereby when the receptacle is approaching its closed position, the curved upper free end portion of the part 17 comes to said embossed section, the under surface of which is substantially tangential to the curve of the under side of the member 21, whereby the force of the spring acts automatically to move the receptacle to closed position and retain it yieldingly therein.

From the ends of the upper bar 20 of the supporting frame vertical sides 25 extend downwardly and are integrally connected at their lower ends by a lower horizontal bar 26, at the upper edge of which and formed from the plate of metal which is used to make the immediate supporting frame for the receptacle 1, is a short horizontal extension to the rear which is then curved upwardly and forwardly as indicated at 27, the curvature thereof corresponding substantially to the curvature of the forward sides of the V-shaped projections 6, making a support about which the receptacle may be turned from closed to open position and vice versa. When the receptacle is moved to open position the lower part of the receptacle is carried bodily outward a short distance so that the edges of the lower flange 8 move away from the finished outer surface of the dash support 19, that is, from the position shown in Fig. 1 to that shown in Fig. 2.

With the ash receptacle in the closed position, as in Fig. 1, when it is desired to deposit ashes, matches or cigarette or cigar butts, the handle 13 is grasped and the receptacle tilted to the position shown in Fig. 2 until stopped by the engagement of the parts 17 and 23. It is in this position that the ashes, matches or the like can be dropped into the receptacle and then the receptacle closed. When the receptacle is to be removed for emptying its contents, it is tilted to the outer position shown in Fig. 2, and then through pressure exerted by the finger against the bar 14 midway between its ends, its rear portion may be depressed so as to bring the upper end of the member 17 below the stop at 23, whereupon a further forward tilting of the receptacle will carry the same out of the frame on which

it is mounted so that it can be removed. The replacement consists merely in placing the projections at 6 over their bearing member 27, pressed downwardly upon the bar 14 to carry it to its lowermost position and then moving the receptacle back or to the closed position shown in Fig. 1. Before it has reached this position the finger will be removed from the bar 14 and it will automatically take its upper operative position where the part 17 will serve to function as limiting the outward tilting movement of the receptacle when it engages the stop at 23.

The invention is of a very practical and meritorious character. The structure is readily manufactured and assembled and is economical to produce, there being substantially no waste of material. The invention is defined in the appended claims and is to be considered comprehensive of all forms of structure coming within their scope.

#### I claim:

1. In an ash receiver, the combination of a support having an entrance opening therein, a receptacle insertable through said opening and mounted to tilt about a horizontal axis at its lower front portion outwardly through said opening, the upper end of said receptacle being open, a stop means on the support adjacent the upper edge of said opening in the support, and a yielding member extending from the front to the rear portion of said receptacle the rear of which has an upturned portion adapted to engage said stop means to normally limit the outward tilting movement of the receptacle and portions extending rearwardly through openings in the rear of said receptacle to limit the yielding movement of said member, said means yielding upon the application of force whereby it may be moved so as not to engage said stop means whereupon the receptacle is bodily removable from its support.

2. An ash receiving receptacle adapted to be received through an opening in a vertical support having a front, back, bottom and sides and open at its upper end, an ornamental front plate lying over the front side of said receptacle, a knob located at the upper portion of said plate, a screw extending through the front of the receptacle and through said plate and threading into said knob, a stop member extending downwardly from the support at the upper edge of said opening, a spring bar member having an upturned front end through which the screw passes, said spring bar member extending rearwardly and having two spaced apart lugs at its rear end, the rear side of the said receptacle having openings greater in height than the thickness of the lugs through which openings said lugs pass, and said bar between said lugs having an upwardly projecting portion to contact said stop member when the receptacle is in position for use.

3. A construction containing the elements defined in claim 2, said support being made from a single plate of metal, and having a rearwardly and downwardly curved cover struck from the plate and bent backward from the lower edge of the upper member of the frame and normally lying over and covering the upper end of the receptacle, against which plate said upwardly projecting portion at the rear end of the spring bar member bears, and a member connected with the upper member of said frame and extending below the lower side of said cover in the path of movement of said upwardly projecting portion thereby normally stopping outward movement of the receptacle at a predetermined position thereof.



4. In a construction of the class described, an open supporting frame made from a single plate of sheet metal, said plate having its central body portion severed from the remainder of the plate at its bottom and vertical sides to produce a lower horizontal bar and two vertical bars of the open frame, the upper part of said severed intermediate portion being integrally connected with the lower edge of the upper bar of said frame, and said severed portion being bent to extend from the lower edge of said upper bar of the frame and back of the opening surrounded by the frame to form a downwardly and rearwardly curved cover, a receptacle open at its upper end inserted through said frame opening underneath the cover, means for tiltably mounting the receptacle to turn on a horizontal axis adjacent the lower front portion of said receptacle, stop means extending from the lower edge of the upper horizontal bar of said frame, a spring member attached to said receptacle and having an upwardly extending part riding against the underside of said cover and adapted to engage said stop means when the receptacle has been outwardly tilted to the predetermined position, said spring member being yieldable upon a downward pressure thereon, whereby the receptacle may be removed from said supporting frame or placed therein, substantially as and for the purposes described.

5. A construction containing the elements in combination defined in claim 4, said cover at its rear free edge portion being upwardly embossed to provide an under surface substantially tangential to the curvature of the cover and against which said upwardly extending part of the spring member engages when the receptacle approaches closed position, thereby automatically moving said receptacle to closed position and holding it with tension in such position.

6. An ash receiving receptacle open at its upper end, a front plate adapted to lie over the front side of said receptacle, a knob located at the upper portion of said plate, a screw extending through the front of said receptacle and through said plate and threading into said knob, a spring

bar member having an upturned front end through which the screw passes, said spring bar member extending rearwardly and having two spaced apart lugs at its rear end, the rear side of said receptacle having openings greater in height than the thickness of the lugs through which openings said lugs pass.

7. An ash receiver construction comprising a supporting frame having an opening there-through, a receptacle open at its upper end insertable through said opening, means for tiltably mounting said receptacle in said opening, stop means located at the upper part of said opening, a yieldable member secured to the front portion of said receptacle and extending rearwardly, cooperating with said stop means to limit the outward movement of the receptacle, and at its rearmost end terminating in a plurality of lugs which extend through openings in the rear portion of said receptacle.

8. An ash receiver comprising in combination the elements defined in claim 7, said yieldable member at its rearmost end also having a tongue struck therefrom to contact said stop means when the receptacle is open for use.

9. In an ash receiving receptacle adapted to be inserted in an opening of a support and to pivot about its lower edge as an axis, the combination of a stop member extending downwardly from the support at the upper edge of the opening and a spring bar extending between the front and rear portions of the receptacle, said spring bar having two portions at one end thereof, one of said portions adapted to contact said stop member to limit the outward pivotal movement of the receptacle and the other of said portions adapted to limit the spring movement of said bar, as specified.

10. The combination of elements as defined in claim 9, combined with openings in the rear portion of said receptacle, said last named portion extending through said openings whereby the upper and lower edges of the openings define the limits within which said bar may be sprung.

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