H. K. SANDELL.

PLATE HOLDER.

APPLICATION FILED AUG. 10, 1921.

1,434,026.

Patented Oct. 31, 1922.

2 SHEETS—SHEET 1.

Fig. 1.

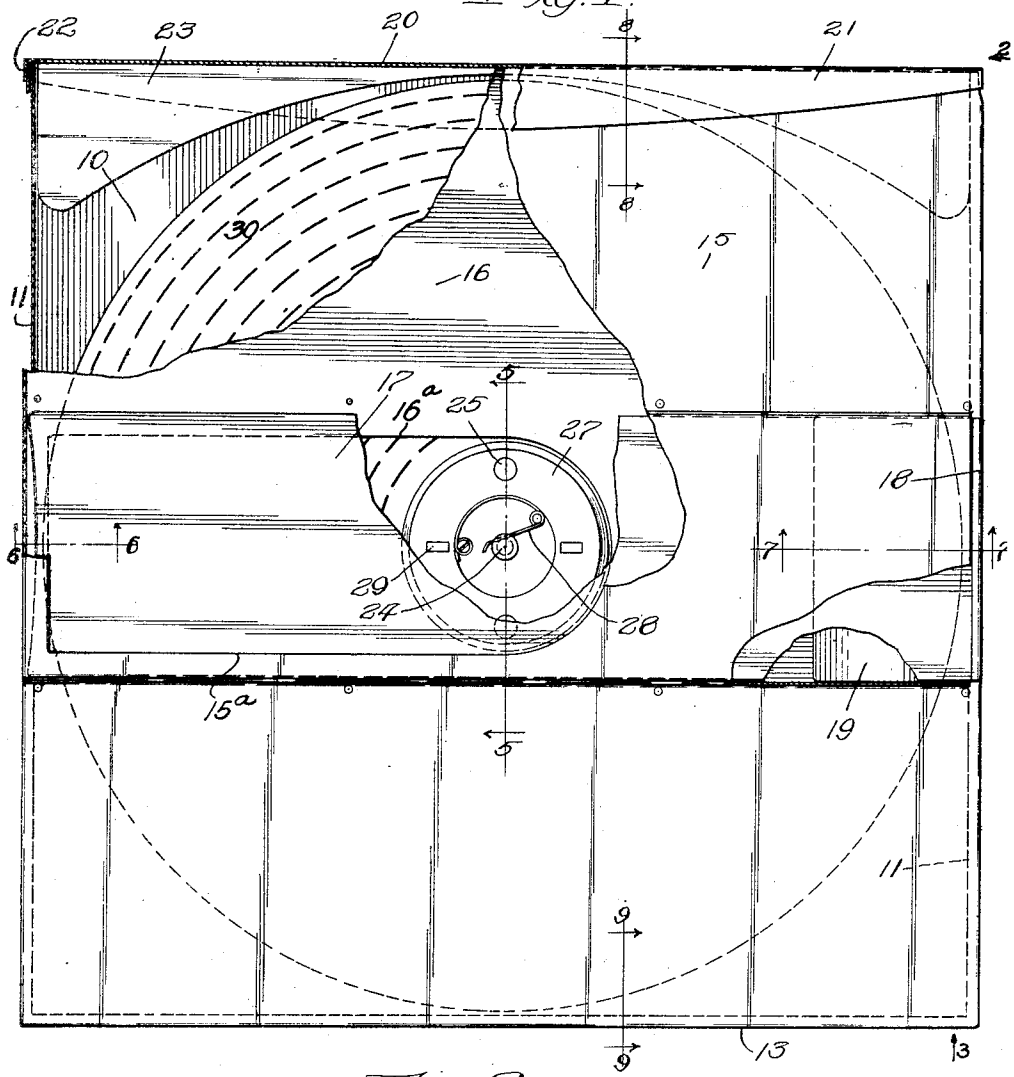


Fig. 2.

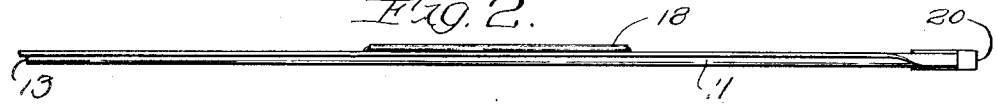
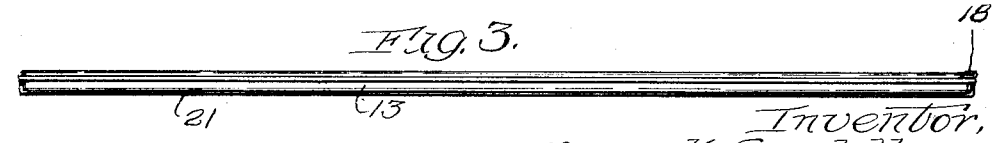


Fig. 3.



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2 SHEETS—SHEET 2.

Fig. 4.

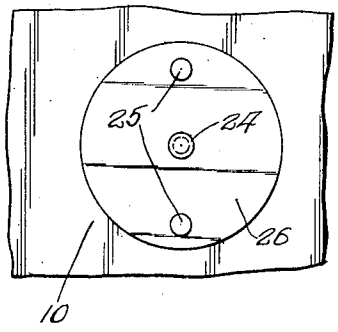


Fig. 5.

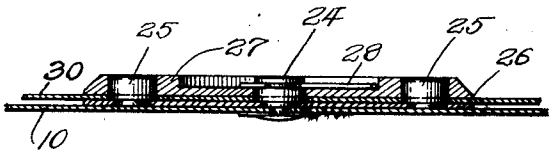


Fig. 6

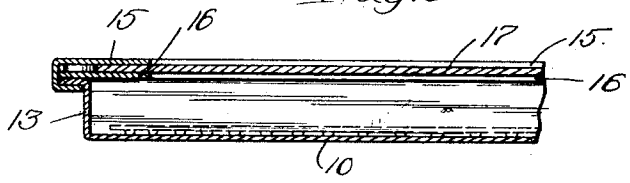


Fig. 7.

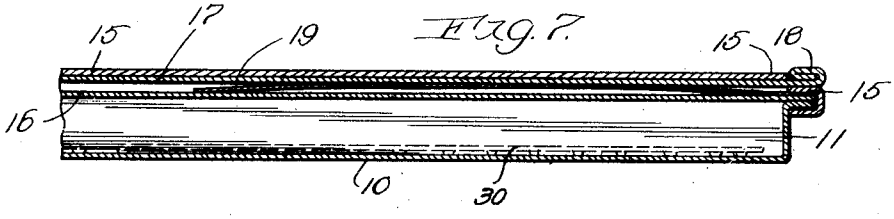


Fig. 8

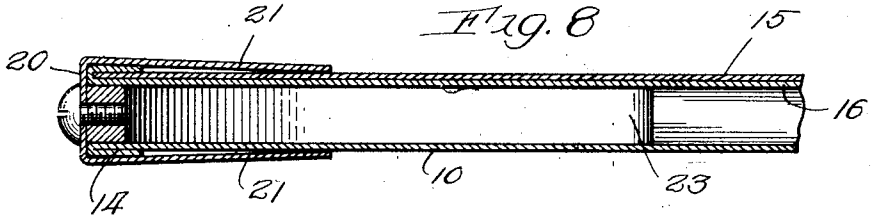
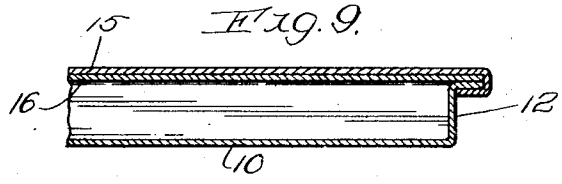


Fig. 9.



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UNITED STATES PATENT OFFICE.

HENRY K. SANDELL, OF CHICAGO, ILLINOIS, ASSIGNOR TO HERBERT S. MILLS, OF CHICAGO, ILLINOIS.

PLATE HOLDER.

Application filed August 10, 1921. Serial No. 491,311.

To all whom it may concern:

Be it known that I, HENRY K. SANDELL, a citizen of the United States, residing at 221 South Green Street, % Mills Novelty Co., Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Plate Holders, of which the following is a specification.

The present invention relates to improvements in plate holders and more particularly to holders for film or plate disks for use in connection with my copending application Serial No. 491,156 filed of even date herewith. It will be fully understood from the following description, illustrated by the accompanying drawings, in which:

Fig. 1 is a side view of the holder, partially broken away;

Fig. 2 is an edge view as seen in the direction of the arrows marked 2 in Fig. 1.

Fig. 3 is an end or edge view as seen in the direction of the arrows marked 3 in Fig. 1.

Fig. 4 is a fragmentary view showing the plate supporting mechanism in plan;

Fig. 5 is a fragmentary sectional view on line 5—5 of Fig. 1;

Fig. 6 is a broken sectional view on line 6—6 of Fig. 1, on enlarged scale;

Fig. 7 is a broken sectional view on line 7—7 of Fig. 1, on enlarged scale;

Figs. 8 and 9 are broken sectional views on lines 8—8 and 9—9 of Fig. 1, respectively, on enlarged scale.

The holder, which is shallow, may be suitably made of sheet metal, as in the form illustrated. The numeral 10 indicates the bottom of the holder and on three sides it is bent up to form three sides 11, 12 and 13 of the box. On the fourth side, which is open, it may be spun over to form a bead, as shown at 14 in Fig. 8. The top is formed of two sheets or plates, 15 and 16, which are provided with identically positioned slots or openings through which the desired area of the plate may be exposed. The position and shape of these slots is indicated at 15^a and 16^a in Figure 1. In the form illustrated these slots extend transversely somewhat more than halfway across the holder parallel to the open end. The plates 15 and 16 are secured together, by beading, for example, at the open end on the other sides, the top plate is spun over both the plate 16 and the upturned edge of the bottom plate 10, as shown in Fig. 9, except where provision is made for the slide 17 which closes the opening in the top. This slide is inserted transversely across the holder between the plates 15 and 16. On one side a slot in plate 15 permits the slide to enter, as shown in Fig. 7. On the other side, as shown in Fig. 6, sufficient space is left between the plates 15 and 16 to permit the admission of the slide 17. One end of the slide may suitably be spun over to form a bead, as at 18 in Fig. 7, to serve as a limiting stop for the movement of the slide and as a convenient handle.

A curved, springy sheet of metal 19 may be secured below the slot in plate 15 in beading over its edge to serve as a light arrester, as shown in Fig. 7.

A cover 20 for the open end of the holder is formed with overlapping tight sides 21 and ends 22. In it is secured a block 23 fitting closely in the interior of the holder and with rounded or beveled ends facilitating insertion into the box. This block may be shaped to correspond with the shape of the plate or film.

Suitable means are provided for positioning and retaining the film in the holder. In the form illustrated a disk 26 is secured to the bottom 10 of the holder by a grooved, inwardly projecting centering button 24, the disk 26 being rotatable thereupon. On opposite sides of it positioning buttons 25 are secured to disk 26. The plate or film 30 is provided with corresponding openings, and is positioned so that the buttons 24 and 25 project through these openings. A retaining plate 27, which also has corresponding openings, is placed over the film, and a spring detent 28 attached to the retaining plate snaps into the groove in the button 24 and secures the whole. The film may then be rotated, if desired, openings 29 being provided in the retaining plate for engagement with a drive member (not shown).

Although the present invention has been described in connection with the specific details of an embodiment thereof, it is not intended that these details shall be regarded as limitations upon the scope of the invention, except in so far as may be included in the accompanying claims.

I claim:

1. A film plate or disk holder having three closed sides and an open side, a cover for the open side fitting over it, and a block secured

within the cover and fitting within the cover, said block having inwardly turned ends.

2. A film plate or disk holder having a grooved centering button secured within it, a rotatable plate mounted on said centering button and provided with positioning buttons for positioning a film mounted on said plate. a retaining plate provided with openings corresponding to the centering and positioning buttons, said retaining plate being placed over said buttons to retain the film thereupon, and a spring detent mounted on the retaining plate and positioned to snap into the groove in the centering button to hold the retaining plate in position.

3. A film plate or disk holder having a back, a rotatable plate mounted thereupon, means for securing and positioning a film plate or disk upon said rotatable plate, a top member for said holder, a slot in said top member extending from one edge of the holder to and over the rotatable plate, and means for closing said slot.

4. A film plate or disk holder having a back, a rotatable plate mounted thereupon, means for securing and positioning a film plate or disk upon said rotatable plate, superposed plates forming a top member for said holder, identically positioned openings in said plates extending transversely from the edge of the holder to and over the rotatable plate mounted on the back member, and a slide movable between the two plates of said top member to close said openings.

HENRY K. SANDELL.