R. S. POWELL.

FRAME AND LOCK THEREFOR.

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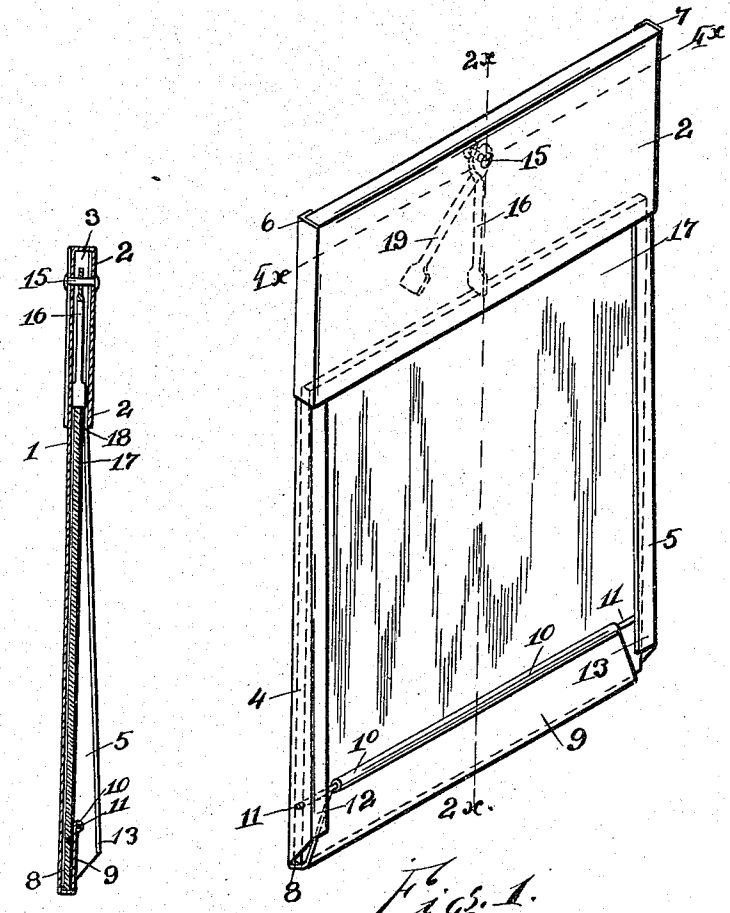


Fig. 1.

Fig. 2.

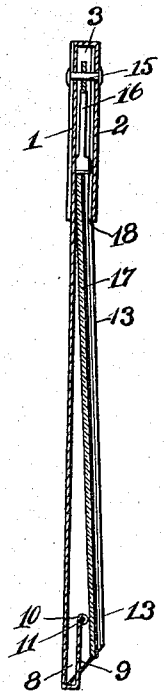


Fig. 3.

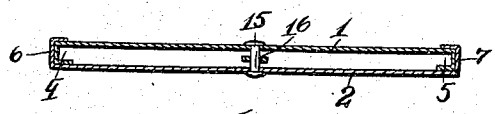


Fig. 4.

Inventor

Roscoe S. Powell

Witnesses

Eric Schinger.

Eleanor M. Corcoran.

By Frank Keiser

Attorney

THE COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ROSCOE S. POWELL, OF GENEVA, NEW YORK.

FRAME AND LOCK THEREFOR.

1,178,262. Specification of Letters Patent. Patented Apr. 4, 1916.

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To all whom it may concern:

Be it known that I, ROSCOE S. POWELL, a citizen of the United States, residing at Geneva, in the county of Ontario and State of New York, have invented certain new and useful Improvements in Frames and Locks Therefor, of which the following is a specification.

The object of this invention is to provide a new and improved frame for bulletins, etc.

Another object of this invention is to provide this frame with a lock that automatically locks the bulletin in the frame.

Another object of this invention is to build the lock into the frame and conceal it therein so that only a person familiar with the mechanism will be able to unlock the frame.

These and other objects of the invention will be fully illustrated in the drawings, described in the specification and pointed out in the claims at the end thereof.

In the accompanying drawings, Figure 1 is a perspective view of my improved frame. Fig. 2 is a vertical section through the frame, the section being taken on the line $2^{\times}$—$2^{\times}$ of Fig. 1. Fig. 3 is a vertical section through the frame showing how the glass panel is inserted or removed therefrom. Fig. 4 is a horizontal section through the top of the frame, the section being taken on the line $4^{\times}$—$4^{\times}$ of Fig. 1.

In the drawings like reference numerals indicate like parts.

The frame is bent up of a single sheet of metal and is held together solely by the flanges provided thereon. As shown in Figs. 1, 2 and 3, the rear panel 1 of the frame is bent over at the top and down in front thereof to form the cover plate 2 of the casing 3, which constitutes the top of the frame. On each side of the rear panel are provided suitable flanges which are bent up to form guides 4 and 5 on either side thereof as shown in Figs. 1 and 4. The cover plate 2 overlaps the outer flanges 12 and 13 of these guides, as shown in Figs. 1 and 4 and the flanges 6 and 7 provided on each side of the cover plate pass down over the sides of each of the guides and are bent back over the rear panel. This holds the cover plate securely in place on top of the guides 4 and 5 and forms with the rear panel of the frame the casing 3 mentioned above.

At the bottom of the rear panel 1 is provided the pocket 8 which is formed by the flange 9 bent out and up at the bottom thereof. At the end of this flange is provided a circular channel 10 through which passes a rod 11 which projects outwardly therefrom on either side thereof. As shown in Fig. 1 this rod runs the full length of the frame and projects on either side thereof into suitable openings provided in the guides 4 and 5 to which it may be fastened in any suitable manner. In this way the flange 9, forming the pocket 8, is securely anchored to the sides of the frame and cannot be bent back to open this pocket.

The guides 4 and 5 gradually expand below the casing 3 so that the top flanges 12 and 13 of each of the guides 4 and 5 respectively project at their ends above the flange 9 and rod 11 of the pocket 8. It is through this arrangement of the respective flanges that the glass panel 17 can be inserted into the frame and locked therein as will presently appear.

In the center of the casing 3 near the top thereof is provided a pin 15 which passes through both the rear panel 1 and the cover plate 3 and is held in place between them by enlarging both ends of the pin on the outside of the rear panel as well as the cover plate thereto. Pivotally mounted on this pin is the bolt 16 having its lower end flattened out as shown in Figs. 1, 2 and 3. When the frame is hung up on the wall or post the bolt 16 normally hangs in a perpendicular position due to its own weight. In this position its flat end rests against the upper edge of the glass panel 17 and as the other edges of the glass panel are surrounded by the flanges of the frame, the glass panel cannot be moved in either direction therein. To unlock the frame the glass panel 17 can be removed by the following operation.

As shown at 18 in Figs. 1 and 3 a small space is left between the glass panel 17 and the cover plate 2 into which a suitable pin is inserted. This pin is moved up a short distance into the opening 18 and then moved sidewise until it encounters the bolt 16 and brushes it aside to a position shown at 19 in Fig. 1. This allows the glass panel 17 to be moved up into the casing 3 until the lower edge thereof has passed the upper edge of the flange 9 and the rod 11. At this point the glass panel may be moved out away from the rear panel 1 at the bottom

thereof and allowed to slide back over the top of the flange 9 and the rod 11 and out through the bottom of the frame. By tapering the guides in the manner above described sufficient room is provided between the flanges 12 and 13 of the guides 4 and 5 respectively and the top of the flange 9 to allow the glass panel to easily slide between them, as shown in Fig. 3.

When the glass is to be inserted the operation above described is reversed. That is the glass panel 17 is inserted between the guides 4 and 5 and moved up over the flange 9 and below the flanges 12 and 13 into the casing 3, where the bolt 16 has been pushed aside to the position indicated at 19 in Fig. 1, so as not to obstruct the travel thereof. After the lower edge of the glass panel has passed the upper edge of the flange 9 and the rod 11, the glass panel is moved in toward the rear panel 1 and allowed to drop back into the pocket 8. The bolt 16 then swings through its own weight into its normal perpendicular position so that the lower end thereof rests against the upper edge of the glass panel. This holds the glass panel in place in the frame and any picture or bulletin in back of the glass panel can only be taken out by a person who is familiar with the locking mechanism, in spite of the fact that no special key is necessary to open it.

In order to still further conceal the locking mechanism the cover plate 2 may have the firm's name, using this frame, painted thereon so that the head of the pin 18 cannot be distinguished from the rest of the frame.

As shown in Fig. 1 the lower end of the guides 4 and 5, as well as both sides of the flange 9 are cut away so that any water running over the frame cannot accumulate in the pocket 8 but will quickly drain off therefrom.

I claim.

1. In a frame for bulletins or pictures the combination of a rear panel having guides bent up on both side edges thereof, a cover plate bent out and over said rear panel at the top thereof to form a casing thereon, a pocket bent up at the bottom of said rear panel, a glass panel, said guides, casing and pocket holding said glass panel in place in the frame, said guides being open at the bottom and terminating into said casing at the top, means in said casing for automatically locking said glass panel in the frame.

2. In a frame for bulletins or pictures the combination of a rear panel having guides bent up on both side edges, said guides expanding toward the bottom, a pocket at the bottom of said rear panel, said pocket having a width less than the width of the said guides at their lower ends thereof, a glass panel inserted over said pocket and between said guides into the frame, a casing at the top of said rear panel, a locking mechanism in said casing to lock said glass panel in the frame.

3. In a frame for bulletins or pictures the combination of a rear panel having guides on both side edges, a casing at the top of said rear panel and a pocket at the bottom of said rear panel, a glass panel, said casing, guides and pocket holding said glass panel in place in the frame, a bolt pivotally mounted in said casing to normally hang in a perpendicular position, the lower end of said bolt normally resting against the upper edge of said glass panel to prevent any movement thereof.

4. In a frame for bulletins or pictures the combination of a rear panel having guides on both side edges, a casing at the top of said rear panel, a pocket at the bottom of said rear panel, a glass panel, said casing and said pocket holding said glass panel in place in the frame, a bolt pivotally mounted in the top of said casing, the lower end of said bolt engaging the upper edge of said glass panel, the width of said casing being greater than the thickness of said glass panel to permit the introduction of means to swing said bolt upward to allow said glass panel to move up into said casing.

5. In a frame for bulletins or pictures the combination of a rear panel having guides on both side edges, a casing at the top of said rear panel, a pocket at the bottom of said rear panel, a glass panel, said casing, said guides and said pocket holding said glass panel in place in the frame, a bolt pivotally mounted in the top of said casing, the lower end of said bolt engaging the upper edge of said glass panel, the width of said casing being greater than the thickness of said glass panel to permit the introduction of means to swing said bolt upward to allow said glass panel to move up into said casing, a rod at the top edge of said pocket running parallel thereto and engaging said guides on both sides to anchor said pocket rigidly thereto, said guides expanding toward the bottom to allow said glass panel to pass over said pocket and between said guides.

6. In a frame for bulletins or pictures the combination of a rear panel having guides on both side edges, a casing at the top of said rear panel, a pocket at the bottom of said rear panel, a glass panel, said casing and said pocket holding said glass panel in the frame, a bolt pivotally mounted in the top of said casing, the lower end of said bolt engaging the upper edge of said glass panel, the width of said casing being greater than the thickness of said glass panel to permit the introduction of means to swing said bolt upward to allow the glass panel to move up into said casing, a rod at

the top edge of said pocket running parallel thereto and engaging said guides on both sides to anchor said pocket rigidly thereto, said guides expanding toward the bottom to allow said glass panel to pass over said pocket and said pin between said guides, the lower ends of said guides and the outer edges of said pocket being cut away to prevent the accumulation of water in said pocket.

In testimony whereof I affix my signature in presence of two witnesses.

ROSCOE S. POWELL.

Witnesses:
L. MARGUERITE GREGG,
W. E. PAGE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."