Dec. 30, 1930. S. SMILEY, JR 1,787,410

FILING TRAY

Filed July 18, 1928 2 Sheets-Sheet 1

Fig. 1

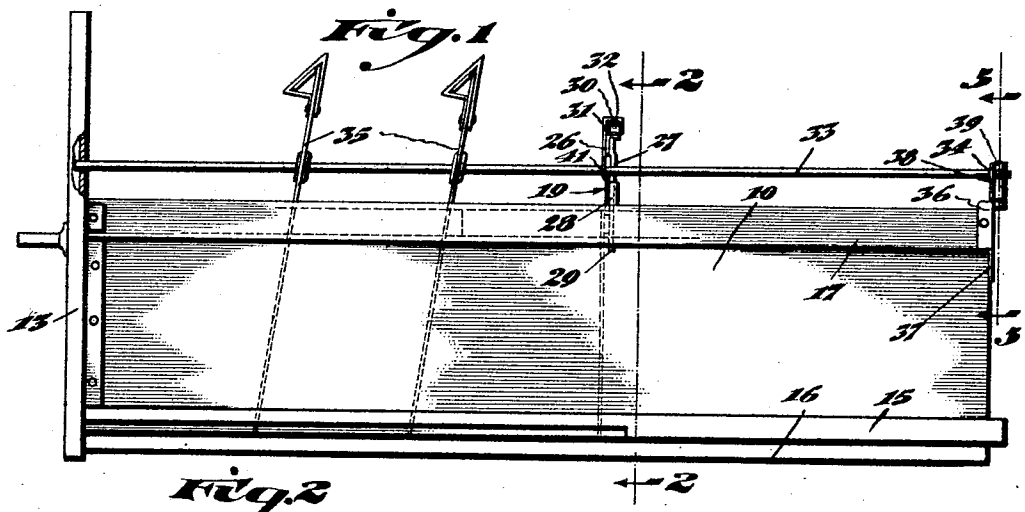
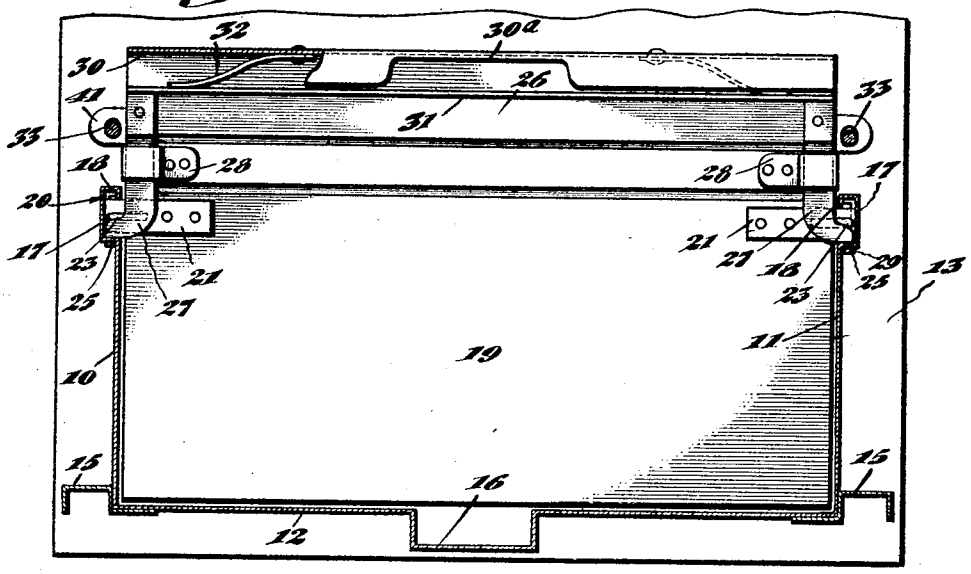


Fig. 2



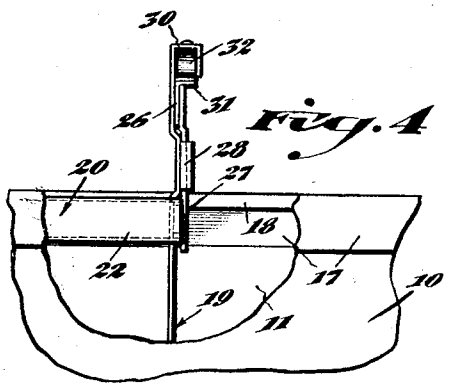


Fig. 4

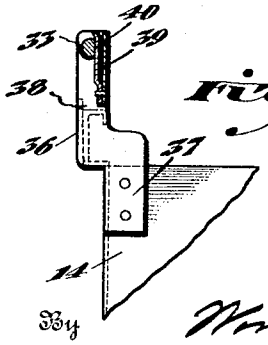


Fig. 5

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FILING TRAY

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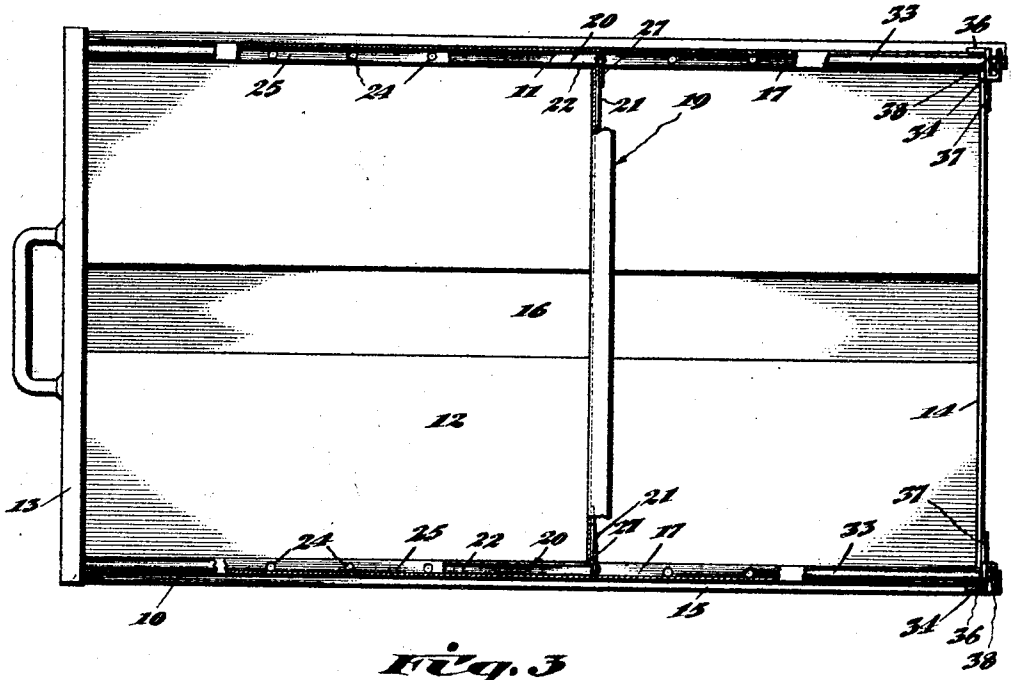


fig. 3

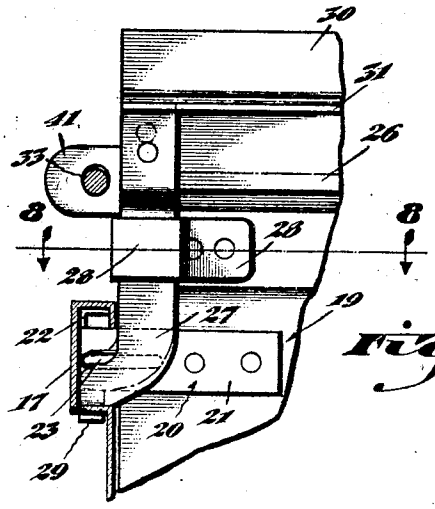


fig. 6

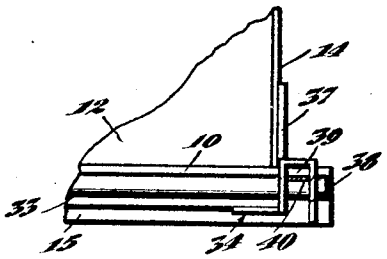


fig. 7

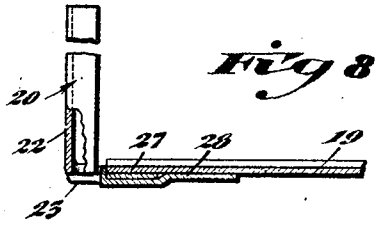


fig 8

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UNITED STATES PATENT OFFICE

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FILING TRAY

Application filed July 18, 1928. Serial No. 293,669.

This invention relates to improvements in devices for vertically filing papers, and is particularly directed to the construction of a follower plate as well as to the construction of a filing tray or case incorporating improved means for mounting and latching the follower plate therein.

The case to which the present invention is applied is of the drawer or tray type, the follower plate being controlled and manipulated from the top of the drawer. The side walls of the case are longitudinally grooved for cooperation with extensions at each side of the follower plate, and a latch mechanism is incorporated in the follower plate operative to latch the follower plate at both sides of the case, the latch being registerable with, for traversing, any pair of opposingly disposed orifices of series disposed along the side walls of the case.

The follower plate is also designed to intermediately sustain index guide or support rods extending longitudinally of and above each side of the case, these rods being provided with an improved end mounting and retaining device. The case may be of that type providing three index guiding or supporting rods such as described in co-pending application Serial No. 196,794, filed June 6, 1927.

It is therefore an object of this invention to provide an improved follower plate for use in a vertical filing case incorporating an extremely rigid and positive means for slidably mounting the follower plate in the case.

Another object is to provide a means for latching the follower plate to the filing case, which is easily accessible and which provides a positive non-slipping setting and engagement of the follower plate within the case.

Still another object is to provide a mounting for the index guide rods into which the guide rods are quickly and conveniently inserted and efficiently held in position against accidental displacement and to also provide an intermediate support for the guide rods embodied in the follower plate.

Further objects and advantages will be more fully set forth in a description of the accompanying drawings, forming a part of this specification, in which:

Figure 1 is a side elevation of a filing case or drawer incorporating the features of the present invention.

Figure 2 is a sectional view taken on line 2—2, Figure 1, showing the follower plate in detail, certain portions thereof being broken away for the purpose of illustrating the details of the device.

Figure 3 is a top plan view of the filing case shown in Figure 1, a portion of the side rods being broken away and a portion of the top flange of the sides of the case also broken away to illustrate the series of apertures disposed along the longitudinal recesses of the case for selective setting of the follower plate.

Figure 4 is a fragmentary side elevation of a portion of the filing case, a portion thereof being broken away to illustrate an end view of the construction and mounting of the follower plate and the side walls.

Figure 5 is a sectional view taken on line 5—5, Figure 1, detailing the arrangement for retaining the guide rods in their mounted positions.

Figure 6 is a fragmentary view of one end of the follower plate illustrating, in detail, one side of the latch engaging the filing case side wall.

Figure 7 is a top plan view of the rear corner of the filing case, further detailing the means for retaining the guide rods in position.

Figure 8 is a sectional view taken on line 8—8, Figure 6, detailing one side of the follower plate, showing the channel iron extension thereof for slideably mounting the follower plate.

Referring to the drawings, a drawer type of casing or receptacle is disclosed. This receptacle, generally described, comprises sides 10, 11, bottom 12, front wall 13 and rear wall 14. The case is fabricated of metal, no detailed description being believed necessary as to the exact manner of securing the metal together to fabricate the casing.

The front wall of the casing extends considerably above the height of the side walls

and slightly beyond the actual receptacle width as well as beyond the base, this extending front wall forming the stop for the drawer when it is slid into position in a filing cabinet.

A pair of longitudinally disposed guides 15 are provided along the respective lower corners of the case adapted to cooperate with the track or rollers within the cabinet (not shown).

The floor of the receptacle is shown with a centrally longitudinally disposed depression 16 therein forming a channel through which a folder support or guide rod may be disposed for cooperation with tabs formed on the separators used in combination with the receptacle as disclosed in the aforementioned co-pending application.

Channels 17 are provided longitudinally along the side walls adjacent the upper edges thereof. The metal of the side walls is formed into a rectangular depression open toward the inside of the cabinet and a downwardly disposed lip 18 is provided at the inner upper corner of the groove or channel.

The follower plate, generally indicated at 19, is of rectangular shape of slightly less width than the inside width of the receptacle and extending upwardly beyond the general height of the receptacle. The follower plate is slideably supported within the grooves 17 by means of a pair of channel-iron extensions 20.

These channel extensions are angled and formed to provide a flat attaching flange 21 riveted to the rear side of the plate and forwardly extending channel flanges 22 of the same general dimension as the rectangular channels, providing a smooth sliding fit therein, the angle pieces provided with a bead 23 on the flat flange thereof to strengthen the same. The lip 18 and the relatively great length of the channel extensions 22 efficiently prevents displacement of the follower plate from its slideable engagement with the case.

In order to provide for a positive setting of the follower plate in various positions throughout the length of the case, a series of apertures, indicated at 24, are provided along the floor of base flange 25 of the channels 17, these apertures being correspondingly arranged in the respective channels, and a latch mechanism is provided on the follower plate for cooperation with these apertures.

The latch member comprises an angle cross piece 26 mounted against the rear face of the follower plate and downwardly extending latching elements 27 riveted to the respective ends of the angle piece.

The latch is slideably mounted against the rear face of the follower plate by means of a pair of clips 28 riveted to a raised portion of the follower plate and forming a slot or passageway, in combination with the plate, through which the respective latching elements 27 are slideably mounted. The lower ends of these latching extensions are formed outwardly, extending within the channels and are each provided with a downwardly extending stud or tip 29 positioned for alignment and registry with the desired aperture depending on the position of the follower plate in the receptacle. The follower plate is turned to provide a downwardly facing channel 30 overhanging the angle-iron cross piece.

The upper flange 31 of the angle piece is engaged by the loose ends of a pair of flat springs 32 having their opposite ends secured to the inner surface of the upper flange of the channel 30. The downwardly extending rear flange of the channel 30 is cut away centrally thereof as at 30^a to provide a clearance for manipulation of the latch upwardly into the channel, the upper flange 31 serving as the gripping portion of the latch. The springs normally hold the latch downwardly into its operative position and cause the studs to snap into engagement with the desired apertures unless the latch is being manipulated.

A pair of index guide rods 33 or support rods for index elements, separators, or folders 35, vertically disposed within the receptacle, are disposed longitudinally and above the side walls of the casing. The forward ends of these rods are inserted within sockets formed in the forward wall 13. The rear ends of the rods are slidably mounted in upwardly extending brackets 34 secured to the respective rear corners of the casing. These brackets 34 provide flat attaching flanges 36, 37 and an upwardly extending portion 38 of channel formation outwardly disposed, the respective rod traversing the side flanges of the channel.

A flat spring 39 is riveted to the lower end of the base flange of each of these channel portions 38 and its upper end is under compression outwardly against the rod which traverses the side flanges of the channel. These flat springs are adapted to cooperate or engage within notches 40 formed in the rods. The notches are formed at substantially the rear ends of the rods and are engaged by the springs when the forward ends of the rods are fully inserted within the sockets. To disengage the rods and withdraw them from their mounted position it is necessary to rotate the rods slightly to remove the grooves from registry with the springs.

The rods 33 are intermediately supported by means of outwardly extending ears or lugs 41 at each side of the follower plate, the rods traversing apertures in these ears.

This type of follower plate is easily adjusted and is firmly slidably mounted relative to the casing due to the long channel-iron extensions so that it cannot be twisted rela-

tively to the casing and will slide evenly at right-angles to the casing side walls.

Having described my invention, I claim:

1. A device of the class described, comprising, a drawer, the side walls of said drawer being longitudinally channeled, a follower plate suspended from said channels within the drawer, the lower wall of each channel having a series of apertures longitudinally arranged therein, and a latch vertically slidably mounted in said follower plate for traversing selected apertures and locking the follower plate in set position.

2. A filing device, comprising, a drawer having longitudinal depressions outwardly formed in its side walls, a follower plate mounted within said drawer having its side edges formed for slidable engagement within said depressions, longitudinally disposed rods mounted in said drawer above the respective side walls thereof, and ears extending from the respective opposite edges of said follower plate, said ears traversed by the guide rods for intermediately supporting the guide rods.

3. A device of the class described, comprising, a filing receptacle, the side walls of said receptacle correspondingly provided with horizontally formed longitudinal ledges, a follower plate having extending lugs at each side thereof for slidably mounting said follower plate on said ledges, said ledges provided with correspondingly arranged series of apertures, and a latch slidably mounted on said follower plate for vertical reciprocation relative to said apertures.

4. A device of the class described, comprising, a casing, the side walls of said casing formed to provide horizontally disposed longitudinal surfaces, said surfaces having corresponding series of longitudinally arranged apertures formed therein, a follower plate slideably disposed on said surfaces and disposed within said casing, and a latch mounted on said follower plate adapted to traverse opposing corresponding apertures of the series.

5. A device of the class described, comprising, a filing receptacle, a follower plate slideably mounted within said receptacle, guide rods mounted in said receptacle longitudinally of and above the side walls thereof, the forward ends of said rods inserted in sockets in the front wall of the receptacle, a pair of upwardly extending brackets disposed at the respective rear corners of the receptacle and slideably supporting the rear ends of said rods, a spring mounted within each bracket and pressing against the rod extending through said bracket, and a notch formed in the rod engageable by said spring to prevent longitudinal movement of the rod within the bracket.

6. A device of the class described, comprising, a filing receptacle, a follower plate slideably mounted therein, longitudinally disposed guide rods mounted in said receptacle longitudinally of and above the side walls thereof, the forward ends of said rods inserted within the front wall of the receptacle, a pair of upwardly extending brackets disposed at the respective rear corners of the receptacle slideably supporting the respective rear ends of said rods, a spring mounted within each bracket and pressing against a respective rod, and a tangential notch formed in the rod engaged by said spring to prevent longitudinal movement of the rod within the bracket.

7. A device of the class described, comprising, a casing, the side walls of said casing formed to provide horizontally disposed longitudinal surfaces, said surfaces having corresponding series of longitudinally arranged apertures formed therein, a follower plate slideably disposed on said surfaces and disposed within said casing, and a latch vertically slideably mounted on said follower plate, said latch comprising a cross-piece and downwardly extending studs at each side adapted to traverse opposing corresponding apertures of the series.

8. A filing device, comprising, a drawer, a follower plate disposed within said drawer and guidingly engaged with the side walls thereof for sliding of the plate longitudinally of the drawer, longitudinally disposed guide and support rods mounted in said drawer above the respective side walls thereof, partitions having their lower edges resting on the bottom of the drawer and their upper ends hung on said guide and support rods, and ears extending from the respective opposite edges of said follower plate, said ears traversed by the guide and support rods for intermediately supporting the guide rods.

9. A device of the class described, comprising, a filing receptacle, the side walls of said receptacle correspondingly provided with horizontally formed longitudinal flanges, a follower plate having extensions at each side thereof slidably mounting said follower plate on said flanges, and a latch slidably mounted on said follower plate for vertical reciprocation relative to and engagement with said flanges.

In witness whereof, I hereunto subscribe my name.

SAMUEL SMILEY, JR.