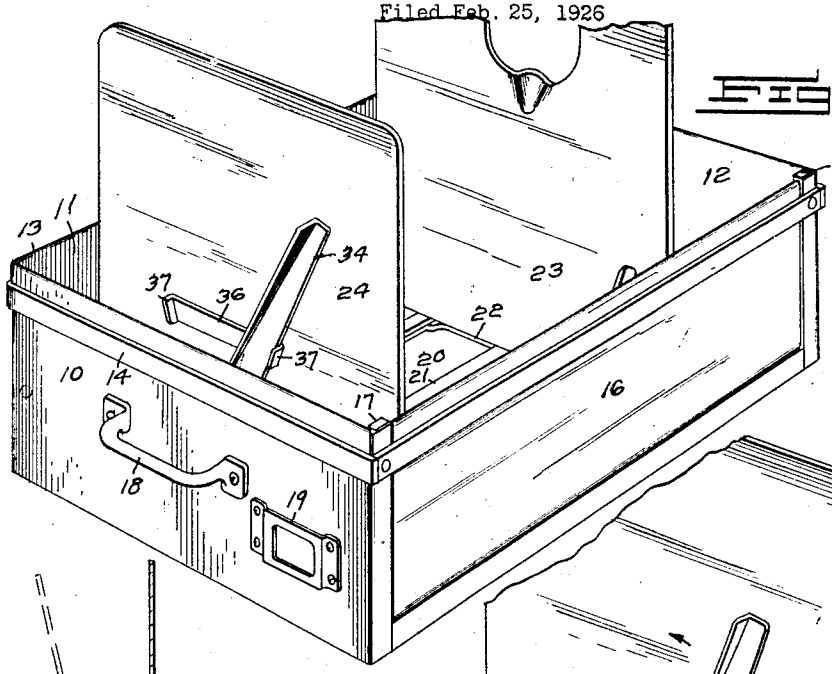
June 12, 1928. 1,673,725

N. S. WELK

FILING TRAY

Filed Feb. 25, 1926

Fig. 1.



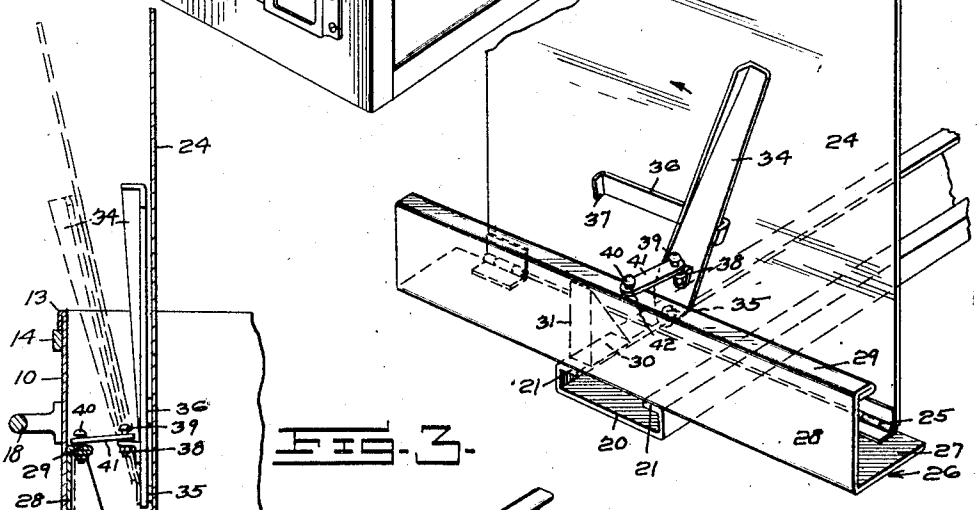


Fig. 2.

Fig. 3.

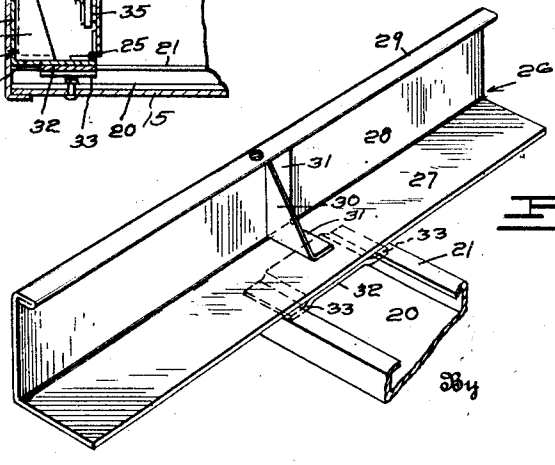


Fig. 4.

Inventor

Nelson S. Welk

By Dodson & Roe

Attorneys

Patented June 12, 1928. 1,673,725

UNITED STATES PATENT OFFICE.

NELSON S. WELK, OF ATHENS, OHIO, ASSIGNOR TO THE McBEE BINDER CO., OF ATHENS, OHIO, A CORPORATION OF OHIO.

FILING TRAY.

Application filed February 25, 1926. Serial No. 90,478.

This invention relates to an improvement in filing trays, similar to that disclosed in my co-pending application, Serial Number 90,475, filed Feb. 25, 1926.

The object of the present invention is the provision of a suitable support for that type of clamping plate disclosed in the above-mentioned application.

The purpose of the device is to provide a rigid support for the clamping plate, that is independently supported, without bolting or otherwise attaching to the front wall of the tray.

It has been found that a clamping plate having a direct support upon the front wall of the tray tends, when in clamping position, to distort such front wall, and especially in that type of tray disclosed herewith.

It is therefore the object of this invention to provide a support for the clamping plate, which will avoid any possibility of distortion or undue pressure on the front wall of the tray.

A further object is the simplicity of construction of this support, and its mode of assembly within the tray.

Other important objects and advantages of the invention will be apparent during the course of the following description, reference being had to the accompanying drawings, wherein like numerals are employed to designate like parts throughout.

Referring to the drawings:

Fig. 1 is a perspective view of a filling tray embodying the invention,

Fig. 2 is a perspective view of a clamping plate and its associated support, removed from the tray,

Fig. 3 is a fragmentary, vertical section through the forward end of the tray, and

Fig. 4 is a perspective view of the support for the clamping plate with a portion of the guide track, removed from the tray.

Referring specifically to the drawings, the numeral 10 designates the front wall of the tray, 11 the side wall and 12 the rear wall. The walls, 10, 11 and 12, are formed from a single sheet of suitably stiff sheet metal, bent upon itself at its upper edges, as indicated at 13, to provide a reinforced and smooth contacting surface. The walls are further reinforced by a substantially rigid band 14, extending therearound, adjacent the upper edges and projecting slightly beyond the front and rear walls 10 and 12. A bottom 15 is suitably rigidly attached to the side and end walls 10, 11 and 12. The opposite side of the tray is formed open and is normally closed by a swinging door, designated as a whole by the numeral 16. The structure of the door 16 has been fully disclosed in my application above identified. The ends 10 and 12, adjacent such opening, are further reinforced by vertical corner posts 17, welded or otherwise attached thereto. The front end 10 is provided with a handle 18 and an open card-pocket 19.

The numeral 20 designates a substantially U-shaped track or guide, extending longitudinally of the tray and preferably bolted to the bottom thereof. The track is provided with inturned flanges 21, for forming rails, to be engaged by the carriage 22 of a follower 23. The follower and associated parts have been shown and described in detail in my application above identified, and will not be further described in this application.

The numeral 24 designates a clamping plate, hingedly mounted as at 25 to a supporting member, designated as a whole by the numeral 26. The member 26 is formed of suitably stiff sheet metal, and is formed substantially L-shaped in cross section. The member embodies the horizontal plate 27, and the vertical wall 28. The upper edge of the wall 28 is bent inwardly and upon itself for forming a reinforced, horizontal flange 29. A diagonal brace 30, having engaging flanges 31, is rigidly attached to the plate 27 and wall 28, as by spot welding, and is adapted to hold the wall 28 against bending with respect to the plate 27. Means are provided for mounting the support within the tray against movement, comprising a flat plate 32, having downwardly, slightly offset ends 33. The plate 32 is rigidly attached to the bottom of the plate 27, as by spot welding. As clearly shown in Fig. 4, the ends 33 are adapted at assembly, to engage beneath the flanges 21 of the track 20. The engagement of the ends 33 and flanges 21 is preferably a tight one, so as to avoid any accidental, longitudinal movement of the support upon the track 20.

The numeral 34 designates an operating lever for controlling the pressure of the

plate 24. This lever is pivotally mounted as at 35, adjacent the lower end of the plate, and adapted for swinging movement across the face of such plate. A combined wear strip and limiting means 36 is secured to the plate 24, and this strip has inturned ends 37 for limiting the swinging movement of the lever 34, in either direction. The lever 34 is provided with an L-shaped pivot member 38, carrying a pivot pin 39. A corresponding pivot pin 40 is carried by the flange 29 and these pins 39 and 40 receive a rigid link 41, the openings 42 of which are sufficiently large to enable such link to partake of slight vertical movement, while swinging in a horizontal plane, due to the swinging of the lever 34 about its pivot. It will thus be seen that movement of the lever in the direction of the arrow, (Fig. 2) will result in the plate being moved forwardly or to the release position, as shown in dotted lines, (Fig. 3). Movement of the lever in the opposite direction will result in the plate being moved to the clamping position, and when in such position, the link 41 will have moved to a past-center position, consequently, the plate 24 will be retained in clamping position, against accidental release by the pressure of the cards.

The operation of the device is as follows:

Assuming that the tray contains filed matter such as cards, and that the parts are in the position illustrated in Fig. 1. It is now desired to inspect the cards, and to make this possible, the lever 34 is swung over to the left, thereby releasing the clamping plate 24. The follower plate 23 is then released and moved rearwardly. It is now possible to inspect the cards, as all pressure has been relieved therefrom.

It will be obvious from the foregoing description that an extremely simple and substantial support has been provided for the clamping plate 24. As has heretofore been noted, there is a great tendency toward the distortion of the front wall of the tray, due principally to the attachment of the support directly to such wall. Consequently, when the plate was placed in compression position, this pressure was imparted to the front wall of the tray, and the degree of such pressure was determined by the adjustment of the follower plate 23 by the operator. The distortion of the front wall of the tray was particularly noticeable in the present type of tray, embodying the drop side, and where the operator placed the plate in clamping position prior to the closing of the drop side, it became difficult to close such side, for the reason that the front wall of the tray had become distorted, and out of alignment with certain engaging parts carried by the side. The support of the present invention is formed of stiff sheet metal, rigidly braced and supported entirely by the track 20. The method of engagement with the track flanges makes the assembly extremely simple, and enables the support to be placed in various sized trays without the necessity of bolting or welding the same to the track.

It is to be understood that the invention is not limited to the precise construction set forth but that it includes within its purview whatever changes fairly come within either the terms or the spirit of the appended claims.

Having described my invention, what I claim is:

1. A device of the character described, comprising a rectangular sheet-metal body portion, open at its top, a follower mounted therein, a clamping plate, a support for said clamping plate mounted in the body portion, means for hinging said clamping plate to said support, an operating lever associated with the plate and linked to the support to selectively clamp and release the plate, means for connecting said operating lever with said support, and means carried by said support for preventing distortion of said support when the plate is put under clamping pressure.

2. A filing tray of the character described, comprising a rectangular body portion, open at its top, a trackway mounted within said body portion upon the bottom thereof, a follower plate mounted upon said trackway, a clamping plate, a support for said clamping plate, means for hinging said clamping plate to said support, and means for mounting said support upon said trackway in the forward portion of said tray.

3. A filing tray of the character described, comprising a rectangular body portion, formed open at its top, a trackway supported within said tray and upon the bottom thereof, a follower plate mounted upon said trackway, a clamping plate and a support therefor, means for hinging said clamping plate upon said support, said support formed of substantially an L-shape in cross section, and having a reinforced upper edge, an operating lever associated with the plate and linked to the support to selectively clamp and release the plate, means connecting said operating lever with said reinforced edge and a brace means connecting the horizontal and vertical walls of the L-shaped support, whereby said support will be held rigid against distortion when said clamping plate is put in clamping position.

4. A filing tray of the character described, comprising a rectangular body portion, formed open at its top, a U-shaped trackway mounted therein, and provided with inturned flanges, a follower plate mounted upon said trackway, a clamping plate, a support for said clamping plate, said support formed of substantially L-shape, and having a horizontal wall and a

vertical wall, said vertical wall bent inwardly and upon itself for forming a reinforced flange, a brace member for supporting said horizontal and vertical walls, against distortion, an operating lever associated with the plate and linked to the support to selectively clamp and release the plate, means for limiting said operating lever, in its swinging movement, and means carried by said horizontal wall of the support for connecting the same to said inturned flanges of the trackway.

5. A filing tray of the character described, comprising a rectangular body portion, formed open at its top, a U-shaped trackway bolted therein and provided with inturned flanges, a clamping plate, a support for said clamping plate, means for hinging said clamping plate to said support, said support formed of an L-shape and provided with a horizontal wall and a vertical wall, a plate secured to the underside of said horizontal wall and having offset ends, said offset ends adapted to engage beneath the flanges of the trackway, an operating lever associated with the plate and linked to the support to selectively clamp and release the plate, link means connecting said operating lever with said support, and brace means for said support, whereby said vertical wall and said horizontal wall will be held against distortion when the clamping plate is placed in clamping position.

6. A filing tray of the character described, comprising a rectangular body portion, formed open at its top, a U-shaped trackway bolted to the bottom thereof, said trackway having inturned flanges, a clamping plate, a support for said clamping plate, said support formed of an L-shape and provided with horizontal and vertical walls, said vertical wall inturned at its upper edge and bent upon itself for forming a reinforced flange, a plate rigidly secured to the bottom of said horizontal wall and provided with offset ends, adapted to engage beneath the flanges of the trackway, a corner brace engaging said horizontal and vertical walls for rigidly supporting them against distortion, an operating lever pivoted to the clamping plate, means to limit the swinging movement of said operating lever, and a link connecting said operating lever with said reinforced flange, said operating lever, when moved to one position, adapted to move the link to a past-center position for retaining the plate in clamped position, and when moved to the opposite position, adapted to retract said plate to the release position.

NELSON S. WELK.