June 12, 1934. W. J. HAMPTON 1,962,146

FILING DRAWER

Filed May 23, 1932 2 Sheets-Sheet 1

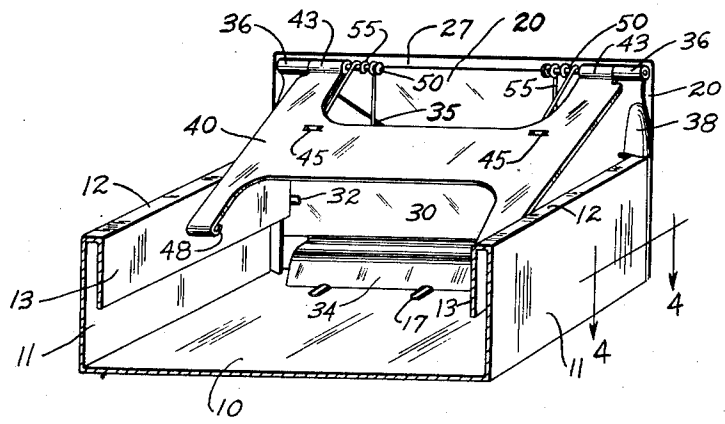


FIG. 1

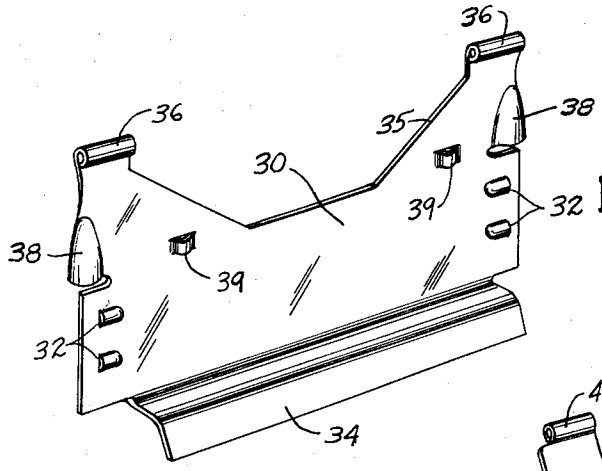


FIG. 3

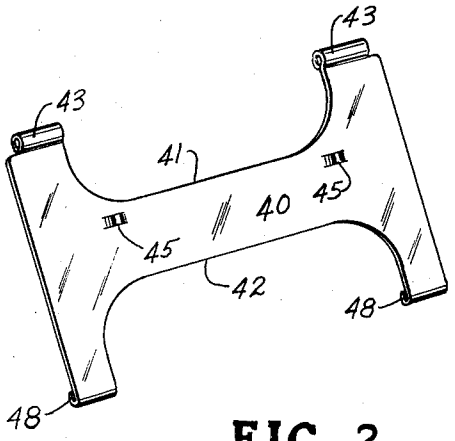


FIG. 2

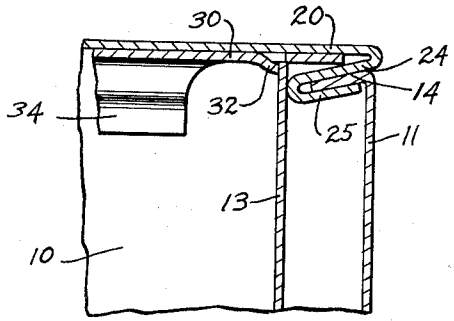


FIG. 4

Inventor

William John Hampton

By Dales, Golrick & Tear

Attorneys

June 12, 1934. W. J. HAMPTON 1,962,146

FILING DRAWER

Filed May 23, 1932 2 Sheets-Sheet 2

FIG. 5

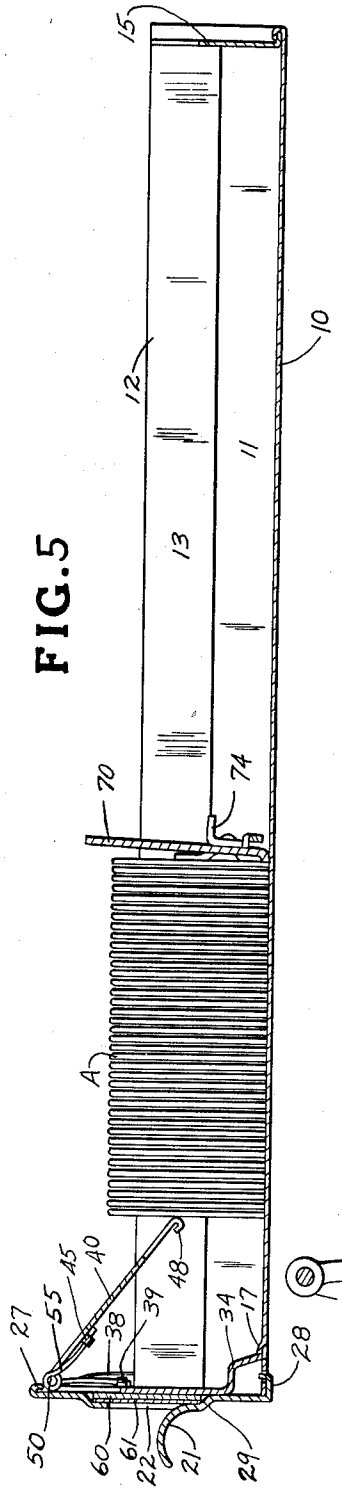
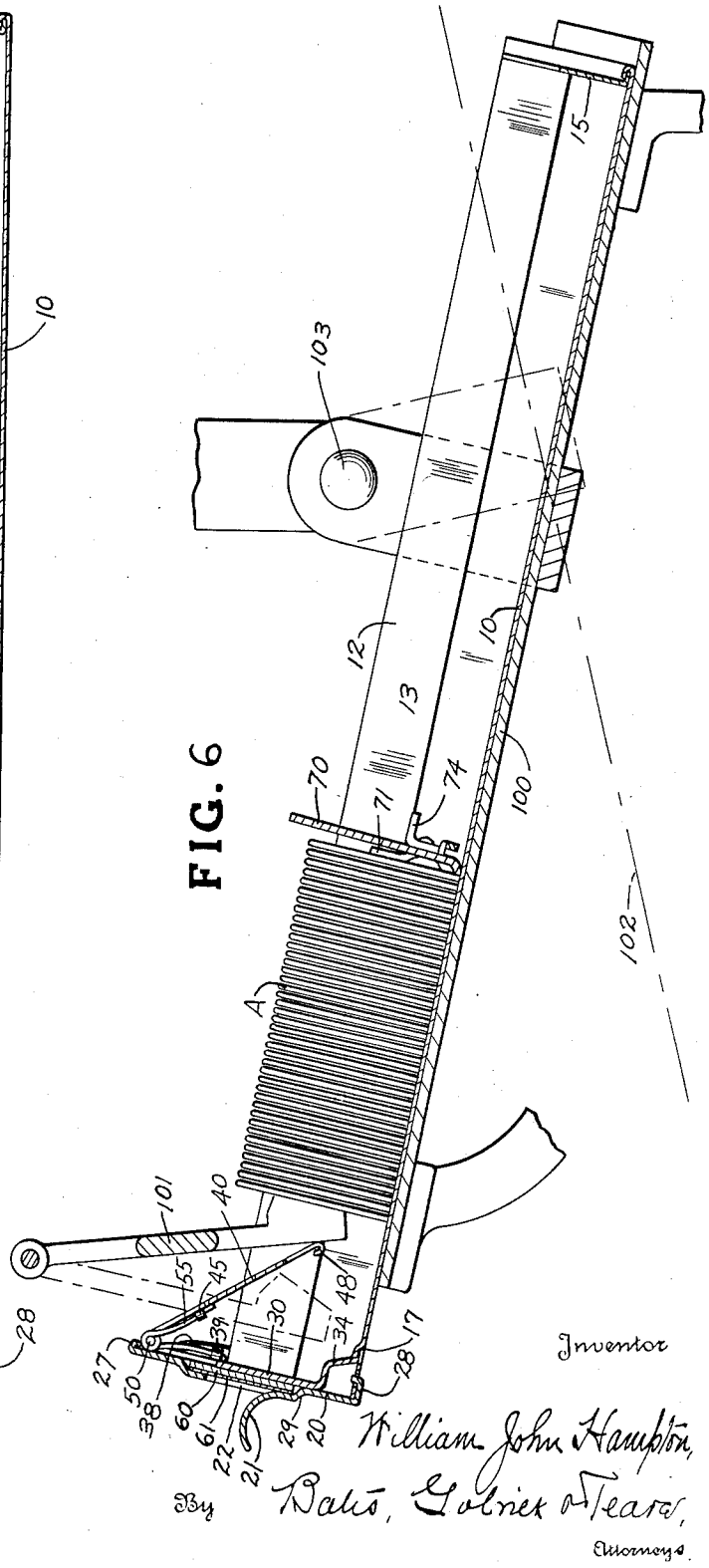


FIG. 6



Inventor

William John Hampton,

By Bair, Goltrick & Teare,

Attorneys.

Patented June 12, 1934 1,962,146

UNITED STATES PATENT OFFICE

1,962,146

FILING DRAWER

William John Hampton, Euclid, Ohio, assignor to Addressograph Company, Wilmington, Del., a corporation of Delaware

Application May 23, 1932, Serial No. 612,954

16 Claims. (Cl. 101—47)

This invention relates to drawers, trays or receptacles for holding articles of plate-like form standing on edge. While the invention is adapted for use with various vertical files, I am more particularly concerned with its embodiment in a drawer adapted to hold a considerable number of address plates, such as used in addressing machines, the drawer receiving the plates one after another as discharged from the addressing machine, retaining them, subject to manual removal, when the drawer is out of the machine or stored, and adapted to discharge them whenever desired into the addressing machine.

It is an object of my invention to provide a yielding presser carried by the drawer in a manner to engage the foremost article in the drawer and maintain the stack substantially vertical. Another object is to so arrange the presser that while it is effective on the foremost plate, it will not interfere in any manner with the normal use of the drawer or the manual separation of the plates therein for inspection.

Another object of the invention is to so arrange the presser that it will not interfere with the normal operation of a suitable packer of an addressing machine which may enter the drawer between the presser and a rearwardly shiftable follower, and, by working back and forth in the drawer, feed the plates as deposited in front of the packer toward the rear end of the drawer.

Some space must be provided at the forward portion of the drawer for the operation of the packer of the addressing machine, and when the drawer is being removed from the addressing machine, there has been difficulty that the forward plates would slide down into this space and lie substantially horizontally in the bottom of the drawer instead of standing vertically. My pressing device operates automatically to maintain the stack in position as the drawer is being removed from the addressing machine, and this is one of its valuable features.

Preferably, the presser is pivotally carried by a lining plate at the front of the drawer which assists in supporting a label visible through an opening in the drawer front, and this feature is also included within my invention.

My invention is illustrated in the drawings hereof and is hereinafter more fully explained in connection therewith.

In the drawings:

Fig. 1 is a sectional perspective of the drawer looking at the interior from an intermediate position and toward the front.

Fig. 2 is a perspective of the presser plate itself.

Fig. 3 is a perspective of the liner plate, which pivotally carries the presser plate.

Fig. 4 is a horizontal cross section through a corner of the drawer at the forward end, as indicated by the line 4—4 on Fig. 1.

Fig. 5 is a longitudinal section of the drawer with a number of address plates therein held in their stored position.

Fig. 6 is a similar section through the drawer as mounted in an addressing machine to receive discharged plates, the packer of the addressing machine being indicated.

As shown in the drawings, the drawer is made of sheet metal and has a bottom 10, side walls 11 with the upper edges turned inwardly, as at 12, and then downwardly as flanges 13 standing some distance in the interior of the drawer. At the rear the drawer is closed by a suitable back 15.

The front 20 of the drawer preferably rises considerably higher than the side walls and is secured to the bottom and side walls. It is shown as having a cut-out downwardly-turned tongue 21 to form a handle leaving an opening 22, behind which a label may be placed. As shown, this front is secured to the side walls 11 by means of inwardly bent end portions 24, which are then bent outwardly on themselves at 25 and intermediately grip inturned flanges 14 formed on the ends of the drawer sides 11. This construction is illustrated particularly in Fig. 4. At its upper end, the drawer front is preferably curled over, as shown at 27, to make a smooth upper edge, while its lower end is flanged rearwardly and then has upwardly turned tongues 28 which enter the drawer bottom.

The liner, which extends along the inner face of the front 20, comprises a sheet metal member of the form shown in Fig. 3. It lies against the rear face of the drawer front, and extends across the front of the ends of the side wall flanges 13, which are cut back at their extreme ends, as illustrated in Fig. 4. The liner is prevented from lateral shifting by tongues 32, cut out from the body of the liner and pressed rearwardly to abut the inner faces of the flanges 13 near the end. At its lower end, the liner may be bent forwardly, as shown at 34, and abut tongues 17 turned upwardly from the bottom of the drawer. The upper edge of the liner is intermediately cut away, as at 35, and the extreme portions at the top are curled into hinge ears 36.

The liner 30 is shown as having projections 38 formed at its extreme ends, preferably by rounding lateral tongues formed on the liner blank. These projections rest on the top sur-

face 12 of the drawer sides when the liner is in place, as shown in Fig. 1, and serve as struts, bracing the projecting upper portion of the liner and drawer front.

My spring presser comprises a plate 40 of the form shown in Fig. 2, having a cut-out upper portion 41 and a cut-out lower portion 42 so that the plate is of approximately H shape. The upper edges of this plate are curled over to make hinge ears 43. These ears stand between, and align with, the ears 36 formed on the liner. The corresponding ears of the liner and presser plate are connected together by hinge pintles 50 which project inwardly of the ears 43.

Suitable wire springs 55 are coiled about the pintles 50 and have free projecting arms, one of which bears against the rear face of the liner and the other against the under face of the presser plate. The normal position of these springs is such as to support the presser plate in an inclined position with its lower edge within the drawer between the side flanges. Thus, the presser plate is pressed by spring action against the devices in the drawer immediately behind the plate.

As shown in the drawings, I have formed keepers 39 on the liner, formed by making parallel slits and pressing rearwardly the intervening portions, and corresponding keepers 45 on the presser plate, and the ends of the springs are mounted in these keepers, as illustrated in Figs. 5 and 6.

As the normal position of the springs holds the presser plate with its lower end in the drawer, it will be seen that these keepers prevent the plate being inadvertently swung out of the drawer, as such movement would constrain the springs in the opposite direction, so that they would react and return the presser plate. The lower ends of the presser plate are bent backwardly on themselves as shown at 48, so that they may present a smooth, rounded surface to rub against the devices in the drawer.

The liner with the presser mounted thereon may be readily installed in the drawer, after the latter is assembled, by being slid down into space behind the drawer front and in front of the side flanges 13. As the liner comes into this position, the upper edge springs beneath the beaded-over top 27 of the front, and is thus retained against an upward movement, while the lower end of the liner is accurately positioned by reason of the engagement of its bent portion 34 with the bottom lugs 17.

The liner cooperates with the front of the drawer to provide a pocket for holding the drawer label. Such label is indicated by a card 60 having a protecting piece of transparent material 61. These parts are inserted downwardly from behind the drawer front into the space in front of the liner, and thus rest on an offset shoulder 29 of the drawer front behind the window 22. The cut-out recesses 35 in the upper portion of the liner, and 41 in the presser plate provide space, enabling this label to be readily placed.

Figs. 5 and 6 show my filing drawer carrying a set of address plates A standing on end in normal position in the drawer. This stack of plates is supported at the rear by a follower 70 which stands in the drawer and may have a frictional engagement with the sides thereof. If desired, this follower may be made in accordance with Patent No. 1,466,792, of Joseph S. Duncan, issued September 4, 1923. When so made, the follower has wings 71 riding against the inner face of the flanges 13 and other wings extending within said flanges, and carries suitable locking levers in the form of bell cranks controlled by a cam 74 on the follower which is adapted to press the upwardly extending arms of the bell cranks against the inner sides of the flanges 13. Any suitable form of follower, however, may be employed.

In Fig. 6, I have illustrated my drawer as mounted on the swinging support 100 in an addressing machine having an oscillating packer 101 projecting into the drawer. In the normal operation of the addressing machine, such packer swings from the position shown in full lines toward the front, providing the space for the insertion of an address plate between the packer and the plates already in the drawer, and then the packer returns to the position shown in full lines, shoving all the plates in the drawer toward the rear. Now, in such operation, the packer simply presses back my presser plate, but otherwise operates in the normal manner in the machine.

The drawer support 100 may be pivotally mounted at 103, so that the loaded drawer may be swung down into the position indicated by the broken line 102 for removal. In such position there has been difficulty heretofore that the plates at the front of the drawer would tip over or slide down in the bottom and thus would lie one on top of the other, and it was necessary to restore them by hand after the drawer was removed. In my invention, however, the presser plate comes automatically into engagement with the front of the stack as soon as the latter is removed from the action of the packer, and this prevents any dislocation of the plates.

My presser continues its valuable function after the drawer has been removed from the machine, and while it is stored in a cabinet or standing on a table for inspection. It maintains the plates in vertical position between the follower and presser plate, as illustrated in Fig. 5, but at the same time, the stack of plates can be separated manually at any point and the forward portion of the stack pressed forwardly to allow inspection of the plate behind the region of separation.

It will be observed that the cut-out lower end of the presser plate gives ample room for the packer, and also enables the entire face of the foremost plate or article to be readily inspected when in the drawer. It will also be seen that the cut-out upper portion of the presser plate, together with that of the liner provides for the ready mounting of the hinge pintles and springs, and allows the very ready insertion of the label in the drawer front.

I claim:

1. The combination of a tray having a front end, a presser hinged to the front and spring-pressed rearwardly to act against articles filed in the tray.

2. The combination of a receptacle having sides and a front and an inclined presser plate pivotally mounted at its upper end adjacent the top of the said front and having its rear end between said sides, and means for pressing said plate rearwardly and upwardly.

3. A filing drawer having sides and a front rising higher than the sides, and an inclined presser plate pivotally mounted at its upper end adjacent the top of the drawer front and having its rear end depending into position between the drawer sides, and means for pressing said plate rearwardly.

4. The combination of a drawer, a presser plate hinged to the forward end of the drawer near the

top thereof, and extending downwardly and rearwardly into the drawer, and a spring constrained between the front of the drawer and the back of the presser plate and tending to swing it toward the rear.

5. The combination of a receptacle, a presser plate within the receptacle having its upper portion hinged on a horizontal axis to the forward end of the receptacle, and a spring bent about the hinge pintle having one arm acting against the receptacle front and the other against the presser plate.

6. The combination of a receptacle having a front plate, a liner carried by the receptacle behind the front plate and adjacent thereto, and a presser plate hinged to the liner and adapted to act on the forward one of a number of devices stacked in the receptacle.

7. The combination of a drawer, a front therefor, a liner behind the front, a presser plate, the presser plate and liner being formed with cooperating ears, hinge pintles occupying such ears, and springs embracing the hinge pintles and acting on the liner and on the presser plate.

8. The combination of a drawer having a front, a liner behind the front, said liner having upwardly extending portions near its ends curled into hinge ears, a presser plate having portions curled into hinge ears and adapted to register with the ears of the liner, pins occupying the hinge ears of the presser plate and liner, and a spring between the liner and presser plate.

9. The combination of a drawer having a front with a sight opening through it, a liner behind the front, there being a label pocket between the liner and the front, a presser plate hinged to the liner, and a spring acting on the presser plate.

10. The combination of a drawer having a front and having side walls which are bent inwardly and flanged downwardly, a liner on the rear face of the front extending beyond the ends of the side flanges, and a pressing device yieldingly carried by the liner.

11. The combination of a drawer having a front and side walls which are bent inwardly and flanged downwardly, a liner on the rear face of the front extending beyond the ends of the side flanges, and a pressing device hinged at its upper edge to the upper end of the liner and depending diagonally into the drawer between the side flanges thereof, and spring means acting on the presser plate.

12. The combination of a receptacle having side walls and a front, a presser plate cut out above and below to give it an H form having its upper arms hinged to the front portion of the receptacle and having its lower arms adapted to stand in various inclined positions between the sides, and a spring acting on the presser plate.

13. The combination of a drawer having side walls and a front rising above the side walls, a liner behind the front rising above the side walls and having a cut-out central portion and hinge ears at the sides thereof, a presser plate of H form having its upper arms hinged to the upper portions of the liner and having its lower arms adapted to stand in various inclined positions between the drawer sides, and a spring acting on the presser plate.

14. The combination of a metal drawer having a bottom, side walls which are bent inwardly and then flanged downwardly, and a front secured to the side walls, the flanges terminating a short distance behind the front, a liner resting against the rear face of the front and extending across the ends of the flanges, a pair of hinge ears formed on the liner, a presser plate having hinge ears at its upper end registering with those of the liner and pinned thereto, the lower edge of the presser plate lying between the side flanges of the drawer, and springs embracing the hinge pins and having two flaring arms, one extending substantially vertically and bearing against the liner and the other diagonally and bearing against the presser plate, whereby the latter is yieldingly held.

15. The combination of a metal drawer having a bottom, side walls which are bent inwardly and then flanged downwardly, and a front secured to the side walls and rising above them, a liner resting against the rear face of the front and extending across the ends of the flanges, projections formed on the liner to engage the top of the side walls of the drawer, a pair of hinge ears formed on the liner, a presser plate having hinge ears at its upper end registering with those of the liner and pinned thereto, the lower edge of the presser plate lying between the side flanges of the drawer, and a spring bearing against the presser plate whereby the latter is yieldingly held.

16. The combination with a filing drawer, of a movable presser device at the forward end of the drawer, said device depending from a mounting means carried by the drawer, and means acting on the presser device and tending to move it rearwardly and upwardly to cause it to exert a yielding pressure against articles mounted in upright position in the drawer at the rear of the presser device.

WILLIAM JOHN HAMPTON.