

Feb. 23 , 1926.

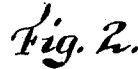
1,574,319

A. J. VINCENT

SELECTING CONTAINER FOR PAY ENVELOPES, ETC

Filed Oct. 7, 1924

2 Sheets-Sheet 1



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Fig. 3.

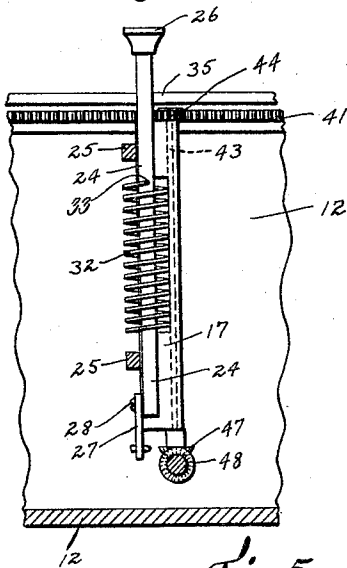


Fig. 6.

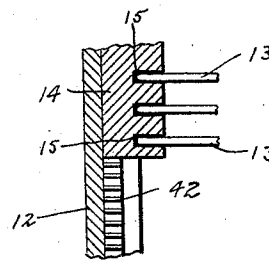


Fig. 5.

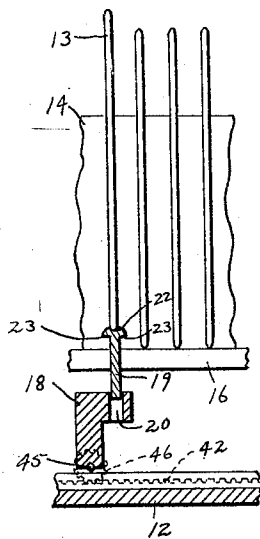
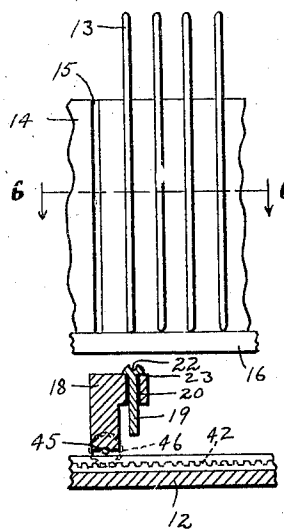


Fig. 4.



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UNITED STATES PATENT OFFICE.

AINSLEY J. VINCENT, OF LAWRENCE, MASSACHUSETTS.

SELECTING CONTAINER FOR PAY ENVELOPES, ETC.

Application filed October 7, 1924. Serial No. 742,165.

To all whom it may concern:

Be it known that I, AINSLEY J. VINCENT, a citizen of the United States, residing at Lawrence, in the county of Essex and State of Massachusetts, have invented new and useful Improvements in Selecting Containers for Pay Envelopes, Etc., of which the following is a specification.

This invention relates chiefly to containers used by paymasters in distributing to employees of an establishment, envelopes containing the pay to which they are entitled. It is customary to arrange a plurality of envelopes in a portable tray, the envelopes being arranged in rows and being serially numbered. The employees are designated by like numbers and the tray is usually carried among the employees by the disburser, who selects for each employee the envelope bearing his or her number. The envelopes are arranged side by side in close proximity to each other, so that the numbers applied to side surfaces of the envelopes are not visible, excepting those on envelopes at the ends of the rows, hence when the tray is full, loss of time is liable to be caused in finding the desired envelope.

The object of the invention is to provide a disbursing tray having simple and efficient selecting mechanism, whereby the disburser may partly project from a row an envelope bearing any desired number, sufficiently to expose the number and permit the delivery of the envelope without loss of time in finding the number.

Of the accompanying drawings forming a part of this specification,—

Figure 1 is a perspective view of a selecting container embodying the invention.

Figure 2 is a section on line 2—2 of Figure 1.

Fig. 3 is a fragmentary section on line 3—3 of Figure 2.

Figure 4 is a fragmentary section on line 4—4 of Figure 2.

Figure 5 is a view similar to Figure 4, showing one of the envelopes partly projected.

Figure 6 is a fragmentary section on line 6—6 of Figure 4.

The same reference characters indicate the same parts in all of the figures.

In the drawings 12 designates a tray having a row of holders, adapted to support a row of spaced apart articles 13, such as pay envelopes, and permit an independent up-

ward movement of each article, the articles being serially numbered at their upper end portions. Said holders are preferably provided by longitudinally extending bars 14, fixed to the tray, the sides of the bars being perpendicular to the bottom of the tray and provided with spaced apart vertical grooves 15 (Figures 6) which are open at their upper ends, and closed at their lower ends by ledges 16, on which the lower ends of the articles rest, as shown by Figure 2. The ledges 16 are spaced apart, so that the lifter hereinafter described is adapted to be raised between the ledges and partly project an article, as shown by Figure 5, and by dotted lines in Figure 2, the projection being sufficient to expose the number of the article.

Movable in the tray is a carrier, which projects under the row of article holders. The construction of the carrier may be variously modified. As here shown the carrier includes an upright portion 17, located in a side portion of the tray, beside the row of article holders, and an arm portion 18, extending horizontally from the upright portion into a space between the article holders and the bottom of the tray.

Mounted on the carrier is a selecting mechanism including an article lifter 19, normally located below the article holders, the lifter being adapted to engage the lower end of an article 13 in either holder. The lifter is movable horizontally by the carrier lengthwise of the row to a position under any article in the row, and is movable vertically independently of the carrier to upwardly project an article under which it is located. The selecting mechanism also includes manually operable means for moving said lifter to partly project the engaged article from its holder.

In this instance, the lifter 19 is an oblong member, occupying a slot 20 in the arm portion of the carrier, and pivoted thereto at 21. The upper edge of the lifter is provided with a groove 22 (Fig. 4) adapted to engage the lower end of an article 13. Said edge is thickened to provide shoulders 23, normally resting on the upper side of the arm portion of the carrier.

The manually operable means for moving the lifter as here shown, includes a vertical plunger 24, movable in guides 25, on the upright portion 17 of the carrier, and provided at its upper end with head or push piece 26, and connections between the lower end of

the plunger and the lifter, whereby, when the plunger is depressed, the lifter is swung upward and caused to partly project an article engaged thereby, as indicated by dotted lines in Figure 2. The preferred connections include an oscillatory lever 27, pivoted at 28, to the carrier and at 29 to the lower end of the plunger 24, and a connecting-rod 30, pivoted at one end to the lever 27, and at its opposite end to an ear 31, projecting from the lifter pivot 21.

I provide means for yieldingly supporting the plunger 24 in a raised position and normally holding the lifter 19 in the depressed position shown by full lines in Figure 2, said means being preferably embodied in a spring 32, supported at its lower end by the carrier and secured at its upper end at 33 to the plunger.

The side portion of the tray in which the upright portion 17 of the carrier is located, is provided with a cover 34, containing an elongated slot 35, through which the plunger 24 extends. The carrier is movable by force applied to the plunger, the slot 35 permitting sufficient movement of the plunger and carrier to locate the lifter under an article 13, held by any holder.

To indicate when the lifter is located under the desired article, I provide indicating means including a fixed row 37 of numerals on the cover 34, said row extending parallel with the row of article holders, and a pointer 38 fixed to the carrier and projecting through an elongated slot 39 in the cover, said slot being coextensive with the slot 35.

The pointer is preferably a flat-sided strip having a sight opening 40, adapted to expose either numeral of the row 37.

It will now be seen that if the disburser wishes to select, for example, the article numbered 18, he moves the carrier to bring the pointer 38 into registration with the numeral 18 of the row 37, and then depresses the plunger, the result being the partial projection of the desired article.

Although I have described an organization including one row of article holders, and one selecting mechanism, it is obvious that the organization may include any desired number of rows of article holders, and any desired number of selecting mechanisms mounted on a single carrier. The drawings show two rows of article holders and two selecting mechanisms, both mounted on the carrier, with the lifters in alignment with each other, one selecting mechanism cooperating with articles held by the holders of one row, and the other with articles held by the holders of the other row.

It is also obvious that the container may be used with articles other than pay envelopes.

To ensure an exactness in the location of the lifter under the article to be engaged

thereby, particularly when the carrier is elongated as shown by Figure 2, and is provided with a plurality of lifters, the outer one of which is at a considerable distance from the upright portion of the carrier, and from the plunger 24, I provide equalizing mechanism adapted to prevent the outer end of the arm portion 18 from lagging behind the opposite end of the carrier, thus causing the arm portion to always occupy a position at right angles to the row or rows of article holders, and to prevent the upper end of the upright portion 17 from swinging forward from the lower portion when the carrier is being moved. Said mechanism preferably includes a fixed upper rack 41, in the side portion of the tray, two fixed lower racks 42 in the bottom portion of the tray, said racks being parallel with each other and with the row of article holders, an upright shaft 43, journaled on the upright portion 17 of the carrier and having a pinion 44 engaging the upper rack 41, a horizontal shaft 45 journaled on the arm portion 18 of the carrier and having pinions 46, engaging the lower racks 42, and bevel gears 47 and 48 connecting the said shafts.

It will be seen that the slots 15 in each side bar 14 are opposite those of the other side bar, and that each envelope is held by a holder composed of two coinciding slots, one in each side bar 14. The slots in the two cross-bars constitute a row of holders, each holder formed by two slots, one abreast of the other.

The numerals of the row 37 supported by a fixed support beside the row of envelope holders, are serially arranged and correspond in position with the envelope holders, so that each numeral identifies the location of the envelope holder containing the envelope bearing the same numeral, and enables the said envelope to be selected, and removed by any suitable means.

It will be seen that when the tray is in the operative position shown by Figures 1. and 2, it has an open top above which the articles supported by the row of holders project so that the upper ends of the articles are elevated above the top, any partly projected article being adapted to be conveniently grasped and removed. It will also be seen that the vertically movable plunger engaged with and guided by the carrier, also projects upward from the tray top at one side of the row of holders, the plunger being movable horizontally to move the carrier, and vertically to move the lifter. The arrangement is such that the operator is enabled, with a minimum expenditure of time, to manipulate the plunger from a point above the top of the tray and beside the row of articles, the plunger and the articles being simultaneously in the operator's view. The connections between the plunger and the

lifter are adapted to convert a downward movement of the plunger into an upward movement of the lifter, so that after the carrier has been adjusted by a horizontal movement of the plunger, the lifter may be raised by a depression of the plunger.

As implied in the foregoing description and in the following claims, I am not limited to the specific mechanism of the preferred embodiment of my improvements shown by the drawings, except as otherwise required in certain of the more limited claims.

I claim:

1. A selecting container for articles of the character stated, comprising a tray having an open top and a row of holders adapted to releasably support spaced apart articles with their upper ends projecting above the top, a carrier movable horizontally in the tray under and lengthwise of the row of holders, and selecting mechanism mounted on the carrier and including an article lifter located below the holders and movable horizontally by the carrier lengthwise of the row to a position under any article in the row, and movable vertically independently of the carrier to upwardly project an article under which it is located, a vertically movable plunger engaged with and guided by the carrier and projecting upward from the tray top at one side of the row of holders, means yieldingly supporting the plunger in a raised position, so that it may be manually depressed, and connections between the plunger and the lifter, adapted to convert a downward movement of the plunger into an upward movement of the lifter, the carrier being horizontally movable by the plunger, the arrangement being such that the plunger and the articles held by the holders project upward side by side from the top of the tray when the latter is in its operative position.

2. A selecting container for articles of the character stated, comprising a tray having a row of holders, adapted to support a row of spaced apart articles and permit an independent upward movement of each article, the tray including a bottom portion located below the row of holders, and a side portion located beside said row and having a cover provided with a longitudinal slot extending parallel with the row of holders, an angular carrier including an upright portion movable in the side portion of the tray, under the cover, and an arm portion projecting into the bottom portion of the tray, under the row of holders, and selecting mechanism including an oscillatory lifter pivoted to the arm portion of the carrier, and movable horizontally by the carrier lengthwise of the row to a position under any article in the row, and movable vertically independently of the carrier to upwardly

project an article under which it is located, a manually operable plunger vertically movable in guides on the upright portion and projecting through said slot, means yieldingly supporting the plunger in a raised position, and connections between the plunger and the lifter, adapted to convert a downward movement of the plunger into an upward movement of the lifter, whereby when the plunger is depressed the lifter is raised and caused to partly project an article engaged thereby, the arrangement being such that the plunger and the articles held by the holders, project side by side from the top of the tray when the latter is in its operative position.

3. A selecting container for articles of the character stated, comprising a tray having a row of holders, adapted to support a row of spaced apart articles and permit an independent upward movement of each article, the tray including a bottom portion located below the row of holders, and a side portion located beside said row and having a cover provided with a longitudinal slot extending parallel with the row of holders, an angular carrier including an upright portion movable in the side portion of the tray, under the cover, and an arm portion projecting into the bottom portion of the tray, under the row of holders, and selecting mechanism including an oscillatory lifter pivoted to the arm portion of the carrier, and movable horizontally by the carrier lengthwise of the row to a position under any article in the row, and movable vertically independently of the carrier to upwardly project an article under which it is located, said lifter being provided with an ear projecting below its pivot, a manually operable plunger vertically movable in guides on the upright portion and projecting through said slot, means yieldingly supporting the plunger in a raised position, an oscillatory lever pivoted to the carrier and engaged with the lower end of the plunger, and a rod connecting said lever with the ear of the lifter, said lever rod and lifter ear being adapted to convert a downward movement of the plunger into an upward movement of the lifter, the arrangement being such that the plunger and the articles held by the holders, project side by side from the top of the tray when the latter is in its operative position.

4. A selecting container for articles of the character stated, comprising a tray having a row of holders, adapted to support a row of spaced apart articles and permit an independent upward movement of each article, the tray including a bottom portion located below the row of holders, and a side portion located beside said row and having a cover, an angular carrier including an upright portion movable in the side portion of the tray,

and an arm portion projecting into the bottom portion of the tray, selecting mechanism including an oscillatory lifter pivoted to the arm portion and movable horizontally by the carrier lengthwise of the row to a position under any article in the row, and movable vertically independently of the carrier to upwardly project an article under which it is located, a manually operable plunger movable in guides on the upright portion and projecting through a slot in the said cover, means yieldingly supporting the plunger in a raised position, and connections between the plunger and the lifter, whereby when the plunger is depressed the lifter is raised and caused to partly project an article engaged thereby, the carrier being movable by force applied to the plunger, and carrier-equalizing mechanism including equalizing means fixed to the tray, and movable equalizing means mounted on the carrier.

5. A selecting container for articles of the character stated, comprising a tray having a row of holders, adapted to support a row of spaced apart articles and permit an independent upward movement of each article, the tray including a bottom portion located below the row of holders, and a side portion located beside said row and having a cover, an angular carrier including an upright portion, movable in the side portion of the tray, and an arm portion project-

ing into the bottom portion of the tray, selecting mechanism including an oscillatory lifter pivoted to the arm portion and movable horizontally by the carrier lengthwise of the row to a position under any article in the row, and movable vertically independently of the carrier to upwardly project an article under which it is located, a manually operable plunger movable in guides on the upright portion and projecting through a slot in the said cover, means yieldingly supporting the plunger in a raised position, and connections between the plunger and the lifter, whereby when the plunger is depressed the lifter is raised and caused to partly project an article engaged thereby, the carrier being movable by force applied to the plunger, and carrier-equalizing mechanism including a fixed upper rack in the side portion of the tray, two lower fixed racks in the bottom portion of the tray, said racks being parallel with each other and with the row of holders, an upright shaft journaled on the upright portion of the carrier and having a pinion engaging the upper rack, a horizontal shaft journaled on the arm portion of the carrier and having pinions engaging the lower racks, and bevel gears connecting said shafts.

In testimony whereof I have affixed my signature.

AINSLEY J. VINCENT.