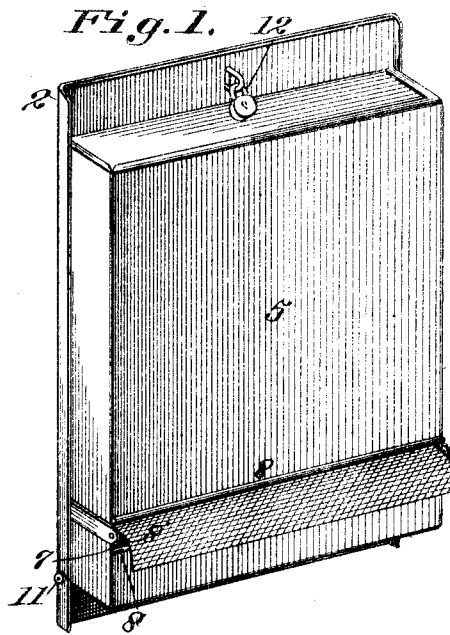
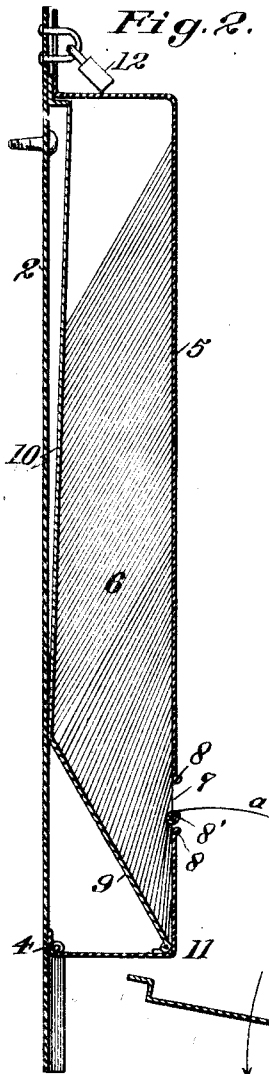


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 LOOSE LEAF DISPENSING DEVICE.  
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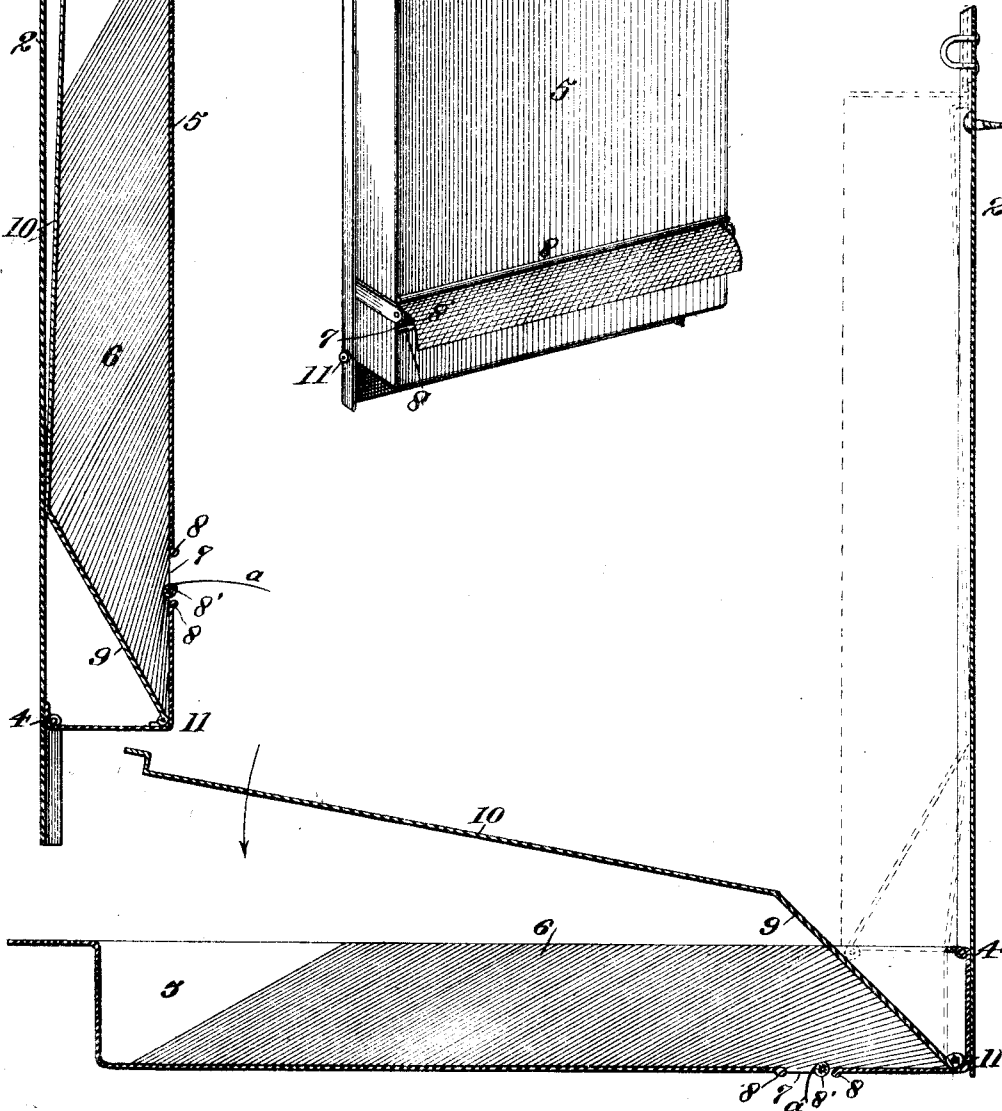
1,135,658.

Patented Apr. 13, 1915.

2 SHEETS-SHEET 1.



*Fig. 3.*



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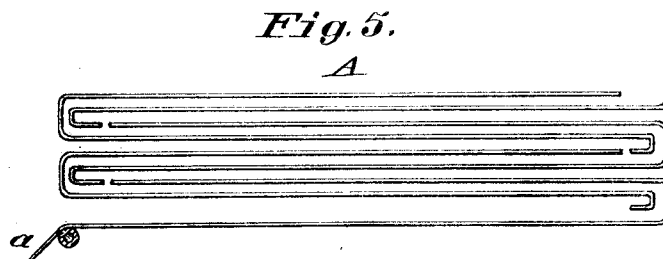
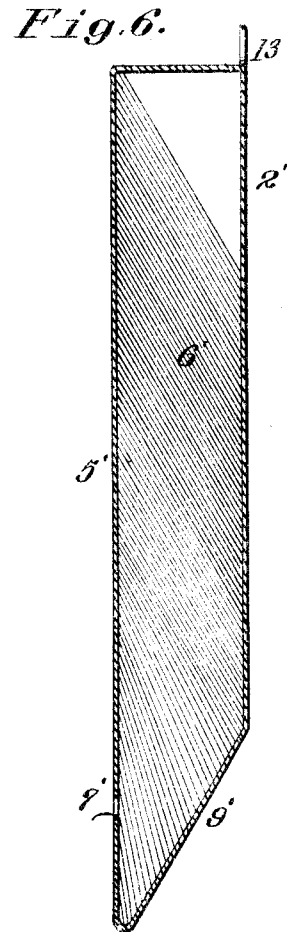
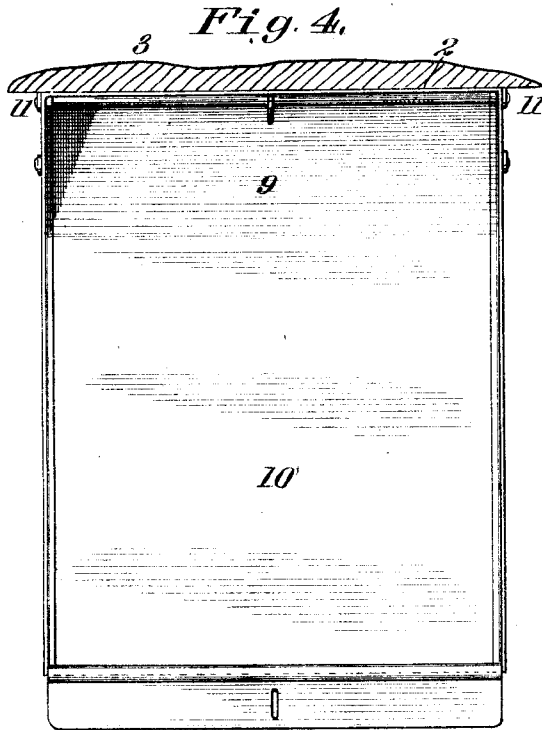
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2 SHEETS-SHEET 2.



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# UNITED STATES PATENT OFFICE.

HORACE P. BROWN AND CLARENCE L. JOHNSTON, OF EMERYVILLE, CALIFORNIA.

## LOOSE-LEAF-DISPENSING DEVICE.

1,135,658.

Specification of Letters Patent.

Patented Apr. 13, 1915.

Application filed April 13, 1914. Serial No. 831,429.

*To all whom it may concern:*

Be it known that we, HORACE P. BROWN and CLARENCE L. JOHNSTON, citizens of the United States, residing at Emeryville, in the county of Alameda and State of California, have invented new and useful Improvements in Loose-Leaf-Dispensing Devices, of which the following is a specification.

This invention relates to an apparatus for containing and dispensing interfolded sheets of paper, or the like.

It is the special object of the present invention to design a simple, practical, cheap device of minimum size and maximum capacity for holding and dispensing paper towels, and whereby the towels are capable of being withdrawn one at a time. Preferably this holder is provided with a movable front or panel forming a door through which the holder may be charged.

A further object of the present invention is to so construct the holder that when the stack of towels has been positioned within the container and the latter is in upright operative position, the lowermost towels or sheets of the stack will be automatically positioned so that they stand approximately vertical and at the lower front portion of the container and adjacent to the mouth of the holder so that the sheets are withdrawable from the front one by one.

The invention consists of the parts and the construction and combination of parts as hereinafter more fully described and claimed, having reference to the accompanying drawings in which:

Figure 1 is a perspective of the device in closed position ready for use. Fig. 2 is a central, vertical section through the closed container. Fig. 3 is a central, transverse section showing the container in the open, charging position. Fig. 4 is a plan view of the device in open position. Fig. 5 shows diagrammatically a plurality of the interfolded sheets, such as may be dispensed from the device. Fig. 6 is a section of a modified form.

A represents a paper towel folded upon itself to provide two flap portions, one of which is interfolded with a similar sheet, the

lowermost flap *a* of the sheet forming a finger hold therewith to grasp the towel and draw it from the holder, as shown in Fig. 2, all as will later be explained.

The present container consists of a back 2, of suitable material and proportions, which may be screwed or likewise securely fastened to a vertical support, such as a wall, or post 3. Upon the lower horizontal edge of the back 3 there is connected, by hinges 4, or other suitable means, a shallow box 5, the depth of which is determined by the size of the towels or other pieces 6, which are stacked in interfolded zig-zag order, as shown in Fig. 5.

As it is one of the most important features of the invention to provide a container which will occupy as little space as possible, we have observed that, by arranging the stack of towels so that the individual towels will lie diagonally, they will occupy a much narrower space than when stacked in a substantially horizontal, superposed position. It is this observation that led to the provision and successful use of a container with a box member 5 of comparative shallow depth in which the stack of towels is so positioned that the individual towels will lie obliquely to the vertical axis of the holder.

Near the lower part of the front or bottom of the container 5 there is provided a transverse mouth or aperture 7, of suitable width, the opposite edges of which are provided with upwardly and downwardly curved lips 8 between which is a roller 8 over which the individual towels may be drawn without laceration or being severed. For maintaining the lower towels of the stack in a substantially vertical position against the front of the box 5, when the latter is closed to its vertical position, there is provided a guide member having a diagonally disposed bottom portion 9 on which the stack rests, and has a back portion 10 supporting the rear edges of the stack. Preferably this guide member is hinged to the bottom of box 5 at 11. This guide 9-10 will support the stack so that the first or bottommost sheet will stand vertically across the mouth 7 with the flap *a* of the first towel

exposed through the mouth in position for withdrawal.

For permitting the easy insertion of a stack of towels in the container or box 5, the latter is swung downwardly about its hinge 4 to a horizontal position (see dotted lines, Fig. 2) in which position it is usable as a table upon which the stack of towels may be disposed. The guide 9-10 is lifted in its hinge 11, and the operator pushes the stack along the bottom of the box 5 so that the first towels will approach the guide 9 and the flap *a* of the leading towel exposed through the mouth 7. The inclined guide member 9-10 is then dropped over the stack and cover fashion into the box; the box lifted into vertical position and locked by suitable means as at 12, whereupon the device is charged and ready for use.

This device provides a container in which the box forms a closed front, and the parts 9-10 a movable back with the part 9 forming an inclined bottom arranged with its lower end contiguous to the lower edge of the front portion, and the front provided with an outlet adjacent to the juncture of the front and the inclined bottom; the parts being so constructed and arranged that a stack of leaves gradually change from a rearwardly and downwardly inclined position at the top to a substantially vertical position as the leaves approach the outlet; the lowermost leaf having its flap *a* protruding through the outlet to furnish a fingerhold by which the towel may be withdrawn. The interleaving of the towels causes each towel as it is withdrawn to present the flap *a* of the succeeding towel through the opening.

One purpose of designing the bottom guide support of the container so as to maintain the lowermost towels vertical is to relieve the lowermost towels from the entire weight of the superposed stack in the container, and to maintain the lowermost towels in such position that the force applied to the outwardly hanging leaf, extending through the mouth of the container, is at right angles to the pressure of the stack of towels in the container; this being in contradistinction to having the mouth of the container so disposed that the direction of the pull on the outwardly hanging leaf of a towel is in the direction of the pressure of the stack. In order to lessen friction on the sheets as drawn forth through the mouth, we may interpose a transverse roller 8', as shown.

In Fig. 6 we have shown a modification of the invention wherein the same principle of interleaved sheets is employed, but with a simple carton 5' which may be of paper or card-board with a feed-slot 7' and a rearwardly and upwardly sloping bottom 9'. A carton of this sort may be provided

with a tab 13 by which it can be hung up on a wall or post and ready for instant use.

Having thus described our invention, what we claim and desire to secure by Letters Patent is:

1. A container arranged to receive a stack of leaves, and having an outlet at a distance above its bottom for the withdrawal of the leaves, and means for causing the leaves gradually to change from a rearwardly and downwardly inclined position to a substantially vertical position as the towels approach the outlet so that the upper ends of the towels may be withdrawn through said outlet.

2. A dispensing device for paper towels consisting of a container of less depth than the length of the towels so as to cause the latter to be diagonally arranged in the container having a substantially vertical front wall formed with a discharge mouth above the lower end of said wall, and having a downwardly and forwardly inclined bottom whereby towels stacked within the container will have their lower ends successively engaged with said bottom and will be engaged with the front wall and held vertical thereagainst by the pressure of the remaining towels.

3. A dispensing device for paper towels consisting of a container of less depth than the length of the towels so as to cause the latter to be diagonally arranged in the container having a discharge mouth, and means arranged adjacent to said mouth to engage the lower ends of the towels so as to present the towels vertically and with their upper ends adjacent to said mouth.

4. In a paper towel dispensing device, a container having an open back hinged to a suitable support and having a discharge mouth in its front and between its ends, and a back for the container having an inclined lower end which is hinged at its free extremity to the container adjacent to the front of the container and below said discharge mouth to allow towels to be diagonally placed within the container with the upper ends of the innermost towels adjacent to said mouth by moving said back on its hinge away from the container front and then moving the back to engage with the towels.

5. In a paper towel dispensing device, a container of less depth than the length of the towels so as to cause the latter to be diagonally arranged in the container having an open back, means to hinge the container to a support, and a back for the container having an inclined lower end to engage the lower ends of the towels, said back being movable with relation to the container so as to allow the towels to be placed in the container and to then allow the back

to be engaged with the towels, said container having a discharge through which the upper ends of the towels may be withdrawn which is disposed to aline with the upper ends of the lowermost towels when the lower ends of said towels are engaged with said lower end of the container back.

In testimony whereof we have hereunto

set our hands in the presence of two subscribing witnesses.

HORACE P. BROWN.  
CLARENCE L. JOHNSTON.

Witnesses:

WILLARD W. WHITE,  
FLORENCE M. KING.