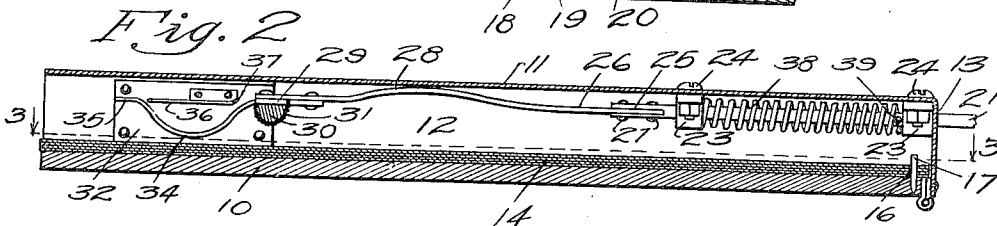
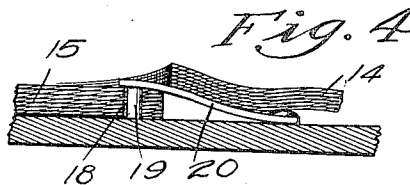
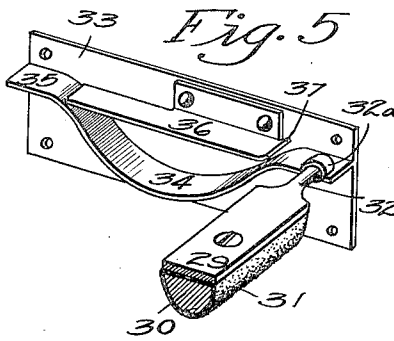
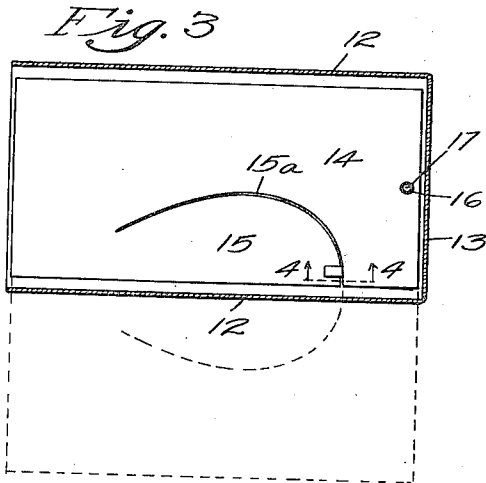
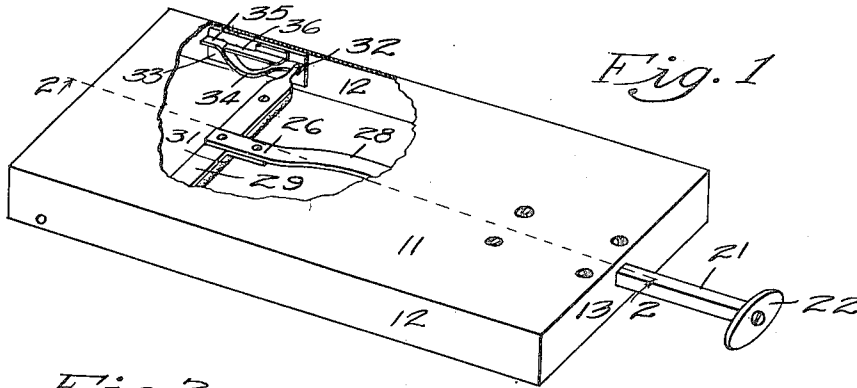


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H. C. PFUND ET AL.
TOILET SEAT COVER HOLDER AND DISPENSER.
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UNITED STATES PATENT OFFICE.

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TOILET-SEAT-COVER HOLDER AND DISPENSER.

Application filed October 7, 1921. Serial No. 506,028.

To all whom it may concern:

Be it known that we, HANS C. PFUND and ROYAL L. ASH, citizens of the United States, and residents of Des Moines, in the county of Polk and State of Iowa, and Nevada, in the county of Vernon and State of Missouri, respectively, have invented a certain new and useful Toilet-Seat-Cover Holder and Dispenser, of which the following is a specification.

The object of our invention is to provide a toilet seat cover holder and dispenser of simple, durable and inexpensive construction, whereby toilet seat covers folded and having a tongue cut therefrom, may be dispensed one cover at a time.

With this and other objects in view our invention consists in the construction, arrangement and combination of the various parts of our device, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in our claims, and illustrated in the accompanying drawings, in which:

Figure 1 shows a perspective view of a machine embodying our invention.

Figure 2 shows a longitudinal, detail, sectional view taken on the line 2—2 of Figure 1.

Figure 3 shows a horizontal, detail, sectional view taken on the line 3—3 of Figure 2.

Figure 4 shows a detail, sectional view taken on the line 4—4 of Figure 3; and

Figure 5 shows a detail, perspective view, partly in section, of part of the ejecting mechanism.

Our machine has been devised particularly for the purpose of ejecting a sheet of paper adapted to serve as a toilet seat cover.

We believe that in many instances it is desirable to use a toilet seat cover made of paper or suitable material adapted to cover the seat of a toilet and having cut from its central portion a flap or tongue so shaped as to leave a suitable opening substantially the same size as the opening in the toilet seat, and adapted to hang down on the inside of the bowl in the forward portion of the opening.

We have found that it is desirable to dispense such covers one at a time. We have also found that on account of the large size of the open sheets it is desirable to fold

the sheets for storage and transportation, and for placing them in a dispensing apparatus.

By folding the sheets the dispensing apparatus may be made of such size and shape as to be conveniently placed near the toilet seat.

We have found considerable difficulty in devising a suitable container and machine adapted to dispense these folded sheets one at a time, and accurately without interfering with the sheets remaining in the container.

We have found it extremely difficult to hang the sheets with the tongue down in any container and remove them one at a time from the container.

It is obvious that in order for the container to hang up on the wall or the like, the sheets should be flat in packets or bundles.

We have had difficulty in properly supporting these sheets in the container because of the fact that the tongue was cut from the sheets except at a small connecting portion before the sheets were placed in the container.

We believe that our present device properly solves the problem for providing a container and dispenser for the kind of sheets mentioned.

In the accompanying drawings which illustrate our invention we have shown a container comprising a back member 10. We provide a front member 11 having the side walls 12 and the upper end wall 13, adapted to slide over and receive the back member 10.

The container is designed to hang on the wall with the member 13 upwardly, and it will be seen that the container is then open at its lower end.

The toilet seat covers comprise, in each case, a single sheet of paper. One of said sheets is indicated as at 14, in full lines and dotted lines in Figure 3.

For convenience in storage and transportation and in reducing the size of the container and dispenser the sheet 14 is folded along the vertical median line.

Each cover 14 has cut therefrom a tongue connected at its smaller end with the body of the sheet, and of such size and shape that when the cover is placed on the seat

the tongue will drop downwardly and leave an opening in the cover conforming in size and shape to the opening in the seat.

When the sheet forming the cover is folded as is hereinbefore described, it will be seen that it will be cut through both thicknesses along the line 15^a, leaving a loose tongue.

A series of the folded sheets are superposed one upon the other as shown for instance in Figure 2, and it will be seen that the loose ends of the tongues are on the upper side.

We have found it extremely difficult to hang the sheets with the loose ends down and then dispense the sheets or covers one at a time. We therefore arrange to hang the sheets in the container with the loose ends of the tongues upward.

We provide in the upper ends of the sheets holes 16 and near the top of the container on the inside thereof is a pin or the like 17 projecting from the back member 10 and extended through the holes 16.

There is then involved the problem of supporting the upper ends of the tongues 15 so that they will not drop downwardly and so that the sheets may be pulled from the open bottom end of the container one at a time in such manner that the upper portions of the sheets above the tongues 15 will slide freely and easily over the upper ends of the tongues 15 of the sheets remaining in the container.

For accomplishing this purpose we have provided in the upper ends of the sheets 15 holes 18 which receive a pin 19 projecting from the back member 10 and supporting the upper ends of said tongues close to the edges thereof.

In addition to the means for holding the upper ends of the tongues in such a manner that one sheet may be withdrawn from the container without interfering with the other sheets, some guide is necessary for guiding that portion of the sheet to be removed which stands above the upper ends of the tongues 15 over such upper ends.

For this purpose we have provided a strip 20 secured to the back member 10 at a point above the pin 19 as shown in Figure 4. Which strip is of resilient material and is inclined downwardly and forwardly to position resting in front of the forward end of the pin 19 as shown in said figure.

It will be seen that when the top sheet is pulled from the open end of the container, the tongue 15 will be torn from the pin 19, and that this will affect only the sheet being withdrawn. The upper portion of the same sheet will slide freely over the pin 19 so that the one sheet may be easily removed without interfering with the other sheets, and without being interfered with by the other sheets.

We have found that a spring device such as the member 20 when used alone and without the pin 19 will hold the tongues 15 in their proper positions under ordinary circumstances, but when one sheet is pulled from the container the top tongue 15 is liable to pull with it the next lower tongue 15, until the tongues have been badly tangled and torn.

We have therefore found it necessary to employ the pin 19.

It will be understood that the pins 19 and 17 are located quite close to the upper ends of the tongues 15 and sheets 14 respectively so that the tongues and sheets may be readily torn from the pins. For forcing one sheet at a time from the container we have provided the following means.

Slidably mounted in the upper end member 13 is a bar 21 which projects upwardly from the container and has on its upper end a head 22. The bar 21 is mounted on the inside of the container on the front wall 11, by means of bearings 23 which are secured to the member 11 by means of screw bolts 24.

Secured to the inner end of the bar 21 in a suitable slot 25 therein is a flat spring element 26 held to the bar 21 by means of rivets or the like 27 and projecting toward the open end of the container.

Between its ends the spring element 26 has a curved portion 28 curved forwardly toward the member 11 and preferably slidably resting against said member, as shown in Figure 2.

Secured to the lower end of the spring element 26 is a cross bar 29, on the lower side of which is a half round or semi-cylindrical member 30 having its flat face secured to the cross bar 29.

The rounded surface of the member 30 is covered with some abrasive material, such for instance as emery dust 31 held on by glue or the like.

The ends of the cross bar 29 terminate in laterally projecting spindles 32. Each spindle 32 is provided with a roller 32^a. Secured to the inner surfaces of the side wall members 12 are supporting plates 33. Extending inwardly from each supporting plate 33 is a curved guide strip 34, each having the shape of a front opening wide-mouthed U terminating in the vertical extensions 35 arranged substantially in alignment with each other.

Just forwardly from the member 34 and in front of the U-shaped portion thereof there is secured to each plate 33 a flat strip 36, the lower end of which is resilient and stands adjacent to the upper end of the lower extension 35. The strips 36 project into the container as shown in Figure 5.

The upper end of the strip 36 is curved

slightly upwardly and forwardly, as at 37. In the practical use of our dispensing device the resiliency of the member 26 and the arrangement of the curved portion 28 thereof is such as to tend to force the member 30 against the upper end of the front sheet 14.

The member 30 is held against such tendency by the upper extensions 35 of the guide members 34.

In the dispensing of a sheet 14 the operator presses the head 22 downwardly whereupon the spindles 32 will follow the guide members 34 permitting the rough faced member 30 to engage the top sheet 14 and slide said sheet downwardly in the container until the lower end of said sheet projects from the open end of the container.

After the downward stroke of the bar 21 is completed it will be seen that the spindles 32 will force the lower end of the member 36 away from the member 34 until the spindles pass the member 36.

Mounted on the bar 21 between the lower bearing 23 and the upper bearing 23 is a coil spring 38, the upper end of which is secured as at 39 to the bar 21.

After the downward stroke of the bar 21 has been completed and the pressure on the head 22 is released the spring 38 will force the bar 21 upwardly to its original position.

During the upper travel of the bar 21 and the parts connected therewith the spindles 32 travel on the forward face of the member 36, which hold the member 30 free from engagement with the paper sheets in the container.

The operator may then grasp the projecting end of the sheet of paper which has been torn free from the pins and partially forced from the container, and pull such sheet entirely out of the container.

The sheet will slide freely over the pin 19 and may be easily removed from the container and unfolded from its full line position to its dotted line position as shown in the drawings with the tongue hanging downwardly near the forward portion of the hole in the seat.

The advantages of such a container and dispenser as that herein described may be largely seen and understood from the foregoing description.

Some changes may be made in the construction and arrangement of the various parts of our device without departing from the real spirit and purpose of our invention, and it is our intention to cover by our claims any modified forms of structure or use of mechanical equivalents, which may be reasonably included within their scope.

We claim as our invention:

1. In a device of the class described a hollow container designed for containing

and dispensing sheets of paper, each having a tongue cut therefrom and attached thereto at one end, said container being designed to hold the sheets, and being provided with an open lower end, projecting pins on the inside of said container upon which such sheets and tongues are adapted to be held, with the pins extended through suitable openings therein, a curved guide element arranged above the pin which supports the tongues and inclined toward the open end of said container.

2. In a device of the class described a hollow container designed for containing and dispensing sheets of paper, each having a tongue cut therefrom and attached thereto at one end, said container being designed to hold the sheets and being provided with an open lower end, projecting pins on the inside of said container upon which such sheets and tongues are adapted to be held, with the pins projected through holes therein, a guide element arranged above the pin, and inclined toward the free end of said container, and means for forcing the end of one sheet of a pad of such paper from the open end of said container at a time.

3. In a device of the class described, the combination of a pad of sheets of paper, each having a tongue cut therefrom, and attached thereto at one end, and being provided with holes near the edges of the sheet and tongue respectively, with a support designed to hold the sheets, pins on the support, projected through said holes and upon which such sheets and tongues are supported, a guide element arranged on said support, extending from position on one side of the pad of sheets, through the pad where the tongues are cut therefrom, to position covering the end of the pin provided for the tongues.

4. In a device of the class described, the combination of a pad of sheets of paper, each having a tongue cut therefrom, and attached thereto at one end, and being provided with holes near the edges of the sheet and tongue respectively, with a support designed to hold the sheets, pins on the support, projected through said holes and upon which such sheets and tongues are supported, a guide element arranged on said support, extending through the pad of sheets where the tongues are separated therefrom, to position covering the end of the pin provided for the tongues, and manually operable means for successively tearing one sheet at a time free from said pins.

5. In a device of the class described, the combination of a pad of sheets of paper, each having a tongue cut therefrom and attached thereto at one end, folded on a line extending through the tongue, and provided with holes near the upper ends of the sheets

and tongues spaced laterally from each other, with a support, designed to hold the sheets, pins on said support projected through said holes for supporting the sheets and tongues, a guide element on the support inclined through the pad of sheets where the tongues are separated therefrom to position to cover the pin provided for the tongues, and means for moving the topmost one of the pad of sheets for pulling it and tearing it from the pins, the parts being so arranged that the line of draft on the sheet proper is not across the line on which the tongue is cut.

15 6. In a device of the class described, the combination of a support, having spaced front and back walls, a pad of sheets of paper having holes therein, a pin projecting from one of said walls through said holes for supporting said pad, a reciprocating sheet ejecting device, means comprising a spring member arranged to bear against the other wall of the support for pressing said device toward the pad of sheets, and

25 means for holding the ejecting device spaced from the pad of sheets during its stroke in one direction.

7. In a device of the class described, a container and support having a top end wall and front and back walls, a pad of sheets of paper having holes therein, a pin projecting from one of said walls through said holes for supporting the pad of sheets, a reciprocating sheet ejecting device comprising a member slidably mounted in the end wall of said support, a spring member connected with said last member and slidably engaging another wall of said support, a paper engaging device mounted on said spring member, said spring member being adapted to yieldingly press said paper engaging device toward the pad of sheets, means for holding the paper engaging device away from the pad of sheets when said last-named device is at the ends of its stroke, said means being adapted to permit the paper engaging device to engage the paper during its stroke in one direction, and means for holding the paper engaging device away from the paper during its stroke in another direction.

Des Moines, Iowa, June 8th, 1921.

HANS C. PFUND.
ROYAL L. ASH.