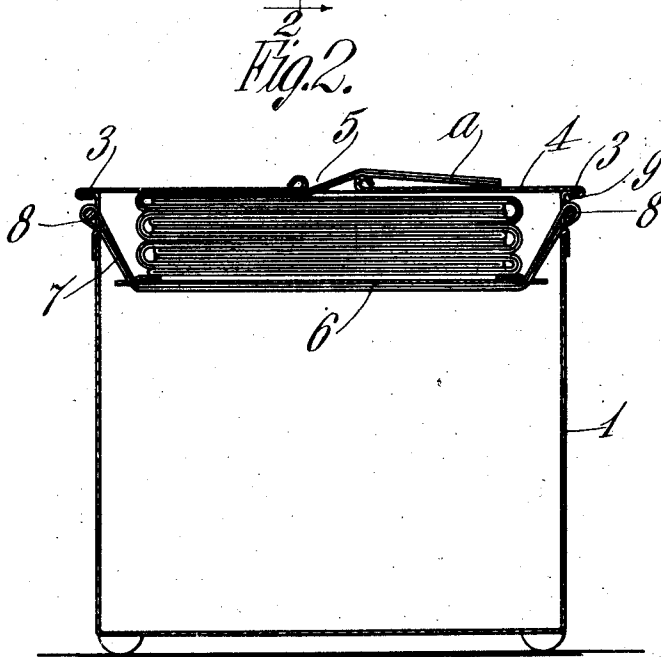
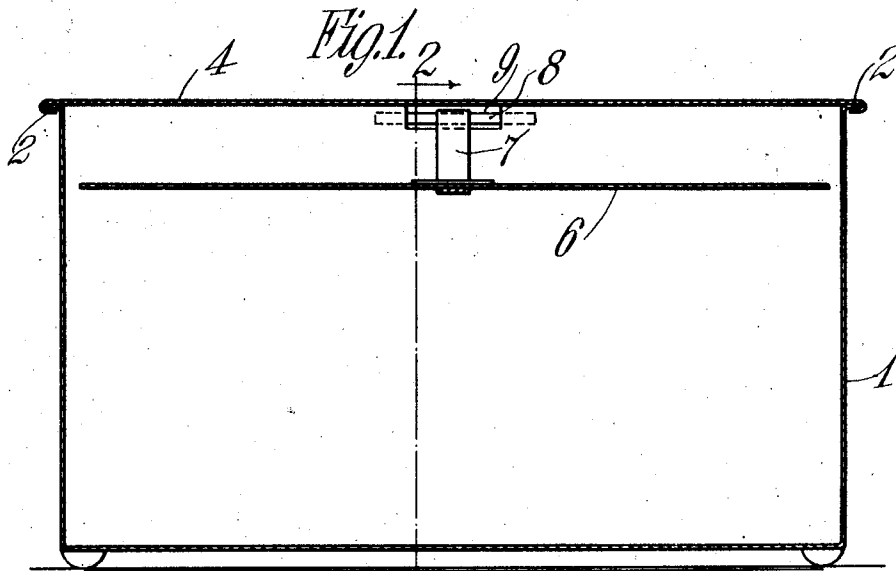


W. McCORKINDALE.
DISPENSING APPARATUS.
APPLICATION FILED SEPT. 7, 1915.

1,218,196.

Patented Mar. 6, 1917.



WITNESS.

H. E. Kirtwell.

INVENTOR.

William McCorkindale.

BY

Chapman & Neal

ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM McCORKINDALE, OF HOLYOKE, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO KRAIG J. YOERG, OF HOLYOKE, MASSACHUSETTS, AND ONE-HALF TO HOLYOKE PAPER PRODUCTS COMPANY, OF HOLYOKE, MASSACHUSETTS, A CORPORATION OF MASSACHUSETTS.

DISPENSING APPARATUS.

1,218,196.

Specification of Letters Patent.

Patented Mar. 6, 1917.

Application filed September 7, 1915. Serial No. 49,407.

To all whom it may concern:

Be it known that I, WILLIAM McCORKINDALE, a citizen of the United States of America, residing in the city of Holyoke, county of Hampden, and State of Massachusetts, have invented certain new and useful Improvements in Dispensing Apparatus, of which the following is a specification.

This invention relates to improved dispensing apparatus wherefrom various kinds of sheet material, such as paper towels and napkins, for example, may be dispensed in a sanitary manner.

An object of the invention is to provide an improved dispensing apparatus, characterized by extreme simplicity in structure and low cost of manufacture, wherein the parts are readily and conveniently accessible.

Another object of the invention is to provide in a dispensing apparatus for sheet material an improved arrangement for feeding the material toward the outlet of the dispenser, which arrangement permits substantially the entire capacity of the dispenser to be utilized for the sheet material to be dispensed.

With these and other objects in view, as will later appear, a single embodiment of the invention is shown, for the purposes of illustration, in the accompanying drawings, in which—

Figure 1 is a longitudinal sectional view of the dispensing apparatus, wherein the towel package is shown as removed in order to reveal structure therebehind, and

Fig. 2 is a cross sectional view thereof taken on the line 2—2 of Fig. 1 and looking in the direction of the arrows.

Referring to these drawings in detail:—1 represents a container, which, structurally, is simply a box open at the top. The upper edges of the box, however, are bent outwardly at right angles to the sides to form end flanges 2 and side flanges 3 as clearly shown in the figures. Slidably mounted on the flanges 2 are a pair of cover plates 4, which each have two edges inwardly turned to engage the flanges 2 and a third inwardly turned to engage a flange 3. The covers 4 are movable toward one another and this

movement is limited by the flanges 3 in such a manner that an outlet 5 is formed between the covers for the otherwise closed container 1. The adjacent edges of the covers 4 are suitably rounded as shown so that no sharp edges are presented to the towel as it is pulled from the outlet in a manner to be described.

Within the container is a vertically movable supporting plate 6 for the towel package and this plate is supported upon a suitable elastic member 7 which in turn is suspended from the sides of the container near the top thereof by pins 8. The pins lie without the container 1 and the member 7 extends, through suitable openings 9 in the sides of the container entirely across the latter to connect the pins, as shown. Although the member 7 may extend entirely across the plate 6 for convenience, as shown, it is not essential that it be so arranged, as, obviously, the same action could be obtained with the use of two elastic members connected one on either side to the edges of plate 6 or its equivalent. The flanges 3 serve to prevent upward movement or removal of the pins 8 and the latter are otherwise held in position against the sides of the container by the action of the elastic member itself. The member 7 may be of any suitable elastic material, for example, an endless rubber band may be used as it is satisfactory and readily obtainable. The essential feature incident to the use of the elastic element is that, since the latter is suspended from the top of the container, and is arranged to pull the plate 6 upwardly, substantially the entire capacity of the container is available to receive the towels, as distinguished from the known operation of the plate by pushing upwardly thereon by springs which necessarily precludes the utilization of the entire container for towels, since the springs, when compressed, occupy an appreciable amount of space.

The towels, napkins or other sheet material used with this container, are preferably formed into an "interfolded" package. Each unit to be dispensed may comprise several superimposed sheets or a single

large sheet folded to a proper size to fit within the container. It is desirable, however, that each unit of the package be folded once upon itself since the several units are to be successively connected one to the other by interfolding. By the latter term is meant the positioning within the folds of one unit of the package, the adjacent leaves of the units on either side thereof, so that the several parts of the package are interconnected. When the package, thus assembled, is placed in the container, a portion of one fold of the uppermost unit *a* thereof is brought through the outlet 5 and, when this portion is substantially pulled, it not only removes the top unit *a* but guides a portion of the succeeding unit through the outlet, so that a portion of one unit of the package always lies outside the container.

When access to the container is desired for filling or other purposes, the covers 4 may be moved along their guiding flanges 2 until a sufficient opening is obtained or they may be entirely removed. A new package may then be placed upon plate 6 or readily combined with what is left of a previously inserted package and the plate with the package pushed downwardly into the container to permit the covers 4 to be moved back in the positions shown. When a new elastic member 7 is required, the plate 6 is first lifted out and then the pins 8 may be easily removed by distending the band 7 sufficiently to permit the pins to pass the flanges 3. The pins may then be passed between the band and the whole quickly and conveniently replaced in the container.

It will, therefore, be seen that simplicity is the keynote of the entire structure. The parts are few in number, each of the simplest character and in the entire apparatus there is little to get out of order. The one element in the form shown which will wear out the quickest, is the elastic member 7 and this part is inexpensive and may readily be replaced by anyone. Aside from its simplicity and resultant low cost of manufacture, the apparatus provides an efficient means for serving sheet material such as towels, napkins and the like. It requires nothing for its operation but a pull on the protruding end of the sheet, which is an instinctive operation on the part of the operator. Moreover, by the improved suspension of the package by elastic members from the top of the container the entire space therein is available to receive the articles to be dispensed.

It is recognized that various modifications may be made in the specific structure heretofore described for illustrative purposes without departing from the scope of the invention which is pointed out in the appended claims.

What I claim is:

1. A dispensing apparatus, comprising, a box provided with a horizontal flange around the open end thereof, a two part cover for the box having slots to engage said flange and adapted to slide into open or closed position, said cover being constructed to leave an open slot between adjacent edges when in closed position, a plate arranged to enter the box and adapted to support the package to be dispensed, an elastic member arranged to underlie and support said plate and means to support said member from opposite sides of the box near the top thereof, all constructed and arranged so that the elastic member forces the package upwardly against said cover.

2. A dispensing apparatus, comprising, a box open at the top and provided with horizontal flanges around the sides and ends thereof adjacent the open top, a plate within the box adapted to support a package of towels, elastic means suspended from the top of said box on either side thereof and engageable with said plate, whereby the latter may be constantly pulled upwardly, two cover members each having slots to engage said end flanges to slide into open or closed position, and another slot formed on each cover member adapted to engage with one of said side flanges to limit the inward movement of the covers, so that a delivery slot for the towels is left between the covers when in closed position.

3. A serving apparatus for sheet material, comprising, a container open at the top and arranged to receive and be substantially filled by said material in package form, covering means removably secured to said container to close the top thereof except for a central longitudinal outlet opening, through which a portion of the uppermost sheet protrudes, said sheets being interfolded one with another whereby, when one thereof is withdrawn through said outlet, a portion of the succeeding sheet is led therethrough, and resilient means to force said package against the under side of said covering means, said resilient means comprising an elastic band supported from and extending between the sides of said container transversely with respect to said opening, said band having a tendency to lie closely adjacent the under side of said covering means in parallel relation therewith and arranged to be stretched by the insertion of a package between the band and said covering means to lie contiguous with the bottom of the container, all constructed and arranged so that the entire space in the container may be utilized for the package.

4. A dispensing apparatus comprising a box provided with a horizontal flange around the open end thereof and with rela-

tively small open ended vertical slots extending through the flange one from the upper edges of two opposite side faces of the box, a plate arranged to enter the box, two
5 pins arranged to lie horizontally under said flange, an elastic supporting member arranged to underlie said plate and to hold said pins so that each spans one of said slots, and a two part cover for the box having slots to engage said flange to slide into open 10 and closed position, said cover being constructed to leave an open slot between adjacent edges when in closed position.

WILLIAM McCORKINDALE.