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PAPER PACKAGE

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Fig. 1.

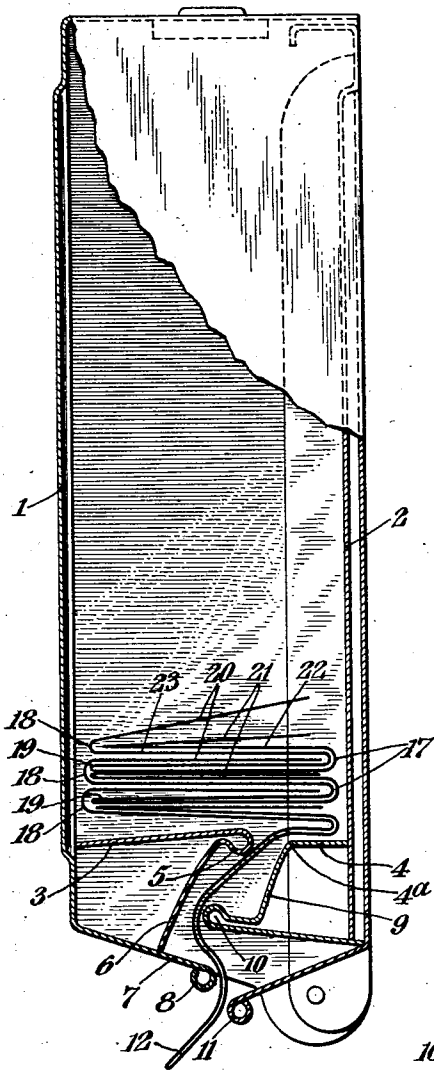


Fig. 2.

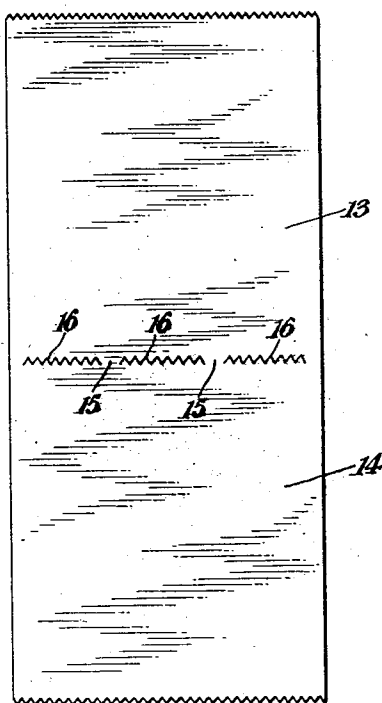


Fig. 4.

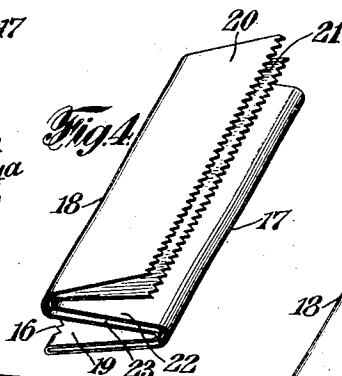


Fig. 5.

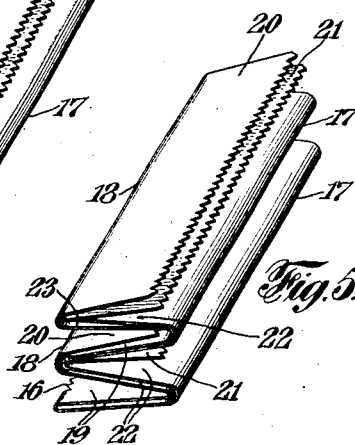
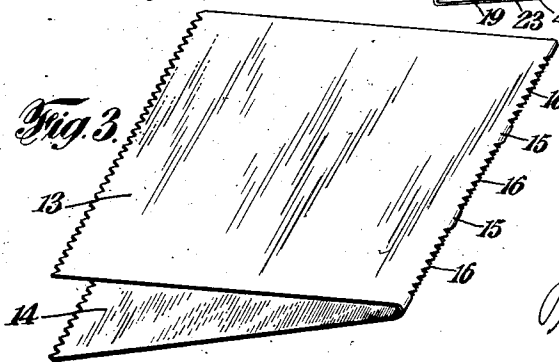


Fig. 3.



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PAPER PACKAGE.

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The object of my invention has been to provide an improved package of interfolded sheets of paper, such as are used in receptacles for delivering paper towels or toilet paper, one unit at a time, which package shall combine the advantages of one whose units are a single sheet of single thickness paper, with one whose units are a doubled sheet, consisting of two thicknesses of paper, and to such ends my invention consists of the paper package hereinafter specified.

More particularly, my invention relates to a paper package which is adapted for use in a receptacle that prevents access to the contents as a whole, but which permits the user to obtain one unit at a time of paper suitable for paper towels or toilet paper, it being intended that the withdrawal of the lowermost unit shall draw the next succeeding unit into a position where it, in its turn, can be grasped.

Prior to my invention, such packages have been made in either one of two ways, each of which has certain disadvantages. First, such packages have been made of units consisting of a single sheet of a single thickness of paper. Such a package has the advantage of economy, in that the units comprise only the amount of paper actually desired for use. This economy, however, is accompanied by certain inconveniences. For instance, the unit presents an edge for the user to take hold of in drawing it from the cabinet, which edge consists of only a single thickness of paper. Hence, when the user is washing his hands and takes hold of the unit with his wet fingers, the portion of the unit taken hold of will often tear away without withdrawing the unit from the cabinet. Again, where such a package comprises units consisting of but a single sheet of paper of a single thickness, the unit, being withdrawn, necessarily has a limited and uncertain contact with the next succeeding unit, so that it is not at all certain that the latter unit will, by the withdrawal of the first-mentioned unit, be drawn into position where the user can grasp it. Furthermore, with a package of such units, the unit being withdrawn only contacts with the next succeeding unit upon one side of the free edge of the latter, so that such free edge frequently becomes bent away from the unit being withdrawn, and curls or crumples up within the receptacle

and does not come into position where the user can get hold of it. Second, such packages have been formed of units consisting of a doubled sheet of two thicknesses of paper. But the latter form of units have been usable only as a whole, which involved the use of twice the amount of paper frequently desired. For instance even with such doubled units it has been customary to direct the user to blot and not rub with the paper towel. This has been because the grain, or line of greatest weakness, so to speak, of the paper commonly used for this purpose, runs all in one direction; and the paper which has to be loose and soft in its texture to have absorbency enough to act as a towel, will, when wet, split or part along the grain if rubbed transversely to the grain. But in my invention the unit can be separated into two sheets, one of which can be placed with its grain crosswise upon the other, and, thus a towel can be formed having grain in two directions at right angles to each other, and with which the user may rub in the usual and natural way and need not confine himself to a mere blotting process.

My invention possesses the economy of the single sheet form of unit, while overcoming its said disadvantages, and also possesses all the advantages of said second form of unit and gives it marked additional advantage.

In the accompanying drawings:

Figure 1 is a vertical sectional view of a cabinet containing a paper package embodying my invention, and so constructed as to permit access to the lowermost unit, while preventing access to the rest of the package;

Fig. 2 is a plan view of the form of unit of which my package is comprised;

Fig. 3 is a perspective view of such a unit folded on its median line to form a doubled unit;

Fig. 4 is a perspective view of the unit shown in Fig. 3, the doubled unit being bent upon two other folds parallel to the median fold, into the form which it has in the assembled paper package; and

Fig. 5 is a perspective view of two of the units, as shown in Fig. 3, interfolded and engaged to form a portion of the completed package.

The cabinet illustrated in the drawings comprises a front 1 and back 2, one of which may be hinged to permit the package of in-

terfolded units to be placed in the cabinet. The cabinet has a bottom consisting of sections 3 and 4, the section 3 being preferably at a higher level than the section 4. The section 3 has a preferably rounded edge 5, and an apron 6, which extends to, or is connected with, a mouth-section 7 having a lip or shoulder 8. The bottom section 4 also has an apron 9 depending therefrom, which is preferably bent up to form a shoulder 10. There is also a lip or shoulder 11 opposite the lip or shoulder 8, the two lips or shoulders being separated to form a mouth or opening through which a portion 12 of the lowermost unit of the paper package may project in position for the user to take hold of. The package and cabinet are so constructed that the withdrawal of one unit from the mouth of the cabinet will always bring a new unit into position where it can be taken hold of by the user.

My new units consist, as shown in Figs. 2 to 5, of two sheets 13 and 14, preferably of the same size, which are secured to each other, as by strips or connections 15, the said sheets being unconnected or severed or weakened between the said strips, as by the zig-zag scores or cuts 16.

My said units may be most conveniently formed in one piece from a long strip of paper by cutting it into lengths equal to the sum of the lengths of the sheets 13 and 14 and forming the scores or cuts 16, leaving the unsevered connections 15 between said scores or cuts.

My said units may be formed in any manner so long as they consist of two sheets 13 and 14, which are sufficiently connected so as to operate in a cabinet as a single unit, and yet are sufficiently severed or weakened so as to be readily broken apart for separate use.

The unit illustrated in Fig. 2 is folded upon the median line to the position shown in Fig. 3, and the doubled unit thus formed is again folded on two or more lines 17 and 18, which are parallel to the median fold, so that the final form of the unit is that shown in Fig. 4. The unit thus formed may be said to consist of a doubled edge 19, formed by the median fold, and of free leaves 20 and 21, which are connected to the leaves that are next to those that form the median fold, by intermediate leaves 22 and 23. My said units are assembled into a package, as shown in Fig. 5, by placing the doubled edge 19 of each unit in between the free leaves 20 and 21 of the unit below. It will be observed that, in this relation, the doubled edge 19 of each unit is, so to speak, grasped on each side by the free leaves of the next unit below in much the same way as the doubled edge of the lowermost unit is grasped between the thumb and forefinger of the user. Thus, when the lower-

most unit is withdrawn from the cabinet, the next unit above is pulled along with much greater certainty than would be the case if the contact between them were only on one side of the doubled edge. Also, the doubled edge of the unit above the lowermost unit, being enclosed between the free leaves of the latter unit, is prevented from any possible engagement with any part of the cabinet which might cause it to crumple up or turn back. Consequently, the unit following the lowermost unit is always brought down, with certainty, to the desired position in which it is within the grasp of the user. Furthermore my unit possesses the very marked advantage of being readily separable into two sheets, so that one of them can be crossed relative to the other, thus affording a towel having grain extending in two directions perpendicular to each other and giving it a strength which will permit it to be safely used for rubbing the hands as one would use a cloth towel, instead of being confined to a mere blotting operation, which is ineffective and irritating to the user.

It will be observed that in the cabinet, which I have described, and which is the subject of a separate application for patent, the engaged portions of the lowermost unit and the one next above it follow a sinuous path between the shoulder 4^a at the front edge of the bottom section 4, and the shoulders 5, 10, 8 and 11, and thus the free leaves of the lowermost section are at several points, being pressed against the doubled portion of the section next above, so that the grip of the said leaves on the said section is firm and sure.

It will thus be seen that my said paper package, composed of the described units, combines the advantages of packages of both previous types of units, and substantially without any of the disadvantages of either of said types. Thus, my said unit can be readily separated into single sheets when it is so desired, and, yet, can as readily be used as a doubled sheet or unit. It presents the advantage of the doubled edge to resist tearing when wet; and each unit, as it is withdrawn from the receptacles, brings the next unit, with certainty and smoothness, into position to be grasped. The following unit is prevented from becoming crumpled or curled up in the receptacle where it cannot be reached.

The receptacle herein described is not claimed herein, but is the subject of a separate application for patent.

I claim:

1. A package for towel or toilet purposes adapted for dispensing in a cabinet, composed of sheets or units doubled on a median line, said doubled sheet being partly severed along said median line, that portion of the

sheet adjacent to the median line being interleaved between the free leaves of the next unit.

2. A package for towel or toilet purposes adapted for dispensing in a cabinet, consisting of sheets or units doubled on a median line, said doubled sheet being partly severed along said median line, said doubled sheet being also folded on two separated lines parallel to the median line, said last mentioned folds being in opposite directions, the doubled portion of each unit being between the free leaves of the next unit below.

In testimony that I claim the foregoing, I have hereunto set my hand this 15th day of January, 1927.

WILLIAM FAIRCHILD