Sept. 19, 1933. W. B. POWELL 1,927,324

CONTAINER FOR FOLDED PAPER SHEETS

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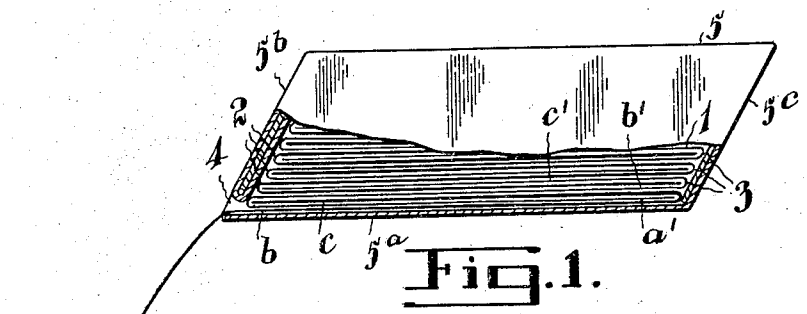


Fig. 1.

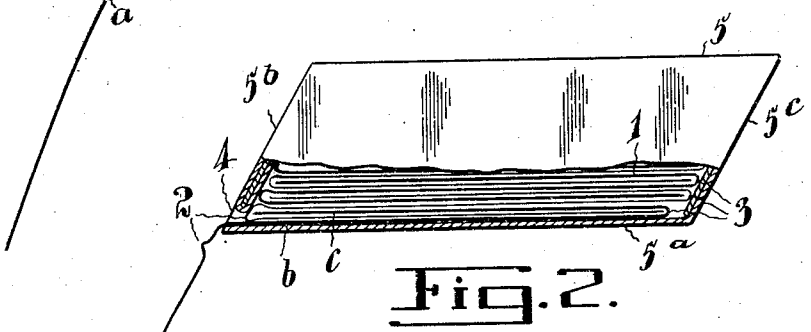


Fig. 2.

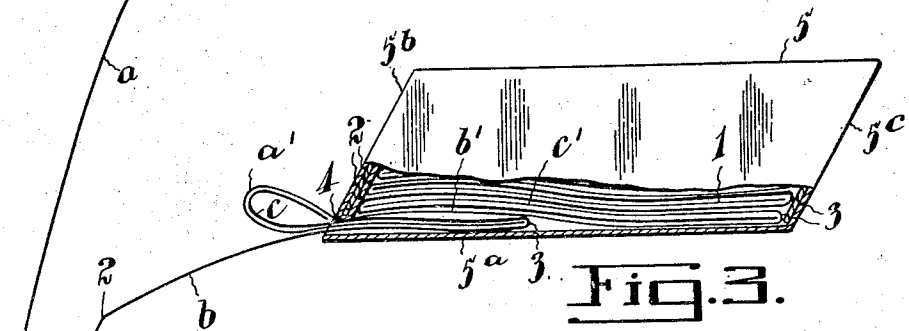


Fig. 3.

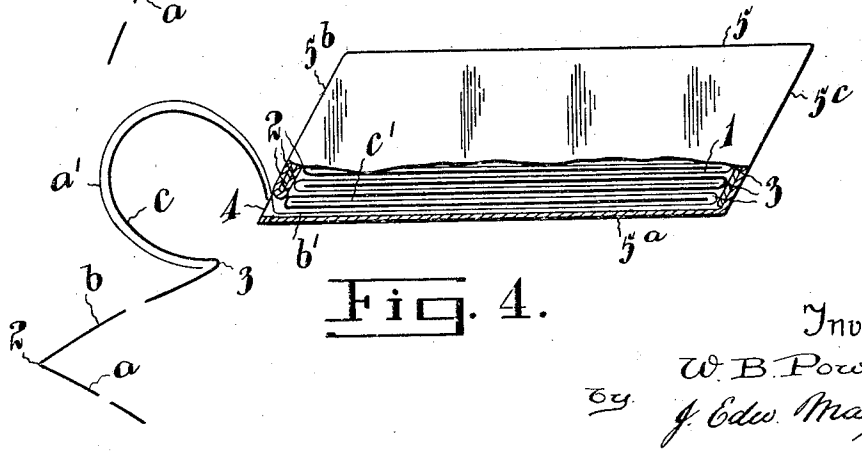


Fig. 4.

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CONTAINER FOR FOLDED PAPER SHEETS

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3 Claims. (Cl. 206—57)

This invention relates to containers for paper napkins and the like and particularly of the type in which the napkins are interfolded in a bank whereby the withdrawal of the lowermost napkin will pull out the flap of the napkin interfolded therewith. Heretofore the vertical cross sectional contour of the bank of napkins and of the container has been rectangular and thus the folds were piled one above the other whereby the lowermost folded edge adjacent the discharge opening of the container in the next to lowermost napkin had to overcome the pressure of the superincumbent napkins before its flap could be pulled out by the withdrawal of the lowermost napkin. The said lowermost fold was thus hindered in its passage through the discharge opening which sometimes resulted in its being left within the container and othertimes resulted not only in its being damaged during its withdrawal but also caused the lowermost napkin to be torn during its removal.

The object of the present invention is to provide an arrangement of napkins and container which will overcome the above objectionable features.

I attain my object by providing a bank of napkins having Z shaped folds interlocked with one another, feathering the napkins of the bank, and making the container of suitable shape to maintain the folds in echelon as the napkins are withdrawn and thus relieve the lowermost folds at the front of the weight of the superincumbent napkins.

The constructions are hereinafter more fully described and are illustrated in the accompanying drawing in which

Fig. 1 is an end elevation, partly in cross-section, of a container showing the normal position of the napkins therein;

Fig. 2 is a similar view showing the lowermost napkin being withdrawn and the lowermost fold at the front side of the bank starting its discharge movement during the pulling out of the flap attached thereto; and

Figs. 3 and 4 similar views showing further progressive steps of the pulling out movement of the flap during the withdrawal of the lowermost napkin.

In the drawing like numerals of reference indicate corresponding parts in the different figures.

1 is a bank of paper napkins each of which is folded at 2 and 3 into a Z form or shape comprising the flaps a and c and the connecting fold b. The flap c of the lowermost napkin is interlocked with the flap a^1 and fold b^1 of the next to the lowermost napkin and the flap c^1 of this napkin is interlocked with the third napkin from the bottom of the bank and so on. The flap a of the lowermost napkin extends through a discharge opening 4 formed adjacent the corner between the bottom 5^a and front side 5^b of a container 5.

To facilitate the withdrawal of the said flap a^1 (in the next to lowermost napkin) through the opening 4 during the withdrawal of the lowermost napkin, I feather the napkins so that their folds 2, 3 will be arranged in echelon and shape the container 5 so that this echelon formation of the folds will be maintained. The folds 2 at the front of the bank of napkins are thus progressively set back from one another to relieve them of the weight of the superincumbent napkins. This results in the fold 2 in the next to lowermost napkin having room for expansion into a small loop (see Fig. 2) caused by the longitudinal movement of the flap c and fold b of the lowermost napkin during its withdrawal by a pull on the flap a. As the fold 3 is drawn towards the opening 4 the loop rolls therethrough and is subsequently increased in size (see Figs. 3 and 4) until the flap c of the lowermost napkin and the flap a^1 of the next napkin are entirely through the opening. The flap a^1 of the napkin which was next to lowermost is now conditioned for withdrawing this napkin which is now at the bottom of the bank.

The front side 5^b of the container 5 is inclined at an angle less than a right angle to the bottom 5^a to retain the echelon formation of the folds 2 during the withdrawal of the napkins, one by one, from the bottom of the bank. The rear side 5^c of the container is similarly inclined to feed the bank forwardly as it drops by gravity as each napkin is withdrawn.

It is obvious, of course, that while the invention is described as applicable to paper table napkins it is equally applicable to the dispensing of towels and other folded sheets of all kinds, the only change needed being in size and proportions.

What I claim as my invention is:

1. A package of paper sheets comprising a rhomboidal container having a horizontal bottom and a discharge opening at one end of said bottom; and a bank of interfolded paper sheets having their folds arranged at an acute angle within the container, the side of the latter adjacent the opening being adapted to maintain the said acute angular formation of the folds to remove the pressure of the superincumbent sheets from the lowermost fold adjacent the opening.

2. A package of paper sheets comprising a rhomboidal container having a horizontal bottom and a discharge opening at one end of said bottom; and a bank of sheets having Z shaped folds interlocked with one another and having their folds arranged at an acute angle within the container, the side of the latter adjacent the opening being adapted to maintain the said acute angular formation of the folds to remove the pressure of the superincumbent sheets from the lowermost fold adjacent the opening.

3. A container including a horizontal bottom; a front and back substantially parallel, and having the front inclined to the bottom, the angle between the said bottom and front being less than a right angle; and a feathered bank of interfolded paper sheets, the container being provided with a discharge opening at the angle between the front and bottom through which the sheets may be drawn one by one.

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