

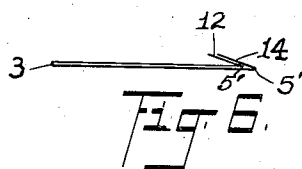
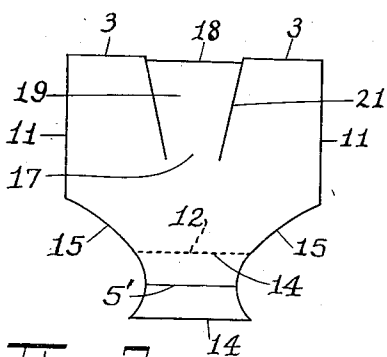
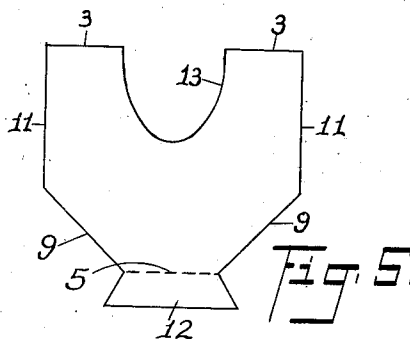
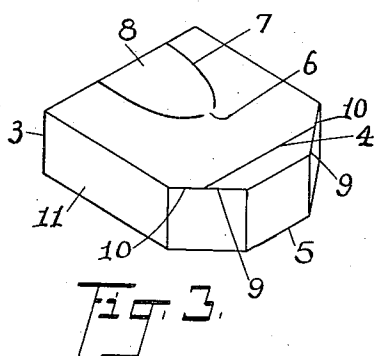
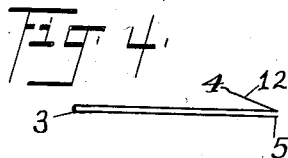
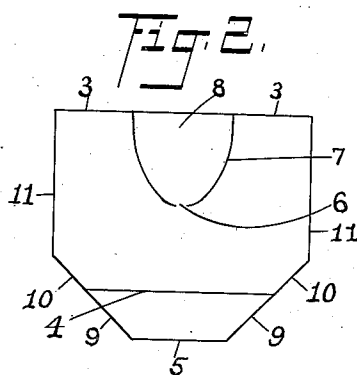
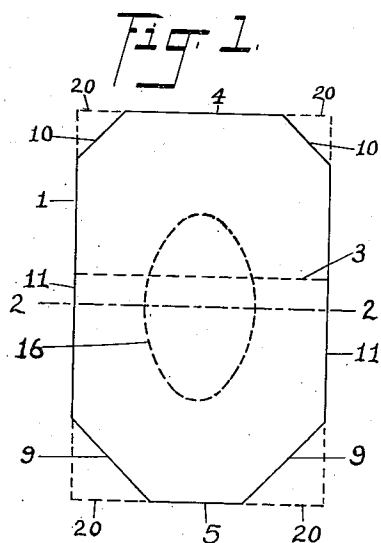
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P. F. REA

2,266,990

SANITARY TOILET SEAT COVER

Filed Sept. 29, 1939



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UNITED STATES PATENT OFFICE

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SANITARY TOILET SEAT COVER

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Application September 29, 1939, Serial No. 297,077

9 Claims. (Cl. 93—1)

My invention relates to improvements in sanitary toilet seat covers and its features are more especially pointed out in the annexed claims.

The purpose of my invention is to secure great economies of production that are not specifically concerned with any one or many forms or shapes of cutting that are conventionally used in this art; that it is basically related to the prefolding of papers for toilet seat covers and cutting the folded sheets into whatever type or shapes or cuts that are desired after the sheets have been folded whether done singly or grouped in small or in larger quantities; that may stack one folded sheet adjacent another in a pack for subsequent use; and that makes my prefolded sheets available for any specific form of container or cabinet in which the papers are stored adjacent a toilet seat.

With these and other ends in view I illustrate in the accompanying drawing such an instance of adaptation as will disclose the broad features of the invention without limiting myself to the specific details shown thereon and described herein.

Fig. 1 is a diagrammatic plan view of a sheet of paper in its unfolded state, showing in dotted lines its relation to a toilet seat, and the rectangular shape of a sheet before cutting.

Fig. 2 is a similar plan view of the sheet shown in Fig. 1 in its folded state, the fold occurring at one side of the median line between the extreme ends of the sheet so that the end of the folded over portion will terminate in spaced apart relation to the end of the under portion.

Fig. 3 is a diagrammatic semi-perspective view showing a group of cut folded sheets in stacked relation ready for banding and use.

Fig. 4 is a diagrammatic edge view showing a modified finger tip extra fold at one end.

Fig. 5 is a diagrammatic plan view of a modified folded sheet with a central portion cut out.

Fig. 6 is a diagrammatic edge view similar to Fig. 4, showing a double finger tip fold, at the forward end of a folded sheet.

Fig. 7 is a diagrammatic plan view showing a folded sheet having a single angular fold at the forward end.

Fig. 8 is a diagrammatic edge elevation of Fig. 7.

In practicing my invention, I may use whatever alternatives or equivalents of procedure, use, structure or design, that the exigencies of varying conditions may demand without departing from the broad spirit of the invention.

As shown in Fig. 1 an approximately rec-

tangular sheet of paper 1 has an end 4 and an opposite end 5. A median dotted line 2 indicates the center between the two ends, and a dotted line 3 indicates the place on which the sheets are folded. The end 4 has diagonal corners 10 if desired, and the end 5 has similar diagonal corners 9 cut at the same angle or contour. The sides 11 join the diagonal corners 9 and 10. The relation of the toilet seat to an opened sheet is shown by dotted lines 16.

The sheet shown in Fig. 1 when folded is shown in Fig. 2 wherein the fold is formed at 3. A central drop out portion 8 is shown cut all around excepting at both ends 6 of an approximate elliptical or any other shape. This uncut portion holds the portion 8 in place until the sheet is placed on a toilet seat when the narrow uncut portions 6 break away.

The folded sheets similar to those shown in Fig. 2 are stacked on top of each other as they come from the cutting dies with the sides and ends trimmed, with a different contour 7 for the central drop-out portion. This cut 7 is discontinued at 6 to also hold the central portion 8 in place prior to the time an opened sheet is to be used.

The portions 9 and 10 are the same so far as the angular relation is concerned so that when the sheet is folded as in Fig. 2, one operation of the cutting dies will shape the sides and ends, as well as the drop out portion at the same time thus reducing the cost of production and also securing a uniform product because they may be assembled in groups and the entire group is cut at the same time.

A sheet may be folded similar to Fig. 2 but with a separate finger tip portion 12 that is produced as shown in Fig. 5. In this figure the center portion 8 shown in Fig. 2 is cut out, and an opening 13 is formed. Finger tips may be folded in duplicate at 12 and 14 (Fig. 6), that is, the forward and the rear end are duplicates of each other. A further modification is shown in Fig. 7 in which the extra finger tip 14 is to be folded at 5 onto the front end as shown on Fig. 6. The portion 12 is in dotted lines on Fig. 7.

The finger tips 12 and 14 (Fig. 6) enable the user to free a folded sheet from its pack, likewise, the short end 4 being spaced apart from the end 5 (Fig. 2) will permit the insertion of a finger between the two layers of a folded sheet and serve the same purpose.

It is immaterial whether I make the sheets with one form or another of the finger tip por-

tion or one form or another of the edges and end, or one form or another of the central section.

In any of these forms the cutting is the same throughout an entire group of folded sheets. This eliminates the necessity of leaving separate dies for different portions of the same sheet as is now required and in addition compel the folding of each cut sheet by hand.

A single sheet is removed from its pack by grasping the portions 4 and 5 or the finger tip portions 12 and 14, and pulling it away from the cabinet and placing it on the toilet seat. After use it is flushed away thus serving a much needed sanitary and hygienic purpose.

It will appear obvious that my invention includes the basic idea of prefolding paper for use as sanitary toilet seat covers. This brings about an economy of production and a speed of output that has not been attained hitherto due to the slowness of hand folding, after the sheets have been cut by the forming dies. It is quite immaterial what shape is given to the sheets nor, as stated above, what contours the incisions that are made in the sheet may follow according to the teaching of many issued patents.

When the central portion of a sheet, in common practice, is partially cut so as to leave certain portions still attached to the main sheet, the after folding is a very tedious and slow operation, as it must be done by hand without taking any advantages of machine folding. With my system these difficulties are avoided by prefolding the sheets, stacking them together in a group as desired and trimming the edges of the entire group of sheets and the ends, and the center cut in any desired form simultaneously.

The sheets may be separately cut to the desired lengths transverse of a roll of paper and then folded transversely of their length or they may first be folded lengthwise of a web of paper as it is unwound from a roll and then cut to the required widths as separately folded sheets to be stacked for the final shaping.

I do not confine myself to the diagonal shape of the outside edges 9 and 10 shown in Figs. 1 and 2, nor to the curved shape 15 shown in Fig. 7. The sheet may be square as shown in dotted lines 20 on Fig. 1. The important feature of my simplified structure is that the shape, whatever form it may take, is substantially duplicated on the upper and under portions of a folded sheet.

In the structure shown in Fig. 7 the two straight cuts 21 do not terminate near each other as the curved cuts 7 of Figs. 2 and 3 do. This leaves a wider space of uncut material at 17. In this case the drop out portion 19 is severed simultaneously at 18 to form two separate duplicate parts instead of a single portion 8 as shown in Figs. 2 and 3.

The extra triangular finger-tip folds 12 and 14 may be cut at the same time the other cutting is done as in Fig. 5 or they may be cut and folded separately if this alternative expedient is desired.

Ordinarily the end 4 of the top layer of a folded sheet is spaced apart from the end 5 of the under layer, Figs. 2 and 3, to be accessible for pulling a sheet from its pack. This means that even though these ends do not terminate at the same point the cutting of both layers is in duplicate, an attainment secured through the prefolding of the paper. This, as stated above, secures unusual economies of production and also avoids large wastages when folding is done after the cutting has been performed.

What I claim is:

1. In toilet seat covers, a prefolded sheet of paper, cuts formed in duplicate contour on each side of the fold, and duplicate border edges also on each side of the fold one of the folded ends being shorter than the other.

2. The process of forming toilet seat covers which consists in prefolding a sheet of paper, in forming discontinuous incisions across the fold, and in trimming the edges and ends of the folded sheet simultaneously through both layers of the paper.

3. A prefolded toilet seat cover comprising a short section and a longer section, and a central portion cut from both sections in duplicate.

4. A prefolded toilet seat cover comprising an extra forward fold on one section adapted to form a pull-out portion, and a partially severed drop-out portion formed in duplicate across the fold.

5. A prefolded toilet seat cover comprising a sheet of paper folded approximately midway of its length, and discontinuous incisions made in duplicate across the folded edge to form a drop-out portion.

6. In toilet seat covers, a pre-folded sheet having duplicate and simultaneously formed edges, and duplicate simultaneously formed discontinuous incisions of desired shape across the folded edge.

7. The process of forming toilet seat covers which consists in prefolding a sheet of paper, in forming incisions across the fold, and in trimming the edges of the folded sheet simultaneously through both layers of the paper.

8. A prefolded toilet seat cover comprising an extra forward fold on one section adapted to form a pull-out portion, and a central portion cut from both sections in duplicate.

9. In toilet seat covers, a prefolded sheet having duplicate and simultaneously formed edges, and duplicate simultaneously formed incisions of desired shape across the folded edge.

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