DISPOSABLE OVEN LINER

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2 Claims. (Cl. 229—31)

This invention relates to a disposable oven liner and, in particular, to a disposable oven liner the size of which can be easily varied.

It is well known that during normal use, the walls and floor of an oven in a conventional stove or range become coated with hydrocarbon deposits which, at best, are difficult to remove.

There are presently commercially available various cleaning compounds intended to remove the deposits, but which must be applied to the walls and floor of the oven and left standing for a relatively lengthy period of time during which time the oven cannot be used. Furthermore, oven cleaning compounds often contain highly reactive and consequently dangerous reagents.

Various forms of oven liners have been proposed to alleviate the need for such cleaning compounds. However, most of the prior oven liners are of relatively complicated structure and are intended for use in ovens of one size.

It is, therefore, the object of the present invention to provide an inexpensive, simply constructed, disposable oven liner which is variable in size and which can be easily inserted into conventional ovens of varying sizes.

According to one aspect, the invention relates to a one-piece blank adapted to form an oven liner having a base, mutually opposed side walls and an end wall normal to and connecting said side walls, said blank comprising a relatively thin sheet of heat-reflecting material, said blank including a pair of parallel first fold lines each spaced a predetermined distance from an adjacent marginal side edge of said blank, the latter being adapted to be folded along said first fold lines to form said side walls; a second fold line normal to said first fold lines, and spaced a predetermined distance from an adjacent marginal side edge of said blank, the latter being adapted to be folded along said second fold line to form said end wall; a pair of diagonal fold lines each extending from the intersection of a said first and said second fold line to an adjacent corner of said blank, the latter being adapted to be folded along each said diagonal fold line to form a corner pleat extending parallel with a selected said wall; said base being defined by said first and said second fold lines and the remaining free marginal side edge of said blank; and at least one pair of spaced additional parallel fold lines extending across said blank, the latter being adapted to be folded along said additional fold lines to vary the area of said base.

According to another aspect, the invention relates to a disposable oven liner formed from a one-piece blank of relatively thin heat-reflecting material, said oven liner including a pair of mutually opposed side walls of variable height; an end wall, also of variable height, normal to and connecting said side walls; and a base of variable area to permit the use of the oven liner in ovens of varying sizes.

The invention will now be described in detail with reference to the accompanying drawings which show, by way of example, three embodiments of the invention, and wherein:

FIGURE 1 is a plan view of one embodiment of the one-piece blank before assembly of an oven liner;

FIGURE 2 is a plan view of a second embodiment of the carton blank before assembly; and

FIGURE 3 is a perspective view of an oven liner constructed from the blank of FIGURE 1.

Referring to the drawings, and in particular to FIGURE 1, a blank generally indicated at 1, for forming an oven liner in accordance with the present invention includes a pair of first fold lines 3 and 5 which are parallel to opposed, parallel side edges 7 and 9 of the blank. The blank can be folded about the fold lines 3 and 5 to form side walls 4 and 6, as shown in FIGURE 3. The height of side walls 4 and 6 can be varied by changing the position of the fold lines 3 and 5 with respect to the marginal side edges 7 and 9.

A second fold line 11 is provided adjacent a third marginal side edge 13 of the blank and the blank can be folded along the fold line 11 to form end wall 12, shown in FIGURE 3 of the drawings. Fold lines 3 and 11, and 5 and 11, intersect each other adjacent the corners 15 and 17 of the blank, respectively. Diagonal fold lines 16 and 18 extend from the intersection of the first and second fold lines to the adjacent corners 15 and 17, respectively. The fold lines 16 and 18 facilitate the construction of the oven liner from the blank as will be described in detail hereinafter.

The fold lines 3, 5 and 11, and marginal side edge 19 of the blank define a base portion 21 of the blank. The base 21 of the blank is provided with a pair of longitudinally extending fold lines 23 and 25, along which the blank can be folded to vary with the width of the oven liner, as shown in FIGURE 3. The base 21 of the blank, as shown in FIGURE 2, can further be provided with transversely extending fold lines 27 and 29 along which the blank can be folded to vary the length of the oven liner.

It will be appreciated that either the fold lines 23 and 25 or the fold lines 27 and 29 would be sufficient to vary the area of the base 21, and that other fold lines can be provided on the base for varying the area of the base.

Such other fold lines could be parallel to the first or second fold lines or they could extend across the blank obliquely to the fold lines 3 and 5.

To assemble the oven liner the blank is folded along the longitudinally extending fold lines 23 and 25, to obtain a base 21 having the required width. The blank can then be folded along fold lines 27 and 29 to give the base 21 the required length.

The blank is then folded along fold lines 3 and 5 to form side walls 4 and 6, along fold line 11 to form the end wall 12, and along diagonal fold lines 16 and 18 to form a pleat which can be folded to extend along either of the side walls 4 and 6 or the end wall 12. The spacing of the fold lines 3, 5, and 11 from the marginal side edges 7, 9 and 13 respectively, can be varied to vary the height of side and end walls 4, 6 and 12 respectively.

A further feature of the invention is the provision of spaced apart ventilating holes 31 in the base 21 of the oven liner, the holes 31 are preferably ¼" in diameter and extend from the front to the rear edges of the oven liner along lines parallel to the side walls 4 and 6 and end wall 12. The ventilating holes 31 permit an even flow of heat through the oven liner and thus ensure that the thermostatic control of an oven containing the oven liner is not affected by the presence of the oven liner.

I claim:

1. A one piece blank of relatively thin aluminum sheet adapted to form a liner for ovens of varying sizes, said blank having portions for forming a base, mutually opposed side walls and an end wall normal to and connecting said side walls, said blank including a pair of parallel first fold lines each spaced a pre-determined distance from an adjacent marginal side edge of said blank, the latter being adapted to be folded along said first fold
lines to form said side walls; a second fold line normal to said first fold lines, and spaced a pre-determined distance from an adjacent marginal side edge of said blank, the latter being adapted to be folded along said second fold line to form said end wall; a pair of diagonal fold lines each extending from the intersection of a said first and said second fold line to an adjacent corner of said blank, the latter being adapted to be folded along each said diagonal fold line to form a corner pleat extending parallel with a selected said wall; said base being defined by said first and second fold lines and the remaining free marginal side edge of said blank; and at least one pair of spaced additional parallel fold lines parallel to said first fold line extending across said blank, the latter being adapted to be folded into pleats along said additional fold lines to vary the area of said base, said pleats being laid flat on said base.

2. A blank as claimed in claim 1 wherein said additional parallel fold lines are also parallel to said second fold line.