

April 26, 1932.

G. H. GARDNER

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CUTTER BOX AND METHOD OF MAKING THE SAME

Filed Dec. 5, 1929

2 Sheets-Sheet 1

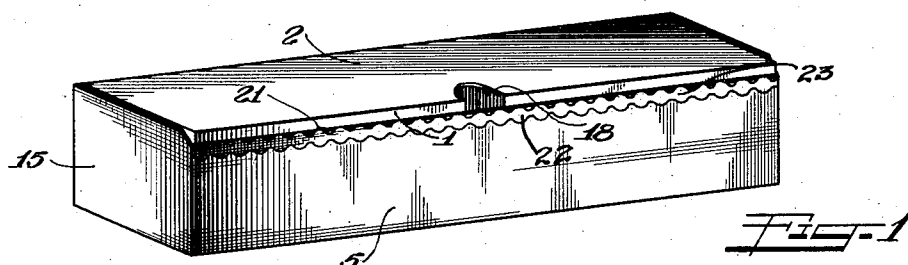
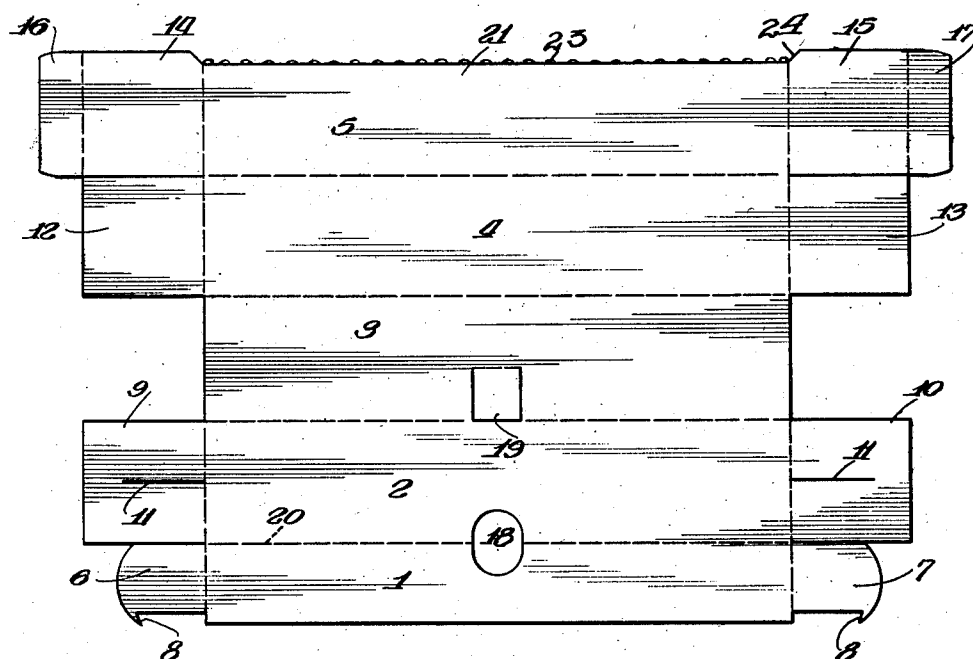


Fig. 2



Inventor:

George H. Gardner.

By: Charles H. Hall

April 26, 1932.

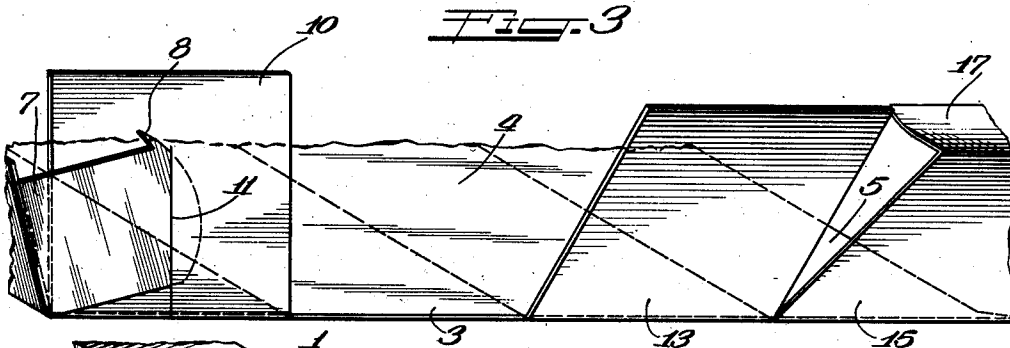
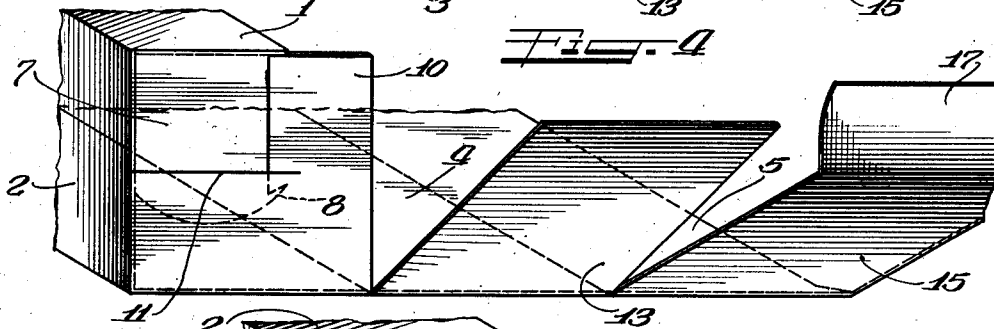
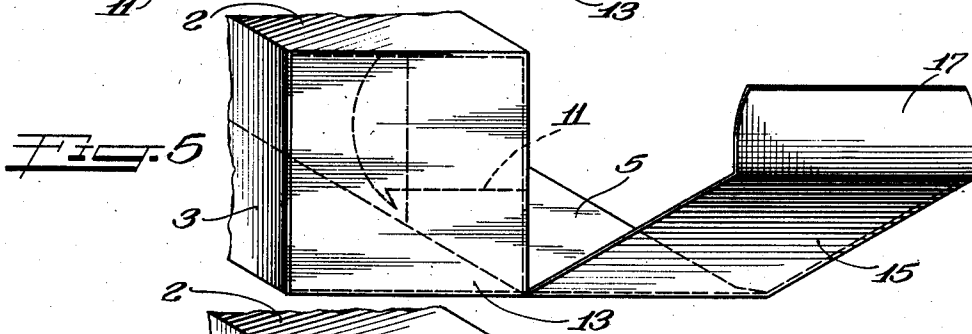
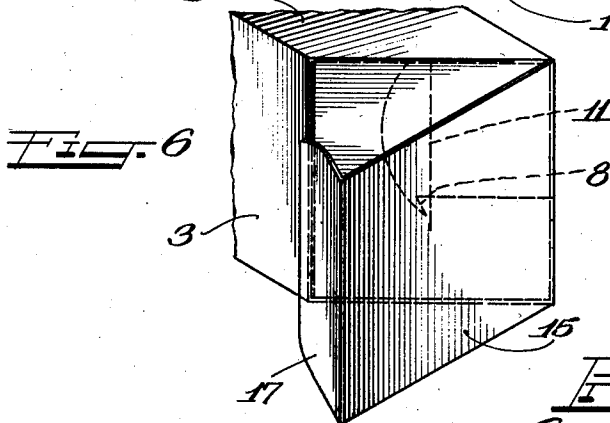
G. H. GARDNER

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CUTTER BOX AND METHOD OF MAKING THE SAME

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2 Sheets-Sheet 2



INVENTOR
George H. Gardner.

BY *Charles H. Hill* ATTORNEY

UNITED STATES PATENT OFFICE

GEORGE H. GARDNER, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE MENASHA PRODUCTS COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF WISCONSIN

CUTTER BOX AND METHOD OF MAKING THE SAME

Application filed December 5, 1929. Serial No. 411,803.

This invention relates to a box and method of making the same and more particularly to a box or receptacle for containing a supply of waxed or other paper or like material for domestic and other uses wherein the paper or material is inserted as a roll with the web of the roll withdrawn from the box as desired and torn off in various lengths as wanted.

An object of the invention is to provide a box for rolled paper and the like arranged with a passage from the interior of the box to the exterior through which the web of the material may be withdrawn and pieces of desired sizes severed, and with a tear off blade adjacent the exit of the passage.

Another object of the invention is to provide a box blank so made and scored as to be folded and locked in box-like form without the use of glue, paste, stickers or other similar means.

A still further object of the invention is to provide a box blank so made and scored as to be folded in box-like form wherein there is provided a passage for the paper web and a free edge of a box wall against which the web may be severed.

A yet further object of the invention is to provide a box blank so made and scored as to be folded and locked in box-like form by reason of the relationship and arrangement of the various parts.

Another and further object of the invention is to provide a box for rolled paper which is made from a single blank of material scored and folded in a box-like form and fastened in such form by interlocking and interfitting relation of certain of the parts.

A still further object of the invention is to provide a method for making boxes from blanks.

According to the invention the method consists in cutting and scoring material to provide a blank having five substantially rectangular panels and then bending one end

panel into substantially right-angular relationship with the next adjacent panel and interlocking these two panels in such relationship and then rolling these two panels over the blank until the first end panel overlies the other end panel to provide a passageway and then fastening the other end panel in place.

The invention contemplates also a box made from a single blank of material scored and folded to provide a box or receptacle for rolled paper and the like wherein a passageway is provided from the interior of the box to the exterior and an edge of a box wall or panel is provided with a tear off blade against which the web may be severed.

An embodiment of the invention is illustrated in the accompanying drawings and the views thereof as follows:

Figure 1 is an isometric view of a box made in accordance with the present invention.

Figure 2 is a developed view of a blank as cut and scored to practice the method of the present invention and to make a box in accordance with the invention.

Figure 3 is a fragmental isometric view of the first step of the method of forming a box in accordance with the present invention.

Figure 4 is an isometric view of a fragmental portion of a box illustrating the second step in the box formation.

Figure 5 is a fragmental isometric view of the box illustrating a subsequent step.

Figure 6 is a fragmental isometric view of one end of a box with the end flap of one panel about to be tucked in to secure the parts in box-like form.

The blank as arranged and illustrated in Figure 2 has five panels which are substantially rectangular and some of which are of substantially the same width. The blank as shown in Figure 2 appears in the position utilized in forming a box in accordance with the method of the present invention, that is,

with the inner front panel 1 immediately in front of the operator.

The illustrated form of blank has inner front panel 1, top panel 2, back panel 3, bottom panel 4 and a front panel 5. These panels are designated in the above manner in accordance with the position of the same when the blank is made into a box, the box ordinarily assuming the position shown in Figure 1 that is the position in which the box is held when withdrawing a portion of the web of paper therefrom for tearing off portions of the same.

The inner front panel 1 has two end pieces 6 and 7 each of which is provided with a hook 8. The hook may be of any arrangement, size or character as desired.

The top panel 2 is provided with end pieces 9 and 10 in each of which is a longitudinal slit 11 extending from the ends of the panel 2 outwardly towards the ends of the end pieces 9 and 10, respectively.

The bottom panel 4 is provided with end pieces 12 and 13 while the front panel 5 has end pieces 14 and 15 which end pieces are in turn provided with tuck-in flaps 16 and 17 at the ends of the end pieces 14 and 15.

The front panel 5 is preferably of less width than the back panel 3 for a purpose to be later explained.

The inner front panel 1 and the top panel 2 are punched to provide a hole 18 through which the operator may insert a thumb and finger for withdrawing the web of the material from the box.

The back panel 3 is provided with a flap 19 which is cut on three sides and which may be utilized by the operator to bear against the roll of material for holding the roll when it is desired to tear off a portion of the web of the same against a portion of the box after the web has been withdrawn to the desired extent.

A tear off blade 22 having a serrated edge 23 is fastened to the free edge of the front panel 5 in any suitable manner.

The front panel 5 is of less width than the back panel 3 so that when the blank is folded and locked in box-like form, the free edge of said panel will lie below the plane of the top panel 2.

The blade 22 is secured to the front panel 5 so that the serrated edge 23 thereof will be with the points of the serrations extending slightly above the free edge of said panel 5, but below the plane of the top panel 2.

Blade 22 may be fastened to the outside or inside of the panel 5 as desired.

The corners of the end pieces 14 and 15 of the front panel 5 are inclined as at 24 to allow folding of the end pieces as described even though the panel 5 is of less width (or height when in box form) than the end pieces 14 and 15 and the box.

The method of making a box from the blank illustrated in Figure 2 is as follows:

The blank is placed in front of the operator with the inner front panel 1 directly in front of the operator whereupon the operator bends the inner front panel 1 upwardly along the scored line 20 in a substantially right-angular position with respect to the top panel 2. The end pieces 9 and 10 of the top panel 2 are then bent upwardly while the end pieces 6 and 7 of the inner front panel 1 are bent rearwardly and the hooks 8 of the end pieces 6 and 7 are engaged through the slits 11 in the end pieces 9 and 10 of the top panel 2. This therefore interlocks the inner front panel 1 and the top panel 2 in substantially right-angular relation.

A box made in accordance with this method necessarily has the surface as shown in Figure 2 as the inside of the box when completed.

The method is then continued by rolling the interlocked panels 1 and 2 over the back panel 3. This may be observed in Figure 4.

The roll of material is then inserted in the box with the web of the same passing against the outer face of the inner front panel 1. The box is then rolled farther over the blank bringing the end edges of the end pieces 9 and 10 of the top panel against the bottom panel 4 and then bending up the end pieces 12 and 13 against the interlocked end pieces 6, 7, 9 and 10 of the panels 1 and 2 as illustrated in Figure 5.

The box is then given one more turn bringing the inner front panel 1 over the front panel 5 whereupon the box is in its completed form except for the final interlocking operation.

This is accomplished by bending up the end pieces 14 and 15 of the front panel 5 and then bending the tuck in flaps 16 and 17 in the manner illustrated in Figures 5 and 6 of the drawings, then bending the end pieces 14 and 15 over the end pieces 12 and 13 of the bottom panel 4 and tucking in the flaps 16 and 17 between the edges of the end pieces 9 and 10 of the top panel 2 and the inner surface of the back wall 3, thus locking the parts into box-like form and providing a passage from the interior of the box to the exterior which passage is defined by the inner front panel 1 and the front panel 5.

The front panel 5 when the box is completed because of the fact that it is of less width or height than the back panel 3 will have its free edge lying below the surface of the top panel 3 as is readily seen in Figure 1 so that the web of material may be readily grasped, withdrawn from the box, bent over the free margin of the front panel 5 and torn off or severed along the free edge of this panel.

A box made in accordance with this invention is strong and rigid enough for all pur-

poses intended, pleasing in appearance and one which lends itself very readily for use in connection with rolled wax paper and the like. The box is securely fastened together without the use of glue, paste, stickers or like means thus making its assembly rapid and, therefore, economical.

The surface of the blank as illustrated in Figure 2 is the inside of the completed box.

The hole 18 is so punched as to lie partially in the inner front panel 1 and the top panel 2 when the blank has been folded into box-like form.

Should it be desired to open the box for insertion of another roll of paper, or to recover the paper web inadvertently withdrawn below the panel 5 so as to be out of reach, the front panel 5 may be opened by withdrawing the flaps 16 and 17 and moving the panel to the position of Figure 5, whereupon the box may be unrolled to the position of Figure 4 for insertion of another roll of paper, or opened to the position of Figure 5 to enable grasping of the paper web.

The invention has been described more or less precisely herein, yet it is to be understood that the invention is not to be limited thereby, as changes may be made in the arrangement and proportion of parts and equivalents may be substituted or utilized, without departing from the spirit and scope of the invention.

The invention is claimed as follows:

1. A box for a supply of rolled material formed from a single blank of material, said blank being scored and foldable into box-like form with two panels in over-lapping relation to provide a passage for withdrawal of the material from the box, one of the panels forming said passage being interlocked with an adjacent panel to which it is hingedly connected, and the other of said panels being provided with tuck-in flaps for holding said panel in passage-forming position.

2. A box for a supply of rolled material formed from a single blank of material, said blank being scored and foldable into box-like form with two panels in over-lapping relation to provide a passage for the withdrawal of the material from the box, the inner of said panels forming the passage having hook-shaped end pieces, the panel next to the one panel having end pieces provided with slits for receiving the said hook-shaped end pieces and locking the panels in angular relation one to the other, the other panel forming the passage having end pieces to overlie the locked end pieces of the said panels, and said end pieces of said last-mentioned panel having tuck flaps for retaining said other passage-forming panel against said inner passage-forming panel.

3. A box for a supply of rolled material formed from a single blank of material, said blank being scored and foldable into box-like form with two panels in over-lapping relation

to provide a passage for the withdrawal of the material, one of said panels forming the passage having hook-shaped end pieces, the panel next to said one panel having end pieces provided with slits for receiving the said hook-shaped end pieces and locking the panels in right-angular relation one to the other, said interlocked end pieces forming ends for the box, another box panel having plain end pieces overlying said interlocked end pieces, and said other passage-forming panel having end pieces overlying said last-mentioned end pieces and tuck-in flaps entering between said interlocked end pieces and a panel for securing said parts together in box-like form.

4. A box for a supply of rolled material formed from a single blank of material, said blank being scored and foldable into box-like form with two panels in over-lapping relation to provide a passage for withdrawal of the material, the outer of said panels being of less height than the box, the inner of the panels forming said passage being interlocked with an adjacent panel to which it is hingedly connected, and the other of said panels being provided with tuck-in flaps, and a tear off blade adjacent the free edge of said outer panel.

5. A box for a supply of rolled material formed from a single blank of material, said blank being scored and foldable into box-like form with two panels in over-lapping relation to provide a passage for the withdrawal of the material, one of said panels forming the passage having hook-shaped end pieces, the panel next to the one panel having end pieces provided with slits for receiving the said hook-shaped end pieces and locking the panels in angular relation one to the other, the other panel forming the passage having end pieces to overlie the locked end pieces of the said panels, the end pieces of the last mentioned panel being of substantially the same height as the box, and the height of said last mentioned panel being less than the height of its end pieces, and said end pieces of said last-mentioned panel having tuck flaps for retaining said other passage-forming panel against said one passage-forming panel, and a tear off blade fastened to the free edge of said panel of less height.

6. A box for a supply of rolled material formed from a single blank of material, said blank being scored and foldable into box-like form with two panels in over-lapping relation to provide a passage for the withdrawal of the material, one of said panels forming the passage having hook-shaped end pieces, the panel next to said one panel having end pieces provided with slits for receiving the said hook-shaped end pieces and locking the panels in right-angular relation one to the other, said interlocked end pieces forming ends for the box, another box panel having plain end pieces overlying said interlocked end pieces,

and said other passage-forming panel having
end pieces overlying said last-mentioned end
pieces and tuck-in flaps entering between said
interlocked end pieces and a panel for secur-
5 ing said parts together in box-like form, said
other passage forming panel having a free
edge terminating below the plane of the top
of the box, and a serrated blade attached to
said free edge with the parts of the serrations
10 above said free edge but below the plane of
the top of the box.

In testimony whereof I have hereunto sub-
scribed my name at Chicago, Cook County,
Illinois.

15 GEORGE H. GARDNER.

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