June 14, 1932. J. VAN BUREN 1,863,260

CONTAINER

Filed Dec. 17, 1929

Fig. 1.

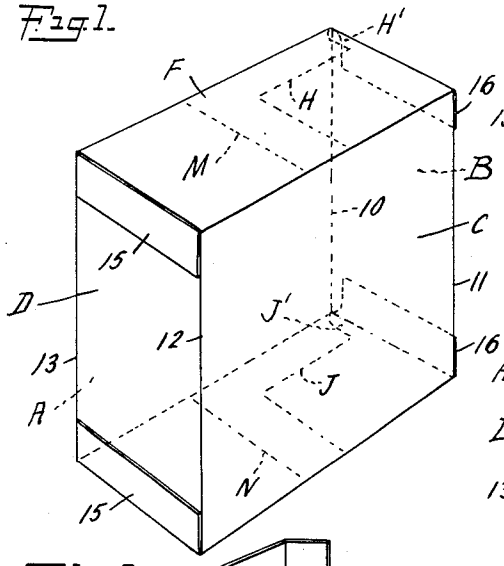


Fig. 2.

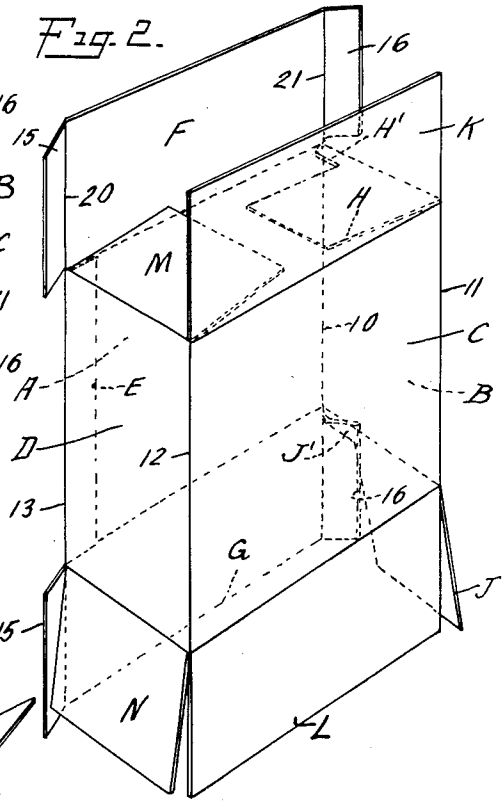


Fig. 3.

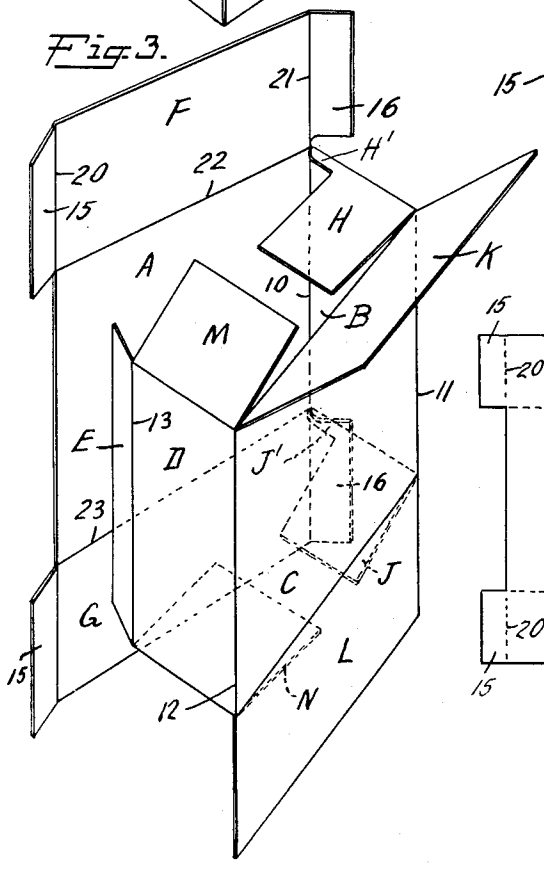
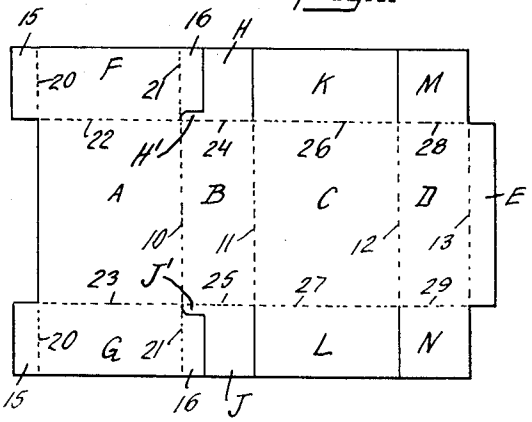


Fig. 4



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Patented June 14, 1932

1,863,260

UNITED STATES PATENT OFFICE

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CONTAINER

Application filed December 17, 1929. Serial No. 414,616.

This invention relates to containers.

It is very difficult to pack granular or flakey material, such as soap powder, soap flakes, cereals, etc., in cardboard containers in such a manner that the material will not leak out of the container. This can be overcome by packing the material first in a bag and then packing the bag in the container. This, however, increases materially the expense of packaging. The leakage from cardboard containers usually takes place at the ends or at the portions where the container is closed.

This invention has for its salient object to provide a container or carton so constructed and arranged that the material therein will not leak out at the sealed or glued ends or other portions thereof.

Another object of the invention is to provide a blank so constructed that it can be folded to provide a tight container secure against leakage.

Another object is to provide a blank so constructed that there will be practically no waste material.

Further objects of the invention will appear from the following specification taken in connection with the drawing, which forms a part of this application, and in which

Fig. 1 is a perspective view showing a container constructed in accordance with the invention;

Fig. 2 is a perspective view showing the ends of the container open;

Fig. 3 is a perspective view illustrating the manner in which the blank is folded; and

Fig. 4 is a plan view of the blank constructed in accordance with the invention.

The invention briefly described consists of a container formed from a blank having flaps and tabs adapted to fold across the ends of the container in overlapping relation and to be secured to each other, one of the flaps having ears adapted to fold against and to be secured to the end portions of the sides of the container. The flaps, tabs and ears are so cut in the blank that there is substantially no waste material. Furthermore, the ears are so arranged that the tabs which are disposed at the ends of the sides of the container will extend the full width of the ends of the sides, thus sealing the ends of the container against leakage.

Further details of the invention will appear from the following description.

In the embodiment of the invention illustrated, there is shown in Fig. 4 a blank having a body portion comprising rectangular sections A, B, C and D. The blank is provided with fold lines 10, 11 and 12 which are disposed respectively between the sections A and B, B and C, C and D. A tongue E extends beyond the section D and a fold line 13 is formed between the section D and tongue E. When the blank is folded, the portions A and C form the back and front, or vice versa, and the sections B and D form the sides of the container.

A pair of flaps F and G extend beyond the section A and each of these flaps is provided with extending ears 15 and 16 which are adapted to extend in overlapping relation with respect to the sections B and D of the blank which form the sides of the container. The extensions 16 are cut from end tabs H and J which are disposed at the ends of the intermediate section B and the cut is so shaped as to leave portions H′ and J′ of the blank integral with the tabs H and J. Thus, these tabs at their juncture with the section B are as wide as section B and when folded form a part of the end of the carton which extends across its full width.

From the showing of the blank in Fig. 4 it will be obvious that blanks having the characteristics illustrated can be cut from a strip of material with no waste, since the space between the ears 15, 15 which project from one end of the blank, corresponds with the tongue E which projects from the other side of the next succeeding blank.

The blank is folded on the fold lines above described into the rectangular shape shown in Fig. 2, and the tongue E is secured within the outer edge of the section A. The tabs H and M are then folded inwardly on lines 24 and 28. The tab M is rectangular and serves to hold the sections A and C in parallelism and the section D at right angles thereto so that the box is maintained as a rectangular carton thereby. The flap F is folded on

line 22 against the tabs M and H and its ears 15 and 16 are secured to the end portions of the sides B and D. Then the other flap K is folded on line 26 to form the outer layer of the end of the carton. After one end of the container has been closed, the container can be filled and the other end can then be closed in a similar manner. The structure thus made has all of its corners reinforced, and every meeting edge is overlapped and covered. Thus with a minimum of material, a strong, leak-proof carton is produced.

Although one specific embodiment of the invention has been particularly shown and described, it will be understood that the invention is capable of modification and that changes in the construction and in the arrangement of the various cooperating parts may be made without departing from the spirit or scope of the invention. as expressed in the following claims.

What I claim is:

1. A blank for containers comprising back, front and side sections, flaps at the ends of the front and back sections, tabs at the ends of the side sections, a tongue extending beyond the central part of one end of the blank and spaced ears extending beyond the upper and lower parts of the other end of the blank, the space between the ears corresponding with the vertical dimension of the tongue.

2. A blank for containers comprising back, front and side sections, flaps at the ends of the front and back sections, tabs at the ends of the side sections, a tongue extending beyond the central part of one end of the blank, and spaced ears extending beyond the upper and lower parts of the other end of the blank, said tongue and ears at the ends of the blank being of substantially the same width and the space between the ears corresponding with the vertical dimension of the tongue.

3. A blank for containers comprising back, front and side sections, flaps at the ends of the front and back sections, tabs at the ends of the side sections, a tongue extending beyond the central part of one end of the blank, and spaced ears extending beyond one of the flaps at each end of the blank, the flaps from which said ears project being coincident in width to the section from which they project, one of said tabs being rectangular, coincident in width to the side section from which it extends and connected with its side section by a fold line which is at right angles to the fold line between its side section and an adjacent section, whereby said tab may serve to hold the sections in rectangular relation when the ends of the carton set up from the blank are closed.

4. A blank for containers comprising back, front and side sections, flaps at the ends of the front and back sections, tabs at the ends of the side sections, a tongue extending beyond the central part of one end of the blank, and an ear projecting from one side of one of the flaps beyond the end of the blank opposite the end thereof from which the tongue extends, a portion of the tab at the end of the intermediate side section being cut to form another ear projecting from the other side of said flap, said flap being coincident in width to the section from which it extends, the other tab being rectangular, coincident in width to the side section from which it extends and connected with its side section by a fold line at right angles to the fold line between its side section and an adjacent section whereby said tab may serve to hold the sections in rectangular relation when its end of the carton set up from the blank is closed.

5. A blank for containers comprising back, front and side sections, flaps at the ends of the front and back sections, tabs at the ends of the side sections, a tongue extending beyond the central part of one end of the blank, and ears extending from the sides of one of the flaps and having fold lines between said ears and said flap, said flap being coincident in width to the section from which it extends, one of the tabs being rectangular, coincident in width to the side section from which it extends and connected with its side section by a fold line at right angles to the fold line between its side section and an adjacent section, said tab being sufficiently wide to extend between the front and back sections whereby it may serve to hold the sections in rectangular relation when its end of the carton set up from the blank is closed.

6. A blank for containers comprising back, front and side sections, flaps at the ends of the front and back sections, tabs at the ends of the side sections, a tongue extending beyond the central part of one end of the blank and spaced ears extending beyond one of the flaps at each end of the blank, the flaps from which said ears project being coincident in width to the section from which they project, the space between the ears corresponding with the vertical dimension of the tongue, the tabs at the ends of one of the side sections being rectangular and connected with their side section by fold lines at right angles to the fold line between their side section and an adjacent section, whereby said tabs may serve to hold the sections in rectangular relation when the ends of the carton set up from the blank are closed.

7. A container having a front, a back and two sides interconnected to form a rectangular tube, and ends, one of which comprises a rectangular tab extending from one of said sides and adapted to abut against the front and the back to hold the front, back and sides in rectangular relation, and a flap extending from the back, coincident in width to the width of said back having ears adapted to be

affixed to the sides by pressure exerted thereon while said sides are maintained in parallelism by said rectangular tab.

8. A container having a front, a back and two sides interconnected to form a rectangular tube, inwardly folding tabs extending from the sides, at least one of which tabs is rectangular and adapted to abut against the front and the back to hold the front, back and sides in rectangular relation, inwardly folding flaps extending from the front and from the back, and ears extending from one of the flaps adapted to be folded against and to be affixed to the sides by pressure exerted thereon while said sides are maintained in parallelism by said rectangular tab, the flap from which said ears project coincident in width to the part from which it extends.

9. A container having a front, a back and two sides interconnected to form a rectangular tube, and ends, one of which comprises tabs at the ends of the sides extending at their juncture therewith substantially the full width thereof, at least one of said tabs being rectangular and adapted to abut against the front and the back to hold the front, back and sides in rectangular relation, and flaps extending from the front and from the back, one of said flaps being coincident in width to the part from which it extends having ears adapted to be affixed to the sides by pressure exerted thereon while said sides are maintained in parallelism by said rectangular tab.

10. A container having a front, a back and two sides interconnected to form a rectangular tube, inwardly folding tabs extending from the sides, at least one of which tabs is rectangular and adapted to abut against the front and the back to hold the front, back and sides in rectangular relation, inwardly folding flaps extending from the front and from the back, and ears extending from one of the flaps adapted to be folded against and to be affixed to the sides by pressure exerted thereon while said sides are maintained in parallelism by said rectangular tab, the flap from which said ears project being coincident in width to the part from which it extends, one of said ears being formed from a part of said other tab.

11. A container having a front, a back and two sides interconnected to form a rectangular tube, and ends, one of which comprises tabs at the ends of the sides extending at their juncture therewith substantially the full width thereof, at least one of said tabs being rectangular and adapted to abut against the front and the back to hold the front, back and sides in rectangular relation, and flaps extending from the front and from the back, one of said flaps having ears adapted to be affixed to the sides by pressure exerted thereon while said sides are maintained in parallelism by said rectangular tab, the flap from which said ears project being coincident in width to the part from which it extends, a part of the other tab which is not adjacent its line of juncture with its side forming one of said ears.

12. A container having a front, a back and two sides interconnected to form a rectangular tube, a tongue joining the meeting edges of a side and the back, and ends comprising tabs extending from the sides, at least one of said tabs at each end being rectangular and adapted to abut against the front and the back to hold the front, back and sides in rectangular relation, and flaps extending from the front and from the back, one of said flaps at each end having ears adapted to be affixed to the sides by pressure exerted thereon while said sides are maintained in parallelism by said rectangular tab, the flap from which said ears project being coincident in width to the part from which it extends, said container being formed from a blank having a portion extending beyond the central part of one of its ends forming said tongue, and spaced extensions at the upper and lower parts of the other end forming two of said ears, said tongue and extensions being of substantially the same width and the space between the extensions corresponding with the vertical dimension of the tongue.

13. A container having a front, a back and two sides interconnected to form a rectangular tube, a tongue joining the meeting edges of a side and the back, and ends comprising tabs at the ends of the sides extending at their juncture therewith substantially the full width thereof, at least one of said tabs at each end being rectangular and adapted to abut against the front and the back to hold the front, back and sides in rectangular relation, and flaps extending from the front and from the back, one of said flaps at each end having ears adapted to be affixed to the sides by pressure exerted thereon while said sides are maintained in parallelism by said rectangular tab, the flap from which said ears project being coincident in width to the part from which it extends, said container being formed from a blank having a portion extending beyond the central part of one of its ends forming said tongue, and spaced extensions at the upper and lower parts of the other end forming two of said ears, said tongue and extensions being of substantially the same width and the space between the ear extensions corresponding with the vertical dimension of the tongue extension.

14. A container having a front, a back and two sides interconnected to form a rectangular tube, a tongue joining the meeting edges of a side and the back, and ends comprising tabs extending from the sides, at least one of said tabs at each end being rectangular and adapted to abut against the front and the back to hold the front, back and sides in rectangular relation, and flaps extending from

the front and from the back, one of said flaps at each end having ears adapted to be affixed to the sides by pressure exerted thereon while said sides are maintained in parallelism by said rectangular tab, the flap from which said ears project being coincident in width to the part from which it extends, said other flaps being cut away to form two of the ears, said container being formed from a blank having a portion extending beyond the central part of one of its ends forming said tongue, and spaced extensions at the upper and lower parts of the other end forming the other two of said ears, said tongue and extensions being of substantially the same width and the space between the ear extensions corresponding with the vertical dimension of the tongue extension.

15. A container having a front, a back and two sides interconnected to form a rectangular tube, a tongue joining the meeting edges of a side and the back, and ends comprising tabs at the ends of the sides extending at their juncture therewith substantially the full width thereof, at least one of said tabs at each end being rectangular and adapted to abut against the front and the back to hold the front, back and sides in rectangular relation, and flaps extending from the front and from the back, one of said flaps at each end having ears adapted to be affixed to the sides by pressure exerted thereon while said sides are maintained in parallelism by said rectangular tab, the flap from which said ears project being coincident in width to the part from which it extends, parts of said other flaps which are not adjacent their lines of juncture with the sides forming two of the ears, said container being formed from a blank having a portion extending beyond the central part of one of its ends forming said tongue, and spaced extensions at the upper and lower parts of the other end forming the other two of said ears, said tongue and extensions being of substantially the same width and the space between the ear extensions corresponding with the vertical dimension of the tongue extension.

16. A carton having front, back and side sections forming a rectangular tube, a rectangular tab extending from one of said sections, said tab being coincident in width with the side section from which it extends and arranged to extend between the front and back sections whereby it may serve to hold the sections in rectangular relation when its end of the carton set up from the blank is closed, a rectangular flap extending from a section at right angles to the section from which the tab extends and coincident in width to the section from which it extends, and ears extending from the sides of said flap.

JOHN VAN BUREN.