Oct. 31, 1950 R. E. ACKER 2,527,784

VEGETABLE BOX

Filed April 14, 1950

Fig. 1

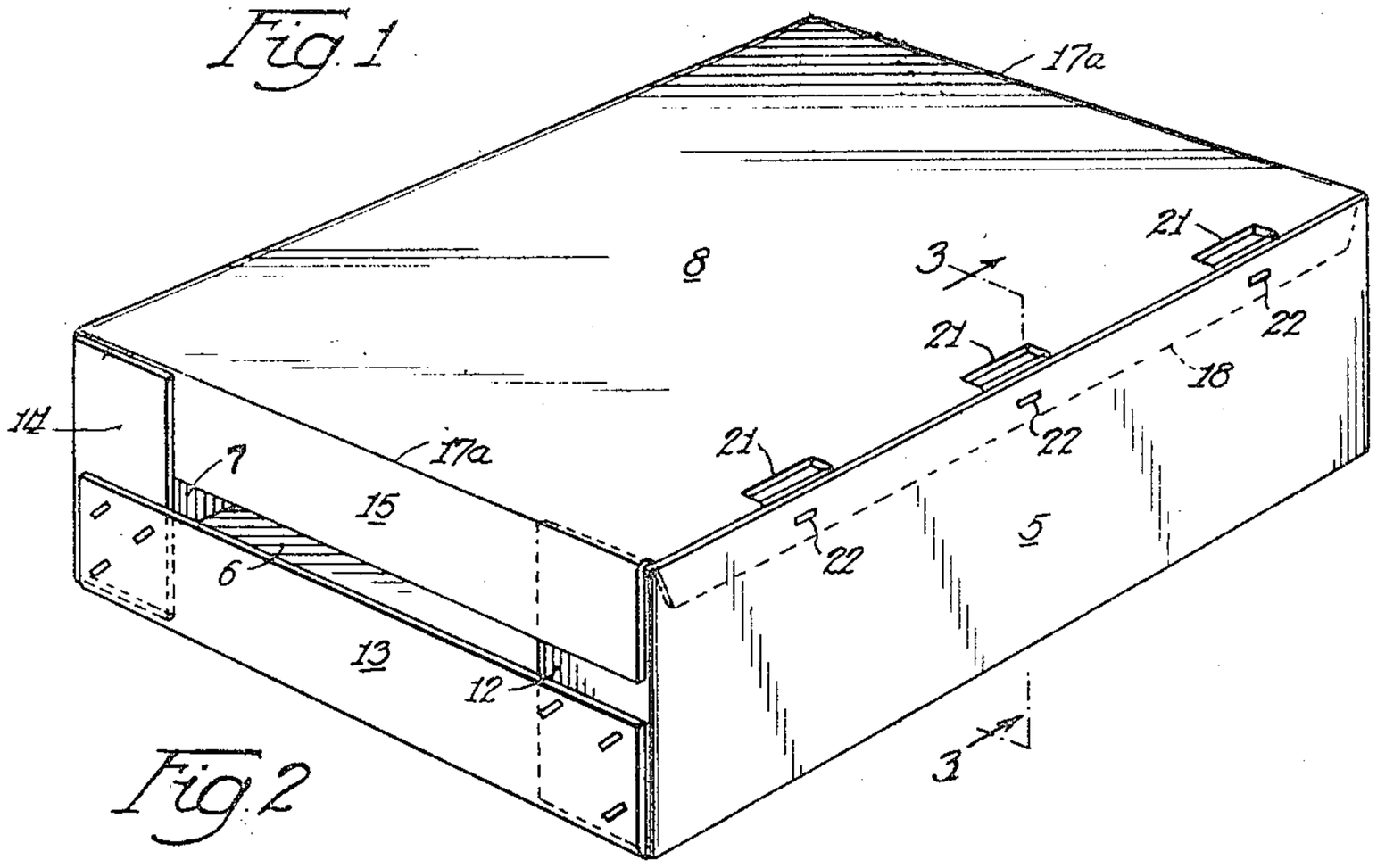



Fig. 2

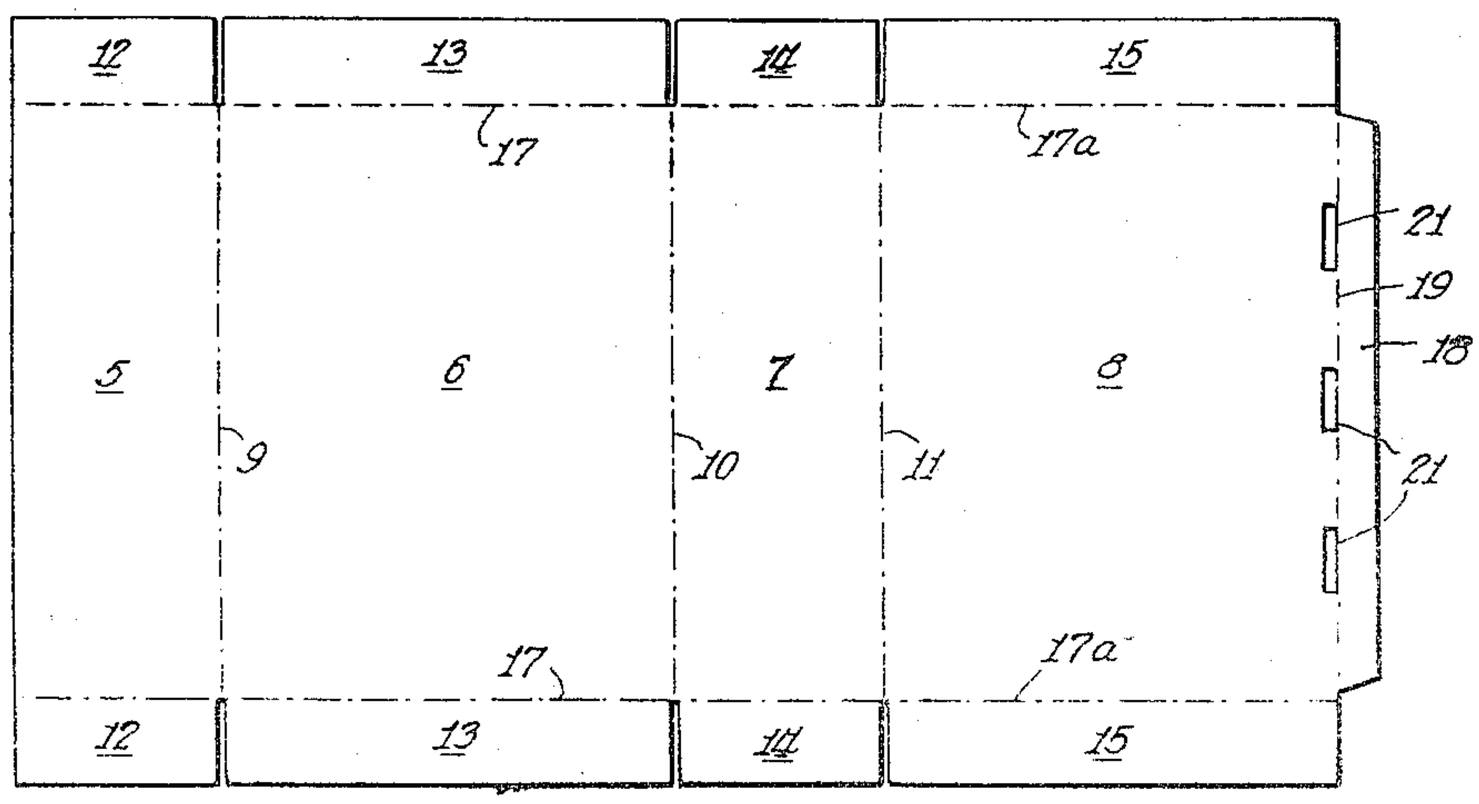
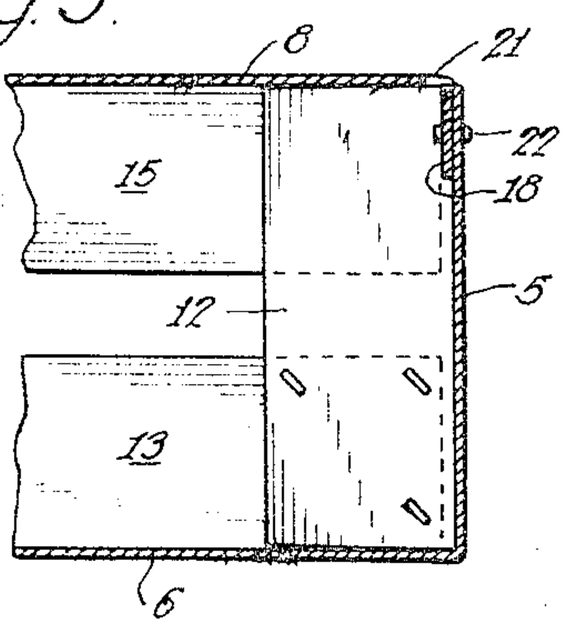



Fig. 3.

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2,527,784

## VEGETABLE BOX

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2 Claims. (Cl. 229—16)

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This invention relates to containers and more particularly to a form of container adapted to be made of folding sheet material such as corrugated fibre board or solid fibre board.

An object of the present invention is to provide an inexpensive container that can be produced from a single blank of paperboard which can be shipped flat to the user and by such user quickly and easily be assembled without requiring expensive tools and equipment.

Another object of the invention is to provide a ventilated container well adapted for use in handling and shipment of perishable produce, such as prepackaged green vegetables of a light bulky nature that require ventilation during shipment and storage.

A further object is to provide a container with partially open end walls formed by relatively narrow overlapping flaps that can be secured together readily by a simple tool, such as a hand stapler, and, when the container is closed, the openings in the end walls, if desired, can serve as hand holds to facilitate handling of the loaded container.

Other and more specific objects and advantages of the present invention will be apparent from the following specification and in the claims appended thereto.

In the drawings, illustrating a preferred embodiment of the invention,

Fig. 1 is a perspective view of a container made in accordance with the present invention;

Fig. 2 is a plan view of the container blank; and

Fig. 3 is a section view on the line 3—3 of Fig. 1.

In general, the invention, as herein disclosed, comprises a single blank of corrugated fibreboard, suitably cut and creased to provide front, bottom rear and top walls, having relatively narrow end flaps which are overlapped to close a part of the end areas of the container, leaving an opening centrally of the ends to provide ventilation and to serve under certain conditions as hand holds. The end flaps on the top wall of the container are designed to fit on the outside of the end flaps on the front wall so that the top wall of the container can be supported by the front wall flaps, thereby properly positioning the free edge of the top wall with respect to the upper edge of the front wall.

Referring more particularly to the drawings, the container blank, shown in Fig. 2, is cut and creased to provide a front wall 5, a bottom wall 6, a rear wall 7 and a top wall 8. These walls are

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defined from each other by crease lines 9, 10 and 11 along which the walls may be swung relative to each other to facilitate setting up the container. The walls 5, 6, 7 and 8 are preferably provided at each end with flaps 12, 13, 14, 15, respectively, which are adapted to be overlapped as illustrated in Fig. 1. Crease lines are impressed lengthwise of the blank as indicated at 17, 17 to facilitate folding of the end closure flaps.

A tuck flap 18 is provided on the free edge of the top wall 8 which is defined from such wall by crease line 19.

The flaps 12, 13, 14 and 15 are preferably cut of equal width in the interest of economical use of material and at the same time providing an end wall structure capable of withstanding considerable rough handling as well as stacking stresses. The flaps should have sufficient width so as to assure that the dimensions of the opening in the end walls will be no greater than a predetermined maximum. While the various dimensions may be changed, depending on the volume desired for the container, it is considered suitable to construct the container so that its height is approximately 6 inches and the distance from front wall to rear wall approximately 14 inches. The end wall flaps would preferably be approximately 2½ inches in width. With this flap width the vertical dimension of the opening in the end walls is approximately 1 inch and the horizontal dimension of the opening is approximately 9 inches.

When it is desired to prepare the container for receiving its contents the front and rear walls are swung upward at right angles to the bottom wall and the flaps 12, 13 and 14 are folded inwardly with flap 13 preferably bearing against the outer surfaces of flaps 12 and 14. The flaps may then be stapled as indicated. After loading the container the flaps 15 on the top are folded to assume a position at right angles to the top wall which is then swung down to its closing position as shown in Fig. 1. The flap 15 preferably lies within the flap 14 and outside the flap 12 as shown. This causes the upper edge of the flap 12, as shown in Fig. 1, to contact the under surface of the top wall and support such wall. Before the top wall is moved to its final position the flap 18 is inserted within the container to lie against the inner surface of front wall 5.

The desired positioning of the forward portion of the flaps 15 on the outside of flaps 12 may be assured by the rectangular shape of the front portion of the flaps 15, which, with flaps

of proper width, will cause the front lower corner of flaps 15, as viewed in Fig. 1, to strike the upper edge of the wall 5 if either flap 15 is swung down inside the adjacent flap 12. The packer therefore, upon noting that the front edge of the flap 15 has come to rest upon the upper edge of the wall 5, will raise the top wall and swing flap 15 outward until it is in a position to be brought down outside the flap 12 and will again lower the top wall which can then move to its intended position as illustrated.

After loading the container and assembling the top wall, with flaps 15 and tuck flap 18 as above described, the flaps 15 may be secured to the adjacent flaps 12 and 14 as by means of staples or the top wall may be held in closed position by suitable strips of gummed tape. When it is desired to staple the top wall in closed position the top wall is provided with elongated narrow openings 21, 21 formed along crease line 19. These openings are designed to admit the anvil portion of a stapling machine, the staples indicated at 22, 22, being driven in through the front wall 5 and flap 18 and clinched on the interior of the container which is then ready for shipment.

When it is desired to unload the container the flap 18 can readily be pulled away from the front wall to enable the cover to be raised.

From the foregoing it is apparent that the present invention provides a simple and economical form of container having partial open ends to provide ventilating openings and convenient end edge portions to facilitate grasping the container. The construction is particularly suitable for shipment of bulky produce such as packaged spinach and similar green vegetables.

While the present description sets forth a prefferred embodiment of the invention, certain changes may be made in the construction without departing from the spirit of the invention, and it is therefore desired that the present embodiment be considered in all respects as illustrative and not restrictive, reference being had to the appended claims rather than to the foregoing description to indicate the scope of the invention.

I claim:

1. A ventilated end container for light, bulky materials such as green vegetables and the like, comprising four interconnected hinged walls formed from a single blank and comprising interconnected panels forming respectively the front, bottom, rear and top walls of the container, the top wall being hinged at one end to the rear wall and serving as a cover, said top wall having a securing flap hinged to the front edge thereof, hinged rectangular end flaps integral with said walls at each end thereof and coextensive therewith, including pairs of flaps extending toward each other from the front and rear walls respectively, and pairs of upper and lower end flaps extending toward one another from the top and bottom walls respectively, the front and rear wall flaps of each pair and the upper and lower wall flaps of each pair terminating short of each other to provide ventilating end openings, the lower end flaps being turned up against the outer surfaces of both the front and rear wall flaps and secured thereto, while the upper flaps have their rear ends inserted within the upper ends of the rear flaps and their front ends resting against the outer surfaces of the upper ends of the front wall flaps when the container is in operative position, the front ends of the upper flaps being positioned to strike the upper edge of the front wall when the top wall carrying said upper flaps is swung downwardly with the front ends of said upper flaps on the inner sides of the front wall flaps, thus making it impossible to close the container unless the front ends of the upper flaps are outside the front wall flaps.

2. A container as defined in claim 1 wherein the securing flap is fastened to the inside of the front wall, the top wall being provided with spaced openings adjacent the front hinge line to permit the insertion of a stapling tool for fastening the securing flap to the front wall.

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