May 15, 1956 R. M. DUNNING 2,745,588

DISPENSING CONTAINER

Filed Dec. 7, 1951

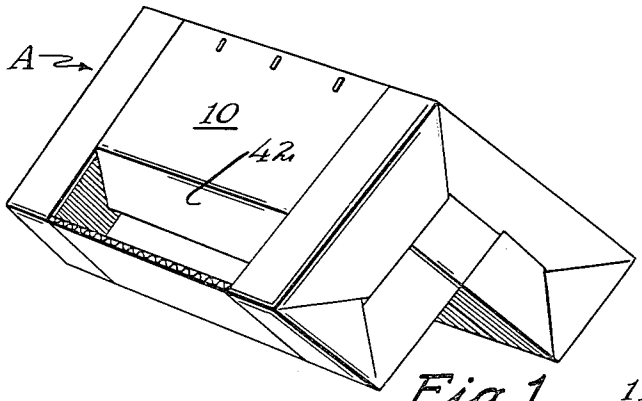


Fig. 1

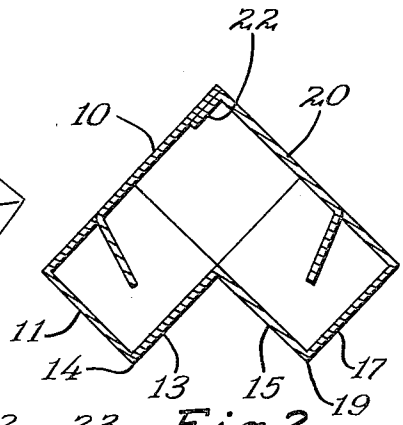


Fig. 2

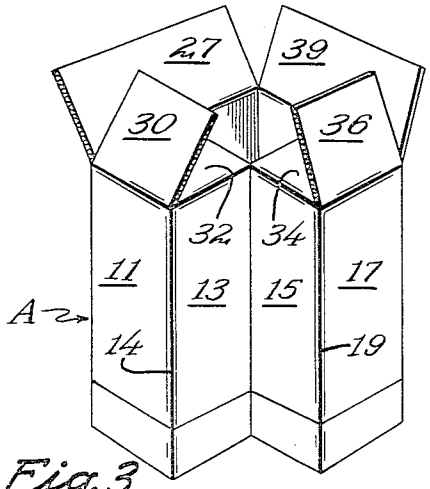


Fig. 3

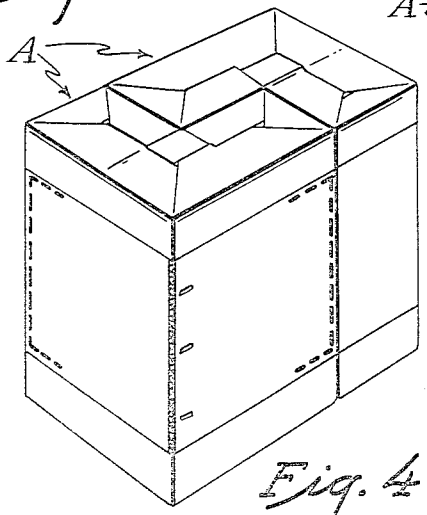


Fig. 4

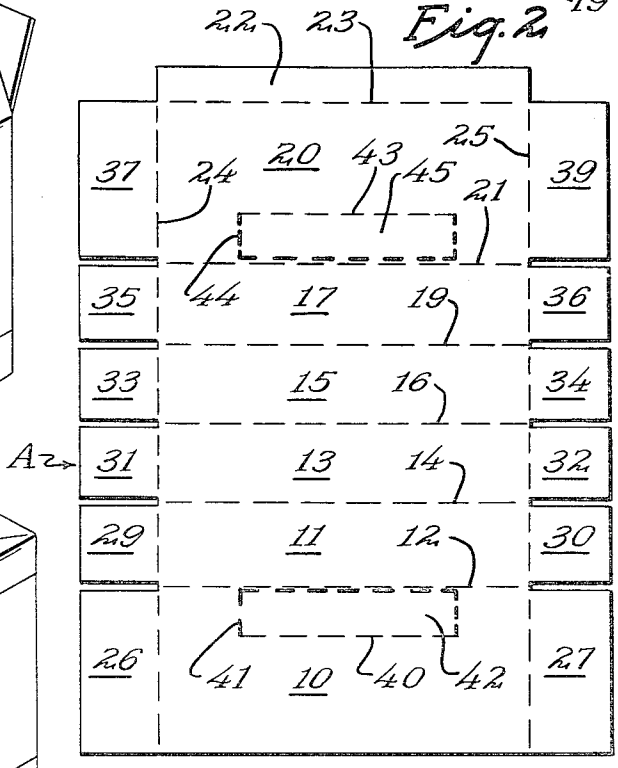


Fig. 5

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United States Patent Office 2,745,588 Patented May 15, 1956

2,745,588

DISPENSING CONTAINER

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Application December 7, 1951, Serial No. 260,508

2 Claims. (Cl. 229—17)

This invention relates to an improvement in dispensing containers and deals particularly with a type of container uneful as a feeder for poultry and the like.

Small chickens and turkeys are usually given grit in the form of granite chips or other finely divided gritty material to assist in grinding up the food they eat. This material is usually heavy and must be supplied in a relatively strong package. It is desirable that the package be convertable into a feeder so that the contents need not be transferred from the original container to a separate feeder for use.

Various types of containers have been produced which may be converted into dispensers or feeders. Most of these packages include trough-shaped members which may be swung out of the plane of a side wall of the container to provide a trough-shaped receptacle. This structure ordinarily requires interior partition means to guide the contents of the package toward the trough or troughs. Thus most such packages are higher in price than containers of the type which might otherwise be used.

A feature of the present invention lies in the provision of a container which may be produced on regular machinery without increased cost and which therefore is economical to construct. The finished package is so arranged that it contains one-fourth less than the usual container employing the same amount of paper stock, but this slight increase in the cost of paper board for the outer container is more than compensated for by the fact that no interior partitions are necessary in producing the feeder. As a result, all hand work for assembly usually necessary in such devices is eliminated, thus greatly decreasing the cost of production.

A feature of the present invention lies in the fact that the container may be formed on usual machinery without additional cost and may be stitched on usual stitching equipment with no increase in cost. Thus the completed feeding device may be produced as inexpensively as a square or rectangular container of conventional form.

A feature of the present invention lies in providing a container of regular style with an additional fold line in each of two adjoining panels and in slitting the flaps in line with these fold lines in the conventional manner. As a result two of the container walls may be folded inwardly intermediate their edges to provide an L-shaped or angular container capable of containing three-quarters of the amount of material usually contained in a container of the same wall size. By securing the flaps closed at each end of the container, an angular structure is produced which may serve admirably as a feeder by providing hinged flaps in certain of the container walls, providing access to the interior of the container.

A feature of the present invention resides in providing a container with a pair of potential hinged flaps by either perforating the container along three sides of the flap or indicating where the container may be cut. When the flaps are bent out of the plane of the container walls to which they are hinged, they provide baffles to limit the flow of the container contents to the openings and provide access to the interior.

These and other objects and novel features of my invention will be more clearly and fully set forth in the following specification and claims.

In the drawings forming the part of my specification:

Figure 1 is a perspective view of the dispening container showing the same in readiness for use.

Figure 2 is a sectional view through the container in assembled form.

Figure 3 is a perspective view of the container in partially closed position.

Figure 4 is a perspective view of two containers interfitted together for storage or shipment.

Figure 5 is a diagrammatic view of the container blank.

The dispensing container is indicated in general by the letter A. The blank from which the container is formed is best illustrated in Figure 5 of the drawings. From this view it will be seen that a wall panel **10** is foldably connected to a second wall panel **11** along a fold line **12**. A third wall panel **13** is foldably connected to the panel **11** along the fold line **14**. A fourth wall panel **15** is foldably connected to the panel **13** along a fold line **16**. A fifth wall panel **17** is foldably connected to the panel **15** along a fold line **19**. A sixth wall panel **20** is foldably connected to the panel **17** along the fold line **21**. A stitching flap or anchoring panel **22** is foldably connected to the panel **20** along the fold line **23**. The fold lines **12**, **14**, **16**, **19**, **21** and **23** are preferably parallel. In the preferred form of construction the panels **11**, **13**, **15** and **17** are substantially one-half the width of the remainiing panels **10** and **20**. While this is not essential it is at least desirable that the panels **11** and **15** when added together, equal the width of the panel **20** and that the panels **13** and **17** when added together equal the width of the panel **10**. In employing the term "equal," it is understood that allowance for variations are made for the thickness of stock, the draw of the paper board and other such variables.

Each of the wall panels is provided with closing flaps at opposite ends thereof. Parallel fold lines **24** and **25** connect the various wall panels with their respective end flaps. The panel **10** is provided with end closing flaps **26** and **27**. The panel **11** is provided with closing flaps **29** and **30**. Wall panel **13** is provided with closing flaps **31** and **32**. Wall panel **15** is provided with closing flaps **33** and **34**. Closing flaps **35** and **36** are hinged to the wall panel **17**. Closing flaps **37** and **39** are connected to the wall panel **20**. The various closing flaps are separated by slits or notches in the conventional manner common in the manufacture of corrugated board or fiber containers and the like. A fold line **40** is provided in the panel **10** which is parallel to and spaced from the fold line **12**. A U-shaped weakened line of separation **41** extend from the fold line **40** toward or to the fold line **12**. The ends of the U-shaped line coinciding with the ends of the fold line **40**. The fold line **40** and the weakened line of separation **41** form a generally rectangular tab or flap **42** which may be folded out of the plane of the remainder of the panel **10**. If preferred the perforated line **41** may comprise merely a printed line having indicia thereby to indicate that the panel **10** may be cut along the line **41** to produce the flap **42**.

A fold line **43** is provided in the panel **20** which is parallel to and spaced from the fold line **21**. A U-shaped weakened line of separation **44** extends toward or to the fold line **21** from the fold line **43**, the ends of the weakened line **44** coinciding with the ends of the fold line **43**. The fold line **43** and the weakened line **44** form a flap **45** which may be folded out of the plane of the panel **20**. Obviously the weakened line **44** may comprise a printed

line, it being understood that the panel may be cut along this printed line.

The container blank is formed in the manner common to regular style containers made of corrugated board, paper board, or the like. The blank shown in Figure 5 is next folded so that the anchoring flap 22 overlaps a portion of the panel 10 and these parts are preferably stitched or adhered together. Alternatively the panels 10 and 20 may be taped together. Stitching is somewhat preferable in the event the container is used for heavy material. After stitching the container is stored or shipped to the consumer in a collapsed flat state.

The manner in which the container may be set up is best indicated in Figure 3 of the drawings. This figure illustrates one end of the container taped closed and the other end partially closed. If the fold lines 14 and 19 were omitted, together with their corresponding slots, the container would comprise a regular style corrugated or fiber container. However, by providing the extra fold lines 14 and 19, one corner of the container may be folded inwardly to produce a container which is angular or L-shaped in cross section. In closing the container two of the closing flaps such as 32 and 34 may be folded downwardly, the remaining smaller flaps 30 and 36 being folded over these first folded flaps. The larger flaps 27 and 39 may be folded to overlie the inner flaps. A strip of gummed tape or the like may be extended around the periphery of the container and folded down over the closing flaps to hold the same closed. Alternatively an adhesive may be placed between the flaps to seal the flaps together. In any event the finished container includes two right angularly extending portions preferably of equal size, as indicated in the drawings. By forming the fold lines 14 and 19 in the center of their respective panels, or close to the center, it is possible for two containers A to interfit together as indicated in Figure 4, thus simplifying the handling, shipping and storage of containers after they have been filled.

When it is desired to dispense the contents of the container, it is placed upon the ground, or a flat surface, in the manner illustrated in Figures 1 and 2 with the container resting upon the fold lines 14 and 19 so that the container is supported in an inverted V-position. The flaps or tabs 42 and 45 are next folded out of the plane of the panels from which they issue, the panels being broken or cut along the fold lines 41 and 44 and the flaps bent downwardly. This permits the contents of the container to be accessible through the openings provided in the panels 10 and 20, the flaps 42 and 45 acting as baffles to permit the contents in the upper portion of the container from flowing out through the openings. At the same time, the panels 13 and 15 serve as center baffles to guide the contents of the container downwardly into the two legs of the container where it is accessible to poultry.

The size and proportions of the container may be varied according to the size of the chickens or turkeys which are

to be fed. If the feeder is for use with small chickens or turkeys, it is desirable to make the legs of the container relatively narrow so that the openings are lower from the ground than would otherwise be the case. This may be done by changing the proportions of the panel sizes or by lengthening the container relative to its wall panel width so that the feed openings are longer and lower.

In accordance with the patent statutes, I have described the principles of construction and operation of my dispensing container, and while I have endeavored to set forth the best embodiment thereof, I desire to have it understood that obvious changes may be made within the scope of the following claims without departing from the spirit of my invention.

I claim:

1. A container including six panels arranged in series with the end panels of the series connected together, two of said adjoining panels being of substantially larger size than the intermediate panels therebetween, each of said larger panels being connected to a narrower panel which is parallel to the other of said larger panels, and each of said narrower panels being foldably connected to a narrower panel parallel to the larger panel to which each respective first named narrower panel is secured, the container thus formed including two right angularly extending legs, and end flaps on said wall panels foldable into overlapping relation to close the ends of the container each of said larger panels including a flap cut and formed from the body of the large panel and foldable out of the plane of the large panel.

2. A tubularly connected dispensing container blank including, in series, six panels including a large panel, four smaller connected panels, and a second large panel, means for connecting said panels in tubular relation, the larger panels being connected and being twice the width of the smaller panels, the large panels including a flap fold line parallel to, and spaced from, the lines of fold connecting the large panels to the adjoining smaller panels, the spaces between said flap fold lines and the lines of fold connecting the large panels to the adjoiniing smaller panels forming a potential flap which may be cut and folded out of the planes of said large panels along said flap fold lines, and end flaps on all of said panels designed to form a container end closure.

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