Feb. 21, 1939. L. C. PILCHER 2,147,798

HARVEST COLLECTION BIN

Filed Sept. 30, 1936

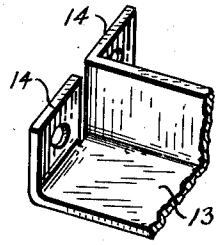


Fig. 6.

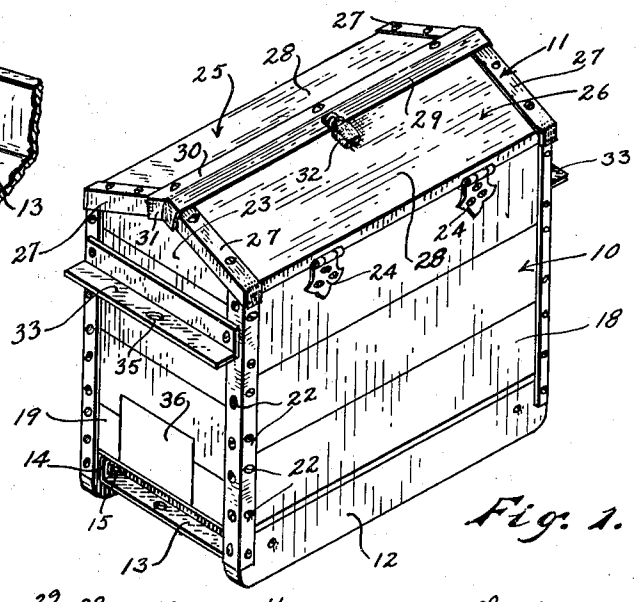


Fig. 1.

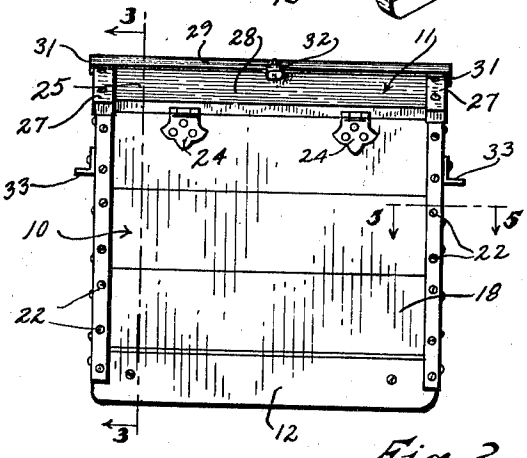


Fig. 2.

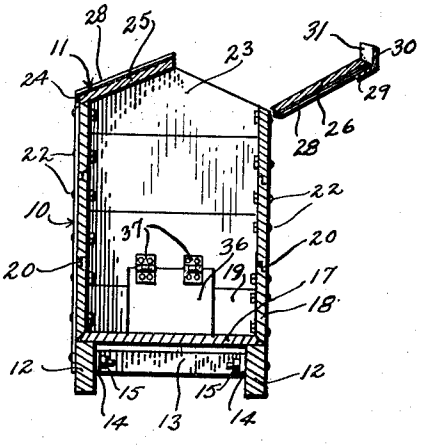


Fig. 3.

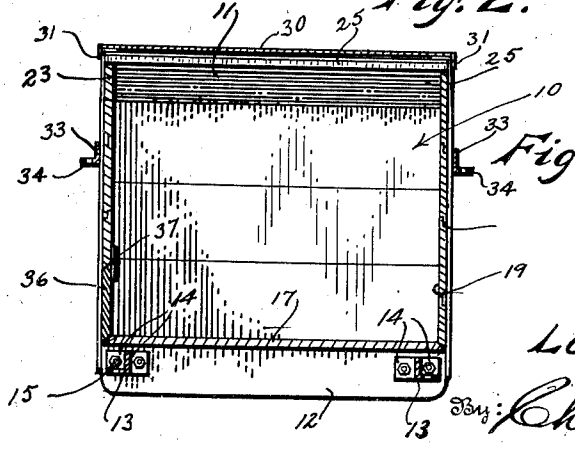


Fig. 4.

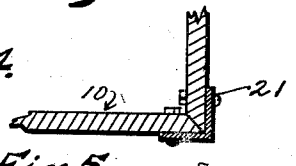


Fig. 5.

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HARVEST COLLECTION BIN

Louie C. Pilcher, Dothan, Ala.

Application September 30, 1936, Serial No. 103,449

5 Claims. (Cl. 217—5)

My invention relates to a harvest collection bin, and it consists in the constructions, arrangements and combinations herein described and claimed.

More particularly, the invention consists in a novel construction of a bin of a weather-proof character susceptible for use in the fields and into which harvested crops, such as cotton, peanuts, etc., may be deposited preliminary to removal to some other destination for further treatment.

It is an object of the invention to provide a bin structure having a roof composed of hingedly connected closure members, which, in their closed positions, have an inclination to readily shed water and thus protect the produce from undue dampness, this function being further enhanced by the fact that the closure members have a covering of tin or other waterproof material.

It is also an object of the invention to provide an overlying flange upon one of the closure members so as to provide an effective seal at the abutting edges of the closure members.

It is a still further object of the invention to provide a bin having means permitting hoisting of the filled bin into a truck or other vehicle for transportation.

It is also within the objects of the invention to provide a bin of the character specified wherein skid runners are embodied, permitting movement of the bin from one location in a field to another, by suitable traction means.

Additional objects, advantages and features of invention will be apparent from the following description considered in conjunction with the accompanying drawing, wherein

Figure 1 is a perspective view of a bin constructed in accordance with my invention.

Figure 2 is a side elevation thereof.

Figure 3 is a vertical sectional view on the line 3—3 of Figure 2.

Figure 4 is a vertical longitudinal sectional view of the bin.

Figure 5 is a cross section on the line 5—5 of Figure 2.

Figure 6 is a fragmentary perspective view of a combined brace and draw bar.

There is illustrated a bin generally indicated by the reference character 10, which in the present instance is shown substantially rectangular, and having a gable roof 11.

In constructing the bin, I provide a pair of skid runners 12 formed from oak or other suitable hard wood, connected adjacent respective ends by transversely extended brace-draw bars 13. The bars 13 are formed of angle iron, and the ends of the flanges are provided with laterally turned ears 14 adapted to rest against the skids for securement thereto by bolts, as at 15. The flange is apertured intermediate its length for admission of a draft hook (not shown) and the apertures also permit securement of the bin to the floor of a transport vehicle, thus retaining the bin against movement during transit.

Floor boards 17 are secured to the upper face of the skids, the outer upper edges being bevelled in a direction outwardly of the bin, and the lowermost side and end boards 18—19 are bevelled to match therewith. The bevel of the boards in the manner shown prevents entrance of water to the interior of the bin.

The side and end boards 18 and 19 have their upper longitudinal edges formed with a rabbet 20 complemental to a rabbet of the next adjacent board and in such manner a tight, weatherproof bin is provided.

The ends of the side and end boards have mitered ends, as clearly shown in Figure 5, and vertically disposed angle bars 21 are secured at the juncture of the boards. The angle bars 21 are suitably drilled or punched at intervals, as are the boards, and through aligned apertures bolts 22 are passed and bolted.

The uppermost end boards 23 are formed in substantially pyramidal shape, the apex of which is positioned medially of the longitudinal plane of the bin and the upper edge of the uppermost side boards are bevelled to form a continuation of the end boards 23.

Upon the uppermost side boards 18 there are mounted a pair of hinge members 24 swingably mounting closure members 25—26. Each of the members is provided with angle bars 27, at the ends, adapted to extend flush against the end boards 23. The closure members 25—26 are further covered with tin or other waterproof material 28.

In the closed positions of the closure members, the free ends thereof will abut at their bevelled portions and snugly contacting the upper bevelled edges of the side boards 18 and end boards 23.

The closure member 26 has a flashing 29 extending longitudinally thereof, including a lip 30 adapted to overlap the closure member 25. The lip 30 terminates at its ends in a downwardly directed flange 31. From the foregoing it will be seen that an effective seal is made at the juncture of the closure members.

It may be found desirable to provide a locking means for the bin, during transit or otherwise, and this is effected by provision of a hasp on the

closure **25**, the lip **30** being slotted to accommodate the hasp and any suitable pad lock, indicated at **32**, may be locked in the hasp.

Across the ends of the bin provision is made whereby the loaded bin may be hoisted onto a conveyance for transit. In the present instance, I provide a flange member **33**, the horizontally disposed flange **34** of which is apertured as at **35**, for engagement by a suitable hoisting hook.

At the end of the bin, a door **36** is provided, opening inwardly, and preferably hinged at the top as at **37**. The upper and lower edges of the door are bevelled, as shown, preventing ingress of water.

The operation

The operation will be readily understood from the following description.

A vehicle having a number of the bins thereon will proceed to the field to be harvested, which we will assume is a field of cotton. The bins are distributed at various locations in the field and the cotton pickers will gather the cotton as customary and deposit it in the bin. When the bin has been filled, the closure members are closed and locked when the truck is backed into proximity of the bin. A suitable hoisting mechanism is then employed in connection with the angle bars **33** for elevating the bin upon the truck. Any suitable hook means on the truck is then employed in conjunction with the bar **13** for maintaining the bin in a fixed position.

There may be times when it becomes necessary to move the bin from one location to another and this may be accomplished by attachment to the bar **13** of suitable draft means.

From the foregoing it will be seen that I have provided a novel construction of bin for collection of a harvest and one which will maintain the same in a dry state, which is especially desirable in the event of sudden rains or showers during gathering of the crops, or during transit.

In the case of a cotton harvest, the cotton will be removed from the bins by means of a suitable suction hose and after removal and ginning of the cotton, the seed obtained from the cotton may be deposited in the bin for return to the grower. The seed will be removed from the bin by means of the door **36**.

I claim:—

1. A harvest collection bin comprising foundation members extended longitudinally of the bin and including a floor, vertically disposed angle irons at respective ends of the foundation members, side and end boards fixed to the angle irons, the uppermost end boards having a pyramidal shape, the apex of which is positioned above the uppermost side boards, a closure member swingably connected to respective side walls, the free ends of the closure members having abutting relation when closed and a flashing member on one of the closure members, of a width overlapping the other closure member.

2. A harvest collection bin comprising parallel foundation members extended longitudinally of the bin, a brace member connecting the foundation members adjacent respective ends thereof, a floor on the foundation members, the edges of the floor having a bevel outwardly from the medial portion of the floor, vertically disposed angle iron members at respective ends of the foundation members, side and end boards fixed to the angle irons, the side and end boards having their lower edges bevelled to match the edges of the floor, the uppermost end boards having a pyramidal shape, the apex of which is positioned above the uppermost side boards, a closure member swingably connected to respective side walls, the free ends of the closure members having abutting relation when closed and a flashing member on one of the closure members of a width overlapping the other closure member.

3. The structure of claim 2 wherein the closure members have a waterproof covering and downwardly extended flanges at their ends adapted to lie flush with the end walls.

4. A harvest collection bin comprising a pair of parallel foundation members extended longitudinally of the bin, a brace member connected between the foundation members adjacent the ends, a floor on the foundation members, the edges of the floor having a bevel outwardly from the medial portion of the floor, angle iron members at respective ends of the foundation members, said angle irons being vertically disposed, side and end boards fixed to the angle irons, the lowermost side and end boards having their lower edges bevelled to match the edges of the floor, other edges of the boards having a rabbet for engagement with a rabbet of the abutting board, the uppermost end boards having a pyramidal shape, the apex of which is positioned above the uppermost side boards, a closure member swingably connected to respective side walls, the free ends of the closure members having abutting relation when closed, a flashing member on one of the closure members of a width overlapping the other closure member, and downwardly extended flange members on the ends of the closure members adapted to lie flush with the end walls.

5. The structure of claim 4 in which said bin is provided with an inwardly swinging door, the lower edge of which contacts the floor of the bin.

LOUIE C. PILCHER.