Sept. 2, 1958 S. L. JOHNSON 2,849,828

WORM BOX

Filed April 2, 1956 2 Sheets-Sheet 1

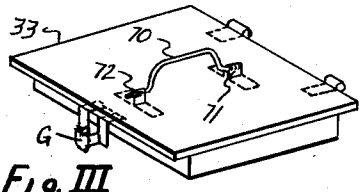


Fig. III

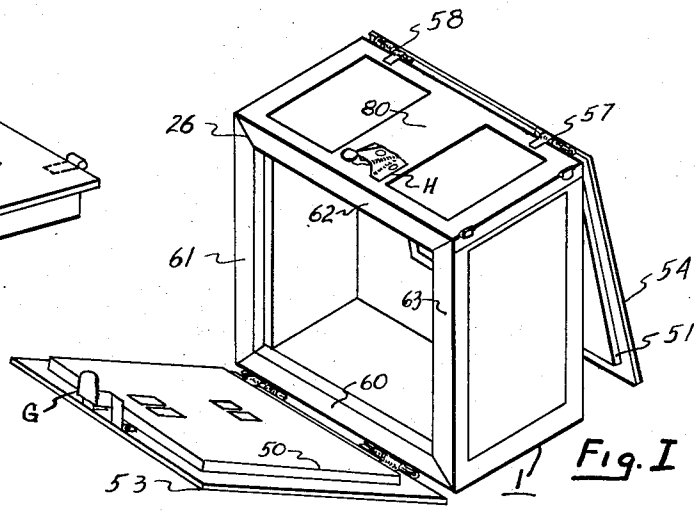
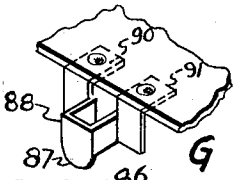


Fig. I



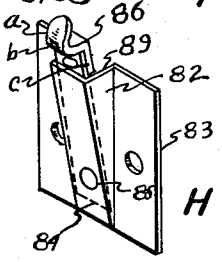


Fig. IV

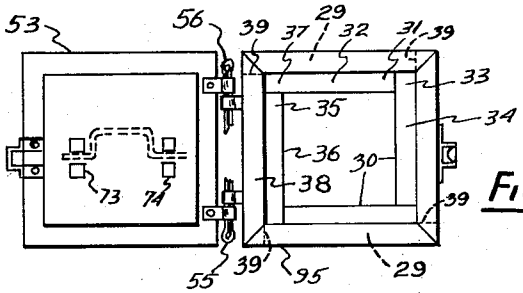


Fig. II

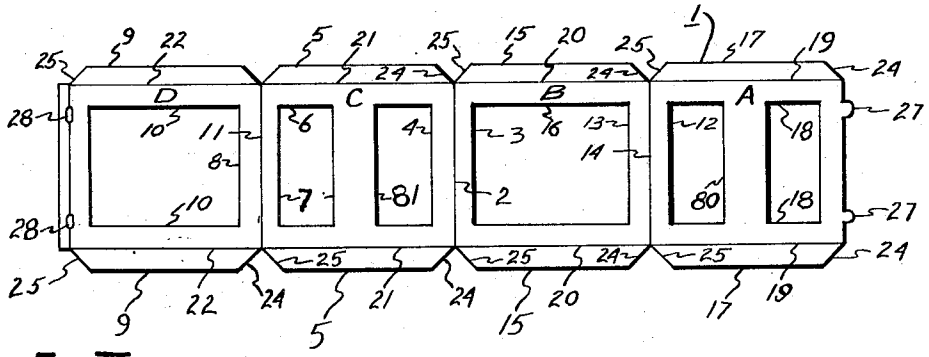


Fig. V

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WORM BOX

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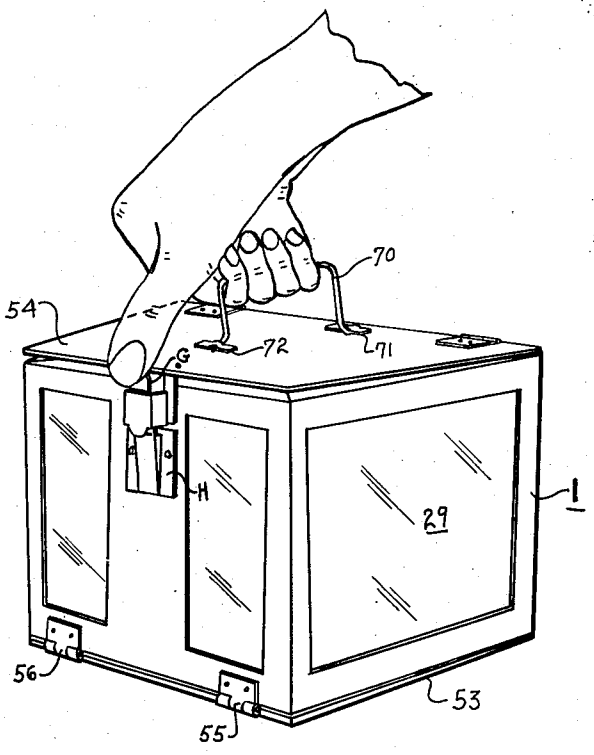

Fig. VI

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United States Patent Office 2,849,828 Patented Sept. 2, 1958

2,849,828

WORM BOX

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Application April 2, 1956, Serial No. 575,510

8 Claims. (Cl. 43—55)

This invention relates to a bait box for fishermen, and more specifically, to a box for fishermen using worms for bait.

Persons who are accustomed to placing worms and dirt in ordinary tin cans or other conventional worm containers, have found that the worms placed in this environment work away from the top of said container and secrete themselves near the bottom thereof. It therefore becomes necessary for the fishermen to dig through the dirt in the can and feel around with his fingers in order to find a worm. Fishermen have also found that worms placed in conventional containers do not survive for any substantial period of time after being placed therein.

Another disadvantage of the conventional container for worms is that it is difficult to carry or use without spillage of the dirt or escape of the worms from within.

It is the object of this invention to overcome all of the difficulties mentioned above and more specifically to provide a worm box for fishermen from which the user can easily obtain a worm when desired without digging around in the dirt with his fingers.

It is also the object of this invention to provide a container which will prevent any spillage of its contents or escape of the worms from within.

It is another object of this invention to provide a bait container in which worms will continue to live for substantial periods of time.

A further object of this invention is to provide a worm box ecenomical to make, durable and of light construction which will not be adversely affected by moisture.

The worm box of this invention is of a generally cubical shape. This box has dual lids opposite from each other, each lid having dual hinges, and a latching device which enables the user of the box to open either lid using only one of his hands. When the lid is closed by the user the latch snaps shut and insures that none of the contents of the box will be lost through jarring or spilling. When the user of this worm box has need for a new worm on his hook, he has only to open the end of the worm box opposite the end just previously opened by him and the worms which have crawled to the bottom of the container are positioned at what is now the top of the container. Of course, if a second worm is needed immediately, the same lid just previously opened will be reopened, since the worms will not have had a chance to work themselves away from the top of the container and bury themselves at the bottom. For a description of the device of this invention in more detail, reference should now be had to the accompanying drawings, wherein:

Figure I is an overall perspective view of the device of this invention, with both lids open.

Figure II is a top view of the device with one of its lids open, showing the interior of the device and a view of the underside of said open lid.

Figure III is a top view for one of the lids of the device.

Figure IV shows the two parts of the latching mechanism,

Figure V is a plan view of the frame before it is folded to form the sides of the box, and

Figure VI is a perspective view of the box showing the one-handed operation of the latch.

The frame **1** may be made of a material selected from a large group of materials which would perform satisfactorily as a frame. Among these materials are sheet steel, aluminum, or a plastic which can be stamped and then formed. The initial stamped-out piece would be as shown in Figure V. The four parts of the stamped-out piece **1** which constitute the four sides of the frame, are designated as sections A, B, C and D of the sheet material. The sides **17** and **18**, **15** and **16**, **5** and **6**, and **9** and **10** of the stamped-out piece are folded 90 degrees along fold lines **19**, **20**, **21** and **22** of sections A, B, C, and D, respectively. Each of the sections A, B, C, and D is then caused to form right angles with the adjacent sections. In other words, if desired, the stamped-out piece is initially folded 90 degrees along line **2** between sections B and C, i. e. side **3** of section B forms a right angle with side **4** of section C. Similarly, side **7** of section C forms a right angle along fold line **11** with side **8** of section D, and side **12** of section A forms a right angle along fold line **14** with side **13** of section B. Folding the sections in this manner causes the adjacent ends **24** and **25** of the sides **9**, **5**, **15** and **17** to fit together smoothly along fold line **26** as shown in Figure I. Terminal tabs **27** of section A are then forced through slots **28** in section D and then bent 180 degrees to complete the forming of the frame.

Assembly of the other parts of the unit takes place within the partially folded frame. Generally, each of the walls of the unit is comprised of a double layer of insulating material such as Celotex, which is made from cane pulp known as bagasse. This material is porous to air and moisture absorbent, but at the same time is not adversely affected when wet. Because of these qualities, in addition to being lightweight, it is ideally suited for the construction of a bait box since it will permit the worms to "breathe" and also provide a moist environment suitable for worms. The Celotex material used in this box is generally about ½ inch thick. The outer layer **29** of Celotex will usually be about 1 inch longer than the inner layer **30** and about an inch wider than the inner layer. The layers are inserted in the frame in a locking staggered manner. Figure II shows the staggered relationship of the inner walls of the container. End **31** of wall **32** locks end **33** of wall **34** in place and prevents any movement of end **33** toward the inside of the container. Similarly end **37** of side **32** is held in place by end **35** of side **36**, and so on with the rest of the inner walls. The same plan is followed with respect to the outer walls, end **37** of inner wall **32** abutting against the outer wall situated beneath folded flange **38** of the frame, the ends of said outer wall beneath flange **38** being defined by the broken line **39** and the oppostie side **95** of the container, Figure II. A further step in assembling these walls is the placing of an adhesive material between each of the inner and outer walls which assists in keeping the walls together near those areas where the inner walls are not locked in place. A material satisfactory for this purpose is a caulking compound such as "Trowelast," which is waterproof and which "sets" to only a semi-hard condition. This is preferable to other adhesives which are not moistureproof or which might harden excessively and chip loose, thereby resulting in separation of the layers. Only very small amounts of Trowelast are needed to secure the necessary degree of adhesion between the Celotex layers. The Trowelast should preferably be applied in thin strips along the lines of abutment of the Celotex walls.

The two lids **53** and **54** for the device are made of

Masonite material or the like and are identical in size. Attached to the inside of each lid is a layer of Celotex **50** and **51** also identical in size, but smaller than the respective lid. Lid **53** is attached to the frame by hinges **55** and **56** and lid **54** is attached to the frame by hinges **57** and **58**. The hinges are all similarly made and similarly connected to the lids and frame, their construction consisting generally of three parts, one part being attached to the lid, another to the frame, and both of these parts having their free ends turned in such wise that a cotter pin or the like may be inserted through the turned portions. The inner layers of Celotex on the lids are so dimensioned and positioned that they will seat snugly within the area bounded by the turned down edges **60**, **61**, **62** and **63** (Figure I) of the frame and will also rest gently upon the top edges of the inner walls of Celotex. As previously mentioned, the inner walls of Celotex are about 1 inch less in width than the outer walls, permitting a half-inch clearance at each end of the container for the layer of Celotex attached to the lids to evenly seat within the container. Thus when both lids are closed, the container is completely lined on the sides, top and bottom with Celotex, the sides being double layered.

Each of the lids is provided with a handle **70**. The handles are attached to the lids by means of metal ribbons **71** and **72** which are first made into a U-shape and then the open ends of said U caused to straddle the ends of the handles, inserted through aligned openings in the lids and Celotex linings thereon, and when fully forced through the lids and linings the ends are folded back firmly upon said Celotex linings. The ends are bent in opposite directions from each other as shown at **73** and **74**. The handles are thus firmly attached to the lids and also secure the Celotex linings to said lids. Some "Trowelast" or the like may also be used near Celotex edges for attaching the linings more securely to the lids.

When the frame is stamped out, it is desirable to leave interconnecting strips **80** and **81** in sections A and C to facilitate the mounting of part G of the latch mechanism shown in Figure IV. By providing said central strips of metal in these sections as a mounting base for latch G, the necessity for solid sheets of metal for sections A and C in order to mount latch G is avoided, thereby making the whole unit lighter and more attractive, as well as also providing better "breathing" for the worms in the box.

Part H of the latch mechanism contains a central portion **82** and a flat portion **83**. The central portion **82** is expanded away from the flat portion into a chutelike shape broader at its top than at its base. The flat portion **83** is attached to the frame on one of said center strips **80** and **81**. The point of attachment is near the top of the center strip so that part H may properly cooperate with portion G of the latch mechanism which is attached to the lid of the container. Flat portion **83** may be attached to the center strip **80** or **81** by spot welding. It can also be attached by rivets, screws or some other means, but spot welding is the easiest and cheapest way.

A thin strip of metal **84**, indicated by dotted lines in Figure IV, is attached near the base **85** of central portion **82**. This thin strip of metal extends up to point **86** of Figure IV. Attached to the thin strip of metal near its top is that portion of the latch mechanism which cooperates with portion G of the latch mechanism. This top portion is bent into three different planes, *a*, *b* and *c*. Plane *a* is shaped to slide under the slanted portion **87** of portion G of the latch mechanism. Horizontal plane *b* is designed to rest upon edge **88** of G and thus lock the lid closed until the user desired to open it. Vertical plane *c* is attached to the thin strip of metal **84**. The bottom edge of portion *c* extends only as far as point **89**, shown in Figure IV. It should be noted that this whole top portion is located between the thin strip of metal and the center strip of the frame. The combination of this location of the top portion of the latch mechanism (which is several times the thickness of the thin strip of metal to which it is attached) and the attachment of the thin strip of metal to H near its base **85** insures that segment *a* will always spring back away from the frame and cause edge *b* to lock over edge **88** of G, when the lid is closed and until it is again desired to open the lid. At this time the user of this device merely places his index finger under tab **87** and pushes on segment *a* with his thumb until edge *b* is back behind edge **88** and then exerts an upward force upon tab **87**. The lid may also conveniently be opened with only one hand by grasping the handle and lifting the box while pushing in on segment *a* with the thumb as illustrated in Figure VI.

Portion G of the latch mechanism is attached to the lid by means of tubular rivets extending through the lid and the horizontal legs **90** and **91** of said portion G. The lid is preferably made from Masonite or the like because it is very hard and not easily banged out of shape. Therefore, misalignment of the latch mechanism will not occur which might be the case if a softer material were used. On the other hand, a hard material such as steel, is not acceptable as Masonite because it is too heavy.

I claim:

1. A fisherman's bait box adapted for one handed operation, comprising four panels of Celotex joined together in interlocking manner at their vertical edges to form side walls of said box, a metal frame emrbacing said walls for retaining said wall panels in place, four panels of Celotex joined together in interlocking manner at their vertical edges and in contact with the inner walls of said wall panels forming a moisture absorbent liner for said box, doors for closing the top and bottom of said box, each door having a pair of hinges for pivoting said door along one side of said side walls on said frame, a liner of Celotex for each door secured to the inner side thereof, a pivoted bail on each door extending radially from the hinged side of the door, a latch for each door disposed on the side of each door opposite said hinges and at the end of said bail, said latch including a U-shaped member attached to and extending outwardly from the edge of said door, and a resilient lever attached to the side of said box adjacent said U-shaped member and adapted to extend therethrough and to hook over the edge of said member, the hinges and latch on the two doors having the same corresponding positions on the box.

2. A fisherman's bait box adapted for one handed operation, comprising four panels of porous fibrous material joined together in interlocking manner at their vertical edges to form side walls of said box, a metal frame embracing said walls for retaining said wall panels in place, four panels of porous fibrous material joined together in interlocking manner at their vertical edges forming a moisture absorbent liner for said box, doors for closing the top and bottom of said box, each door having a hinge for pivoting said door along one side of said side walls, a liner of porous fibrous material for each door secured to the inner side thereof, a bail on each door extending radially from the hinged side of the door, and a latch for each door disposed on the side of each door opposite said hinge and at the end of said bail, the hinge and latch on the two doors having the same corresponding positions on the box.

3. Claim 2 wherein each of the layers of porous fibrous material connected to the doors fits snugly into said box when said doors are closed and abut against the edges of said liner of porous fibrous material.

4. Claim 2 wherein said doors are made from Masonite and said frame is made from aluminum.

5. A fisherman's bait box adapted for one handed operation, comprising four panels joined together at their vertical edges to form side walls of said box, four panels of porous fibrous material joined together at their vertical edges forming a moisture absorbent liner for said box, doors for closing the top and bottom of said box,

each door having a hinge for pivoting said door along one side of said side walls, a pivoted bail on each door extending radially from the hinged side of the door, a latch for each door disposed on the side of each door opposite said hinge and at the end of said bail, said latch including a U-shaped member attached to and extending outwardly from the edge of said door, and a resilient lever attached to the side of said box adjacent said U-shaped member and adapted to extend therethrough, the hinge and latch on the two doors having the same corresponding positions on the box.

6. In a fisherman's bait box adapted for one handed operation and having means of porous fibrous material forming side walls of said box; doors for closing the top and bottom of said box, each door having a hinge for pivoting said door along one edge of said side walls, a liner of porous fibrous material for each door secured to the inner side thereof, a pivoted bail on each door extending radially from the hinged side of the door, and a latch for each door disposed on the side of each door opposite said hinge and at the end of said bail, the hinges and latch on the two doors having the same corresponding positions on the box.

7. In a fisherman's bait box adapted for one handed operation and having means forming side walls of said box: doors for closing the top and bottom of said box, each door having a hinge for pivoting said door along one edge of said side walls, a bail on each door extending radially from the hinged side of the door, and a latch for each door disposed on the side of each door opposite said hinge and at the end of said bail, the hinge and latch on the two doors having the same corresponding positions on the box.

8. A fisherman's bait box adapted for one handed operation, comprising four panels joined together at their vertical edges to form side walls of said box, doors for closing the top and bottom of said box, each door having hinges for pivoting said door along one side of said side walls, a pivoted bail on each door extending radially from the hinged side of the door, a positive locking latch for each door disposed on the side of each door opposite said hinges and at the end of said bail, said latch including a U-shaped member attached to and extending outwardly from the edge of said door, a resilient lever attached to the side of said box adjacent said U-shaped member and adapted to extend therethrough and to hook over the edge of said member, the hinges and latch on the two doors having the same corresponding positions on the box.

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