Dec. 26, 1950 E. L. BENSON ET AL 2,535,256

BAIT BOX

Filed April 5, 1946

Fig. 1.

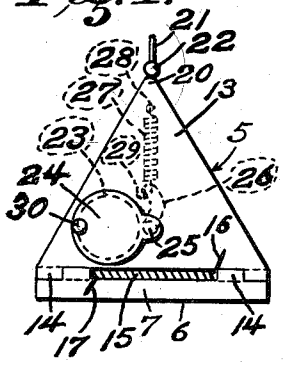


Fig. 2.

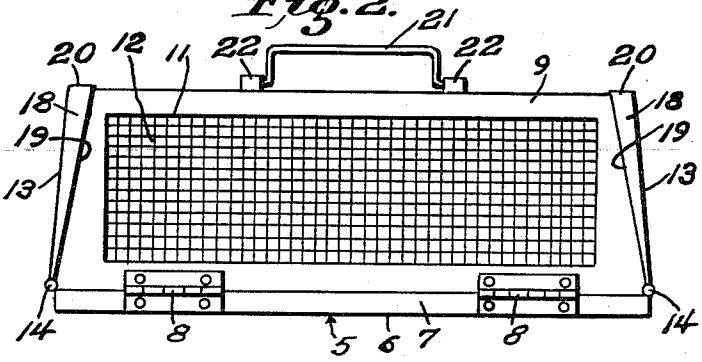
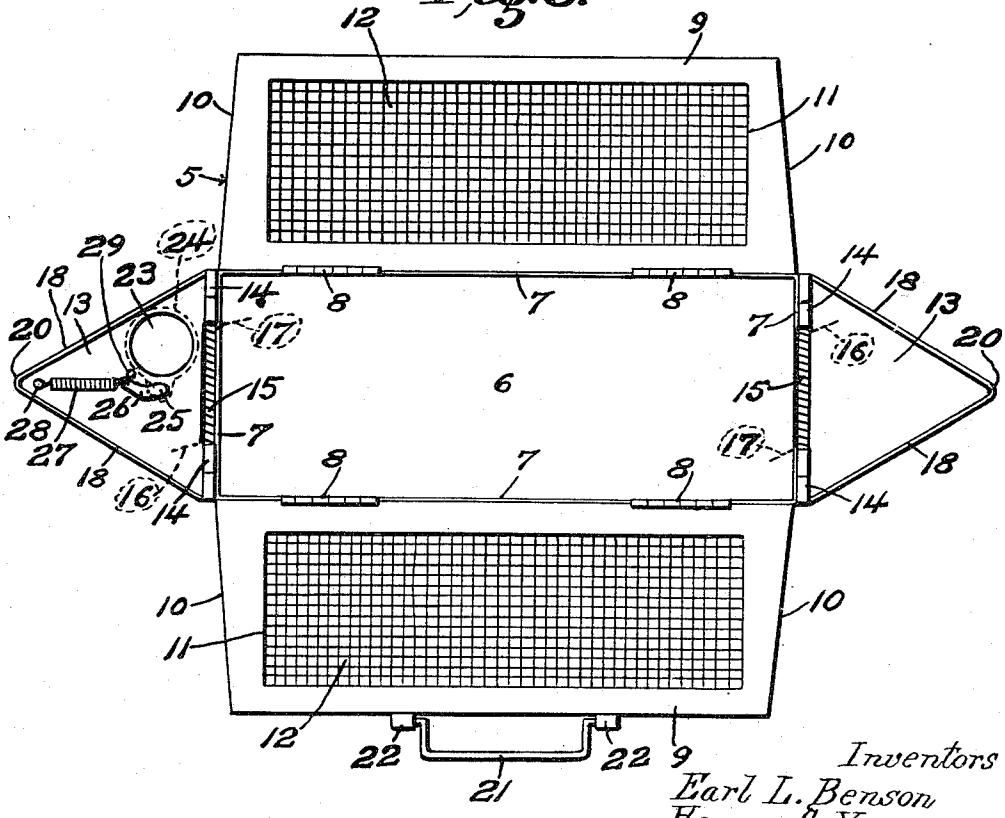


Fig. 3.



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BAIT BOX

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1 Claim. (Cl. 220—7)

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This invention relates to foldable knock-down bait boxes, and more particularly to boxes of this character for the carrying and handling of live bait such as frogs, crawfish, grasshoppers, etc., and which is readily collapsed and folded into a compact flattened condition when not in use and is as readily opened and set up in working condition for use.

An object is to improve generally upon devices of its kind by simplification of the construction and arrangement thereof and to make the same more practical and convenient in its use and at the same time facilitate its manufacture and minimize the cost thereof.

Another object is to secure ideal compactness of the device in a flattened folded condition thereof so as to occupy minimum space and at the same time produce a novel form and arrangement of cooperative and correlated parts, all hinged together in a unitary assembly wherein opposite longitudinal side wall members, hinged to a rectangular base member, are swingable to a set-up position with a lean-to effect and in triangular relation to the base member, that is to say, with the free longitudinal edge portions of the wall members in meeting contact with each other, while triangular end members, hinged at their base edges to the opposite ends of the base member, are swingable upwardly to close the ends of the box and are provided with flanges at their opposite inclined edges to retentively overlap outside the adjacent end edge portions of the side wall members, the triangular end members being normally spring-urged to their set up positions and thus caused to hold all of the said set up parts of the box stably in their cooperative working positions.

Other objects and advantages to be attained will hereinafter more fully appear in the following description.

In the accompanying drawings illustrating a practical but non-limiting exemplification of the invention:

Figure 1 is an end view;

Figure 2 is a side elevation; and

Figure 3 is a plan view showing the end and side wall members of the box in flattened opened positions.

Referring now to the drawings in detail, the numeral 5 designates the bait box as a whole. As shown, the box comprises a pan-like, flat, rectangular, base or bottom member 6 formed with slight, upstanding, marginal flanges 7 at its longitudinal sides and ends, thus making it pan-like and also serving to stiffen it. However, as far as the present invention is concerned, the base member 6 may be a plain plate without marginal flanges, but, obviously, it should be

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sufficiently thick to give the requisite inherent rigidity thereto.

Hinged, as at 8, to the longitudinal side flanges 7 of the base 6 or directly to the corresponding edges if no flanges are provided, is an opposed pair of polygonal side wall panels 9. These panels 9 may be truly rectangular, that is to say, formed square at their opposite ends, but, preferably, their ends are tapered slightly angularly, as at 10 (see Figure 3). So, too, the wall panels 9 may be solid throughout the extent thereof but they are preferably formed with rectangular opening 11 of a size including the major portion of each panel 9 and said openings 11 are covered by wire mesh fabric or other suitable foraminous material 12, or obviously, in some adaptations of the invention, the wall panel may be provided with a multiplicity of perforations. This provision is to give ample ventilation to the box.

It is here further noted that, in size, the openings in the wall panel 9 are preferably made large enough to enable one to view clearly the contents of the box, but, of course, the same should be small enough to retain the live bait within.

In practice, the side wall panels 9 are preferably made of a width slightly less than the width of the base member 6. In this way, the side wall panels 9 can be swung upwardly on their hinges 8, into a lean-to relative position with their upper longitudinal edge portions in meeting contact so that the panels rest in direct edgewise contact with each other and in triangular cross-sectional relation to the base member 6. This is the set-up condition of the panels for the box in use. However, in the collapsed and folded condition of the box, one of the side wall panels 9 can be folded down substantially flatwise on the bottom or base member 6 and then the other panel down on top of the first so folded panel.

At the opposite ends of the bottom or base member 6, an opposed pair of triangular end wall panels 13 are hinged at their base edges, as at 14, to the adjacent end flanges 7 of the bottom or base member. As shown, the hinges 14 are provided in pairs, one pair adjacent each side edge of the end wall member 13. A common pintle is provided for both pairs of the hinges 14, and coiled around each pintle, between the respective pairs of associated hinges, is a helical spring 15 (see Figure 3). The respective springs 15 are wound so that one end portion 16 of each bears upon the adjacent outer face portion of the companion end wall member 13 and the other end 17 of the spring bears against the adjacent outer face portion of the bottom or base member 6. Thus, a forced swinging movement of the end wall 13 from its raised position shown in Figures 1 and 2 to its lowered open position shown in Fig-

ure 3, causes a further winding of the spring 15 and the reactive effect of the spring is for it to unwind and in so doing causes the end wall member 13 to swing upwardly either into engagement with the adjacent ends of the triangularly disposed set-up side wall panels, or, if the side wall panels have been folded down in their flatwise collapsed condition on the bottom or base member 6, the end wall members 13 are spring-urged to a folded down position on the adjacent end portions of the folded down side wall panels.

In either the set-up or the collapsed folded down condition of the box, the springs 15 are constantly wound under tension and reactive to move the end wall members 13 to their upstanding working position or their folded down collapsed position, as the case may be. So, too, the spring elements 15 are primarily provided to normally function so as to hold the longitudinal side wall panels 9 and the end wall members 13 quite firmly and stably in set-up working position as illustrated in Figures 1 and 2, yet the springs are readily yieldable to a forced movement of the end wall members 13 out of holding engagement with the set-up side wall panels 9.

To enable the end wall member 13 to effectively retain the set-up side wall panels 9 in that condition, said end wall members 13 are provided with substantially right-angular, upstanding flanges 18, which, in the set-up condition of the parts, overlap the adjacent end marginal portions of said side wall panels 9 (see Figure 2). These end wall flanges 18 are preferably tapered at their longitudinal edges, as at 19, the taper inclining inwardly from the apex 20 of each member 13 to its base edge (see Fig. 2).

For convenience in carrying the bait box by hand or strapping or tying the same to the belt of a user or to any other convenient place in use, a bail-like handle or handles is illustrated as hingedly mounted at its ends in suitable bracket or lug members 22 provided either on the free longitudinal edge portion of one or both of the side wall panels 9. In the illustration only one of said handles is shown. Of course, if two handles are provided they will be attached in coincident relation on the respective side wall panels 9 so that they can be made to register in an associated and cooperative relation whereby they can be used together at one and the same time.

For access to the interior of the set-up box structure, a circular opening 23 is provided in at least one of the end wall members 13. Obviously, one of these openings 23 may be provided in each end wall member. As shown, a circular disc-like closure member 24 is provided on the outside of the end wall member 13 for said opening 23. The closure member 24 is formed with a peripheral lug extension which is pivotally attached to the end wall member 13, adjacent to one side of the opening, as at 25, the pivot member of said closure member being inserted and rotatably fitted in an aperture provided therefor in the wall member and having fixedly secured on its inner end portion a bent crank lever 26.

The free end portion of the crank lever 26 is attached to one end of a spring element 27, the opposite end of which is attached to a stud 28 located on the inner face of the end wall member 13 adjacent the apex 20 of the member, said spring element 27 yieldably holding said crank lever 26 against a stop stud or the like 29 on the end wall member 13 and thereby the closure member 24 in its closed position.

The closure member 24 is provided on its outer face, as shown at a point substantially diametrically opposite its pivotal point, with a handle or knob member 30 for convenience in opening the closure member, this being all that is necessary because the spring element 27 not only yieldably holds the closure member in its closed position but automatically returns it to such position after each actuation thereof.

Frogs and other live bait such as crawfish, grasshoppers and the like are readily placed in and removed from the set-up box of the present invention. So, too, the improved box has many apparent and practical advantages in its make-up, important among which is the ease and facility in collapsing the box foldably with ideal compactness and as readily setting up the box for use, in which latter condition it is quite safe from accidental collapsing in regular use thereof. The box can be made in different desirable sizes, one very practical size being comparatively small in triangular cross-section so as to accommodate a reasonably sufficient quantity of live bait with ample ventilation provision but limited space capacity so that the live bait does not have too much freedom of movement which thus makes it less liable for the bulk of live bait to kill themselves or each other.

While the illustrated structure is a practical exemplification of the invention, the same admits of modification and change within the spirit and scope of the appended claim. The invention, therefore, is not limited to the specific construction and arrangement shown.

What is claimed is:

A collapsible bait box of the character described, including a base member having side and end edges, a pair of inwardly folding side walls each having side and end edges, said end edges being inclined inwardly toward the free edge thereof and each being pivotally secured along one side edge to a side edge of the base member, a pair of inwardly folding flanged end walls of substantially triangular shape each being pivotally secured to an end edge of the base member, and spring means for normally biasing each of the end walls into overlapping retentive engagement with each of the side walls when the latter are moved to set-up position with their free side edges in contacting relation with each other, and for causing the end walls to overlie the side walls when the latter are folded inwardly over the base member and to retain the same in said last named position, the spring means constituting the sole means for maintaining the side and end walls in set-up or collapsed position with respect to said base member.

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