Oct. 23, 1962 H. E. SWANSON 3,059,369

MINNOW DIPPER AND HOLDER

Filed Sept. 27, 1961

FIG. 1

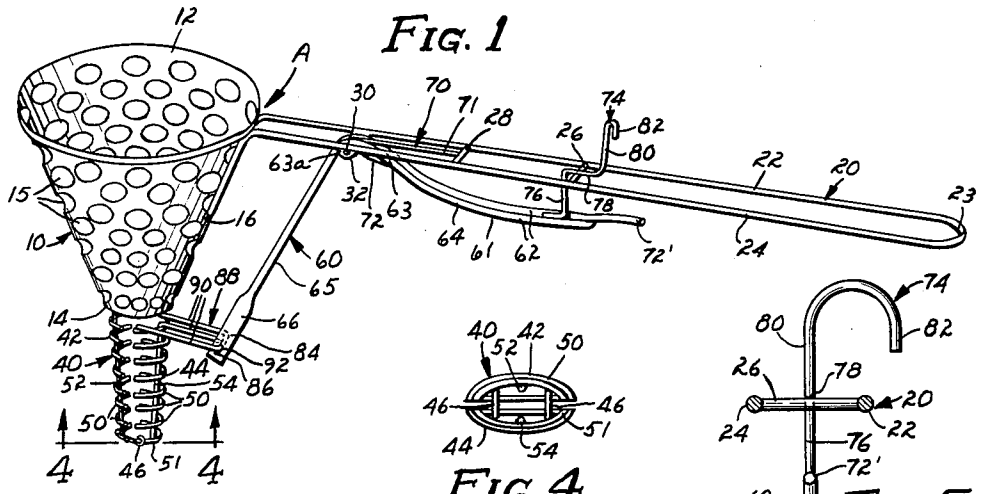

FIG. 4

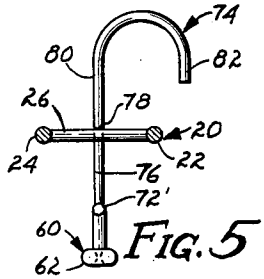

FIG. 5

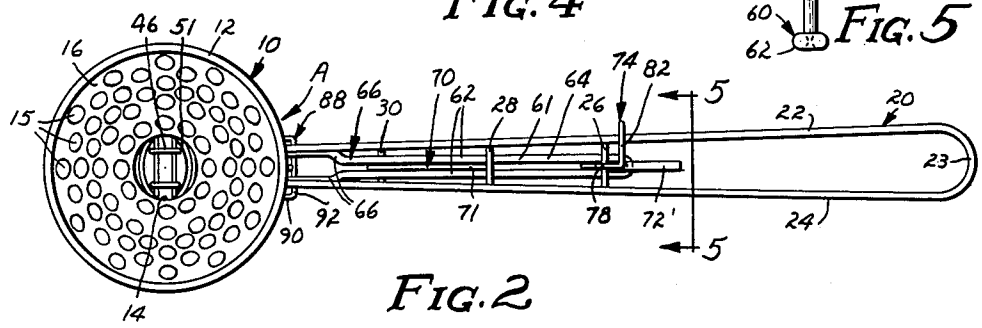

FIG. 2

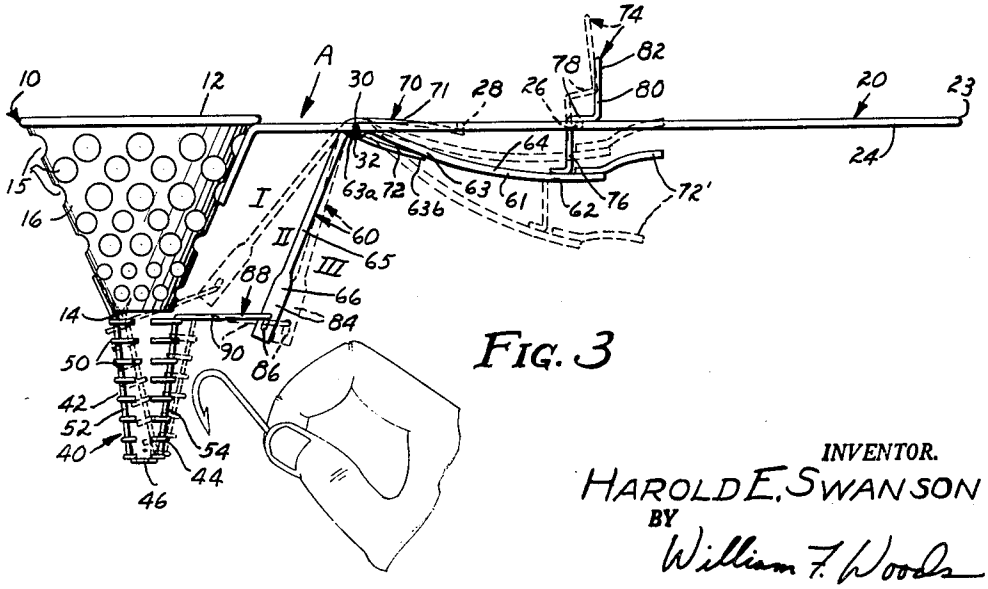

FIG. 3

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MINNOW DIPPER AND HOLDER

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This invention concerns a live bait handling device; in particular, it concerns a new and improved minnow dispenser adapted for dipping minnows from a container and holding them while they are being hooked preparatory to being released for use as bait.

There are a large variety of such devices on the market today. These include dippers and holders that have means in their handles for receiving, holding and releasing minnows after being dipped from a bucket, as well as those characterized by various types of conical bodies that discharge the minnow from their lower end. The former are generally difficult to manipulate with one hand as the fisherman has to change the position of the device between the dipping operation and the hooking step often resulting in lost minnows which eventually find their way into the bilge of the boat. The latter type or conical body type either do not hold the minnow firmly during the hooking operation or prevent the easy attachment of a hook while the minnow is being held. In addition, the spoon shaped holders and dippers that make up a part of the prior art are frequently disadvantageous in that a one hand operation is quite difficult to attain and their shape makes it hard to capture minnows in a cylindrical bucket.

Accordingly, it is a primary object of this invention to provide a minnow dispenser that will overcome the disadvantages listed above.

Another important object of this invention is to provide an improved minnow dipper and holder.

A further object of this invention is to provide a minnow dispenser having novel structural characteristics and improved operational qualities.

Another object of this invention is to provide in a minnow dispenser novel and improved means for holding and releasing a minnow that is carried therein.

Yet another object of this invention is to provide a minnow dispenser having novel means for manipulating the minnow with one hand after it has been caught whereby to hook the minnow easily with the other hand.

Another object of this invention is to provide in a minnow dispenser novel means for restraining the minnow during the hooking operation cooperative with novel means for releasing the minnow after it has been hooked.

Still another object of this invention is to provide a minnow dispenser that is relatively inexpensive to produce, easy to operate with one hand, rugged in construction and extremely durable.

Another object of this invention is to provide in a minnow dispenser of the type described, novel spring biased means for holding and releasing a minnow without requiring the use of two hands.

Another object of this invention is to provide a minnow dispenser having means for positively holding and restraining a minnow from movement during the hooking operation without harming the minnow.

Yet another object of this invention is to provide in a minnow holder and dipper, novel means for manipulating the minnow holding element into several positions whereby to easily capture, hold, and release the minnow with one hand.

Another object of this invention is to provide a minnow dispenser that is light in weight, compact in size and easy to operate.

Another object of this invention is to provide a minnow dispenser built according to sound mechanical design principles adapted to normally maintain the minnow holding

element thereof in a natural minnow holding position and having novel means for clamping the minnow therein and releasing the minnow therefrom while leaving one hand free to hook and remove the minnow.

These and other objects and advantages of the invention will become more fully apparent from a consideration of the following detailed specification and accompanying drawing wherein a preferred embodiment of the invention is shown by way of illustration and not by way of limitation.

In the drawing:

FIGURE 1 is a perspective view of the invention;

FIGURE 2 is a top plan view of the invention;

FIGURE 3 is a side elevational view of the invention with parts shown in dotted lines to illustrate different operating positions thereof;

FIGURE 4 is an enlarged view, partially in section, taken on the line 4—4 of FIGURE 1; and

FIGURE 5 is a view, partially in section, taken on the line 5—5 of FIGURE 2.

FIGURES 1 to 3 of the drawing illustrate the invention A in its entirety. My minnow dispenser includes an inverted conical dipping member **10** having a generally circular open top **12** and a generally circular open bottom **14** joined by a cone shaped perforated or mesh body **16**. As shown in the drawing, bottom **14** is of lesser diameter than top **12** to provide a minnow dipping structure adapted to funnel the minnows into the open bottom **14** after their capture by means of top **12**. Water easily passes through body **16** by virtue of the perforations **15** therein. Body **16** may be made of stiff mesh material in place of the perforated structure disclosed in the drawing.

An elongated wire loop handle **20** is secured to the top **12** of dipping member **10**. Handle **20** is of sufficient length to reach into a normal size minnow bucket and is made up of slender spaced elongated relatively inflexible longitudinal members **22, 24** connected at their outer end by an integral section **23**. Carried transversely between members **22, 24** intermediate approximately the middle thereof and dipping member **10** are spring bars **26, 28**, and hinge pin **30**. Spring bar **26** is located remote from dipping member **10** on handle **20**. Hinge pin **30** is carried on handle **20** substantially adjacent dipping member **10** while spring bar **28** is located on handle **20** intermediate spring bar **26** and hinge pin **30**. Hinge pin **30** is preferably carried by opposed lugs **32** mounted on members **22, 24** of handle **20**.

An elongated longitudinally spilt hollow wire cage **40** is in communication with and forms an extension of bottom **14** of dipping member **10**. Cage **40** is generally cylindrical in cross section and has a longitudinal axis that is coincident with the axis of dipping member **10**. Cage **40** consists essentially of two parts. The forward section **42** (located on the edge of bottom **14** remote from handle **20**) is fixedly attached to bottom **14** of dipping member **10**. The rearward section **44** of cage **40**, in free communication with the rearward edge of bottom **14**, is pivotally secured to fixed section **42**. Fixed section **42** and pivotally section **44** of cage **40** are made of spaced generally semi-circular segments **50** each attached to central longitudinal supports **52, 54** respectively. Longitudinal support **52** of fixed section **42** is rigidly fastened to the forward edge of bottom **14** of dipping member **10** while support **54** of pivotal section **44** is connected to hinge pin **46** of fixed section **42** through lower segment **51** of section **44**, as disclosed in FIGURE 4 of the drawing. The result is a pivotal minnow receiving, clamping and releasing cage in communication with the bottom of the conical dipping member **10**.

Means for manipulating cage **40** include an elongated curved operating lever **60** constructed of an inflexible wire loop **61** having spaced generally parallel legs **62** formed

into a downwardly curved pivot section **63**, slightly upwardly curved operating section **64** and a generally straight section **65** engageable at its lower end **66** with the upper end of pivotal section **44** of cage **40**, as will be described. The pivot section **63** of lever **60** is drilled, as at **63***a*, to receive hinge pin **30** of handle **20** and nests between legs **22**, **24** thereof. A slender wire torsion spring **70**, mounted on hinge pin **30**, has a leg **71** bearing against spring bar **28** and a leg **72** that is fixedly attached to pivot section **63**, as at **63***b*, of lever **60**. Spring **70** biases lever **60** in a clockwise direction so that straight section **65** and the lower end **66** thereof are normally urged in the direction of cage **40**. The rear end of operating section **64** of lever **60** has a short downwardly curved finger engageable extension **72'** adapted for the manipulation of the device, as will be explained.

Slightly forwardly of extension **72'** and in register with spring bar **26** of handle **20** is a slender elongated resilient locking member **74** having a shape made up of a vertical section **76** extending upwardly from lever **60**, a generally horizontal section **78** extending rearwardly from the upper limit of vertical section **76**, a second vertical section **80** extending upwardly from horizontal section **78** and a hook section **82** at its upper extremity. Hook section **82** is not co-planar with the other elements **76**, **78**, and **80** of locking member **74**, it being designed to engage leg **22** of handle **20** to limit the clockwise rotation of lever **60**. Locking member **74** is so positioned as to engage spring bar **26** with its horizontal section **78** to maintain lever **60** and cage **40** in a normaly minnow receiving position, as will be explained.

The lower end **66** of lever **60** is characterized by a pair of opposed parallel jaws **84** each having a slot **86** parallel to each other and in communication with the end thereof. Into slots **86** of jaws **84** is positioned a slender connecting link **88** consisting of three parallel struts **90** connected together at the end thereof engageable with lever **60** by means of a transverse cross strut **92** which is retained within slot **86** of jaws **84**. Link **88** is preferably clamped within jaws **84** by closing the outer end of slot **86** as shown in FIGURES 1 and 3. Link **88** is connected to the upper free end of pivotal section **44** of cage **40** to complete the assembly of the device. Preferably link **88** is formed integral with or rigidly secured to the upper end of pivotal section **44** and bent into a re-entrant angle with its outer surface to form the structure disclosed.

In use the fisherman grasps the minnor dispenser A by handle **20** and captures a minnow from its container. The minnow enters cage **40** in a head downward position, as illustrated in FIGURE 3. During this operation, cage **40** is in the minnow receiving position, represented by reference character II. Position II is achieved by the coaction of spring **70** and horizontal section **78** of locking member **74** which rests upon spring bar **26** of handle **20** to retard the clockwise movement of lever **60**. This position of pivotal section **44** of cage **40** results in a generally cylindrically shaped cage **40** in communication with open bottom **14** of dipping member **10**, into which the minnow is received.

For hooking the minnow, locking member **74** is pushed forwardly with the thumb causing spring **70** to urge lever **60** further in a clockwise direction. This results in pivotal section **44** of cage **40** assuming the closed or minnow clamping position represented by reference character I of FIGURE 3. Damage to fixed section **42** of cage **40** by contact with pivotal section **44** during this step is prevented by hook section **82** which, by engaging leg **22** of handle **20**, stops the clockwise movement of lever **60** and limits the movement of pivotal section **44** toward fixed section **42**. The minnow is easily hooked while restrained within cage **40** when cage **40** is in a closed or clamping position.

Release of the minnow after it has been hooked is accomplished by lifting finger extension **72'** and rotating lever **60** in a counterclockwise direction. This action causes pivotal section **44** of cage **40** to open into the minnow release position shown by reference character III of FIGURE 3. When the minnow is released from cage **40**, finger extension **72'** may be released to allow lever **60** and cage **40** to assume a normal minnow holding position (position II).

Thus cage **40** may be manipulated by lever **60** into any one of three positions. Position I is the closed or minnow clamping position; position II is the normal minnow receiving position and position III is the open or minnow release position. Spring members **70** and locking member **74** coact to limit the displacement of lever **60** in both directions.

The device may be made of standard materials according to well known methods. For example, dipping member **10** may be made of light perforated metal, plastic material or wire mesh material. The use of metal or light plastic may be similarly employed in the construction of the remaining components, no limitation in this regard being intended.

My invention has been sufficiently tested and found to be entirely satisfactory. It will be obvious to those skilled in the art that my invention may be modified by many substitutions and equivalents and that this disclosure is intended to be illustrative only. Therefore, I intend to be limited solely by the scope of the appended claims.

I claim:

1. In a minnow holder and dispenser, an inverted hollow truncated conical body, a hollow elongated longitudinally split cage connected to and in communication with the lower end of said conical body, said cage being generally open at the ends thereof and having an opening therein through which a fishhook may be inserted to hook a minnow placed in said cage, said cage including a pivotal section movable from a normal minnow receiving position into minnow clamping and minnow releasing positions, handle means secured to the upper end of said body, lever means mounted on said handle means and being engageable with said pivotal section for manipulating said pivotal section into a selected position, and means for normally biasing said pivotal section towards a minnow clamping position.

2. The device of claim 1 wherein releasable means coacting with said biasing means are provided to normally hold said pivotal section in a minnow receiving position.

3. A minnow holder and dispenser including a hollow inverted truncated cone-shaped body having an open upper end and an open lower end, said body being adapted to pass water through the wall thereof, a minnow receiving cage connected to and in communication with the lower open end of said body, said cage being generally open at its ends and having an opening through which a fishhook may be inserted to hook a minnow placed in said cage, said cage being split length-wise and including a fixed section and a pivotally movable section, said movable section being hinged to the lower end of said fixed section, an elongated handle carried by the upper end of said body, a first class operating lever pivotally mounted on said handle, one end of said lever being connected to said movable section, the other end of said lever extending from the fulcrum point thereof towards the rear of said handle, means carried by said handle and engageable with said lever for normally biasing said movable section into clamping engagement with said fixed section, and releasable means carried by said lever and engageable with said handle for positioning said movable section into a normally spaced relation with said fixed section whereby said fixed section and said movable section assume a generally cylindrical shape substantially coincident with the lower end of said body, said movable section being pivotal into a clamping relationship with said fixed section and being movable into an open position with respect to said fixed section.

4. In a minnow holder and dispenser, a funnel-shaped body, an elongated generally cylindrical cage in com-

munication with and connected to the small end of said body, said cage being generally open at its ends and having an opening therein through which a fishhook may be inserted to hook a minnow placed in said cage, said cage including a fixed section having a generally semi-circular cross section and a movable section forming therewith said cage, said movable section being pivoted to said fixed section at the lower end thereof, a handle secured to the large end of said body; a finger engageable lever secured to said handle and to said movable section, spring means carried by said lever for normally biasing the free end of said movable section into clamping engagement with fixed section, and releasable means for holding said movable section in spaced relation to said fixed section where said cage is substantially cylindrical in shape and in alignment with the small end of said body.

5. The device of claim 4, wherein said funnel shaped body is perforated so as to be adapted to pass water therethrough.

6. In a minnow holder and dispenser, an inverted hollow conical body, a hollow truncated elongated longitudinally split cage connected to and in communication with the lower end of said conical body, said cage being generally open at the ends thereof and having an opening therein through which a fishhook may be inserted to hook a minnow placed in said cage, said cage including a pivotal section movable from a normal minnow receiving position into minnow clamping and minnow releasing positions, handle means secured to said body, and means mounted on said handle means for manipulating said pivotal section into a selected position.

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