Jan. 3, 1933. M. F. JAMAR, JR 1,892,892

ARTIFICIAL MINNOW

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Fig. 1.

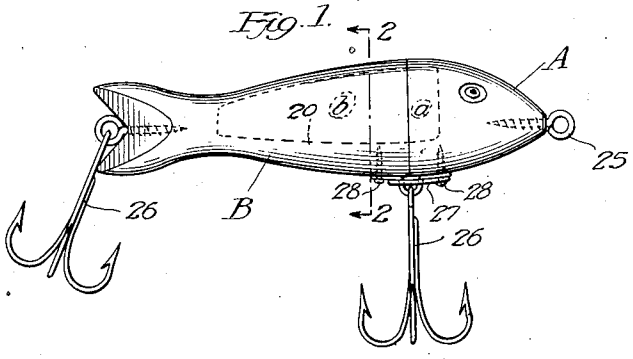


Fig. 2.

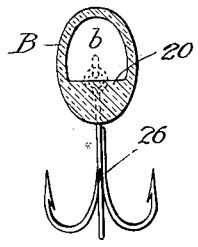


Fig. 3.

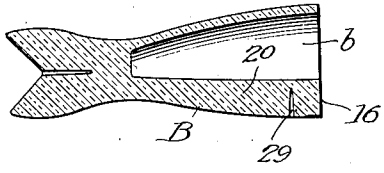


Fig. 4.

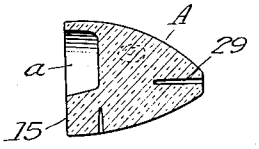


Fig. 5.

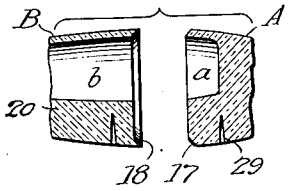


Fig. 6.

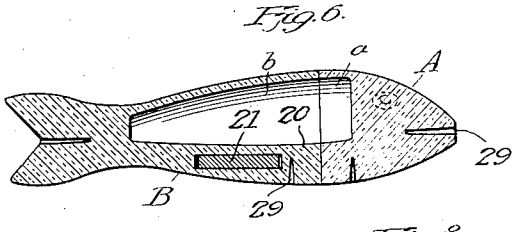


Fig. 7.

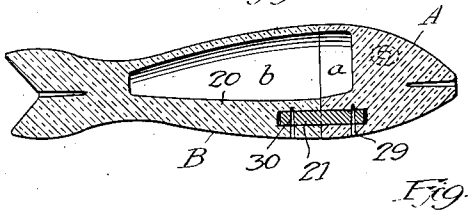


Fig. 8.

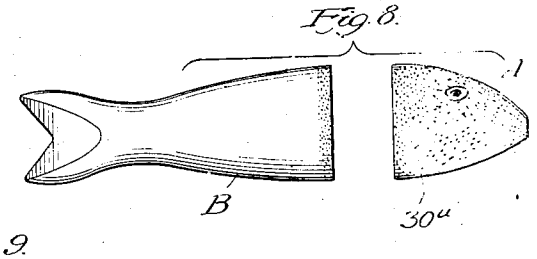
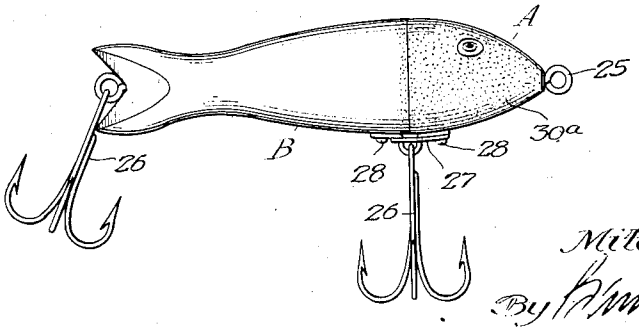


Fig. 9.



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Fig. 10.

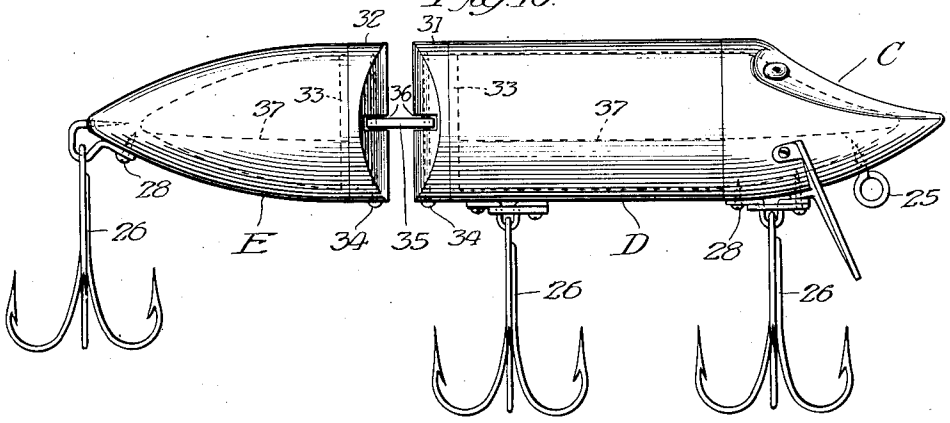


Fig. 11.

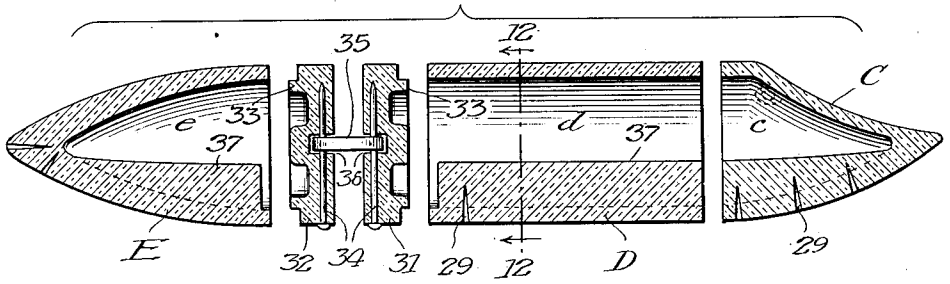


Fig. 12.

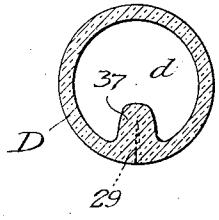


Fig. 13.

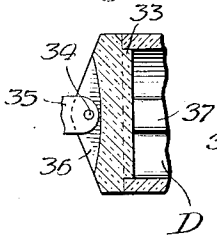
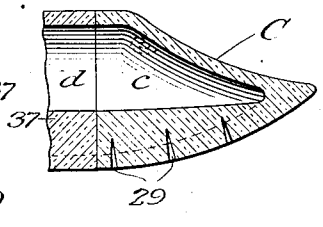


Fig. 14.



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Patented Jan. 3, 1933 1,892,892

UNITED STATES PATENT OFFICE

MITCHELL F. JAMAR, JR., OF DOWAGIAC, MICHIGAN, ASSIGNOR TO JAMES HEDDON'S SONS, OF DOWAGIAC, MICHIGAN, A CORPORATION OF MICHIGAN

ARTIFICIAL MINNOW

Application filed December 5, 1931. Serial No. 579,145.

This invention which relates to an artifical minnow is concerned with the construction of its body from a number of sectional units adapted to be joined inseparably into an integral structure.

An artificial minnow embodying my improved features is advantageous in that its several components may be formed of a non-buoyant material susceptible of being moulded to desired form to produce in the completed bait a body having walls of amplified thickness at desired points by which to produce interiorly thereof an air chamber of desired size and in a selected location so that the buoyancy of the bait may thereby be modified within wide limits. In addition, the present bait construction is one which may be produced from material which is transparent, translucent, or colored evenly, or otherwise, throughout the entire thickness of its walls so as to retain its appearance unchanged even though its exterior surface be marred somewhat in usage. As a further advantage, the present bait may utilize an embedded weight, located at a desired point, to impart ballast to the bait as well as shift its center of gravity. All such objects, as well as others which will hereinafter appear, are attained by a bait embodying the improved features of my invention, an exemplification of which is set out in the accompanying drawings in the manner following:

Figure 1 is a side elevation of the completed bait;

Fig. 2 is a transverse section on line 2—2 of Fig. 1;

Fig. 3 is a central longitudinal section of the rear unit of the bait;

Fig. 4 is a similar view of the front unit of the bait;

Fig. 5 is a similar fragmentary view of the meeting ends of the bait units here shown as slightly separated;

Fig. 6 is a central longitudinal section through a bait having embedded in its rear unit a weight for ballast purposes;

Fig. 7 is a similar view showing the weight disposed in part within each of the front and rear units;

Fig. 8 is a view in elevation of the two bait units slightly separated illustrating possibilities in color combinations therefor;

Fig. 9 is a similar view of the bait with its two units joined together;

Fig. 10 which is a view in elevation shows a jointed bait embodying my invention;

Fig. 11 is a central longitudinal section through the bait of Fig. 10 with the several units thereof slightly separated;

Fig. 12 is a transverse section taken on line 12—12 of Fig. 11;

Fig. 13 is a horizontal section through one of the closure units shown in Fig. 11; and

Fig. 14 is a fragmentary detail in longitudinal section showing connections between the two forward units of the bait of Fig. 10.

In the production of the present bait, it is advantageous to utilize a powdered material which by the application of heat and pressure may be moulded to the desired shape. Such a material may comprise cellulose acetate colloided with suitable plastizers, pigments and solvents, the resulting product being optionally transparent, translucent and/or variously colored. By providing suitable die moulds in which to cast such a material, the production of the body units, which combine to form the present bait, can be greatly expedited. In addition, the size, contour, and finish of all such units are uniform, and, therefore, assure an action and behavior in service that exactly conforms to the intended design—something which is not always the case with ordinary baits when produced from wood or like material.

Referring to Fig. 1, the bait here shown comprises a body formed of a front unit A and a rear unit B having, when combined, a suitable exterior contour resembling, in general, that of a fish. One or both units may be provided interiorly with air chambers *a* and *b*, respectively, opening onto the confronting ends thereof. The meeting surfaces 15 and 16, respectively, of the two body units are disposed in a plane which is transverse to the axis of the bait, i. e., a line extending centrally of the bait in the general direction of its movement through the water when retrieved. These surfaces may be squared off, as shown in Figs. 3 and 4, for a butt joint,

or, as indicated in Fig. 5, they may be cooperatively beveled at 17 and 18. In either case the two units, when assembled, provide an enclosure for any air chamber that is provided interiorly of the bait.

The material of which the present bait is made may be non-buoyant. An air chamber will offset this tendency to sink in varying degree depending upon its capacity. In addition, the location of the air chamber, either forwardly or rearwardly, will affect to some extent the tendency of the bait to point up or down as it is retrieved through the water. A further control over the behavior of the bait is achieved by disposing the material forming the walls of the body in a desired manner. For example. as suggested in the several figures of the drawings, the under side of the bait body is provided with a thickened wall 20 which serves to ballast the bait somewhat. In addition, a weight 21 of lead, or other desired substance, may be embedded in this thickened wall of the bait, or elsewhere, in the casting operation, or subsequently. As shown in Fig. 6, this weight is entirely contained within the rear unit of the body. It may be, however, disposed in part within the front unit, as suggested in Fig. 7. In this construction aligned chambers are formed in the two body units of the bait, permitting the insertion thereinto of the weight subsequent to the moulding operation. By providing an air chamber of desired size and in a selected location, also by adding thickness to the bait walls, desirably along the under side, and further by the use of a ballasting weight at an advantageous point, all as heretofore explained, I am able to control such factors as buoyancy, steadiness, and motion, when the bait is put to service.

To the exterior of the bait may be applied the usual fittings such as a screw eye 25 for a line at the front end, and one or more hooks 26 below the body and, optionally, at the tail end thereof. The gang hooks secured to the under side of the body are affixed in the usual way with the aid of an eye plate 27 through which are passed screws 28 for threaded engagement with the bait body. In the casting of the sectional body units it may be desirable to form openings 29 in which the screws may be received, thereby facilitating their application to the bait, as well as dispensing with boring operations which otherwise would be required. It is possible also, as suggested in Fig. 7, to locate the screw openings in line with other openings 30 in the weight 21 whereby the screws, when inserted therein, will take hold of the weight, as well as the body material of the bait.

The decorative scheme to be adopted for the present bait may be varied in character. For example, the bait, which may be of transparent or translucent material, may have applied to its outside surface a decorative coating which simulates fish scales. The decorative finish to be exposed to view may also be applied to the interior surface of a bait body which is transparent or translucent, if this be preferred. It is also permissible to incorporate in the material forming the bait body a color pigment which renders the bait walls of one solid color throughout. This is of advantage as no subsequent decorative treatment is thereby required. As suggested in Figs. 8 and 9, the front unit may be of one color, indicated by stippling 30^a, and the rear unit of another color, so that when the two units are joined, as indicated in Fig. 9, the bait surface will present a combination of two colors in separated zones. In such a construction, I prefer that the head unit shall be cast of one solid color and the tail unit mostly of another color with its end which is to be united to the head unit exhibiting a blend of the color in which the head unit is made. In this manner, a very attractive use of contrasting colors can be attained.

Two or more body units adapted to meet in planes which are transverse to the axis of the bait united in any appropriate manner, desirably by a cement which is soluble in relation to the material forming the body sections. Such a means of joining the body units forms a seal protecting the hollow interior of the bait from the ingress of water. The connection thus formed may readily be smoothed off so as to scarcely be discernible, and without detracting in the least from the appearance of the bait.

The modifications of which this invention is susceptible are many. In Figs. 10 to 14 inclusive, I have suggested one further example of a bait which may be advantageously produced in the manner already explained. Here I have shown the bait as formed of three sections, a head unit C, a body unit D, and a tail unit E. In one or more of these units, as desired, are chambers *c*, *d* and *e*, respectively. In the construction shown, the chambers *c* and *d* are in communication when these two sections are joined. Most, if not all, of the features outlined with reference to the bait appearing in Figs. 1 to 9 inclusive may be incorporated in the modified bait now under description. The head and body sections C and D constitute, in effect, one unit which may be swingingly joined to the tail unit by a link connection. For this purpose, I prefer to use two plugs 31 and 32, the former applicable to the open end of the body section and the other to the open end of the tail section, the two plugs forming in effect closures for the chambers therein. These plugs may, if desired, be flanged as at 33 to lap into the associated sections when joined thereto (see Fig. 13). Extending transversely through each plug is a pin 34 traversing one end of a link 35 that is swingable within a slot 36 to permit flexing of the body.

The present bait, as already indicated, may utilize walls of variable thickness to increase or decrease its specific gravity at desired points, and also to provide enhanced strength wherever required. Such disposition of the material may take the form of an internal rib 37 (see Fig. 12) which provides sufficient stock for a screw of substantial length to take into. The incorporation of a weight within the walls of the bait prior to the assembly of its body units dispenses (1) with any insertion thereof from the exterior with consequent danger of the lead falling out, and eliminates (2) the usual blemish which requires covering up by surface coating of enamel or other material. The cost of such a bait is reduced to a minimum because no after surface treatment or decoration is required. In the event of hard usage, with consequent marring and penetration of its exterior surface, the appearance of the bait remains almost unchanged due to the enduring coloring of its body which extends clear through the walls to the interior thereof. The factors of buoyancy, ballast and contour can be more accurately controlled so as to assure a uniform and predetermined action in the water. These several advantages which inhere in my invention may be realized in various embodiments of which those illustrated are typical.

I claim:

1. A fish bait comprising a chambered body made from two separately formed end units with open ends provided with meeting surfaces disposed in a plane transverse to the bait axis, the walls of the body being of non-buoyant material and having an excess of thickness along the bottom of the bait to position the center of bait gravity below its axis, and means connecting the end units of the bait along their meeting surfaces in a manner to form a seal therebetween.

2. A fish bait comprising a chambered body made from two separately formed end units each having one open end which is disposed in a plane transverse to the bait axis, a closure for the open end of each bait unit, means connecting each closure with its associated bait unit in a manner to form a seal for the chamber therein, and a jointed connection between the two closures permitting the bait body to flex when retrieved through the water.

3. A fish bait comprising a chambered body made from two separately formed end units with open ends provided with meeting surfaces disposed in a plane transverse to the bait axis, the bait wall in its lower region being formed with an internally extending rib, means connecting the end units of the bait along their meeting surfaces in a manner to form a seal therebetween, a fitting applied to the underside of the bait, and screws entered into the bottom wall of the bait and extending into the rib therein to secure the fitting to the bait.

4. A fish bait comprising a chambered unit for one body end having the material forming its walls disposed non-uniformly so that the mass preponderates at a desired point, in combination with a second unit for the opposite body end having its preponderance of mass determined in like manner, the two units being provided with complementary meeting faces extending crosswise of the bait, and a connection between the meeting faces of the body units to seal the chamber interiorly thereof.

MITCHELL F. JAMAR, JR.

DISCLAIMER

1,892,892.—*Mitchell F. Jamar, Jr.*, Dowagiac, Mich. ARTIFICIAL MINNOW. Patent dated January 3, 1933. Disclaimer filed March 16, 1939, by the assignee, *James Heddon's Sons.*

Hereby enters this disclaimer to that part of the claims in said specification in the following words, to wit:

In each of the claims the units of the chambered body are formed from a plastic material susceptible of being molded to the desired shape as contrasted with bait bodies carved from wood or formed from metal, and bait bodies formed from wood or metal are herein expressly disclaimed.

[*Official Gazette April 4, 1939.*]