Jan. 13, 1953 D. G. BELDING 2,624,975

JET-PROPELLED TOY BOAT

Filed Aug. 19, 1949

FIG 1

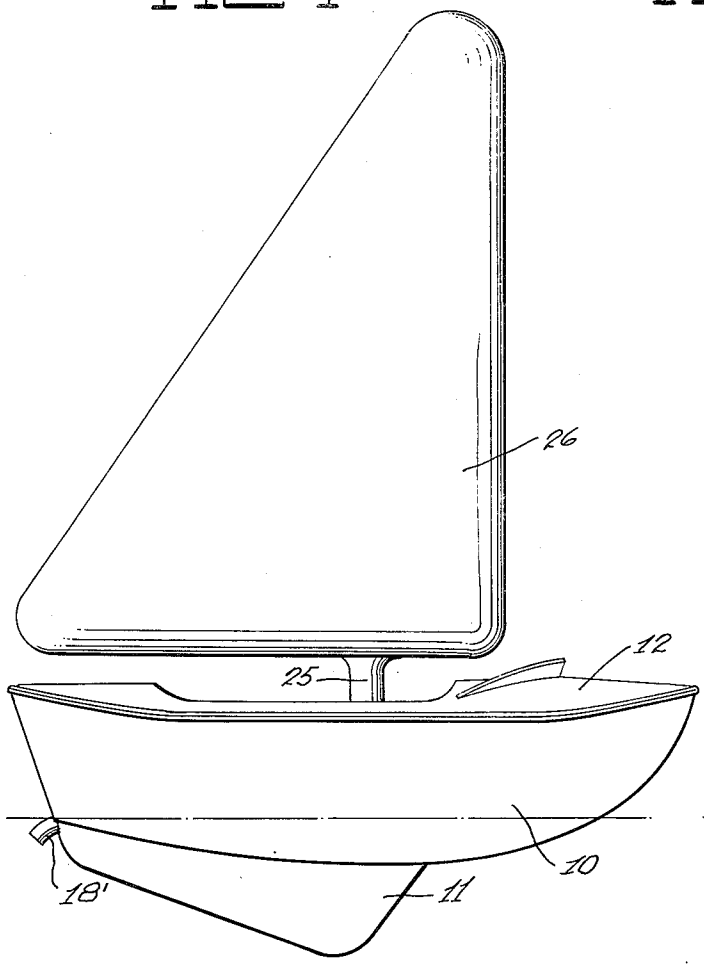


FIG 2

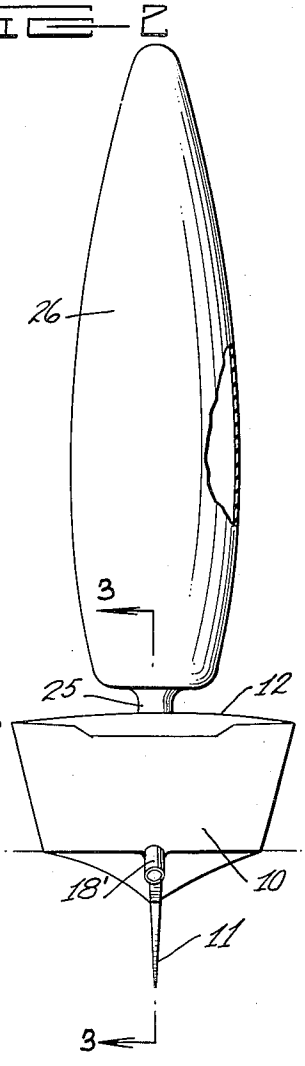
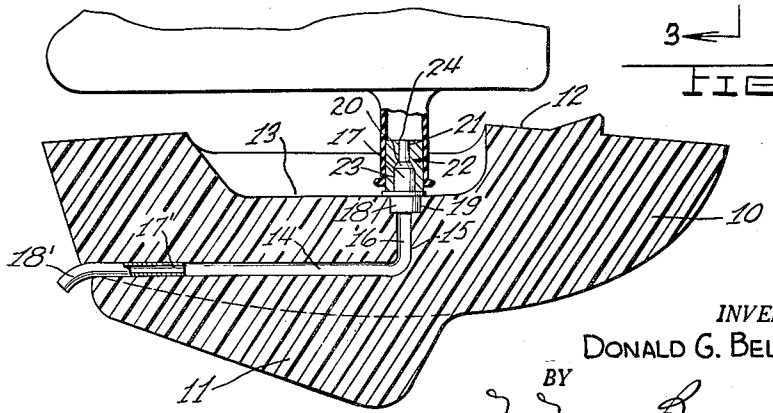


FIG 3



INVENTOR.
DONALD G. BELDING
BY
McMorrow, Berman & Davidson
ATTORNEYS

Patented Jan. 13, 1953 2,624,975

UNITED STATES PATENT OFFICE

2,624,975

JET-PROPELLED TOY BOAT

Donald G. Belding, Orrville, Ohio

Application August 19, 1949, Serial No. 111,257

2 Claims. (Cl. 46—95)

1

My invention relates to a toy boat of the type propelled by compressed air.

An important object of my invention is to provide a toy boat which can be operated by children in a bathtub or the like and which is propelled by compressed air held in a toy balloon.

A further object of the invention is to provide a toy boat of the above-mentioned character which is highly simplified in construction, and therefore cheap to manufacture.

Other objects and advantages of the invention will be apparent during the course of the following description.

In the accompanying drawings, forming a part of this application, and in which like numerals are employed to designate like parts throughout the same,

Figure 1 is a side elevation of a toy boat embodying my invention,

Figure 2 is a rear end elevation of the boat, and,

Figure 3 is a central vertical longitudinal section taken on line 3—3 of Figure 2, part broken away.

In the drawings, where for the purpose of illustration is shown a preferred embodiment of my invention, the numeral 10 designates the hull or body portion of the toy boat, and this hull is preferably formed of molded plastic, although other suitable material, such as wood may be employed. Rigidly secured to the bottom of the hull 10, at the transverse center thereof and near its rear end is a thin depending fin or keel 11, preferably formed integral with the hull, and serving to give the hull stability in the water. The keel 11 has its bottom edge inclined upwardly toward the stern of the hull, as shown. The hull 10 is molded to simulate a conventional sail boat hull. The hull includes a top generally flat deck 12, provided near the longitudinal center of the boat with a large recess having a flat bottom 13 intermediate of and spaced from the stern and bow of the hull 10.

An L-shaped passage or bore is formed within the hull 10, and includes a horizontal longitudinal section 14, and a vertical section 15, leading from the forward end of the section 14 upwardly into the recess in the deck. The section 14 of the L-shaped passage extends from a point near the longitudinal center of the hull rearwardly through the rear end or stern of the hull. The entire L-shaped passage is formed at the transverse center of the hull. Molded or otherwise permanently within the L-shaped passage is an L-shaped air tube including a vertical section 16

2

and horizontal section 17'. The rear end of the air tube section 17' extends rearwardly of the stern and is preferably bent downwardly slightly as at 18' to form an exhaust extension.

The top end of the vertical air tube section 16 terminates below the surface 13 and is connected with the lower end of a tubular fitting 17 having a lower enlarged portion 18, seated in a recess 19 formed in the surface 13, as shown. The tubular fitting 17 has an air-tight connection with the tube section 16. The fitting 17 has an intermediate cylindrical body portion 20, and a top reduced cylindrical extension 21. The bore of the tubular fitting 17 is in communication with the L-shaped air tube.

Detachably mounted upon the fitting 17 is an outer cylindrical tubular fitting 22 having a lower opening or bore 23 which engages over the intermediate body portion 20 of the fitting 17, and an upper reduced bore section 24 which receives the top reduced extension 21, as shown. The outside diameter of the fitting 22 is such that the tubular neck 25 of a conventional toy rubber balloon 26 will readily engage over the fitting, as shown in Figure 3. The balloon 26 is preferably formed in the shape of a triangular sail, as shown, to add a realistic appearance to the toy boat, but obviously a balloon having any desired shape may be employed. The top reduced extension 21 of the fitting 17 projects through the top of the outer cylindrical fitting 22, so that the bore of the fitting 17 is in communication with the neck 25 of the balloon, and compressed air held within the balloon may pass through the inner fitting 17 and through the air tube sections 16 and 17', out through the exhaust extension 18'.

In use, the outer fitting 22 may be removed from the inner fitting 17 with the balloon 26 attached to it. The balloon may be inflated with the mouth while the fitting 22 is in the neck 25 of the balloon. The inflated balloon and fitting 22 are now applied to the inner fitting 17, Figure 3, and the compressed air within the balloon 26 passes through the L-shaped air tube to propel the boat through the water. Since the bore of the inner fitting 17 is small, it takes the air quite a while to pass from the ballon 26, and I have found that the boat will be propelled for a considerable length of time. At the same time, the bore of the fitting 17 and the bore of the air tube are large enough to give the boat considerable power and speed. The fitting 22 is sanitary since it does not come in contact with the water.

It is thus seen that I have provided a toy boat which is highly simplified in construction and

embodies very few parts. The boat can be manufactured cheaply and forms an attractive toy which will prove highly amusing for children.

The L-shaped air tube and the fittings 17 and 20 are preferably formed of plastic, although other suitable material may be employed, such as light metal, or the like.

It is to be understood that the form of my invention herewith shown and described is to be taken as a preferred example of the same, and that various changes in shape, size and arrangement of parts may be resorted to, without departing from the spirit of the invention, or the scope of the subjoined claims.

Having thus described my invention, I claim:

1. A toy boat comprising a hull having a longitudinal recess extending inwardly from its deck intermediate of and spaced from its stern and bow, a longitudinally extending fin positioned below and inwardly of the stern and spaced from the bow of said hull and dependingly secured to the latter, there being a longitudinal passage extending inwardly from the stern of said hull adjacent to and spaced from the adjacent end of said fin and terminating in and communicating with a transverse passage formed in said hull and extending downwardly from the recess in the bow of said hull, a tube extending through said longitudinal and transverse passages and having one end extending out of and terminating at a point spaced from the stern of said hull, the other end of said tube terminating at a point adjacent to and spaced from the end of the transverse passage adjacent to the recess in the deck of said hull, a hollow tubular fitting having one end embracing the other end of said tube and seated upon the bounding wall of said transverse passage, the other end of said fitting being constricted, a second hollow tubular fitting circumposed about the constricted other end of said first fitting and embracingly supported on the latter, and an inflatable balloon containing compressed air including a tubular neck arranged above said hull and having its tubular neck frictionally embracing said second fitting, whereby the air passes from said balloon into the constricted end of said first fitting and thence through and out of said tube to thereby propel the boat forwardly.

2. A toy boat comprising a hull having a longitudinal recess extending inwardly from its deck intermediate of and spaced from its stern and bow, a longitudinally extending fin positioned below and inwardly of the stern and spaced from the bow of said hull and dependingly secured to the latter, said fin having its bottom edge sloping upwardly toward the stern of said hull, there being a longitudinal passage extending inwardly from the stern of said hull adjacent to and spaced from the adjacent end of said fin and terminating in and communicating with the transverse passage formed in said hull and extending downwardly from the recess in the bow of said hull, a tube extending through said longitudinal and transverse passages and having one end extending out of and terminating at a point spaced from the stern of said hull, said one end of said tube being bent downwardly, the other end of said tube terminating at a point adjacent to and spaced from the end of the transverse passage adjacent to the recess in the deck of said hull, a hollow tubular fitting having one end embracing the other end of said tube and seated upon the bounding wall of said transverse passage, the other end of said fitting being constricted, a second hollow tubular fitting circumposed about the constricted other end of said first fitting and embracingly supported on the latter, and an inflatable sail shaped balloon containing compressed air including a tubular neck arranged above said hull and having its tubular neck frictionally embracing said second fitting, whereby the air passes from said balloon into the constricted end of said first fitting and thence through and out of said tube to thereby propel the boat forwardly.

DONALD G. BELDING.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,596,852	Foster	Aug. 17, 1926
1,610,093	Hitt	Dec. 7, 1926
1,611,613	Stevenson	Dec. 21, 1926
2,484,468	Schaad	Oct. 11, 1949

FOREIGN PATENTS

Number	Country	Date
417,317	Great Britain	Oct. 2, 1934