Aug. 19, 1952 W. C. FORREST 2,607,160

TOY BOAT WITH PROPELLING MEANS

Filed Nov. 4, 1949

Fig. 1

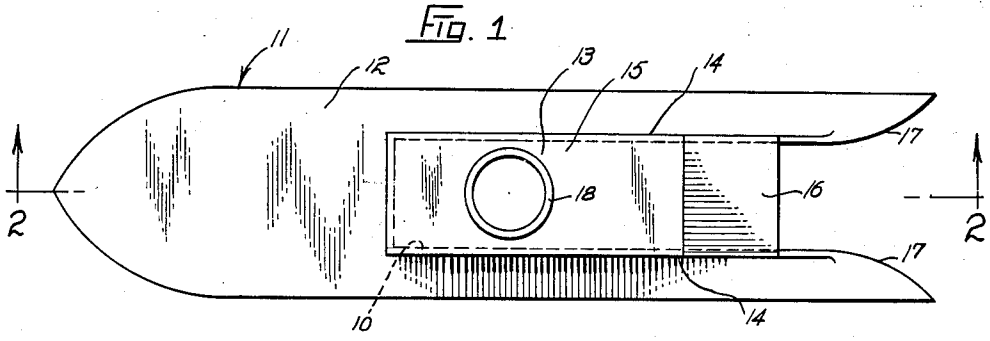


Fig. 2

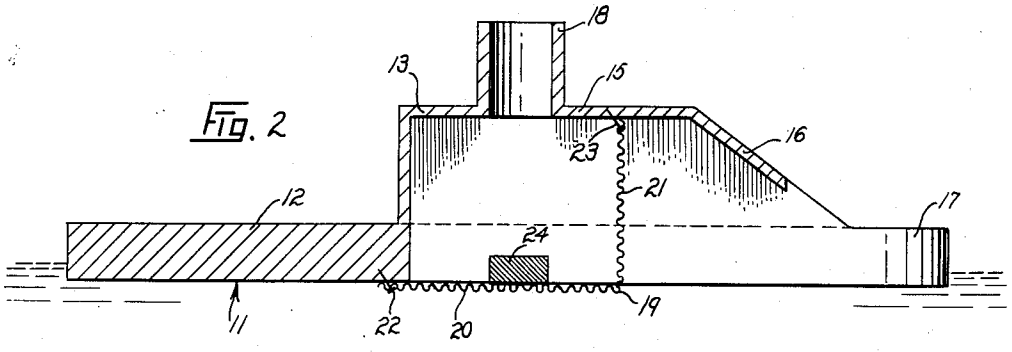
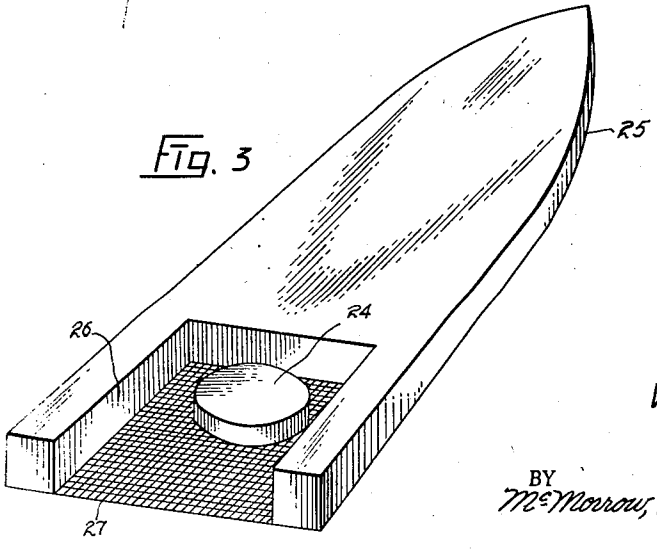


Fig. 3



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Patented Aug. 19, 1952

2,607,160

UNITED STATES PATENT OFFICE

2,607,160

TOY BOAT WITH PROPELLING MEANS

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Application November 4, 1949, Serial No. 125,559

1 Claim. (Cl. 46—93)

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This invention relates to toy boats, and more particularly to toy boats of the type propelled by the action of a chemical pellet which, when in contact with water, produces a change in surface tension causing the boat to be propelled.

A main object of the invention is to provide a novel and improved toy boat of the type propelled by the reaction of a chemical pellet, whereby changes in surface tension are produced causing the boat to be propelled, said boat being very simple in construction, being very attractive in appearance, and being arranged so that the chemical pellet may be utilized with maximum efficiency.

A further object of the invention is to provide an improved toy boat of the surface-tension-propelled type, said toy boat being very inexpensive to manufacture, being sturdy in construction and being provided with means whereby loss of the pellet through careless handling of the boat is avoided.

Further objects and advantages of the invention will become apparent from the following description and claim, and from the accompanying drawings, wherein:

Figure 1 is a top plan view of a toy boat constructed in accordance with the present invention;

Figure 2 is a cross-sectional view taken on line 2—2 of Figure 1;

Figure 3 is a perspective view of a modified form of toy boat constructed in accordance with the present invention.

Referring to the drawings, and more particularly to Figures 1 and 2, 11 designates the hull of the boat, said hull being formed of light plastic material or of light wood, such as balsam wood, the hull being formed with a main body portion 12 and a longitudinal notch 10 extending inwardly from the rear end thereof intermediate the sides and terminating at a point of the front end of the main body, the notch 10, the bounding side walls 14, 14, and a top wall 15 forming a rear cabin portion 13, the top wall terminating at its rear portion in an inclined wall element 16. The side walls 14, 14 terminate at their rear portions in outwardly-flaring inside surfaces 17, 17. The top wall 15 is formed with an upwardly-projecting cylindrical, tubular extension 18, resembling a smokestack, which, as will be subsequently described, provides a means for inserting a pellet into the cabin portion of the boat. Designated at 19 is a screen member of light metal screen or the like, said screen member having a horizontal reticulated panel or

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bottom portion 20 and a vertical reticulated panel or rear portion 21, the forward edge of the bottom portion 20 being secured at 22 to the bottom of the hull body 12 and the top end of the vertical screen portion 21 being secured at 23 to the under side of the cabin top wall 15. The screen 19 is coextensive in width with the interior of the cabin 13 and defines a compartment in which may be positioned a pellet 24 of suitable chemical composition, for example, a mixture of aerosol and sugar, which has the property of reducing the surface tension of water when it comes in contact therewith. In operation, the pellet 24 is dropped into the compartment defined by the screen 19 through the smokestack 18, and the boat is placed on the surface of the water. The boat being made of light material floats on the water and the pellet 24, coming in contact with the water, acts thereon to reduce the surface tension and thereby produces a propelling force on the boat which propels the boat forwardly. This action continues until the pellet 24 is completely dissolved, at which time a new pellet may be dropped into the compartment defined by the screen 19 through the tubular stack 18.

In the modification illustrated in Figure 3, the hull of the boat is designated at 25 and is formed of a suitably-shaped piece of light material, such as balsam wood or light plastic material, the rear or stern end of the hull being formed with a square notch 26 extending inwardly from the rear end thereof intermediate the sides and terminating at a point short of the front end of the hull, and a piece of light metal screen 27 being secured to the under side of the hull underlying the notch 26 and forming with the walls of said notch a compartment on which may be positioned the chemical pellet 24. In operation, the boat is placed in the water and the pellet 24 is deposited on the screen 27, whereby said pellet interacts with the water to produce reduced surface tension, whereby propelling force is developed, moving the boat forwardly in the same manner as in the modification described in connection with Figures 1 and 2.

While certain specific embodiments of a toy boat have been disclosed in the foregoing description, it will be understood that various modifications within the spirit of the invention may occur to those skilled in the art. Therefore, it is intended that no limitations be placed on the invention except as defined by the scope of the appended claim.

What is claimed is:

A toy boat comprising a hull having a longitudinal notch extending inwardly from the rear end thereof and terminating short of the front end of said hull, a hollow cabin surmounting said notch and secured to said hull, a horizontally disposed reticulated panel positioned on the under side of said notch and secured to said hull, and a vertically disposed reticulated panel positioned contiguous to the end of said horizontally disposed panel adjacent to the rear end of said hull and secured to said hull and forming with said horizontally disposed panel and adjacent portions of said cabin a compartment, the top of said cabin having an upstanding stack for introducing a pellet into said compartment.

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