J. W. SOUTHERN.

TOY.

APPLICATION FILED OCT. 10, 1918.

1,320,581.

Patented Nov. 4, 1919.

2 SHEETS—SHEET 1.

Fig. 2.

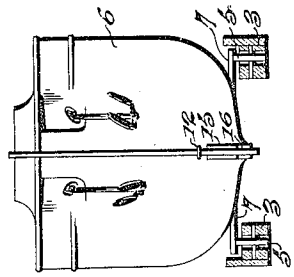


Fig. 4.

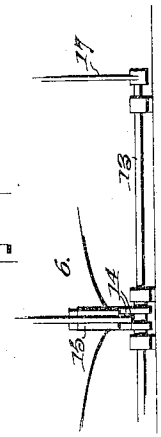
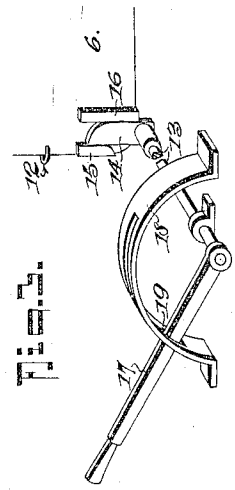


Fig. 1.

Fig. 3.



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Fig. 5.

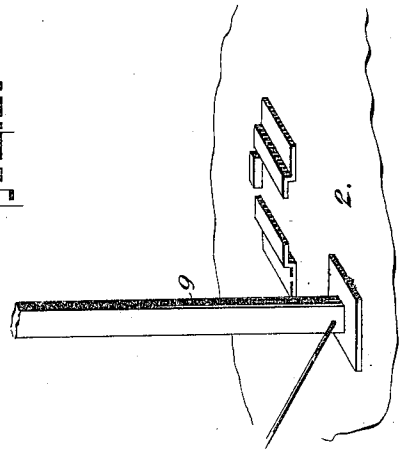
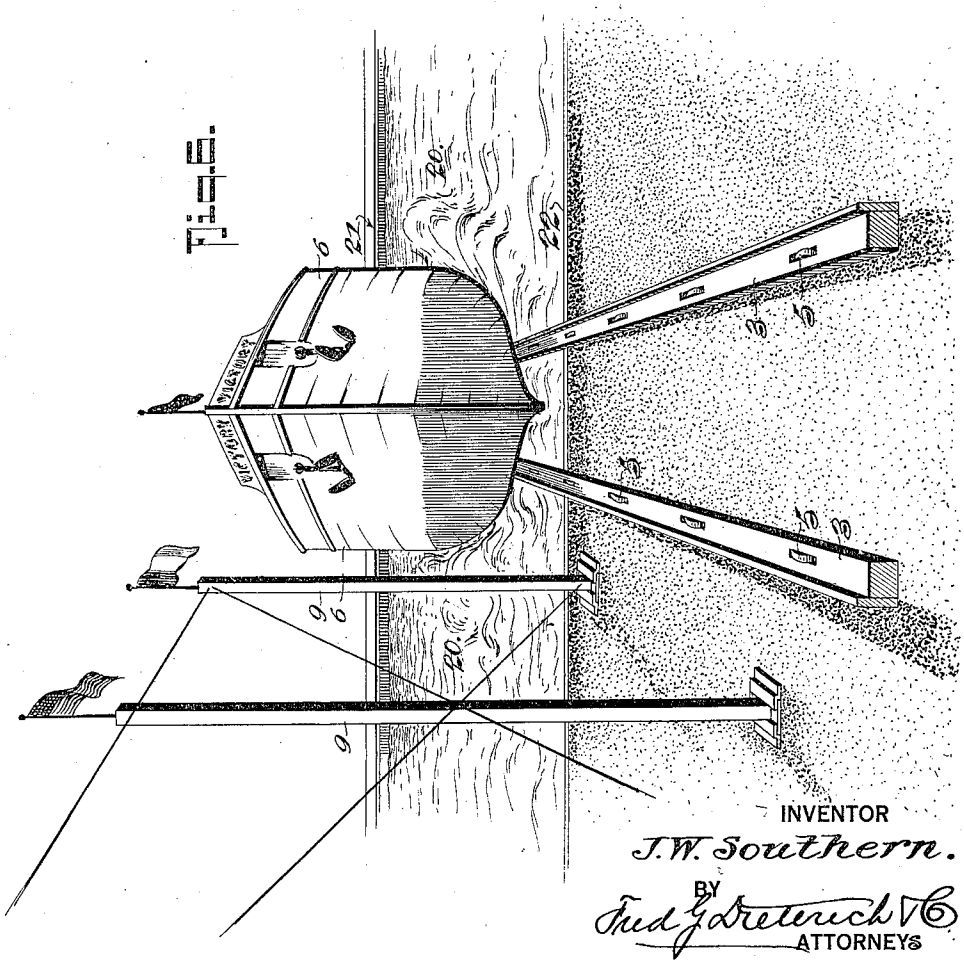


Fig. 6.



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TOY.

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Application filed October 10, 1918. Serial No. 257,601.

To all whom it may concern:

Be it known that I, JOHN W. SOUTHERN, a citizen of the Dominion of Canada, residing at Vancouver, in the Province of British Columbia, Canada, have invented certain new and useful Improvements in Toys, of which the following is a specification.

This invention relates to a toy which is designed to represent the launching of a ship. It comprises in combination inclined launching ways which are provided with rotatably hidden roller wheels on which the vessel can run freely down the ways, the rolling chocks or bilge keels of the vessel being horizontally produced to provide a runway for the rollers.

The device also comprises a reel and line by which the vessel may be drawn up the launching ways and a provision for retaining it there, and a hand operated means for releasing and giving it a start down the ways when it is to be launched.

The object of the device is to have the toy represent the launching of a vessel in as realistic a manner as possible.

The invention is particularly described in the following specification, reference being made to the drawings by which it is accompanied, in which:

Figure 1 is a side elevation and part section showing the launching ways with the vessel on it in relation to the tank of water in which the vessel is to be launched, the tank being in section and the flange of the near way being removed.

Fig. 2 is an end elevation from the front end of the vessel on the launching ways.

Figs. 3 and 4 are details to an enlarged scale in perspective and end elevation of the provision for retaining the vessel on the launching ways, for releasing it and for starting it down the incline.

Fig. 5 is a perspective view showing the removable connection of the scaffold uprights and their bracing to the base plate, and

Fig. 6 is an end view showing the vessel as taking the water.

In these drawings 2 represents a base plate of any suitable material exemplifying in the toy the shore on which the launching ways are erected, the upper surface of which base plate being at a slight incline from the horizontal.

On this base plate 2, the inclined launching ways 3 are secured being supported at intervals apart by blocks 4 representing balks of timber tiered in the customary manner to distribute the weight of the vessel over a sufficient area of the ground.

The launching ways 3 and supporting blocks 4 may be made of wood or metal. If thin sheet metal is used it should be bent to represent the usual timber balks. As the weight of the toy vessel will not be sufficient to slide down the ways, roller wheels 5 are rotatably mounted in the ways to project slightly above the upper surface, and the outer edge of the ways 3 is flanged to form a guide-way and retain the vessel on the ways.

The vessel 6 has its rolling or bilge keels 7 horizontally disposed to rest on the upper edges of the rollers 5 and between the flanges of the launching ways. It is also provided with a freely running screw propeller 8 that will be rotated by movement of the vessel through the water. Along one side of and parallel to the launching ways 3 the uprights 9 and the ties and diagonal bracing of one side scaffold are represented, the uprights and stay rods being removably connected to the base plate, as shown in Fig. 5 that the scaffold may be taken down for convenience in packing.

Across the upper end of the launching ways 3 is a small platform 10 with a flight of steps thereto and rotatably mounted on this platform in alinement with the middle line of the launching ways is a small reel 11 having a line wound on it that may be connected to an eye 12 on the stem of the vessel to draw the vessel up the ways.

Members 15 and 16 project from opposite sides of the stem of the vessel at the fore foot, which members are vertically disposed, with a space between them adapted to receive a retaining lever 14 upwardly project-

ing on each side of the stem from a rocking shaft 13 mounted along the front of the platform 10 to cross under the fore foot of vessel. While these retaining levers 14 are in the upright position, as shown in Fig. 3, they fit between the projections 15 and 16 on the fore foot and hold the vessel on the launching ways against any tendency to run down; but the forward projections 15 are shorter than those 16 that they will clear the levers 14 when those levers are turned downward to the incline of the ways, and the front outer corner of each lever 14 is rounded as shown, that in the act of turning the levers downward the rounded edge will encounter the forward edges of the after member 16 and will give the vessel a downward impulse on the ways.

The rocking shaft 13 is operated by a lever 17 secured on it and movable in a quadrant 18 having a detent at 19 that will retain it with the levers in the upward or retaining position.

Removably connected to the lower end of the launching ways 3 is a shallow tank 20 adapted to hold a sufficient quantity of water to float the vessel and permit its limited movement within it. Around three sides the upper edges of the tank are angled or curved inward, as at 21, to prevent the water splashing over, and the fourth side, which is removably connected to the ways 3 or base 2, is angled, as at 22, to the approximate angle of the ways that it may be passed under them and up toward the lowest set of blocks 4, to either of which it may be removably connected by a hook and eye 23 or other suitable means. The width and the length of the tank are such that the base and launching ways may conveniently be packed within it as also may the scaffold frame 9 when removed from the base.

The vessel and launching ways may fly the flags of the Entente Allies displayed at the stern of the vessel and at the head of the scaffold uprights.

The toy is different to the generality of such in that it illustrates an industry that until recently has been too little known, and does so in a practical and realistic manner that will appeal to children and will stimulate interest in the business of shipbuilding.

Having now particularly described my invention, I hereby declare that what I claim as new and desire to be protected in by Letters Patent, is:

1. A toy, comprising in combination, inclined launching ways, a shallow tank into which the lower end of the launching ways deliver and a miniature ship endwise movable on the launching ways, a base plate, means for mounting the launching ways on said base plate.

2. A toy comprising in combination inclined launching ways, a shallow tank into which the lower end of the launching ways deliver, a miniature ship endwise movable on the launching ways, means for retaining the ship at the upper end of the launching ways and for releasing the ship from said retaining means and for starting it down the inclined ways.

3. A toy, comprising in combination, inclined launching ways, a shallow tank, devices connecting the launching ways with the tank, whereby the tank is removably connected to the lower end of the launching ways, and a miniature ship endwise movable on the launching ways.

4. A toy, comprising in combination, inclined launching ways having a flange upwardly projecting from each outer edge, a shallow tank removably connected to the lower end of the launching ways, and a small vessel having bilge keels, the edges of which are turned to a horizontal plane and adapted to fit between the upwardly turned flanges of the ways.

5. A toy, comprising in combination, inclined launching ways built on blocks from a base representing the ground level, a shallow tank having inwardly turned upper edges around three sides of it, the open end of which tank has means for removably connecting it to the foot of the launching ways, a miniature ship having a freely rotatable propeller and bilge keels horizontally disposed to rest on the launching ways, means for retaining the ship in proper alinement on the ways, and means for retaining the ship at the upper end of the launching ways for releasing it therefrom and for starting it down the incline.

6. A toy, comprising in combination, a base, launching ways supported on blocks from the base at a suitable incline, the outer edges of such ways having upwardly projecting flanges and the ways having a series of roller wheels rotatably mounted in them to project above the upper surface, a shallow tank removably connected to the lower end of the launching ways, a miniature representation of a steam-ship with a rotatable propeller, said ship having horizontally disposed bilge keels adapted to fit between the flanges of the launching ways and rest upon the roller wheels, a reel and line adapted to pull the vessel up the ways, a cam lever rockably mounted adjacent the upper end of the ways and adapted to engage projections on each side of the fore foot, and means for rocking said cam lever to release it from the fore foot and to give the ship a start down the ways.

7. A toy, comprising in combination, a base, launching ways supported on blocks from the base at a suitable incline, the representation of a scaffold frame removably

connected to the base along one side of the launching ways, a shallow tank removably connected to the lower end of the launching ways, a miniature representation of a ship endwise movable on the ways, a small platform across the upper end of the ways, a reel rotatably mounted on the platform with a line connected to the stem of the ship that the same may be drawn up the ways, and means for retaining the vessel at the upper end of the incline for releasing it from such retaining means, and for giving it a start down the incline.

In testimony whereof I affix my signature.

JOHN W. SOUTHERN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."