May 17, 1927. 1,628,796

L. M. MAYO

AIR PROPELLED NOVELTY DEVICE

Filed Dec. 26. 1925 2 Sheets-Sheet 1

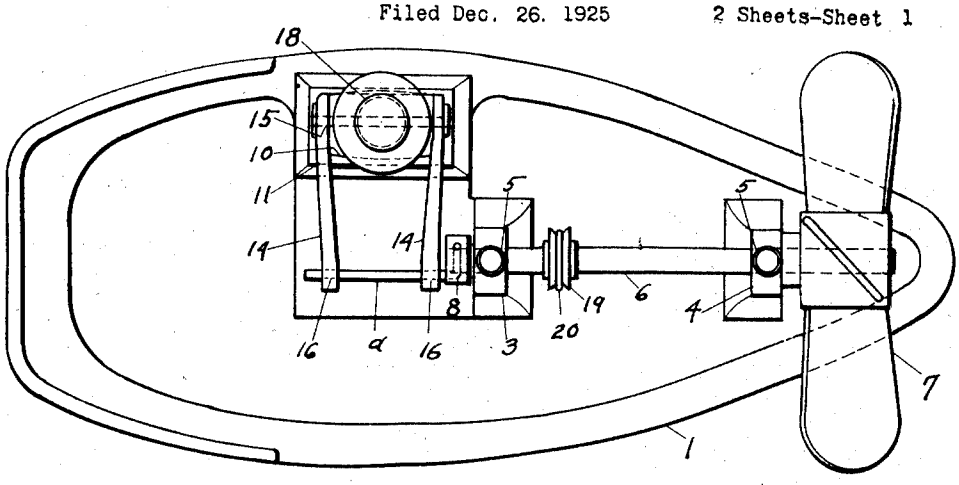


Fig. 2

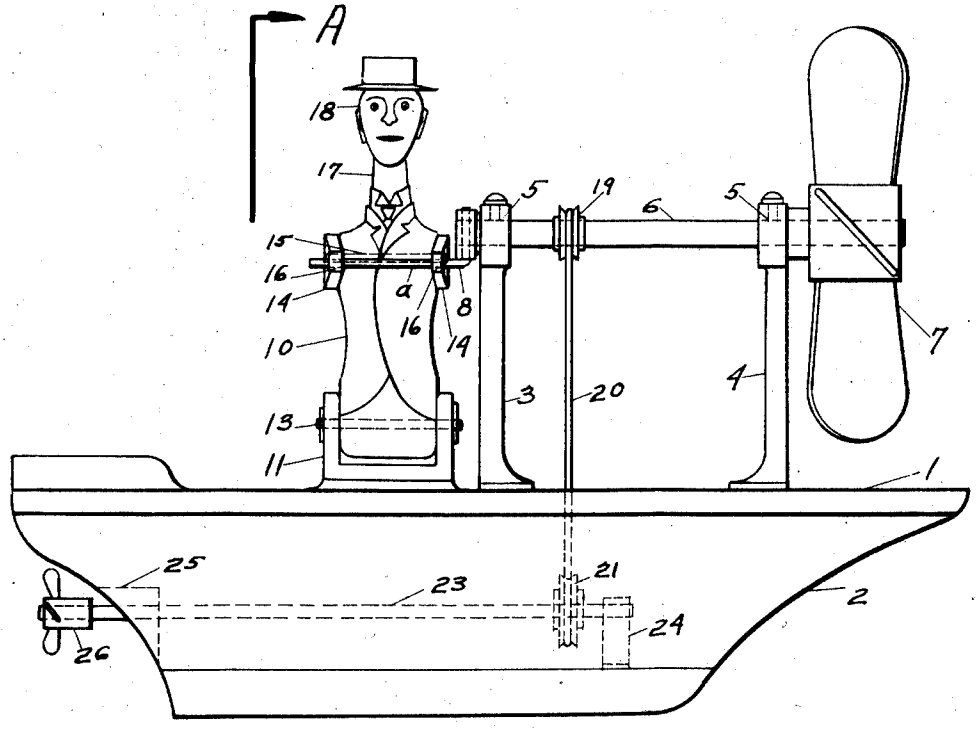


Fig. 1

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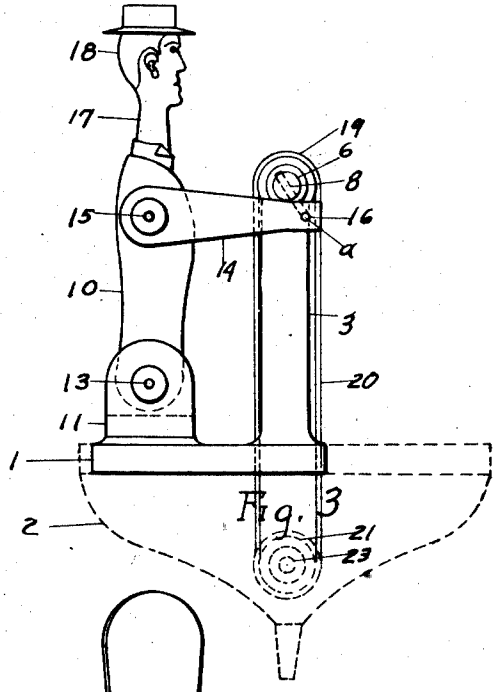


Fig. 3

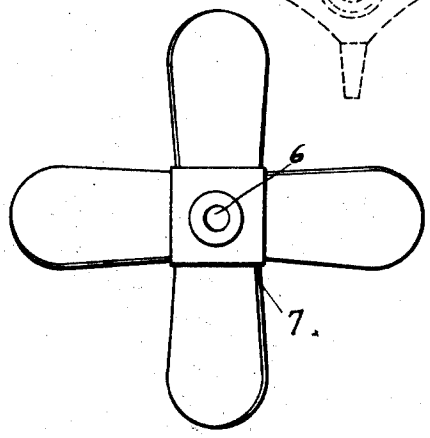


Fig. 4

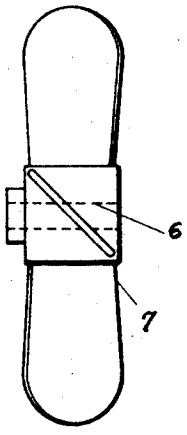


Fig. 5

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UNITED STATES PATENT OFFICE.

LONNIE M. MAYO, OF DETROIT, MICHIGAN.

AIR-PROPELLED NOVELTY DEVICE.

Application filed December 26, 1925. Serial No. 77,749.

The object of my invention is to produce a wind propelled novelty, adapted for amusement, and for toys such as boats and small wheeled vehicles, and providing means where the toy may also be propelled by the action of the device, when subjected to a wind.

Another object is to provide a wind wheel novelty that is adapted as an ornament of amusement for the radiator cap of an automobile, so designed as to operate under the action of the passing air as the automobile is driven under high speed.

A further object is to produce a novelty that is self operating when placed in the wind, for amusement purposes, that is simple in construction and can be manufactured at a very low cost.

These several objects are attained in the preferred form by the construction and arrangement of parts more fully hereinafter shown and described.

Similar parts on all drawings are marked by similar numerals.

Fig. 1 is a side view of my device showing the relative position of the working parts therein.

Fig. 2 is a plan view of the device as shown in Fig. 1, showing the general arrangement of the working parts.

Fig. 3 is a sectional view taken on the line —AA— of the Fig. 1, showing the connecting and operating parts of the image, and its relative position to the operating shaft of the device.

Fig. 4 is the front view of the air fan, showing the wings and means for attaching same to the shaft.

Fig. 5 is a side view of the air fan, showing the angularly positioned wings, adapted for turning in the air coming from either direction.

I will now describe more fully the detailed construction and working parts of my device, referring to the drawings and the marks thereon.

In general, my device comprises a horizontal supporting frame having a horizontal rotatable shaft mounted thereon, and provided with a suitable air fan mounted on one end of the horizontal shaft, and the opposite end of the shaft being provided with a small crank, all rotatable under the action of the wind against the wings of the air fan. A small image is pivoted to the horizontal supporting frame directly opposite the crank section on the shaft, provided with movable arms and body, having the ends of the arms pivotally attached to the said crank in such a manner as to cause the image to swing back and forth as at work, when the shaft and crank rotate under the action of the passing wind. The shaft also having a small power pulley attached thereto, providing means for connecting a small belt cord and to connect and propel toy vehicles thereby. The device is designed to use on either toys, or for an amusement ornament on an automobile radiator cap.

Fig. 1, shows the frame section —1— attached to a boat —2—. The frame —1— being of a flat member, rigid, formed of either wood or metal, and having its outer edge shaped and fitted to the top of the boat hull —2—, and fixedly attached thereto, appearing to be a part of the boat hull. Along the centerline of the frame —1— are mounted bearing posts —3— and —4—, also made of rigid material, either wood or metal, said posts being fixedly attached to the frame —1— and projecting therefrom in a vertical position. Through the top ends of the posts —3— and —4— are formed small bearings —5—, being arranged in a horizontal alinement with each other. Through the bearings —5— is mounted a shaft —6—, preferably of metal, free to rotate therein. To one end of the horizontal shaft —6— is attached a winged air fan, having the wings positioned angularly thereon relative to the axis of the supporting shaft —7—, said fan being fixedly attached to said shaft and rotatable therewith. At the opposite end of the shaft —6— is fixedly attached a crank —8—, positioned to lie in a plane parallel with the axis of the shaft —6—, said crank —8— having a long handle —*a*— formed thereon, positioned parallel to the shaft —6—, and rotatable therewith. Positioned at one side of the crank handle —*a*—, directly opposite thereof, is a pivotally mounted image —10— of a man, made of some rigid material, wood or metal, connected to the supporting frame —1—, by the hinge support —11— which is fixedly attached to the frame. The body of the image —10— being connected to the hinge support —11— through the intervening pivot pin —13— which passes through both the body of the image —10— and the projecting arms of the support —11—, allow-

ing the image —10— to rock in a plane at right angles to the axis of the shaft —6—. The arms —14— of the image —10— are pivotally attached to the body of the image by the pin —15— which passes therethrough and allowing the arms —15— to turn thereon. The outer ends of the arms —15— are provided with end holes —16— for receiving therein the extended handle —*a*— of the crank —8—, said handle —*a*— being free to turn within the end arm holes as the shaft —6— and crank rotates. The image —10— is provided with a neck —17— and head —18— resembling, or imitating distorted characteristics, of a man, positioned at work at the crank —8— of the rotating shaft. The image —10— and the connecting arms —15— move freely on their supporting pivot pins —13— and —15—, as the crank —8— rotates with the shaft, giving the appearance of the image —10— actually doing the work of turning the shaft, as the passing wind rotates the fan when same is subjected thereto. Near the center of the shaft —6— and fixedly attached thereto, is a power cord pulley —19—, and formed to carry therein a drive cord belt —20—, and which belt —20— also engages a propelling cord pulley —21— positioned in the body —2— of the attached toy. The pulley —21— is fixedly mounted on the propeller shaft —23—, said shaft being also rotatably mounted by the end bearings —24— and —25— fixedly attached to the boat hull —2—, but free to turn therein under the action of the cord belt —20—. At the outer end of the shaft —23— is fixedly attached a propeller —26—, when caused to rotate under action of the rotation fan —7— and the connecting mechanism, will cause the boat to advance through the water when placed therein if subjected to a sufficiently strong wind. It is evident that any form of image may be substituted for the image —10— of a man, or that the device may be applied to wheel toys or small vehicles as well, and without departing from the spirit of my invention.

Having fully described my air propelled novelty device, what I claim as my invention and desire to secure by Letters Patent is:

A wind propelled toy comprising a toy vehicle, a propelling mechanism therefor, a horizontal supporting frame attached to the top of said vehicle, vertical bearing posts mounted on the top of said frame, said posts having bearings formed near the top ends thereof and arranged in horizontal alinement with each other, a horizontal shaft mounted within said bearings and free to turn therein, an air fan mounted on one end of said shaft and a crank mounted on the opposite end of said shaft, both crank and fan rotatable with said shaft, a cord power pulley mounted on said shaft also rotatable therewith, a cord pulley mounted on the toy propelling mechanism, a cord belt engaging said power cord pulley and connecting with the propelling cord pulley, an image pivotally mounted on the supporting frame positioned directly opposite the crank, said image having pivoted arm members attached thereto, said arms having holes formed in the outer ends thereof for engaging the crank, free to turn thereon, and in such a manner as to cause the image to sway as if at work, when said crank and shaft rotates under the action of the fan if subjected to wind pressure.

In witness whereof I sign these specifications.

LONNIE M. MAYO.