

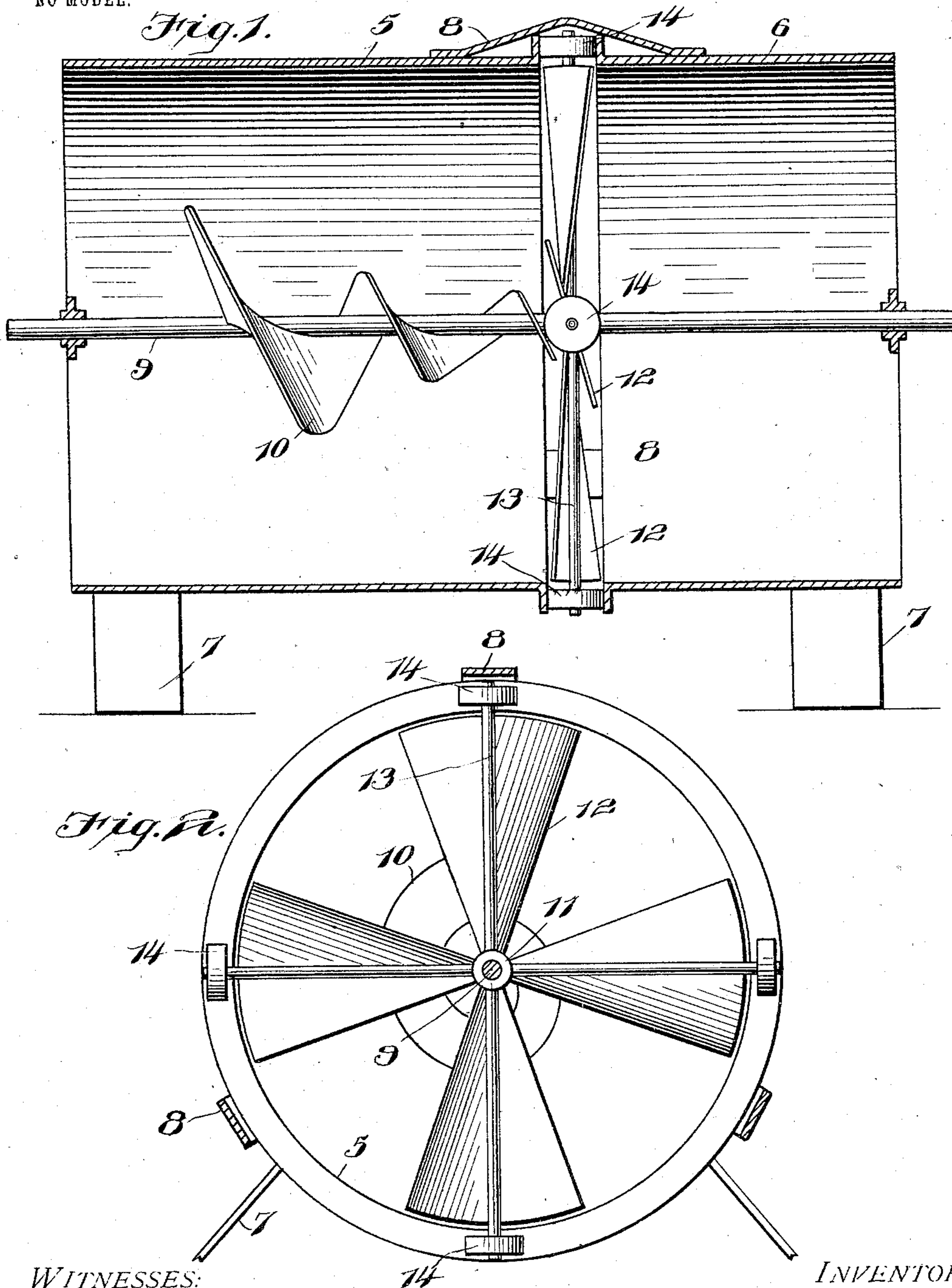
No. 725,280.

PATENTED APR. 14, 1903.

G. R. NOBLET.
SHIP'S PROPELLER.

APPLICATION FILED AUG. 26, 1902.

NO MODEL.



WITNESSES:

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GEORGE R. NOBLET, OF PARADISE, OKLAHOMA TERRITORY.

SHIP'S PROPELLER.

SPECIFICATION forming part of Letters Patent No. 725,280, dated April 14, 1903.

Application filed August 26, 1902. Serial No. 121,142. (No model.)

To all whom it may concern:

Be it known that I, GEORGE R. NOBLET, a citizen of the United States, residing at Paradise, in the county of Payne, Territory of Oklahoma, have invented certain new and useful Improvements in Ship - Propellers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to propellers for ships; and it has for its object to provide a construction which will increase the efficiency of the propeller and with which a high rate of speed may be attained, a further object of the invention being to provide a structure which will be strong and durable, other objects and advantages of the invention being understood from the following description.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in both views, Figure 1 is a section taken longitudinally through the casing of the propeller and showing the mounting of the outer ends of the blades of the wheel. Fig. 2 is a section taken transversely through the casing and showing the form and arrangement of the wheel.

Referring now to the drawings, there is shown a casing comprising cylindrical sections 5 and 6, having the same diameter and arranged in axial alinement, said sections being supported upon suitable brackets 7 and being connected at their adjacent ends by the straps 8, the adjacent ends of the sections being flanged outwardly to form a guideway for a purpose to be presently explained. Centrally of the casing is mounted the propeller-shaft 9, and upon the shaft and within the casing-section 5, which is the rear section, is secured the helical blade 10, the width of which gradually increases in the direction of the rear end of the casing. Upon the propeller-shaft and directly in advance of the helical blade referred to is secured a propeller-wheel, including a hub 11, from which radiate the blades or wings 12, which increase gradually in width in the direction of their outer ends and which blades are bent to give the

proper pitch to the wheel. From the hub 11 radiate also the shafts 13, which pass longitudinally of the forward faces of the blade and project beyond the outer ends of the latter, so that the outer ends of these shafts lie between the mutually adjacent ends of the casing-sections. Upon the outer ends of the shafts 13 are mounted the wheels 14, which lie between the flanges of the casing-sections and which prevent bending of the blades of the wheel when the wheel is in action. It will of course be understood that instead of the shafts 13 extending throughout the length of the blades of the wheel they may be formed upon the outer ends of the latter.

In practice the casing is arranged upon the deck of the vessel, and the propeller-shaft is provided with a pulley-wheel or any other suitable form of transmission-gearing for driving the shaft from an engine or other suitable source of power.

It will be noted that while the wheel has a diameter substantially the same as that of the casing the screw in the rear of the wheel has a maximum diameter of only about one-third of that of the casing.

The wheel first engages the air and forces it rearwardly through the casing, said wheel, however, acting only on the outer two-thirds of the cylindrical stream of air that it projects, so that the inner third of the stream of air is not given the same velocity as the outer two-thirds. After the stream of air passes from the wheel the inner third of the stream is acted upon in part by the helical blade or screw, and in consequence the cylindrical stream emitted from the end of the casing moves with a more regular velocity at every point of its cross-section than if the helical blade or screw were omitted.

In practice modifications of the specific construction shown may be made and any suitable materials and proportions may be used for the various parts without departing from the spirit of the invention.

What is claimed is—

1. A propeller comprising a casing having a shaft disposed centrally thereof, a wheel on the shaft having a diameter substantially the same as the casing, and a helical blade se-

cured to the shaft in the rear of the wheel and having its diameter increasing gradually in the direction of its rear end.

2. A propeller comprising a casing including spaced cylindrical sections in axial alignment, a shaft disposed centrally of the casings, a propeller-wheel fixed to the shaft and having terminal wheels on its blades disposed between the ends of the casing-sections, and

a helical blade secured upon the shaft in the rear of the wheel and having a diameter less than that of the wheel.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE R. NOBLET.

Witnesses:

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