PROPELLER POSITIONING DEVICE

Inventor: Frank Victorino, Lakewood, Calif.
Assignee: The Raymond Lee Organization, Inc., New York, N.Y.

Filed: July 14, 1972
Appl. No.: 271,748

U.S. Cl. 269/50, 269/52, 269/76
Int. Cl. B23q 1/04, B23q 1/12
Field of Search 269/76, 47, 50, 52, 269/74, 75, 81, 83, 29/156.8 P, 557, 558

References Cited

UNITED STATES PATENTS
1,371,374 3/1921 Bach 269/50
2,013,705 9/1935 Warren 29/156.8 P
3,576,070 4/1971 Parsons 29/558
1,791,781 2/1931 WilSon 269/52 X
3,065,369 10/1962 Roth 269/50 X
372,714 11/1887 Shaw 269/101 X
1,579,582 4/1926 Voltz 269/76 X
3,248,101 4/1966 Muller et al. 269/58 X

FOREIGN PATENTS OR APPLICATIONS
912,307 4/1946 France 269/58

ABSTRACT

A propeller positioning device comprises a table mount comprising a base member of substantially cylindrical configuration having an under surface substantially perpendicular to the axis thereof and an upper surface transverse to the axis thereof. A table has a substantially planar upper surface, an under surface and a substantially cylindrical support member coaxially affixed to the under surface thereof and having a substantially planar under surface transverse to the axis thereof. A rotating device rotatably mounts the support member on the base member in a manner whereby the under surface of the support member rests on the upper surface of the base member and the support member is rotatable about an axis of rotation perpendicular to the under surface of the support member and the upper surface of the base member so that the table assumes different inclinations corresponding to the rotation of the support member on the base member. A spindle for accommodating a propeller is affixed to the upper surface of the table and extends perpendicularly therefrom and coaxially with the support member.

4 Claims, 2 Drawing Figures
PROPELLER POSITIONING DEVICE

DESCRIPTION OF THE INVENTION

The present invention relates to a propeller positioning device. The principal object of the invention is to provide a propeller positioning device of simple structure for positioning a propeller, as desired, to facilitate work on the propeller, which device is efficient, effective and reliable in operation.

In order that the invention may be readily carried into effect, it will now be described with reference to the accompanying drawing, wherein:

FIG. 1 is a schematic diagram, partly in section, of an embodiment of the propeller positioning device of the invention; and

FIG. 2 is a schematic diagram of the embodiment of FIG. 1 of the propeller positioning device of the invention at a desired angular inclination.

In the FIGS., the same components are identified by the same reference numerals.

The propeller positioning device of the invention comprises a table mount 1 comprising a base member 2 of substantially frustoconical configuration having an under surface 3 substantially perpendicular to the axis 4 thereof and an upper surface 5 transverse to said axis.

A table 6 has a substantially planar upper surface 7, an under surface 8 and a substantially frustoconical support member 9 coaxially affixed to the under surface thereof and having a substantially planar under surface 10 transverse to the axis 11 thereof.

A rotating device rotatably mounts the support member 9 on the base member 2 in a manner whereby the under surface 10 of the support member rests on the upper surface 5 of the base member. The support member 9 is rotatable about an axis of rotation 12 perpendicular to the under surface 10 of the support member and the upper surface 5 of the base member 2. Thus, the table 6 assumes different angular inclinations (FIG. 2) corresponding to the rotation of the support member 9 on the base member 2.

The upper surface 5 of the base member 2 is at the same angle with its under surface 3 as the under surface 10 of the support member 9 is with the upper surface 7 of the support member.

The base member 2 has an internally threaded pin bore 14 formed therein. The rotating device comprises a bore 15 formed in the base member 2 and extending from the upper surface 5 thereof coaxial with the axis of rotation 12. The pin bore 14 opens into the bore 15. A substantially cylindrical extension 16 extends from the under surface 10 of the support member 9 coaxially with the axis of rotation 12. The extension 16 is rotatably seated in the bore 15 of the base member 2.

The extension 16 has a circular circumferential groove 17 formed therein. An externally threaded pin member 18 is threadedly coupled in the pin bore 14 of the base member 2. The pin member 18 abuts the extension 16 in the groove 17 formed therein for holding the table 6 in a desired angular position.

A spindle 19 for accommodating a propeller is affixed to the upper surface 7 of the table 6 and extends perpendicular therefrom and coaxially with the support member 9. Propeller accommodating means includes a first substantially frustoconical annular member 20 (FIG. 1) coaxially positioned around the base 21 of the spindle 19. A tubular member 22 (FIG. 1) is axially positioned around the spindle 19 and rests on the first annular member 20. A second substantially frustoconical annular member 23 (FIG. 1) coaxially positioned around the top 24 of the spindle 19.

An internally threaded axial bore 25 (FIG. 1) is provided in the top 24 of the spindle 19 for accommodating a bolt 26 for maintaining a propeller 27 in position on the first and second annular members 20 and 23. A washer may be positioned between the head of the bolt 26 and the propeller 27.

While the invention has been described by means of specific examples and in specific embodiments, I do not wish to be limited thereto, for obvious modifications will occur to those skilled in the art without departing from the spirit and scope of the invention.

I claim:

1. A propeller positioning device, comprising a table mount comprising a base member of substantially frustoconical configuration having an under surface substantially perpendicular to the axis thereof and an upper surface transverse and non-perpendicular to the axis thereof;

a table having a substantially planar upper surface, an under surface and a substantially frustoconical support member coaxially affixed to the under surface of the table, the support member having a substantially planar under surface transverse to the axis of the support member;

rotating means for rotatably mounting the support member on the base member with the under surface of the support member resting on the upper surface of the base member and the support member being rotatable about an axis of rotation perpendicular to the under surface of the support member and the upper surface of the base member so that the table assumes different inclinations corresponding to the rotation of the support member on the base member;

a spindle affixed to the upper surface of the table and extending perpendicularly therefrom and coaxially with the support member, the spindle accommodating a propeller; and

propeller accommodating means including a first substantially frustoconical annular member coaxially positioned around the base of the spindle, a tubular member coaxially positioned around the spindle and resting on the first annular member and a second substantially frustoconical annular member coaxially positioned around the top of the spindle.

2. A propeller positioning device as claimed in claim 1, wherein the upper surface of the base member is at the same angle with its under surface as the under surface of the support member is with the upper surface of the support member.

3. A propeller positioning device as claimed in claim 1, wherein the base member has an internally threaded pin bore formed therein and the rotating means comprises a bore formed in the base member and extending from the upper surface thereof coaxial with the axis of rotation, the pin bore opening into the bore, a substantially cylindrical extension extending from the under surface of the support member coaxially with the axis of rotation and rotatably seated in the bore of the base member, the extension having a circular circumferential groove formed therein, and an externally threaded pin member threadedly coupled in the pin bore of the
3. A base member and abutting the extension in the groove formed therein for holding the table in a desired angular position.

4. A propeller positioning device as claimed in claim 1, further comprising an internally threaded axial bore in the top of the spindle for accommodating a bolt for maintaining a propeller in position on the first and second annular members.