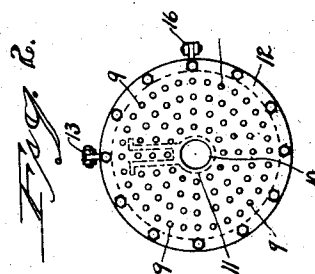
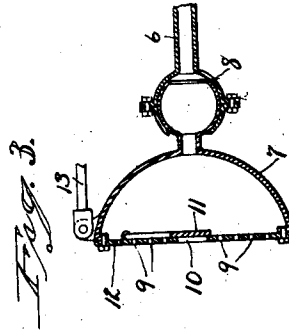
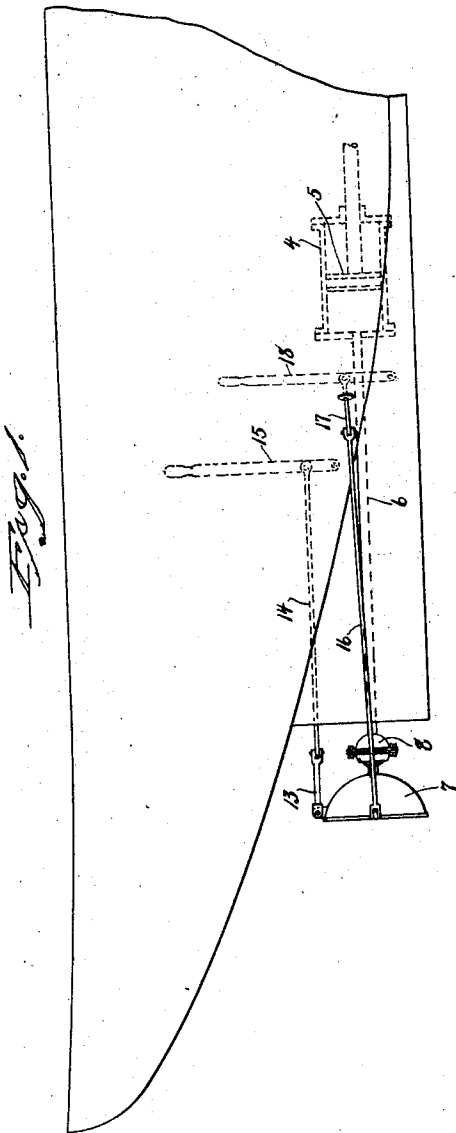


T. P. DUNNE.
 PROPELLING MECHANISM FOR VESSELS.
 APPLICATION FILED OCT. 22, 1917.

Patented May 7, 1918.

1,265,309.



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PROPELLING MECHANISM FOR VESSELS.

1,265,309.

Specification of Letters Patent.

Patented May 7, 1918.

Application filed October 22, 1917. Serial No. 197,753.

To all whom it may concern:

Be it known that I, THOMAS P. DUNNE, a citizen of the United States, residing at Meriden, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Propelling Mechanism for Vessels; and I do hereby declare the following, when taken in connection with the accompanying drawings and the characters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this application, and represent, in—

15 Figure 1 a side view of the stern of a vessel showing my improved propelling mechanism in connection therewith.

Fig. 2 a face view of the rose-head on the end of the discharge pipe.

20 Fig. 3 a vertical sectional view of the rose-head showing the universal joint connection with the discharge pipe.

This invention relates to an improved propelling mechanism for vessels of the type wherein a cylinder is employed with a piston operated from suitable mechanism for discharging water drawn into the cylinder at the rear of the vessel, whereby the vessel is driven forward.

30 The object of this invention is to provide means for discharging the water under high pressure and admitting water under low pressure, with means for moving the discharge end so that a vessel may be steered by the driving mechanism; and the invention consists in the construction hereinafter described and particularly recited in the claims.

40 In carrying out my invention, I employ a pump cylinder 4 of any approved construction in which a piston 5 is adapted to be moved back and forth by any suitable mechanism, not shown. Connected with the rear end of the cylinder is a pipe 6 which terminates at its outer end beyond the stern in a so called rose-head 7 having a flat outer face. Preferably and as herein shown, this rose-head 7 will be connected with the pipe 6 by a universal pipe coupling 8 as clearly shown in Fig. 3 of the drawings. In the outer face of the rose-head 7 are a series of small perforations 9 and a large central opening 10. This central opening is adapted to be closed by a valve 11 hinged to the

inside of the face plate 12 above the opening. Secured to the top of the rose is a link 13 connected with a rod 14 extending to a lever 15 and secured to one side of the rose is a link 16 connected with a rod 17 extending into connection with an operating lever 18. When the piston 5 is moved forward, water will be drawn into the pump cylinder 4 through the rose-head 7 and pipe 6, the valve 11 swinging inward so as to clear the large opening 10 for the free admission of water. On the reverse or rearward movement of the piston, water is forced through the pipe 6 and rose-head 7, and closes the large opening 10 so that the water is forced through the small perforations 9 and is ejected under considerable force, thus propelling the vessel forward. By moving the lever 18 back or forth, the rose-head will be swung to the right or left so as to steer the vessel in the desired direction; or if desired, the rose may be tilted vertically through the lever 15 tending to force the bow up or down according to the direction in which the rose is turned. With this construction on the forward stroke of the piston water is freely admitted to the cylinder, and on the rear stroke it is ejected under pressure, and by means of the levers the vessel may be readily guided.

I claim:—

1. A propeller mechanism for vessels comprising a cylinder, a piston, a pipe leading from the cylinder through the stern of the vessel, a flat-faced rose on the outer end of the pipe, said face formed with a series of jet openings, with an inlet opening, and a valve adapted to close the said inlet opening.

2. A propeller mechanism for vessels comprising a cylinder, a piston, a pipe extending rearward from the cylinder through the stern of the vessel, a flat-faced rose-head, a swivel connection between the said pipe and rose-head, and means for moving the said rose-head.

In testimony whereof, I have signed this specification in the presence of two subscribing witnesses.

THOMAS P. DUNNE.

Witnesses:

ARTHUR B. O'BRIEN,
MADELINE SMITH.