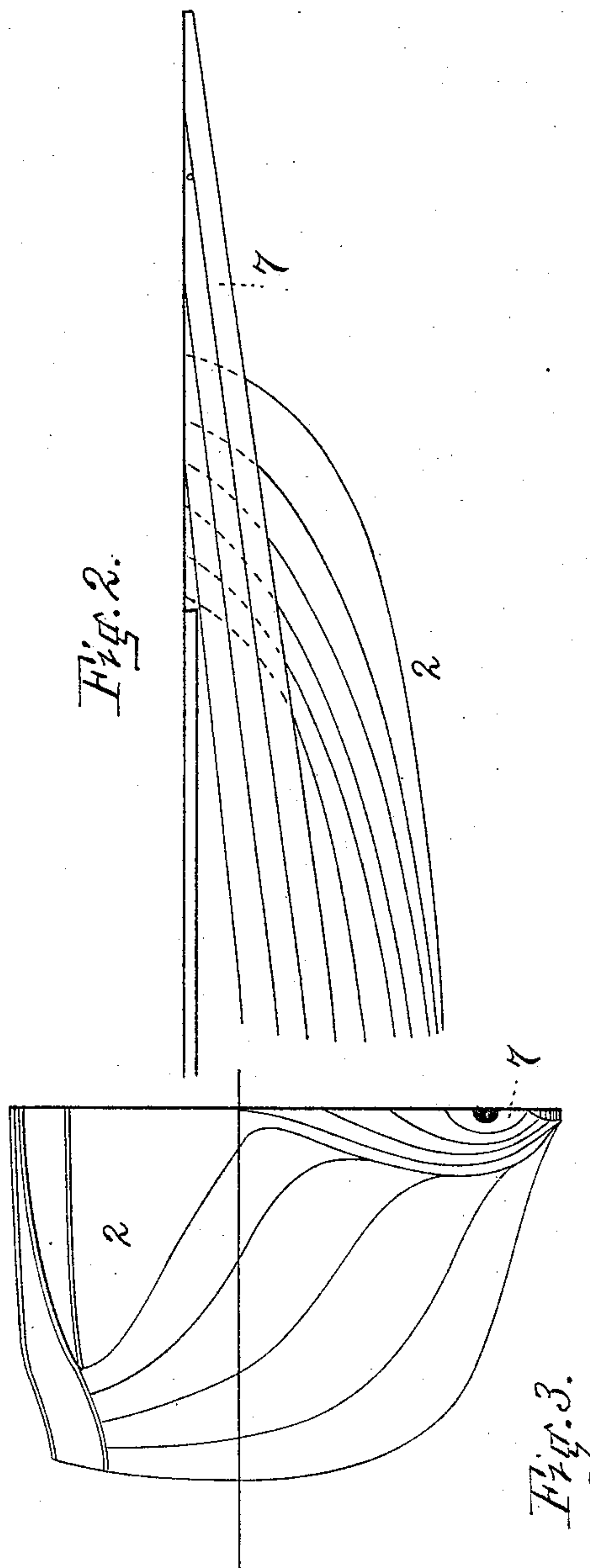
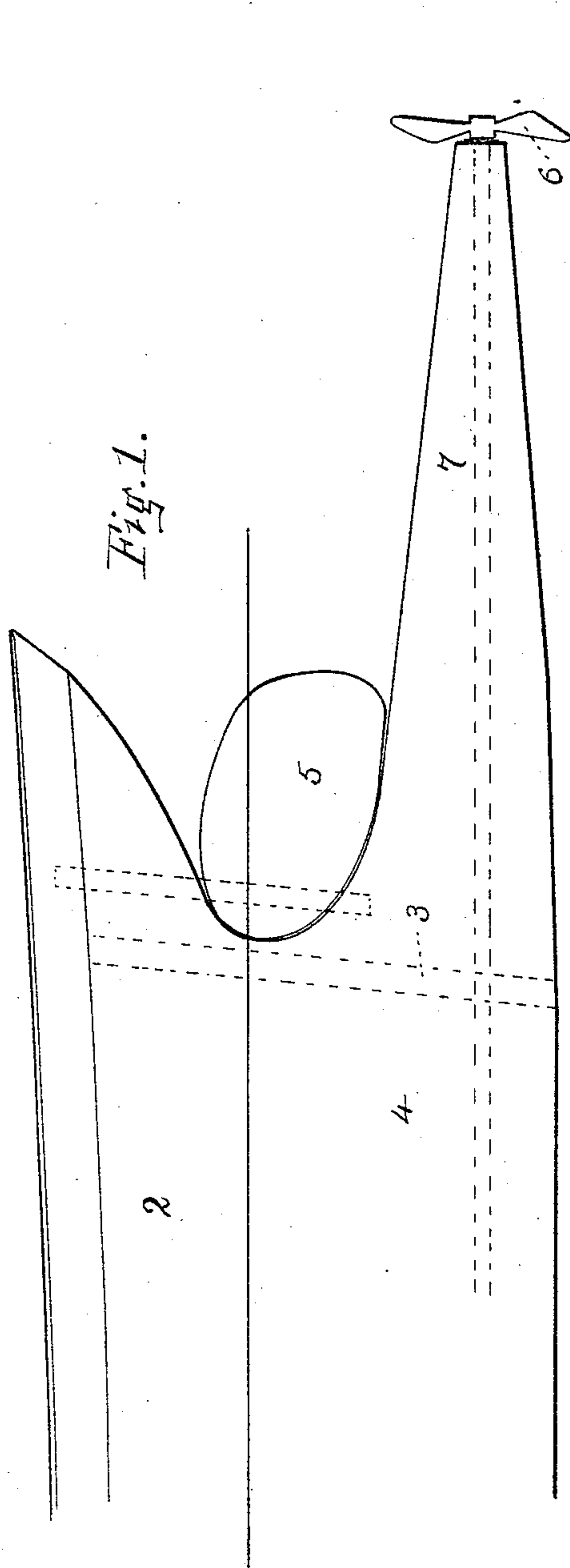


(No Model.)

T. L. STURTEVANT.
NAVIGABLE VESSEL FOR STEAM PROPULSION.

No. 441,202.

Patented Nov. 25, 1890.



Witnesses.

Francis C. Stanwood
John A. Dougherty

Inventor.

Thos. L. Sturtevant.
by H. C. Lodge Atty.

UNITED STATES PATENT OFFICE.

THOMAS L. STURTEVANT, OF FRAMINGHAM, MASSACHUSETTS.

NAVIGABLE VESSEL FOR STEAM PROPULSION.

SPECIFICATION forming part of Letters Patent No. 441,202, dated November 25, 1890.

Application filed November 26, 1889. Serial No. 331,679. (No model.)

To all whom it may concern:

Be it known that I, THOMAS L. STURTEVANT, a citizen of the United States, residing at Framingham, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Navigable Vessels for Steam Propulsion; 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, reference being had to the accompanying drawings, and to figures of reference marked thereon, which form a part of this specification.

My invention relates to navigable vessels for steam propulsion, particularly that class in which "revolvable screws," so called, are employed.

The object of my invention is to render the propeller more efficient, and at the same time prevent the boat from running against the backward current caused by the inrush of water occasioned by the slip of the screw.

The drawings herewith annexed represent, in—

Figure 1, the stern portion of a navigable vessel in sheer plan and provided with the improvements embodying my invention. Fig. 2 is a half-breadth plan of said stern portion. Fig. 3 is a body plan of the after body.

In said drawings, 2 represents the stern portion of a navigable vessel, in which the stern-post is shown at 3, the "dead-wood," so called, at 4, and the rudder at 5.

As before premised, the object of my invention is to afford clear water for the screw, (indicated at 6,) in which to revolve, and likewise to remove from the vessel such retarding effects as are now produced by the inflow of water against the submerged part of the vessel near the stern, such inflow being induced, when the screw is located just aft of the stern-post, by the slip of the screw. To obtain such results, and in lieu of mounting the screw upon its shaft directly in rear of the stern-post, I have built an extension 7, either hollow or solid, in alignment with the keelson. Such extension may be considered as a portion of the dead-wood and projects rearwardly such distance as is found to be most effective. This extension 7 is tapered toward

its outer extremity in a vertical plane or "rockered," so called, one object being to prevent the screw being injured in case the vessel should get aground. In cross-section, as shown in Fig. 3, the extension is oval in shape, with the long axis vertically disposed to facilitate the passage of said extension through the water occasioned by the pitching of the vessel when such act takes place. By such construction and by locating the screw some distance aft of the stern-post it is evident that the vessel is retarded only by the resistance occasioned by the displacement of water due to the body of the vessel as the latter passes therethrough, as likewise by the inflow of water along the dead-wood and stern portions to take the place of that thrust aside; but the retardation induced by any inflow from the front caused by the slip of the screw is not felt, since the vessel is always in advance of the point where such action occurs. A further advantage in this extension, particularly for small boats, is that this projection may be made of iron and hollow. Thus a water-tight chamber is produced, whereby a certain displacement is made and the tendency of the boat to settle aft when at high speed is counteracted to a certain extent.

In my application for patent, No. 351,209 I have described and claimed a navigable vessel provided with a rearwardly-projecting extension having an oval or curved contour, the lines in cross-section enlarging as they approach the body of the vessel and merging easily therewith. Therefore, I do not claim the said construction herein.

What I desire to claim is—

In combination with a vessel for steam propulsion, an extension aligned with the keelson and projecting some distance behind the stern-post, the rudder secured to the latter, and a propeller located at the outer end of said extension and rotated by a shaft longitudinally within and operated by some prime motor, substantially as herein described.

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

THOMAS L. STURTEVANT.

Witnesses:

FRANCIS C. STANWOOD,
H. E. LODGE.