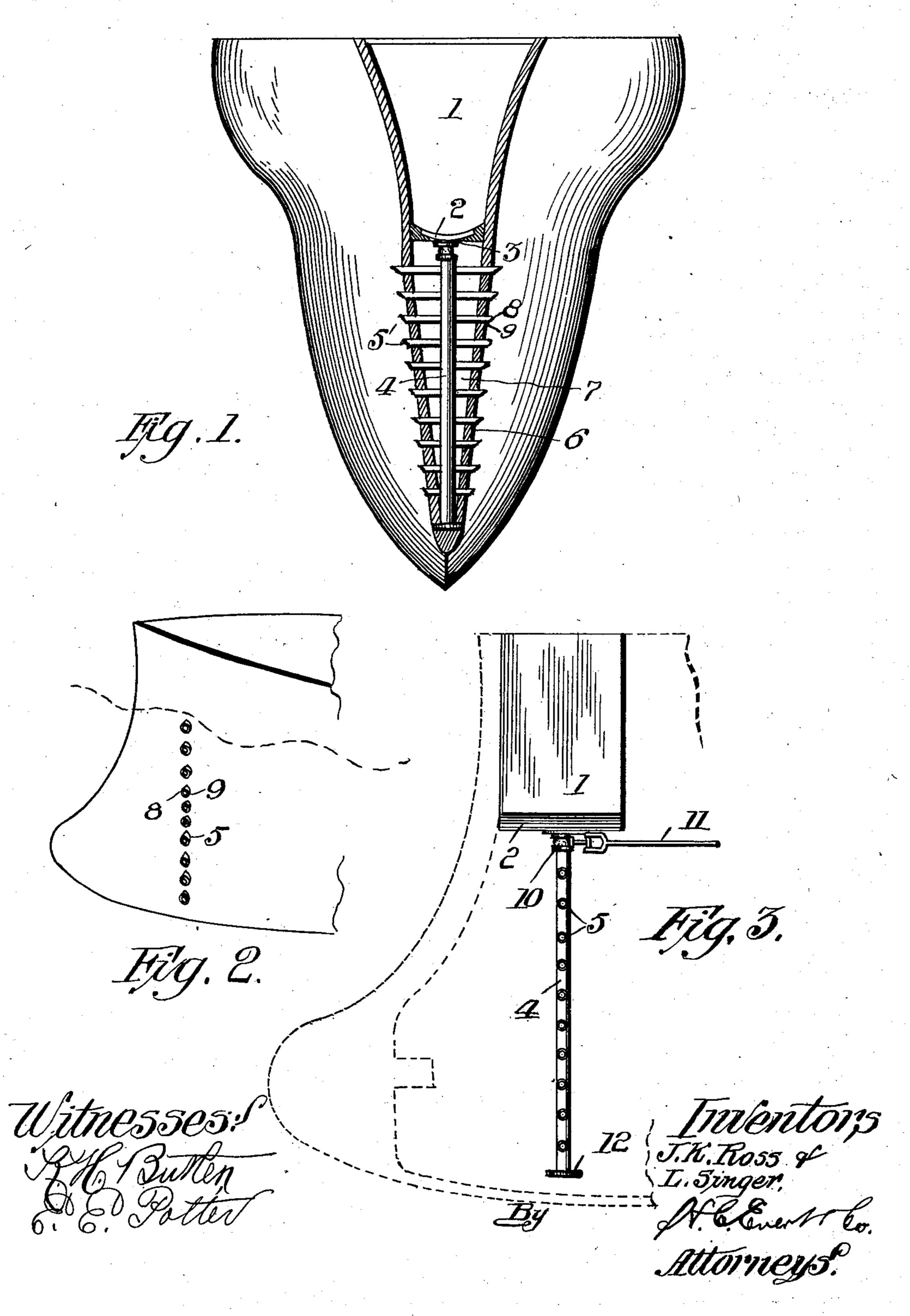
J. K. ROSS & L. SINGER. APPARATUS FOR INCREASING SPEED OF VESSELS. APPLICATION FILED JUNE 24, 1903.

NO MODEL.



United States Patent Office.

JOHN K. ROSS AND LAWRENCE SINGER, OF ALLEGHENY, PENNSYLVANIA.

APPARATUS FOR INCREASING SPEED OF VESSELS.

SPECIFICATION forming part of Letters Patent No. 744,622, dated November 17, 1903.

Application filed June 24, 1903. Serial No. 162,944. (No model.)

To all whom it may concern:

Be it known that we, John K. Ross and LAWRENCE SINGER, citizens of the United States of America, residing at Allegheny, in 5 the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Apparatus for Increasing Speed of Vessels, of which the following is a specification, reference being had therein to to the accompanying drawings.

This invention relates to certain new and useful improvements in apparatuses for increasing the speed of vessels and the like, the primary object of which is to provide means 15 carried by a vessel whereby the speed of the same may be increased, at the same time providing means whereby during a storm or rough sea the speed of the vessel may be increased by the quieting of the sea.

20 Another object of our invention is to provide novel means which may be attached to the vessels of any description, whereby the speed of the vessel may be increased when it is desired, means being provided for con-25 trolling the first said means, and a still further object of our invention is to provide an apparatus which will be extremely simple in construction, strong, and durable, and one which will occupy comparatively small space 30 within a vessel and be readily applied to the different constructions used in building vessels.

Another important feature of our invention is the provision of novel means whereby bar-35 nacles and like foul growth will be prevented from clinging to the sides of the vessels, whereby the speed of the same will be greatly increased and the life of the same considerably lengthened.

The invention finally consists in the novel construction, combination, and arrangement of parts to be hereinafter more fully described, and specifically pointed out in the claim.

erence is had to the accompanying drawings, forming a part of this specification, and wherein like numerals of reference indicate like parts throughout the several views, in 50 which—

Figure 1 is a sectional view of the end of a boat, showing our improved apparatus at-

tached thereto. Fig. 2 is a fragmentary sectional view of the bow of a boat; and Fig. 3 is a detail side elevation of our improved ap- 55 paratus, showing the bow of the boat in dotted lines.

In carrying out our invention we provide a tank and distributing means which may be readily attached to any boat, and in Fig. 1 60 of the drawings we have shown the same in the bow of a yacht, while in Figs. 2 and 3 of the drawings we have illustrated the same in connection with a heavier type of vessel.

Reference-numeral 1 indicates a tank of 65 any desired size, the same being adapted to conform to the part of a vessel in which the same is placed, and we preferably employ the apparatus as near the bow of the boat as possible, whereby the entire boat will be aided 70 and influenced by the apparatus.

The reference-numeral 2 indicates the base of the tank, which has a suitable outlet 3, which connects with the vertical pipe 4, having a plurality of outlets 5, said outlets con- 75 sisting of pipes 6, which passes through the hull of the vessel 7 and through the shell or sides of the vessel, the end of said pipes being beveled, as indicated in Fig. 2 of the drawings, the side of the pipes nearest the 80 bow projecting farther out, as indicated at 8, these pipes being cut at such an angle that the opposite side of the pipe is flush with the side of the vessel, as indicated at 9, whereby a slight obstruction will be presented and a 85 suction formed which will carry any liquid coming through the pipes along the sides of the vessel and prevent the same from spreading out and leaving the vessel were not this suction provided.

Located upon the vertical pipe 4, and preferably between the tank and the outlet, we provide a valve 10, which may be controlled at the tank or suitable mechanism provided whereby the same may be controlled from 95 the engine-room or any desired position, and In describing the invention in detail ref- | in Fig. 3 of the drawings we have illustrated a lever 11, which may pass rearwardly to the desired operating-point.

> The reference-numeral 12 indicates the 100 closed end of the vertical pipe 4, and while we have described this pipe as being vertical it is obvious that we may employ a pipe at an angle where the construction of the ves

sel necessitates the same, and any number of outlets may be employed, the same depending upon the height and the draft of the vessel.

In Fig. 2 of the drawings it will be noted that we have illustrated the water-line in dotted lines, whereby the outlets will be beneath the water and the liquid which passes from the pipes will be thoroughly mixed with the water.

We desire to employ any lubricating oil or liquid within the tank 1, whereby the same will have a steady flow through the pipes 5 and into the water when the valve 10 is opened, said lubricator or oil being of such a nature as to quiet the water, whereby the speed of the vessel will be increased. It will be seen by the construction of the ends of the pipe 5 that the lubricating oil or liquid will be driven rearwardly against the sides of the vessel and thus prevent the barnacles from becoming attached to the sides of the vessel, whereby the retarding of the speed of the vessel will be prevented.

It will be noted that we have illustrated our improved apparatus as applied to a yacht

and a heavier vessel, and it is obvious that the same may be used to advantage upon ocean liners and battle-ships, and it will be noted that other various changes may be made in the details of construction without 30 departing from the general spirit of our invention.

Having fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

In an oil-distributer comprising a tank and a downwardly-extending main pipe leading therefrom, a plurality of branch pipes horizontally extending from said main pipe, and projecting through the sides of the vessel, the 40 extended portions of said pipes being angularly cut at their lower ends, said lower ends being flush with the sides of the vessel.

In testimony whereof we affix our signatures in the presence of two witnesses.

JOHN K. ROSS. LAWRENCE SINGER.

Witnesses:

E. E. POTTER, K. H. BUTLER.