

A. W. Von Schmidt.
Pneumatic Propeller.

Nº 59,686.

Patented Nov. 13, 1866.

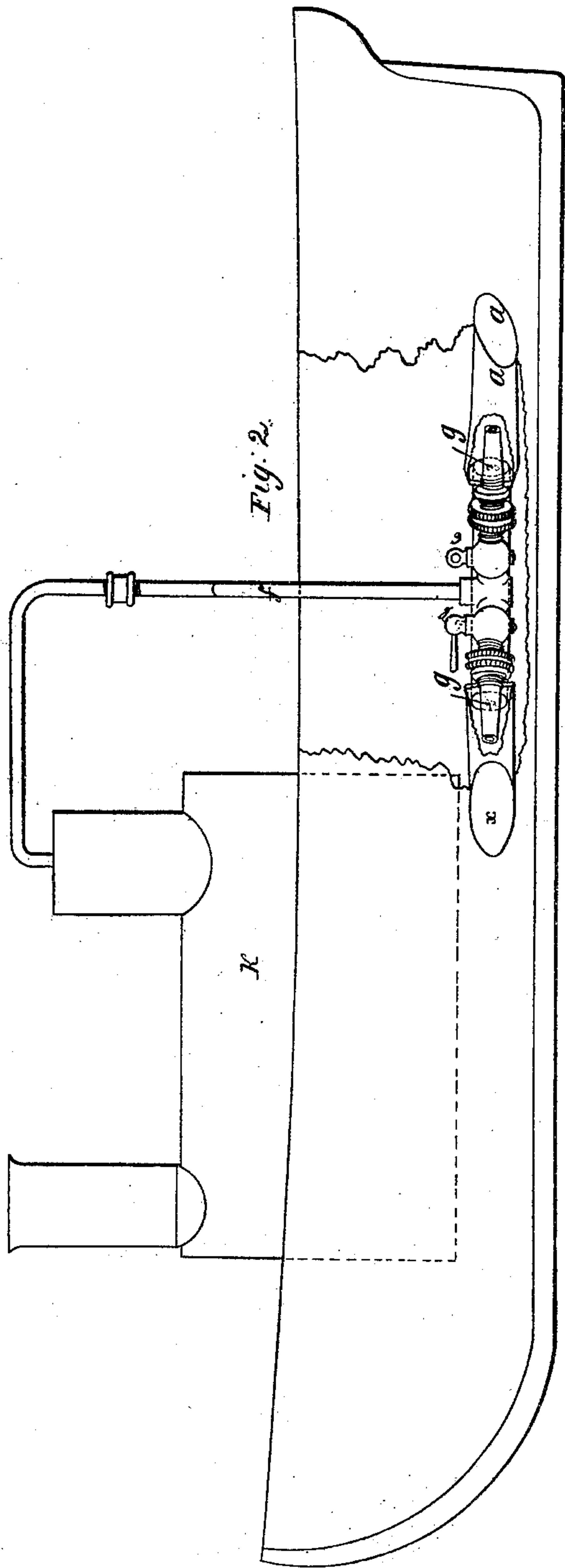


Fig. 2.

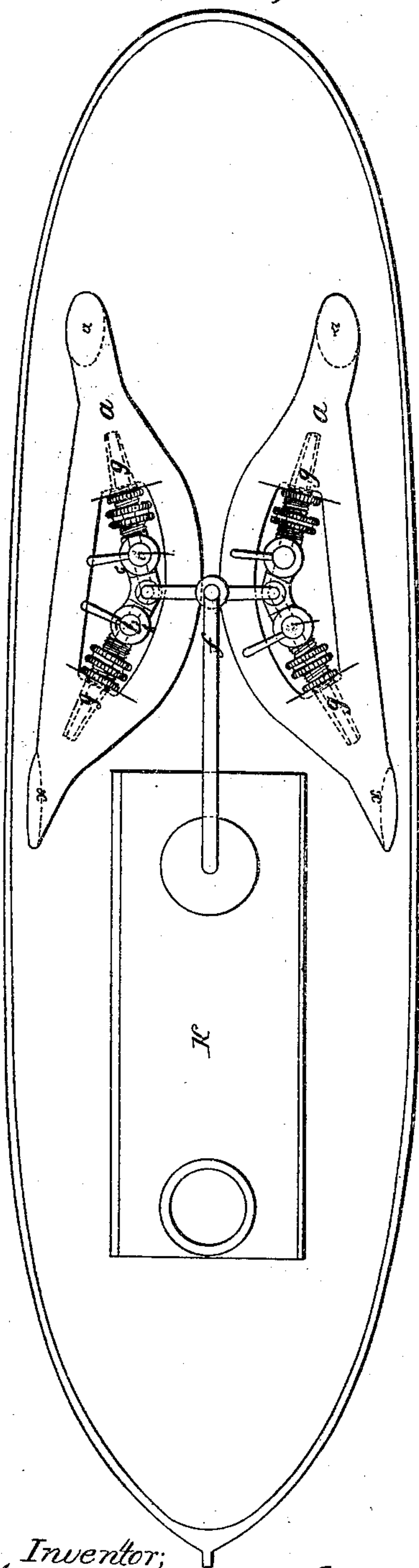


Fig. 1.

Witnesses;
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UNITED STATES PATENT OFFICE

ALLEXEY W. VON SCHMIDT, OF SAN FRANCISCO, CALIFORNIA.

IMPROVED STEAM-PROPELLER FOR BOATS.

Specification forming part of Letters Patent No. 59,686, dated November 13, 1866.

To all whom it may concern:

Be it known that I, ALLEXEY W. VON SCHMIDT, of the city and county of San Francisco, and State of California, have invented a new Method, Mode, and Apparatus for Propelling Boats, Ships, and Vessels by Steam; and that the following is a clear, full, and exact description of the principles or character which distinguish the same from all others heretofore known or employed.

The nature and plan of my invention and the making and using the same are as follows, reference being had to the accompanying drawings, of which—

Figure 1 is a top view of the vessel and propeller-pipes; Fig. 2, a longitudinal section of vessel and propeller-pipes, and also shows the mode of applying the steam.

My invention consists in the direct application of steam on and upon the column of water contained in the propeller-pipe, thereby forcing said column of water outward and propelling the vessel by the action of said column upon the water in which the vessel floats; and also in the mechanical construction of the apparatus used for this purpose.

I describe the same as follows, viz: I construct a boat or vessel in the ordinary manner. I use a boiler for generating steam in the usual way. I introduce one or more pipes of suitable size on each side of the vessel beneath the water-line, as represented in Fig. 2, letter *a*. The steam-pipe, letter *f*, Figs. 1 and 2, leading from the boiler *K* enters the propeller-pipe *a*, Figs. 1 and 2, and by means of stop-cocks or valves *c* the steam is let on direct from the boiler *K* through steam-pipes *g* on the water in pipes *a*.

When the vessel is required to move ahead, steam is let on by opening stop-cocks or valves *c*. The force of steam drives the water out of the pipe *a*. The water coming out of pipe *a* comes in contact with the water on the outside of the vessel and gives the necessary power, the water coming into pipe *a* from the opening *x* as fast as it is required.

When the vessel is to be backed, stop-cocks or valves *c* are closed and stop-cocks or valves *b* are opened, when the action of the steam reverses the current of water in the pipe *a*, and the water passing forward through the pipe *a* at *x* causes the vessel to back.

I do not confine myself to one set of propellers, but I put in a number of them, on the same principle, on each side of the vessel, so as to get more speed should it be required.

I do not claim as my invention the forcing of water into vessels under pressure by a jet or jets of steam; but

What I claim as my invention, and desire to secure by Letters Patent, is as follows:

In combination with a propeller-pipe, arranged either inside or outside the vessel, but below the water-line, and one or more stationary steam-pipes the ends or nozzles of which are within and point respectively toward the openings of the propeller-pipe, one or more valves or cocks, arranged so that a column of steam may be projected at pleasure through either nozzle, thus inducing a current of water through the propeller-pipe, as and for the purposes shown and described.

ALLEXEY W. VON SCHMIDT.

Witnesses:

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