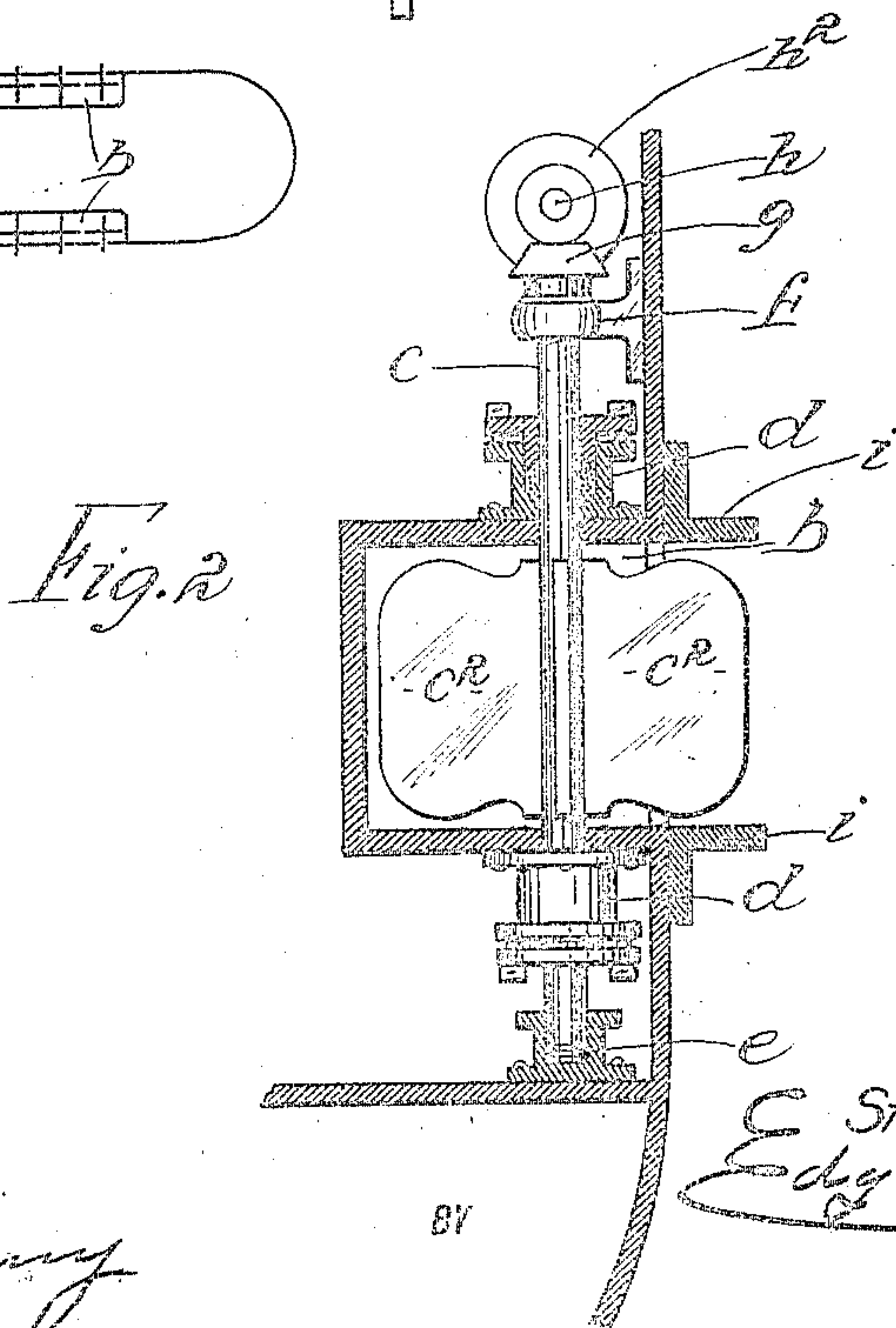
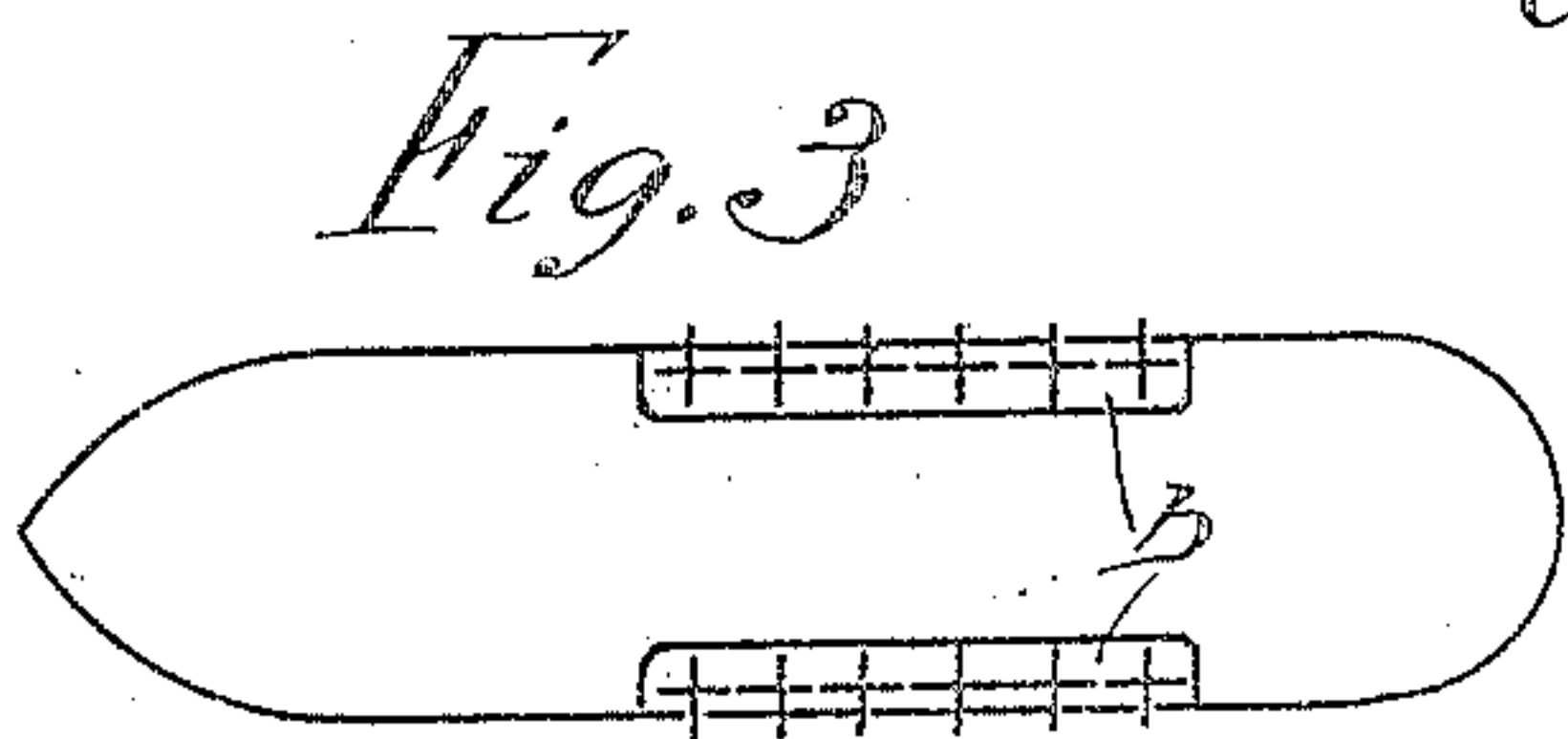
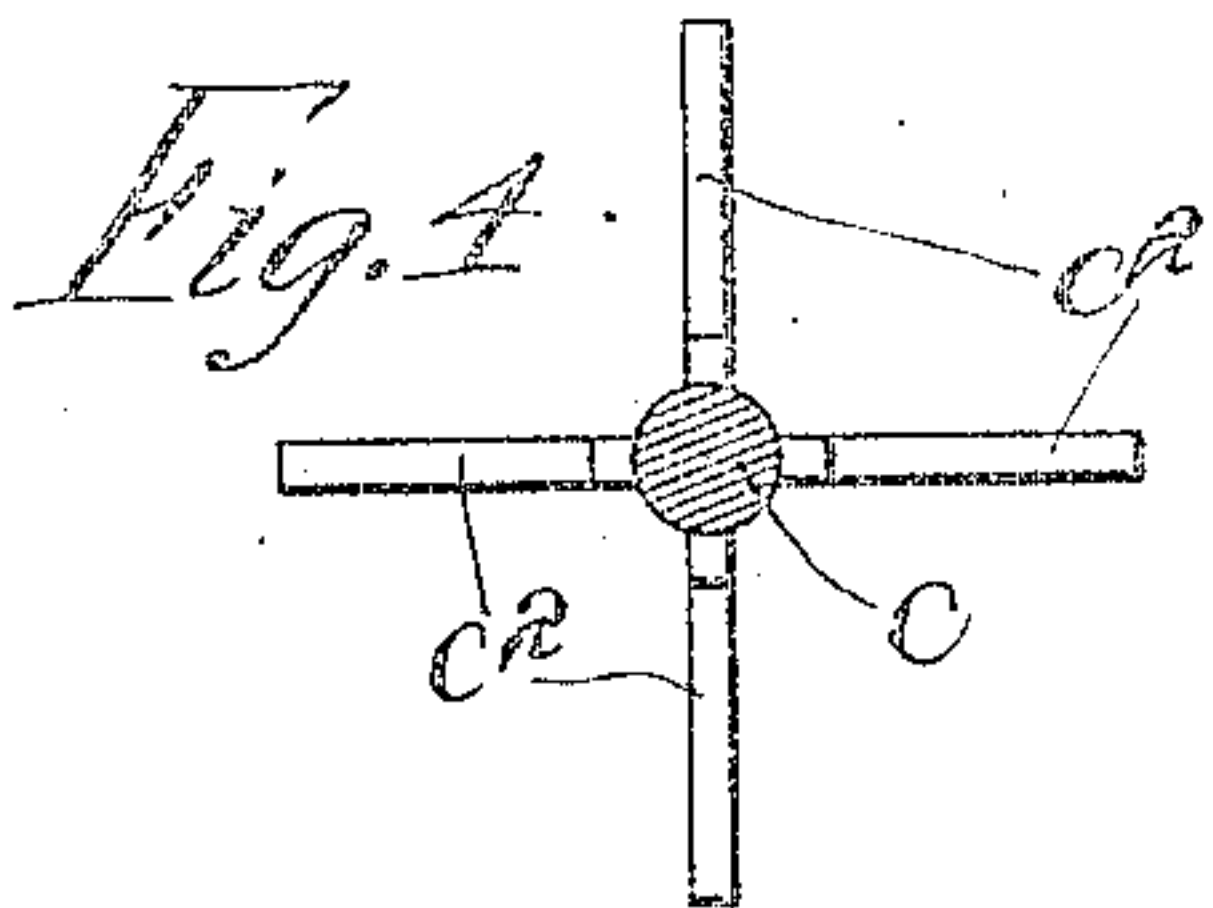
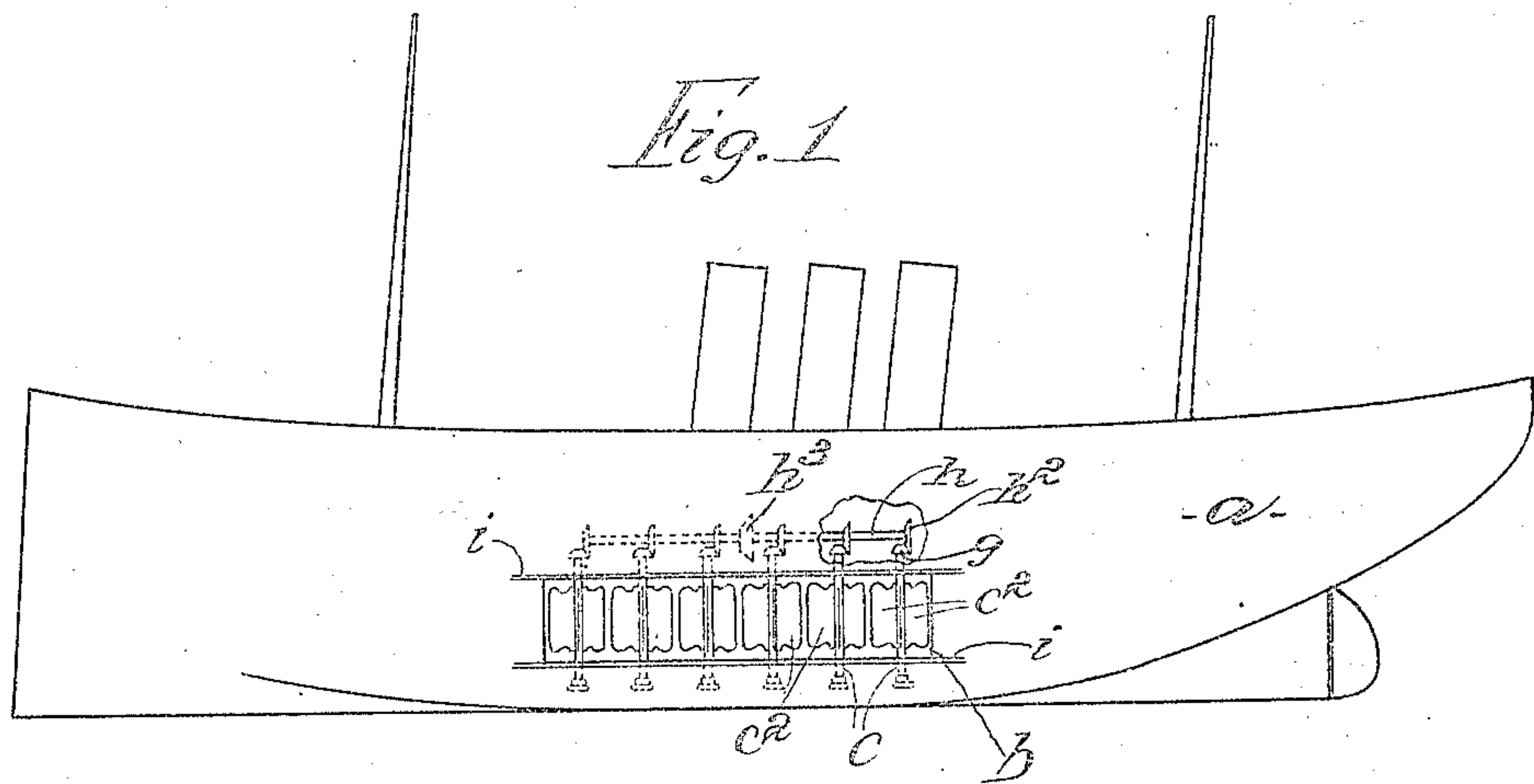


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PROPELLER FOR SHIPS.  
APPLICATION FILED JULY 2, 1909.

959,761.

Patented May 31, 1910.



WITNESSES:  
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BY

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# UNITED STATES PATENT OFFICE.

STEFAN LABRYSZEWSKI, OF BROOKLYN, NEW YORK.

## PROPELLER FOR SHIPS.

959,761.

Specification of Letters Patent.

Patented May 31, 1910.

Application filed July 2, 1909. Serial No. 505,552.

*To all whom it may concern:*

Be it known that I, STEFAN LABRYSZEWSKI, a citizen of the United States, and residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Propellers for Ships, of which the following is a specification such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to propellers for steamships and other vessels; and the object thereof is to provide a propeller construction for vessels whereby the speed of the vessel may be increased, and the danger of injuring or breaking the propeller or propellers avoided; and with this and other objects in view the invention consists in a propeller mechanism for vessels constructed as hereinafter described and claimed.

In my improvement the propellers are mounted in the opposite sides of the hull of the vessel; and the invention is fully disclosed in the following specification, of which the accompanying drawing forms a part, in which the separate parts of my improvement are designated by suitable reference characters in each of the views, and in which;—

Figure 1 is a side view of a vessel provided with my improved propellers, Fig. 2 a partial, transverse, vertical section of the vessel shown in Fig. 1. Fig. 3 a diagrammatic view on a small scale of the vessel and showing the arrangement of the propellers in the side and end, and;—Fig. 4 a plan view of one of the propellers, the shaft thereof being shown in section.

In the accompanying drawing I have shown at *a* the hull of a vessel, and in the practice of my invention, I form in the sides thereof below the water line longitudinal channels *b* in which are mounted a plurality of vertically arranged propeller shafts *c*, each of which is provided within the corresponding channel *b* with propeller blades *c*<sup>2</sup>, four of which may be employed on each shaft.

In the accompanying drawing six of the propellers are shown in each side of the vessel, each propeller consisting of a shaft *c* and the corresponding blade *c*<sup>2</sup>. Above and below the channels *b* are placed packing boxes *d* secured to the top and bottom walls of the channels *b* and through which the propeller shafts *c* pass, and the lower

ends of said shafts are stepped in boxes or housings *e* in which they are rotatable.

The upper ends of the propeller shafts *c* pass through brackets or keepers *f* secured to the sides of the hull of the vessel, and said shafts are provided at their upper ends with beveled gears *g*, and mounted horizontally over the propeller shafts are power shafts *h* provided with beveled gears *h*<sup>2</sup> which correspond with and mesh with the gears *g*, and the shafts *h* are also provided centrally with a gear *h*<sup>3</sup>, and in practice power may be transferred from any suitable engine located in the hull of the vessel to the shafts *h*, and in practice the propellers may be rapidly rotated by means of this gearing and suitable means may be provided whereby said propellers may be rotated in either direction or to propel the vessel forwardly or backwardly as may be desired.

The propeller blades *c*<sup>2</sup> project, in the form of construction shown, beyond the sides of the hull of the vessel as shown in Fig. 2, and the rapid rotation of said propellers will move the vessel either forwardly or backwardly according to the direction in which the propellers are turned. I also secure to the hull below and also preferably above the channels *b* horizontally arranged guard plates *i* or similar devices to protect the propellers or the blades thereof when the ship is lying in dock and at other times, but these guard plates will not interfere with the operation of the propellers.

My invention is not limited to the exact details of construction herein shown and described, and various changes therein and modifications thereof may be made, within the scope of the appended claims, without departing from the spirit of my invention or sacrificing its advantages.

Having fully described my invention, what I claim as new and desire to secure by Letters Patent, is;—

A vessel, the sides of the hull of which are provided with longitudinal channels which open outwardly and a plurality of propellers mounted in said channels on vertically arranged shafts and the blades of which project beyond the hull of the vessel, the shafts of said propellers extending upwardly and downwardly through the top and bottom walls of said channels and within the hull of said vessel and a drive shaft geared in connection with the upper ends of said propeller shafts; the top and



bottom walls of said channels being also provided with stuffing boxes through which the end portions of said propeller shafts pass and the lower ends of said propeller  
5 shafts being provided with supports, in which they rotate, and the hull of the vessel being provided above and below said propellers with longitudinally ranging guards.

In testimony that I claim the foregoing as my invention I have signed my name in 10 presence of the subscribing witnesses this 30th day of June 1909.

STEFAN LABRYSZEWSKI.

Witnesses:

H. R. CANFIELD,  
C. E. MULREANY.