

G. W. La Bar.

Life Boat.

N^o 14,843.

Patented May 6, 1856.

Fig. 1.

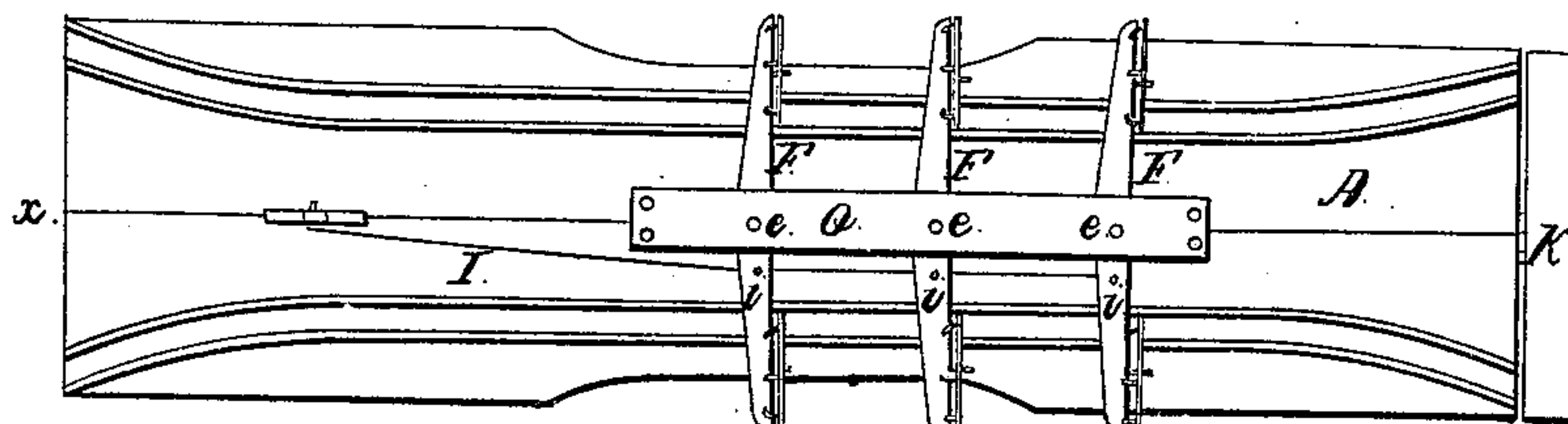


Fig. 2.

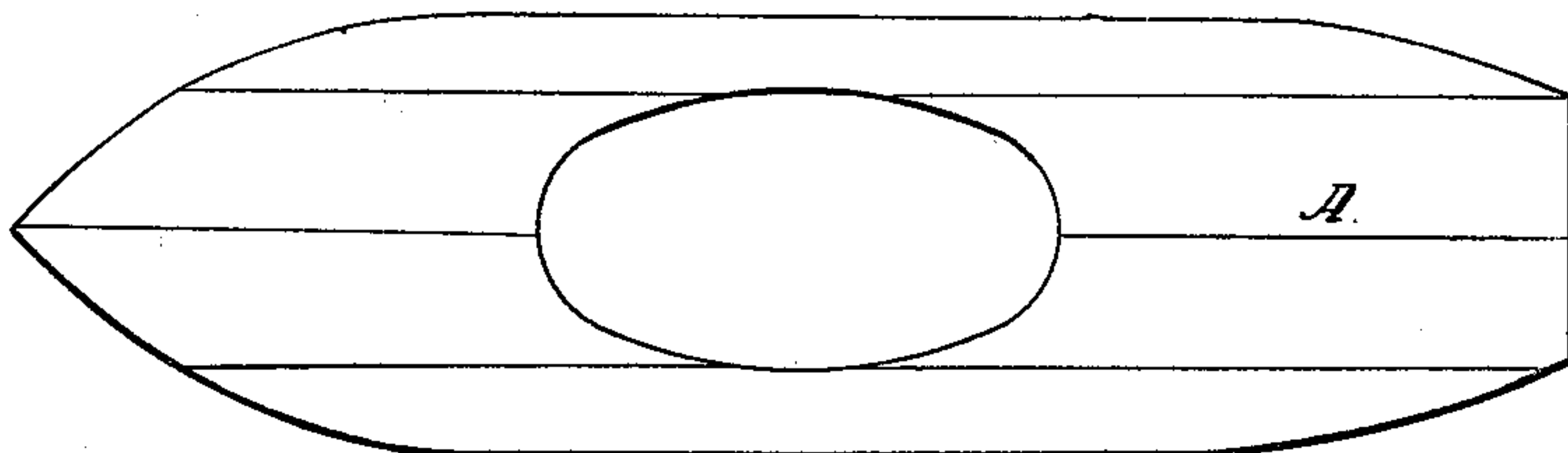


Fig. 3.

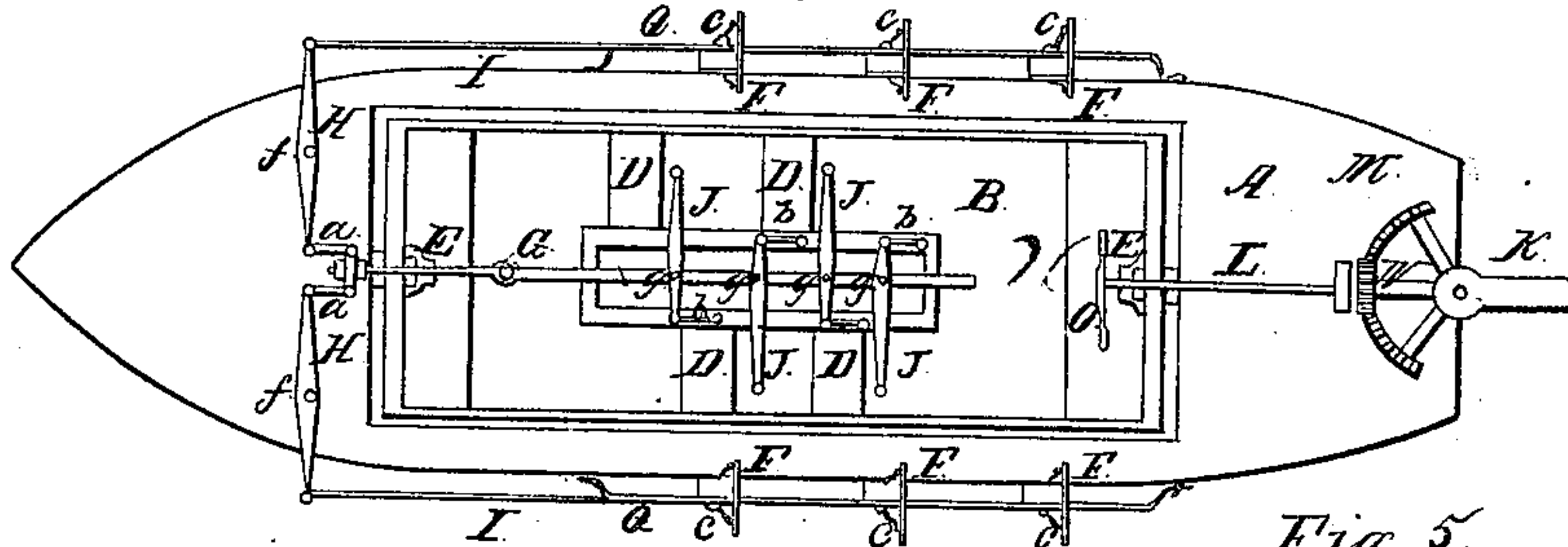


Fig. 4.

Fig. 5.

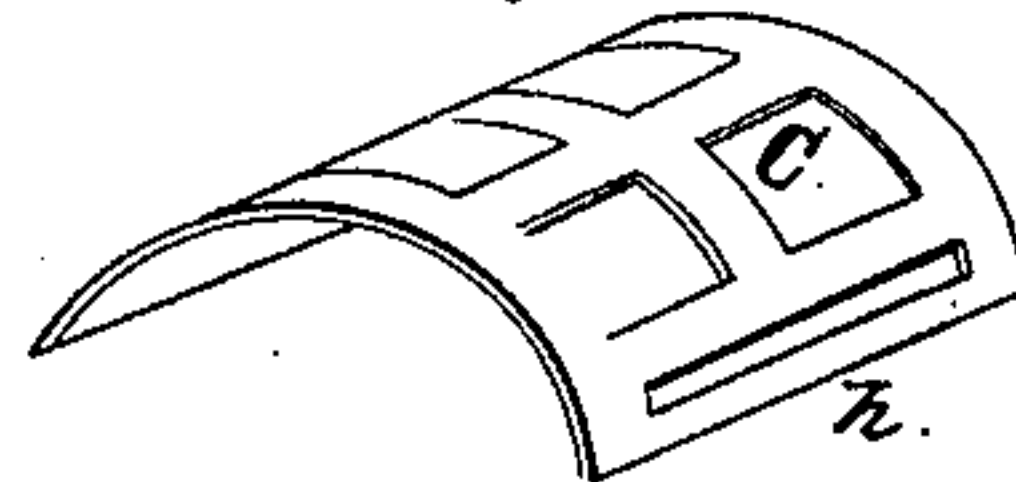
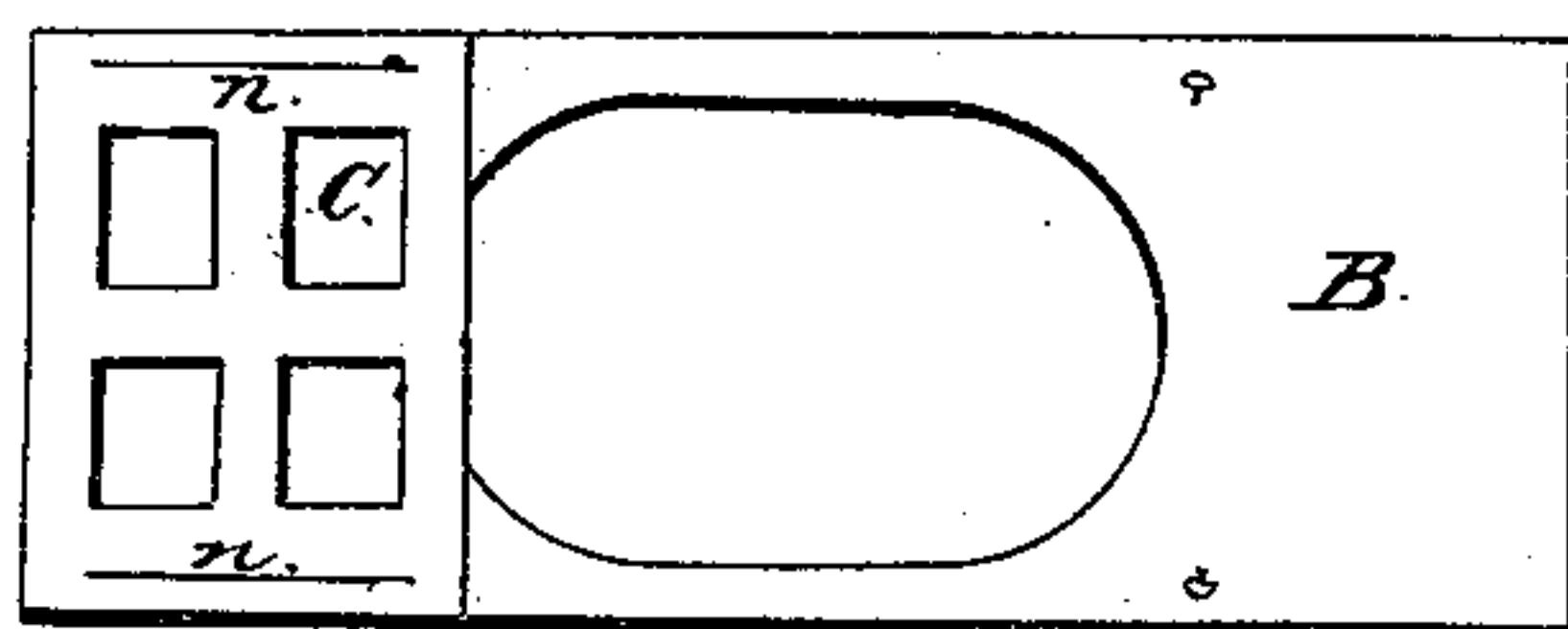


Fig. 6.

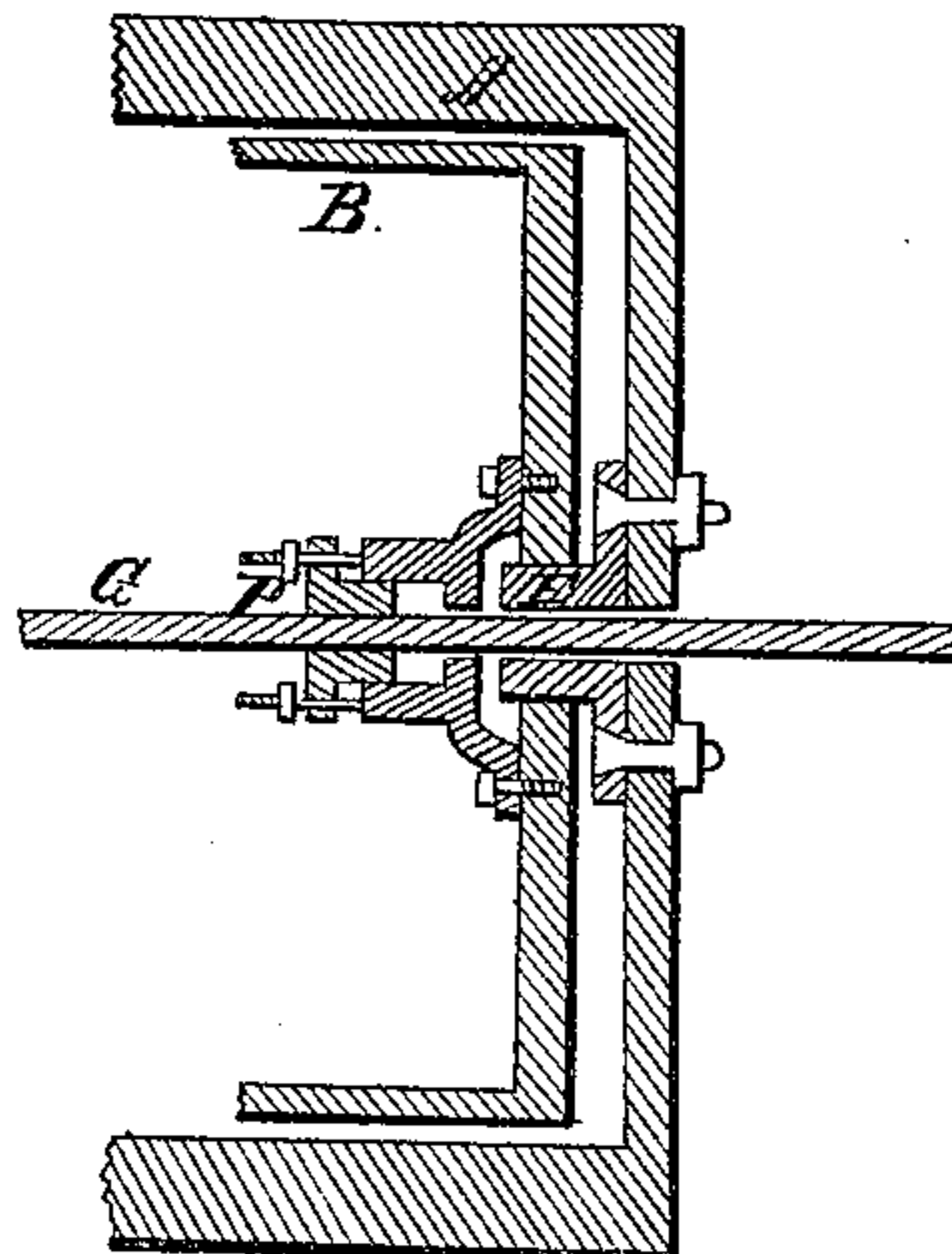


Fig. 7.

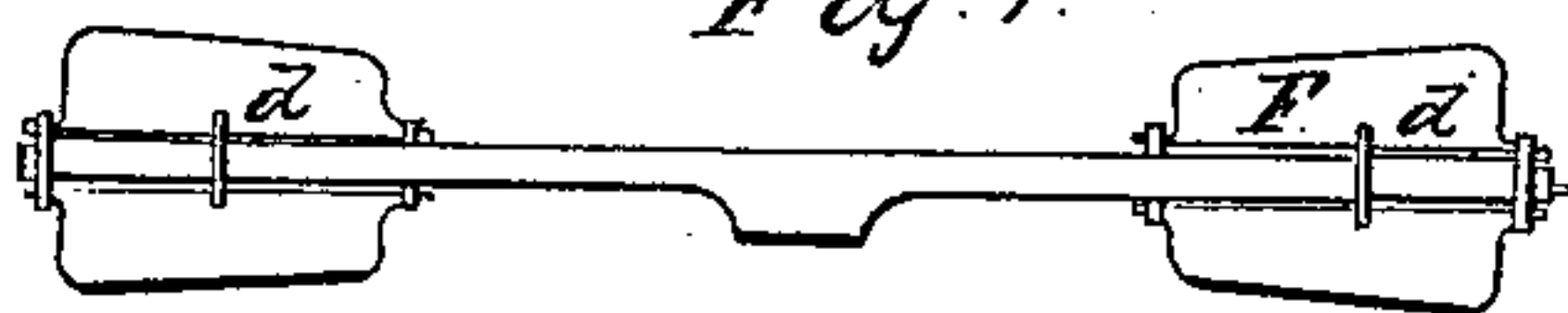
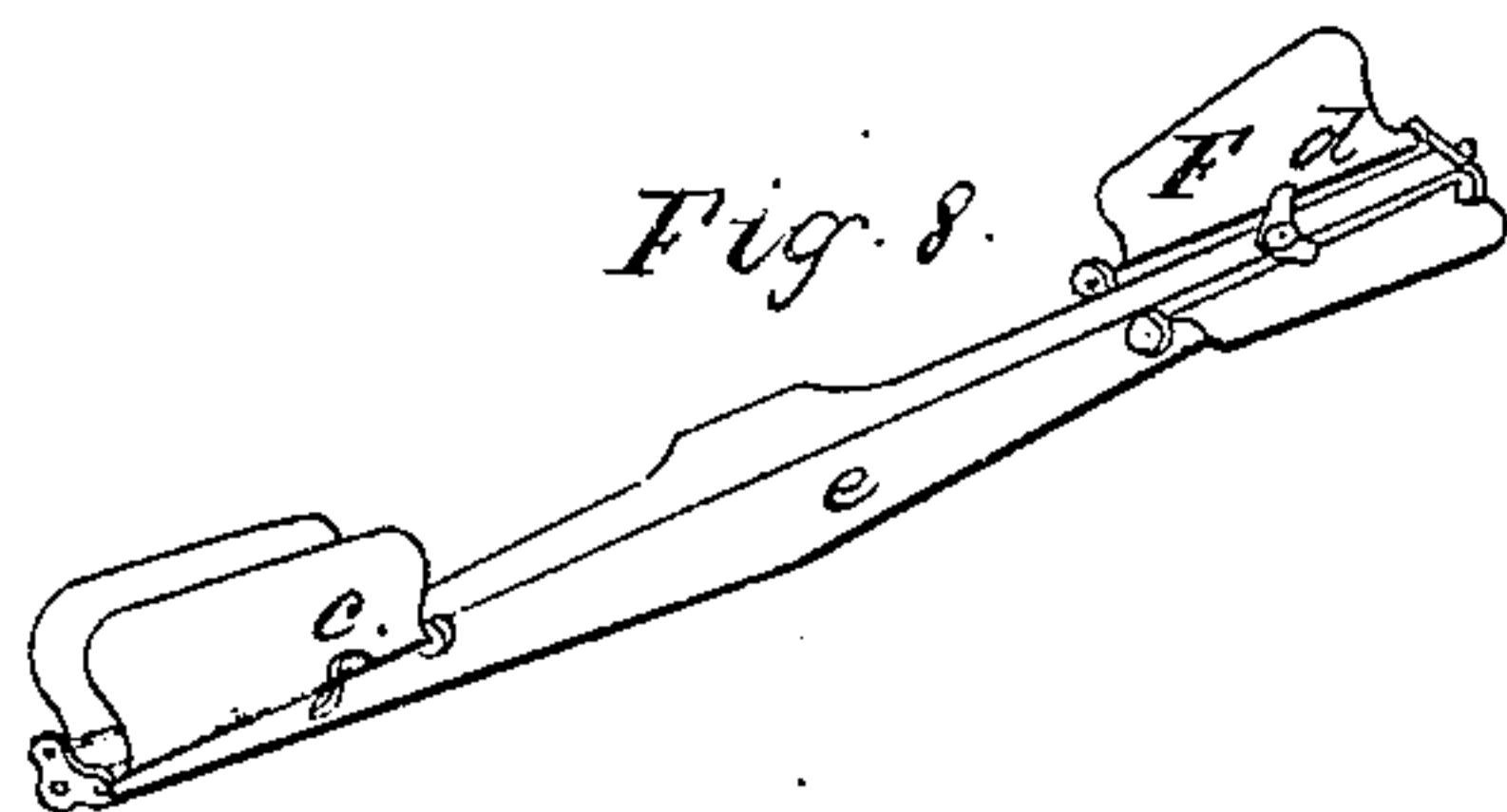


Fig. 8.



UNITED STATES PATENT OFFICE.

GEORGE W. LA BAW, OF JERSEY CITY, NEW JERSEY, ASSIGNOR TO G. W. LA BAW, JOS. COLTON, AND THEO. HOWELL.

PROPELLER FOR LIFE-BOATS.

Specification of Letters Patent No. 14,843, dated May 6, 1856.

To all whom it may concern:

Be it known that I, GEORGE W. LA BAW, of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and Improved Life-Boat; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, figures, and references thereon, in which—

Figure 1 is a side elevation of my improved life boat. Fig. 2 is a top view of the same with the carriage left out. Fig. 3 is a top view of it showing the carriage and mechanism for propelling and steering the boat. Fig. 4 shows the carriage detached from the boat, having one of the sliding covers on, and the other off. Fig. 5 is a detached cover. Fig. 6 is a top view of one half the boat showing how the carriage may be attached to the frame work A, so as to render it water tight. Fig. 7 is a perspective view of one of the propellers detached. Fig. 8 is a reverse side view of the same.

Similar letters of reference refer to like parts in all the drawings.

The nature of my invention consists in constructing and arranging the carriage in such a manner that the persons in the boat may always retain a comfortable position regardless of heavy seas; and also in providing a mechanism to propel the boat which shall be the same let the boat be either side up.

To enable others skilled in the art to make and use my invention I will proceed to describe it.

A, is the outside frame work of the boat.

B, is the carriage for holding the passengers.

C, C, are covers or doors which close the entrance during boisterous weather and thus protect the passengers.

D, D, are seats arranged in a suitable manner in the bottom of the carriage.

E, E, are the trunnions, or shafts which attach the boat and carriage together.

F, F, F, are the propellers arranged on each side of the boat with blades on both ends, as shown in Figs. 1-7 and 8.

G, is a shaft or rod to which are attached the levers in the stem of the boat to work the propellers.

H, H, are levers which connect with the shaft G by the short links a, a.

I, I, are rods on each side of the boat which connect the propellers together.

J, J, are levers suitably attached to the rod G for these fulcrums while the short ends are attached to the rods b, b, b, b.

K, is the rudder of the boat.

L is a shaft to work the rudder by means of the wheel or handle O and pinion N.

M is a segment attached to the rudder.

P is a gland to stuff the box around the shaft G and L in order to render the joints tight.

Q is a bar or strap of iron or other substance seen plainly in Fig. 1 to support the propellers.

I construct the boat as shown in the side elevation Fig. 1 so that the top and bottom may be alike and of nearly the same shape as other life boats. The two parts are joined together at the center line seen in Fig. 1 from H to K. At the central point in the stem and stern are the trunnions on which the carriage rotates, seen at E, in Fig. 3 which trunnions are hollow to admit the rods Q and L to slide freely through them. These joints are made water tight by packing suitable for the purpose as shown in Fig. 6.

The carriage is arranged with seats D D, as shown in Fig. 3, while the top is provided with sliding doors suitably attached by bolts passing through the slots in the plates C, which may be shut together thus protecting the passengers from cold and exposure. I would here remark the doors are to be furnished with glass lights. Should a sea strike the outer boat and turn it completely over, the carriage B, would still retain the same position; for the outer frame work A, of the boat may rotate freely either way over the carriage without in any way deranging the carriage.

The propellers are constructed so as to open and present their full blades during the forward progressive movement of the boat as shown in Figs. 1-3 and 7, while as they return for the next stroke they close themselves as shown in Fig. 8, in order to present but small resistance to the water during the back stroke. On the back side there is placed a pin, d, or other suitable mechanism to prevent them from opening too far. The front side is also furnished with some suitable device seen at, c, Fig. 8

to keep it from closing up too much so as to prevent the blades from opening for the next succeeding stroke. These propellers having blades on both ends are supported
 5 on proper bearings at, *e*, Fig. 1, by inserting their fulcrum shafts in the sides of the boat, and beam, *a*, see Fig. 1. A proper distance from the fulcrum of the propellers is a connecting rod, *I*, which serves to give
 10 them all a simultaneous movement as the rod is worked back and forth. This rod, *I*, is jointed near the propeller nearest the stern of the boat in a proper manner.

In the carriage, *B*, of the boat Fig. 3 attached to the shaft, *G*, are levers *J*, *J*, which
 15 have their fulcrum at *g*, *g*, while the other ends are secured to the short straps *b*, *b*, in order to give them the proper vibrating motion. By working the levers *J*, *J*, (see
 20 Fig. 3) back and forth the shaft, *G*, would have a reciprocating motion imparted which by means of the levers *H*, *H*, and connecting rods *a*, *a*, and *I*, would give a reciprocating motion to the paddles *F*, *F*, *F*.

25 The steering apparatus is arranged in the stern of the boat as plainly shown in Fig. 3. The shaft *L* is made water tight by suitable packing at *E* while the other end rests in a

box. On one end of the shaft *L* in the carriage is a wheel *O*, which serves to work the
 30 rudder by means of the pinion *N* working in the segment *M* attached to the rudder *K*.

I would here remark the carriage *B*, may be secured to the outer frame *A*, of the boat in ordinary weather and also when being
 35 launched in order to more readily allow the passengers to get in and also to prevent the boat rolling too much. The boat may be properly ventilated by having holes on top of the carriage at each end under the outer
 40 covering *A*. Should a sea wash over the boat it would quickly leave the highest points of the carriage, while the closing doors *C* *C*, would not allow water to come in, or if any but very small quantities.
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Having thus described my improved life boat what I claim as new therein and desire to secure by Letters Patent is—

I claim constructing the propellers with blades on both ends, so as to enable the boat
 50 to be worked by the same mechanism when either side up substantially as described.

GEO. W. LA BAW. [L. s.]

Witnesses:

C. A. DINGAR,
 JAMES HYDE.