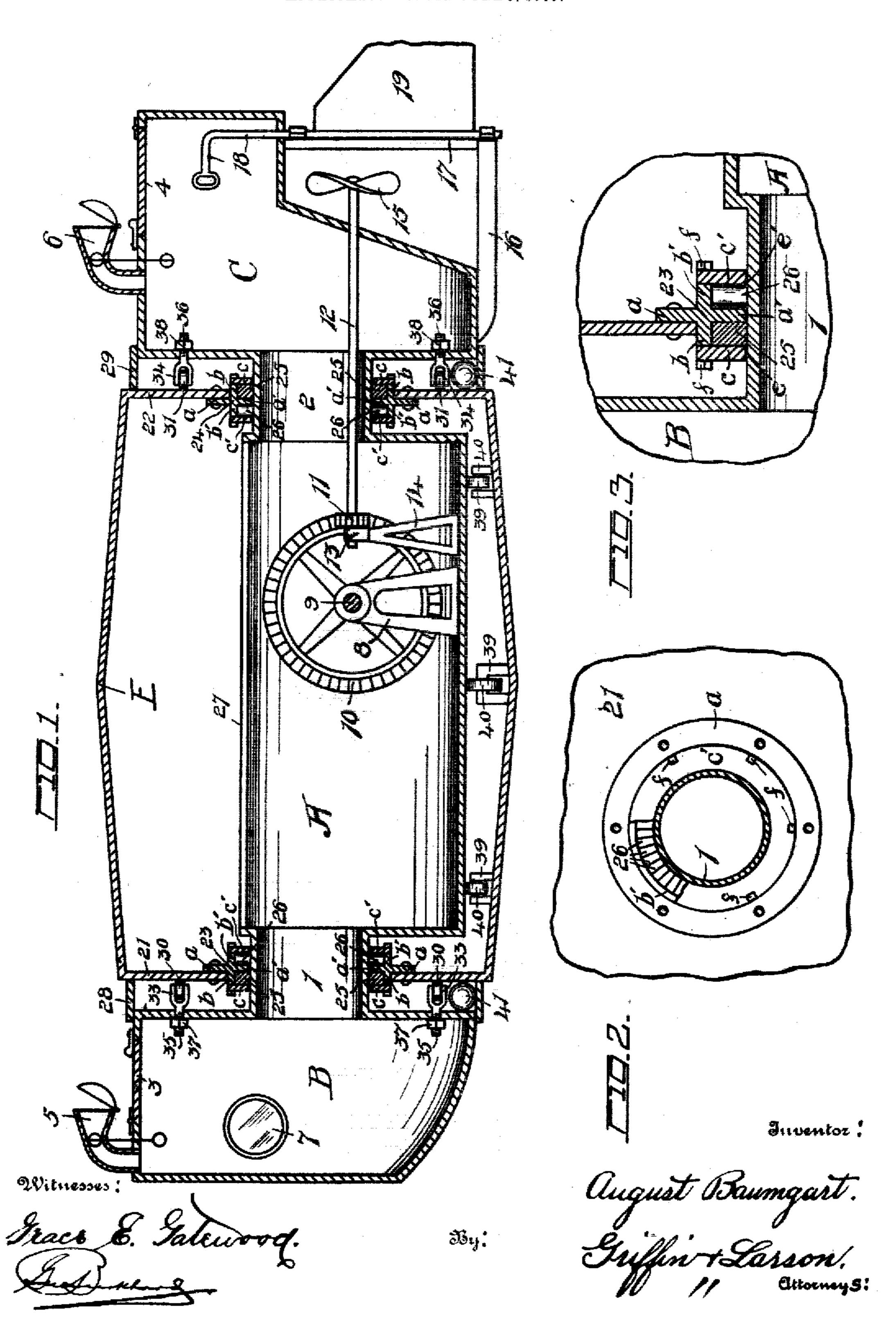
A. BAUMGART.

LIFE SAVING BOAT.

APPLICATION FILED JUNE 9, 1905.



## UNITED STATES PATENT OFFICE.

AUGUST BAUMGART, OF LIND, WASHINGTON.

## LIFE-SAVING BOAT.

No. 811,815.

Specification of Letters Patent.

Patented Feb. 6, 1906.

Application filed June 9, 1906. Serial No. 264,537.

To all whom it may concern:

Be it known that I, August Baumgart, a citizen of the United States, residing at Lind, in the county of Adams and State of Wash-5 ington, have invented certain new and useful Improvements in Life-Saving Boats, of which the following is a specification.

My invention relates to certain new and useful improvements in life-saving boats, to and more particularly to that class of lifesaving boats which is illustrated in my Patent No. 701,128, of May 27, 1902.

The object of my invention is to provide a life-boat so constructed that the force of the 15 waves shall be compensated in striking the life-boat, so that the force of the waves and water will expend its force upon an outer movable cover to protect the life-boat proper; and a further object is to provide a means 20 whereby the approximately barrel-shaped housing or outer cover may be permitted to revolve freely with the wash of the water or the movement of the waves; and the still further object is to prevent the longitudinal 25 movement of the approximately barrelshaped housing or cover.

In the accompanying drawings I have shown in Figure 1 a center sectional view of my life-boat embodying my improve-30 ments. Fig. 2 shows an inside end view of a broken portion of my life-boat, disclosing the ring or annulus provided with roller-bearings and packing and the set-wheels, while Fig. 3 shows a broken portion, in center section, of 35 the ring or annulus provided with two annular spaces adapted to carry roller-bearings

and packing. In the drawings I have shown my life-boat, consisting of a main cylindrical chamber A 40 and forward bow-chamber B and the rear chamber C, these chambers B and C being connected to the main chamber A by means of the communications in the form of collars 1 and 2, which collars extend from the ends 45 of the main chamber eccentrically, as shown, so that the top of the chambers B and C will not extend beyond the top of the approximately barrel-shaped housing E, as clearly shown in Fig. 1. These chambers B and C 50 are provided with the doors 3 and 4 and the fresh-air tubes 5 and 6, as shown and described in my prior patent, No. 701,128, of

May 27, 1902. The forward end or bowchamber B is also provided with the circular

55 window 7, as shown.

Held within a suitable frame 8 within the main chamber A is a shaft 9, which is operated by any suitable power and which shaft 9 supports a crown-gear 10, which gear meshes with a pinion 11, secured to one end of the 60 shaft 12, which shaft at this end works within the bearing 13, which is secured within the chamber A. To the opposite end of this shaft 12 is secured a suitable propeller 15, as clearly shown.

Secured to the bottom of the chamber C is the keel 16. Secured to one end of this keel 16 is the keel-rod 17, which extends upward and is secured to another portion of the chamber C, as shown, and to this keel-rod 17 7° is movably secured the rudder-rod 18, which is secured by any suitable means to the rudder 19, as shown, for the purpose of steering the boat.

Revolubly working upon the collar-sections 75 1 and 2 are the ends of disks 21 and 22 of the housing E, which are provided with the rings or annulus 23 and 24, which are when in crosssection in the form of a cross, consisting of the legs a and a', b and b'. Secured to the end of the 80 legs b b' are the ring-plates c c', into which spaces packing 25 and roller-bearings 26 are placed, as shown in Figs. 1 and 3, the packing being placed within the annular spaces c and the roller-bearings within the spaces c', thus 85 making the barrel-shaped housing E watertight and at the same time allowing the same to freely revolve by means of the roller-bearings. The ring-plates are secured to the legs b and b' by means of set-screws f, so that new 9° packing and roller-bearings may be easily replaced without having to remove the ring or annulus 24 from the disks 21 and 22.

It will be observed that the main chamber A is provided with the opening 27, so as to 95 enable a person to stand up within the main chamber A, and, further, to allow the operator to go into the housing E from the main chamber A whenever it is desired to replace new roller-bearings, &c.

Secured to the outer side of the chamber B and C are the rings or annulus 28 and 29, which work against the ends of the disks 21 and 22 of the housing E to prevent solids from working between the disks and the end 105 of the chambers B and C, as clearly shown in Fig. 1.

100

Held between the disks 21 and 22 and one end of the chambers B and C are the setwheels or rollers 30 and 31, which wheels or 110

rollers work on the outside of the disks 21 and 22, as clearly shown in Fig. 1. These rollers or wheels 30 and 31 are held in place and adjusted to prevent the housing E from lon-5 gitudinal movement by means of the yokes 33 and 34, which are provided with the threaded tubular ends 35 and 36, which pass through the inner ends of the chambers B and C and held in place and adjusted by means 10 of nuts or burs 37 and 38, as clearly shown. It will be observed that the chamber or housing E will thus be permitted to revolve freely with the wash of the water or the movement of the waves, so that when the shock of the 15 waves is expended upon the housing E, which is adapted to revolve to the obedience to the wave-power, and, further, prevent longitudinal movement of the housing E upon the collars 1 and 2. The housing E is provided be-20 low with a plurality of bearings 39, supporting the rollers 40, upon which rests the interior or main chamber A, as in my prior patent. It will also be noticed that I use a plurality of ball-bearings 41, loosely placed with-25 in the spaces between the disks 21 and 22 and the chamber B and C, as shown in Fig. 1.

Having thus described my invention, what I claim as new, and desire to secure by United

States Letters Patent, is—

1. The combination of the main chamber, of the forward and rear chambers thereof, of the housing or movable cover provided with disks surrounding the main chamber, and an annulus provided with a pair of annular 35 spaces and secured to the disks of said housmg.

2. The combination of the main chamber, of the forward and rear chambers thereof, of the housing or movable cover provided with 40 disks surrounding the main chamber, an annulus or ring approximately in the form of a cross in cross-section secured to said disks, annular or ring plates secured to the ends of the horizontal legs thereof, and forming a 45 pair of annular spaces between the lower ver-

tical leg and said annular spaces.

3. The combination of the main chamber, of the forward and rear chambers thereof, of the housing or movable cover surrounding 50 the main chamber provided with disks, an annulus provided with a pair of annular spaces secured to the disks thereof and a plurality of set-wheels or rollers the periphery

thereof working on the outer face of said disks.

4. The combination of the main chamber, of the forward and rear chambers thereof, of the housing or movable cover surrounding the main chamber provided with disks, an annulus provided with a pair of annular 60 spaces secured to the disks thereof and a plurality of set-wheels or rollers the periphery thereof working on the outer face of said disks and means for adjustably securing said setwheels or rollers to the forward and rear 65 chambers of the life-boat.

5. The combination of the main chamber, of the forward and rear chambers thereof, of the housing or movable cover surrounding the main chamber provided with disks, an 70 annulus secured to the end disks thereof and provided with annular spaces one of said annular spaces adapted to be filled with packing and the other with roller-bearings to permit the housing or outer movable cover to 75

freely revolve.

6. In combination with the forward and rear chamber of the life-boat and the movable cover or housing thereof provided with disks, a plurality of rollers or set-wheels, the periph- 80 ery thereof working upon the disks of the aforesaid movable cover, and said rollers or set-wheels being secured to the forward and rear chambers by means of a forked-shaped member, and adjusted by means of a nut or 85 bur.

7. The combination of the main chamber, of the forward and rear chambers thereof, and of the housing or movable cover surrounding the main chamber provided with disks, an 90 annulus provided with a pair of annular spaces secured to the disks of said movable cover or housing, a plurality of set-wheels, the periphery thereof working on the outer face surface of aforesaid disks, and means for ad- 95 justing said set-wheels to prevent longitudinal movement of the housing upon the collars communicating with the aforesaid forward and rear chambers.

In testimony whereof I affix my signature 100 in presence of two witnesses.

AUGUST BAUMGART.

Witnesses: E. T. Copp, DAY IMUS.