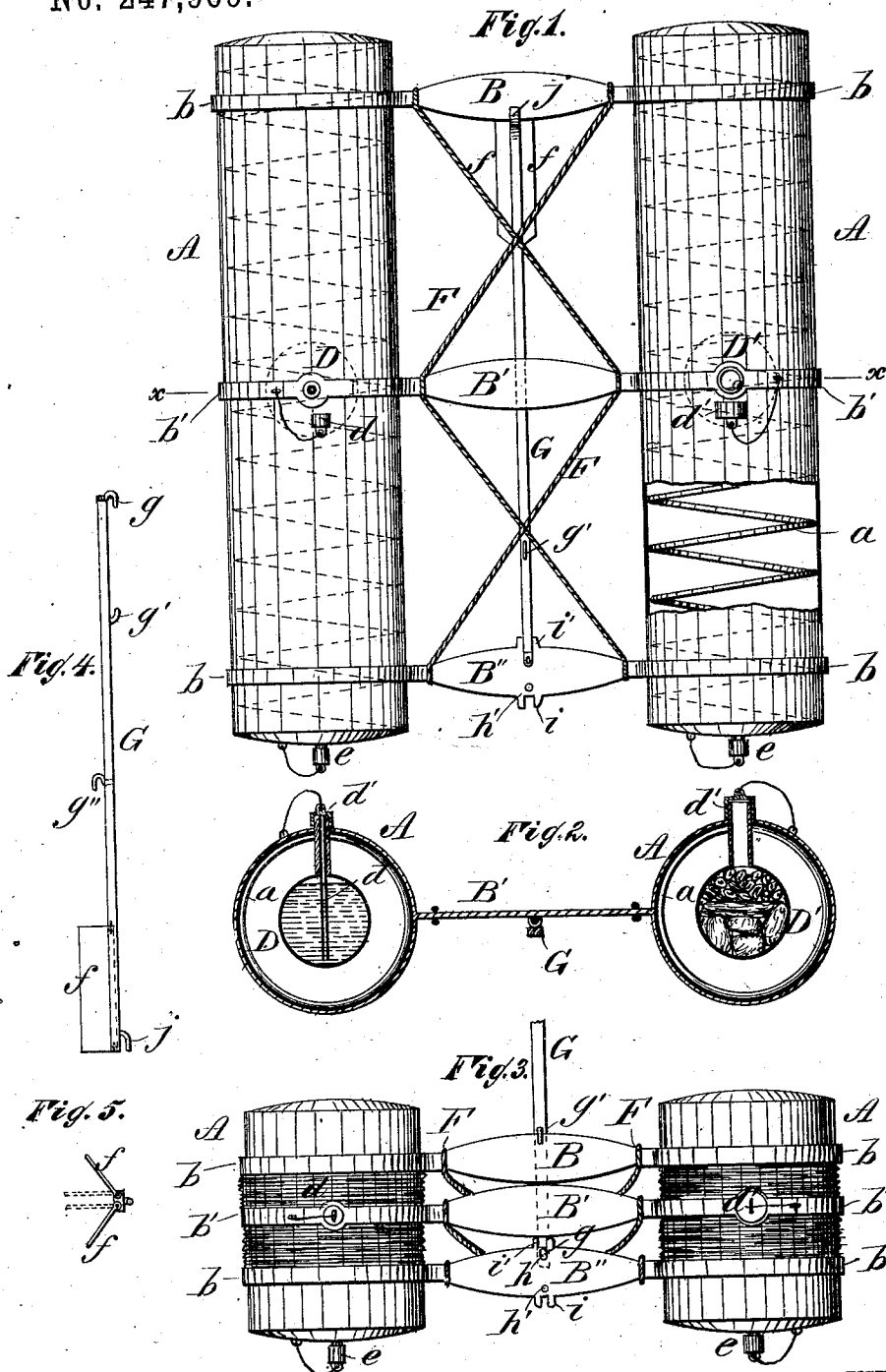


(No Model.)

R. TORRAS.
LIFE PRESERVER.

No. 247,969.

Patented Oct. 4, 1881.



WITNESSES:

Theo. G. Foster.
C. Seagwick

INVENTOR:

R. Torras
BY *Munn & Co*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

ROSENDO TORRAS, OF BRUNSWICK, GEORGIA.

LIFE-PRESERVER.

SPECIFICATION forming part of Letters Patent No. 247,969, dated October 4, 1881.

Application filed August 18, 1881. (No model.)

To all whom it may concern:

Be it known that I, ROSENDO TORRAS, of Brunswick, in the county of Glynn and State of Georgia, have invented a new and useful Improvement in Life-Preservers, of which the following is a full, clear, and exact specification.

My invention consists of two air-tight and water-proof cylinders, each provided on the inside with helical springs, and connected together by metallic gyves, having such arrangement and construction that the cylinders may be compressed and retained in a small compass, and when distended form a ponton for buoying the shipwrecked person or persons.

My invention further consists in means whereby provisions and water may be stored in the preserver or life-raft, and of convenient and ready means for steering or propelling the raft, and also of the construction, arrangement, and combination of parts, as hereinafter more fully set forth.

In the accompanying drawings, Figure 1 is a plan view of my improved life-preserver or life-raft in distended position. Fig. 2 is a cross-section of the same, taken on the line *xx* of Fig. 1. Fig. 3 is a plan view showing the preserver as it appears when compressed for stowing away. Fig. 4 is a side view of the oar, and Fig. 5 is an end view of the same, showing the hinged blades or wings.

Similar letters of reference indicate corresponding parts.

The cylinders *A A*, of heavy canvas, rendered water-proof by painting or otherwise, are secured at the ends and in the center in the rings *b b'* of the gyves *B B' B''* in any suitable manner, preferably by sewing to the rings strips of canvas by means of small wire passing through suitable perforations made in the rings, and then stitching the said strips to the cylinders.

Instead of using water-proof canvas for the cylinders, rubber fabric or any similar material might be substituted.

Within the cylinders are placed the strong helical springs *a a*, which serve to distend the cylinders to their utmost when the raft or preserver is prepared for use, as shown in Fig. 1, but which may be compressed, when the raft is not in use, to the small compass shown in Fig. 3.

Within the cylinders are placed the receptacles *DD'*, of rubber, leather, metal, or any suitable material. The one *D*, which is for water, has a small opening provided with the tube *d*, leading to near the bottom of the receptacle, through which the water may be sucked, while the receptacle *D'*, which is for food, is provided with a large opening to admit the hand of a person, for taking out the food as required. Both of these necks or openings of the receptacles protrude from suitable holes formed through the rings *b'* of the gyve *B'*, and are adapted to be closed by the screw-caps *d' d'*, attached to the rings by small chains.

The ends of the cylinders are provided with the air-openings *e e*, for the admission of air when the cylinders are being distended and for the outflow of air when the same are compressed. These openings are also closed by screw-caps, as shown.

In some instances the gyves will be concave in the center, as shown in Figs. 1 and 3, while in others they will be straight, as shown in Fig. 2, and in some instances the space between the cylinders and over the gyves will be covered with strong netting to comfortably support the occupant, and in some instances this will be left off, the gyves being then only laced, mainly for the purpose of strengthening the raft with the ropes, strips of canvas, or similar material, *F F*, as shown in Fig. 1.

The gyve *B''* is formed with the keepers *i i'* upon its sides, for holding the oar *G* when used to guide or scull the raft, and with the holes *h h'* for the hooks *g g'* of the oar, for holding the cylinders compressed, as shown in Fig. 3, and also for the reception of the hook *g''* when the oar is used for propulsion. When the raft is distended and the oar is not in use it may be placed on the gyves, as shown in Fig. 1, the end of the oar being provided with the hook *j* for holding it in this position.

It will be understood that the oar may have an ordinary blade; but I prefer to form the blade of the hinged wings *f f*, which are free to close from pressure from the back, but will open to pressure of water from the opposite direction, thus furnishing broad resistance in one direction and small resistance in the other.

In case the gyves are straight, as shown in Fig. 2, the raft may be used either side up, in which case the openings to the provision and water receptacles should be duplicated upon

the other side of the cylinders, so that the contents thereof may be taken from either side of the raft.

The receptacles are of such size relative to the size of the springs in the cylinders that when the springs are compressed they will not interfere with or injure the said receptacles.

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

1. In a life-preserver, the combination, with the cylinders A A, provided with the helical springs *a a* and the receptacles D D', of the gyves B B' B'', rings *b b' b'*, and tie-ropes F, substantially as shown and described.

2. The extensible cylinders A A, provided with air-plugs *cc* and receptacles D D', in combination with the gyves B B' B'', rings *b b' b'*, tie-ropes F, and oar G, substantially as and for the purpose set forth.

3. The cylinders A A, provided with the

springs *a a*, in combination with the gyves B B' B'', and the oar or similar device G, provided with hooks for holding the cylinders after they have been compressed, substantially as and for the purposes set forth.

4. The gyve B', the rings *b' b'* of which are provided with suitable openings for the passage of the necks of the receptacles D D', in combination with said receptacles, and with the screw-caps *d d'*, substantially as and for the purposes set forth.

5. The oar G, provided with the wings *f f* and the hooks *g, g', g''*, and *j*, in combination with the gyves B B' B'', the latter being formed with the keepers *h h'* and with the holes *i* and *i'*, substantially as and for the purposes set forth.

ROSENDO TORRAS.

Witnesses:

C. H. DEXTER,
PEDRO DOMENECK.