



G. BATES.  
SECTIONAL LIFE-BOAT.

No. 189,297.

Patented April 10, 1877.

Fig. 4.

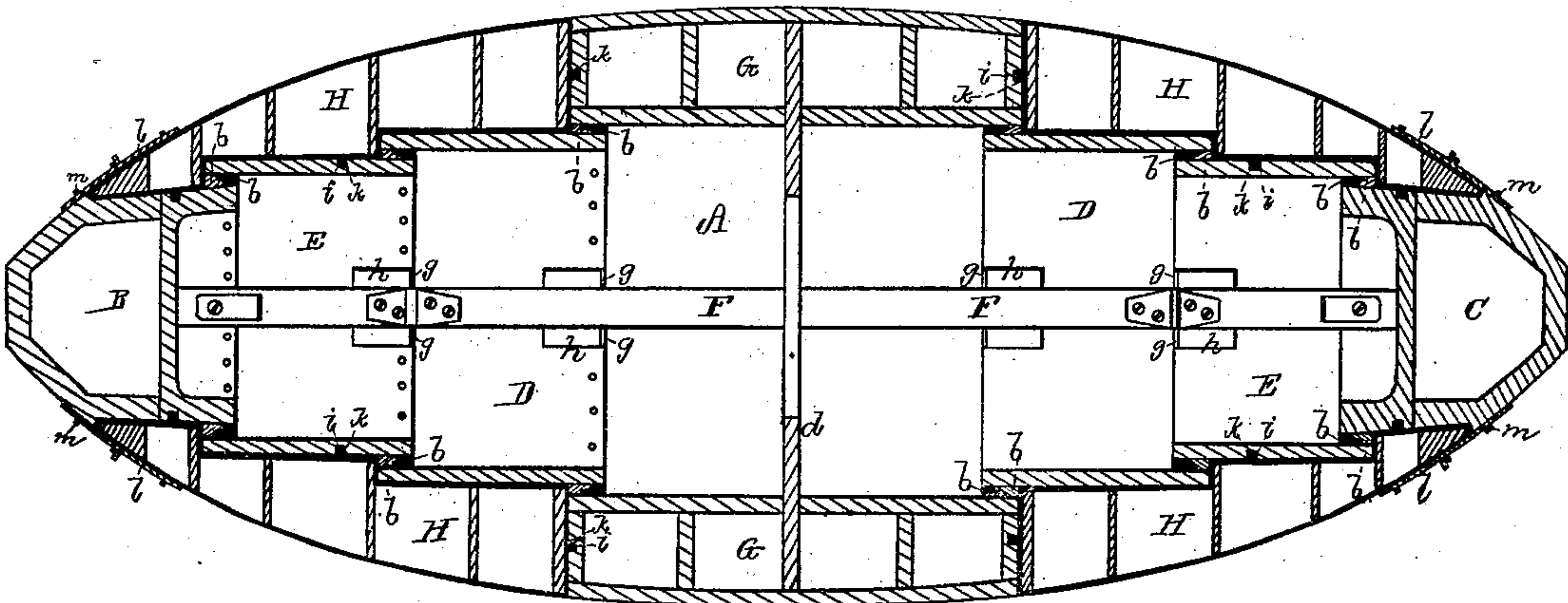
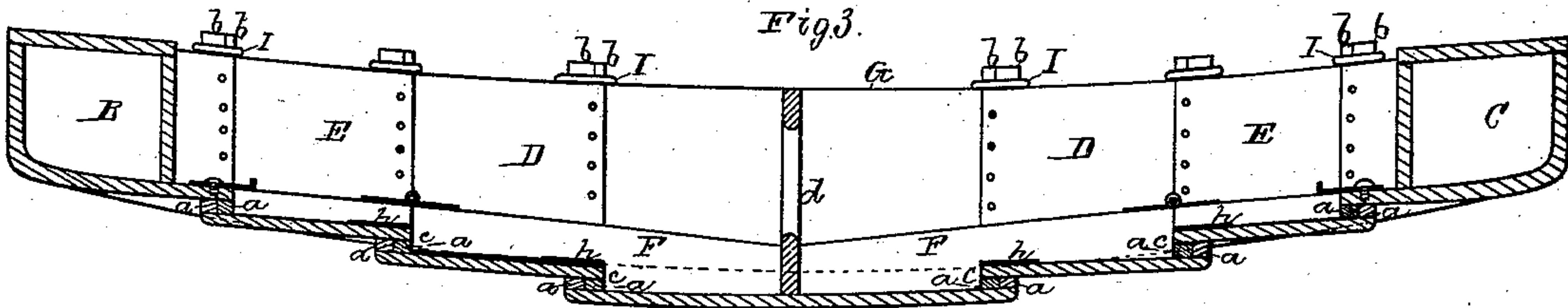


Fig. 3.



Witnesses

S. W. Piper

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# UNITED STATES PATENT OFFICE

GEORGE BATES, OF COHASSET, MASSACHUSETTS.

## IMPROVEMENT IN SECTIONAL LIFE-BOATS.

Specification forming part of Letters Patent No. **189,297**, dated April 10, 1877; application filed March 21, 1877.

*To all whom it may concern:*

Be it known that I, GEORGE BATES, of Cohasset, of the county of Norfolk and State of Massachusetts, have invented a new and useful Improvement in Life-Boats; and do hereby declare the same to be described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a top view, Fig. 2 a side elevation, Fig. 3 a longitudinal and vertical section, and Fig. 4 a longitudinal and horizontal section, of a boat in accordance with my invention.

The body of the said boat is composed of a central section, A, bow and stern sections B C, and a series of intermediate sections, D E D E. Each bow and stern section, as represented in the drawings, is a hollow and air-tight box having a wedge-shaped form, as shown.

It is so adapted to the next adjacent intermediate section E as to be capable of being slid or moved into and out of such, as a drawer is into its case. So each intermediate section E is similarly arranged with and applied to the next intermediate section D. The sections D D are also, in like manner, adapted to the midship or middle section A. The sections are furnished with horizontal and vertical shoulder pieces or ribs *a a b b*, formed and arranged as represented. These ribs serve to limit the outward movements of the bow and stern and intermediate sections relatively to each other and the central section. The surfaces of these shoulders or ribs, which are to come together when the body is fully extended, may be lined with india-rubber, or other proper elastic and water-proof material, in order to make water-tight joints between the sections.

Each end section and the next adjacent set of intermediate sections, arranged as represented, are to slide together, and into the central section, in a manner analogous to that in which the tubes of a telescope slide together.

Furthermore, for keeping the body in one extended state, I use removable braces F F, formed or provided with shoulders *c c*, as represented, such braces being placed on the floor of the body, and extended each way from

its middle, or a cross-partition, *d*, there placed to the two bow and stern sections, all as shown.

Each brace may be made in two or more lengths, connected by hinges, in order for the brace to be folded into less compass or length than it takes up when fully extended and in use.

Each brace, when in place, goes between projections *g g*, extended up from a plate, *h*, there being such a plate and projections to each of the intermediate sections, and arranged therewith as shown. The projections *g g* not only serve to maintain the brace in position, or from slipping laterally out of place, but they answer as stops to limit the inward movements of the movable sections.

To the opposite outer sides of the middle section A air-tight boxes or floats G G are fixed. These floats may be applied so as to be capable of being removed from the said sides; but I prefer to have them immovably fixed to the sides.

To the bow and stern sections and the intermediate sections separable floats or air-tight vessels or boxes H H H H, formed as shown, are applied, they being arranged with the several sections, in manner as represented. These separable floats, as well as the fixed or middle ones G G, are provided with latching-hasps I, hinged to them, and formed as shown. When turned down on the upper surfaces of the floats, the clasps are to receive in their openings the upper projecting ends of the vertical ribs *b b*, such ribs, for such purpose, being extended a short distance above the sections.

Fig. 5 is a perspective view of one of the separable sections, showing it as provided not only with the locking-hasps, but with tenons or studs *i i*, extending from its larger end and inner side, such studs being to enter corresponding mortises or holes *k* made in the mouth-sections. Each float H also has a slide-bolt, *l*, on its outer side and at its smaller end, to engage with a hasp or staple, *m*, projecting from the next adjacent end section.

A boat made as described may have its sections folded together, so as to reduce the whole into a very small compass, in order to have convenient stowage or transportation of it. When



required for use, the boat can easily have its body extended or drawn and forced out, and the movable floats applied and fixed thereto.

I claim as my invention as follows:

1. The folding boat-body as composed of the central and end and intermediate sections, provided with the shoulder-ribs, and constructed and arranged substantially in manner and to operate as specified.

2. The series of fixed and detachable floats, provided with locking hasps or devices, as described, in combination with the boat-body composed of the central and end and intermediate sections, constructed, arranged, and furnished with shoulder-ribs, all substantially as set forth.

3. The combination of the separable longitudinal braces with the boat-body composed of sections, constructed and arranged or applied as specified.

4. The combination of the series of projections *g h* with the sectional boat-body, as described, such projections being for use with the braces, and to serve as stops to the sections, as explained.

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Witnesses:

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