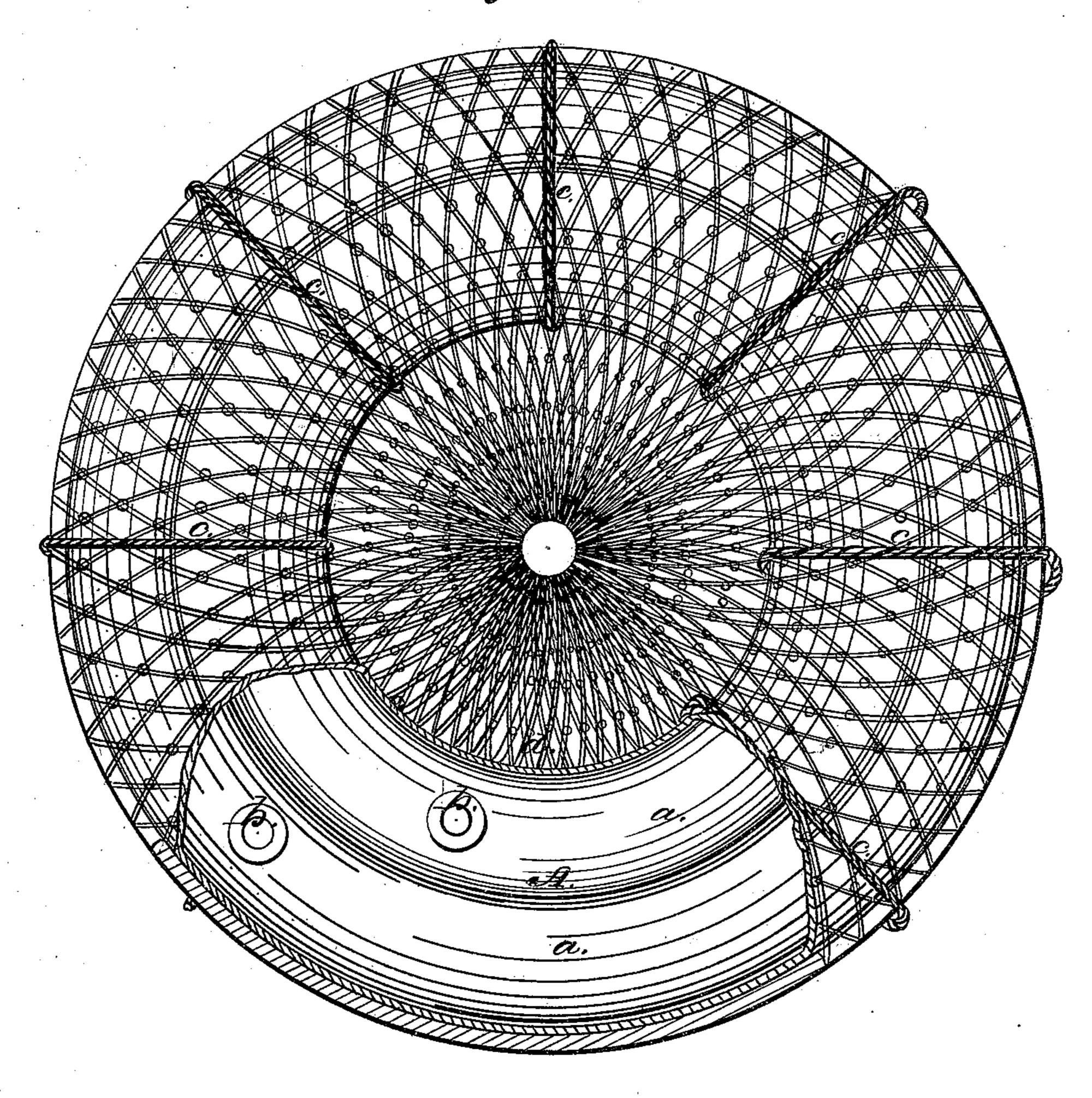
J. Murtaugh.

Life Raft.

Nº 60,640. Patented Dec. 18,1866.

Fig. 1.



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Inventor. James Murlaugh Bermung for Atty.

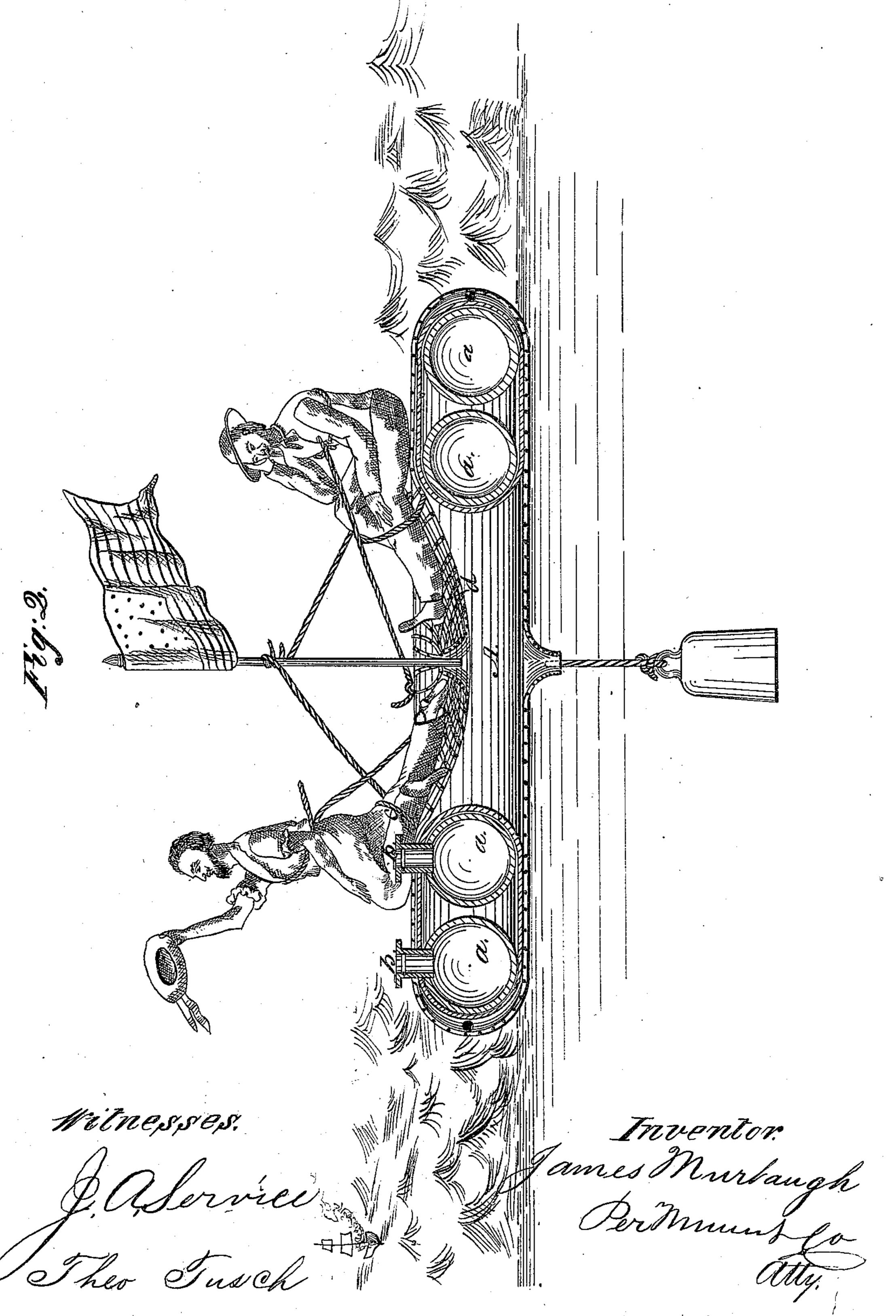
Sheet 2.2 Sheets.

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N=60,640.

Patented Dec. 18,1866.



## Anited States Patent Pffice.

#### IMPROVEMENT IN LIFE RAFT.

### JAMES MURTAUGH, OF NEW YORK, N. Y.

Letters Patent No. 60,640, dated December 18, 1866.

The Schedule referred to in these Betters Patent and making part of the same.

#### TO ALL WHOM IT MAY CONCERN:

Be it known that I, James Murtaugh, of the city, county, and State of New York, have invented a new and useful improved Life Raft; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a sectional plan or top view of this invention.

Figure 2 is a transverse section of the same. Similar letters of reference indicate like parts.

This invention relates to a life raft, formed of two or more hollow expansible rings, one inside of the other, and fastened together by cords, ropes, or other suitable means, in such a manner that a raft is obtained which, when not inflated, can be stowed away in a small compass, and which, when inflated, affords room for

two or more persons, and enables them to sustain themselves above water, even in a rough sea.

A represents the body of my life raft, which is composed of two or more cylindrical rings, a, one inside the other, as shown in the drawing. These rings are made of India-rubber cloth, or other suitable air and water-tight material, and they are provided with mouth-pieces, b, of any suitable construction, so that they can be inflated at any moment, if they are to be used, or that the air can be forced out of them, if it is desired to store the raft away. By securing two or more rings together, one inside of the other, a raft is obtained of great buoyancy; and furthermore, the surface of the raft thus formed affords a convenient space for sitting down, so that a raft of comparatively small dimensions is capable of supporting two or more persons, who may lash themselves to the rings by suitable ropes. It is obvious that, by these means, a raft can be constructed of sufficient buoyancy to sustain several persons, and still light enough to be handled with ease and convenience. Ropes, c, which are passed around the rings a, enable persons floating in the water to get a good hold on the raft, and a weight, which may be suspended from its under side or circumference, serves to steady the raft and prevent its being capsized. A net-work, d, of cords or ropes forms a convenient resting place for the legs of persons sitting on the raft, as shown in fig. 2, and a raft is thus obtained capable of saving the lives of persons in the roughest weather.

What I claim as new, and desire to secure by Letters Patent, is—

The expansible rings a a, separate, and arranged one within the other, with a net-work covering forming a seating surface and a rest or hold for the feet, in the manner described, for the purpose specified.

The above specification of my invention signed by me this 20th day of October, 1866.

JAMES MURTAUGH.

Witnesses:

WM. F. McNamara, W. Hauff.