

N. Thompson Jr
Life Preserving Bucket.

No 10,140.

Patented Oct 18. 1853.

Fig. 2.

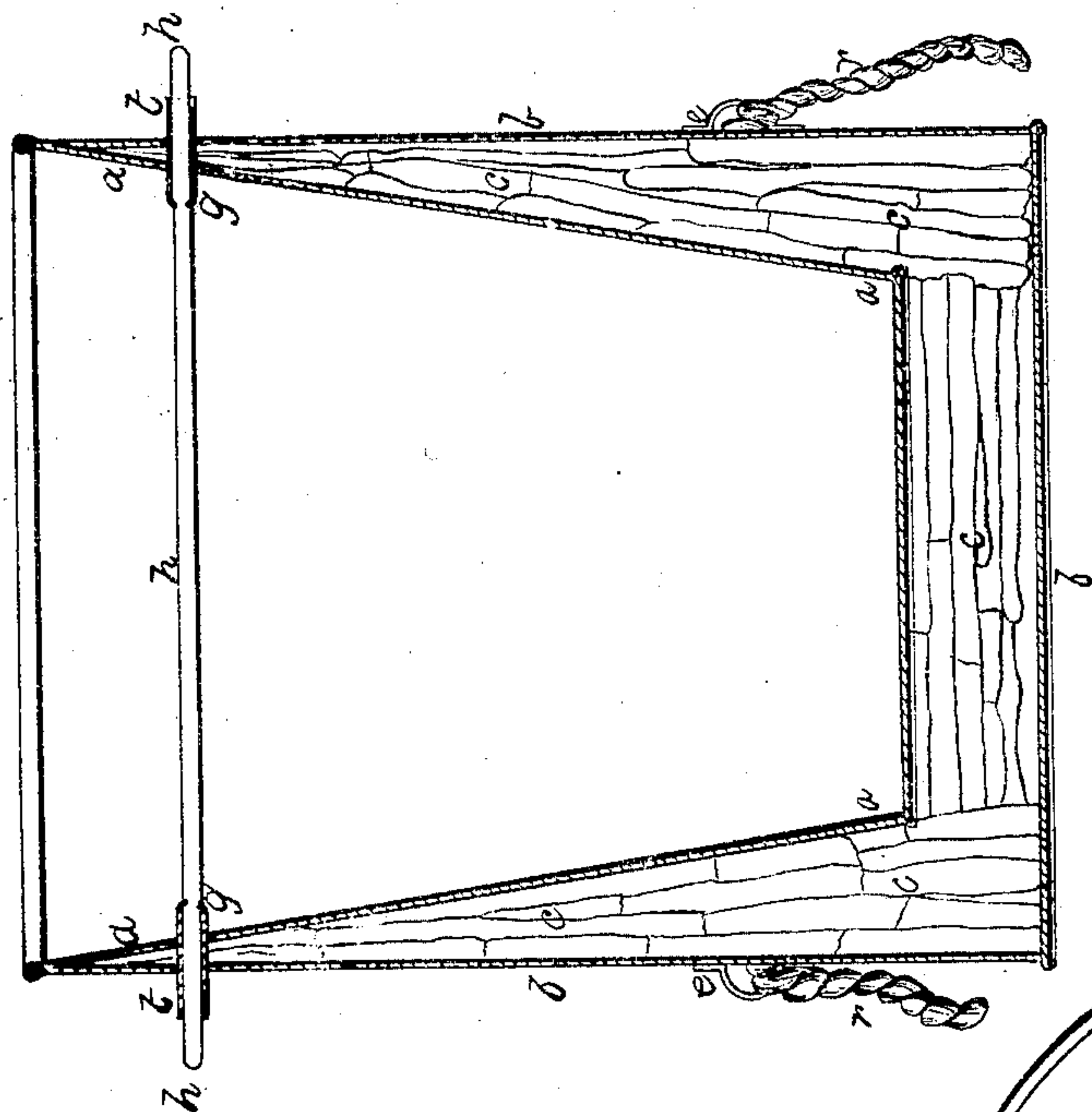


Fig. 3.

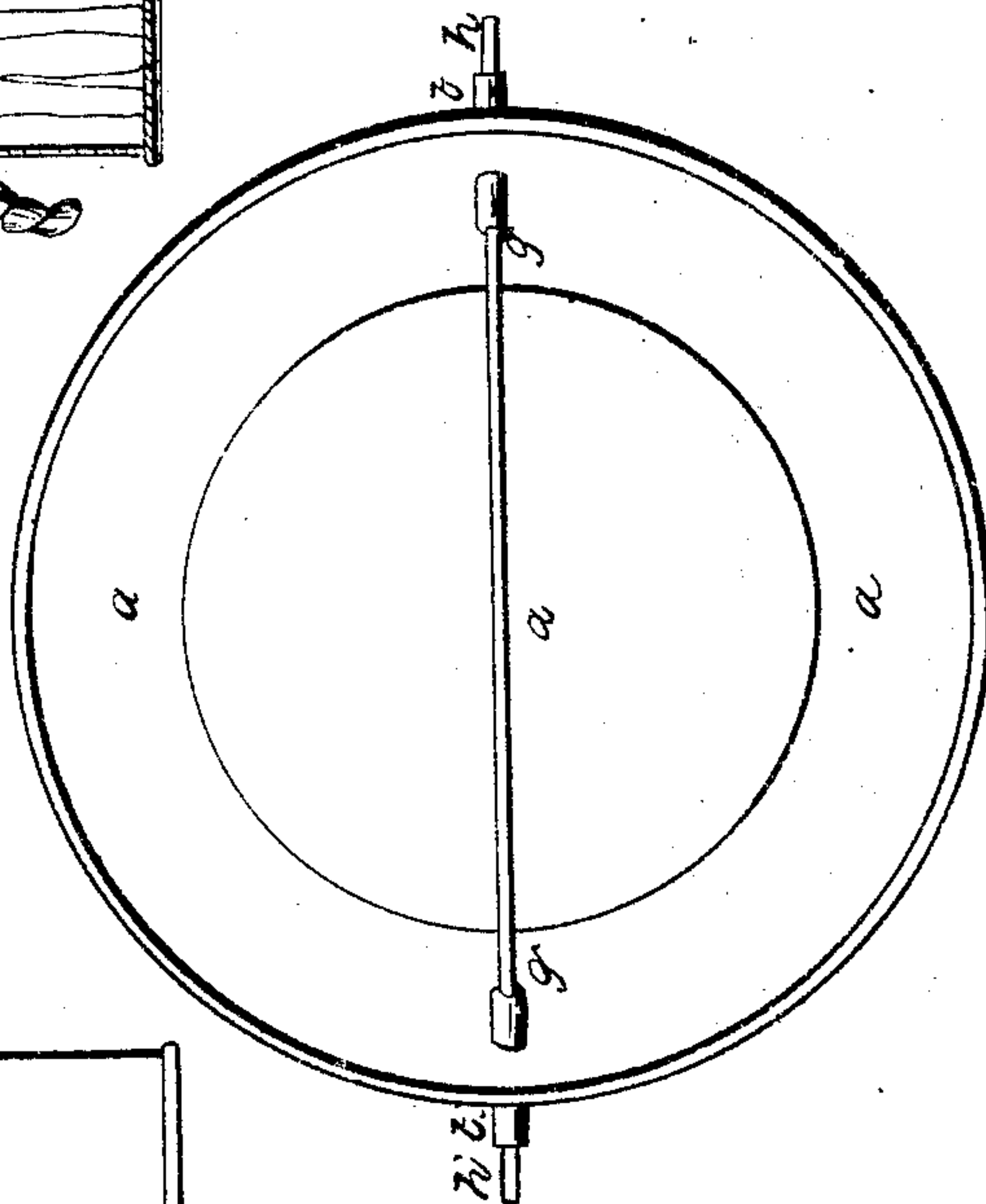
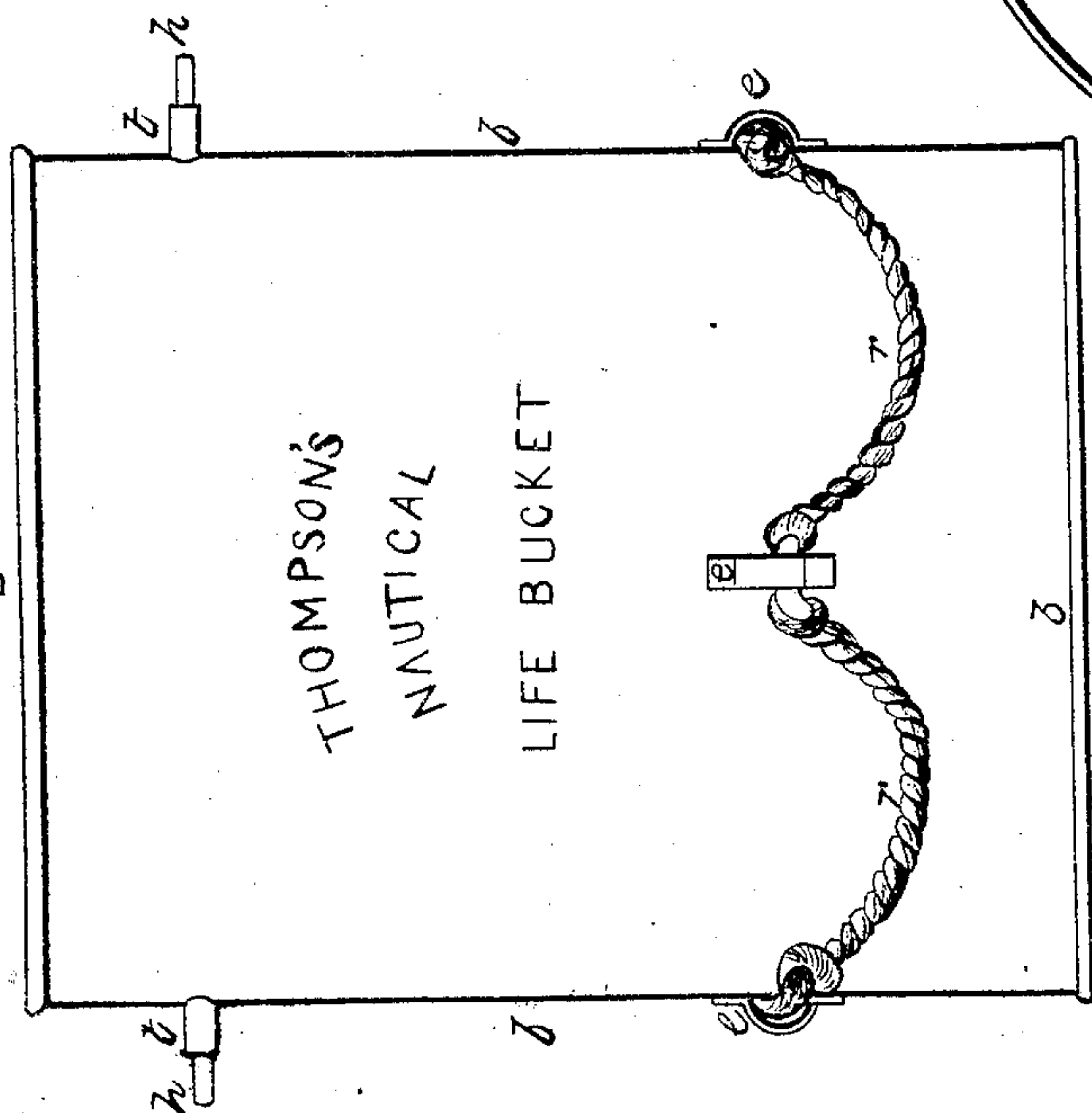


Fig. 1.



UNITED STATES PATENT OFFICE.

NATHAN THOMPSON, JR., OF WILLIAMSBURG, NEW YORK.

IMPROVED LIFE-PRESERVING BUCKET.

Specification forming part of Letters Patent No. **10,140**, dated October 18, 1853.

To all whom it may concern:

Be it known that I, NATHAN THOMPSON, JR., of Williamsburg, Kings county, New York, have invented a new and Improved Implement which I have denominated "Thompson's Nautical Life-Bucket," of which the following is a specification.

This implement has been chiefly designed for use on shipboard, and the following specification, taken in connection with the drawings, is a full and fair description thereof.

In the drawings, Figure 1 represents an elevation, Fig. 2 a vertical section, and Fig. 3 a bird's-eye view, thereof.

This article has been contrived chiefly with a view of meeting in a strong, simple, efficient, and cheap manner certain requisitions of the new steamboat law, which obliges each vessel to be furnished with a certain number both of fire-buckets and life-preservers, and has been invented in view of the experiments lately made upon life-preservers and with a knowledge of their various deficiencies and excellencies. These articles are of three classes: first, textile fabrics impervious to air and water and needing inflation prior to use; second, vessels of thin sheet metal hermetically sealed, and, lastly, floats of cork either cased or uncovered. The first class is the worst of all. It takes some time to blow them up, and they are easily and frequently damaged by slight punctures or by the rotting of the stuff. In the second class the first difficulty is obviated; but they are still liable to puncture and to leakage from indentations or bending. The third class is perfectly reliable, but is cumbrous and difficult of stowage.

By my invention I unite the excellencies of the second and third class and obviate the defects incidental to both. While I also so form and shape the article that in addition to acting as a life-preserver it at the same time constitutes a complete and perfect fire-bucket, so that the same article fills both requisitions of the law, while costing the user only the price usually charged for one of them.

The nature of the first part of my invention therefore consists in confining between an inner and outer vessel a tight stuffing of cork or its equivalent, said vessel completely inclosing the stuffing, and the whole being so shaped that it answers as a pail or bucket.

The nature of the second part of my invention consists in securing the handle or bail thereto by means of metallic tubes and grooves in the handle, into which the ends of the tubes are burnished, as hereinafter more particularly described.

The vessel is most generally constructed of thin sheet metal, although strong water-proof leather or sheet-rubber would answer well. In making it an interior pail (a frustum of a cone) is first constructed, and to its top is attached a cylinder whose length exceeds somewhat the height of the frustum. When these parts are thus attached, pieces of cork are tightly rammed into the open space and over the bottom of the frustum. A disk of sheet metal is then attached air-tight to the bottom of the cylinder and the cork is completely inclosed.

It is obvious that the vessel, when placed in water and its interior filled with the same fluid, will float with a sustaining power equal to the difference between the specific gravity of water and that of the cork and outer and inner pails. If these latter be made of light sheet metal and the pail be of ordinary size, the flotation will amount to about twenty-two pounds, while if the pails or either of them be punctured it will be about fifteen pounds, the latter even being more than sufficient to sustain in the water a full-grown person of spare form with large bones. It is evident that the cork unites the strength of both pails, and itself while supported by them forms a strong cylinder, so that it is almost impossible to break or bulge the vessel, while the article serves first as a fire-bucket to put out a fire or make an effort thereto and next as a life-preserver if the crew or passengers be forced to desert the vessel. The small lines rove through the ears act first as handles to empty the bucket and next as straps, to which the user may cling when he jumps overboard. It is, moreover, stowed, as the ordinary bucket, in racks or otherwise and takes up no more room. It saves all the space usually devoted to life-preservers, and is also more efficient and reliable than any such article known to me. To such a bucket any known species of bail may be fitted; but I prefer attaching that invented by me and shown in the drawings. To form and secure it, a piece of wood or its

equivalent is turned or otherwise shaped cylindrically and two small tubes are passed through the cork and the outer and inner pails and attached to each of the latter. These tubes are opposite to each other, and the cylinder, in which notches or grooves have been formed, is driven through both tubes. Either the outer or inner or both ends of the tubes are then bent over into these grooves, firmly securing the handle in its place.

In the drawings the inner vessel is shown at *aa*, the outer at *bb*, the stuffing of cork or its equivalent at *cc*, the handles at *hh*, the tubes at *tt*, and their ends driven into the grooves at *gg*. The ears are shown at *ee* and the cord rove through them at *r* and knotted, as shown in the drawings, in such manner that the loops cannot be pulled through.

The instrument as a whole, I again state, serves two purposes at the expense only of either a bucket or a life-preserver, is safe and reliable in either capacity, and only occupies the space usually needed for one of them.

Having thus fully described my invention,

I would state that I do not claim a double vessel, as such have been employed both as refrigerators and as retainers of heat; but

What I do claim as my own invention, and desire to secure by Letters Patent of the United States, is—

1. A double vessel, the space between the outer and inner side thereof being filled with cork or its equivalent, by which it is in a great measure secured against breakage and retains sufficient buoyancy when punctured, and serves as a reliable bucket and life-preserver.

2. Attaching the handle thereto by means of the tubes, the nicks in the handles, and the bending of the ends of the tubes therein, substantially in the manner herein described.

In testimony whereof I have hereunto subscribed my name on this 8th day of August, 1853.

NATHAN THOMPSON, JR.

Witnesses:

H. C. BAUX,

R. A. WATKINSON.