

T. B. BOYD.  
LIFE PRESERVER.

No. 104,546.

Patented June 21, 1870.

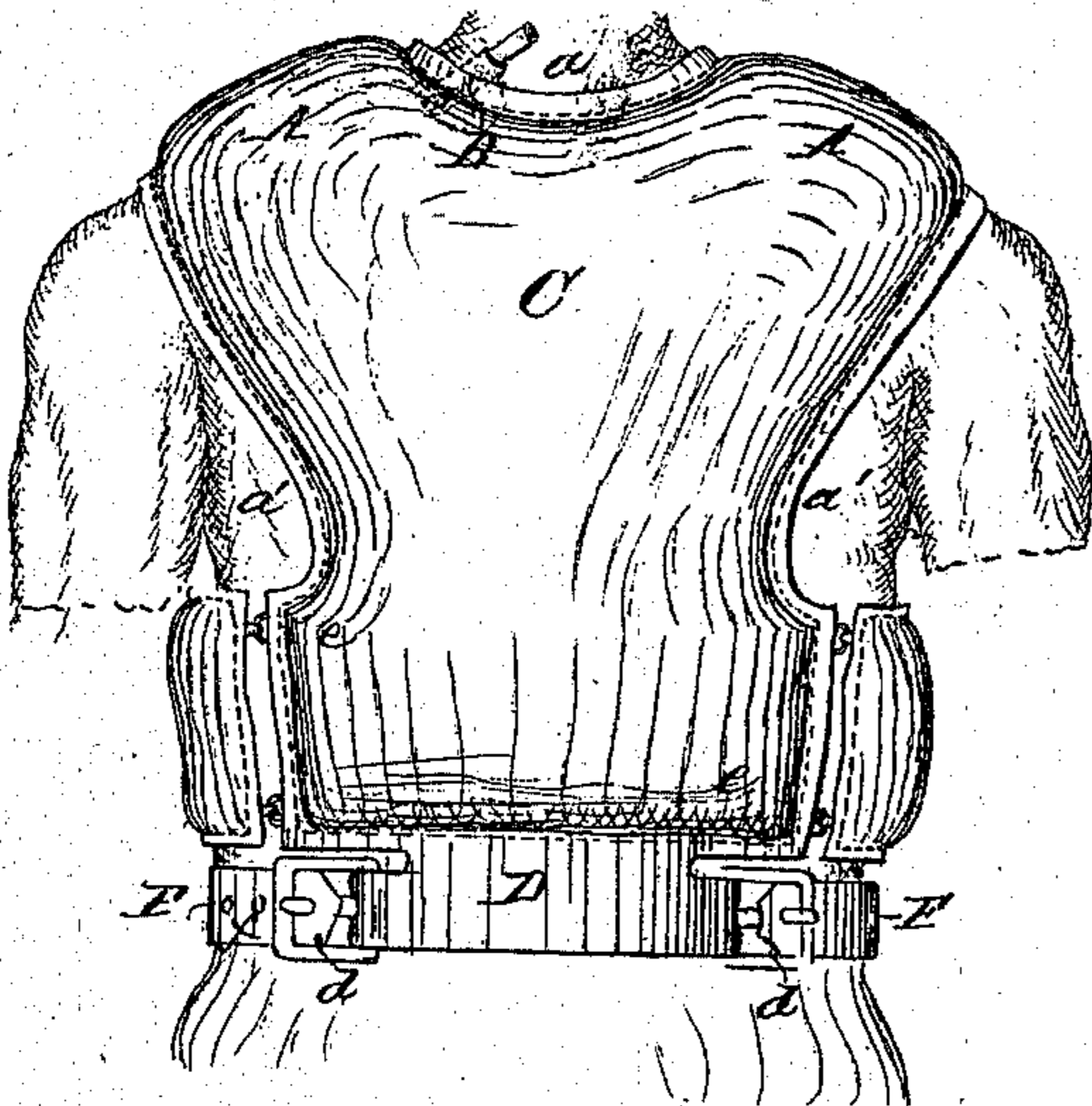


Figure 1.

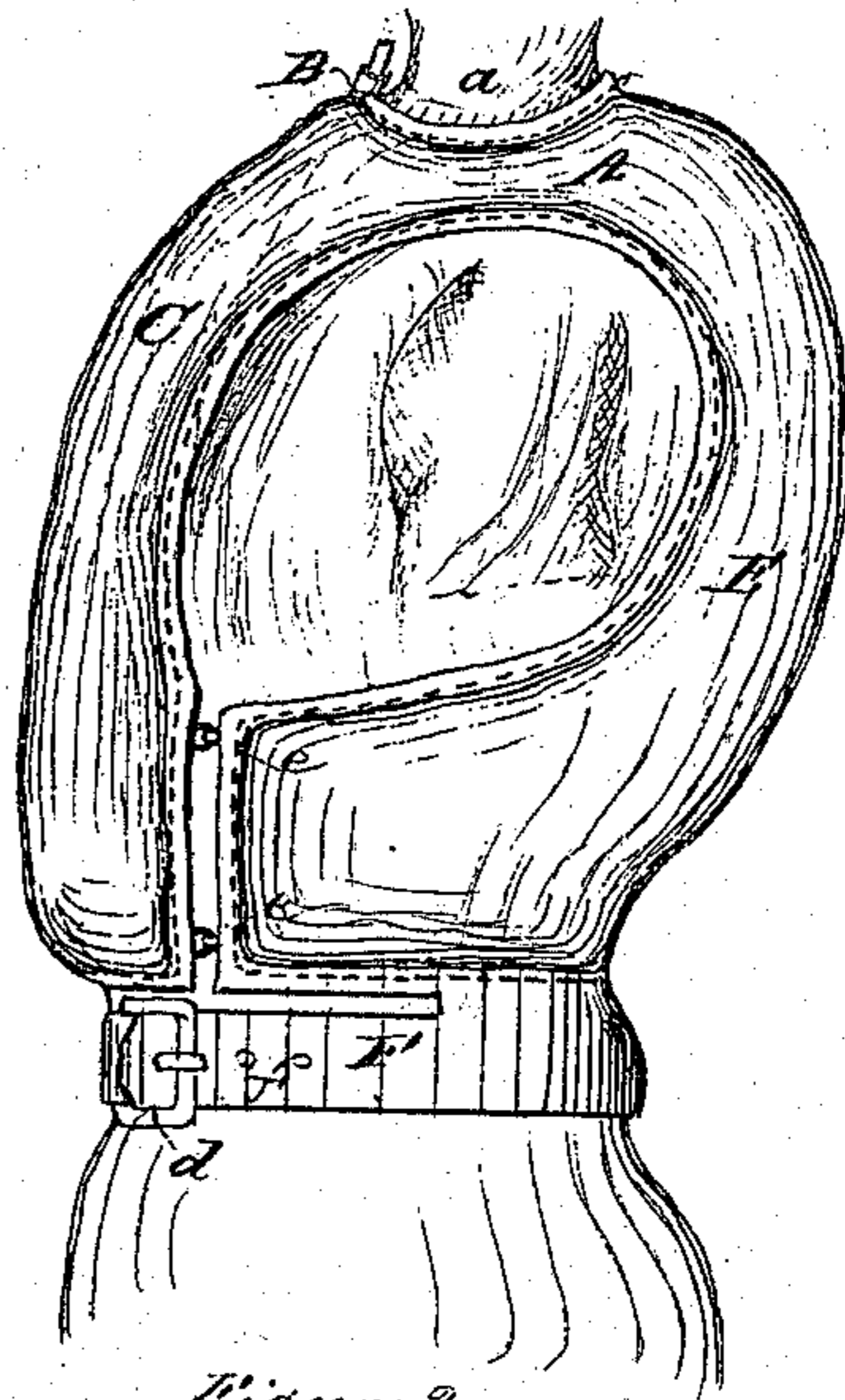


Figure 2.

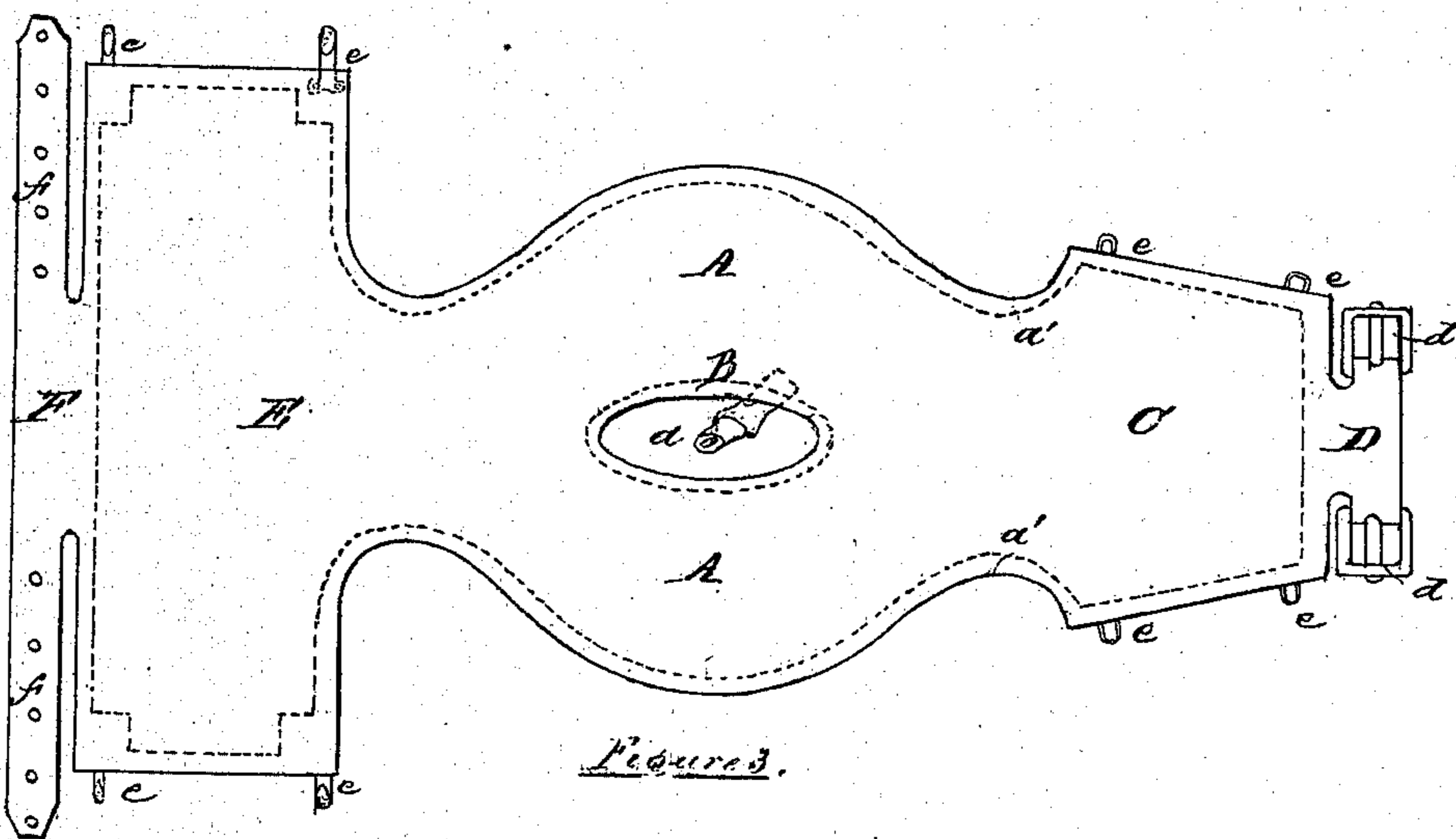


Figure 3.

Witnesses:

*William W. Herchel*

*Robert Burns*

Inventor.

*Thos B. Boyd*

# United States Patent Office.

THOMAS B. BOYD, OF ST. LOUIS, MISSOURI.

Letters Patent No. 104,546, dated June 21, 1870.

## IMPROVEMENT IN LIFE-PRESERVERS.

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

To all whom it may concern:

Be it known that I, THOMAS B. BOYD, of St. Louis, in the county of St. Louis and State of Missouri, have made certain new and useful Improvements in Life-Preservers; and I do hereby declare the following to be a full and true description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon.

This invention relates to the arrangement of a life-preserver in such form as to be drawn over the head of the wearer, and fit about the neck and fairly cover all parts of the body above the waist.

The object hereof is to gain a large surface and volume, in which, in the life-preserver pouch or bag, the application of air for producing buoyancy is practicable. The disposition of the parts of the pouch, and their conformation, is such that the air buoyant therein shall produce a resultant tendency of support for the body of the wearer, which shall sustain him uprightly in the water, or nearly in this position, without undue strain; and in this regard said invention relates more especially to the arrangement of the breast-piece of the pouch, to extend about the neck to buoy up the head, to keep the mouth and nostrils above water, and afford a rest for the chin.

Lastly, the said device is arranged for ready attachment, and for secure fastening to the body, the fastening buckles, hooks, or straps being placed well forward, to be within easy reach of the operator.

To enable those herein skilled to make and use my said improved device, I will now more fully describe the same, referring herein to the accompanying—

Figure 1 as a front view, to

Figure 2 as a side view, showing the preserver as worn; to

Figure 3 as a plan of the pouch when spread out to exhibit the outlines thereof.

My said life-preserver will usually be formed of rubber cloth, or other air and water-tight stuff which shall not be unduly stiff or cumbersome.

The form by which the material may be cut so as to produce the requisite arrangement of parts, may be taken from fig. 3. There will be generally no need to fit the pouch to the body, as it is preferable to wear the same over some or all of the usual wearing apparel for the upper part of the body; a very loose fit is not objectionable, as the pouch is well secured against dislocation.

The central or shoulder-piece A of the pouch has the neck opening *a*, and at the neck seam an inflator-tube, B, is well secured. Within said tube there will be a check-valve of proper form to prevent return flow of air, and said tube will have a proper mouth-piece. When the pouch is worn, the tube B, by its position, is near the mouth of the wearer, and the operation of inflation thus becomes easy, whenever required.

The central piece A narrows, so as to fit about the shoulders and pass under the arms at *a'*, and thereupon widens to a breast-piece, C, which extends down to a waist-band, D.

At the rear the central piece A joins the wide back-piece E, which, when worn by the user of the preserver, fits about the back, and comes well forward, so as to join with the breast-piece C.

The back-piece E has a strap or band, F, which usually has tongue and cyclet-holed ends *f*, so as to connect with buckles *d* of the waist-band D, thus securing the whole pouch at the waist or thereabout.

At the corners of the breast-piece C and back-piece E of the joining edges, I arrange hooks and eyes, *e*, strings, or other fastening devices, so that these parts may be readily connected.

Any desirable mode of fastening may be employed, it being apparent that, by the arrangement of the parts, and by the location of the joint between the parts C and E, so far forward on the chest of the wearer, a ready adjustment is always practicable.

The preserver device when inflated, will not easily detach itself, because of its inflated volume pressing under the chin and fitting more or less closely to the back of the head, and especially, if the lower fastenings are secure, the connection and application of the power of buoyancy under the arms precludes any danger of dislocation or tendency thereto.

Having thus fully described my said invention,

What I claim, is—

The combination of the parts A, C, and E, formed, arranged, and fastened substantially as and for the purpose set forth.

In testimony of said invention, I have hereunto set my hand in the presence of—

THOS. B. BOYD.

Witnesses:

GEO. P. HERTHEL, Jr.,  
WILLIAM W. HERTHEL.