

(No Model.)

B. J. WILLARD.

LIFE PRESERVER.

No. 254,580.

Patented Mar. 7, 1882.

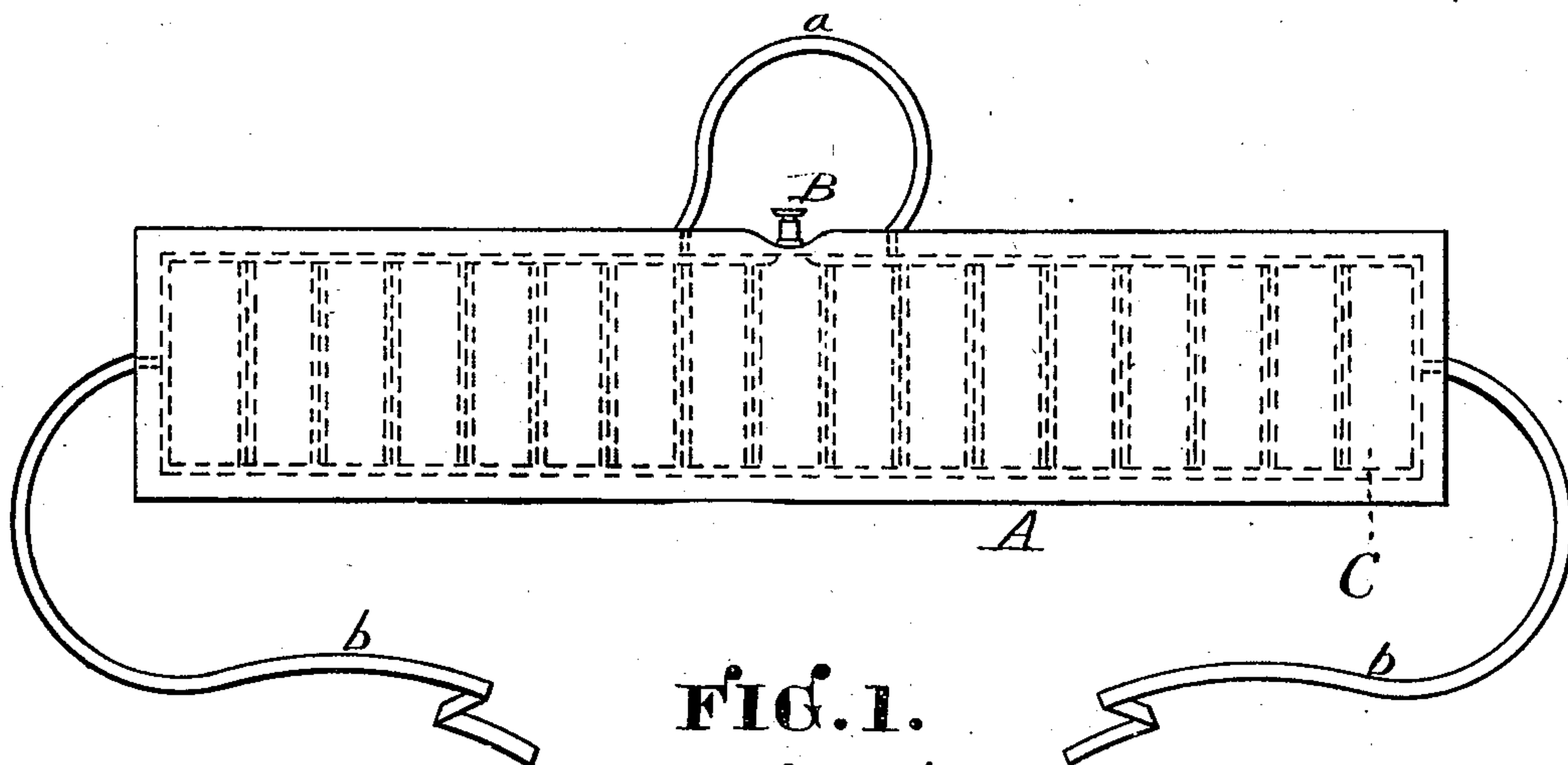


FIG. 1.

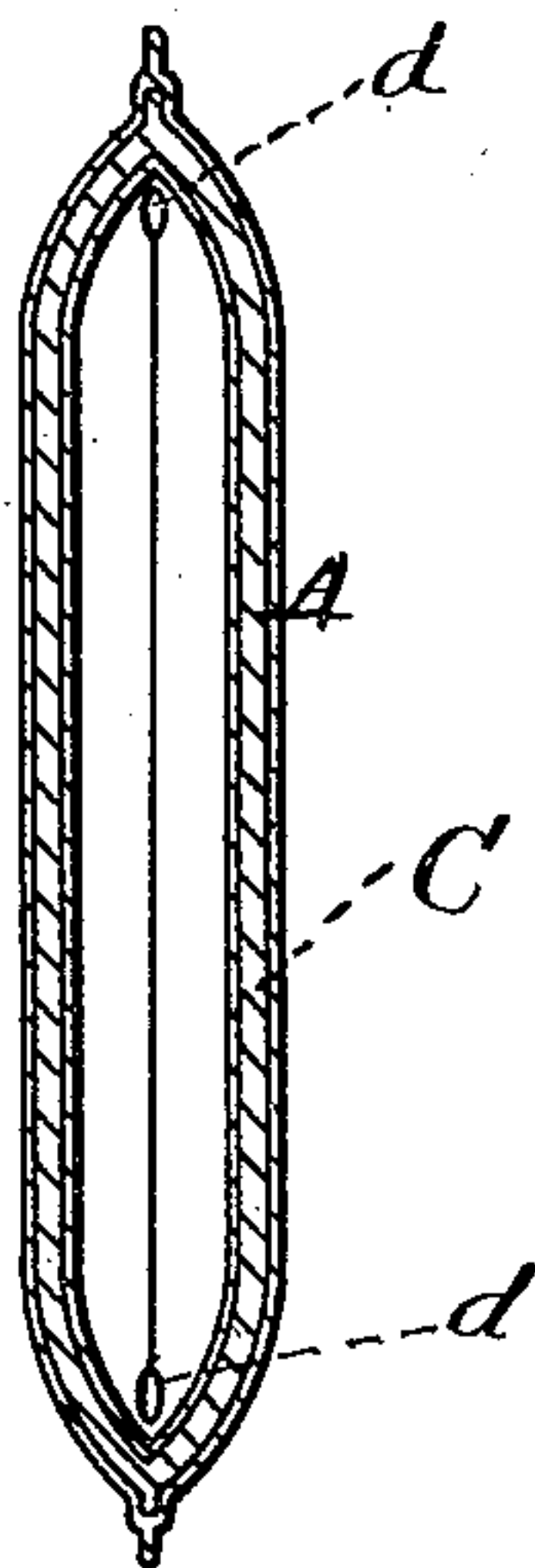


FIG. 2.

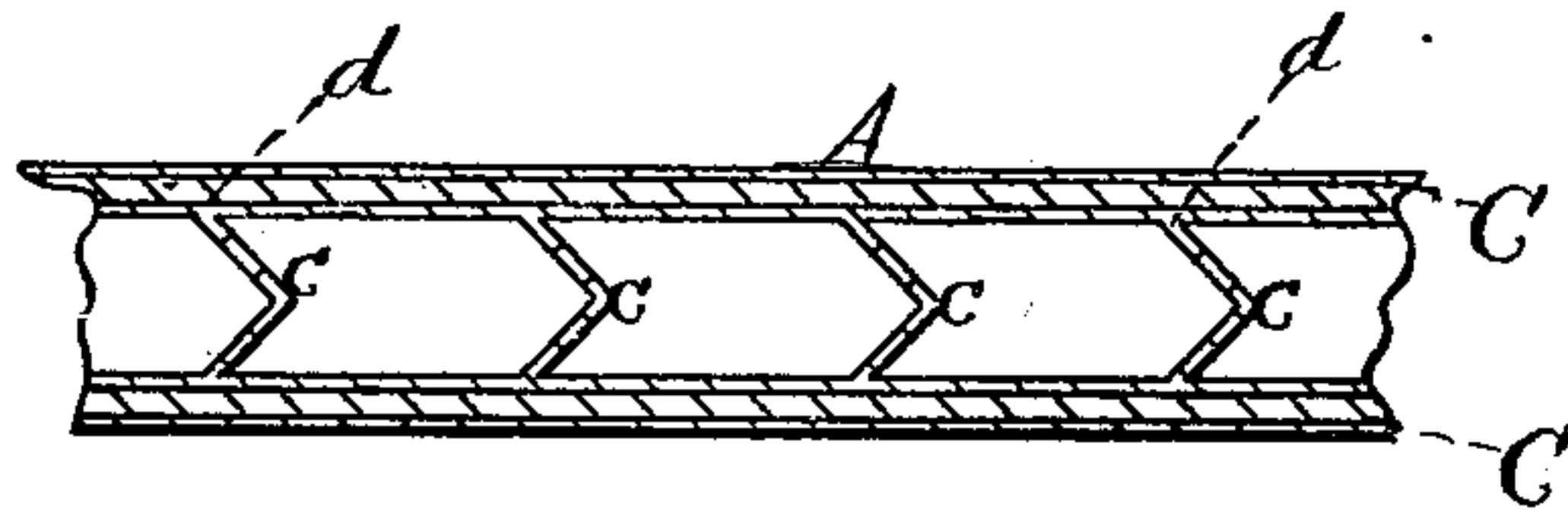


FIG. 3.

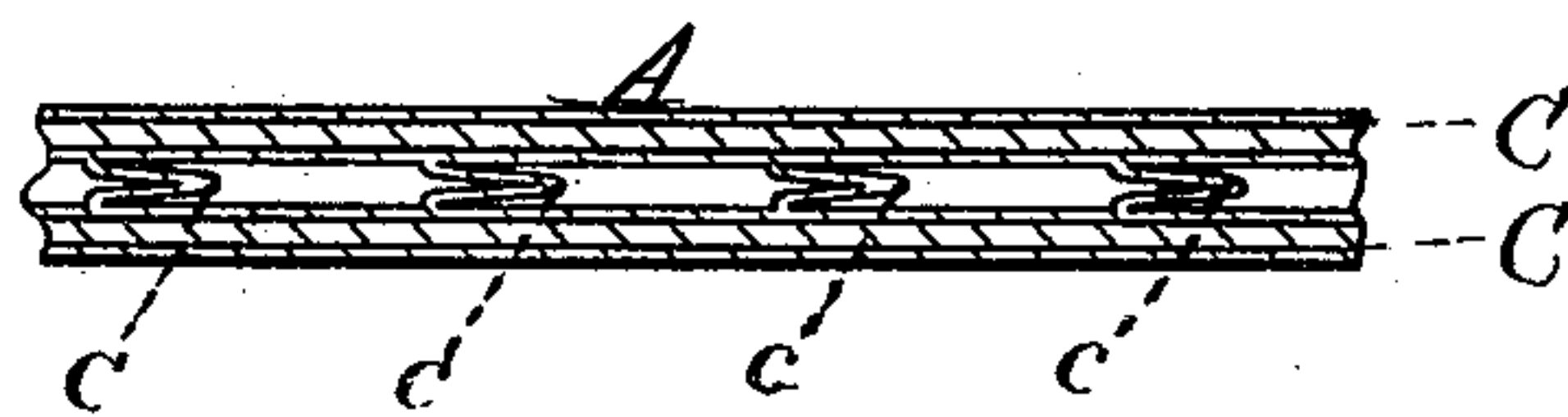


FIG. 4.

WITNESSES:

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# UNITED STATES PATENT OFFICE.

BENJAMIN J. WILLARD, OF PORTLAND, MAINE.

## LIFE-PRESERVER.

SPECIFICATION forming part of Letters Patent No. 254,580, dated March 7, 1882.

Application filed January 14, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, BENJAMIN J. WILLARD, of Portland, in the county of Cumberland and State of Maine, have invented certain new and useful Improvements in Life-Preservers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 is a side elevation. Fig. 2 is an edge view in section. Fig. 3 is an edge view in section, showing the folds opened or expanded when the preserver is inflated. Fig. 4 is an edge view, showing the folds closed when the air is expelled from the preserver.

Same letters show like parts.

My invention relates to life-preservers.

It consists in the combination of a series of folding partitions having air-passages with a rubber bag or belt to be worn around the body, and certain means of fastening the belt to the body, as hereinafter described. The bag or belt is of such form and dimensions that it can be worn around the body or waist and there fastened. It is rectangular in shape, as seen in Fig. 1, and around the four edges is closed air-tight. This bag has the usual contrivance for inflating, (seen at B,) which is, as common, capable of being shut air-tight when the bag or belt is filled with air.

*a* is a string to pass up around the back of the user's neck to keep the bag or belt from slipping down on the body.

*b* are strings to tighten the bag or belt around the body. The bag or belt is intended to be worn around the waist, or about in that position. It may be placed, however, up under the arms. It is supplied within with folding partitions *c*. When the bag or belt is not distended by inflation these folding partitions are closed or brought together, as seen at Fig. 4. When the bag is filled with air and distended the condition of the folding partitions is seen at Fig. 3. The edge view, also, at Fig. 2, shows the distended bag, and the position of the partitions is shown by a vertical line, *c*. At the ends of each of the partitions are the apertures *d*, which are there placed to allow the air

to pass from one to another of the successive compartments, both when the bag is being filled and emptied of air. These apertures are placed at the top and bottom of each partition, so as to most readily allow the air driven into the part directly communicating with the inflating-nozzle to pass into the other parts or compartments. The folding partitions give strength to the whole structure and aid to retain it in a flat or belt form, or nearly so, and the location of the apertures, as herein set forth, while admitting of easy and ready inflation of the belt, do not diminish in any practical degree the strength of the whole belt or the effect of the partitions in other respects. Thus by the combination of the folding partitions and the perforations I have a strong belt—one that is kept in a flat form, and one that is readily inflated and emptied of air.

I design to make my belt long and narrow, as illustrated in Fig. 1. It can, when thus formed, be placed upon the body without serious inconvenience, and worn for a considerable time. The purpose is to have it thus shaped, light, and perfectly flexible, so that in times of danger the owner can place it around his body underneath his clothing, and thus in a certain measure be insured against sudden accidents in the water. It can be placed on the body empty of air or not distended thereby, and can be filled while so on the body.

A shows the bag or belt. C shows the walls or sides thereof. The belt can be worn under the waistcoat, outside of the shirt, so that the inflating-nozzle will be under the chin, and thus be capable of being readily blown up at all times.

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

The life-preserving belt or bag A herein described, having walls C, inflating-cock B, neck-string *a*, body-strings *b*, folds *c*, and air-passages *d*, the said bag or belt being shaped as set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

BENJAMIN J. WILLARD.

Witnesses:

WILLIAM HENRY CLIFFORD,  
JOHN P. KERRIGAN.