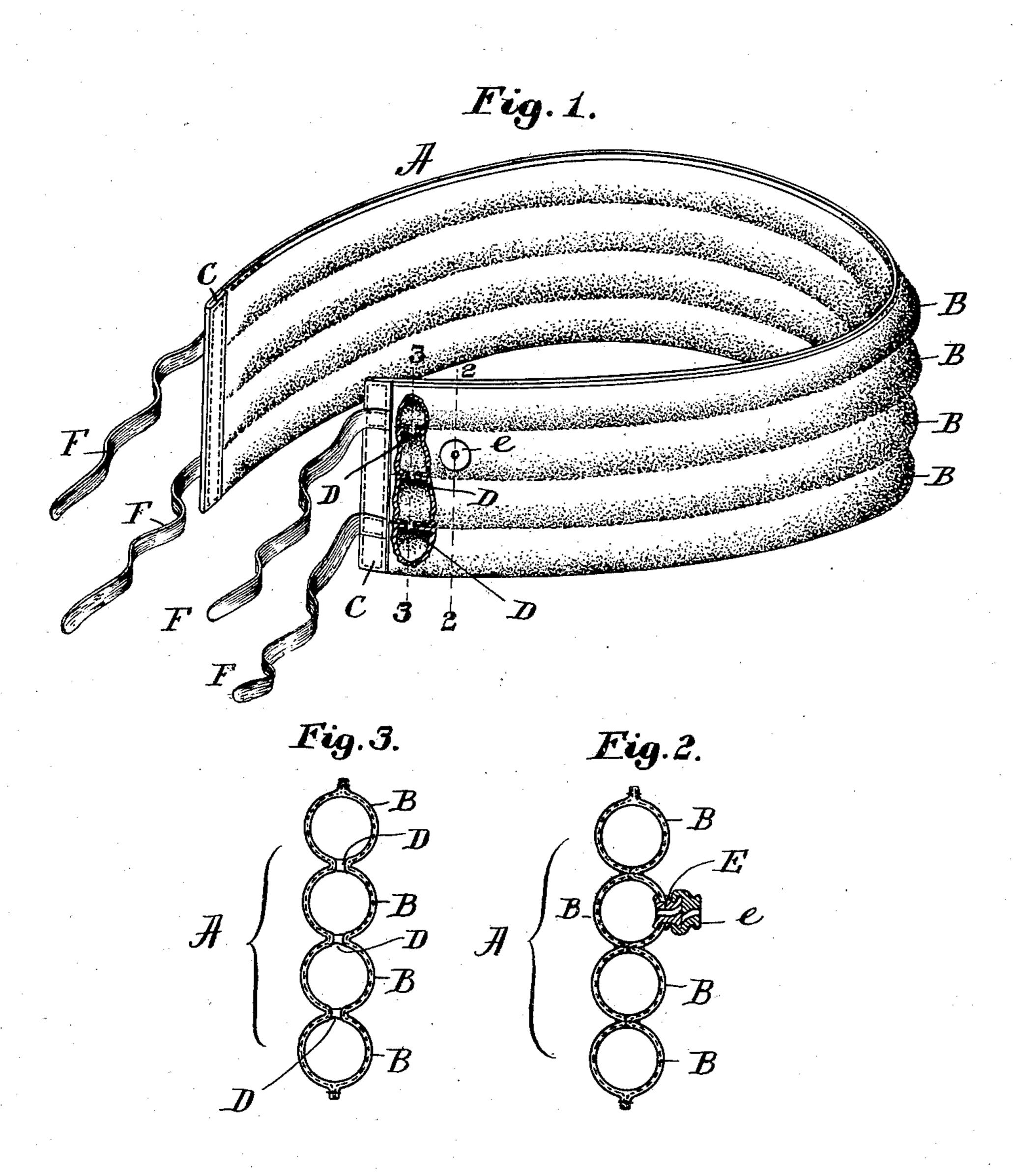
J. A. MALMQVIST.
PNEUMATIC LIFE BELT.
APPLICATION FILED AUG. 20, 1902.

NO MODEL.



Witnesses: Natter S. Lombard Nathan C. Lombard 2nd

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United States Patent Office.

JOHAN A. MALMQVIST, OF CAMPELLO, MASSACHUSETTS.

PNEUMATIC LIFE-BELT.

SPECIFICATION forming part of Letters Patent No. 731,314, dated June 16, 1903.

Application filed August 20, 1902. Serial No. 120,373. (No model.)

To all whom it may concern:

Be it known that I, JOHAN A. MALMQVIST, a citizen of Sweden, and a resident of Campello, in the county of Plymouth and State of Massachusetts, have invented certain new and useful Improvements in Pneumatic Life-Belts, of which the following is a specification.

This invention relates to improvements in pneumatic life-belts adapted for use as a lifeo saving device in case of accidents at sea or as a safety device by bathers or persons learning to swim, as will hereinafter be more fully shown and described, reference being had to the accompanying drawings, wherein-

Figure 1 is a perspective view of the improved pneumatic life-belt shown inflated and showing a portion of one end broken away for the better illustration of the construction of the same. Fig. 2 is a cross-sec-20 tion on the line 2 2 shown in Fig. 1; and Fig. 3 is a cross-section on the line 33, also shown in Fig. 1.

Similar letters refer to similar parts wherever they occur on the different parts of the

25 drawings.

The invention consists of a flexible waterproof, preferably rubber-coated, belt A, which is divided longitudinally in two or more pockets B B, closed at their ends at C C, as shown. 30 At one place on said waterproof belt its pockets are connected by means of perforations D D, going through the adjoining walls of the pockets, as shown in Figs. 1 and 3, so as to cause all the pockets to be pneumatically 35 expanded by inflating one of them, as shown. To one of said pockets I secure a perforated socket or valve-stem E, adapted to be covered with a perforated cap or valve e, as shown in

Figs. 1 and 2. Such valve-stem and cap may be of any well-known construction, similar to 40 what is used on pneumatic bicycle-tires, for the purpose of inflating the belt when it is to be used and prevent the escape of the air from the inflated belt when in use. The ends of the improved belt are provided with suit- 45 able straps, tying-strings, &c., F.F, or other suitable fastening devices for securing the belt to the body of the person using it.

By making this my improved belt of a series of parallel connected pockets, as above 50 described, instead of as a single tube of corresponding buoyancy I am enabled to produce a comparatively thin belt which can be strapped around the body below the armpits without interfering with the free movements 55 of the arms of the wearer when in or out of the water.

When not in use, the belt may be deflated and folded into a very small space, so as to be carried in the coat-pocket or otherwise, as 60 may be most convenient.

What I wish to secure by Letters Patent and claim is—

The herein-described pneumatic life-belt comprising a plurality of longitudinally-ex- 65 tending tubes B attached to each other and having their ends flattened and closed by strips C, said tubes communicating with each other; attaching means for said belt, and means for inflating said tubes.

In testimony whereof I have affixed my signature in presence of two witnesses. JOHAN A. MALMQVIST.

Witnesses:

ALBAN ANDRÉN, CHARLES H. SMITH.