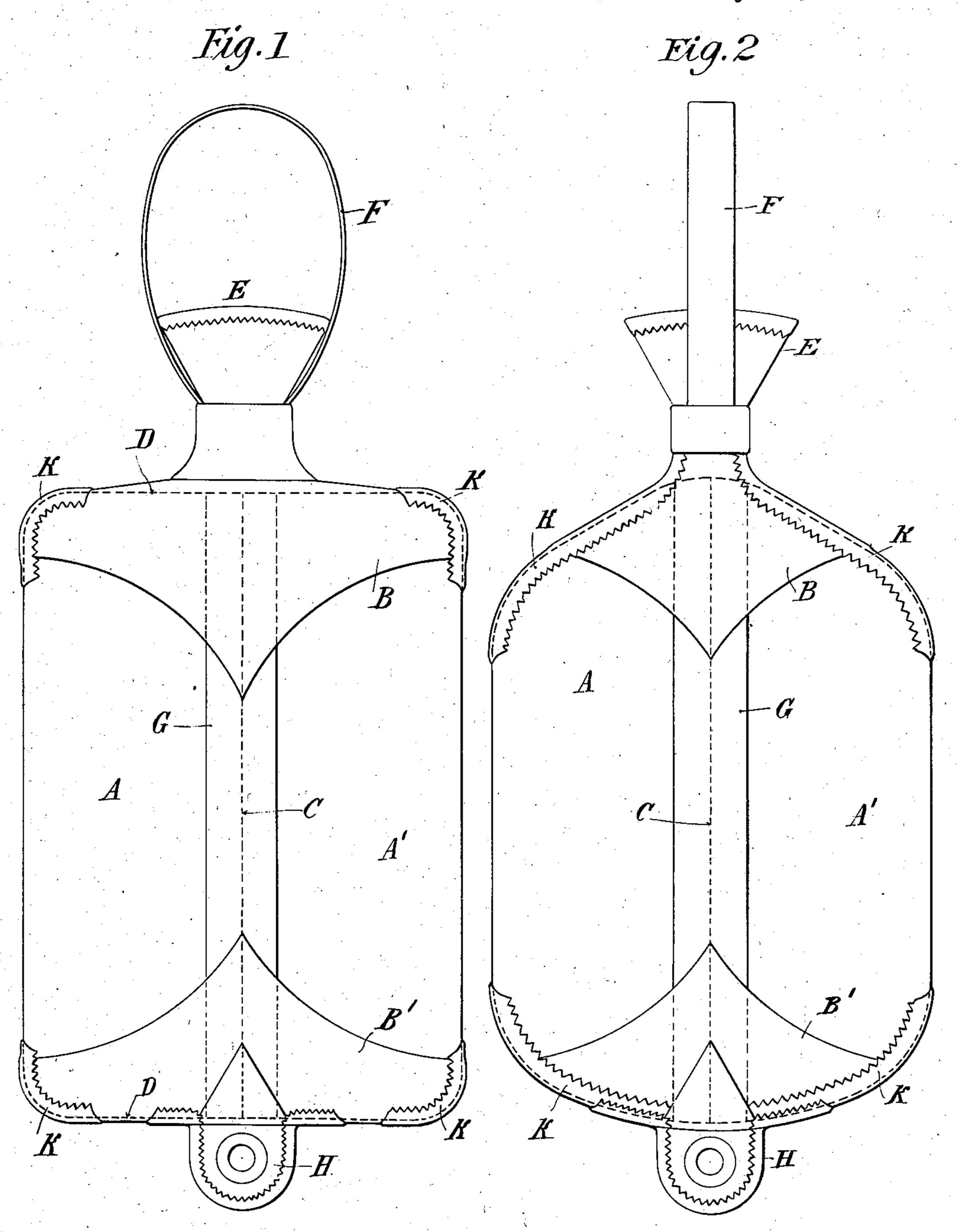
(No Model.)

A. H. ALDEN. INDIA RUBBER WATER BAG.

No. 604,925.

Patented May 31, 1898.



Witnesses: Helary C. Messiver Edwin B. Hopkinson.

Adelbert H. Alden, Inventor by Klu. Auti hafe Attys

United States Patent Office.

ADELBERT H. ALDEN, OF LAWRENCE, NEW YORK.

INDIA-RUBBER WATER-BAG.

SPECIFICATION forming part of Letters Patent No. 604,925, dated May 31, 1898.

Application filed December 1, 1897. Serial No. 660,410. (No model.)

To all whom it may concern:

Be it known that I, ADELBERT H. ALDEN, a citizen of the United States, residing at Lawrence, in the county of Queens and State of New York, have invented certain new and useful Improvements in India-Rubber Water-Bags, of which the following is a specification, reference being had to the drawings accompanying and forming a part of the same.

The subject of the present application for Letters Patent is an improvement in water bags or bottles, fountain-syringes, and the like, and has for its object to produce a bag of india-rubber of practically seamless character, whereby the tendency to leakage is reduced to a minimum, the cost of manufacture lessened, and a superior and more dur-

able article produced. In the manufacture of articles of this de-20 scription it is usual to form the bag by laying together two sheets of india-rubber or rubber fabric and abutting or overlapping the edges of the same along the lines which form the edges of the flattened bag and rein-15 forcing such edges, usually by a strip of rubber secured over such edges. In my improved manufacture of these articles I take a single sheet of the material, which may be indiarubber in a more or less pure form or india-30 rubber fabric, and fold the edges of such material over upon the main sheet until they abut approximately at the central vertical line of the main sheet. I then join the said edges in the usual manner to form a bag with-35 out seams at its edges and open at the ends. I then take strips or smaller sheets of rubber or rubber fabric and fold them over the ends

of said bag, so as to close the same, securing their edges to the sides, and finish the bag in the usual manner by forming a vent at one end and a tag at the other. The construction thus described may be departed from in certain respects, as hereinafter noted; but the essential feature of the improvement is

in forming a bag which has a single seam or joint extending along one side only and having no seams or joints along the side edges of the bag, where the wear and tendency to leak in ordinary bags of this description are the greatest.

I have illustrated the improvement in the

accompanying drawings, to which reference is now made.

Figure 1 is a plan view of a water-bag embodying my improvements in the perferred 55 form. Fig. 2 is a similar view of a modification of the invention.

To make the bag, I take a sheet of indiarubber or other similar and suitable material and fold over the two side edges A A' of the 60 same until they meet along the dotted line C. These edges are butted in the usual manner and joined. I then apply to each side of the bag and over the seam (indicated by the dotted line C) a reinforcing-strip of rubber or 65 rubber fabric G. The open ends of the bag as thus formed are then closed by folding over the edges (indicated by the dotted lines D D') strips or sheets of rubber B B' and securing the said strips to the opposite sides of 70 the bag. The strip B, used for closing the top of the bag, is formed before application with a tube E for the stopper, and attached to this is a handle or loop F. To the bottom strip B' is secured a tag H for an eyelet. It 75 is desirable to apply over the edges of the bag at the corners strips K after the parts have been assembled as above described. When the bag has been completed, it is vulcanized in the usual manner.

When it is desired to make a bag of generally oval shape, the difficulty of forming strips K in condition to fold over the ends of the bag may be avoided by rounding the corners of the sheet and joining such corners in the 85 usual way, reinforcing the joint by longer strips K, and applying end strips B B' over such portions of the ends of the bag as may be covered by ordinary flat strips of crude rubber. This form of bag is illustrated in 90 Fig. 2, in which the main distinctive feature of the seamless side edges of the bag is preserved. In such forms of bag the tendency to leak is very greatly reduced, as the seams are not only of considerably less extent than 95 in ordinary forms of bag, but where they occur they are much more fully protected without the employment of any excessive amount of material.

What I claim is—

1. A water-bag composed essentially of a sheet of india-rubber folded upon itself from

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opposite sides and having its meeting edges joined along a vertical line, so as to form a bag without seam or joint along its side edges, as set forth.

- 2. A water-bag composed of a sheet of rubber folded upon itself from opposite sides and having its meeting edges joined on a line extending vertically across one side of the bag, and its ends closed by sheets of rubber folded over said ends and united to the sides as set
- over said ends and united to the sides, as set forth.
 - 3. A water-bag composed of a sheet of rub-

ber folded upon itself from opposite sides and with its meeting edges joined in a central vertical line running across the side of the bag, 15 and having strips or sheets of rubber folded over its ends and united to the sides, and a reinforcing-strip applied over the vertical seam or joint, as set forth.

ADELBERT H. ALDEN.

Witnesses:

WM. C. BETTS, WM. A. DE LONG.