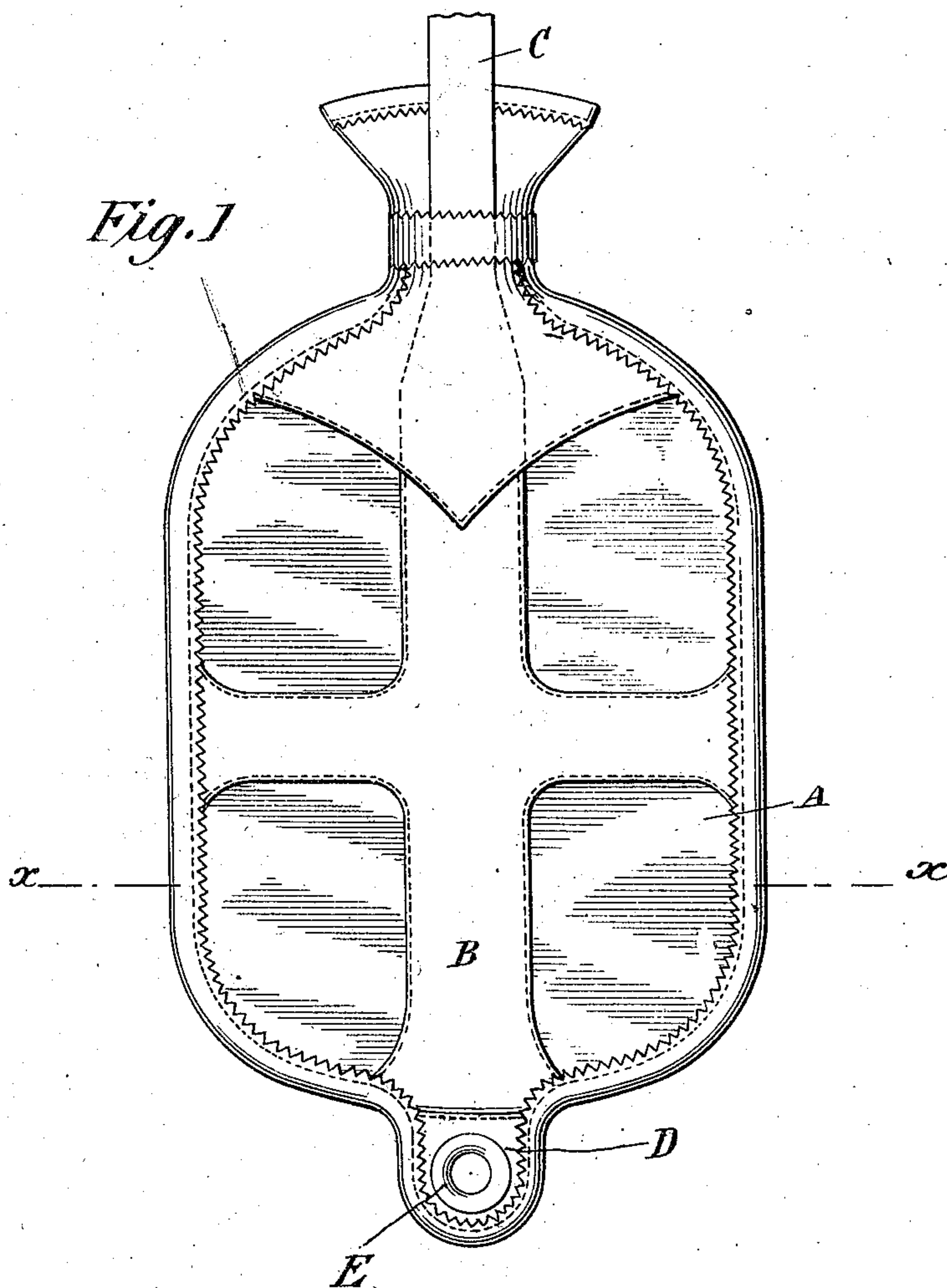


(No Model.)

A. H. ALDEN.  
INDIA RUBBER WATER BAG.

No. 604,924.

Patented May 31, 1898.



*Fig. 2*



Witnesses:

M. Lawson Dyer.  
Benjamin Wilson

Adelbert H. Alden, Inventor.

by *Wm. Curtis Wake* Att'y



# UNITED STATES PATENT OFFICE.

ADELBERT H. ALDEN, OF LAWRENCE, NEW YORK.

## INDIA-RUBBER WATER-BAG.

SPECIFICATION forming part of Letters Patent No. 604,924, dated May 31, 1898.

Application filed November 26, 1897. Serial No. 659,725. (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.

My invention is an improvement in india-rubber bags for containing hot water or forming part of fountain-syringes and for similar purposes; and the object of the invention is to produce at a smaller cost and with less material as durable and useful bags as those heretofore made in the ordinary way.

Water-bags of the particular description referred to are made substantially in whole of india-rubber and generally of pure rubber, and since, owing to the requirements of ordinary use, they must be capable of withstanding considerable pressure without becoming much distended they are made with comparatively thick walls to give them the necessary strength.

My improvement consists in a water-bag of india-rubber having vertical or transverse bands or portions or both vertical and transverse bands or portions of greater thickness than the remaining parts of the walls. In other words, my improved water-bag is in general distinguished by a reticulated reinforcement of thicker rubber than the walls of the bag, and this without regard to the specific character of the strengthening-bands or thickened portions, providing they be such as to serve, essentially, as would a network for the sides of the bag. This form of bag involves no additional expense in its making, while it requires for a bag of given size and strength less material than those made in the ordinary way.

In the drawings hereto annexed, Figure 1 is a side view of a water-bag embodying my invention. Fig. 2 is a cross-section of the same on line *x x* of Fig.

A is a bag of ordinary form, generally made of two pieces of sheet-rubber, which are laid one on the other, joined at their edges, and then vulcanized. Such bags are usually thickened along the lines of union of the two parts either by the overlapping of their edges or

by the application of a strip of rubber over the joint; but in molding or forming the sheet-rubber for the manufacture of my improved bags I form or apply one or several bands or thicker portions B, which extend entirely across the sides of the bag in several directions, if so desired, but in any event so as to constitute a reticulated reinforcement for the bag. When this is done, the thickness of the rubber sheet in the spaces between the reinforcing or thickened portions may be made so much thinner without sacrifice of strength that the aggregate amount of rubber necessary for a bag of given dimensions or capacity is reduced.

It is not necessary that the reinforcing portions should extend both transversely and vertically across the bag, but, as above stated, they should be so disposed as to have the effect of a net, leaving comparatively small or narrow surfaces of the thinner wall between.

An improved detail in the construction of the bag is in using a single piece of rubber or rubber fabric for the reinforcement and the loop or handle of the bag. In other words, the loop or handle C is formed by the portion of the part B where the latter is bent over and applied to the opposite sides of the bag. The two ends of the reinforcement B are lapped and pressed together at the bottom of the bag to form the tag D, in which the eyelet E is inserted.

What I claim is—

1. A water-bag composed essentially of sheet-rubber with a reticulated reinforcement composed of thickened portions of the walls or sides of the bag, as set forth.

2. A water-bag A composed of sheet-rubber having bands or portions B thicker than the remaining portions of the bag, extending across its sides and serving as reinforcements therefor, as set forth.

3. A water-bag A composed of sheet-rubber having bands or reinforcing-strips B extending across its sides, the vertical band or strip being extended above the neck of the bag to form a loop or handle C and united below the bag to form a tag D, as set forth.

ADELBERT H. ALDEN.

Witnesses:

DEURY W. COOPER,  
M. LAWSON DYER.