

March 7, 1944.

D. F. LARKIN

2,343,678

CLOSURE FOR BAGS

Original Filed March 27, 1940

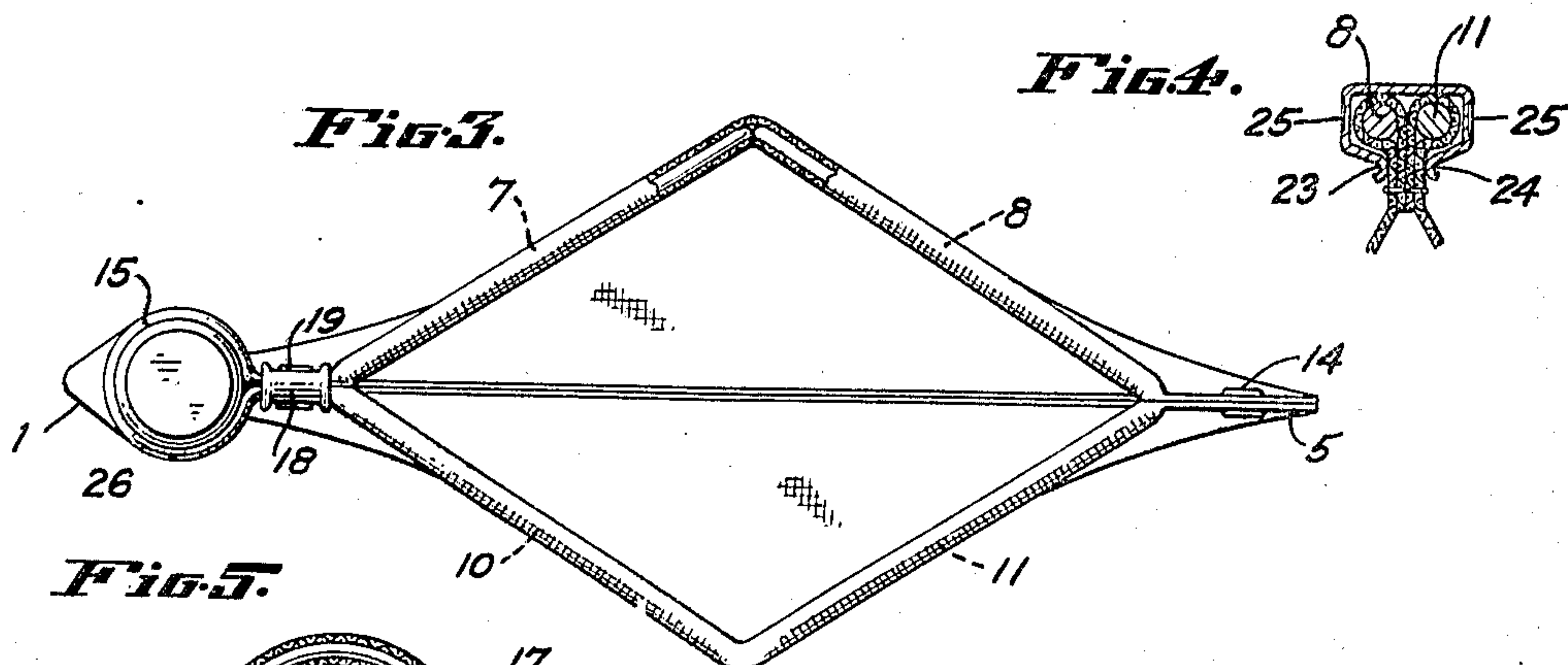
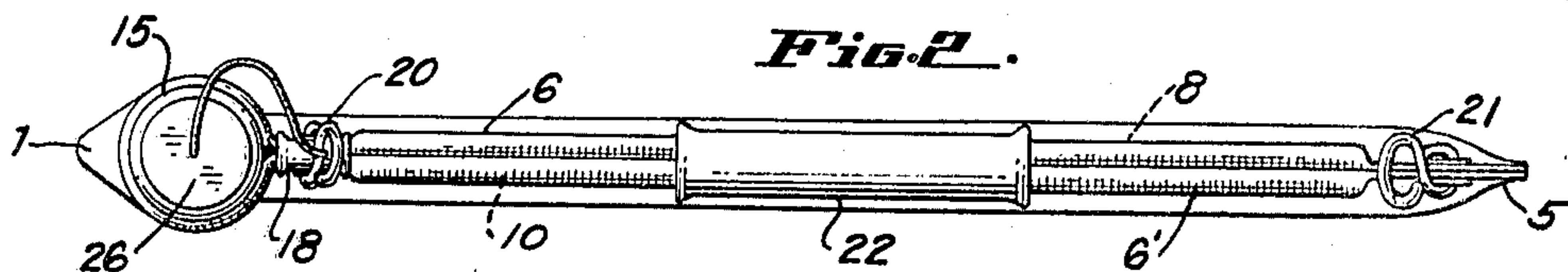
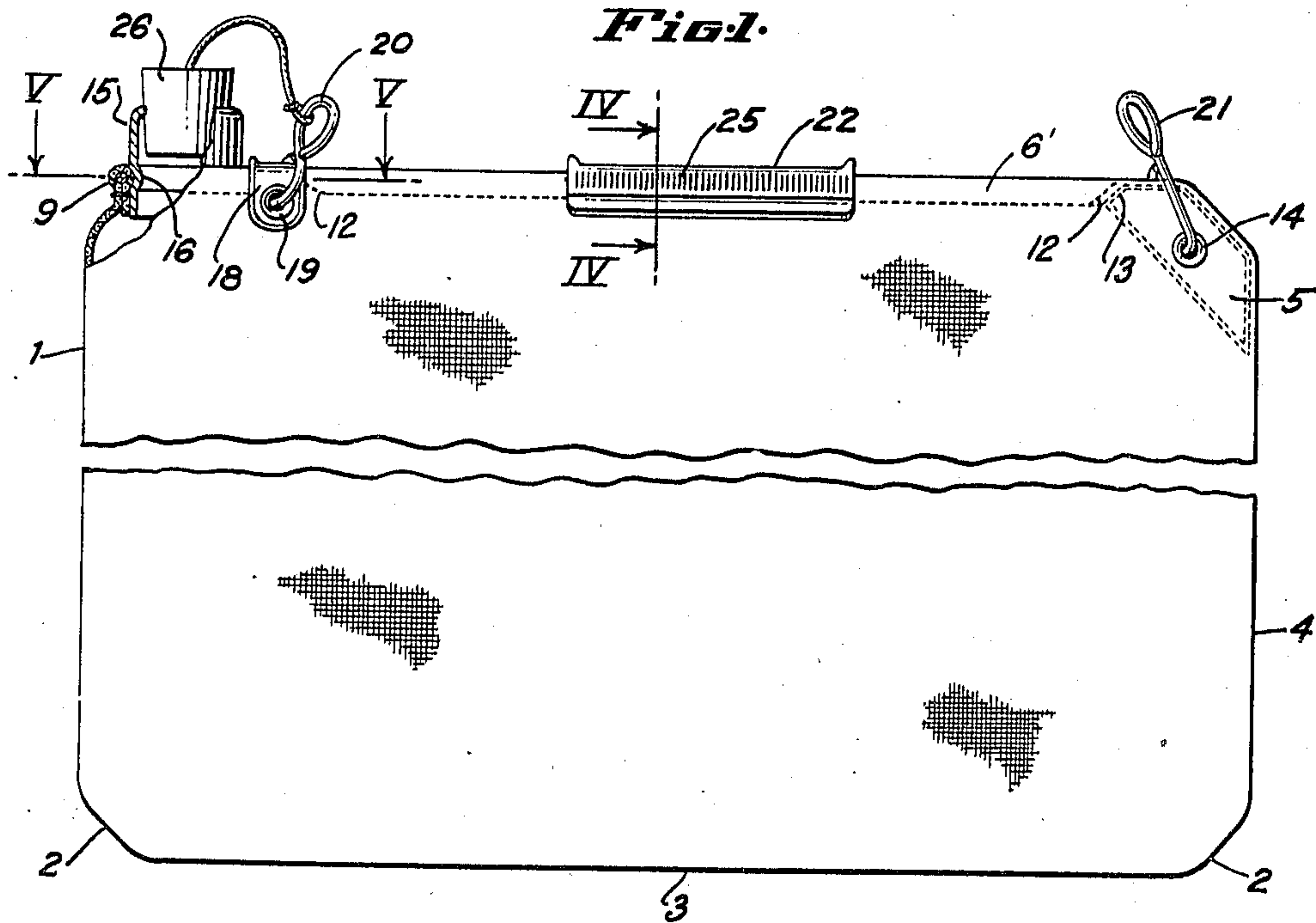
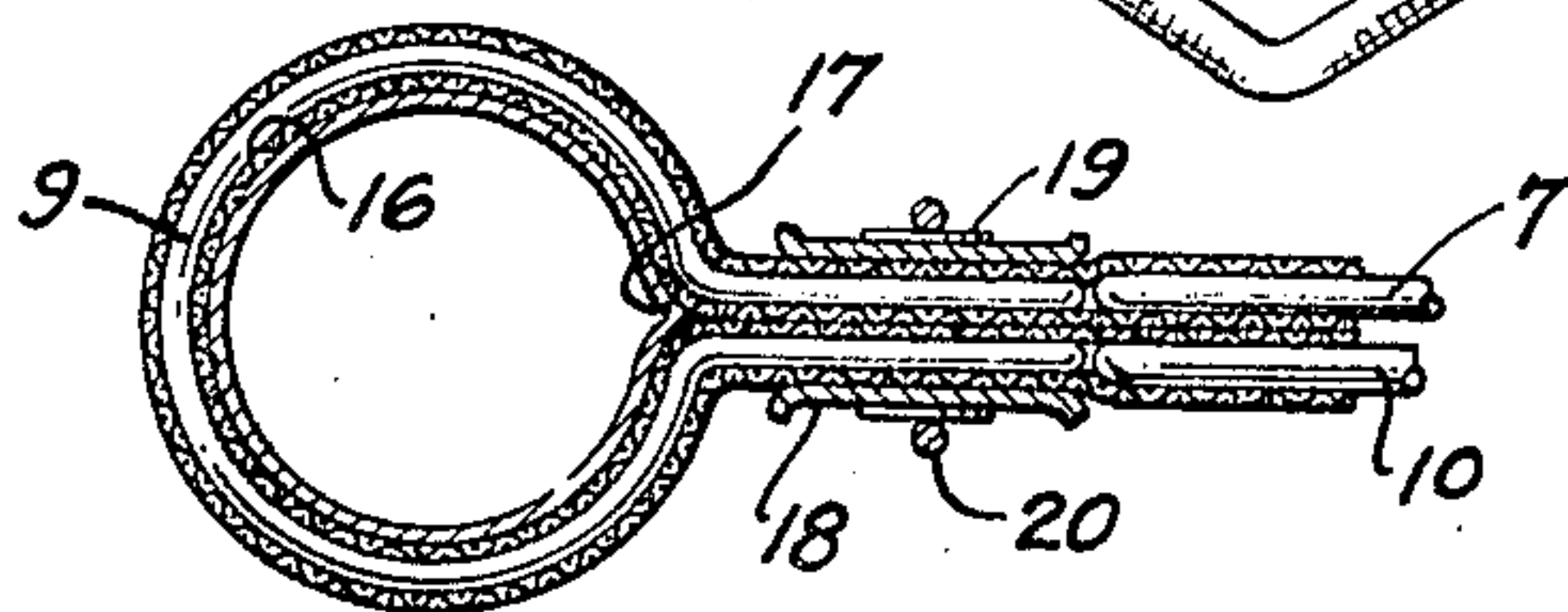


Fig. 5.



INVENTOR.
DENNIS F. LARKIN
BY *Baldwin*
ATTORNEY.

UNITED STATES PATENT OFFICE

2,343,678

CLOSURE FOR BAGS

Dennis F. Larkin, San Francisco, Calif.

Substituted for abandoned application Serial No.
326,283, March 27, 1940. This application July
6, 1943, Serial No. 493,676

1 Claim. (Cl. 150—6)

This invention relates to improvements in closures for bags, and more particularly to water bags.

This application is a substitute for application Serial Number 326,283 filed Mar. 27, 1940.

Among the objects of the invention is to facilitate the opening and closing of bags in this class.

Another object is to give stability to the bag when open or closed.

Another object is to simplify the fabrication of the bag, especially in assembling the neck of the spout into the top of the bag.

A further object is to facilitate propping open the bag or turning it wrong side out for airing the interior.

Other objects and advantages will appear as the description proceeds.

In this specification and the accompanying drawing the invention is disclosed in its preferred form. But it is to be understood that it is not limited to this form, because it may be embodied in modifications within the spirit of the invention as defined in the claim following the description.

In the one sheet of drawings:

Fig. 1 is a side elevation of the upper and lower portions of a canvas water bag constructed in accordance with this invention.

Fig. 2 is a plane view of the same in the closed condition.

Fig. 3 is a similar view of the same when open.

Fig. 4 is a vertical section on the line IV—IV, Fig. 1.

Fig. 5 is an enlarged detail view in horizontal section on the line V—V, Fig. 1 of the spout assembly.

In detail the construction illustrated in the drawing comprises the bag composed of a single piece of duck or canvas or other suitable material, preferably one piece folded back upon itself at 1, and stitched around the corner 2, the bottom 3, the side 4 and the top corner 5.

It is desirable that the upper edges 6, 6 be the natural selvage of the fabric. In fabricating the bag the first step is to lay the fabric blank flat on the bed of the sewing machine. Then fold the selvage inward and stitch about two inches. As the stitching proceeds the two rods 7, 8 are laid within the stitched tubular fold. The wire 9 is then added to the fold at the central portion of the blank that will form the return bend 1. Two more rods 10, 11 are then added and stitched into the fold and the stitching continues to what will be the edge 4.

The rods 7—11 are preferably about $\frac{3}{8}$ of an

inch in diameter in the conventional sizes of bags. The wire 9 should be soft annealed stock that will bend easily.

The fabric strip is then folded back upon itself at 1, and the several free edges alined. These edges are then sewn together from the corner 2 to the corner at 5. The bag is then wrong side out. It is advisable to run a second seam along the top edge around the ends of the rods and the wire, as at 12 to prevent the several rods shifting longitudinally in the enclosing fold. This stitching 12 can also be run up between the contiguous ends of the rods 7—11, to prevent them over riding and injuring the fabric.

The next step is to reverse the bag so that all seams and edges are on the inside. The corner at 5 is then folded inward so that the whole perimeter of the bag shows only folded edges; the stitching being within the bag. The corner 5 is restitched to give it stability to receive the grommet 14.

The lower portion of the spout 15 is provided with an annular groove 16. The spout is now inserted in the open corner of the bag which is folded therearound until the enclosed wire 9 fits snugly into the groove 16 and is sealed by the intervening fabric of the bag.

The V shape rib 17 is struck outward from the body of the spout in the path of the groove 16 to seal the opening that would otherwise result where the wire 9 bends away from the spout.

To insure proper sealing against leakage at this point the metal clip 18 is folded over the top edge of the bag and riveted in position by the grommet 19.

The wire loops 20, 21 passing through their respective grommets 14, 19 provide secure attachment for a shoulder strap, handle or other convenient means for supporting the bag.

Referring to Fig. 3, it will be noted that the contiguous ends of the several rods 7—11, hinged together by the tubular folds of the top edges of the bag, form a reinforced rectangular opening for filling or pouring from the bag. Such an effect is very convenient in dipping the bag into a body of water or when pouring water into the bag from a faucet or bucket. It also provides a well defined V shape to direct the flow of water when pouring therefrom into an automobile radiator or other container.

Such advantages are particularly desirable in conserving water on the desert or wherever water may be scarce.

The bag is closed water tight by means of the

substantially channel shaped slide clamps 22 preferably formed of non-corrosive metal. The flared end of the slide is entered at the flat stiff corner 5 behind the ends of the rods 8, 11 and pushed forward to the center of the top of the bag to bridge across the center meeting ends of the rods 7-11. The curled edges 23, 24 fit snugly under the rods to hold the top edges of the bag tightly closed. The sides of the slide are knurled as at 2, 5 to give a better manual grip in placing or removing the slide.

The reinforced rigid top edge stabilizes this portion of the bag, greatly facilitating its handling and in pouring from the spout 15 that is closed by the stopper 26 in the usual manner.

This disclosure has been limited to the application of the invention to water bags, but it is equally applicable to closures, for grain, wool, laundry and other fabric containers, with or without the spout 15.

For ready application to such bags the rods 7-11 can be sewn into the folded edges of fabric strips, with or without the wire 9. Such strips can be attached, in opposed relation to each other, to the opposite edges of the bags, much as in the conventional manner of attaching "Zippers" to closures.

The invention is also useful in pinning the

edges of tent flaps and similar opposed fabric closures. In such long openings a multiplicity of reinforcing rods such as 7-11 and a number of clamps 22, are used.

Having thus described this invention what is claimed and desired to secure by Letters Patent is:

A closure for bags including a strip of fabric having a tubular edge and folded back upon itself into substantially U shape with the legs of the U secured together at their ends; a wire in the shape of a bulging loop in the tubular edge of said strip at the bend of the U, and having parallel end portions projecting a short distance into the tubular edge of the legs of said U shaped strip; a spout confined within the fabric covered loop of the wire and having an outwardly projecting rib at the juncture of the loop and said end portion of said wire; a clip clamped over said wire end portions adjacent said rib; substantially rigid longitudinal members in said tubular leg portions of said U shaped strip, said members being spaced from one another and from the end portions of said wire; and a clamp slidably engaging the tubular legs of said U shaped strip.

DENNIS F. LARKIN.