R. S. GUTSHALL.

TOP FOR CLOTH OR FLEXIBLE WATER BAGS.

APPLICATION FILED JUNE 24, 1913.

1,099,796. Patented June 9, 1914.

FIG. 1.

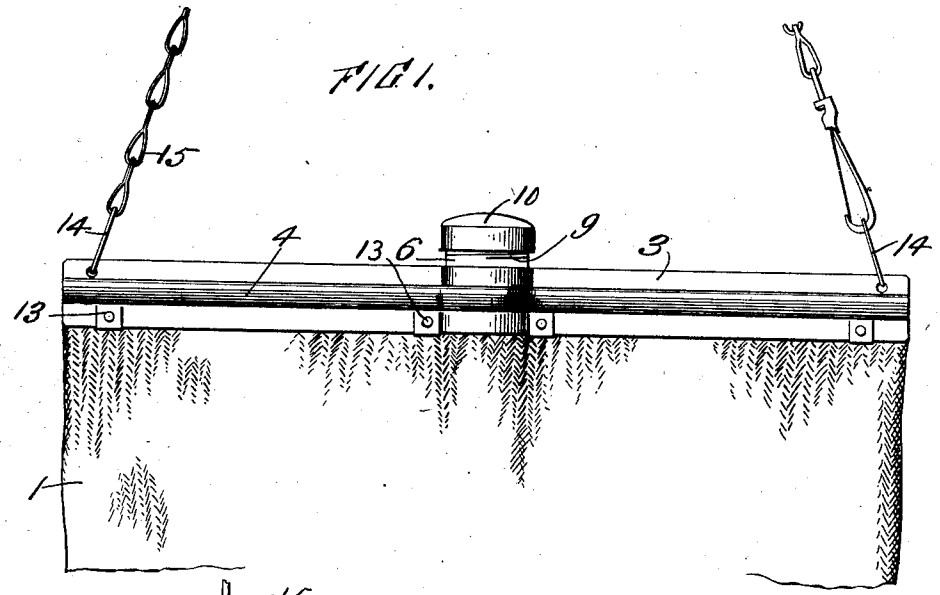


FIG. 2.

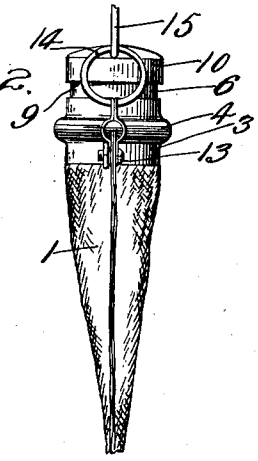


FIG. 3.

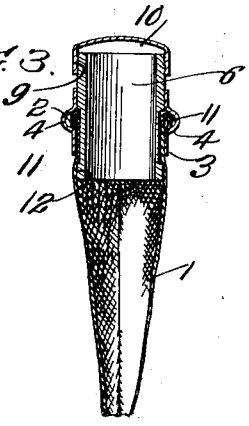
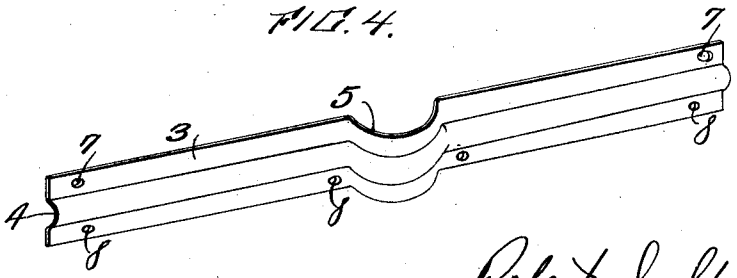


FIG. 4.



Witnesses

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TOP FOR CLOTH OR FLEXIBLE WATER-BAGS.

1,099,796. Specification of Letters Patent. Patented June 9, 1914.

Application filed June 24, 1913. Serial No. 775,579.

To all whom it may concern:

Be it known that I, ROBERT S. GUTSHALL, a citizen of the United States, residing in the city and county of Denver and State of Colorado, have invented certain new and useful Improvements in Tops for Cloth or Flexible Water-Bags; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to tops for cloth or flexible water bags, and an object of the invention is to provide a top or cover readily applicable to the bag which shall form a water-tight-closure.

A further object of the invention is to provide a cover so formed as to receive the hems formed at the top of the water bag, said hems serving to engage the cover to help support the bag.

A further object of the invention is to provide a cover for a water bag so formed as to receive the top of the bag and at the same time prevent buckling or twisting of the cover.

A still further object of the invention is to provide a cover adapted to be clamped in place having an opening in some portion thereof, and means for supporting the bag from the ends of the cover.

With these and other objects in view, the invention consists in certain novel constructions, arrangements and combinations of parts as will be hereinafter fully described and claimed.

In the drawings wherein similar reference characters designate corresponding parts: Figure 1 is a side elevation of the cover showing the same applied to part of a water bag, and having chains shown for the purpose of supporting the same; Fig. 2 is an end elevation of the cover as shown in Fig. 1; Fig. 3 is a vertical transverse section taken through the cover and outlet as shown in Fig. 1; Fig. 4 is a perspective view of one of the members forming a part of the cover.

Water bags of the general class described herein, are used for carrying water or other liquid over deserts or places where it is difficult to carry liquid in a rigid receptacle, and at the same time desirable to transport a quantity of liquid. The bags are frequently strapped on the backs of animals and are preferably made of a material which will admit of a slight evaporation of the water for the purpose of keeping the contents cool. Several of the covers or closures have been designed for these water bags, but they have either been so constructed as to bend when supported in any secure manner from the ends of the cover, or have been so constructed that the swelling of the cloth bag due to soaking up of the water interferes with the removal of the cover, or the fitting of the same to the bag. The present invention aims to overcome these difficulties by having a two-part cover formed of crimping metallic strips designed to fit around the end outlet to the bag, the crimps being so located as to receive the hem in the bag for the purpose of helping support the weight of the filled bag. This crimp also serves to reinforce the strips so that when the bag is supported from its ends by means of chains or other suitable flexible means, no bending or buckling will result, with consequent leakage so that this cover provides a water-tight rigid cover which may be clamped in place when desired.

Referring to the drawings, 1 designates a bag made of cloth or other suitable material, although it is preferable to make the bag of cloth slightly porous as heretofore mentioned to afford a slight evaporation. The two sides and bottom of this bag, the upper portion of which is shown in the drawings, are closed, while the two sides of the top are provided with a hem as indicated at 2, in Fig. 3. This hem may be formed in any approved manner, forming no part of the present invention and it is to be understood that the hem is not absolutely essential in the operation of the cover, but will assist if used.

The cover proper forming the subject-matter of this invention, is formed of two strips of metal 3 treated in some manner, as by galvanizing, to prevent rusting. These strips are both formed in the same manner, and are each provided with crimps 4 formed in the central portion of the strip and running throughout the length thereof. A suitable portion of each of the strips is bent as shown in Fig. 4, at 5, to form substantially a semi-cylinder, which, when the two strips are assembled, will form a closure for the reception of a tube 6 forming the outlet for the bag. Adjacent the upper end of each of the strips 3, is formed an opening 7 while the lower edge of each of the strips is provided with an opening 8,

the use of which will be described presently. In the drawings, the crimp has been shown as a semi-cylindrical raised portion, but variations may be made in the form of the crimp and still comply with the spirit of the invention.

As shown in Fig. 3, the tube 6 has the upper end thereof threaded as at 9, for the purpose of receiving an internally threaded cap 10 which may be made of the same material as the strips 3 if desired, and designed to fit tightly enough to prevent leaking of the water. The lower end of the tube is reduced as at 11, while there is formed at the inner end of the tube, a shoulder or flange 12.

When it is desired to assemble the water bag and cover, the tube 6 is inserted in the bent portion of the cover, and then the two strips 3 are clamped against the top of the cloth bag by means of bolts 13 in such a way that the hems 2 lie within the crimps 4, while the bolts 13 pass through the material of the bag beneath the hems and bind the lower edges of the strips 3 against the bag. By referring to Fig. 3, it will be seen that the top of the bag has each side thereof led around the tube 6 over the flange 12 and the upper edge of each of the strips 3 rests against the top portion of the tube 6, while the lower portion of the strips 3 binds the hemmed portion of the bag within the recess 11, thus securing the cloth bag to the tube in a water-tight manner. While the bolts 13 have been shown for the purpose of clamping the lower edges of the strips 3 together, other detachable means may be used for this purpose. It will be obvious that as the cloth from which the bag is made soaks up the water, the portions between the strips 3 will swell so as to provide a pipe adapted to prevent the leaking of water while the hems 2 located within the crimps 4 will distribute the weight of the bag uniformly over the entire length of the cover to release the strain on the material surrounding the bolts 13. In order to carry the bag, rings 14 may be inserted through the opening 7 in the upper edges of the strips 3, and a chain 15 connected to the rings, although any other desirable means for supporting the ends of the bag could be used. In order that the cloth may be bound more tightly around the tube 6, there are provided a pair of bolts 13 as near the rounded portion 5 of the strips as practicable. It will be understood that as the bags are carried, the supports 15 do not rise in a straight line from the ends of the cover so that there is a tendency to pull the ends of the cover inwardly which is overcome in the present instance by the crimps 4, which serve as a reinforcement for the strips 3. The cover herein disclosed may be made the full width of the bag, in which case the natural shape of the bag will be preserved, or the cover may be applied to a part only of the top of the bag.

What I claim is:

1. A cover for water bags comprising a pair of binding strips held to the top of the water bag, said strips being provided with crimps, means engaging the ends of the strips adapted to support the water bag and an outlet formed in the bag and cover between the ends of the strips.

2. A cover for water bags comprising a pair of binding strips, means for holding said binding strips against the water bag, a tube providing an outlet for the bag, said binding strips adapted to surround the tube and means adjacent the tube engaging the strips and bag adapted to hold the bent portion of the strip against the parts of the bag surrounding the tube.

3. A cover for water bags comprising a pair of binding strips, a tube surrounded by said strips and affording an outlet for the bag, said tube provided with a recessed portion between its ends, and means for securing the clamping strips around said tube and to the water bag.

4. In a water bag cover, a tubular member forming an outlet for the water bag, a recessed portion formed in said tube between the ends thereof, and binding strips engaging the water bag and held thereto, part of the bag adapted to lie within the recess of the tube, while part of the strips overhang said recess to bind the bag in the recess.

In testimony whereof I affix my signature in presence of two witnesses.

ROBERT S. GUTSHALL.

Witnesses:
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GEO. A. CHASE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents. Washington, D. C."