June 26, 1923.

1,459,735

H. P. KRAFT

CLOSURE FOR ICE BAGS

Filed March 31 , 1919

Fig. 1.

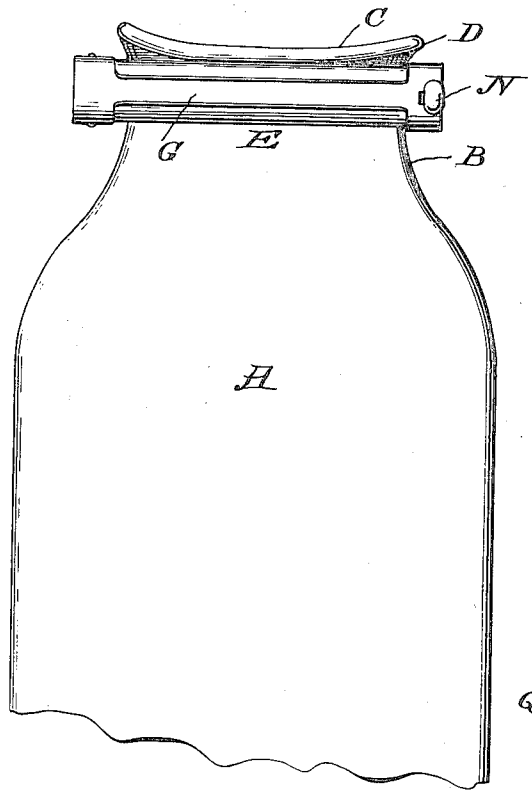


Fig. 3.

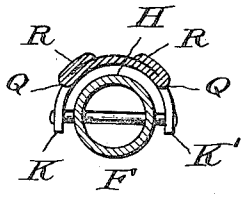


Fig. 2.

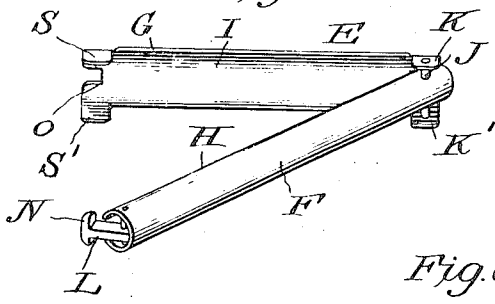


Fig. 4.

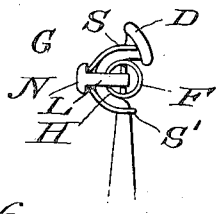


Fig. 5.

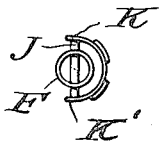


Fig. 6.

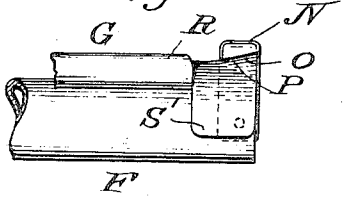
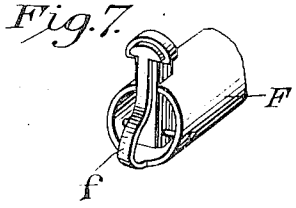


Fig. 7.



INVENTOR

Henry P. Kraft,

By Attorneys,

Fraser, Turner & Myers

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UNITED STATES PATENT OFFICE.

HENRY P. KRAFT, OF RIDGEWOOD, NEW JERSEY, ASSIGNOR TO A. SCHRADER'S SON, INCORPORATED, OF BROOKLYN, NEW YORK, A CORPORATION OF NEW YORK.

CLOSURE FOR ICE BAGS.

Application filed March 31, 1919. Serial No. 286,346.

To all whom it may concern:

Be it known that I, HENRY P. KRAFT, a citizen of the United States of America, residing in Ridgewood, in the county of Bergen and State of New Jersey, have invented certain new and useful Improvements in Closures for Ice Bags, of which the following is a specification.

This invention relates to closures for ice bags, and aims to provide certain improvements therein.

In certain types of rubber ice bags, particularly those which are of narrow width and elongated, the custom has heretofore been to tie the mouth of the bag with a string or tape in order to prevent escape of ice and leakage of condensation water. This is quite unsatisfactory, because of the difficulty of application and the uncertainty of making a sealing joint.

According to the present invention I provide a simple and cheap closure adapted to clamp the neck of the bag for the purpose of sealing the latter. In the preferred form the device comprises two members preferably hinged together at one end, one of which is preferably a convex member and the other a concave member adapted to fit together and clamp the bag between them. The invention also includes various other features of improvement which will be hereinafter more fully described.

Referring to the drawings which illustrate one form of the invention,—

Figure 1 is a plan of the bag with the closure in place.

Fig. 2 is a perspective view showing the clamp separated.

Fig. 3 is a cross-section.

Fig. 4 is a view of one end of the closure.

Fig. 5 is a view of the opposite end.

Fig. 6 is a detail on an enlarged scale.

Fig. 7 is a perspective view of a part of the clamp provided with a spring pressed catch member.

Referring to the drawings, let A indicate an ice bag which is essentially of the type which is narrow and elongated and composed of more or less elastic rubber. The bag has a neck B and mouth C, a bead or flange D, usually being provided at the mouth for the purpose of finishing the latter, and also for the purpose of retaining any closure which may be applied to the bag.

The closure provided by the present invention is indicated as a whole by the letter E. By reference to Figure 2, which shows the preferred form, it will be seen that the closure comprises two clamping members F and G, one of which as F is best provided with a convex or rounded face H designed to contact with one side of the neck of the bag, and the other of which, as G, is provided with a concave face I adapted to contact with the opposite side of the neck. The member F is most satisfactorily made of a complete tube, although other constructions may be adopted, while the member G is best made as semi-cylindrical, being preferably stamped out of flat sheet metal. The two members are best pivoted together by some form of hinged joint, such as the pin J, passing through the end of the member F, and through lugs K K′ formed on the member G.

Means are provided for connecting the opposite ends so as to clamp the bag between the members, the means preferred comprising a catch L pivoted to the free end of the member F, which catch L is adapted to enter a recess formed in the member G. The catch has a head N which overlies the end of the member G, as best seen in Fig. 6. Preferably the metal of the member G is flared as shown at O, at the points where the head N engages the member, and the head is formed with an inclined surface P, so that when the parts are engaged as shown in Fig. 6 they are securely held in place due to the fact that in order to become disengaged the member G must be pressed toward the member F, which movement is resisted by the springiness of the rubber neck clamped between the two. When the parts are formed of sheet metal as designed, the flaring P provides a bevelled face on the interior of the end of the member G, which when the parts are brought together causes the catch L to be forced outwardly beyond the end of the member G into position to pass over the member when the parts are fully clamped. A spring may be provided, if desired, which is arranged to hold the catch L normally in its inward position, as shown in Fig. 7, so that the action of the catch may be automatic. Such spring *f* may be formed of the metal of the member F as by cutting a tongue in the latter against which tongue the lower part of the catch bears or in any other desired manner.

It is very desirable, if not necessary, that the parts be so arranged as to avoid chafing or cutting the bag, and this is particularly true with regard to the conformation of the member G, the edges of which would be apt to cut or chafe the bag. Preferably, therefore, the member G is formed on each side where it comes in contact with the bag with a rounded edge Q. It being desirable to make the parts of as light metal as possible, the edge Q is preferably obtained by turning back flanges R R, as best seen in Fig. 3. The metal thus utilized is of little cost, since in cutting the blanks sufficient metal must be provided to constitute the lugs K K'. Preferably also similar lugs S S' are formed at the opposite end of the member G to make a better connection at this end. It is the metal between these two sets of lugs which is turned back, which metal would otherwise have only a scrap value.

It will be seen that by the present invention the portion of the neck of the bag which is directly engaged by the closure is clamped in a curved condition, or in a sense doubled over. This secures a tighter connection than would be possible with merely straight edges under a similar clamping force. At the same time, the compression on the neck of the bag is distributed over a wide area, so that there is no danger of cutting into the rubber of the bag after a short period of use. The clamping action is best illustrated in Fig. 4.

While I have shown and described one embodiment of the invention, it will be understood that I do not wish to be limited thereto as various modifications may be made therein without departing from the spirit of the invention.

What I claim is:

1. A closure for ice bags or the like, comprising two members pivoted together at one end and adapted to embrace between them the opposite sides of the neck of the bag, one of the members being of concave form and having longitudinal beaded edges on its side which engages the bag and the other being of convex form on such side whereby to enter the concavity in the first, and means for detachably connecting the free ends of said members.

2. A closure for ice bags or the like, comprising two members pivoted together at one end and adapted to embrace between them the opposite sides of the neck of the bag, one of the members being of concave form on its side which engages the bag and made from sheet metal, the longitudinal edges of which are turned back over its rear side to constitute thickened and rounded surfaces and the other being of tubular form whereby to enter the concavity in the first, and means for detachably connecting the free ends of said members.

3. A closure for ice bags or the like, comprising two members fitted together at one end and adapted to embrace between them the opposite sides of the neck of the bag, one of said members being of concave form on the side which engages the bag, and the other being of convex form on such side, whereby the latter enters the concavity in the first, one of said members being made of sheet metal curved to the proper form, and the other member being of tubular construction, and means comprising a pivoted catch for detachably connecting the free ends of said members.

4. The device of claim 3 further characterized in that the catch has a beveled portion for engaging the opposite member, such member having a corresponding beveled portion.

In witness whereof, I have hereunto signed my name.

HENRY P. KRAFT.