May 29, 1951 R. P. GUTSHALL 2,555,128

FISHING CREEL COOLED BY EVAPORATION OF WATER

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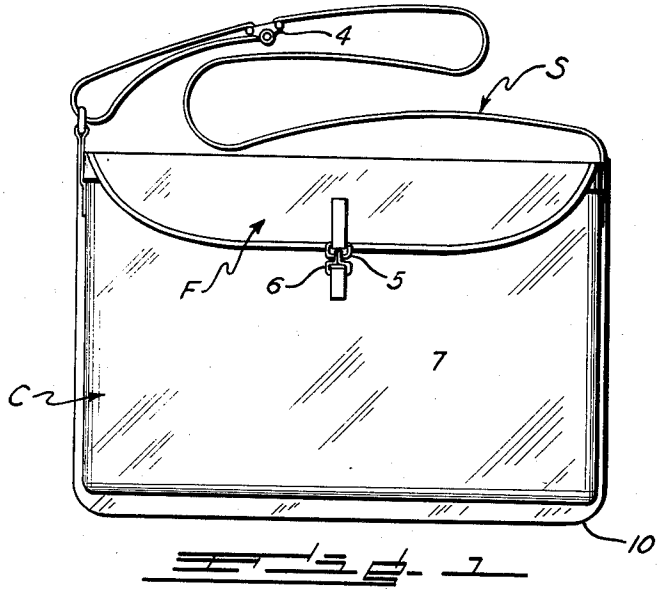


Fig. 1

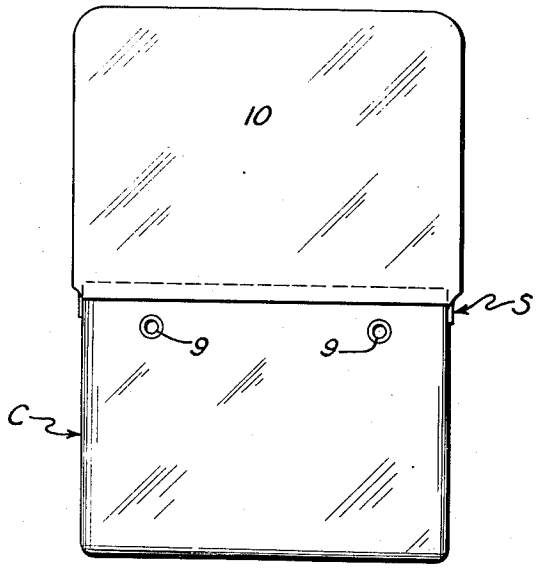


Fig. 2

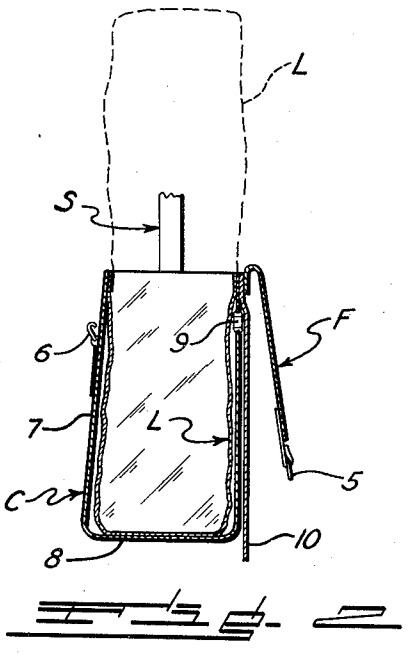


Fig. 3

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FISHING CREEL COOLED BY EVAPORATION OF WATER

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This invention relates to a creel for fishermen, and has for its object to provide a light, durable and sanitary carrier for fish which preserves them in a cool and essentially dry condition.

Another object of the invention is to provide a creel which is cooled by evaporaton of moisture contained on its outer surface to maintain its contents at temperatures substantially lower than the atmospheric temperature to which the creel is exposed.

A further object of the invention is to provide a creel which is easily supported and carried on the body of the user without impedance.

Other objects reside in novel details of construction and novel combinations and arrangements of parts, all of which will be fully described in the course of the following description.

The present invention is based on the discovery that by forming a creel consisting of inner and outer casing members, the outer one being formed of an absorbent material, such as a flax canvas, and the inner one being formed of a water and air-impervious film, such as a vinyl plastic, it is possible to maintain the interior space and its contents at a substantially lower temperature than the prevailing temperature at the outer surface, by evaporating the contained moisture in the outer member. Due to the heat conductivity of the inner member, the heat exchange induced by the evaporation is carried through such member, although the fish or other contents subjected to these cooling influences are kept in an essentially dry condition.

The practice of the invention will be best understood by reference to the accompanying drawings illustrating a typical embodiment. In the drawings, in the several views of which like parts are designated similarly,

Fig. 1 is a front elevation of a creel embodying features of the present invention;

Fig. 2 is a section through a creel of the type shown in Fig. 1 with the cover flap folded to a retracted position and the dotted lines representing the position of the inner lining member when it is being cleaned; and

Fig. 3 is a rear elevation of the creel shown in Fig. 1 with the cover flap shown in an upright position.

As shown in Fig. 2, the creel of the present invention comprises an outer container or casing member C, and an inner lining member L, preferably shaped like a wallet or pouch. A strap S has two point attachment to casing C and is

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provided with an adjusting link 4 by which the stretch of the strap may be lengthened or shortened.

The container C is provided with a flap F carrying at its free end an eyelet 5 adapted to engage a hook 6 attached to the front side or wall 7 of the container. This arrangement provides a snap-on lock which effectively holds the flaps in closed position to prevent accidental loss of its contents, or exposure of the interior to atmospheric air.

Inasmuch as access to the interior frequently has to be accomplished by one-handed manipulation while fishing, this type of fastening is preferred but other fasteners, such as snap fasteners, buttons and the like may be used for this purpose. In fabricating the container, it will be preferable to have the bottom 8 formed of a separate piece of material and attached to the sides 7 as by stitching, although the drawings illustrate a one-piece assembly.

The rear side of container C which is opposite the one on which hook 6 is mounted is normally covered by an apron or flap 10 and one or more eyelet openings 9 admit air between the inner lining member L and the outer casing C to facilitate drying, as before storage, for example. Apron 10 preferably is formed of vinyl plastic or other suitable waterproof composition to shield the clothing of the user against contact wetting in use.

In using the creel of this invention, as in stream fishing, the fisherman hangs the creel on the side of his body opposite the shoulder on which strap S rests, after first establishing a desired strap length for comfortable support of the creel. The outer surface of container C is wetted as by dipping in water, and apron 10 hangs between the creel and the user's clothing to prevent wetting of the latter.

In practice, it has been possible to reduce the interior temperature of the container as much as 30° F. in about thirty minutes by the resulting evaporation at atmospheric temperatures of approximately 70° F. The inner lining is a good enough heat conductor so that stored contents of the creel are cooled a corresponding amount, and as the lining is waterproof, the contents are maintained dry, which is an essential condition in proper preservation of fish.

Operation of the flap lock may be accomplished by one-handed manipulation as previously explained, thus permitting easy insertion of additional fish, as when the fisherman is wading a

stream and must use one hand for support of his rod. Locking of the flap prevents accidental loss of fish as by wriggling, or by contact with brush and the like when moving along the stream.

Whenever the rate of evaporation reduces considerably due to drying of the outer surface of the creel, it may be dipped in water, such as a stream or lake, while holding apron 10 out of contact with the water, and thus the rate of evaporation may be retained at maximum for the prevailing atmospheric temperature. In so doing, it is unnecessary to remove the contents if care is taken to prevent shipping in water at the top.

After a given period of use, the contents may be removed, the lining member may be drawn to the dotted line position of Fig. 2, and thoroughly cleaned as by washing with soap and water or merely by rinsing with water according to actual requirements. Also, by flexing the creel while the lining is thus extended, sufficient air is drawn into the interior to insure drying of the inner surface of the container. After being dried and cleaned in this manner, the creel may be stored, as by hanging on a hook or the like until required for use again.

In the preceding description, I have set forth the properties required in the inner and outer members of the assembly. Various compositions may be used for the outer member, such as canvas, duck, flannel, and similar fabrics, although I have found that a flax canvas is particularly suited because of its excellent water absorbent properties and its durability under conditions of rough usage. Similarly, various compositions may be used as the flap and inner lining member. I prefer to use a vinyl plastic film, but any suitable natural or artificial film which is water-impervious and has the desired heat conductivity and flexibility will be satisfactory for this purpose. Examples of materials particularly suited are compositions of the class of polystyrene, vinyl chloride and vinyl acetate, methyl methacrylate, butadiene and natural rubber.

In the foregoing description, the invention has been described particularly with reference to the form illustrated in the accompanying drawings. While this form of the invention is well suited for the intended purpose, it will be apparent that variations in the construction and design may be resorted to.

What I claim and desire to secure by Letters Patent is:

1. A fishing creel comprising a bag-like container having an inner water-impermeable heat-conductive pocket portion for preserving fish formed as a continuous imperforate sheet of material and having a contiguous exterior surface covering for said pocket portion, at least a substantial portion of said exterior surface covering being formed of a water-permeable absorbent material maintained in close proximity to said pocket portion so as to cool the contents thereof by evaporation of contained moisture from said absorbent material, at least one surface of said container being apertured to permit circulation of atmospheric air between said inner pocket portion and said exterior surface covering, the ends of the sheet comprising the inner pocket portion being adapted to lie in a common plane when the container is closed and being separable to provide an access opening to the inner pocket portion, and means including a closure carried on the container for preventing entrance of atmospheric air to the interior of the inner pocket portion when said access opening is not in use.

2. A fishing creel according to claim 1, wherein said exterior surface covering is formed from water absorbent canvas, and wherein said inner pocket portion is in the form of a vinyl plastic sheet.

3. A fishing creel according to claim 1, wherein the inner water-impermeable pocket portion is withdrawable from within the contiguous exterior surface covering for cleaning purposes when the closure is in open position.

4. A fishing creel comprising a bag-like container having an inner water-impermeable heat-conductive pocket portion for preserving fish formed as a continuous imperforate sheet of material and having a contiguous exterior surface covering for said pocket portion, at least a substantial portion of said exterior surface covering being formed of a water-permeable absorbent material maintained in close proximity to said pocket portion so as to cool the contents thereof by evaporation of contained moisture from said absorbent material, at least one surface of said container being apertured to permit circulation of atmospheric air between said inner pocket portion and said exterior surface covering, the ends of the sheet comprising the inner pocket portion being adapted to lie in a common plane when the container is closed and being separable to provide an access opening to the inner pocket portion, means including a closure carried on the container for preventing entrance of atmospheric air to the interior of the inner pocket portion when said access opening is not in use, and flap-like water-impervious means attached to the container in a position to be interposed between said container and the body of the user of the creel.

5. A fishing creel comprising a bag-like container having an inner water-impermeable heat-conductive pocket portion for preserving fish formed as a continuous imperforate sheet of material and having a contiguous exterior surface covering for said pocket portion, at least a substantial portion of said exterior surface covering being formed of a water-permeable absorbent material maintained in close proximity to said pocket portion so as to cool the contents thereof by evaporation of contained moisture from said absorbent material, at least one surface of said container being apertured to permit circulation of atmospheric air between said inner pocket portion and said exterior surface covering, the ends of the sheet comprising the inner pocket portion being adapted to lie in a common plane when the container is closed and being separable to provide an access opening to the inner pocket portion, means including a closure carried on the container for preventing entrance of atmospheric air to the interior of the inner pocket portion when said access opening is not in use, and a piece of water-impervious material attached to and carried by the exterior surface covering in a position to be interposed between said exterior surface covering and the body of the user of the creel.

6. A fishing creel comprising a bag-like container having an inner water-impermeable heat-conductive pocket portion for preserving fish formed as a continuous imperforate sheet of material and having a contiguous exterior surface covering for said pocket portion, at least a substantial portion of said exterior surface covering being formed of a water-permeable absorbent material maintained in close proximity to said pocket portion so as to cool the contents thereof by evaporation of contained moisture

from said absorbent material, at least one surface of said container being apertured to permit circulation of atmospheric air between said inner pocket portion and said exterior surface covering, the ends of the sheet comprising the inner pocket portion being adapted to lie in a common plane when the container is closed and being separable to provide an access opening to the inner pocket portion, means including a closure carried on the container for preventing entrance of atmospheric air to the interior of the inner pocket portion when said access opening is not in use, and flap-like water impervious means attached to the container in a position to be interposed between said container and the body of the user of the creel, the apertures in said container being provided in the wall of the exterior surface covering which is located between the adjacent wall of the inner pocket portion and said flap-like water-impervious means.

7. A fishing creel comprising a bag-like container having an inner water-impermeable heat-conductive pocket portion for preserving fish formed as a continuous imperforate sheet of material and having a contiguous exterior surface covering for said pocket portion, at least a substantial portion of said exterior surface covering being formed of a water-permeable absorbent material maintained in close proximity to said pocket portion so as to cool the contents thereof by evaporation of contained moisture from said absorbent material, there being an air space extending between the inner pocket portion and the contiguous exterior surface covering and at least one surface of said container being apertured to permit circulation of atmospheric air between said inner pocket portion and said exterior surface covering, the ends of the sheet comprising the inner pocket portion being adapted to lie in a common plane when the container is closed and being separable to provide an access opening to the inner pocket portion, and means including a closure carried on the container for preventing entrance of atmospheric air to the interior of the inner pocket portion when said access opening is not in use.

8. A fishing creel comprising a bag-like container having an inner water-impermeable heat-conductive pocket portion for preserving fish formed as a continuous imperforate sheet of material and having a contiguous exterior surface covering for said pocket portion, at least a substantial portion of said exterior surface covering being formed of a water-permeable absorbent material maintained in close proximity to said pocket portion so as to cool the contents thereof by evaporation of contained moisture from said absorbent material, there being an air space extending between the inner pocket portion and the contiguous exterior surface covering and at least one surface of said container being apertured to permit circulation of atmospheric air between said inner pocket portion and said exterior surface covering, the ends of the sheet comprising the inner pocket portion being adapted to lie in a common plane when the container is closed and being separable to provide an access opening to the inner pocket portion, means including a closure carried on the container for preventing entrance of atmospheric air to the interior of the inner pocket portion when said access opening is not in use, and flap-like water-impervious means attached to the container in a position to be interposed between said container and the body of the user of the creel, the apertures in said container being provided in the wall of the exterior surface covering which is located between the adjacent wall of the inner pocket portion and said flap-like water-impervious means.

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