Nov. 26, 1940. C. PIRES 2,222,914

PORTABLE CONTAINER COMPLETE WITH FILTER, FOR WATER OR OTHER LIQUIDS

Filed Aug. 6, 1938

Fig. 1.

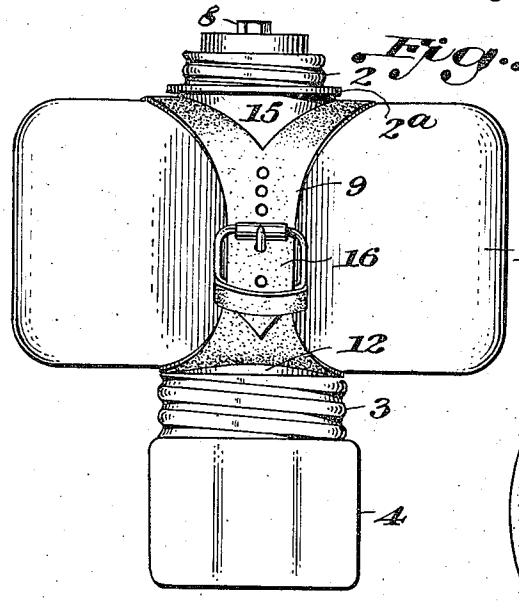


Fig. 2.

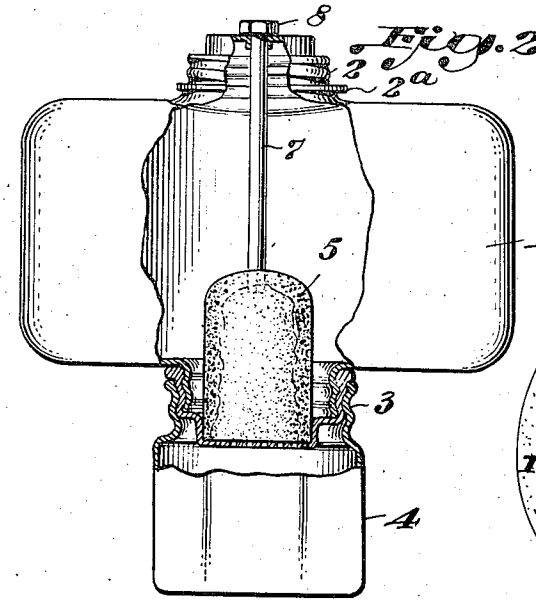


Fig. 3.

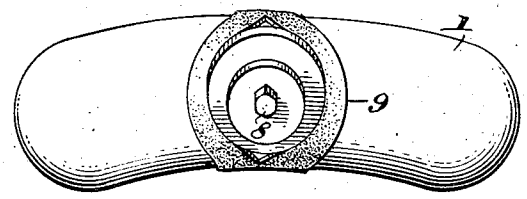
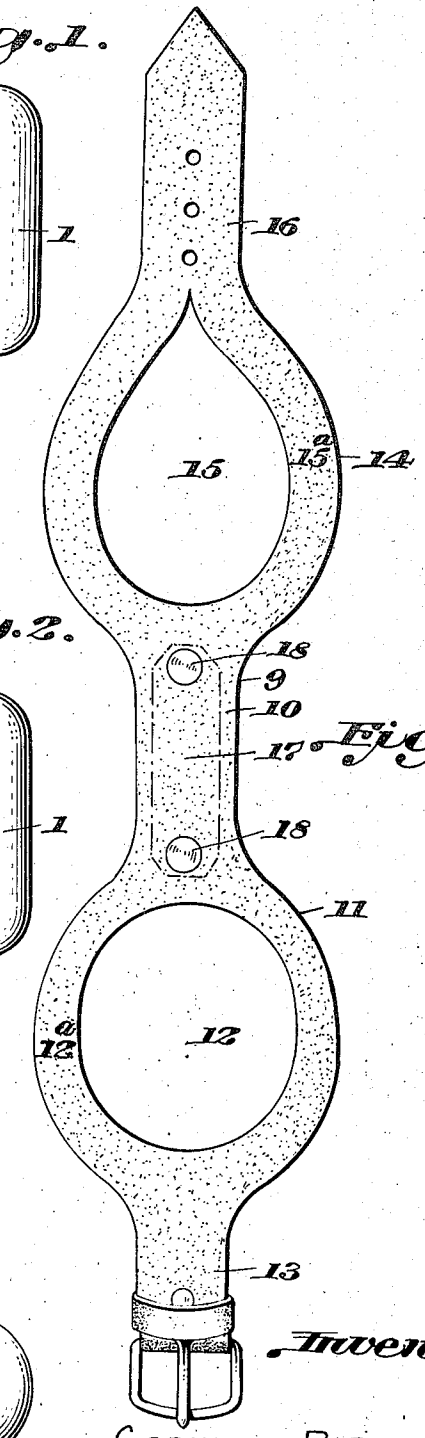


Fig. 4.



Inventor,

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By Young, Emery & Thompson Attys.

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UNITED STATES PATENT OFFICE

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PORTABLE CONTAINER COMPLETE WITH FILTER, FOR WATER OR OTHER LIQUIDS

Cornelio Pires, Sao Paulo, Brazil

Application August 6, 1938, Serial No. 223,544

1 Claim. (Cl. 210—62)

This invention consists essentially of a water container, readily portable and complete with its own filter, thus assuring at any moment, water of absolute purity; and relates preferably to a canteen possessing the advantages above mentioned.

As is well known the existing type of canteen is the container in most general use, amongst all portable water vessels, for it constitutes an essential part of military equipment and it is in common use by workmen in railroad gangs and the like, in all cases where service requirements necessitate their presence at places distant from supplies of drinking water. However, the existing type of canteen, although it fulfills requirements satisfactorily as a water container does not assure the soldier on the march, or the workman in the depths of the woods a constant supply of pure water, always comparatively fresh. Finally, soldiers and workmen frequently run the risk of filling their canteens with polluted water, and of contracting fevers and intestinal illnesses as is common knowledge.

Consequently this invention represents a great hygienic advantage, from the point of view of the individual, soldier, workman or others, and a further great advantage from the collective point of view, for it reduces considerably the sickness percentage in army units in action or on the march, and in workmen's gangs in railroad maintenance or platelaying services, or roadmaking.

The invention is illustrated in the annexed designs in the form of a canteen, in which designs:

Fig. 1 shows an outside view of the canteen in accordance with the invention, seen from the back;

Fig. 2 shows the same canteen in section, indicating the inside arrangement;

Fig. 3 is a plan of the upper part of the canteen, showing its bulged form; and

Fig. 4 is a plan of the strap to support the canteen in correct position, to hang from a military belt or a belt of any other kind.

As will be clearly seen in Figs. 1 and 2, the container or canteen in accordance with this invention consists essentially of: a body of aluminium or other suitable light weight material 1, slightly curved inward so as to be comfortably adaptable to the hip of its carrier, Figure 3, having at its upper part a perforated stopper 2, and at its lower part a comparatively wide spout or neck 3, provided with a stopper 4, which hermetically seals the spout 3 and at the same time serves as a drinking vessel; a filter cylinder 5 conveniently secured to the inner part of the spout 3 and projecting inwardly into the canteen body 1, up to a certain height; a vertical stem 6 firmly secured at one end to the filter cylinder 5 with its other end, which is threaded, passing through the central hole 7 of the top stopper 2 projecting slightly beyond and above the said stopper; a nut, 8, screwed on to the threaded projecting extremity of the stem 6 so as to secure the said stem and the filter cylinder 5 in position; a strap 9, with a narrow centre part 10, extending downward in a wide part 11, having a circular aperture, also wide, 12, ending in a narrow extremity with a buckle 13, the said central part of the strap 10 being extended towards its other end in a wide part 14, with an oval aperture 15, ending in a narrow tip with holes 16, to fasten up in the usual way with the aforesaid buckle; and a strap-guide 17 on the inner side of the centre part 10, shown by dotted line—fastened to the belt by rivets 18.

To apply the belt 9 to the canteen 8, the belt aperture 12 is threaded over the spout 3, until its annular rim 12*a* gets between the upper and the lower surfaces of the said spout of the canteen 1. In this way, the narrow part 10 passes to the other side of the canteen, opening 15 being threaded over the stopper 2 in such a way that its annular rim 15*a* fits into flange 2*a* and the corresponding upper surface of canteen 1. Obviously the two opposite ends of the belt 16 and 13 meet, and can then be buckled together. Finally the canteen may be attached to the body belt or the like, by threading the same body belt through the strap-guide 17 as far as convenient.

By virtue of the arrangement of the filter 5 in the lower part of the canteen, the water contained in the canteen will be filtered up to the last drop. On the other hand the liquid eventually warmed by the heat of the human body or by the outside temperature will lose part of its heat in the filtering cylinder and will thus be comparatively fresh when it reaches the mouth of the user of the canteen.

It will be understood that this invention is applicable to all kinds of portable vessels such as, for example, bottles, flasks and the like.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:

A portable canteen comprising a reservoir having an outlet opening in the lower portion thereof for the discharge of water therefrom by gravity, a filler opening in the upper portion of said canteen, a closure for the filler opening having an aperture therein, a filter body projecting through the outlet opening into the interior of the reservoir, a stem projecting from the filter body through the aperture in the filler closure, means for securing the stem in said aperture, and a receptacle detachably secured to said outlet opening for closing said outlet opening and collecting filtered water.

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