March 20, 1956 A. GEROSA 2,738,531

MOPPING BUCKETS

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FIG. 1

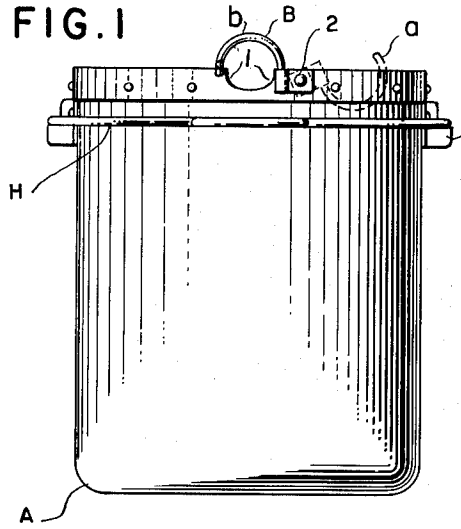


FIG. 2

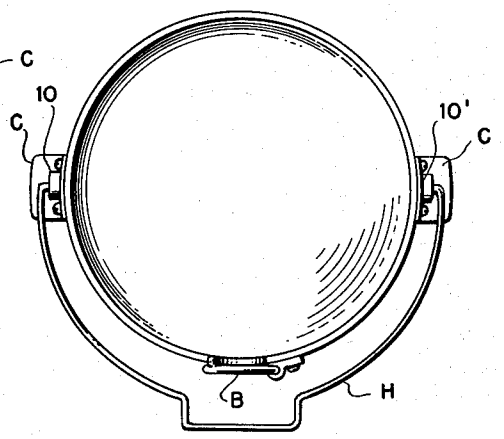


FIG. 3

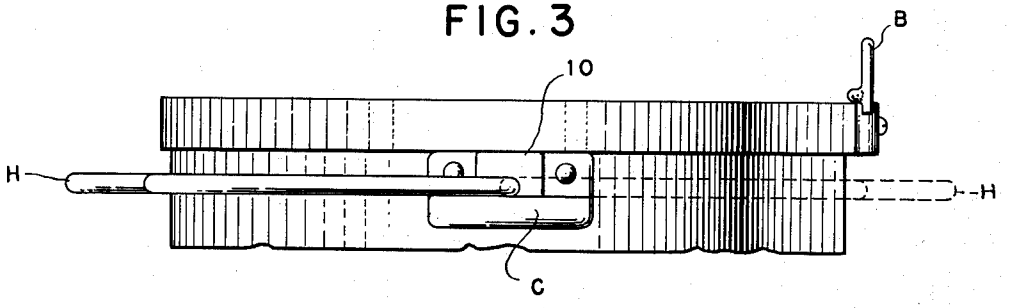


FIG. 4

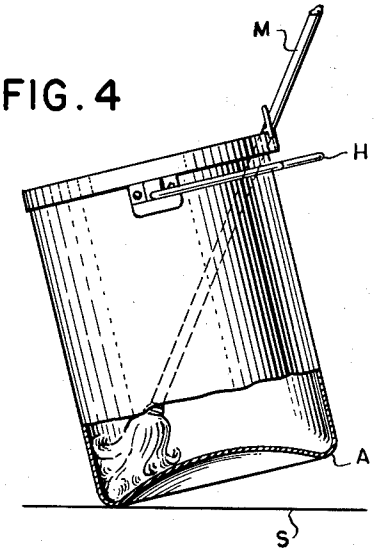
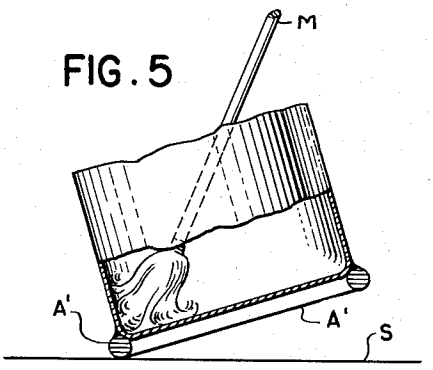


FIG. 5



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FIG. 6

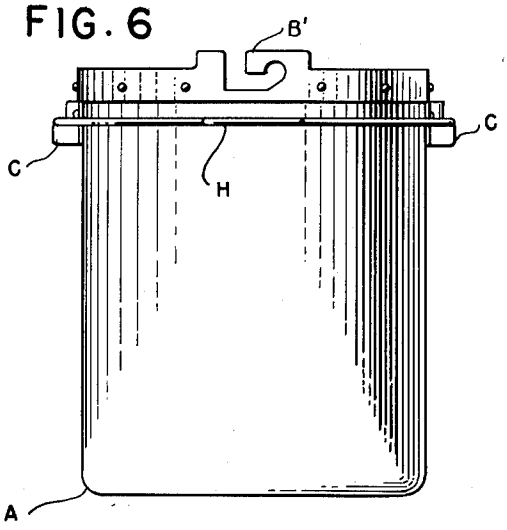


FIG. 7

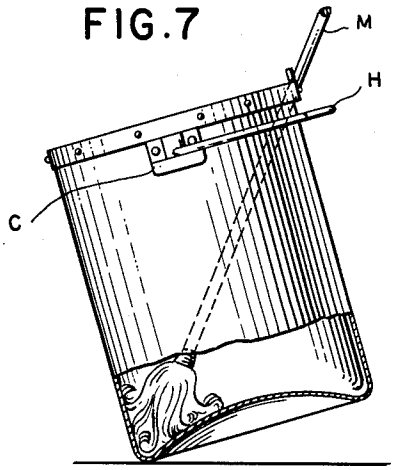


FIG. 8

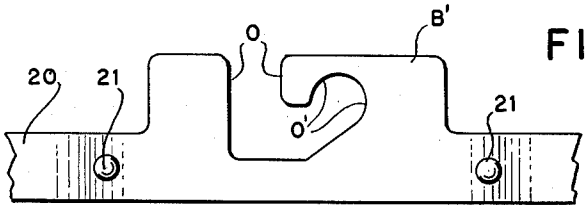


FIG. 9

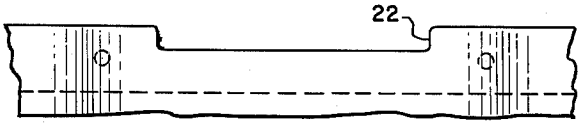


FIG. 10

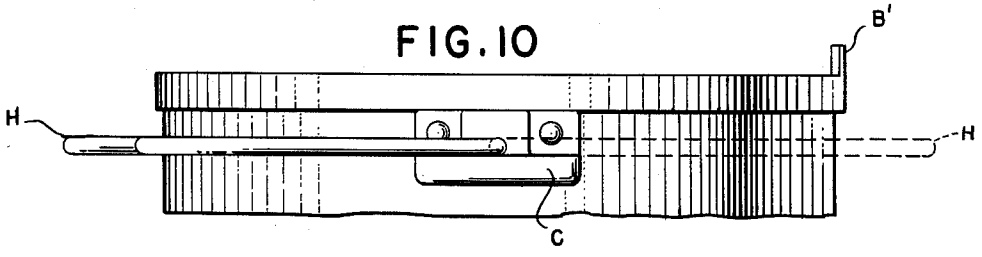
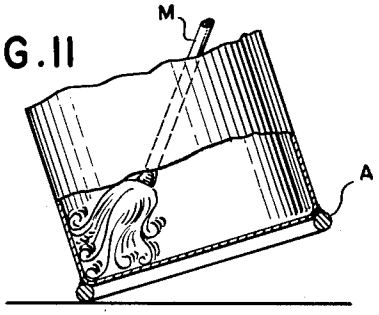


FIG. 11



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United States Patent Office 2,738,531 Patented Mar. 20, 1956

2,738,531

MOPPING BUCKETS

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Application June 29, 1953, Serial No. 364,553

4 Claims. (Cl. 15—140.2)

This invention relates to mopping buckets and more particularly to mopping buckets of the type designed to contain heated liquids and still more particularly to mopping buckets of the type known generally in the art as roofer's mopping buckets.

Heretofore in the art roofer's mopping buckets have consisted of a flat bottomed straight sided pail or bucket comprised of heavy guage sheet metal with the usual handle or bail attached thereto adjacent the top and having a liquid capacity of 8 to 10 gallons. With such type of bucket it requires two men to lift the bucket when full to capacity from its rest position on a roof surface to transport the bucket to a new rest position. Frequently the flat bottom of the bucket becomes attached to the roof surface and is difficult to detach when the bucket is to be lifted and moved to a new rest position and the roofers are in constant danger of being severely burned by the hot tar present in the bucket during the lifting and transporting of the bucket.

One of the objects of the present invention is to provide a bucket adapted for use as a roofer's mopping bucket which is readily detachable from and easily movable along a roof surface.

Another object is to provide an improved mopping bucket, particularly one adapted to contain heated liquids adapted to be tilted and to be moved along the roof surface when in said tilted position.

Still another object of the invention is to provide a roofer's mopping bucket having a bottom provided with a rounded ring shaped area contacting the roof surface when in rest position and provided with means adjacent the top edge of the bucket to engage with the handle of a mop seated within the bucket in such manner as to provide a lever means for up-tilting the bucket to a position providing a substantially ball-point contact with the roof surface and to provide a means for pushing or pulling the up-tilted bucket along the roof surface to a new rest position.

Other objects will be apparent as the invention is more fully hereinafter disclosed.

In accordance with these objects I have devised an improved type of mopping bucket which is of particular utility for buckets containing heated liquids, which substantially eliminates the effort and hazards heretofore attending the use of prior art mopping buckets, which improved type of bucket is characterized by having a bottom provided with a rounded ring area for contacting the work surface and with means adjacent the top of the bucket adapted to engage or to be engaged with a mop handle when the mop is seated within the bucket, thereby to convert the mop into a lever arm providing a lever arm means for up-tilting the bucket on the rounded ring contacting area to a position making a substantially ball-point contact with the work surface and for either pushing or pulling the bucket along the work surface to another rest position into which the bucket may be lowered by the said mop handle lever arm means.

The improved bucket of the present invention is adapted

to wide modification without essential departure from the invention as will be apparent from the two specific embodiments of the same illustrated in the accompanying drawings.

Referring to the drawings:

Figs. 1 to 5 illustrate one specific example and Figs. 6 to 11 inclusive, illustrate the second specific example, in each of which the rounded ring area improvement feature of the bottom of the bucket is adapted to be used in at least two forms.

The invention will first be disclosed with respect to the specific embodiment illustrated in Figs. 1 to 5 inclusive. Referring to these figures:

Fig. 1 is a side elevational view of a mopping bucket, incorporating the improvement features of the present invention of the type specifically designed for use by roofers;

Fig. 2 is a top plan view of same;

Fig. 3 is an enlarged section of the top or open end of the bucket;

Fig. 4 is a side elevational view partly in section of the said bucket in up-tilted position; and

Fig. 5 is a similar view showing a modification of the present invention.

The type of bucket illustrated in Figs. 1 to 5, inclusive, is one particularly adapted for use as a roofer's mopping bucket, and is comprised of heavy sheet iron with welded joints providing a leak-proof structure and of such size as to provide a capacity of 8 to 10 gallons of hot liquid tar (temperature 375° to 400° F.) when about three-fourths full. The various improvement features of the bucket illustrated are identified by the letters A—A', B and C.

Improvement feature A—A' consists essentially of a means providing a rounded ring contact of the base or bottom of the bucket with a work surface when in rest position thereon. The object of this means is to reduce the area of the bottom in contact with the work surface to a minimum, thereby to reduce to the minimum the force required to up-tilt the bucket by the lever arm means provided by the means B or to raise the bucket vertically by the handle or bail H.

As shown in section in Figs. 4 and 5 this means can be provided by either of the two modified forms A or A'. Form A consists in shaping the normally flat bottom of the bucket to be concave and rounding off the outer periphery thereof substantially as shown in Fig. 4 in section.

The alternative means A' consists in welding onto the normally flat bottom of the bucket a ring member (A') comprised of large diameter rod or wire, said ring member having a diameter slightly greater than the outside diameter of the bucket.

In both of these forms A and A' it is clearly apparent that when the bucket is in the up-tilted position shown in Figs. 4 and 5, the bucket is in a substantial ball-point contact with the work surface, thereby providing the minimum resistance to movement of the bucket along the work surface to a desired new rest position.

To provide the means for up-tilting the bucket to the position shown in Figs. 4 and 5, the means B, which may be generally characterized as hook means, is provided on the bucket. Means B consists substantially of a hook latch means movably mounted adjacent recess or socket **1** by means of rivet **2** to be moved from dotted line position *a* to solid line position *b*, thereby to leave open or to close, respectively, the said recess or socket **1**.

The hook latch means B is comprised of large diameter rod or wire of the requisite strength to sustain without bending the full weight of the bucket and its liquid contents and the diameter of the recess **1** and the diameter of the hook latch means are selected with respect to the normal diameter of the handle M of the usual type of roofer's mop to receive the mop handle when disposed therein as shown in Figs. 4 and 5 with very little play

therebetween, the hook latch means when in closed position, and the wall of the socket or recess **1** being disposed substantially opposite each other in a common vertical plane and respectively overlying and underlying the upper part of the handle M.

With the mop handle in position in the recess **1**, as shown in Figs. 4 and 5, and with the latch means B located in closure position *b* over the mop handle M, the handle M provides a lever means for the roofer to up-tilt the bucket to the position indicated in Figs. 4 and 5, with minimum effort and to either push or pull the bucket over the work surface S on the ball-point contact provided by the means A to a new rest position, to which the bucket may be lowered gently and with minimum disturbance or splashing of the hot tar liquid present in the bucket.

Referring now to improvement C, this consists of a stop plate or bar for holding the bucket handle or bail H in a substantially horizontal position and out of contact with the side of the bucket. The particular size, shape and configuration of this stop means may vary widely without essential departure from the invention. In the form illustrated is formed integral with the bail socket members **10—10** secured by rivets to the sides of the bucket.

Referring now to Figs. 6 to 11, inclusive:

Fig. 6 is a side elevational view of the improved bucket of this second specific example;

Fig. 7 is a tilted side elevational view of the same partly in section;

Fig. 8 is an enlarged fragmentary view of the means B′ shown in Fig. 6;

Fig. 9 is an enlarged fragmentary view of the top of the bucket underlying the means B′;

Fig. 10 is an enlarged view of the top of the bucket; and

Fig. 11 is a fragmentary view partly in section illustrating a modified form A′ of the means A of Figs. 1 to 5.

It is believed apparent that the means A—A′ and the means C hereinabove disclosed and illustrated in Figs. 1 to 5, inclusive, have been retained in this second specific embodiment and that the major change made is in the means B′.

This means B′ functionally is the equivalent of the means B shown in Figs. 1 to 5, inclusive, and in some respects is somewhat better than the means B of the first specific embodiment in that it eliminates the movable hook latch means that is likely to become encrusted with cooled tar with resulting interference to its movability.

The means B′ consists substantially of a bayonet-type recess into which the mop handle may be moved to provide the lever arm means for up-tilting the bucket and either pushing or pulling the bucket along the work surface.

As indicated in the drawings, the means B′ consists of an annular strap member **20** secured by rivets **21** onto the top edge of the bucket, substantially as indicated, and overlying cut-out recess **22** in the top edge of the bucket, the said strap **20** being provided with the bayonet-type cut-out section B′ for positioning over the recess **22**, as indicated in Figs. 8 and 9. The particular size, shape and configuration of the opening *o* in the section B′ may vary widely without essential departure from the invention but the minimum diameter of the opening *o* or of the recess *o′* should approximate but be larger than the diameter of the mop handle M.

Otherwise the remaining elements of the bucket of Figs. 6 to 11 inclusive, are substantially identical to those hereinabove described with respect to Figs. 1 to 5 inclusive, and are similarly identified in these figures.

It is believed apparent from the two specific examples illustrated and described that the present invention is adapted to be widely modified without essential departure therefrom and all such modifications and departures are contemplated as may fall within the scope of the following claims.

What I claim is:

1. The combination of a roofer's or like mopping bucket and a mop or the like having the customary elongated handle, the bucket having a closed bottom and open top, hook means on the bucket adjacent the upper rim portion of the same to engage the mop handle intermediate its ends and hold the same locked to the side wall of the bucket when the mop is disposed at rest within the bucket and the upper part of the mop handle projects outside the bucket at an inclination for moving the bucket on a work surface, said hook means having a lower portion and an upper portion lying in substantially a common plane parallel with the longitudinal axis of the bucket, the upper portion overlying the lower portion, the lower portion of the hook means having a recess in its upper side, said recess facing upwardly and providing for freely entering an intermediate portion of the mop handle therein, the upper portion of the hook means being concave at its under side and rounded to correspond generally to the transverse curvature of the mop handle, said upper and lower portions cooperating with each other to form a restraining enclosure for the handle of a size sufficiently greater than the cross sectional size of the handle to provide for positioning the handle between said upper and lower portions when the mop is disposed at rest within the lower part of the bucket adjacent the bottom thereof and the mop handle extends at an inclination and projects outside the bucket, whereby the inclined mop handle when engaged with the hook means forms a lever by which the bucket may be tilted on its bottom rim portion and readily moved on a work surface.

2. The roofer's mopping bucket and mop defined in claim 1 and in which the bottom of the bucket is provided with a rounded ring area about the periphery thereof for contact with a work surface when the bucket is in rest position thereon, and said rounded ring area providing a substantially ball-point contact of the bottom of the bucket with the work surface when the bucket is tilted on said rounded ring area through the mop handle.

3. The roofer's bucket and mop defined in claim 1 and in which the hook means consists of a plate-like part substantially rigid with the upper rim portion of the bucket, said plate-like part being provided with a slot therein having an entrance portion extending downwardly from its upper edge, a portion extending laterally substantially horizontally from one side of said entrance portion and a portion extending laterally and upwardly from the inner end of said horizontally extending portion of the slot, the upper edge of said upwardly and laterally extending portion of the slot being concave.

4. The roofer's bucket and mop defined in claim 1 and in which the upper portion of the hook means consists of a substantially semi-circular shaped latch member pivotally mounted at one end on the rim portion of the bucket near one end of the recess in the upper side of the lower portion of the hook means to swing in a vertical plane from a position in which said recess is open to receive an intermediate portion of the mop handle to a position closing the recess and securing the mop handle in position therein.

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