

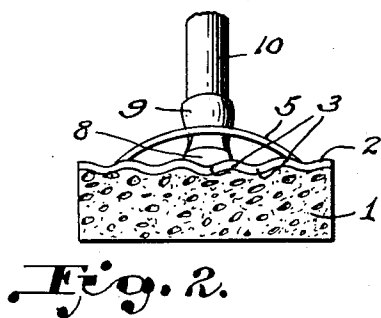
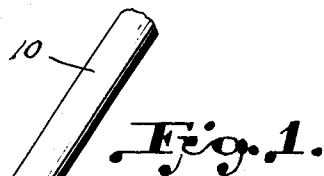
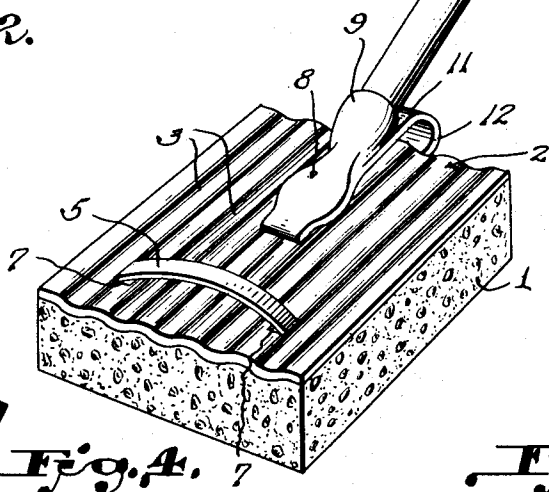
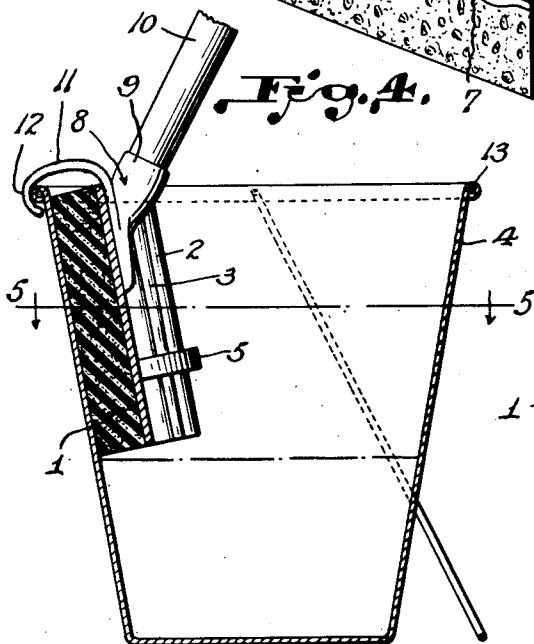
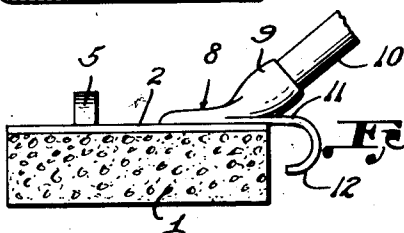
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S. P. VIDAL

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MOP WITH WRINGER MEANS

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INVENTOR.
Steven P. Vidal

BY

W. B. Moore
ATTORNEY.

UNITED STATES PATENT OFFICE

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MOP WITH WRINGER MEANS

Steven P. Vidal, Albuquerque, N. Mex.

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This invention relates to improvements in mops having means associated therewith for squeezing liquid therefrom.

The principal object of the present invention is to provide a mop of absorbent material having a novel backing plate and supporting means thereon whereby the mop may be so supported on the rim of a pail or receptacle and the liquid squeezed therefrom.

Another object is the provision of a mop arranged on a flexible backing plate which is adapted to flexibly conform to the contour of a receptacle upon which it is supported to facilitate the squeezing of liquid from the absorbent mop material.

A further object is the provision of a mop embodying a flexible absorbent material backing plate having a hook member extending therefrom to enable the mop to be supported on a pail and to be so actuated that the mop material may be compressed against the inside of the pail and liquid squeezed therefrom.

These and other objects of the invention will be apparent as the specification is considered with the accompanying drawings wherein

Figure 1 is a perspective view of the entire mop structure;

Figure 2 is an end view of the mop;

Figure 3 is a side view of the mop;

Figure 4 is a cross sectional view of the mop and pail; and

Figure 5 is a section on the line 5-5 of Figure 4.

Referring more particularly to the drawings, wherein similar reference characters designate like parts throughout the several views, numeral 1 indicates the mop material which is preferably of cellulose sponge or the like cut into a substantially rectangular block, although it is apparent that the mop material may assume other shapes. The mop material is suitably affixed by an adhesive or the like, not shown, to the underside of a substantially rectangular backing plate 2.

This plate is formed of flexible metal which is provided with a series of corrugations or shallow grooves 3 which extend or are oriented in the same general direction of the handle and at the forward edge of the mop, and at the same time tend to enhance the flexibility of the plate so that the same will flex transversely, or perpendicular to the mop handle. This is essential in order that the mop will conform with uniform pressure to the concave shape of the pail or receptacle 4 upon which the mop will interengage by

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means of hook 11 at the heel of the mop, the operation of which is hereinafter described. A relatively narrow arcuate strap or brace of spring material 5 is formed with laterally extending feet 6 on the ends thereof which extend downwardly and laterally through spaced openings 7 in the plate 2 and are suitably secured by welding or the like, not shown, to the underside of the plate. The strap or spring 5 acts as a brace or support to impart sufficient transverse rigidity to the entire plate surface during squeezing operation, and to return it to its normal flat surface, as well as prevent transverse flexing or bending of the plate during cleaning or scrubbing operations. The combined transverse flexibility of the plate and the added rigidity of the spring assures maximum elimination of liquid from the absorbent mop because of the need of compression against a concave surface. The hook in itself can be interengaged with the rim of the pail by manipulation of the handle and thereby permits the freezing of water from the absorbent material of the mop by compression against the inside of the pail and without need of any other device, platform, or additional hooks to such devices.

A socket member 8 of metal or other suitable material suitably secured to the upper face of plate 2 adjacent the rear end thereof is formed with a tubular socket 9 for the reception of the end of a handle 10. The socket member preferably extends upwardly and rearwardly at an angle with respect to the plate 2 so that the handle 10 and mop may be handled with ease to move the latter over a surface to be cleaned.

At the heel of the mop and extending rearwardly from the socket member 8 and rigidly formed thereon is a relatively flat hook member 11 which is curved downwardly and inwardly, as at 12, to form a hook adapted to extend and interengage over the beaded rim 13 of the pail 4, as best shown in Figure 4. The lower end or tip of the hook 12 is spaced slightly from the end of the sponge mop and terminates at a point intermediate the top and bottom of the mop so that the latter may be compressed against the inside or concave surface of the pail when the handle is moved.

When it is desired to remove liquid from the mop, it is only necessary to insert the latter into the pail and so manipulate the handle that the hook 12 extends over the pail and interengages its rim 13 as a fulcrum. In this position, the mop is in its normal flat position. By moving the handle in a clockwise direction, or from left to

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right viewing Figure 4, about the pivot 12 and rim 13 of the pail as a fulcrum, the mop is compressed against the inside wall of the pail so that the mop will conform to the curvature of the pail and will contact the same throughout the area of the active mop surface. This arcuate conformity or shape of the sponge mop is made possible by action of the handle through the hook 12 and by virtue of the corrugations 3 in the backing plate 2 which permits of transverse bending of the latter against the tension of the strap 5. It will thus be seen that the corrugations 3 extending from end to end of the plate brace the latter so as to prevent the same from bending in the direction of the mop handle. In other words, the corrugations permit of the plate being flexed or bent transversely only. When so moved against the pail, the sponge material will be compressed so that liquid will be squeezed therefrom and caused to flow into the pail. Upon the removal of pressure from the mop handle or the movement of the latter in a counter-clockwise direction, also viewing Figure 4, it will be apparent that the tension of the strap 5 will cause the plate 2 and mop to resume their normal flat position.

While I have shown and described a preferred form of my mop, it is to be understood that various changes and improvements may be made therein without departing from the scope and spirit of the appended claims.

Having thus described my invention what I claim is:

1. A mop device comprising a block of absorbent material, a backing plate arranged on said block, said plate being grooved for permitting transverse flexing thereof, a hook member on said backing plate for interengagement with the rim of a receptacle, and a handle on said plate for moving said plate and compressing said block against the receptacle wall.

2. A mop device comprising a block of absorbent material, a substantially flat backing plate arranged on said block, said plate having grooves therein to permit of transverse flexing of said plate, a hook member extending from one end of said plate and being adapted to interengage with the rim of a pail, and a handle on said plate for pivotally moving said plate and compressing said block against the pail wall, said grooves extending substantially in the direction of said handle.

3. A mop device comprising a block of absorbent material, a normally substantially flat backing plate arranged on and secured to one face of said block, said plate having corrugations therein

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to permit of transverse flexing of said plate, a hook member extending from the rear end of said plate and overlying the rear end of said block and being adapted to interengage with the rim of a pail, and a handle on said plate for pivotally moving said plate and compressing said block against the pail wall, said corrugations extending substantially in the direction of said handle.

4. A mop device comprising a block of absorbent material, a normally substantially flat backing plate arranged on and secured to one face of said block, said plate having corrugations therein to permit of transverse flexing of said plate, a hook member extending from the rear end of said plate and overlying the rear end of said block and being adapted to interengage with the rim of a pail, and a handle on said plate for pivotally moving said plate and compressing said block against the pail wall, said corrugations extending substantially in the direction of said handle and means on said plate for causing the same to resume its normal flat position after the compression of said block.

5. A mop device comprising a block of absorbent material, a normally substantially flat backing plate arranged on and secured to the upper face of said block, said plate having corrugations therein extending from one end to the other to permit of transverse flexing only of said plate, a hook member extending from the rear end of said plate and overlying and spaced from the rear end of said block and being adapted to interengage with the rim of a pail, and a handle mounted on said plate adjacent said hook, said corrugations extending substantially in the direction of said handle, said handle being adapted for pivotally moving said plate and compressing said block against the pail wall whereby the block and plate will conform to the curvature of and have uniform pressure against the pail wall, and a spring strap to restore said mop to a flattened position.

STEVEN P. VIDAL.

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