Feb. 28, 1933. C. E. BENEDICT 1,899,845

MOP HOLDER

Filed Nov. 5, 1931 2 Sheets-Sheet 1

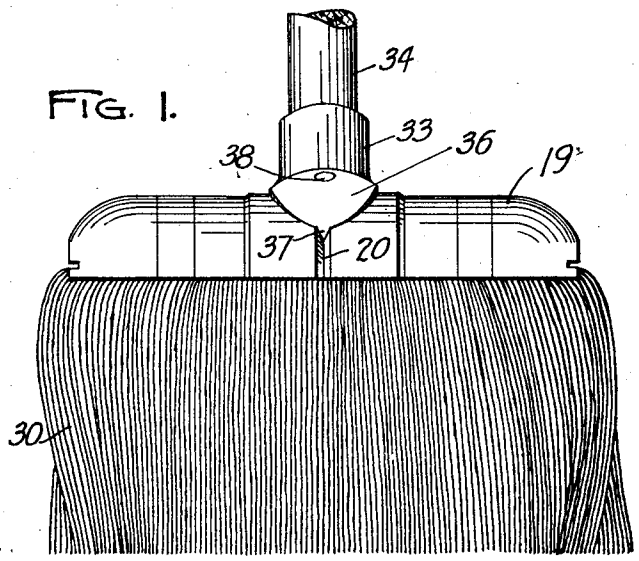


FIG. 1.

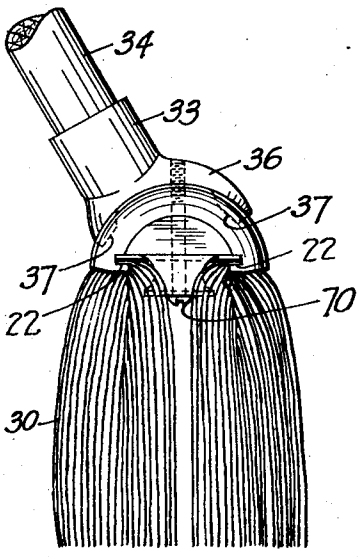


FIG. 2.

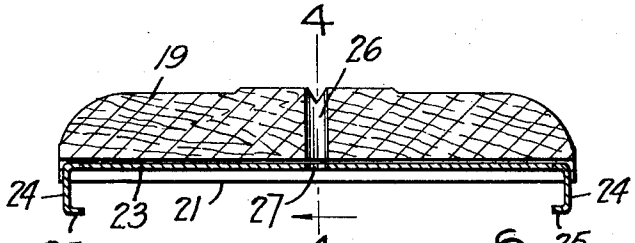


FIG. 3.

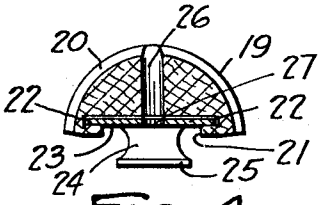


FIG. 4.

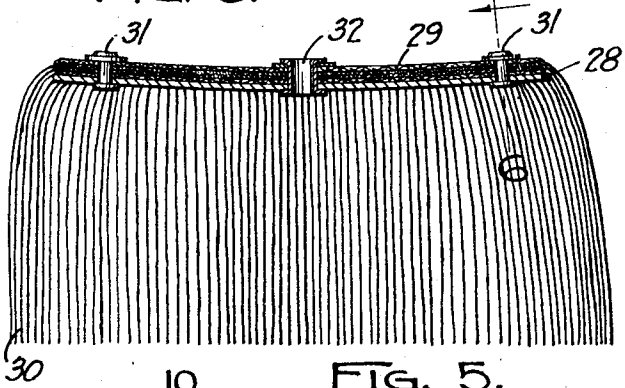


FIG. 5.

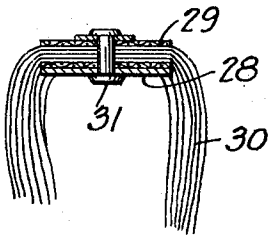


FIG. 6.

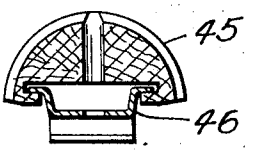


FIG. 11.

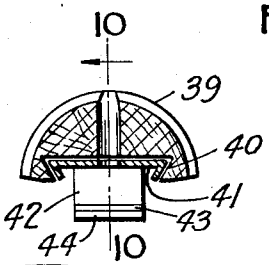


FIG. 9.

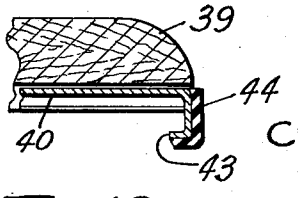


FIG. 10.

INVENTOR
CHARLES E. BENEDICT
BY
Rolland S. Trott
ATTORNEY

Feb. 28, 1933. C. E. BENEDICT 1,899,845

MOP HOLDER

Filed Nov. 5, 1931 2 Sheets-Sheet 2

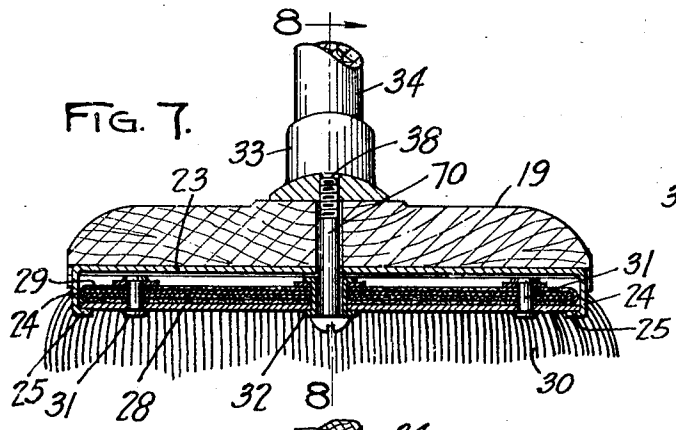


FIG. 7.

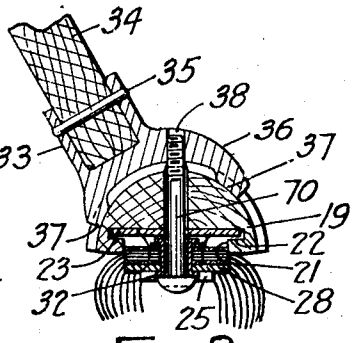


FIG. 8.

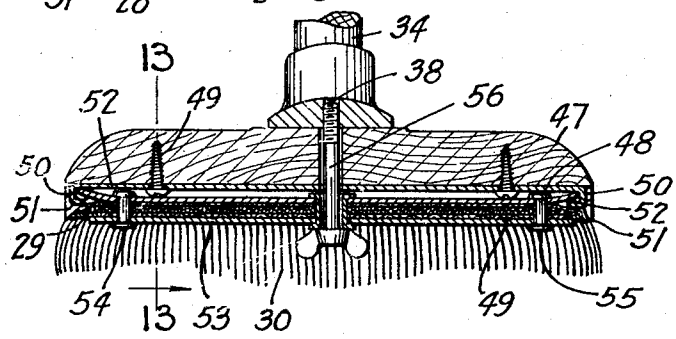


FIG. 12.

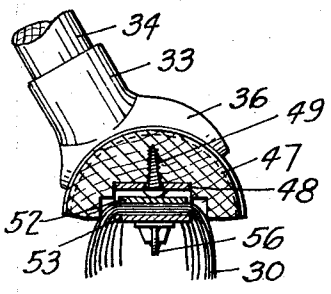


FIG. 13.

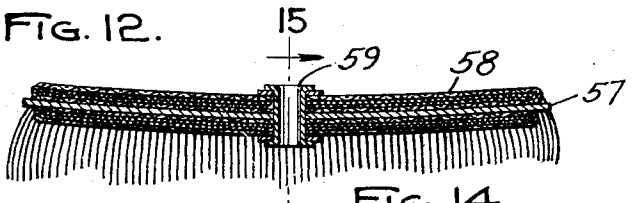


FIG. 14.

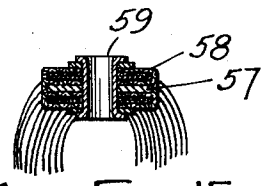


FIG. 15.

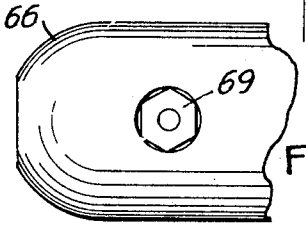


FIG. 18.

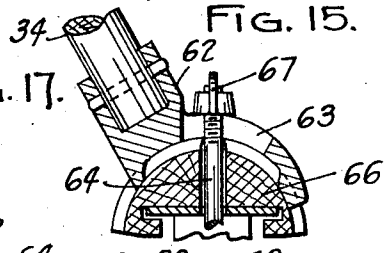


FIG. 17.

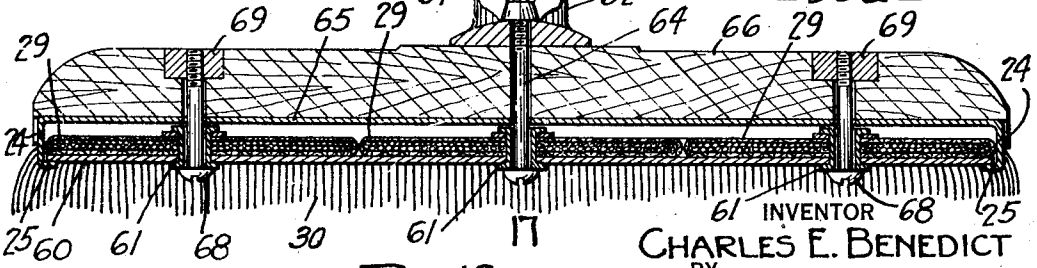


FIG. 16.

INVENTOR
CHARLES E. BENEDICT
BY
Rollard S. Trott
ATTORNEY

Patented Feb. 28, 1933 1,899,845

UNITED STATES PATENT OFFICE

CHARLES E. BENEDICT, OF DENVER, COLORADO

MOP HOLDER

Application filed November 5, 1931. Serial No. 573,098.

The principal object of this invention is to provide a small mop-holder for household use, to adapt a mop of the type in common use to be used for dry cleaning, sweeping, polishing or dusting, or as a substitute for a floor broom or brush.

A further object of the invention is to provide a mop-holder so designed as to eliminate the necessity of an extra cushion to prevent marring a floor.

A further object of the invention is to provide a mop-holder which will adapt a mop to clean by either pushing or dragging the same.

A further object of the invention is to provide a mop-holder which is designed to adapt a mop to push the more dense dirt ahead of it, and to collect the fine dust or dirt in the strings of the mop itself, thereby collecting all of the dirt and dust and leaving a perfectly clean floor.

A further object of the invention is to provide a mop-holder having a separable curved mop-head preferably of spring steel or brass, adapted to be attached to or integral with the binding web of the ordinary type of string or yarn mop, and adapted to be rigidly secured to the mop-holder proper by means of a clamping bolt which draws the spring steel or brass mop-head up firmly against the lower surface of the mop-holder thereby clamping said mop-head under spring tension against said mop-holder between metal clips at each end of said mop-holder, thereby making the entire unit easily and quickly assembled or dismantled as desired, without the aid of special tools or clamping devices which might cause injury to the hands.

A further object of the invention is to provide a mop-holder having a mop-head holder which is slightly longer than the mop-head, so that the mop strings form a bumper or cushion at the ends of the mop-holder, thereby preventing the marring of floors or furniture.

A further object of the invention is to provide a mop-holder so designed that no sharp or hard portions may come in contact with the floor, and having a minimum number of exposed metal parts which might scratch or mar furniture.

A further object of the invention is to provide a mop-holder which is separable in the sense that a portion of the holder called the mop-head, which is integral with or attached to the mop way, may be removed from the holder proper, thereby permitting the substitution of a similar unit consisting of a mop and integral mop-head portion in the same holder, to permit of laundering one mop while another is in use.

A further object of the invention is to provide a mop-holder which is separable in the sense that the mop-head integrally attached to the mop-way may be removed, thereby permitting the substitution of a similar unit, so that a number of mop units may be interchanged in the same holder for various purposes, such as the application of oil or wax, the dry cleaning of floors, the scrubbing of floors with water or soap solutions, and the like.

A still further object of the invention is to provide a modified form of the mop-holder of larger size for use in hotels, office buildings and the like, adaptable to having three ordinary string or yarn mops accommodated therein, having a single mop-head which may be integrally attached to the webs of three ordinary string or yarn mops side by side to provide a wide mopping unit.

Additional objects and advantages will be made manifest in the following description and in the accompanying drawings, in which,

Fig. 1 is an elevational view of the preferred form of mop-holder of my invention showing an ordinary string mop secured in said holder, the mop handle being broken off.

Fig. 2 is an end view of the same.

Fig. 3 is a vertical sectional view of the mop head holder longitudinally thereof.

Fig. 4 is a central vertical sectional view of the same taken on the line 4—4 of Fig. 3.

Fig. 5 is a side elevation of a mop showing the mop head attached to the mop web.

Fig. 6 is a transverse vertical sectional view of the same taken on the line 6—6 of Fig. 5.

Fig. 7 is a fragmentary view in section

and elevation showing the details of construction and assembly of the mop-holder.

Fig. 8 is a central vertical sectional view of the same taken on the line 8—8 of Fig. 7.

Fig. 9 shows a central vertical sectional view of a modified form of mop head holder.

Fig. 10 is a fragmentary longitudinal vertical sectional view of the same taken on the line 10—10 of Fig. 9.

Fig. 11 is a central vertical sectional view of another modified form of mop head holder.

Fig. 12 is a fragmentary view in section and elevation of a modified form of mop-holder.

Fig. 13 is a fragmentary view of the same partially in section and partially in elevation, the section being taken vertically on the line 13—13 of Fig. 12.

Fig. 14 is a fragmentary view in section and elevation of a mop having a modified form of mop-head integrally inserted in the web.

Fig. 15 is a central vertical sectional view of the same taken on the line 15—15 of Fig. 14.

Fig. 16 is a fragmentary view in section and elevation of a large size mop-holder of modified form and construction.

Fig. 17 is a central vertical sectional view of the same taken on the line 17—17 of Fig. 16.

Fig. 18 is a fragmentary top plan view of one end of the mop-holder illustrated in Fig. 16, showing the manner of mortising the hexagonal clamping nut therein.

Referring to the drawings in detail, Figs. 1 to 8 inclusive, 19 is the mop head holder the lower horizontal plane of which is oblong with curved ends, and the upper surface of which is convex with rounded ends, having a V-shaped medial groove 20 extending around the center of the convex surface. The lower surface of the holder 19 is provided with a recess 21 extending throughout the entire length of the holder, having horizontal grooves 22 of uniform width extending along the upper corners of said recess. 23 is the mop head holder sliding clamp, which is preferably of sheet metal, oblong in shape, adapted to slide snugly in the grooves 22, and being slightly shorter than the wooden portion of said mop-holder, and having at each end integral vertical end taps 24 with horizontal clips 25. A medial vertical hole 26 is provided through the wooden portion of said mop-holder, and a corresponding hole 27 is drilled vertically through said sliding clamp 23.

28 is the mop head which is oblong in shape, and preferably of sheet spring steel or brass, and having its ends curved slightly upward, and slightly shorter than the distance between the end taps 24 of sliding clamp 23. The mop head 28 is adapted to have the web 29 of an ordinary mop 30 secured to its lower surface by rivets 31 or other means near each end, and by a hollow rivet 32 through the center, so that the mop head 28 and web 29 is adapted to slide horizontally between the end taps 24 of sliding clamp 23.

33 is a handle socket in which a handle 34 is secured by a metal dowel pin 35 passing therethrough, said handle socket having a base 36 having a longitudinally extending convex upper surface and a longitudinally concave lower surface to conform to the convex upper surface of the mop-holder 19, said handle socket being provided with a wedge-shaped longitudinal protuberance 37 at each end adapted to fit in the groove 20 of mop-holder 19. A vertical threaded hole 38 is provided through said handle socket base as shown in the drawings.

In assembling the mop and holder, the sliding clamp 23 is inserted in the grooves 22 in such manner that the hole 26 through the mop head holder 19 and the hole 27 of the sliding clamp 23 correspond. The mop head 28 with mop web 29 secured thereto, is then inserted between the end taps 24 of sliding clamp 23, and a machine screw 70 is passed through the hollow rivet 32 and through the holes 27 and 26 of the sliding clamp 23 and mop-holder 19, respectively, and is screwed into the tapped hole 38 in the handle socket base, pulling the hollow rivet 32 up firmly against the sliding clamp 23, causing the mop head 28 to straighten and grip the mop web 29 against the surface of the sliding clamp 23, the ends of the mop head 28 being clamped between the end taps 24 above the clips 25. Also the handle socket base is clamped firmly against the mop head holder 19, with the wedge-shaped protuberances 37 fitted in the groove 20, which insures a convenient angle of the mop handle 34 in using the mop.

The vertical end taps 24 of the sliding clamp 23 are preferably cut out with a curved edge as shown in Figs. 2 and 4, so that the mop strings 30 may work around the end taps 24, forming a cushion or bumper to prevent the end taps coming in contact with furniture or floors.

Figs. 9 and 10 illustrate a modified form of a mop head holder 39, having a dovetail recess 40 with a dovetail sliding clamp 41 fitted therein, having vertical end taps 42 with horizontal clips 43, provided with right-angle rubber bumpers 44 to prevent marring of floors or furniture, the clamping device, mop head and other details being the same as and interchangeable with the preferred form described above.

Fig. 11 illustrates another form of a mop head holder 45, having a sliding clamp 46 which is interchangeable in the mop head holder 19 above described, but which is offset as shown in the drawing to permit fas-

tening the sliding clamp 46 to the mop head 28 and mop web 29 before inserting it in the mop head holder 45, the other parts being interchangeable with the preferred form above described.

Figs. 12 and 13 illustrate still another form of mop holder, similar to the preferred form described above, but the mop head holder 47 having a stationary clamp 48 recessed therein and secured thereto by screws 49, said clamp 48 having short vertical end taps 50 with horizontal clips 51. The spring steel or brass mop head 52 is secured to the upper surface of the mop web 29, and has a reinforcing bar 53 for the lower surface of mop web 29, the rivets 54 and 55 causing the mop web 29 to be gripped between the reinforcing bar 53 and the mop head 52. In this form, it will be noted that only the mop head 52 is inserted between the clips 51, and is firmly secured in place by a wing bolt 56 clamping the entire mop-holder together.

Figs. 14 and 15 illustrate a modified form of a mop head 57, made preferably of spring brass or steel curved upward from the center toward the ends, which passes through a special mop web 58 sewed around the mop head 57, and secured in place by a hollow rivet 59 passing through the web 58 and mop head 57. This mop head is adapted to fit any of the mop holders and clamps above described except the one shown in Figs. 12 and 13, which can easily be modified to accommodate this type of mop head.

Figs. 16, 17 and 18 illustrate still another form of mop-holder similar in construction to the preferred form above described, but much larger to accommodate three mops of ordinary width. The mop head 60 is likewise long enough to accommodate three mop webs 29, side by side, each being fastened to the mop head 60 by hollow rivets 61 passing through the center of each mop web 29, through said mop head 60.

The handle socket and base 62 is similar in construction to the preferred form above described, but instead of a threaded hole through the base, is provided with a longitudinal slot 63, as shown in the drawings Fig. 17.

The entire mop-holder is clamped together by a central machine bolt 64 passing through the center hollow rivet 61, through sliding clamp 65 and mop head holder 66 through the slot 63 of socket base 62 and secured in place by wing nut 67. The slot 63 permits the handle socket base 62 to be moved in an arc around the convex surface of mop head holder 60, so that the angle of the mop handle may be adjusted to suit the individual using the mop. Machine bolts 68 are provided through the outer hollow rivets 61, sliding clamp 65 and mop head holder 66, screwed into hexagonal nuts 69 mortised in the upper surface of the mop head holder 66 flush with the surface.

The handle socket and base 62 is interchangeable with the preferred form above described, and it will be noted that the various parts of the different forms have been designed to be interchangeable so far as possible, and to be assembled without the use of tools other than perhaps an ordinary screwdriver in some cases.

Having described my invention in its preferred form and a few of its modified forms, what I claim is—

1. In combination a mop of textile material a curved transversely extending mop head of spring material, means attaching the mop head to the mop to form a mop assembly, a mop-holder having a longitudinally extending upper surface, a lower contact surface and retaining means to receive the extremities of the mop head, a mop handle having a handle base fitting upon the upper surface of the mop-holder and assembly means to clamp the mop assembly, the mop-holder and the mop handle base together, with the concave face of the mop assembly contacting the contact face of the mop-holder and the extremities of the mop head engaging said first mentioned retaining means.

2. A mop-holder having a lower surface and mop head retaining means adjacent the ends thereof, a mop of textile material, a curved transversely extending mop head of spring material secured to the mop, its concave face adapted to engage the lower surface of said holder and its extremities adapted to engage said mop head retaining means, and means to clamp said mop and mop head to said mop-holder.

3. In a mop holder of the class described, a mop head enclosed in the web of an ordinary string or yarn mop, said mop head consisting of a spring metal strip curved upward from the center toward the ends, and secured within said mop web by a hollow rivet through the center thereof.

4. A mop-holder having a lower surface and mop head retaining means adjacent the ends thereof, a mop of textile material, a mop head consisting of a spring metal strip curved upward from the center toward the ends, snugly enclosed within a passage extending through said mop and formed by sewing two strips of said mop material around said spring metal strip, means securing said strip to said mop and including a hollow central rivet and means passing through said rivet to clamp the mop and mop head against the lower face of said holder with the extremities of said mop head engaging said retaining means.

5. As a new product of manufacture, a mop head consisting of a spring metal strip insert in a passage through a mop web comprising two strips of web material sewed

together on each side of said metal strip, said metal strip being secured to said mop web by means of a hollow rivet through the center thereof, and said mop web adapted to have mop strings attached thereto by sewing or other means so as to form a string mop.

6. A mop head consisting of a spring metal strip, superimposed upon a string mop binding web and slightly projecting beyond the ends of the web, and an auxiliary reinforcing bar underlying said binding web, all being securely fastened together by rivets or grommets near the ends, and a hollow rivet through the center, adapted to be used in a mop holder of the class described.

7. In a mop holder of the class described, an elongated mop head holder to accommodate a triple-width mop, having a metal sliding clamp fitted in horizontal grooves opening out of the upper corners of a recess extending throughout the entire length of the lower surface of said mop head holder, and having integral vertical end taps with horizontal clips, a mop head consisting of a single spring metal strip underlying the webs of three ordinary string mops placed side by side, and attached to said mop webs by a hollow rivet through the center of each mop web, said mop head adapted to be carried between the horizontal end clips of said sliding clamp, and securely fastened to said mop holder near the ends by machine screws extending vertically upward through the hollow rivets of the mop head, through said mop head holder, and screwed into hexagonal nuts mortised into the upper surface of said mop head holder flush with the surface, and secured to said mop holder in the center by means of a machine screw projecting vertically upward through said central hollow rivet, through the center of said mop head holder, and through a longitudinal slot in the base of a handle socket carrying a handle secured therein, and a wing nut screwed firmly down against said handle socket base, substantially as described.

8. In combination a mop construction comprising a mop of textile material, associated with a mop holder having a central transverse open ended V-shaped groove in its exterior surface, a mop handle base carrying a mop handle therewith and having a mop-holder fitting surface to fit the said exterior surface of said mop-holder and V-shaped aligning means adapted to fit said groove for centrally locating said mop handle base on said mop-holder, and means within said mop-holder fitting surface adapted to receive the threaded end of a screw projecting through a central opening in said mop-holder to secure the said mop handle base in firm contact with said mop-holder.

In testimony whereof I affix my signature.

CHARLES E. BENEDICT.