MOP SQUEEZING COVER SLIDABLE ON MOP HANDLE

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ABSTRACT OF THE DISCLOSURE

A squeeze-mop having an elongated pleated cover squeeze member mounted for reciprocation on the mop handle for linear movement into water expressing contact with a floorcloth attached to the end of the handle.

With a mop designed to rub the floor with the moistened floorcloth provided at the lower end of the operation handle, it is customary to use the cloth after washing it thoroughly with water and squeezing it. Or it is customary to rub the floor with the moistened floorcloth and to wet the floor with the cloth squeezed completely in order to dry the floor. In many instances, the mop is squeezed by a squeezing device provided in the water receptacle used to hold the cleaning water. Whether it is of hand type or treadle type, this squeeze weighs more than ordinary buckets. This is because care has been taken not to accept the receptacle and spill the water, when the floorcloth is squeezed. It is evident, therefore, that the foregoing receptacle is hard to handle and that even if the mop is light and permits easy operation, cleaning work is apt to be incomplete.

The present invention is characterized by the squeeze provided on the mop itself. The operation handle with the floorcloth at its lower end is provided with a slideable squeeze. When the squeeze is slid on the handle over the floorcloth and lowered onto the cloth, the cloth expanded with water is squeezed gradually and fully covered by the squeeze. The squeeze further brings the floorcloth when the cloth covered wholly by the squeeze is gripped by hand. The squeeze prevents the water squeezed out from flowing back on the handle.

The most important object of the present invention is to make it possible to squeeze out water from the floorcloth by hand without wetting the hand. Another object of the present invention is to make it possible to discharge the water of the floorcloth only in a specific direction when the cloth is gripped. Still another object of the present invention is to provide a squeeze which is light in weight and easy in operation. The more specific aspects of the present invention will become clear as a detailed explanation will be made below with reference to the embodiment shown in the drawing.

FIG. 1 is a front view of the present mop when the squeezing cover is raised along the handle and it is now possible to rub the floor.

FIG. 2 is a front view of the mop when the squeezing cover is lowered, covering the floorcloth.

FIG. 3 is a front view, partially sectional, of the connection between the handle and the floorcloth.

FIG. 4 is a front view, partially sectional, of the squeezing cover.

FIG. 5 is a front view, partially sectional, of another embodiment of the squeezing cover.

With reference to the drawing, it is desirable that the floorcloth which is provided at the lower end of the handle and moistened to rub the floor should be cylindrical. The squeezing cover, which is the most important aspect of the present invention, is almost a cylindrical shape with an inner diameter smaller than that of the floorcloth.

FIG. 2 shows the mop when the squeezing cover 3 is lowered from the handle 2, covering the floorcloth 1. Since the squeezing cover 3 slides up and down the handle 2 and can be used to rub the floor while positioned above the floorcloth 1, a cylindrical shape is easiest to operate. But the squeezing cover 3 does not necessarily have to be cylindrical. It may be of a type to be used with a mop in which the cross arm is provided at the lower end of the handle and the broad floorcloth is attached thereto. But in this case when the mop is used while the squeezing cover 3 is raised along the handle 2, the squeezing cover is apt to prevent easy operation. It is desirable then to keep the squeezing cover 3 away from the handle 2.

As shown in FIG. 3, on the circumference of the lower end of the handle 2 is provided the male screw 4 to which the floorcloth flange cap 5 is fitted by the female screw 6. This makes it possible to move the flange cap 5 freely along the handle 2 by turning the cap following the male screw 4. The skirt 7 of the floorcloth 5 extends contzually to fasten the shoulder of the floorcloth 1 hung on the hook 8 at the lower end of the handle 2. The circumference of the floorcloth 1 had best be cotton, but other materials will do. The floorcloth 1 is bound in the middle by the ring 19, and the bound section is hung on the hook 8. When the flange cap 5 is lowered toward the shoulder of the floorcloth 1 hung on the hook 8, following the screw 4, then the skirt 7 of the cap fastens the shoulder of the cloth. Thus, the floorcloth 1 is firm even when roughly dealt with by hand. Since the skirt 7 of the flange cap 5 stabilizes the shoulder of the floorcloth 1, stable rubbing becomes possible.

FIG. 4 shows the construction of the squeeze 3 which is fitted to the handle 2, covers and squeezes the floorcloth 1. The squeeze 3 is made of a thin rubber or synthetic resin plate which can be squeezed by hand and restored to the original state. The squeeze 3 consists of the squeezing sheet 9 covering the floorcloth 1 and the holding sheet 10 sliding on the handle 2. Since it covers the floorcloth 1, the squeezing sheet 9 has a large diameter, while the holding sheet 10 has a small diameter, since it covers the thin handle 2. The squeezing sheet 9 forms the border between the squeezing sheet 9 and the holding sheet 10 is almost similar in shape to the flange cap 5. The squeezing sheet 9 is a conical shape whose diameter is large enough to receive the floorcloth 1 when the cloth is dry.

The squeezing sheet 9 has the plate 12 all over the circumference from the shoulder to the round edge 11 at the lower end. The edge 11 extends in a circular arc. When the squeezing cover 3 is lowered from the position in FIG. 1 to that in FIG. 2, the edge 11 slides down outside of the floorcloth 1 swollen with water, without rubbing it with the rugged skirt of the pleats 12. Thus, it becomes possible for the squeeze 3 to cover the floorcloth 1 without breaking the thread of the cloth. Since the swollen floorcloth 1 discharges water gradually by the passage of the edge 11, most of the water is squeezed out, when the squeezing sheet 9 covers the cloth wholly. The conical shape of the squeeze 9 further facilitates the squeezing action. When the squeezing cover 3 is pushed down by the holding sheet 10, the pleats 12 prevent a part of the cover from being broken or bent by the strong resistance which takes place when the edge 11 passes on the swollen floorcloth 1 gradually, and by giving flexibility to the diameter of the squeezing sheet 9 somewhat weaken the foregoing resistance.

The holding sheet 10 is fitted to the handle 2 so as to slide on it and to be gripped by one hand, and has a rough surface so as not to slip. On the outer circumfer-
ence of the upper end of the holding sleeve 10 is provided the ring projection 13 not to let the hand slip, and this ensures the sliding of the squeezing cover 3. As shown in FIG. 4, the diameter of the upper end of the holding sleeve 10 is a reverse conical shape larger than that of the lower end. On the inner circumference of the upper end is provided the flange 14 which is in contact with the handle 2, and the inner edge of the flange is in contact with the circumference of the handle 2. At the bottom of the holding sleeve 10 is the narrow sleeve 15, the inner diameter of which is in contact with the handle 2. Thus, when slid up and down the handle 2, the squeezing cover 3 slides without shaking.

This construction makes it possible to stop the squeezing cover 3 at any optional point on the handle 2 and also to prevent the water squeezed out from the floorcloth 1 covered by the squeezer, from going beyond the cloth and getting out through the gap between the handle and the upper end of the holding sleeve 10. The former function of this construction helps to facilitate the water washing of the floorcloth 1 and to rub the floor strongly with the lower edge 11 of the squeezing cover 3 by putting down the cover as much as possible to nearly cover the end of the cloth and bundling the greater part of the cloth by the cover, when it is impossible to rub the floor without using very strong power.

Shown in FIG. 5 is a variation of the holding sleeve 10, which is the same as the preceding embodiment in that the flange 17 justs out at the upper end of the sleeve, getting in contact with the handle 2. But the holding sleeve 16 is not a reverse conical shape, but a straight cylinder, at the end of which juts out the flange 18 contacting the handle 2 like the flange 17. Hence, when the water of the floorcloth 1 is squeezed out by gripping the cloth from over the squeezing cover 3, the flange 18 prevents a part of the water squeezed out, from going beyond the cloth and getting out at the upper end of the holding sleeve 16 as in the case of the foregoing embodiment. Also as with the preceding example, the squeezing cover 3 can be slid on the handle 2 without shaking.

As indicated above, the present invention has the advantage of making it possible to wash the floorcloth with any receptacle anywhere and thus dispense with a special receptacle with a squeezer.

What we claim is:

1. A squeezing cover for a mop of the type including a handle having a floorcloth attached to one end, said squeezing cover comprising, a sleeve formed of flexible, waterproof material readily squeezable by hand and having a tubular holding portion slidably engageable with the mop handle, and an enlarged, elongated, longitudinally extending pleated squeezing portion extending from said holding portion so that movement of the squeezing cover along the handle toward the floorcloth causes the squeezing portion to engage the floorcloth to fully cover the floorcloth for squeezing water from the floorcloth, the grooves of the pleats extending substantially longitudinally of the mop.

2. The construction recited in claim 1 wherein said squeezing cover is made of rubber and additionally including a flange incorporated in the holding portion for contacting the handle to prevent the flow of water up the handle.

3. The construction recited in claim 1 in which said squeezing cover is made of synthetic resin and the pleats of said squeezing portion extend longitudinally of the handle.

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