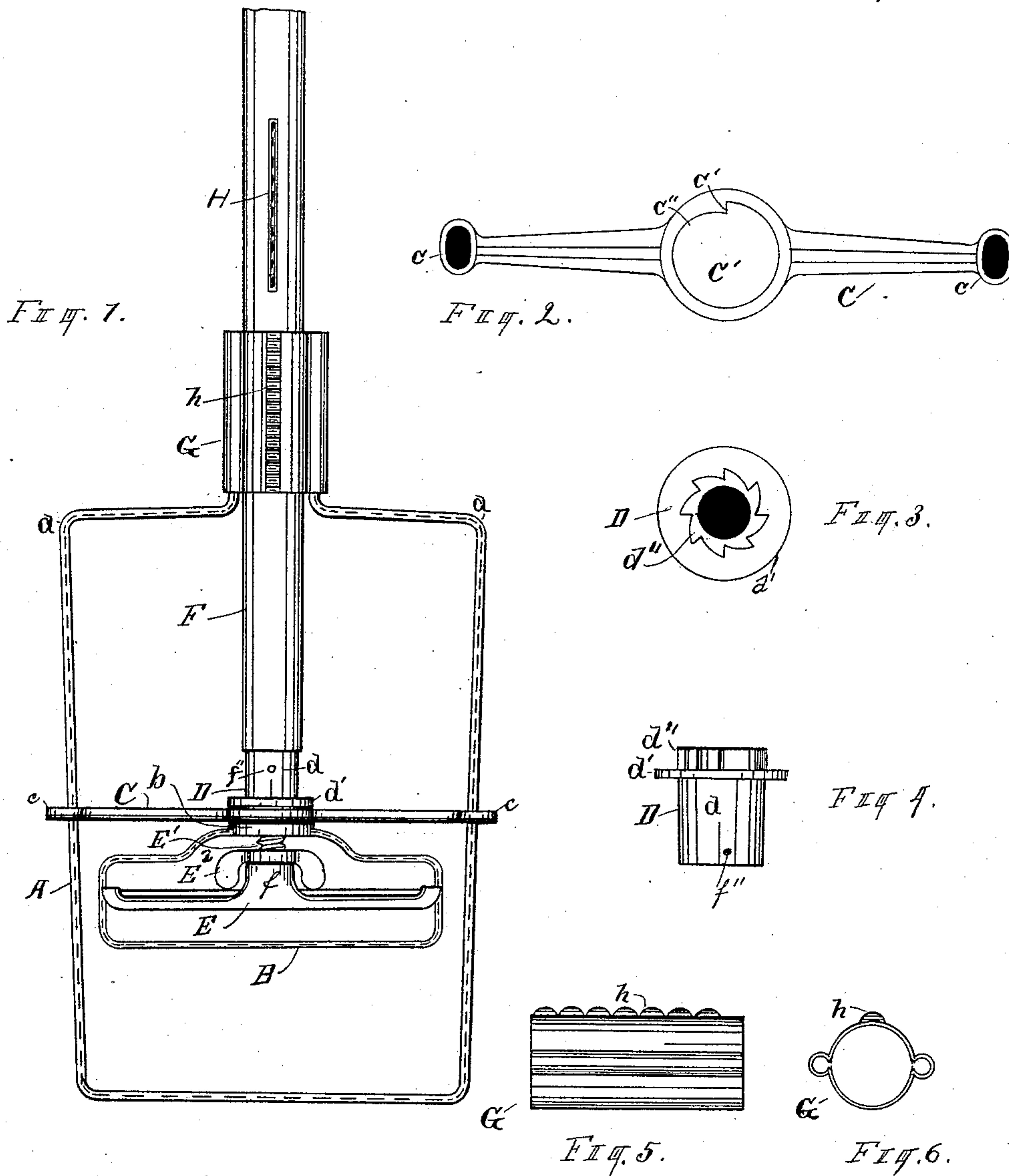


(Model.)

C. BATEMAN.
MOP.

No. 429,835.

Patented June 10, 1890.



WITNESSES

George H. White.
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CHARLES BATEMAN, OF GRAND RAPIDS, MICHIGAN, ASSIGNOR OF ONE-HALF
TO FRANK P. SMITH, OF SAME PLACE.

MOP.

SPECIFICATION forming part of Letters Patent No. 429,835, dated June 10, 1890.

Application filed July 8, 1889. Serial No. 316,900. (Model.)

To all whom it may concern:

Be it known that I, CHARLES BATEMAN, a citizen of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented a new and useful Improvement in Mops, of which the following is a specification.

My invention relates to an improvement in mops; and it consists of a modified form of ratchet and dog for holding the mop-handle in place while wringing the mop, and slide for controlling its position when in use; and the objects of my invention are, first, to avert the necessity of drilling the cross-bar and attaching a separate dog; second, to provide a slide that will allow the adjusting of the wringer-frame to the thickness of the cloth, and, third, to provide a mop-head for mops with which it will not be necessary to sew the cloths together or to make them endless for holding them in the mop-head. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a side view of my mop entire. Fig. 2 is a side view of the cross-bar. Fig. 3 is an end view of the ferrule. Fig. 4 is a side view of the same. Fig. 5 is a side view of the slide, and Fig. 6 is an end view of the same.

Similar letters refer to similar parts throughout the several views.

A represents the wringer-frame.
B is the mop-head.
C is the cross-bar.
D is the ferrule.
C' is an aperture in the cross-bar for the support of the mop-head and forms the dog.
E is a clasp.
E' is a screw.
E² is a nut.
F is the mop-handle.

G is the slide, and H is the spring in the handle for holding the slide in place.

The wringer-frame A is made in the usual form and of sufficient length to allow the necessary action to the mop-head to wring the mop-cloth, the upper end being turned in and thrown back parallel with the handle, and secured to the slide G by soldering or other suitable means, this slide being made of a proper size to slide freely upon the handle of the mop, and provided with a narrow line of

corrugations *h* on one side for the reception of the spring H in the handle of the mop, for the purpose of holding the wringer-frame in place when the mop-head is thrown down to position for use as a mop. I make use of these corrugations for the reason that I can adjust my mop to use cloths of various thicknesses, and I make them in a single narrow line upon one side only, for the purpose, first, of holding the head so that it cannot turn around out of line with the wringer-frame, as would be the case if the corrugations extended entirely around the slide, and, second, to designate which side up to hold the handle of the mop when wringing the mop or throwing the dog out of the ratchet to unwind it, which will be more fully explained hereinafter.

The head of the mop is constructed upon the principle of an ordinary screw-clamp mop-head except that I cast a small screw inside of the head and provide it with a thumb screw or nut E' for throwing the clamp E, which is fitted with a hole in the neck *f*, that works freely over the screw out against the outer line of the mop-head to secure the cloth in place. This head is provided with a flange *b* and is secured to the handle by means of a slim shank passing into the end of the handle through the ferrule D and secured with a pin *f''* through the ferrule.

The ferrule D is formed with a body *d*, a collar or rim *d'*, and with a ratchet *d''*, which should be of proper length to give sufficient space between the flange or collar *d'* on the ferrule, and the flange *b* on the mop-head for the free action of the cross-bar C.

The cross-bar C is made of sufficient length to extend entirely across the wringer-frame, and is provided with an aperture *c* at each end of sufficient size and proper form to allow both sides of the frame to pass through them and give the necessary room for adjusting the cross-bar to allow of the free working of the ratchet. The wringer-frame being wider at the upper or back end at *a* than at the lower end, it is necessary to make these apertures considerably wider than the simple size of the wire of which it is made, and it is necessary to make them of an oval form in order to allow of a sufficient lateral mo-

tion to the cross-bar to throw the tooth c' in the aperture C' clear of the ratchet. At the center of this cross-bar I form an aperture C' somewhat larger than the ratchet d'' , or
 5 of a proper size so that the tooth c' can be thrown out and entirely clear of the teeth of the ratchet, which serves as a support for the mop-head.

I find that in order to have this form of
 10 dog and ratchet work successfully it is necessary to form a sagging receptacle c'' in the aperture C' , back of the tooth c' , of sufficient capacity to allow the ratchet to turn freely in it without danger of catching the tooth c' ; or,
 15 in other words, I form a chamber in the aperture C' back of the tooth c' , which will form on the line xx an arc of a circle of the exact diameter of the circle formed by the ends of the teeth on the ratchet. I describe
 20 this feature thus minutely for the reason that it forms one of the most important features of my invention, as, without it, when unwinding the mop-cloth, the ratchet-teeth will draw its cross-bar up and interlock the teeth,
 25 so that the wringer is rendered useless, while with it the ratchet drops back into this arc and turns free of the tooth c' in this cross-bar.

In placing the cross-bar C and the slide G
 30 upon the wringer-frame A pains should be taken to place the tooth c' in the cross-bar and the line of corrugations h upon the same side of the frame, so that there will be no difficulty in determining in what position to hold the
 35 mop when wringing or unwinding the cloth.

To use my device for mopping, draw the wringer-frame A up on the handle until the lower end is brought to bear upon the mop-head and the spring H interlocks with the
 40 corrugations h in the slide sufficiently to hold the mop firmly in place, and to use it as a wringer hold the handle with the corrugated side of the slide up. Push the wringer-frame down until the mop-cloth is drawn its full
 45 length. Clasp the slide with the left hand and turn the handle with the right hand. In this position the tooth c' in the cross-bar will interlock with the teeth of the ratchet and hold the handle from turning while shifting the
 50 hand. When the cloth is wrung sufficiently dry, turn the mop over, and, holding the slide firmly in the hand, turn the handle sufficiently to allow the tooth c' in the cross-bar to become disconnected from the ratchet and
 55 the cross-bar to drop down. Then let go of the handle and unwind the cloth.

I am aware that mops of this general form have been long in use. I therefore do not claim such, broadly, as my invention; but

What I do claim as new, and desire to secure 60 by Letters Patent, is—

1. A mop having a wringer-frame attached to a slide and arranged to work freely upon the handle of the mop, in combination with a cross-bar extending across the wringer-frame 65 and supported thereon, having a central aperture arranged to fit over a ratchet and provided with a tooth to act the office of a dog, and an offset in the aperture back of the tooth for the reception of the ratchet, a ferrule 70 placed over the end of the handle and provided with a flange to hold the cross-bar in place and with a ratchet at the end fitted to work inside of the aperture C' in the cross-bar, and a mop-head, substantially as and for 75 the purpose set forth.

2. The combination, in a mop, of a wringer-frame and a slide with a cross-bar having an aperture in the center for the support of the mop-head, said aperture being provided with 80 a tooth and with an offset back of the tooth for the reception of the ratchet, a ferrule formed with a flange, and a ratchet fitted to work inside of the aperture C' in the cross-bar, and a head consisting of a bow, a clasp, 85 a screw, and a nut, substantially as and for the purpose set forth.

3. The combination, in a mop, of a wringer-frame with a slide formed with a narrow row of corrugations on one side for the reception 90 of the supporting-spring, a cross-bar provided with apertures at each end to fit around the sides of the wringer-frame and an aperture in the center to support the mop-head, a tooth in said aperture to engage as a dog with the 95 ratchet upon the ferrule, an offset in said aperture back of the tooth for the reception of the ratchet when not in use, a ferrule provided with a flange, and a ratchet to work inside of the aperture C' in the cross-bar and 100 engage with the tooth c' , and a mop-head consisting of a bow, a screw cast inside of the bow, a sliding clasp, a nut, a flange, and a shank, substantially as and for the purpose set forth. 105

Signed at Grand Rapids, Michigan, this 1st day of July, 1889.

CHARLES BATEMAN.

In presence of—

GEORGE H. WHITE,
 ITHIEL J. CILLEY.