

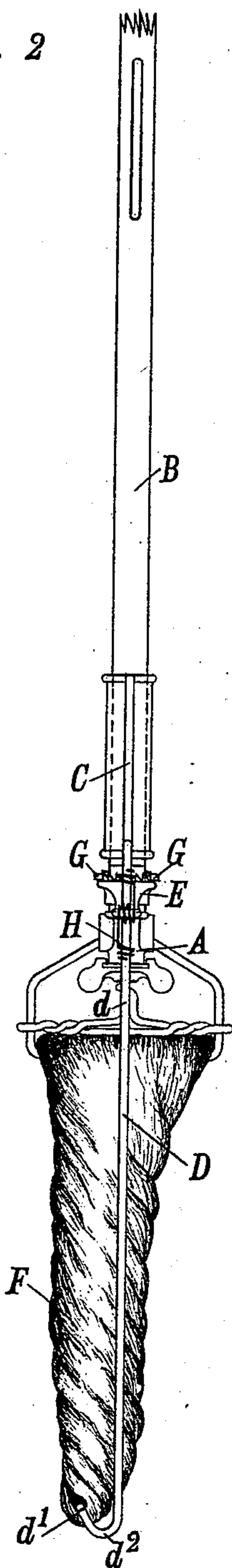
(No Model.)

H. F. LOW.  
MOP WRINGER.

No. 516,271.

Patented Mar. 13, 1894.

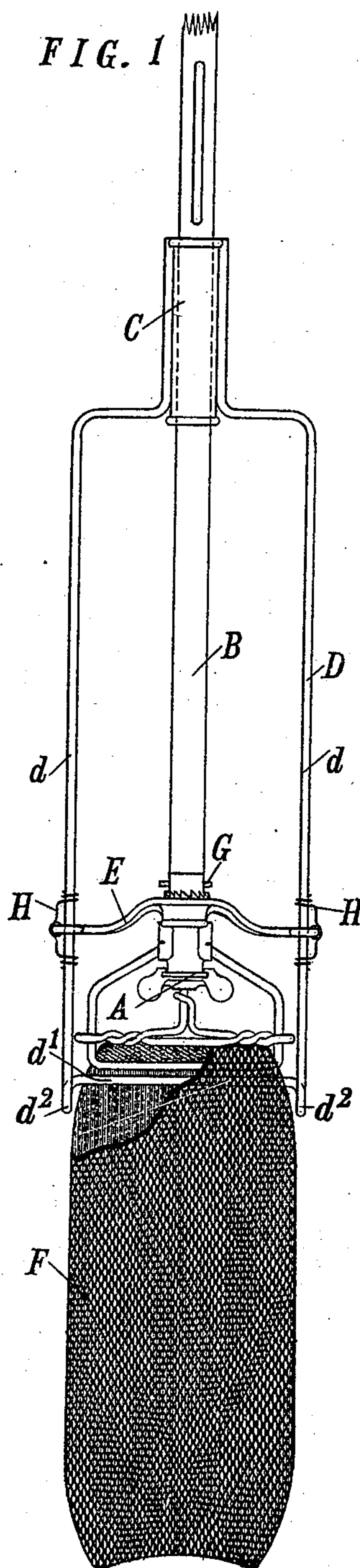
FIG. 2



WITNESSES.

Frank. Miller.  
M. S. Ingham.

FIG. 1



INVENTOR.

Hamilton F. Low  
By Wing & Thurston  
his attorneys



# UNITED STATES PATENT OFFICE.

HAMILTON F. LOW, OF CLEVELAND, OHIO, ASSIGNOR TO LOUIS KOEHL, OF  
SAME PLACE.

## MOP-WRINGER.

SPECIFICATION forming part of Letters Patent No. 516,271, dated March 13, 1894.

Application filed May 27, 1893. Serial No. 475,686. (No model.)

*To all whom it may concern:*

Be it known that I, HAMILTON F. LOW, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Mop-Wringers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to wringing attachments for mops; and it consists in the details of construction, and in the combination of parts shown in the drawings and hereinafter described and pointed out definitely in the claims.

In the drawings, Figure 1 is a side view of a mop provided with my improvements, when all of the parts are in such relative positions that the mop is in condition for use. Fig. 2 is another view showing the relative positions of the parts when the water is being wrung from the mop fabric.

The mop head A, which may be of any suitable construction, is rigidly secured to the end of the handle B. A sleeve C loosely surrounds the handle B; and it may be rotated upon said handle or moved lengthwise thereon. The wringing frame D is rigidly connected at its upper end to said sleeve. The frame D has two substantially parallel sides  $d$   $d$ , which are separated a distance which is at least slightly greater than the width of the mop head, and an end bar  $d'$  which extends between and is rigidly connected with the lower ends of the sides  $d$   $d$ . In the form shown the wringing frame is made of a single piece of stiff wire bent into the required shape.

The mop F which is adapted to be wrung by the described mechanism, is a double fabric, and the end bar  $d'$  lies between the two parts thereof.

E represents a yoke which is mounted on the handle B. It may be revolved about said handle, but is only permitted a limited longitudinal movement thereon between the base of the mop head and a pin G. The hub of the yoke is provided with ratchet teeth on that end which faces the pin G; and said pin under certain circumstances, to be presently explained, acts as a pawl which engages with

said ratchet teeth. The arms of the yoke are held at all times in frictional engagement with the sides of the wringing frame, the friction being great enough to make the relative movement of yoke and frame a matter requiring some little force. The construction shown for producing and preserving the frictional engagement of the yoke and frame is as follows, viz.—The sides  $d$   $d$  of the frame pass through holes in the ends of the yoke; and a friction spring H is secured to each end of the yoke and embraces and presses upon the adjacent side  $d$ .

When the mop is in use, the frame is drawn up until the cross-bar  $d'$  is as close as practical to the mop head, whereby it does not interfere with the ordinary use of the mop. When it is desired to wring the mop, the user, holding the handle with one hand, grasps the sleeve C with the other and pushes it down until the mop is outstretched between the mop head and end bar  $d'$  of the frame. Then the handle is turned in the sleeve with the result of twisting the mop as shown in Fig. 2. As the mop is twisted it is shortened and the end bar  $d'$  and head A are drawn toward each other. By reason of the frictional engagements of the springs H H with the wringing frame, the yoke tends to move with the frame, and does actually so move sufficiently to cause the ratchet teeth thereon to engage with the pin pawls G on the handle. This prevents the reverse relative revolution of mop head and frame, and permits the user to get a new hold on the sleeve and handle by which the mop may be still further twisted.

When it is desired to permit the untwisting of the mop fabric, the sleeve C (and with it the frame D) is pushed down the handle a very short distance. This movement of the frame is, by reason of the frictional engagement of the yoke therewith, accompanied by a sufficient movement of said yoke to release its ratchet teeth from the pin pawl; whereupon the handle revolves in the sleeve and the mop fabric is untwisted.

In order to prevent the lower end of the mop fabric from slipping off the end bar of the wringing frame during the twisting operation, the outer ends of the sides of the wringing frame are bent backward substantially as



shown, thereby forming two shoulders  $d^2 d^2$  which project beyond the end bar  $d'$ .

Having described my invention, I claim—

1. The combination of a mop head and a  
5 handle secured thereto, with a sleeve loosely  
mounted on the handle and having both a ro-  
tary and a longitudinal movement with re-  
spect thereto, a wringing frame secured to  
said sleeve having an end bar adapted to en-  
10 gage with the mop fabric, and two shoulders  
 $d^2 d^2$  which project beyond said end bar, sub-  
stantially as set forth.

2. The combination of a mop head and a  
handle secured thereto, with a sleeve loosely  
15 mounted on said handle, a wringing frame se-  
cured to said sleeve having substantially par-  
allel sides and a connecting end piece, a yoke  
loosely mounted on the handle, means limit-  
ing the longitudinal movement of said yoke  
20 on the handle, and a ratchet and pawl se-  
cured respectively to said yoke and handle,  
substantially as and for the purpose set forth.

3. The combination of a mop head and a  
handle secured thereto, with a sleeve C loosely  
25 mounted on said handle, a yoke loosely  
mounted on said handle, means limiting the  
longitudinal movement of said yoke on the  
handle, a wringing frame secured to the sleeve  
C having substantially parallel sides which  
30 pass loosely through the arms of the yoke,

and friction springs which are secured to said  
yoke and engage with said sides, substantially  
as and for the purpose specified.

4. The combination of a mop head and a  
handle secured thereto, with a sleeve C loosely 35  
mounted on said handle, a wringing frame  
having substantially parallel sides, a yoke  
loosely mounted on said handle having arms  
through which the sides of the wringing frame  
pass, friction springs secured to said arms 40  
and engaging with said sides, ratchet teeth  
on the yoke and a pawl on the handle, sub-  
stantially as and for the purpose set forth.

5. The combination of a mop head and a  
handle secured thereto, with a sleeve C loosely 45  
mounted on said handle, a yoke loosely  
mounted on said handle, a shoulder and a  
pin on said handle between which said yoke  
lies, ratchet teeth on the end of said yoke  
which faces the pin, and a wringing frame 50  
secured to the sleeve C and having two sub-  
stantially parallel sides which engage with  
said yoke, substantially as and for the pur-  
pose specified.

In testimony whereof I affix my signature in 55  
presence of two witnesses.

HAMILTON F. LOW.

Witnesses:

E. L. THURSTON,  
FRANCIS J. WING.