

C. A. VAILE.  
Mop-Wringer.

No. 206,371.

Patented July 23, 1878.

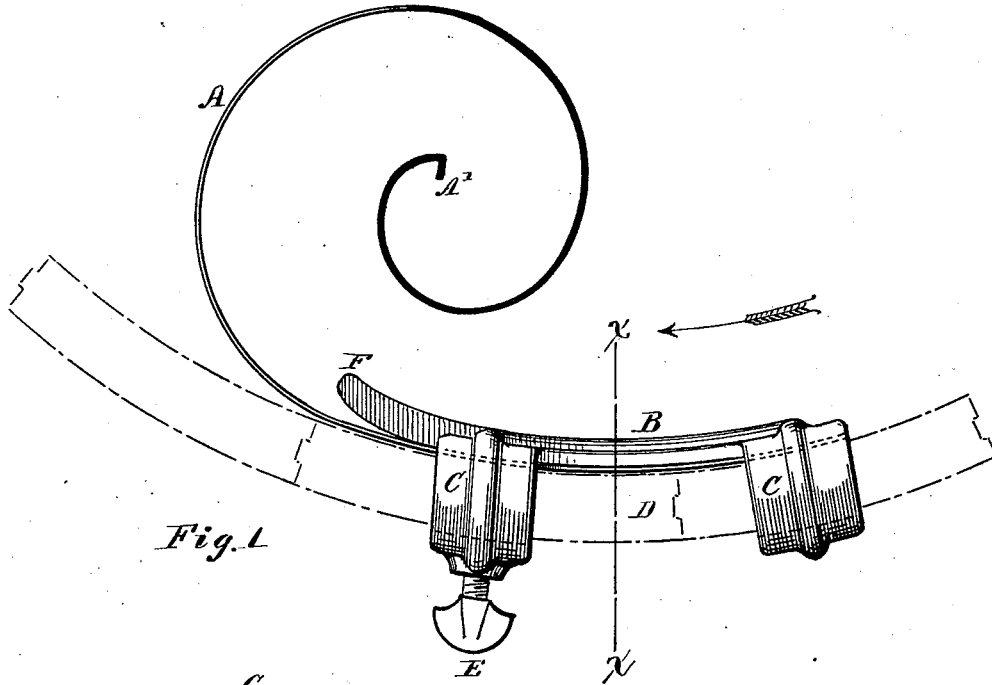


Fig. 1

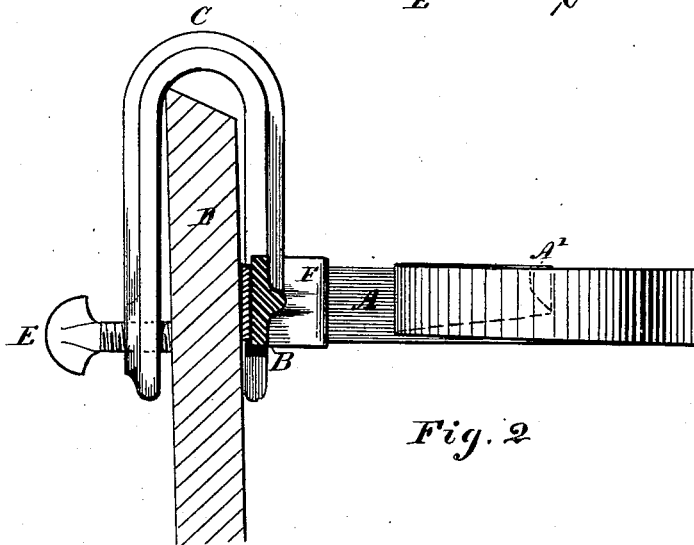


Fig. 2

Witnesses.

Charles B. Stilwell  
Charles A. Vaile

Inventor.

Charles A. Vaile  
per Charles B. Stilwell  
Atty.

# UNITED STATES PATENT OFFICE.

CHARLES A. VAILE, OF WORCESTER, MASSACHUSETTS, ASSIGNOR TO  
JOSEPH MARCUS RICE, OF SAME PLACE.

## IMPROVEMENT IN MOP-WRINGERS.

Specification forming part of Letters Patent No. **206,371**, dated July 23, 1878; application filed  
March 18, 1878.

*To all whom it may concern:*

Be it known that I, CHARLES A. VAILE, of Worcester, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Mop-Wringers; and I declare the following to be a description of my said invention, sufficiently full, clear, and exact to enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a plan view of my improved mop-wringer; and Fig. 2 is a vertical section of the same at line *x x*, Fig. 1, looking toward the coil.

The object of my invention is to provide a cheap, simple, and convenient device for attachment to a tub or pail, to assist in wringing mops; and the nature of my invention consists in an improved mop-wringer, constructed and operating in the peculiar manner hereinafter described.

In the drawing, A denotes a flexible spiral rod or volute spring, arranged to roll inward from the side of the pail in manner indicated. B denotes a head-piece, to which the volute A is attached. Said head-piece is cast with looped ears C C, to pass over the side of the pail D, for supporting the device in proper position. E is a thumb-screw for clamping the device to the pail. F is a projection or guard-finger formed on the head-piece B, and having a rounded back and end, for supporting the volute A when strained, and preventing any liability of breakage that might occur if the volute was strained over a short angle. A' denotes a short turn or hook formed at the end of the volute to cause it the more readily to catch the mop. The lower side of said hook A' is rounded upward, as per dotted lines, Fig. 2.

The device is operated as follows: The mop is swung along the side of the pail, in the direction indicated by the arrow, its end being inserted into the space between the coils of the volute A. The mop-handle then, being turned around in the direction of coil, twists the end of the mop into the vertex of the scroll, where it is caught and securely held while the water is expelled from the mop by torsional action. When the twisting strain ceases, or is reversed, the spring or elastic force of the volute opens the coils and releases the mop.

The length and curvature of the volute A may be varied to suit different requirements as to size and quality of spring-power desired, and said volute may be formed of round or other shaped wire in lieu of a flat band, as herein shown, without departing from the spirit of my invention.

The volute A may be secured to its support by screws, rivets, or any suitable fastening.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A mop-wringer consisting, essentially, of a flexible spiral or volute spring, A, provided with means for supporting or attaching it to the tub or pail for operation, substantially as set forth.

2. The spring-volute A, provided with end hook A' and looped ears C, for the purposes set forth.

3. In combination with the flexible volute A, the supporting-head C B, provided with guard-finger or projection F, for the purpose set forth.

Witness my hand this 11th day of March, A. D. 1878.

CHARLES A. VAILE.

Witnesses:

CHAS. H. BURLEIGH,  
CHAS. B. STILWELL.