

(No Model.)

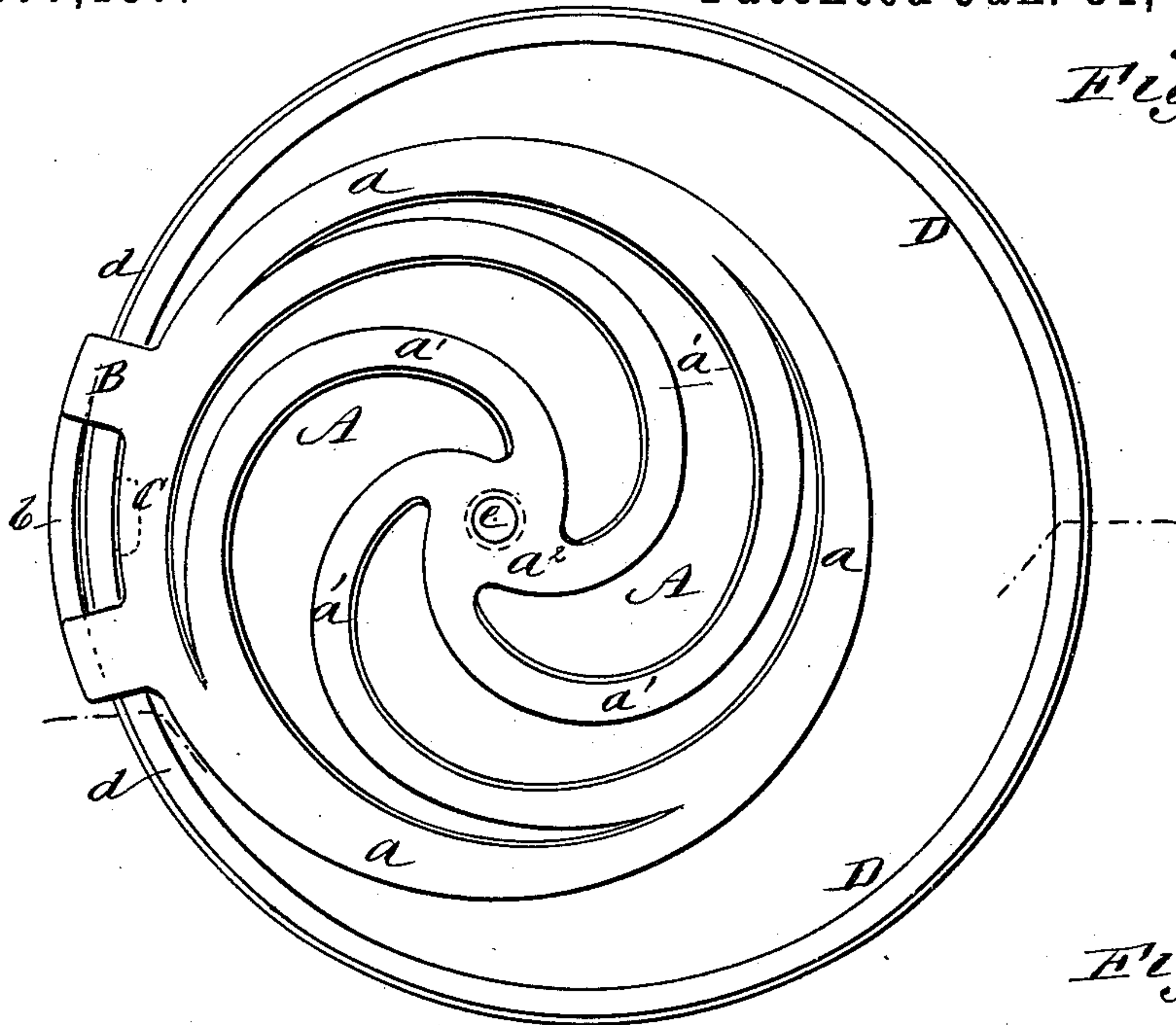
H. I. HOTCHKISS.

MOP WRINGER.

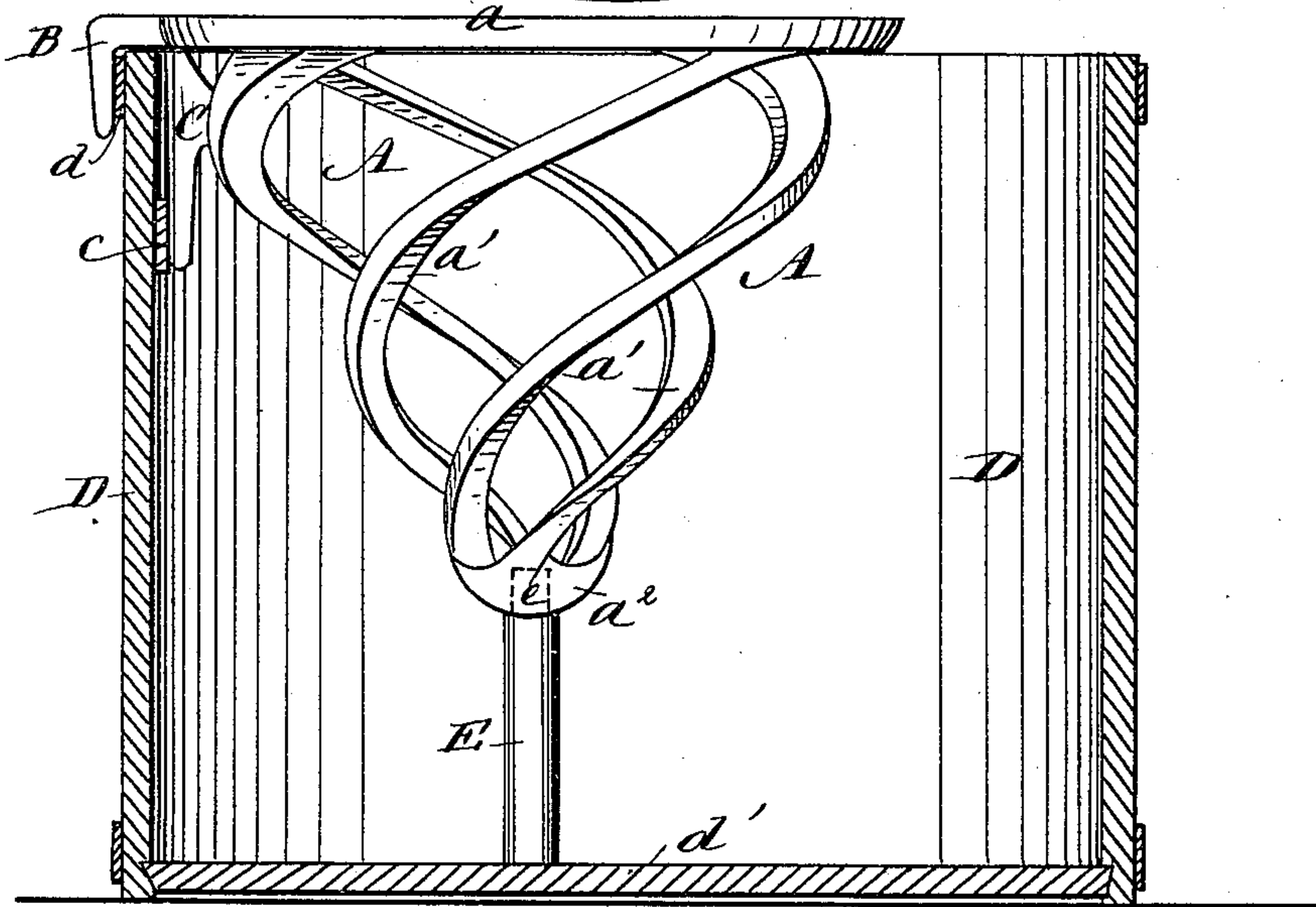
No. 377,157.

Patented Jan. 31, 1888.

*Fig. 1*



*Fig. 2*

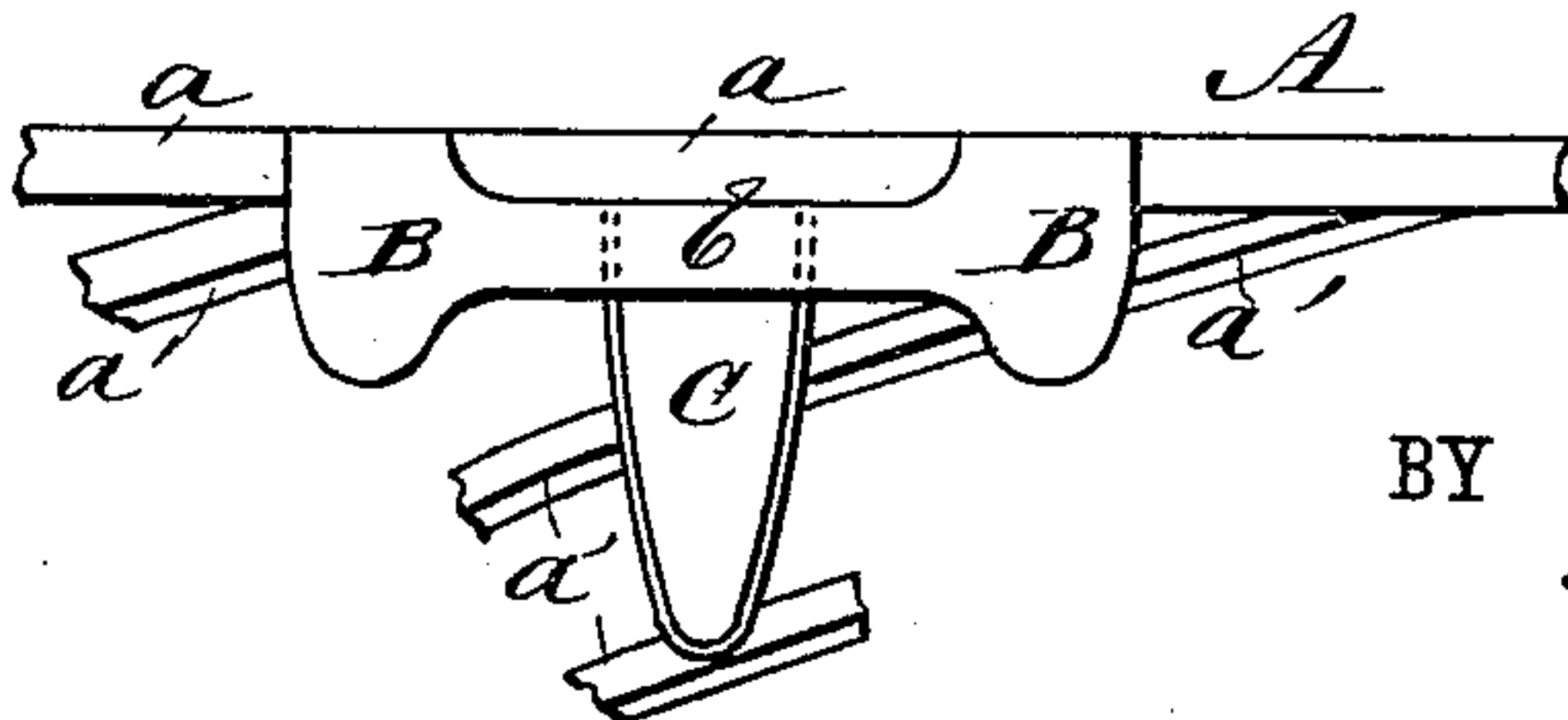


*Fig. 3.*

WITNESSES:

*C. Neveux*

*C. Sedgwick*



INVENTOR:

*H. I. Hotchkiss*

BY

*Munn & Co.*

ATTORNEYS.



# UNITED STATES PATENT OFFICE.

HENRY I. HOTCHKISS, OF SOUTH RYEGATE, VERMONT.

## MOP-WRINGER.

SPECIFICATION forming part of Letters Patent No. 377,157, dated January 31, 1888.

Application filed December 15, 1886. Serial No. 221,590. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY I. HOTCHKISS, of South Ryegate, in the county of Caledonia and State of Vermont, have invented a new and  
5 Improved Mop-Wringer, of which the following is a full, clear, and exact description.

My invention relates to a device for wringing mops used in cleaning floors, walks, or walls, and has for its object to provide a simple inexpensive wringer of this class which  
10 will have substantial support on and in a pail or tub, and so as to prevent the strains incident to the wringing of the mop from breaking the wringer or the pail or upsetting the pail,  
15 and allowing mops to be wrung out with economy of time and labor.

The invention consists in certain novel features of construction and combinations of parts of the mop-wringer, all as hereinafter  
20 fully described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

25 Figure 1 is a plan view of my improved mop-wringer in place in a tub or pail. Fig. 2 is a side elevation of the wringer and vertical section of the pail, and Fig. 3 is a detail side view of part of the wringer next its fastening-jaws.

30 The main body portion A of the mop-wringer is made with an upper rim or ring portion,  $a$ , and a series of spirally-arranged ribs,  $a'$ , which converge to a common center or apex at  $a^2$ , the body A thus having the general form of an inverted cone.  
35

At one side of the body A, and projecting from the ring  $a$ , there are cast or formed or attached a pair of angularly-shaped lugs, B B, which are connected by a cross-bar,  $b$ , and about  
40 at a central point between the lugs B B, and at a distance from the cross-bar  $b$  about equaling the thickness of an ordinary tub or pail, D, there is fixed to the body A of the wringer a pendent lug, C, and whereby when the lugs B  
45 B and their cross-bar  $b$  are placed outside of the body or staves of the pail or tub D the lug C will bear upon the inside face of the pail or tub to support the wringer from the side of the pail and within the pail, as clearly shown  
50 in Figs. 1 and 2 of the drawings.

The ordinary pail-hoop  $d$  gives a bearing to

the outside wringer-lugs B B and bar  $b$ , and I fix to the inner face of the pail a plate,  $c$ , on or against which the lug C bears, the hoop  $d$  and plate  $c$  thus protecting the body or staves of  
55 the pail from injury by pressure of the wringer-lug fastenings.

In the lower end,  $a^2$ , of the body A of the mop-wringer there is provided a hole, in which the upper shouldered end,  $e$ , of a pin or leg, E, 60 has a bearing, while the lower end of the pin rests on the bottom  $d'$  of the pail or tub D, and whereby substantial support is given to the wringer body from the bottom of the pail and at a point where the greatest downward pressure 65 is exerted. The lower end or apex,  $a^2$ , of the inverted conical body of the mop-wringer may be provided with a pin to enter a hole in the top of the leg-support, as at E, instead of having a hole into which a stud on the leg enters, as above described, one construction being the substantial equivalent of the other. 70

Mop-wringers made with the body portion A formed of spiral ribs converging toward the 75 bottom are used by inserting the mop and pressing it down into the body A and twisting it around therein, and these operations exert considerable strain on both the wringer-body and the pail or tub in which it is held when 80 the wringer is not properly supported against these downward and torsional strains, and either the wringer or pail, or both, are liable to be broken, and the pail is easily upset.

It is obvious that by providing a broad side 85 clamp by the two outside lugs, B B, and the inner lug, C, and by supporting the bottom or apex of the wringer-body directly on or from the bottom of the pail or tub, these downward or torsional strains in using the wringer can 90 have little or no effect to injure either the wringer or the pail, and the pail is not liable to be upset, as is the case when a mop-wringer of this class is supported wholly at or from the side of the pail or tub; hence a mop-wringer 95 of large size made as herein shown and described may be used with safety in a comparatively small pail, thus allowing the wringing of large mops which only can be used effectively in cleaning floors, walks, walls, or 10 other surfaces.

The leg or bottom support, E, is preferably

made of a wooden rod, which may easily be cut off to fit between the apex  $a^2$  of the wringer-body and the bottom of any pail or tub in which it is desired to use the wringer, as will readily  
5 be understood.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

10 A mop-wringer comprising a rim or ring,  $a$ , and the integral spirally-ranging converging ribs  $a'$ , a fastening formed on said rim or ring

and consisting of a pair of outer lugs, B B, and inner lug, C, spaced as described, to bear against the outer and inner sides of the pail or tub, and a detachable leg, E, engaging the apex of the  
15 spiral ribs  $a'$  and adapted to rest upon the bottom of the pail or tub, substantially as shown and described.

HENRY I. HOTCHKISS.

Witnesses:

WM. D. TOBIN,  
JAS. W. NORRIS.