(No Model.)

## A. M. BORLAND. MOP WRINGER.

No. 438,467.

Patented Oct. 14, 1890.

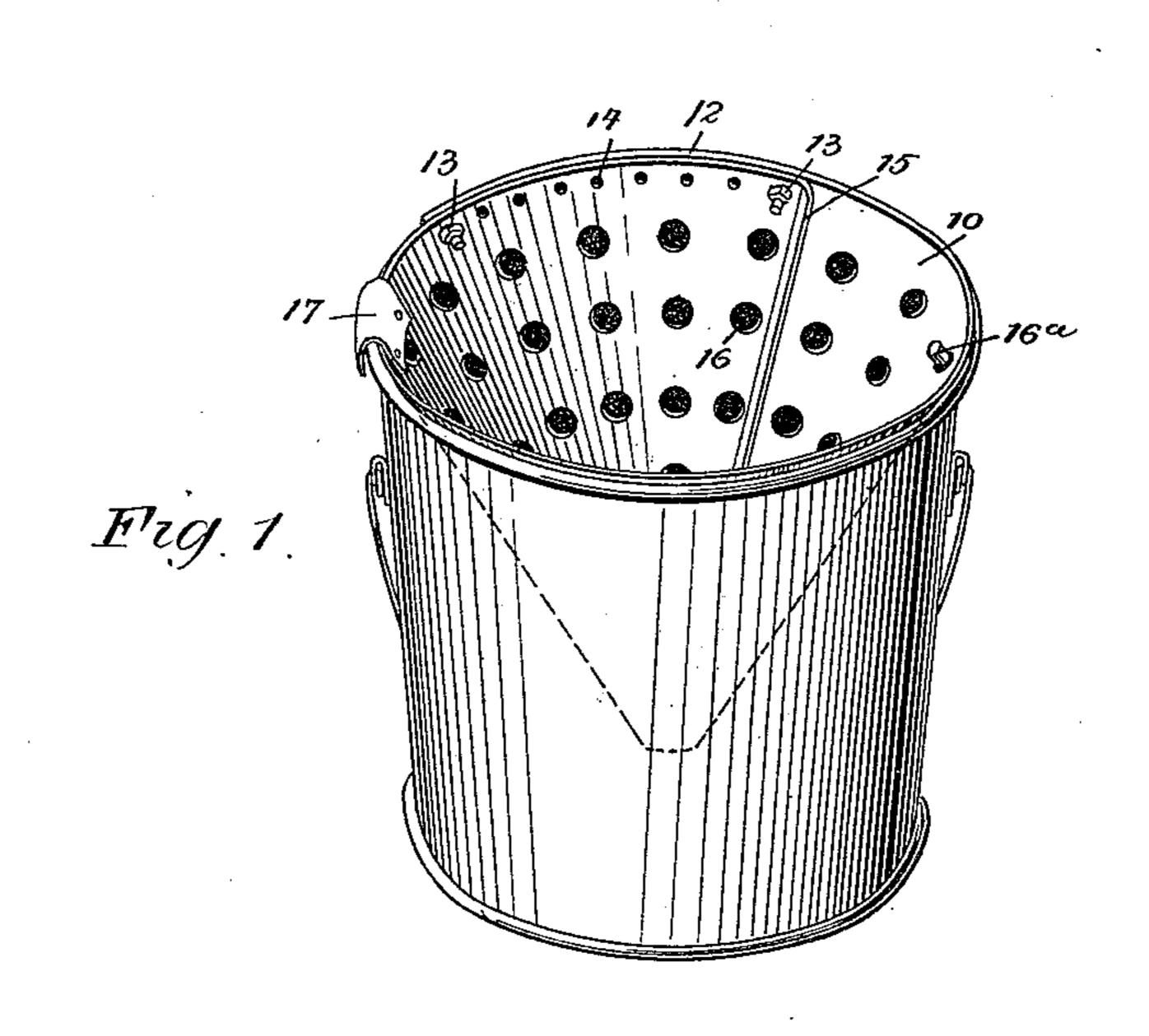


Fig. 2

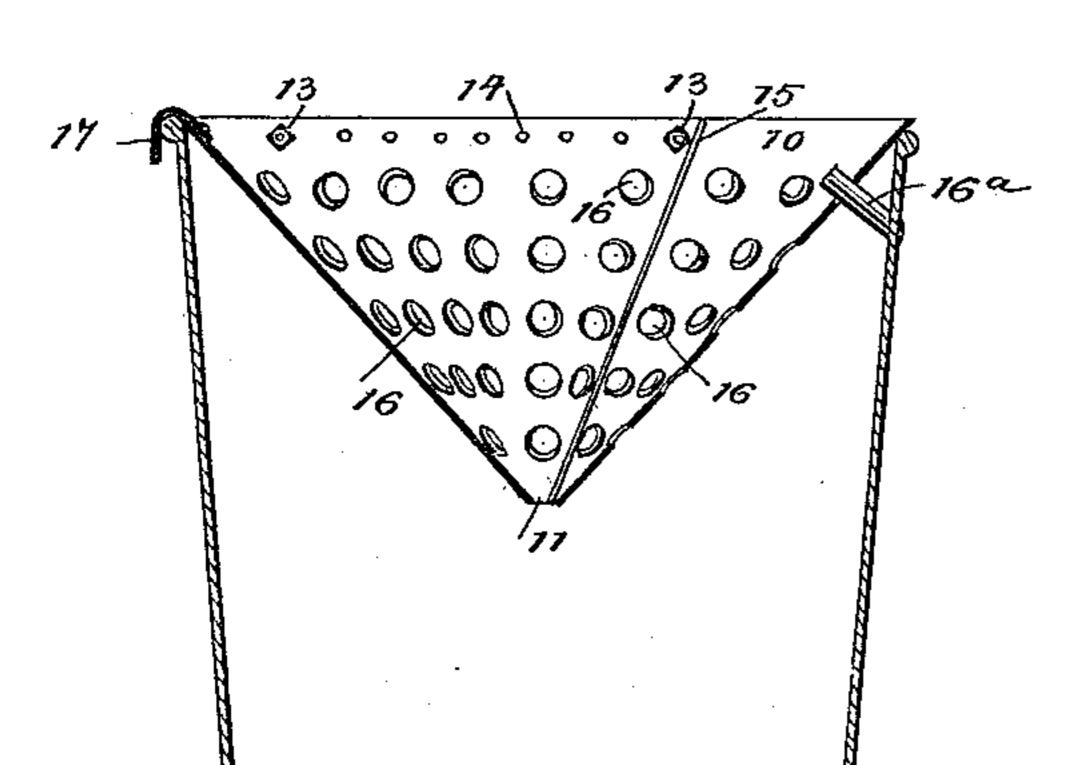
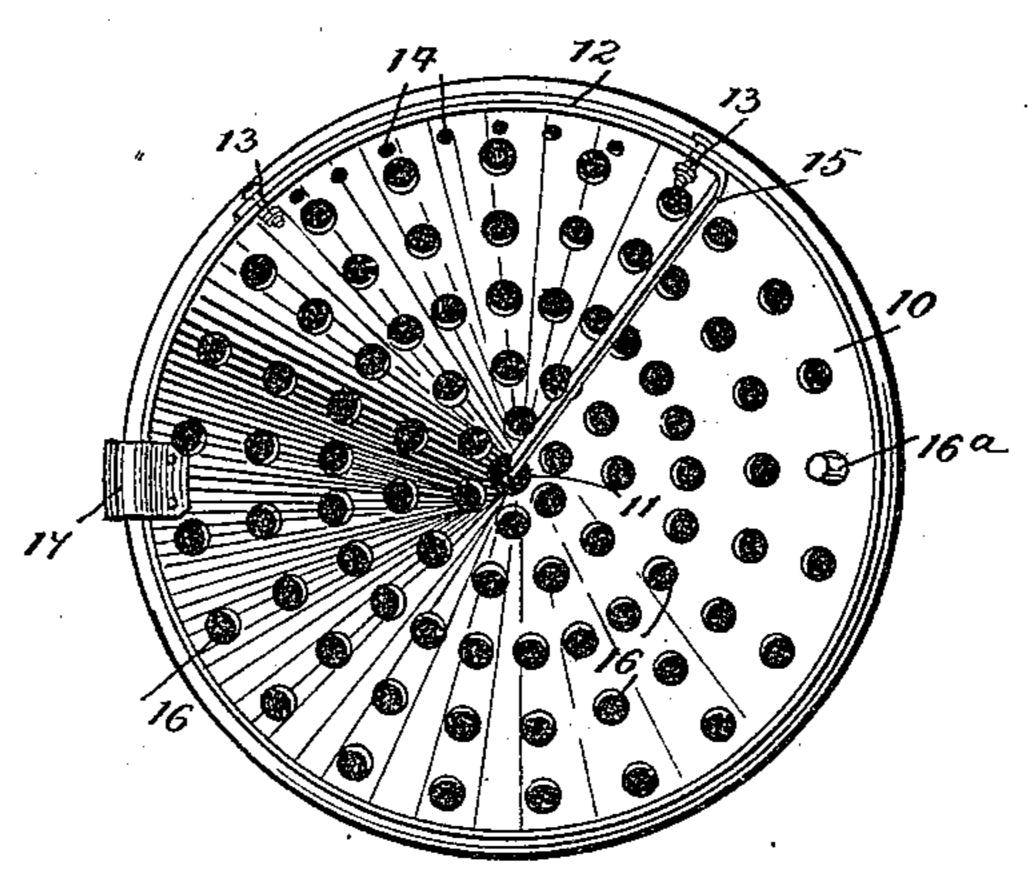


Fig. 3.



WITNESSES:

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## United States Patent Office.

## ALEXANDER M. BORLAND, OF OTISVILLE, NEW YORK.

## MOP-WRINGER.

SPECIFICATION forming part of Letters Patent No. 438,467, dated October 14, 1890.

Application filed May 9, 1890. Serial No. 351,107. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER M. Bor-LAND, of Otisville, in the county of Orange and State of New York, have invented a new and useful Improvement in Mop-Wringers, of which the following is a full, clear, and exact description.

My invention relates to an improvement in mop-wringers, and has for its object to provide a simple and durable device capable of convenient and expeditious application to any pail or similar receptacle, and to so construct the device that it will be exceedingly economic to manufacture and most effective in operation.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

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

Figure 1 is a perspective view of the device applied to a pail. Fig. 2 is a central vertical section through the pail and the device, and Fig. 3 is a plan view of the same.

The device consists of a shell 10, preferably constructed of sheet metal and bent to the shape of an inverted cone, being provided at its lower end or apex with an opening 11. The cone-like shell is preferably made from one piece of metal, and the said metal at its ends is made to overlap, as illustrated at 12 in the drawings. The overlapping portions of the shell are retained in adjustable position through the medium of bolts 13, provided with suitable nuts passed through certain of a number of apertures 14, formed in the shell at or near its upper end.

The inner end of the metal is bent upon itself to form a decided rib 15, which rib extends from top to bottom of the device, and in the said shell, between its top and bottom, quite a number of preferably circular openings or apertures 16 are produced, which apertures or openings may be grouped or arranged in any suitable or desired manner. The rib 15 is adapted to engage with the mop when the latter is introduced into the wringer, and serves to prevent the mop from slipping

when manipulated, and the rib also acts as a bearing against which pressure may be exerted, whereby the act of wringing the mop is greatly accelerated.

It is obvious that by removing the bolts 13 and compressing or expanding the shell the enlarged upper end of the device may be made to snugly fit to the contour of any sized bucket, pail, or similar receptacle.

It is obvious that the body of the device may be made of stout wire-cloth or equivalent material instead of sheet metal, as illustrated.

In the application of the device the upper 65 enlarged end thereof is adapted to contact with the upper rim of the pail or receptacle to which it is to be applied, and the remaining surface of the device extends downward within the pail, as shown in Figs. 1 and 2.

Any mode of securing the device to the pail may be employed, one mode being illustrated, which consists in attaching to the inner face of the pail near its top an inclined pin 16<sup>a</sup> and providing a suitable opening in one side 75 of the device to receive said pin. At the opposite side of the device a cleat 17 is attached, adapted to engage with the upper rim of the pail.

In operation, when the device is applied to 80 a receptacle to wring the mop, it is forced downward in the conical shell and slightly turned, whereupon all the water in the mop is squeezed out therefrom, finding its way into the pail through the lower opening 11 and 85 the numerous body-openings 16.

I desire it to be understood that, although sheet metal is specified as the preferred material employed in the construction of the device, papier-maché or any equivalent article 90 may be substituted, if found desirable.

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

1. A mop-wringer consisting of a conical 95 shell provided with a series of body-openings and an opening in its apex, the ends of the material of which the shell is constructed being overlapped and adjustably connected, whereby the diameter of the shell may be increased or decreased, as and for the purpose specified.

2. A mop-wringer consisting of a conical shell provided with a series of body-openings and an opening in its apex, the ends of which shell are made to overlap and are adjustably connected, the side edge of the inner end having a rib formed thereon, substantially as and for the purpose set forth.

3. As an improved article of manufacture, a mop-wringer consisting of a shell shaped to the contour of an inverted cone, having an opening in its apex and a series of openings in its side and provided with an interior rib, substantially as and for the purpose specified.

4. The combination, with a pail, of a shell shaped to the contour of an inverted cone and pendent within the pail, the said shell having its side edges overlapped and adjustably connected and provided with a series of side openings and an opening in its apex, and locking devices, substantially as described, for attaching the shell to the pail, as and for the purpose specified.

ALEXANDER M. BORLAND.

Witnesses:

JOHN WIGGINS, JAMES S. CRANK.