

A. R. DOUGLASS & J. F. WILLETT.
 COMBINED MOP HEAD AND WRINGER.
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970,197.

Patented Sept. 13, 1910.

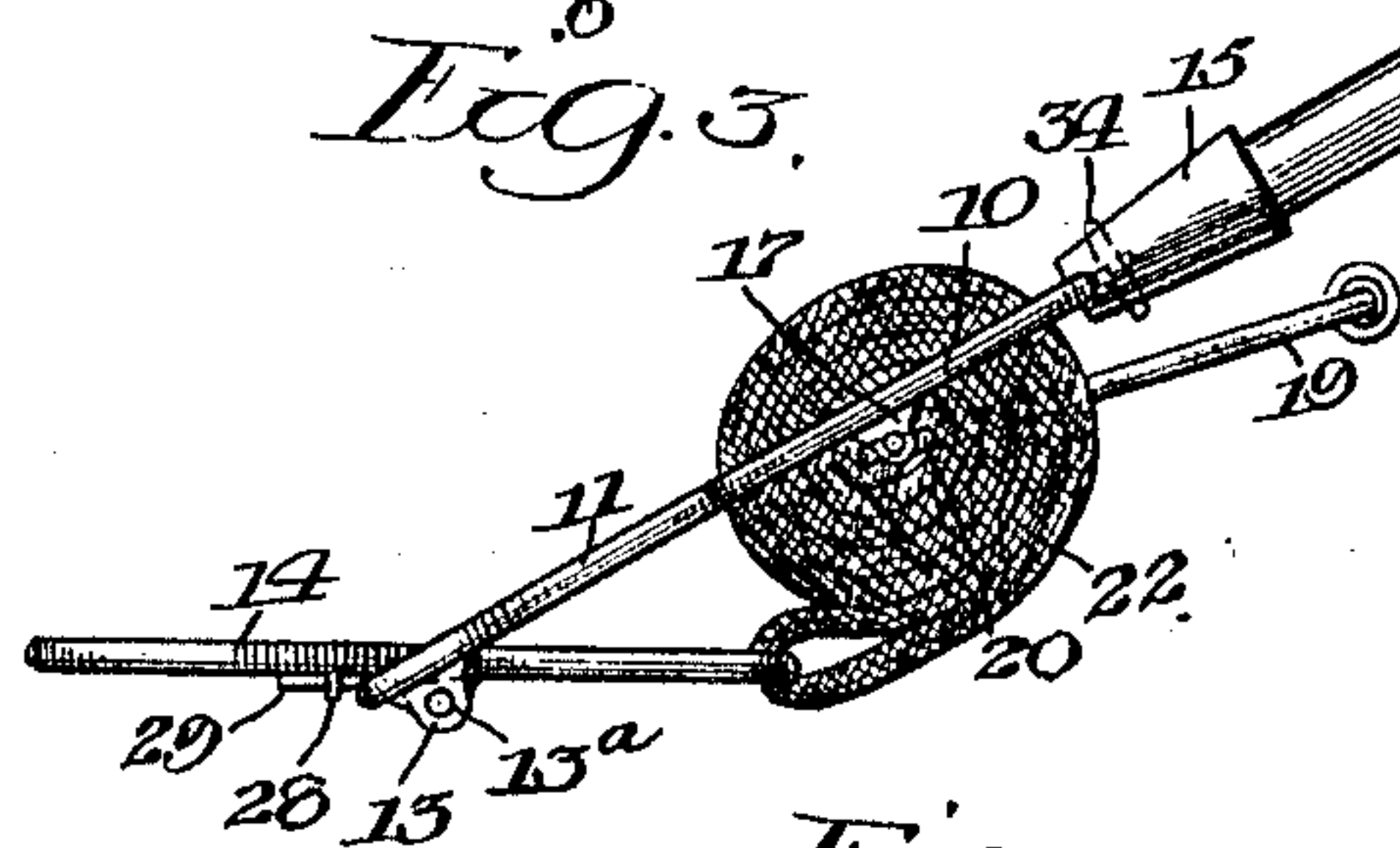
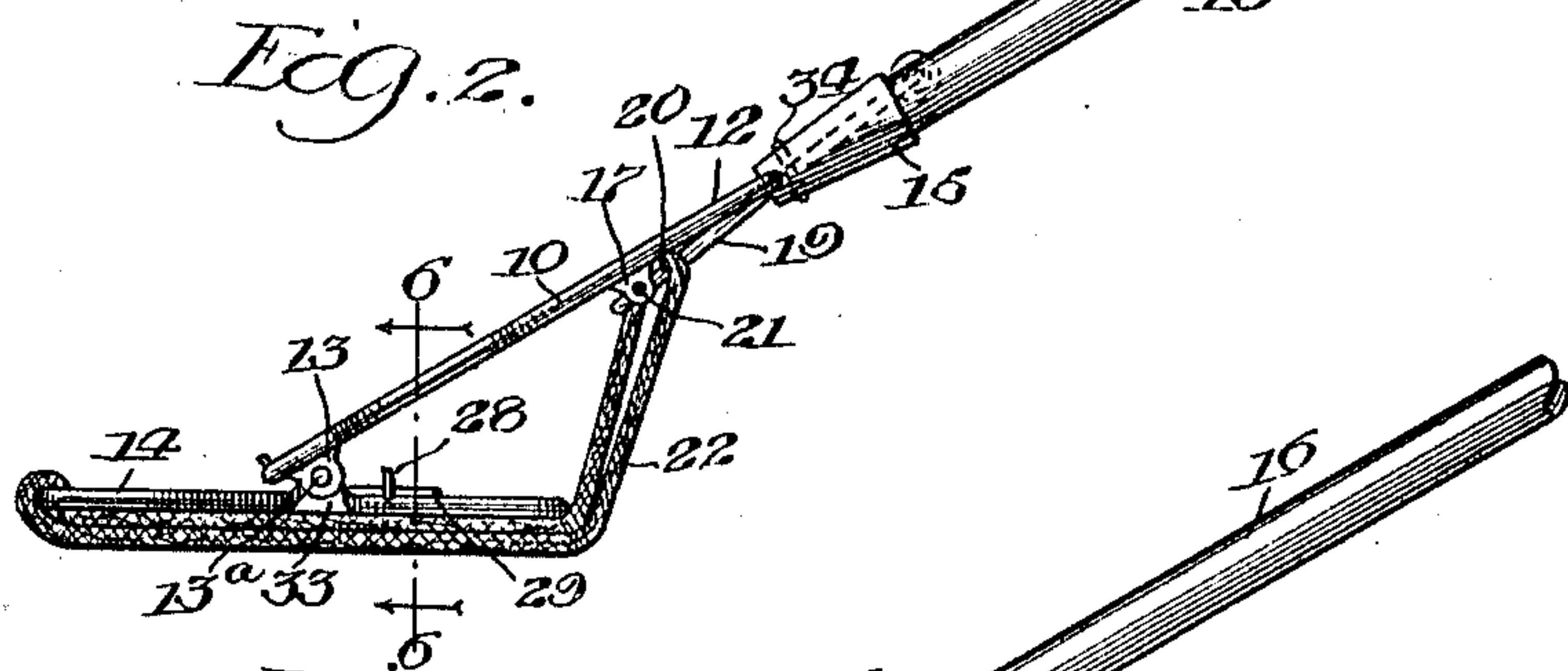
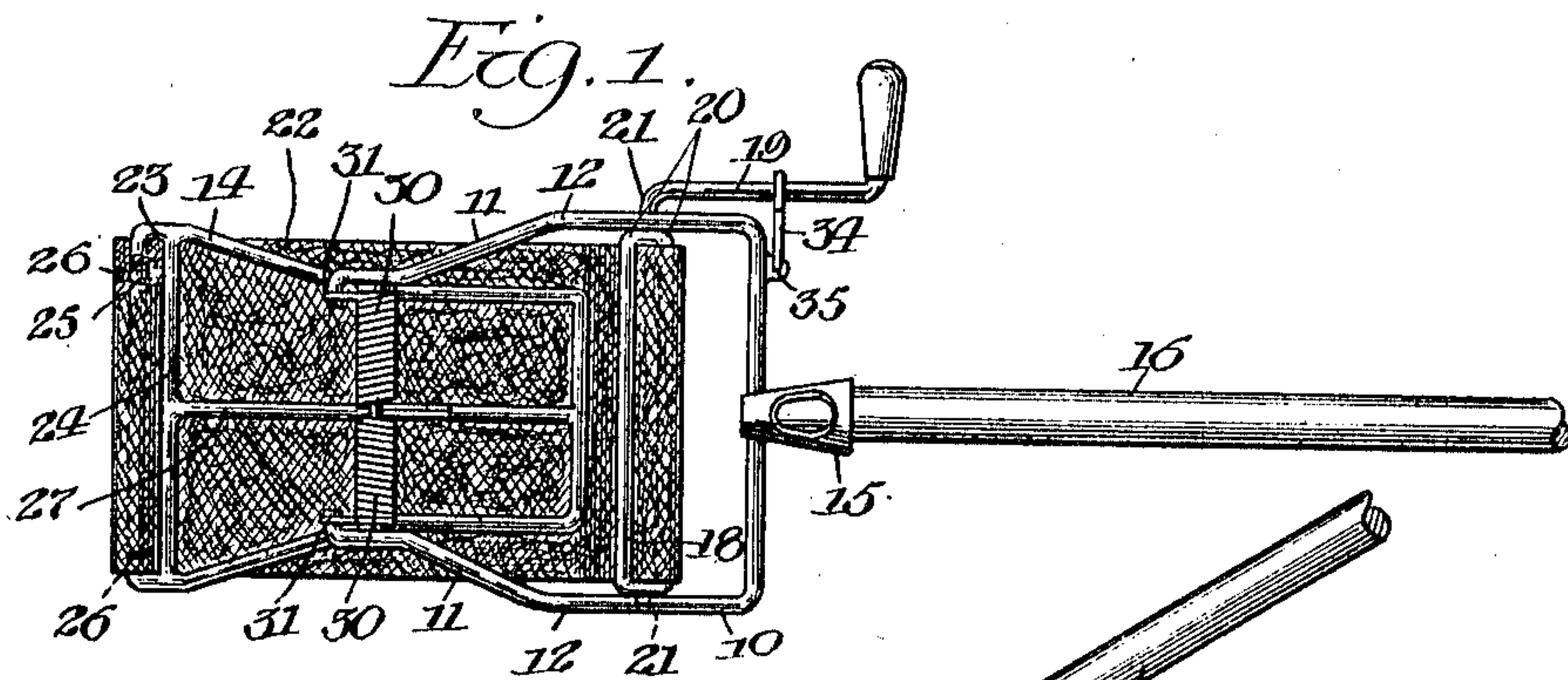
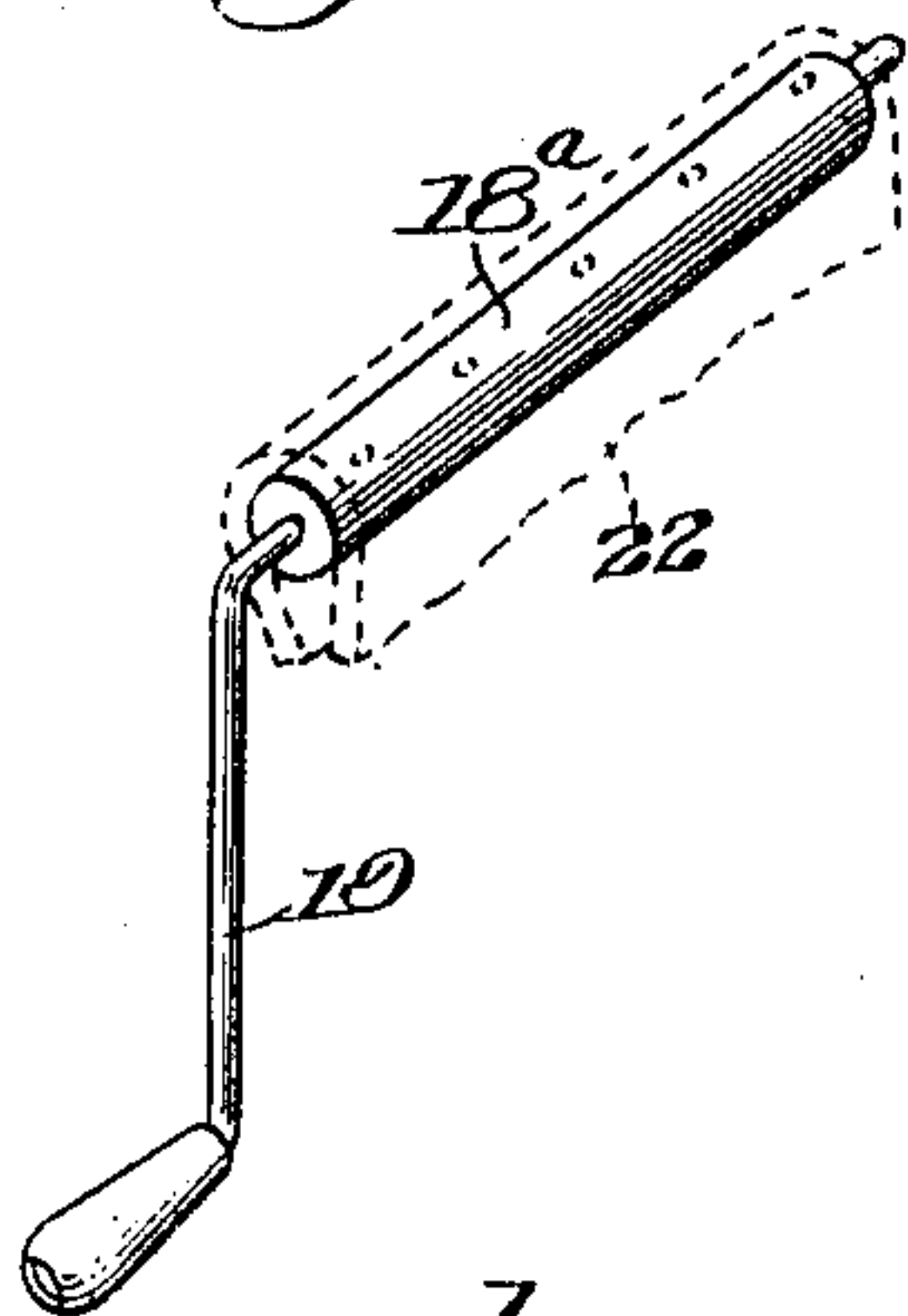
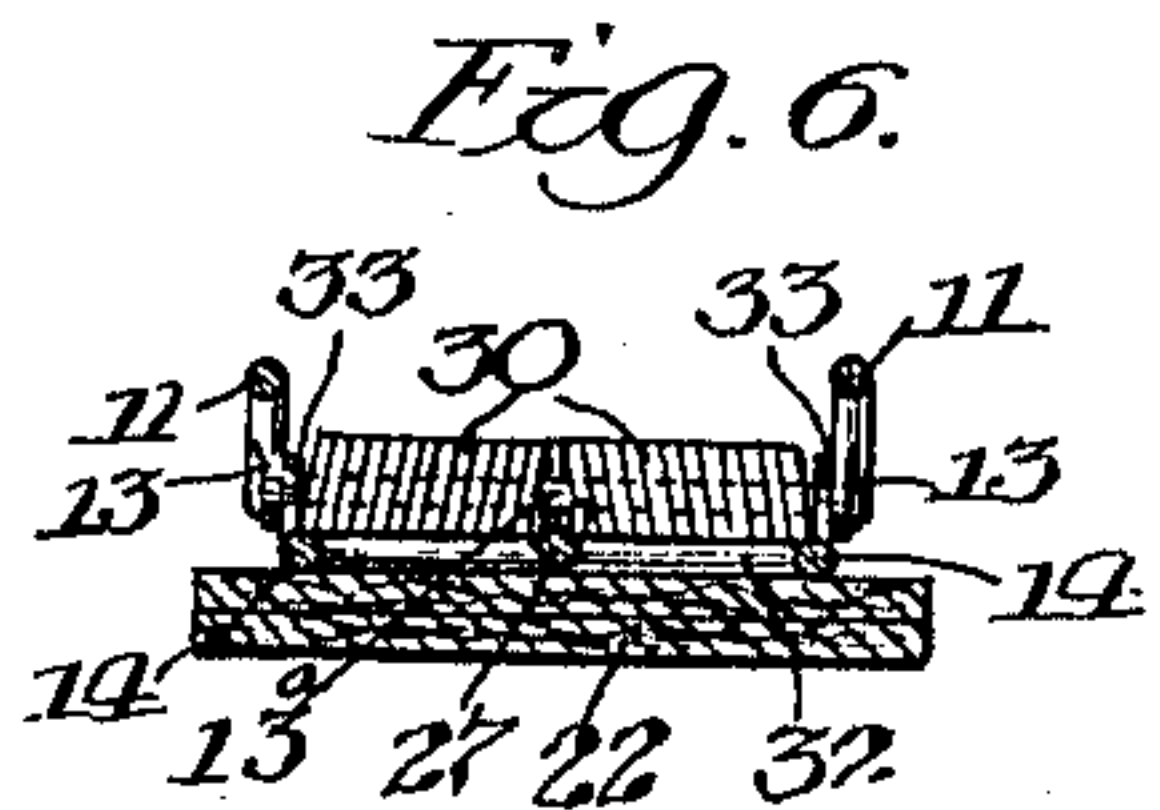


Fig. 4.

Fig. 5.



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UNITED STATES PATENT OFFICE.

ARTHUR R. DOUGLASS AND JAMES F. WILLETT, OF CHARITON, IOWA, ASSIGNORS OF
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COMBINED MOP HEAD AND WRINGER.

970,197.

Specification of Letters Patent. Patented Sept. 13, 1910.

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To all whom it may concern:

Be it known that we, ARTHUR R. DOUGLASS and JAMES F. WILLETT, both of Chariton, in the county of Lucas and State of Iowa, have
5 invented certain new and useful Improvements in Combined Mop Heads and Wringers, of which the following is a specification.

This invention relates to improvements in a combined mop and wringer, and consists
10 in certain peculiarities of the construction, novel arrangement and operation of the various parts thereof, as will be hereinafter more fully set forth and specifically claimed.

The principal object of the invention is
15 to provide a device for mopping floors, which shall be simple and inexpensive in construction, strong, durable and effective in operation, and so made that the mop-cloth can be caused to be acted upon by certain
20 parts of the device so as to express or squeeze the water therefrom in a thorough and efficient manner and without soiling the hands of the operator.

Another object of the invention is to provide a mop which shall be of such construction that the entire thickness of the mop-cloth will be located beneath the pivoted foot or mop-cloth holder when the device is being
25 used to mop or wipe the floor.

Other objects and advantages of the invention will be disclosed in the subjoined description and explanation.

In order to enable others skilled in the art to which our invention pertains, to make and
35 use the same, we will now proceed to describe it, referring to the accompanying drawings, in which—

Figure 1, is a top plan view of a mop embodying the invention showing the parts in
40 position ready for use in mopping or wiping the floor or other surface; Fig. 2, is a view in side elevation thereof; Fig. 3, is a similar view showing the position the parts will assume when the mop-cloth is being wrung, or
45 rather when the water is being squeezed or expressed therefrom; Fig. 4, is a detached perspective view of a modification in the construction of the roller around which the mop-cloth is wound in the operation of extracting water therefrom; Fig. 5, is a detached perspective view of the upper portion
50 of the frame of the mop showing a catch thereon for securing the crank-handle in position when the mop is being used on the
55 floor; and Fig. 6, is a vertical sectional view

taken on line 6—6 of Fig. 2, looking in the direction indicated by the arrows.

Like numerals of reference, refer to corresponding parts throughout the different
60 views of the drawing.

The reference numeral 10, designates the frame of the mop which may be made of any suitable size and material, but preferably of malleable iron wire, bent to form
65 three sides of a substantially rectangular figure, as shown in Fig. 1, of the drawing. The front or lower portion of the frame 10, has two forwardly extended arms or extensions 11, which are preferably bent inwardly
70 from the sides 12, of the frame, and each has near its free end a hanger 13, to receive the ends of a transverse rod 13^a, with which the mop holder 14, is provided about mid-
75 way between the ends thereof. The upper transverse portion of the frame is provided at its middle with a socket piece 15, in
80 which is fitted a handle 16, by means of which the device may be operated. At a suitable point and on the lower portion thereof, each of the sides 12, of the frame is
85 provided with a hanger 17, for the roller 18, and crank-handle 19, which roller is shown in Figs. 1, to 3, inclusive, as being made of two wire members or rods 20, arranged in parallelism with one another, and
90 having their ends united and each end provided with a projection 21, to form shafts or journals for said roller. Secured on one of the shafts 21, is the crank-handle 19,
95 which is used for turning the roller 18, when it is desired to wind the mop-cloth 22, thereon. The mop holder 14, may be made of any suitable size, form and material, but preferably of malleable iron wire,
100 and of substantially the shape shown in Fig. 1, of the drawing, that is to say, substantially rectangular in form in outline, yet with its upper or rear portion somewhat narrower than its front part, which it will
105 be seen is provided with a transverse slot 23, to receive the front portion of the mop-cloth and this slot is preferably produced by means of two parallel members 24, and
110 25, which have their ends united but spaced apart therebetween. The member 25, is provided near each of its ends with an upturned hook 26, to engage the mop-cloth, thus holding it in its spread position, and if desired, to permit of its side edges overlapping the front portions of the sides of the

holder 14, thus forming cushions at said points for mopping against walls, in corners, or base-boards. The rod or portion 24, of the mop holder is united to the rear transverse portion of said holder by means of a bar or rod 27, which gives additional strength to the holder, and is provided rearwardly of the rod 13^a, with a suitable catch 28, on its upper surface to hold the inner ends 29, of two helical springs 30, which are wound around the rod 13^a, and have their outer ends 31, in engagement with the free ends of the arms or extensions 11, of the frame. Just below the rod 13^a, the holder 14, is provided with a transverse bar or rod 32, which serves to strengthen it, the sides of which holder are pivotally connected by means of upright hangers 33, with the rod 13^a.

Secured on the transverse or upper portion of the frame 10, is a forked catch 34, the prongs of which are adapted to be placed astride of the crank-handle 19, to hold it in such a position as to be out of the way when the mop is being used for wiping or mopping the floor. When it is desired to wring the mop-cloth or to squeeze or express the water therefrom, it is evident that the catch 34, may be turned on its pivot 35, out of engagement with the crank-handle, when the roller 18, may be turned thereby and the mop-cloth wound on said roller as shown in Fig. 3, of the drawing, in which operation it will be understood that the springs 30, will exert their tension against the front portion of the mop, thus causing it to be very tightly and compactly wound on the roller, to the end that the water will be squeezed or forced from the mop-cloth, after which, by releasing the crank-handle, it is apparent that by the action of the springs 30, the parts will be returned to their normal positions shown in Figs. 1, and 2, of the drawing and that as the free ends of the arms or extensions are bent inwardly over the sides of the holder 14, they will act as a stop therefor, and prevent its front portion moving upwardly when the mop is being used on the floor.

It will be observed that the mop-cloth is in the form of a loop or hank, and that it is extended through the slot 26, in the front portion of the holder and through the slot of the roller 18, thus disposing its entire thickness beneath the holder. Instead of using a slotted roller as shown in Fig. 1, of

the drawing, an ordinary roller 18^a, (see Fig. 4,) may be employed, in which case the mop-cloth 22, may be looped thereover, and secured thereto by means of tacks or spikes with which the roller may be provided.

Having thus fully described our invention, what we claim as new and desire to secure by Letters-Patent is—

1. In a combined mop head and wringer, the combination with a handled frame, of a mop holder pivotally secured on said frame, a roller journaled on the frame, a mop cloth connected to the front portion of the mop holder and also to the roller, and a spring arranged with respect to the frame and mop holder to exert its tension against the mop cloth as it is wound on the roller.

2. In a combined mop head and wringer, the combination with a handled frame comprising spaced forwardly extending side arms, each provided with a hanger, of a mop holder having a transverse rod journaled in said hangers, a roller journaled on the upper portion of the frame, a mop cloth connected to the front portion of the holder and also to the roller, a spring coiled around the rod of the holder and having one of its ends resting against a part of the holder, and its other end resting against one of the side arms whereby said spring will exert its tension against the mop cloth as it is wound on the roller.

3. In a combined mop head and wringer, the combination with a handled frame comprising spaced forwardly extending side arms, each provided with a hanger, of a mop holder having a transverse rod journaled in said hangers and provided at its front end with a transverse slot, a slotted roller journaled on the upper portion of the frame, a crank handle to turn said roller, a mop cloth extended through the slot in the front portion of the holder and also through the slot in the roller, springs coiled around the rod of the holder and having one of their ends resting against a part of the holder, and their other ends resting against the side arms whereby said springs will exert their tension against the mop cloth as it is wound on the roller.

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