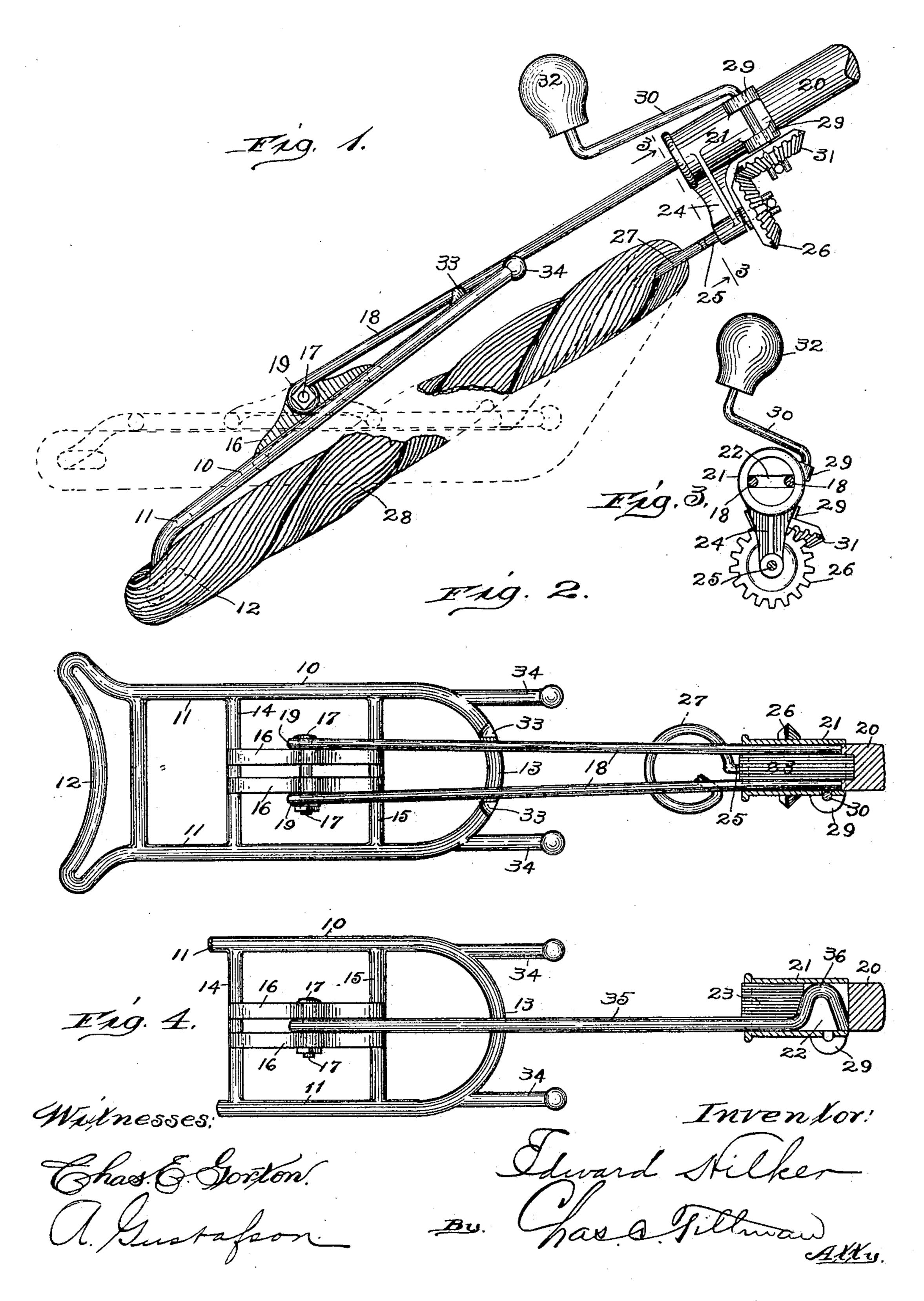
## E. HILKER. COMBINED MOP AND WRINGER.

APPLICATION FILED MAY 28, 1903.

NO MODEL.



## United States Patent Office.

## EDWARD HILKER, OF CHICAGO, ILLINOIS.

## COMBINED MOP AND WRINGER.

SPECIFICATION forming part of Letters Patent No. 758,753, dated May 3, 1904.

Application filed May 28, 1903. Serial No. 159,054. (No model.)

To all whom it may concern:

Be it known that I, EDWARD HILKER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, 5 have invented certain new and useful Improvements in a Combined Mop and Wringer, of which the following is a specification.

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

The objects and advantages of the invention 15 will be disclosed in the subjoined description

and explanation.

In order to enable others skilled in the art to which my invention pertains to make and use the same, I will now proceed to describe 20 it, referring to the accompanying drawings, in which—

Figure 1 is a view in side elevation of a mop and wringer embodying my invention, illustrating by dotted lines the positions the 25 parts will occupy when the mop is being used for scrubbing or wiping the floor and by continuous lines the positions they will assume when removed from the floor and the cloth or mop is being wrung. Fig. 2 is a plan view, 30 partly in section, of the mop holder or head and a portion of the handle. Fig. 3 is an end view, partly in section, of the wringer; and Fig. 4 is a plan view, partly in section, showing a modification in the construction of the 35 mop holder or head and also illustrating modified means for connecting the handle thereto.

Like numerals of reference refer to corresponding parts throughout the different views

of the drawings.

The reference-numeral 10 represents the mop holder or head, which may be made of any suitable size, form, and material, but preferably of malleable iron and of the form shown in the drawings—that is, an elongated 45 open-work frame consisting of sides 11, joined together at their ends by means of portions. 12 and 13 and having transverse bars or connecting parts 14 and 15, which are united at about their middle portions with bars or con-50 necting members 16, which are a slight dis- in Fig. 1 of the drawings. The upper surface 100

tance apart and extend longitudinally with the sides of the frame. Each of the bars or members 16 is provided at about its middle with an opening to receive a pivot-bolt 17, on which the handle extension is secured. This exten- 55 sion preferably comprises two parallel members 18, each of which has its lower end formed with an eye 19 to receive the bolt 17, thus pivotally connecting it to the connecting members 16, as is clearly shown in Figs. 1 and 2 of the 60 drawings. Fixed on the lower end of the handle 20 is a collar 21, which forms a ferrule, as well as a hanger for the shafts of the wringer, as will be presently explained. The lower end of the handle 20 is formed with a slot 22 to re- 65 ceive the upper portions of the handle-extension members 18, as is clearly shown in Fig. 3 of the drawings, which members are firmly secured in place by means of a block or wedge 23, driven into the slot 22 of the handle between 7° the members 18, as is clearly shown in Fig. 2 of the drawings. The collar 21 is provided on its lower portion with a depending bracket 24, in the lower end of which is journaled a shaft 25, which carries on one of its ends a 75 beveled gear 26 and on its other end a broken ring or loop 27 to engage and support the upper portion of the mop or cloth 28, which is preferably made in the form of a hank or loop. The upper side portion of the collar 80 21 is provided with lugs 29, in suitable openings of which is journaled a crank-shaft 30, which carries on one of its ends a beveled gear 31 to mesh with the gear 26 and on its other end a knob or handle 32, by means of which 85 the said crank-shaft is turned, so as to operate the wringer. The front ends of the sides 11 of the head or holder are preferably downturned, as shown in Fig. 1 of the drawings, and the portion 12, connecting said ends, is 9° curved inwardly, as is clearly shown in Fig. 2 of the drawings, thus causing the mop or cloth, one end of which is connected to the portion 12, to be bunched or drawn together in the wringing operation. The downturned 95 portions of the sides 11 will serve to hold the head or holderslightly above the moporcloth when it is being used for wiping or scrubbing the floor, as is clearly shown by dotted lines.

of the portion 13, which connects the rear parts of the sides 11 of the holder, is provided with upwardly-extending lugs 33, which serve to assist in preventing lateral movement of the 5 holder when the mop is being wrung, for it is apparent that the handle-extension members 18 will rest between said lugs when the head or holder is raised to the position shown in Fig. 1 by reason of the mop being made 10 taut. As a further guide for the mop or cloth 28 when it is being wrung, as well as to prevent it slipping from under the holder 10, the said holder is provided at its rear end with extensions 34, located at the sides of the holder 15 and extending parallel with one another, as shown.

In Fig. 4 of the drawings is shown a modification in the construction of the handle extension, which consists in employing one member 35 instead of two members, as shown in Fig. 2 and above described. In this modification the member 35 is pivotally secured at one of its ends between the portions 16 and has its other end formed with a crook 36 to fit in the slot 22 of the handle 20, and said end of the extension is secured in position by means of a block or wedge 23, driven in the slot and collar 21 thereon.

The operation is simple and as follows: 3° When it is desired to use the mop for scrubbing or wiping the floor, the cloth 28 is untwisted, when by reason of its weight the head or holder will be caused to assume substantially a horizontal position, as shown by 35 dotted lines in Fig. 1, in which position the mop under the holder will rest on the floor, the rear portion of the mop extending up between the projections or extensions 34, the same thus preventing the mop or cloth slip-4° ping sidewise from under the same. When it it is desired to wring the mop or cloth, the device is raised from the floor, when the crankhandle may be turned, which operation, through the medium of the gears 31 and 26, 45 will twist the mop, thus extracting the water therefrom without soiling the hands of the operator.

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

1. The combination with the holder, of a handle extension pivotally secured thereto, a

handle connected to the upper end of the extension, a collar surrounding the lower end of the handle and the upper end of the extension 55 and forming a ferrule for the former, a twisting device located on the collar, and a mop or cloth connected at one of its ends to the twisting device and at its other end to the holder, substantially as described.

2. The combination with the holder having at one of its ends an inwardly-curved transverse portion and at its other end rearwardly-projecting extensions, of a handle extension pivotally connected to the holder, a handle 65 connected to the upper end of the extension, a wringer on the handle, and a mop connected at one of its ends to the wringer and at its other end to the inwardly-curved portion of the holder, substantially as described.

3. The combination with the holder having at its front end a downwardly-depending and inwardly-curved transverse portion and at its other end rearwardly-projecting extensions and on the upper surface of its rear end up- 75 wardly-projecting lugs, of a handle extension pivotally connected to the holder, a handle connected to the upper end of the extension, a wringer on the handle, and a mop connected at one of its ends to the wringer and at its 80 other end to the inwardly-curved portion of the holder, substantially as described.

4. The combination with the holder having at one of its ends a transverse portion and at its other end rearwardly-projecting exten- 85 sions and on the upper surface of its rear end lugs, of a handle extension pivotally secured to the holder, a handle having a slot in its lower end to receive the upper end of the said extension, a collar surrounding the lower end 90 of the handle and the upper end of the said extension, means to fix the extension within the collar, a crank-shaft journaled on the collar, a beveled gear on the crank-shaft, another shaft journaled on the collar, a beveled 95 gear on said shaft to mesh with the firstnamed gear, a mop connected at one of its ends to the last-named shaft and at its other end to the holder, substantially as described.

EDWARD HILKER.

Witnesses:

CHAS. C. TILLMAN, A. GUSTAFSON.