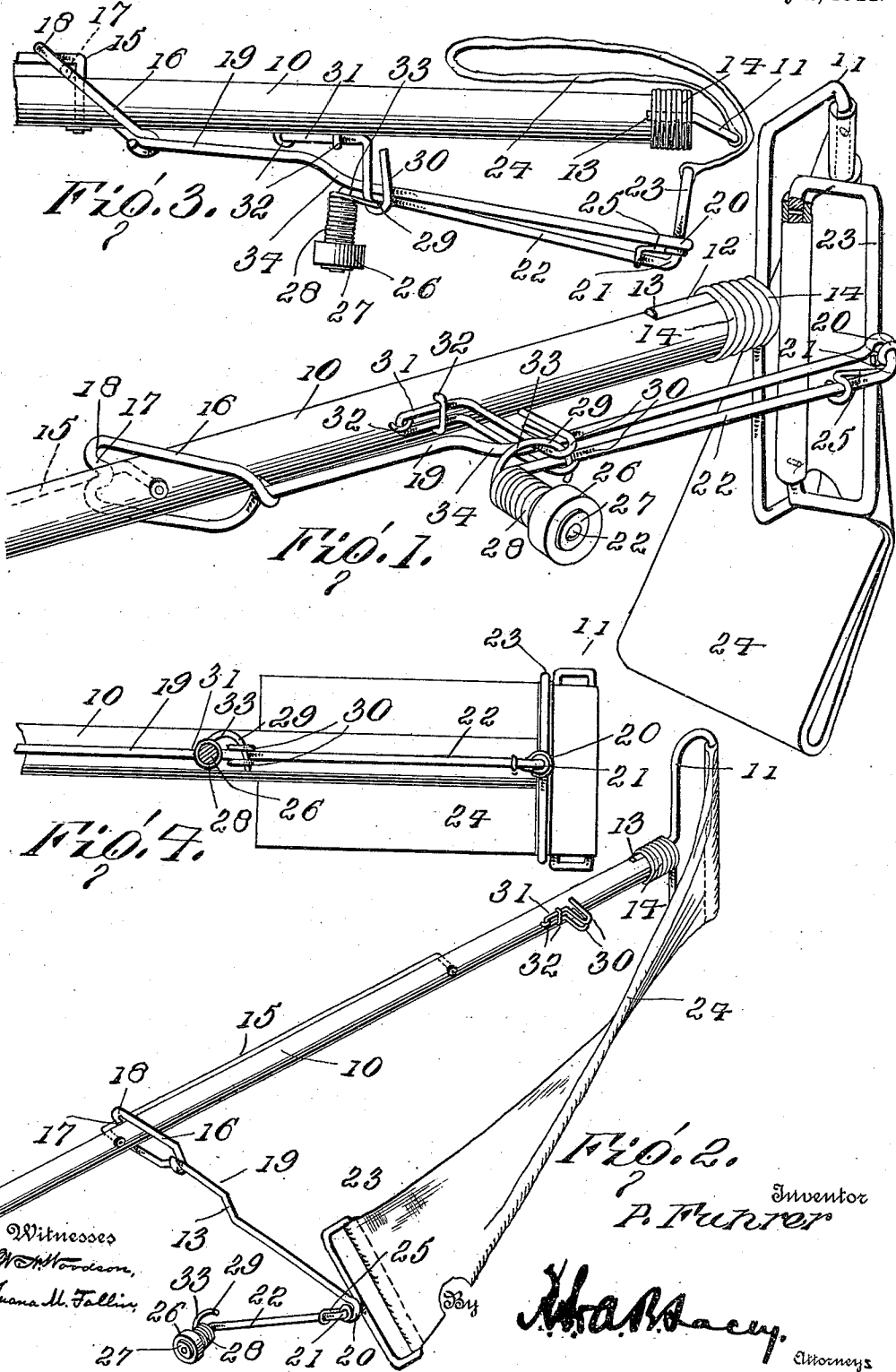


P. FUHRER.
 COMBINED MOP HEAD AND WRINGER.
 APPLICATION FILED MAR. 19, 1910.

991,054.

Patented May 2, 1911.



UNITED STATES PATENT OFFICE.

PAUL FUHRER, OF GREELEY, COLORADO.

COMBINED MOP HEAD AND WRINGER.

991,054.

Specification of Letters Patent.

Patented May 2, 1911.

Application filed March 19, 1910. Serial No. 550,474.

To all whom it may concern:

Be it known that I, PAUL FUHRER, citizen of the United States, residing at Greeley, in the county of Weld and State of Colorado, have invented certain new and useful Improvements in Combined Mop Heads and Wringers, of which the following is a specification.

This invention relates to an improvement in mop heads and wringers, and has for an object to so construct such a device that a long and comparatively thin mop cloth may be employed and operated therein in lieu of the short thick mop cloth now commonly used. The long thin cloth admits of the drying of the same more quickly and thoroughly during the use of the wringer.

Another object of this invention is to form a light, strong and durable mop wringer which may be conveniently handled and quickly operated.

For a full understanding of the invention reference is to be had to the following description and accompanying drawings, in which:—

Figure 1 is a perspective view of the improved wringer in a closed position. Fig. 2 is a similar view disclosing the wringer in an open position. Fig. 3 is an edge view of the wringer in closed position, and Fig. 4 is a side view of the same, partially in section.

Corresponding and like parts are referred to in the following description and indicated in all the views of the accompanying drawing by the same reference characters.

Referring to the drawing the numeral 10 designates a handle which is of the usual rounded formation and of any desired length. Upon the outer end of the handle a loop 11 is positioned which is formed of a length of wire bent upon itself to provide a flattened loop, and having short arms 12 for engagement against the opposite edges of the handle 10, wherein the short arms 12 are seated and have their free ends turned inwardly as at 13 to engage in the edge of the handle. A binding wire 14 is positioned about the outer end of the handle and over the arms 12 to retain the same rigidly in place.

At one side of the handle 10 a bail 15 is positioned which is arranged longitudinally against the handle to receive an elongated yoke 16. The yoke 16 is passed over the handle 10 engaging against the edges there-

of and provided with a seat 17 which is formed by looping the end of the yoke inwardly to provide fingers 18 at its outer end to engage against the opposite sides of the bail 15. The yoke 16 is thus held from rotation about the handle 10. The inner end of the yoke 16 is terminated in an arm 19 formed of a single length of wire extending longitudinally of the handle 10 to a point adjacent its outer end. The arm 19 is overturned at its outer end to form an eye 20. The eye 20 carries a shank 21 which is rotatably positioned therethrough and terminates in a crank-arm 22 at its outer end. The inner end of the shank 21 is formed into a revoluble loop 23 to cooperate in conjunction with the loop 11 to support the mop cloth 24. The mop cloth 24 comprises an elongated strip of flexible material which is turned over at its opposite ends to engage loosely about the loops 11 and 23. The shank 21 is provided with a bushing 25 which is in the form of a length of wire curved about the shank and held in position thereon by extending the outer end of the wire longitudinally against the arm 22 and looping the extremity of the wire about the arm 22. The outer end of the arm 22 is provided with a handle 26 which is in the formation of a sleeve which is rotatably disposed thereon and held in position through the medium of a washer 27 which is engaged over the end of the arm 22 and held in place by upsetting the end of the arm. The inner end of the handle 26 is reduced to receive a helical spring 28 which is rigidly secured thereto at its inner end and in any suitable manner, as by winding the same tightly about the handle 26 as is disclosed in the drawing. The outer arm of the spring 28 terminates in an arcuate locking finger 29 which extends radially from the handle 26. The handle 10 carries against one side a pair of ears 30 which extend outwardly therefrom to receive therebetween the central portion of the arm 19. The ears 30 are formed from a single length of wire which is returned upon itself to form a base 31 which is held against the handle 10 by the provision of cleats 32. The ears are projected outwardly at right angles from the base 31 to receive frictionally therebetween the arm 19.

It will be observed from the drawing that the ears 30 are looped at their outer ends for the reception of the locking finger 29. The

crank-arm 22 is also positioned between the ears 30 in order to bring the locking finger 29 into registration with the ears 30. From Fig. 4 it will be observed that the locking finger 29 is so curved as to present a cam 33 at its central portion which is adapted to bind against the inner sides of the ears when the handle 26 is rotated and to thereby frictionally retain the finger in position. The arm 19 is offset outwardly as at 34 to position the revoluble loop 23 against the fixed loop 11 and to admit of the positioning of the cloth 24 therebetween.

Referring particularly to Figs. 1 and 2 the operation of the device is as follows:— The handle 26 is rotated to draw the locking finger 29 from the ears 30, when the arms 22 and 19 are drawn outwardly from the ear 30 and swung into a right angle relative to the handle 10. The yoke 16 is now moved inwardly upon the handle 10 to the lower end of the bail, 15, as is disclosed in Fig. 2. The crank-arm 22 is now rotated to twist the mop cloth 24 and to thereby extract the excess of moisture from the same. The loops 11 and 23 are each apertured adjacent their ends for the reception of a thread or other fastening means by which the ends of the mop cloth 24 are secured in position. By passing a thread through the apertures in the loops 11 and 23 and through the mop cloth adjacent its edges, the mop cloth is prevented from gathering or bunching at its ends when it is twisted by the turning of the revolving loop 23. The mop cloth is thereby held in a flat and laterally stretched position at all times.

Having thus described the invention what is claimed as new is:—

1. A mopping device including a handle, a fixed loop positioned upon the outer end of the handle, a swinging arm carried by the handle, a bail positioned longitudinally against the handle to pivotally hold the arm in sliding relation against the handle, a revoluble loop carried in the outer end of the arm to coöperate with said fixed loop to carry a mop cloth, ears carried by the han-

dle to receive said arm, a crank-arm carried by the revoluble loop to operate the same, and means disposed upon the outer end of the crank-arm for engagement with the ears to lock said arm in a closed position.

2. A mopping device including a handle, a fixed loop on the outer end of the handle for supporting one end of a mop cloth, a swinging arm adjustably supported upon said handle, a revoluble loop carried by the arm and engaged with the opposite end of the mop cloth to twist the same, a crank-arm carried by the loop to operate the same, a handle carried upon the outer end of said crank-arm, an arcuate locking finger carried by said handle, and a pair of ears carried by said first handle to receive said arm and said locking finger.

3. A mopping device including a handle, a fixed loop arranged upon the outer end of the handle, an arm pivotally and slidably disposed upon the handle, a revoluble loop mounted in the outer end of the swinging arm and having a shank, locking means carried by the revoluble loop shank and the handle for holding the arm inwardly against the handle.

4. A mopping device including a handle having a fixed loop upon its outer end to support one extremity of a mop cloth, a swinging arm mounted on the handle, a yoke carried upon the inner end of the arm for loose engagement about the handle, a bail carried by the handle to receive the outer end of the yoke and to limit the sliding movement thereof, a pair of ears secured against the side of the handle to receive the arm, a locking finger supported on the arm for engagement through the ears to hold the arm therebetween, a twisting means carried by said arm for supporting the opposite end of the mop cloth.

In testimony whereof I affix my signature in presence of two witnesses.

PAUL FUHRER. [L. S.]

Witnesses:

W. G. HAYDEN,
L. B. CARRELL.