

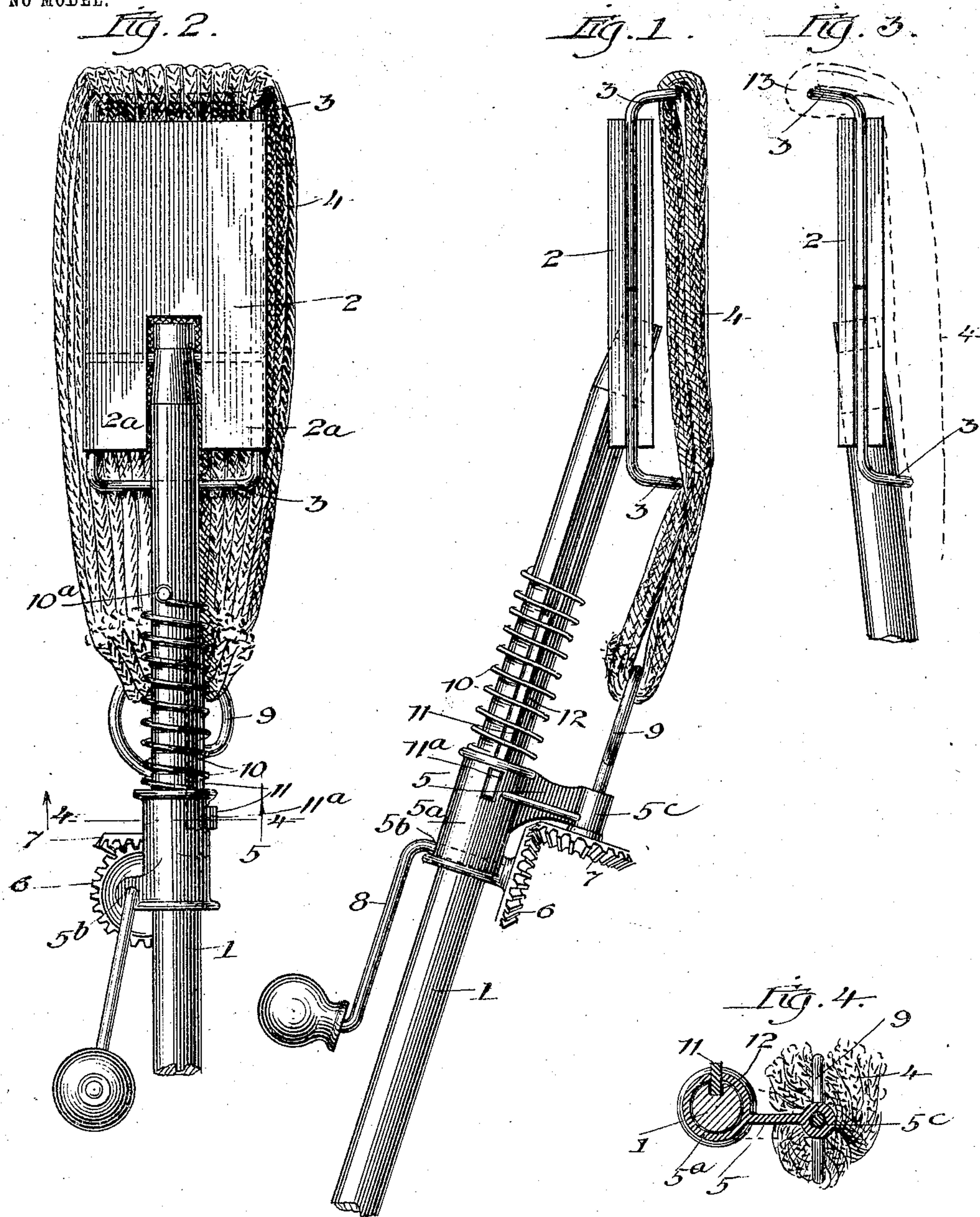
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PATENTED NOV. 22, 1904.

H. O. THOMAS.  
MOP OR WIPER.

APPLICATION FILED AUG. 27, 1903.

NO MODEL.



Witnesses:

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# UNITED STATES PATENT OFFICE.

HENRY O. THOMAS, OF HARRISBURG, NEBRASKA.

## MOP OR WIPER.

SPECIFICATION forming part of Letters Patent No. 775,463, dated November 22, 1904.

Application filed August 27, 1903. Serial No. 170,904. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY O. THOMAS, a citizen of the United States of America, residing at Harrisburg, in the county of Banner, in the State of Nebraska, have invented new and useful Improvements in Mops or Wipers, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof.

The purpose of this invention is to provide an improved device in the nature of a mop or wiper for cleaning walls or floors adapted to be used either wet or dry and when used wet to be wrung without detachment of the mop or wiping-cloth from the stretching or carrying devices.

It consists in the features of construction which are set out in the claims.

In the drawings, Figure 1 is a side elevation of my improved mop. Fig. 2 is a plan view of the same, both Figs. 1 and 2 showing the mop or wiping-cloth in the customary position for ordinary wiping. Fig. 3 is a detail side elevation of a portion of the stretcher with the mop or wiping-cloth adjusted to a different position from that shown in the other figures. Fig. 4 is a section at the line 4 4 on Fig. 2.

My improved mop or wiper comprises a handle 1, which has pivoted to it a bifurcated block 2, the handle being inserted between the separated arms or fingers 2<sup>a</sup>, as seen in the drawings. The sides of the block 2 are grooved, whereby the block is adapted to retain the loops 3 3, which are made of wire of such diameter as to fit tightly in the grooves, the loop being folded at right angles to the side bars or stems, so that when the side bars are lodged in the grooves of the block said loops may turn downward, as seen in Figs. 1 and 2, projecting beyond the plane of the lower face of the block, whereby they are adapted to hold the wiping-cloth 4 in the manner most clearly seen in Fig. 1. This wiping-cloth is preferably made from a web which has its ends connected and through which the loop 3 at the forward end of the block is inserted, while the loop at the rear end serves to hold the two plies of the wiping-cloth off from the face of the block when it is stretched

by the devices provided for holding its rear end, as seen in Fig. 1. These devices comprise a bracket 5, which is formed with a sleeve 5<sup>a</sup>, which slides on the handle 1 and has projecting from it bearings at 5<sup>b</sup> and 5<sup>c</sup>, respectively, for intermeshing bevel-gears 6 and 7, the former of which has a crank-handle 8 for rotating it, while the latter has its shaft terminating in a hook or loop 9, which is hooked through the rear end of the wiping-cloth 4, as seen in Fig. 1.

Coiled about the handle 1 below the bracket 5 is a spring 10, one end of which is stopped on the handle and may be fastened to it, as seen at 10<sup>a</sup>, the other end of the spring reacting against the lower end of the sleeve 5<sup>a</sup>, with a tendency to thrust the bracket up on the handle, and thereby stretch the wiper and hold it taut over the block between the two loops 3 3. The bracket 5 is prevented from rotating about the handle 1 by means of a long key 11, which is lodged in a groove 12 in the handle and has an offset head 11<sup>a</sup> projecting out through the sleeve 5<sup>a</sup>. This key permits the sleeve to slide longitudinally on the handle, but locks it equally against rotation at all positions.

For wringing the mop the operator rotates the crank-handle 8, thereby causing the hook 9 to be rotated and to twist the mop after the old-fashioned method of hand-wringing. It will be understood that unless pressed against the floor or wall for wiping the block 2 will be drawn by the pull of the wiping-cloth on its forward end out of the position shown in full line in Fig. 1 to the position shown in Fig. 3, being stopped in latter position by the rear loop 3 coming up against the under side of the handle, and that in this position it will stand while being wrung, as above described. The action of wringing the cloth, tending to shorten it, will cause the bracket 5 to be pulled down against the resistance of the spring 10. Such movement of the bracket on the handle will be permitted by the sliding of the key 11 in its groove 12 so long as the resistance of the cloth to the torsion of the wringing process does not tend strongly to rotate the sleeve on the handle; but after the cloth becomes somewhat tightly twisted in the wringing the



rotary tendency of the entire bracket 5 causes the key 11 to be pressed laterally against the side of the groove 12, and the key being of metal, and the handle in which the groove is formed being of wood, such lateral pressure, tending slightly to embed the corner of the key in the wood, makes it resist further sliding movement of the bracket on the handle, so that in the further wringing the cloth may be twisted tightly and wrung quite dry instead of becoming merely wound up in a knot, as it would be liable to be if it were free to shorten indefinitely under the twisting action.

When using this implement for wiping either wet or dry around base-boards and door or window casings, and particularly over the top of such casings, where dust accumulates, it is very desirable to have a protruding nose which will reach into the smaller corners and over the protruding moldings to wipe them clean, and for such use the forward loop 3 may be reversed in position, as shown in Fig. 3, whereby there is formed a distinctly protruding nose 13 at the forward end of the block, consisting of the wiping-cloth folded over the upturned loop and projecting beyond the upper surface of the block.

I claim—

1. A mop or wiper comprising a bifurcated block, a handle pivoted to the block at such bifurcation and adapted to fold therein into line with the block; a wiping-cloth connected to the forward end of the block; means sliding on the handle for holding the rear end of the wiping-cloth, and a spring forcing said means up on the handle to stretch the said cloth, and means for stopping the handle from folding back through the block.

2. A mop or wiper comprising a block; a handle pivotally attached thereto; a wiping-cloth connected to the forward end of the block and extended thereunder; a stretching device mounted on the handle and connected to the rear end of the wiping-cloth; a spring forcing said stretching device up on the handle, and means limiting the pivotal action of the block on the handle to prevent the forward connection of the wiping-cloth with said block swinging back rearward.

3. A mop or wiper comprising a block having lateral grooves; loops having their side bars lodged in such grooves and bent to project past the plane of the lower surface of the block; a wiping-cloth engaged with the forward loop and extended back under the rear loop; a stretching device mounted on the handle and engaged with the rear end of the wiping-cloth, and a spring reacting between the handle and the stretching device to pull the rear end of the wiping-cloth up rearward, and means limiting the swing of the block on the handle to prevent the forward loop from swinging back rearward.

4. A mop or wiper comprising a block bifurcated at the rear end; a handle pivoted to

it in such bifurcations, said block having its lateral edges grooved; loops having their side bars engaged in said grooves, the forward loop being adapted to engage the wiping-cloth, and the rear loop by its cross-bar to stop the handle from swinging back through the bifurcations past such cross-bar; the wiping-cloth engaged with the forward loop and extended thence back under the block and under the cross-bar of the rear loop; a bracket sliding on the handle having means for engaging the rear end of the wiping-cloth, and a spring reacting between said bracket and the handle to stretch the wiping-cloth.

5. A mop or wiper comprising a handle and a block pivotally connected thereto and provided with means for holding the forward end of a wiping-cloth, and stopped in its pivotal movement with respect to the handle to prevent the forward end from swinging rearward at the side at which the wiping-cloth lies; a wringing device and means whereby it is mounted on the handle, said wringing device comprising means for engaging the rear end of the wiping-cloth; a spring operating against said wringing device to stretch the wiping-cloth, and means for rotating said device to wring said cloth.

6. A mop or wiper comprising a handle and a block at the end thereof provided with means for holding one end of the wiping-cloth; a bracket mounted on the handle with capacity for sliding thereon; the handle having a longitudinal groove; a key lodged in such groove and engaged with the bracket; a spring reacting between the handle and the bracket to thrust the latter away from the block; means mounted on the bracket for engaging the rear end of the wiping-cloth to stretch it under the block, and means for rotating said engaging means to wring the wiping-cloth.

7. A mop or wiper comprising a block past which the wiping-cloth is to be stretched; means at the forward end of the block holding one end of the cloth; an element at the rear end of the block projecting down past its lower face to hold the cloth off from the block; means other than said element for securing the rear end of the cloth to stretch it past said element, and means for rotating said securing means to wring the cloth.

8. A mop or wiper comprising a block past one face of which the wiping-cloth is to be stretched; a reversible loop at the forward end of the block adapted to be turned projecting upward past the upper face and to engage the wiping-cloth entered through it, and means for engaging the rear end of the wiping-cloth to stretch it from said loop down around the forward end of the block and past its lower face, substantially as and for the purpose set forth.

9. A mop or wiper comprising a block past which the wiping-cloth is to be stretched; means at the forward end of the block for holding one end of the cloth; an element at

the rear end of the block projecting down  
past its lower face to hold the cloth off from  
the block; a handle to which the block is piv-  
oted and means carried by the handle at a po-  
5 sition rearward from the rear end of the block  
for securing the rear end of the cloth to stretch  
it past the block.

In testimony whereof I have hereunto set  
my hand, in the presence of two witnesses, at  
Chicago, Illinois, this 18th day of May, 1903. to  
HENRY O. THOMAS.

Witnesses:

FRED. G. FISCHER,  
J. S. ABBOTT.