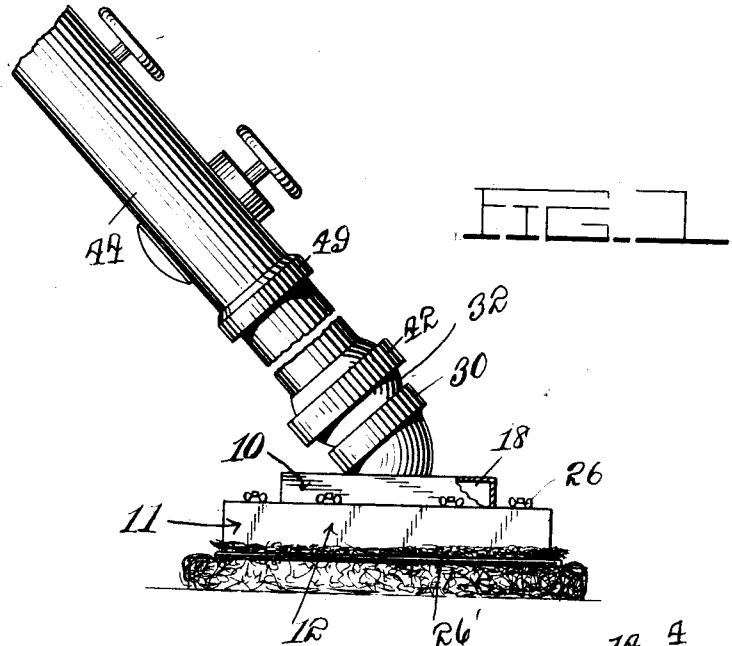
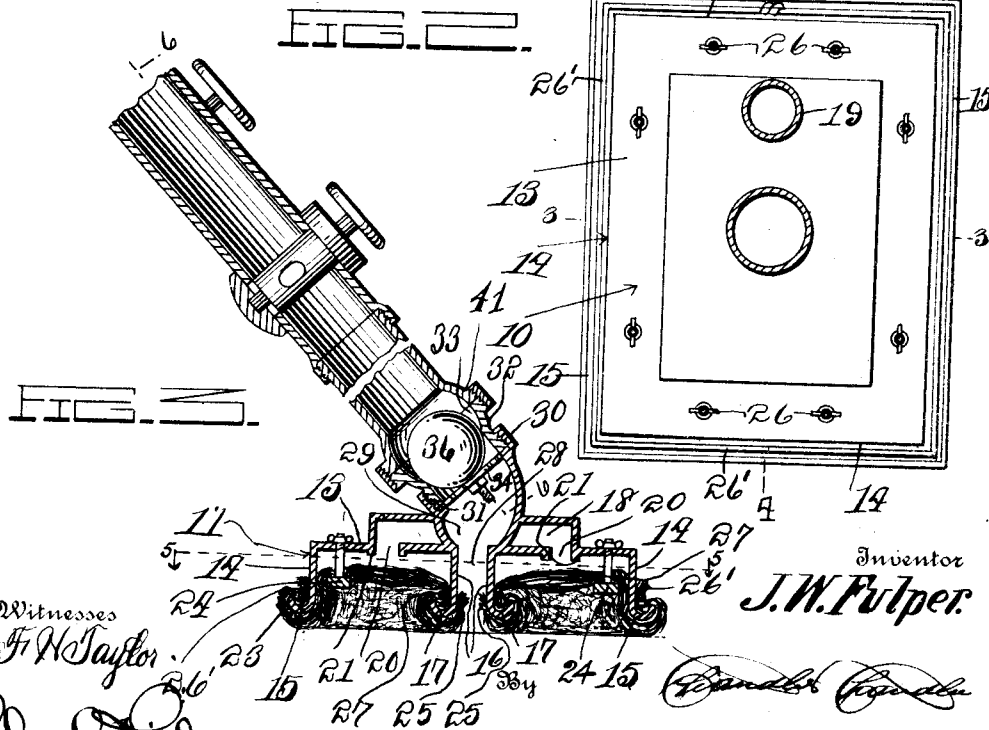


1,066,201.

Patented July 1, 1913.

2 SHEETS—SHEET 1.



Witnesses

J. H. Taylor

Wm. C. Richardson

Inventor

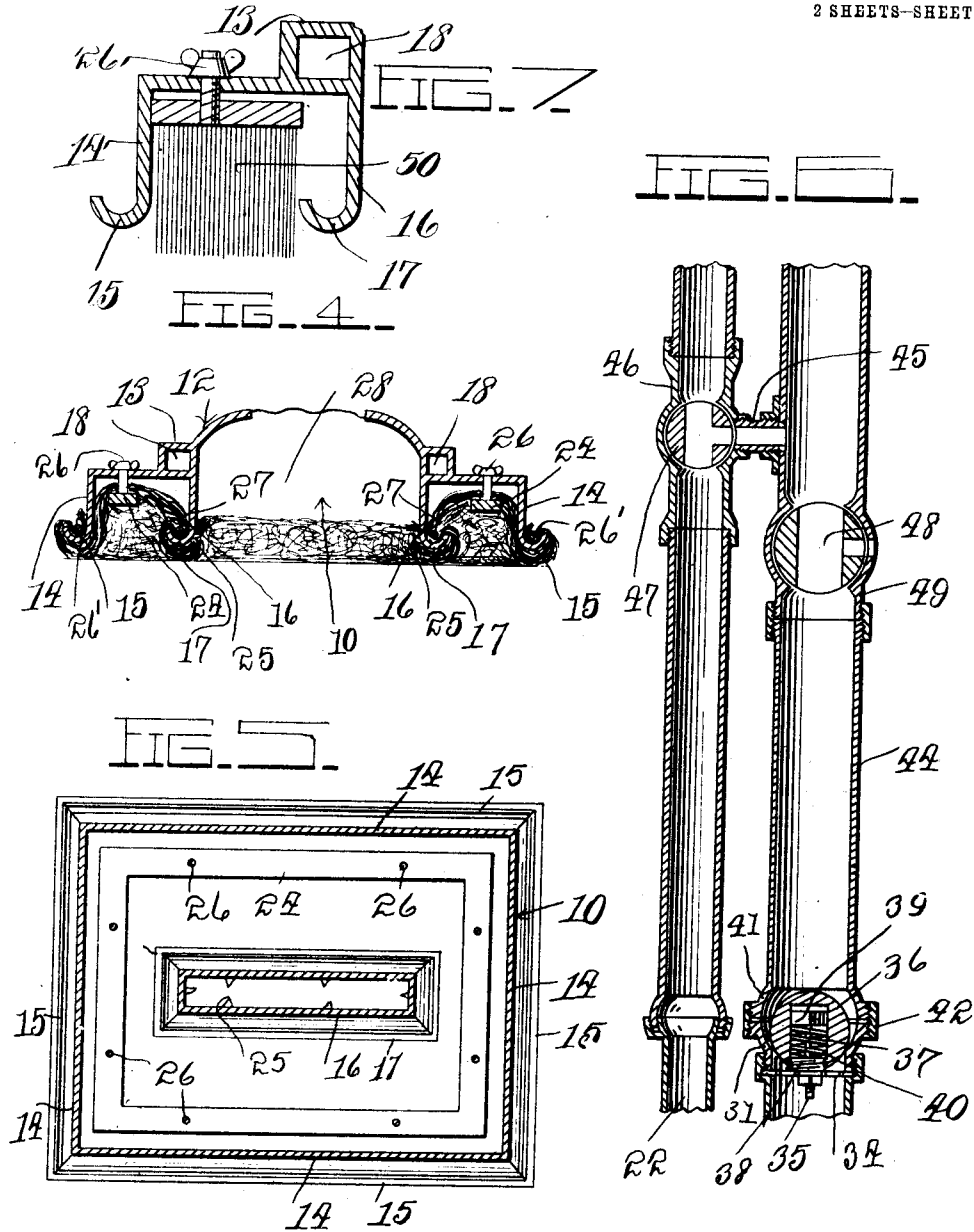
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1,066,201.

Patented July 1, 1913.

2 SHEETS-SHEET 2.



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UNITED STATES PATENT OFFICE.

JOHN W. FULPER, OF ANNANDALE, NEW JERSEY.

VACUUM-MOP.

1,066,201.

Specification of Letters Patent.

Patented July 1, 1913.

Application filed August 25, 1911. Serial No. 645,997.

To all whom it may concern:

Be it known that I, JOHN W. FULPER, a citizen of the United States, residing at Annandale, in the county of Hunterdon, State of New Jersey, have invented certain new and useful Improvements in Vacuum-Mops; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to new and useful improvements in vacuum mops, and more particularly to that class adapted to be used for indoor cleaning, for the purposes of washing windows, floors or the like.

An object of this invention is the provision of a device of this character adapted to support a mop, supply water thereto and draw the water and dirt therefrom when in use.

Another object of this invention is the provision of a scrubbing device which comprises a head or casing to which is secured a mop, the said casing being provided with a passage through which water is supplied to the mop and a central outlet from which the water is drawn therefrom through a suitable outlet pipe to a convenient receptacle.

A further object of this invention is to improve and simplify devices of this character rendering them comparatively simple and inexpensive to manufacture, reliable and efficient in use and readily operated.

With the above and other objects in view this invention resides in the novel features of construction, formations, combinations and arrangements of parts to be hereinafter more particularly described, claimed and illustrated in the accompanying drawings, in which,

Figure 1 is a side elevation of my invention. Fig. 2 is a top plan view thereof. Fig. 3 is a longitudinal sectional view taken on the line 3—3 of Fig. 2. Fig. 4 is a transverse sectional view taken on the line 4—4 of Fig. 2. Fig. 5 is a horizontal sectional view taken on the line 5—5 of Fig. 3. Fig. 6 is a sectional view on the line 6—6 of Fig. 3. Fig. 7 is a view illustrating a brush applied instead of a mop.

Referring to the drawings by characters of reference, the numeral 10 designates generally my improved mop which consists of

a head 11, comprising a casing 12 which consists of a horizontally disposed plate 13, the opposite edges of which are flanged, as at 14 and provided with outwardly curved edges 15, for a purpose to be later disclosed. I further provide parallel flanges 16, the lower edges of which are curved outwardly in opposite directions, as at 17, and lie in substantially the same horizontal plane as the curved edges 15 of the flanges 14. The upper face of the plate 13 has formed thereon a passage 18 from which extends a tubular member 19. This passage 18 communicates through suitable openings 20, immediately of the flanges 14 and 16 and is provided with depending lips 21 which serve to discharge the fluid which enters the tubular extension 19 through a suitable pipe 22 upon the center of the mops 23 which are secured beneath the casing 12 in a manner to be hereinafter described.

Transversely extending clamping bars 24 are carried upon the threaded terminals of winged screws 26, and serve to extend below the mops 23 for the purpose of retaining them against the lower face of the casing 12. The inner sides of the flanges 16 are provided with hooks 25 which engage the edges of the mops and hold the ends thereof securely against displacement. The opposite ends of the mops are then extended above the curved edges 15 of the flanges 14 and securely retained thereon against displacement by means of flexible members 26'. The opposite edges of the mops are retained upon the curved edges 17 of the flanges 16 by similar flexible members 27.

It will be readily apparent from an inspection of the drawings, that the flanges 16 produce a transversely extending passage 28, the upper terminal of which is tapered, as indicated by the numeral 29, producing a rounded interiorly threaded terminal 30 in which is threaded a tubular member 31. This tubular member 31 is flared at its opposite end as indicated by the numeral 32, producing a cup shaped member 33. A spider 34 is securely clamped between the tubular member 31 and extension 30 and supports a perpendicularly extending threaded pin 35 upon which is slidably located a ball valve 36. This ball valve 36 is socketed as at 37 and threaded at its open end for engagement with a nut

38, which is slidably located upon the said pin 35.

The outer terminal of the pin 35 is provided with a head 39 between which and the nut 38 is interposed a spring 40 which serves to normally seat the valve 36 against the juncture of the cup 33 and tubular member 31. A cup 41, similar to the cup 33, but lying in reverse position thereto is securely clamped upon the first mentioned cup by means of a collar 42 which engages the exteriorly threaded terminal of the cup 41 and the outer surface of the cup 33. The cup 41 has extending therefrom a pipe 44 which lies substantially parallel to the pipe 22 and is connected thereto by means of a short pipe 45 which extends substantially at right angles to the pipes 22 and 44.

The pipe 45 is connected to a valve casing 46 secured to the pipe 22, in which casing is located a three way valve 47, while a similar three way valve 48 is located in a valve casing 49 connected to the pipe 44. These valves may be turned in such position as to admit the passage of fluid through the pipe 22 and the passage of air and fluid through the pipe 44 or they may be turned in such position as to provide a connection between the two pipes and also to admit the passage of air into the pipe 44 from the exterior thereof. When the valves are turned to admit the passage of air into the pipe 44 and to connect the said pipes 22 and 44 the device will be rendered inoperative, as will be readily apparent from an inspection of Fig. 6.

Referring to Fig. 7 of the drawing, the mop is dispensed with and brushes 50 are substituted therefor.

Having thus particularly described my invention, what I wish to protect by Letters Patent, is:

1. In a device of the class described the combination with an inlet and outlet pipe, of a head connected therewith provided with parallel depending flanges upturned at their lower ends, a mop within the head and en-

gaging the flanges, and means for retaining the mop in the head.

2. The combination with an inlet pipe and an outlet pipe, of a head connected therewith and provided with a rectangular flange, the edge of said flange being provided with teeth, of a mop engaging with the flange, and a flexible member for retaining the mop in position in engagement with the flange.

3. The combination in a mop such as described, of a head, inlet and outlet pipes extending from said head, flanges formed upon the head, curved extensions formed upon the flanges, bars adjustable between said flanges and a mop carried by said bars and curved extensions of the flanges, substantially as and for the purposes set forth.

4. The combination in a device of the character described, of a head comprising a plate, depending flanges formed upon said plate and provided with curved terminals, a mop located between said flanges, and flexible members connecting the mop to the curved extremities of the flanges, clamping bars located between said flanges and retaining the mop against displacement, the said plate having a passage located thereon, said passage communicating with the mop between the exterior and intermediate flanges, a reduced extension formed upon said plate and communicating between the intermediate flanges, an outlet pipe connected to the reduced extension, a valve located in the lower terminal thereof, an inlet pipe communicating with the passage, means for providing communication between the inlet and outlet pipes, and regulating valves located within the inlet and outlet pipes, substantially as and for the purposes set forth.

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

JOHN W. FULPER.

Witnesses:

J. N. ALPAUGH,
E. B. COSS.