June 29, 1937. T. GUTTERSON 2,085,653

DUST MOP DUSTER

Filed Aug. 27, 1934 3 Sheets-Sheet 1

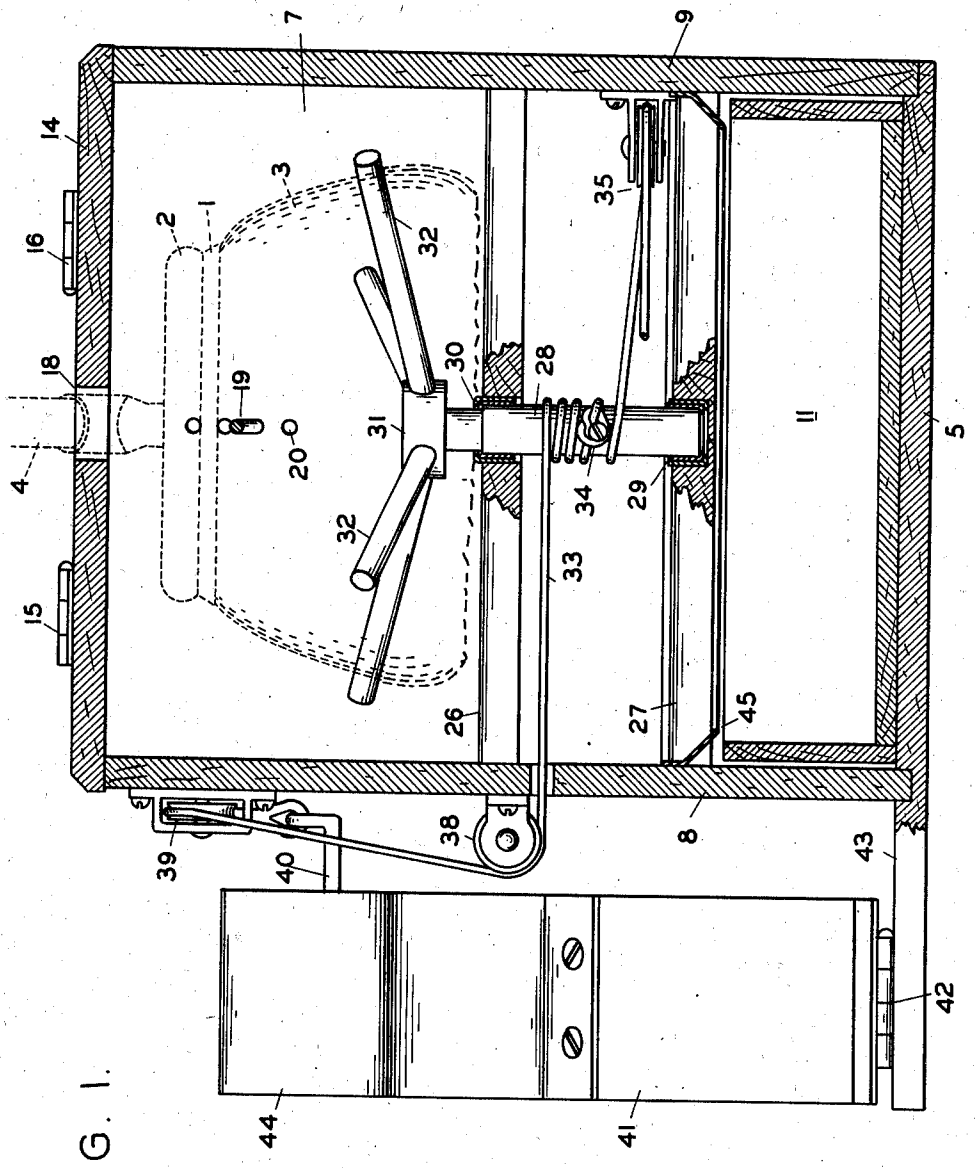



FIG. 1.

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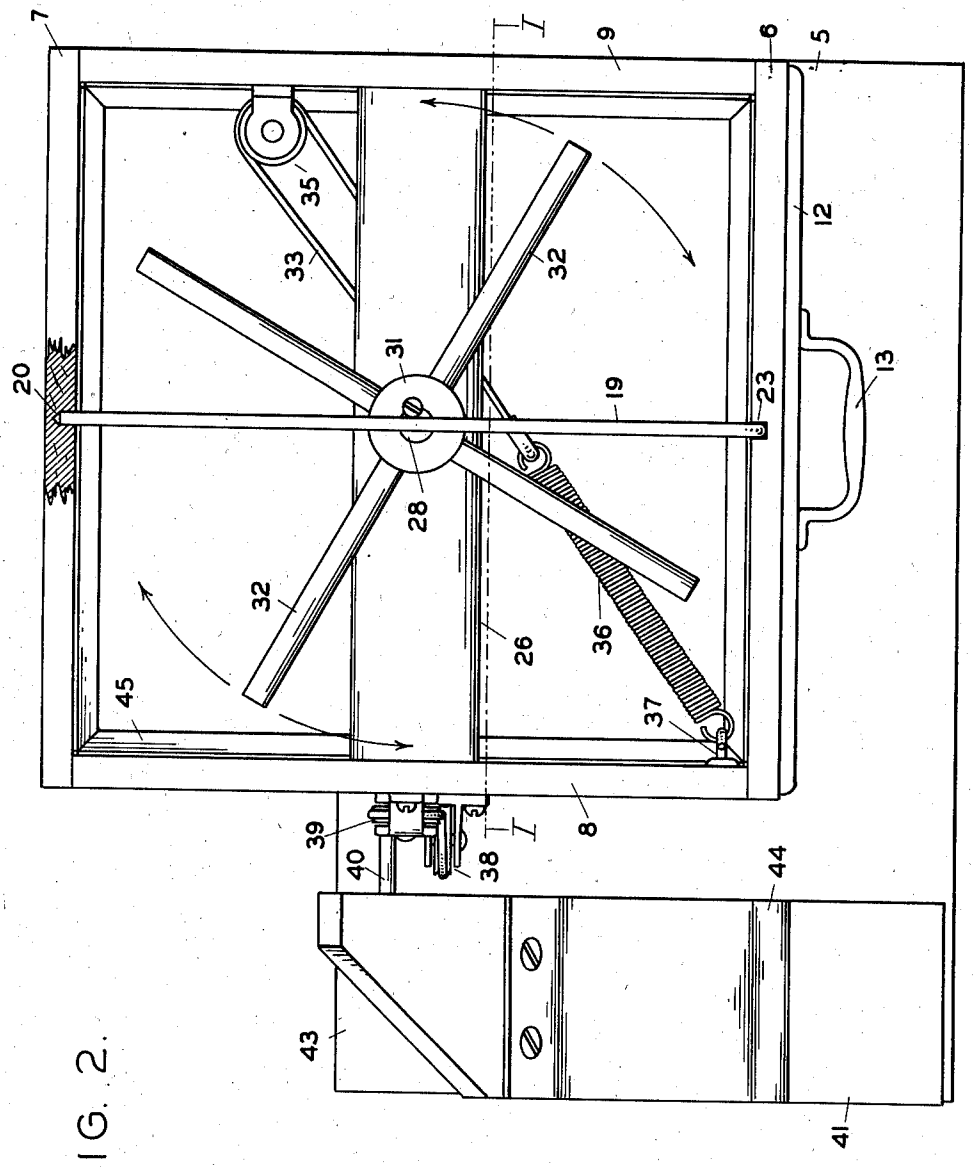



FIG. 2.

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DUST MOP DUSTER

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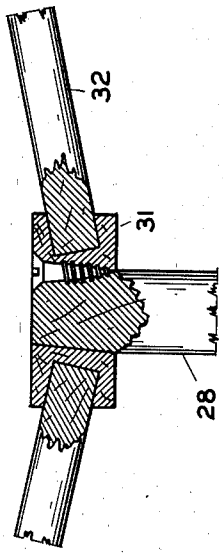



FIG. 4.

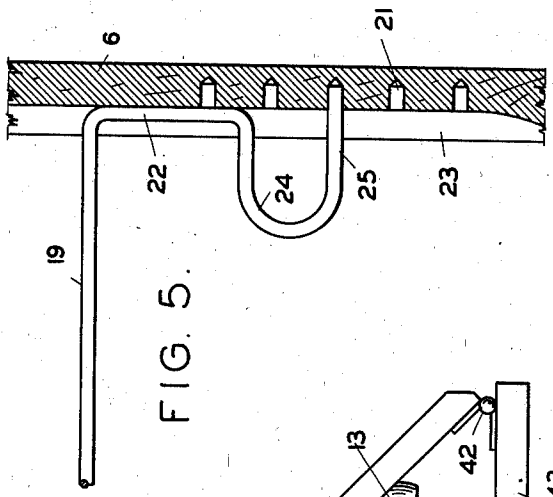



FIG. 5.

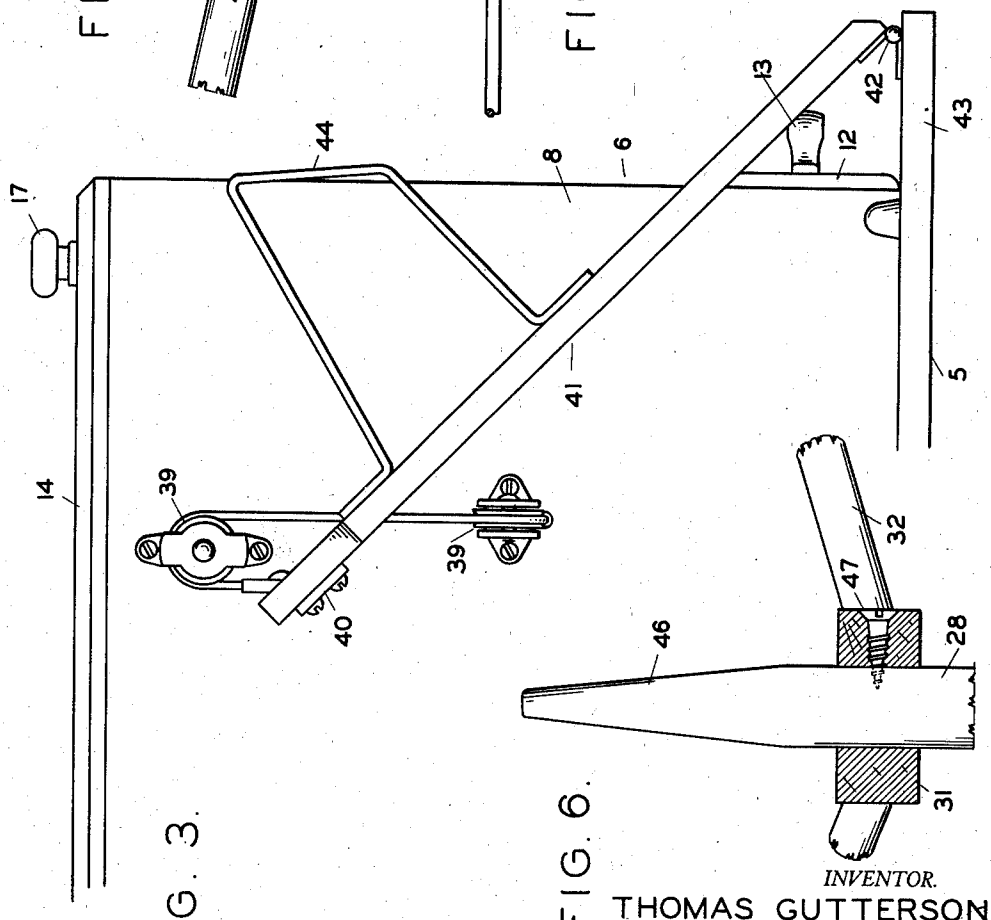



FIG. 3.




FIG. 6.

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Patented June 29, 1937 2,085,653

# UNITED STATES PATENT OFFICE

2,085,653

## DUST MOP DUSTER

Thomas Gutterson, San Francisco, Calif.

Application August 27, 1934, Serial No. 741,573

1 Claim. (Cl. 15—89)

This invention relates to improvements in dust mop dusters.

An object of the invention is to provide means for removing accummulated dust from absorbent dust mops.

Another object is to so design and construct the machine that it may be built into the bottom of a conventional broom cabinet.

A further object is to provide for the easy disposal of dust beaten from the mop.

Other objects and advantages will appear as the description progresses.

In this specification and the accompanying drawings the invention is disclosed in its preferred form. It is to be understood, however, that it is not limited to this form, because it may be embodied in other forms without departing from the spirit of the invention as defined in the claim following the description.

In the three sheets of drawings:

Fig. 1 is a longitudinal vertical section taken along the line 1—1, Fig. 2 of a mop beater constructed in accordance with this invention.

Fig. 2 is a horizontal section of the same.

Fig. 3 is a fragmentary side elevation of the same illustrating the operating pedal.

Fig. 4 is a detail view in vertical section of the spindle with the beater head mounted thereon.

Fig. 5 is a similar view of the same showing a mop stop for limiting the entry of the mop into the beater.

Fig. 6 is a similar view of the same showing a modified form of stop.

Mops to which this invention particularly applies consist of a length of tape 1, padded at 2 to form a bumper and having a fringe 3 depending therefrom, see Fig. 1. The head of the mop is usually formed of sheet metal, not shown, in round or triangular form and has the handle 4 pivoted thereto. The tape 1 encircles and is attached to the head so that the fringe hangs below the head. The fringe 3 is usually composed of strands of cotton yarn which may or may not be impregnated with a suitable oil to increase its dust absorbing qualities. It is the purpose of this invention to remove such dust from the mop.

In detail the construction illustrated in the drawings, referring first to Fig. 1, comprises an enclosing box having the bottom 5 with the front 6, the back 7 and the sides 8 and 9. The front 6 is spaced above the bottom 5 to provide an opening for the sliding drawer 11, the front 12 of which closes this opening and has the convenient handle 13.

The top of the box is closed by the cover 14 hinged at 15 and 16 to the back 7 and has the handle knob 17.

The front edge of the cover is notched at 18 to pass the handle 4 of the mop extending outward and upward therethrough.

The head of the mop rests upon the crossbar stop 19 extending across the box from the front 6 to the back 7. The back 7 is provided with a series of holes 20 at different vertical levels in cooperation with similar holes 21 in the front 6 to permit adjustment of the height of the bar 19. This bar is bent to form the angular extension 22, slideable in the saw kerf 23 in the front 6. The bar is then looped outward at 24 and has its end 25 adapted to engage any desired hole 21. An outward pull on the loop 24 will release the end 25 to permit the vertical adjustment of the bar.

The cross struts 26 and 27 extend across the box and are fixed to the sides 8 and 9. The vertical spindle 28 has the step bearing 29 in the strut 27 and a suitable bearing 30 in the strut 26.

The beater comprises the hub 31 fixed upon the upper end of the spindle 28 and having the radial spokes 32 fixed therein and preferably inclined slightly upward among the strands of the mop fringe 3.

The spindle 28 is rotated by the cord 33, wound helically thereabout and fixed to the spindle at 34. The cord extends from the spindle through the pulley 35 fixed to the side 9 and engages the pull spring 36 the end of which is fixed at 37 to the opposite side 8, see Fig. 2.

The opposite end of the cord 33 extends through the side 8, around the pulley 38, and over the pulley 39 and is attached to the bracket 40, see Fig. 3. This bracket is fixed to the upper end of the pedal 41 which is pivoted at 42 to the extension 43 of the bottom 5. To bring the pedal within comfortable and effective reach of the foot of the operator it is provided with the upward extension 44, substantially flush with the front 6 of the box. The whole length of cord is held taut by the tension of the spring 36.

This invention operates substantially as follows: The cover 14 is lifted and the mop is inserted to rest upon the stop 19. The cover is then closed with the mop handle extending through the notch 18 or the cover may be left open if desired. The operator holds tightly to the handle 4 and depresses the pedal 44 with his foot. This unwinds the cord 33 above the point 34 and winds the cord about the spindle below the point 34. This forceably revolves the spindle slightly less than three times in one direction. When the foot

pressure is released, the pull of the spring **36** reverses the action revolving the spindle in the opposite direction.

The rotation of the spindle causes the spokes **32** to beat the dust out of the mop fringe **3**. The mop handle can be twisted back and forth on the rod and the handle moved up and down to present all the parts of the fringe **3** to the beating action of the spokes **32**. The handle also steadies the operator while he has one foot upon the pedal **44**.

The dust dislodged from the mop descends and is guided into the drawer **11** by the inclined coping **45** extending around the box above the edge of the drawer **11**.

Certain types of mops have closed heads or plates within the circle of the bumper **2**. The extension head **46** of the spindle shown in Fig. 6 may be substituted for the cross stop **19**. The hub **31** can be vertically adjusted on the spindle by the screw **47** to accommodate various lengths of fringe **3**. The head of the mop rests on top of the extension **46** instead of the stop **19** during the beating operation.

Having thus described this invention, what is claimed and desired to secure by Letters Patent is:

A dust mop duster including an enclosure having series of holes at different levels in opposite sides thereof and a vertical saw kerf coincident with one of said series of holes; a vertical spindle rotatably mounted within said enclosure; a beater fixed on said spindle; means for rotating said spindle and beater; a mop stop consisting of a cross bar traversing said enclosure above said beater and having its ends engaged in said holes; said cross bar having a portion adjacent one of its ends bent so as to be slidable in said saw kerf; and a loop in juxtaposition to said end and adapted to be manually pulled to release said end from the one of said holes in which it is engaged, said enclosure being so constructed and arranged that a dust mop may be introduced therein and rest on said stop in cooperative relation to said beater.

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