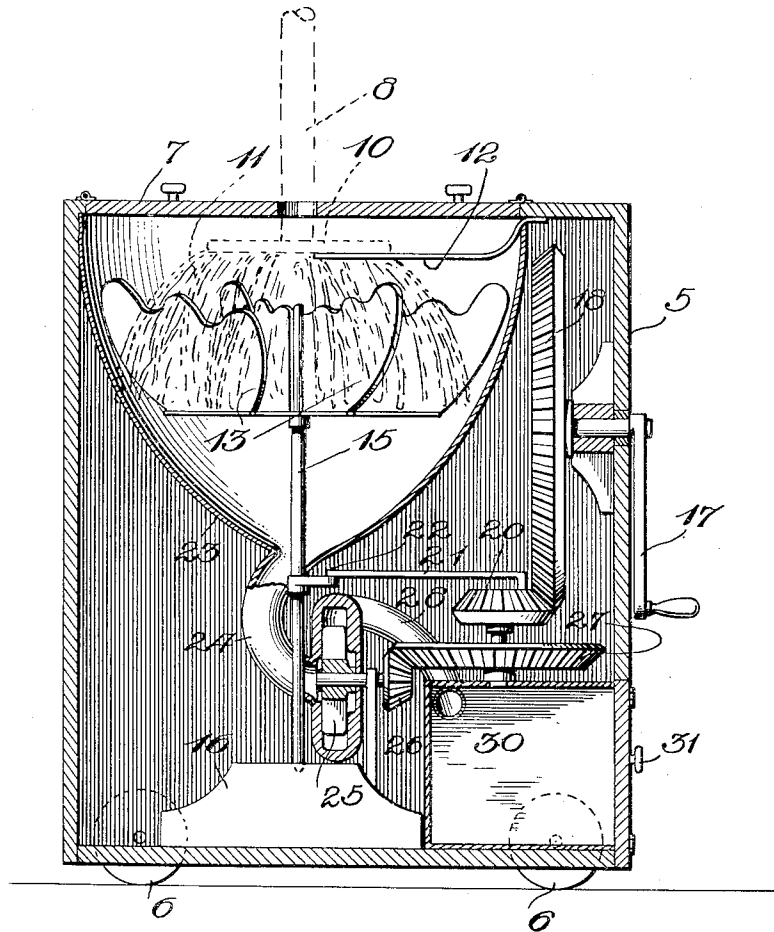


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MOP CLEANING DEVICE.
APPLICATION FILED JAN. 14, 1921.

1,399,341.

Patented Dec. 6, 1921.



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MOP-CLEANING DEVICE.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, AGNES B. GRYMES, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Mop-Cleaning Devices, of which the following is a specification.

This invention relates to improvements in mop cleaning devices and particularly a device for cleaning or removing the dust and dirt from dry mops, dusters, and the like.

One of the objects of the present invention is to provide a simple, practical, portable and self-contained device particularly adapted for cleaning dry mops, although it is to be understood that without material modification the invention is equally useful for cleaning other articles of a somewhat similar character.

A further object is to provide a device of the above character of compact, inexpensive construction which may be easily moved about from place to place as desired.

A further object is to provide a reliable, durable and efficient mechanism of the above character which may be inexpensively manufactured and assembled.

Other objects will be in part obvious and in part hereinafter pointed out in connection with the accompanying sheet of drawings forming part of this disclosure.

In this drawing there is illustrated in sectional elevation such parts of the complete mechanism as will enable one skilled in the art to fully understand the construction and method of use and operation of the device in question.

This style of floor cleaner generally known as a dry mop such, for example, the well-known O-Cedar mop, comprises a head having a plurality of strands suitably treated or impregnated with an oil-like substance to which the dust of the floor adheres as the mop is moved about. In a short time, however, the mop becomes saturated. Until cleaned, it is useless to attempt to clean the floors further for the reason that streaks of dirt remain behind the path of the mop. It is accordingly necessary to frequently clean the mop to remove the dust and dirt and if it is attempted to wash the same, the impregnating material is removed and the efficiency of the mop accordingly reduced. In many cities there are ordinances prohibiting

the shaking of mops, dusters and the like out of windows on the theory that such actions tend to spread disease, etc. It is, therefore, exceedingly difficult for the housewife in many apartment houses of large cities to clean the mops and the present invention is intended to provide a simple, practical and portable mechanism which will reliably and efficiently clean the mop in a relatively short space of time without danger of spreading the dust and dirt.

With this explanation in view reference is made to the accompanying drawing wherein,

Figure 5 denotes a casing or box-like structure which may be of wood or sheet metal as desired and provided with a plurality of rollers or casters 6 on the under side whereby the entire mechanism may be conveniently moved about the floor from room to room. The upper part of the box or casing 5 is provided with one or more hinged doors 7 adapted to be swung upwardly in open position to permit the introduction of the mop, the handle of which is indicated at 8, the head at 10 and the strands to be cleaned at 11. The mop head 10 is preferably supported in relatively fixed position by means of a prong or fork 12 adapted to be inserted under the head 10 and between the strands allowing the strands to hang down over a plurality of vanes or beaters 13 preferably positioned at right angles on a spindle 15. This spindle is supported at its lower end in any desired manner as by resting in a block 16.

At one side of the casing is mounted any suitable source of power, preferably a crank handle 17 for rotating a relatively large gear 18 meshing with a smaller gear or pinion 20. Eccentrically mounted on the upper surface of the pinion 20 is a link 21 connected at its opposite end with a crank arm 22, these power multiplying and transmitting devices being so positioned and arranged that a rotation of the handle 17 will cause a rapid reciprocation of the link 21 and cause the spindle 15 and vanes associated therewith to rapidly oscillate back and forth in a rotary manner between the strands 11 of the mop thus to quickly and efficiently shake and beat the dust therefrom.

This dust and dirt may, if desired, fall to the bottom of the casing but it is preferable to provide a conical shaped receiver

23 having an outlet passage 24 at the bottom. Mounted in a suitable casing at the lower end of the outlet is a fan 25 driven by means of pinions 26 meshing with pinion 27 mounted or keyed upon the same shaft as the gear 21 whereby the fan is driven at a high rate of speed through the same transmitting and power multiplying devices on rotation of the handle 17. A second passage 28 leads from the outlet side of the fan 25 to a receptacle 30 preferably positioned down at one side of the casing 5. The receptacle 30 is provided with a door having a knob 31 whereby the contents may be removed at will. Thus at intervals the drawer or receiver 30 is removed and emptied as desired.

It is believed from the above that the construction, method of use and operation of the device will be clear to those skilled in the art. It may be briefly stated, however, that when in use the doors 7 are open and the mop placed upon the support 12 and then the doors closed, there being a suitable opening provided for the passage of the mop handle. The mop rests in a relatively fixed position on the support 12 and as the crank 17 is rotated the fans 13 flutter beneath the strands of the mop to shake the dust and dirt therefrom which is simultaneously withdrawn from the receptacle 23 and delivered to the removable drawer 30.

The invention is of simple, practical and durable construction and may be inexpensively manufactured. Being small, light and entirely self-contained it may be easily moved bodily from one room to another as desired. It is, therefore, believed that the invention is adapted to accomplish, among others, all of the objects and advantages herein set forth.

What I claim is:—

1. A portable self-contained device for cleaning dry mops and the like comprising a casing having an opening adapted to receive the mop, means for supporting the mop head, means adapted to be inserted between the mop strands and means for giving said last mentioned means a rapid rotary oscillatory movement to beat and shake the dust from said strands.

2. A portable self-contained device for cleaning dry mops and the like comprising a casing having an opening adapted to receive the mop, means for supporting the mop head, means adapted to be inserted between the mop strands, means for giving said last mentioned means a rapid rotary oscillatory movement to beat and shake the dust from said strands, a container to receive the dust, and means associated with

said second means for conveying the dust to said container.

3. A portable self-contained device for cleaning dry mops and the like comprising a casing having an opening adapted to receive the mop, means for supporting the mop head, means adapted to be inserted between the mop strands, a source of power, and means operated thereby for giving said last mentioned means a rapid rotary oscillatory movement to beat and shake the dust from said strands, a container to receive the dust, and other means associated with said source of power and operated thereby for conveying the dust to said container.

4. A portable self-contained device for cleaning dry mops and the like comprising a casing adapted to receive and support a mop head, means adapted to be inserted at a plurality of places between the strands of the mop head, and a source of power and transmitting devices for causing said means to oscillate back and forth between the strands to shake the dust therefrom.

5. A portable self-contained device for cleaning dry mops and the like comprising a casing adapted to receive and support a mop head, means adapted to be inserted at a plurality of places between the strands of the mop head, a source of power and transmitting devices for causing said means to oscillate back and forth between the strands to shake the dust therefrom, a conical receptacle into which the dust falls, a container, and means for conveying the dust from the receptacle to said container.

6. A portable self-contained device for cleaning dry mops and the like comprising a casing adapted to receive and support a mop head, means adapted to be inserted at a plurality of places between the strands of the mop head, a source of power and transmitting devices for causing said means to oscillate back and forth between the strands to shake the dust therefrom, a conical receptacle into which the dust falls, a container, and means for conveying the dust from the receptacle to said container, comprising a fan connected with and driven by said source of power.

7. A portable self-contained device for cleaning mops and the like, comprising a casing having an opening adapted to receive the mop, means adapted to be inserted between the mop strands, and means for giving said last mentioned means a rapid oscillatory movement to beat and shake the dust from said strands.

Signed at Los Angeles, California, this 23rd day of Dec., 1920.

AGNES B. GRYMES.