

May 30, 1944.

F. EISENHUT

2,350,221

DUST MOP WITH ATTACHABLE DUST BAG

Filed May 20, 1941

2 Sheets-Sheet 1

Fig. 1.

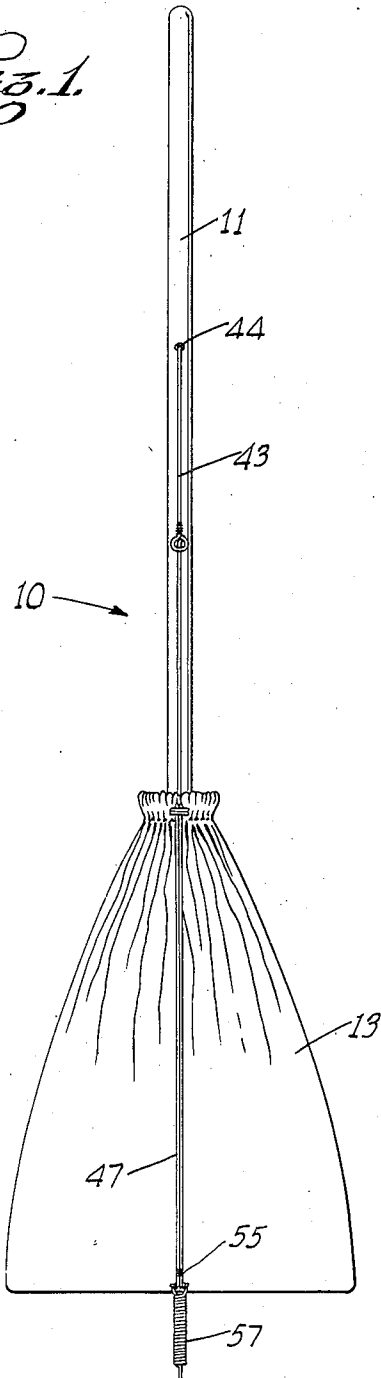
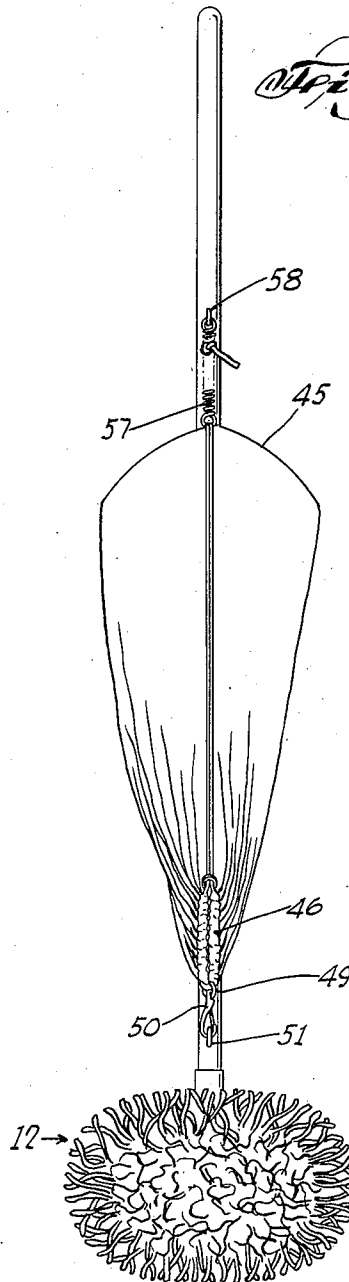


Fig. 2.



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Fig. 3.

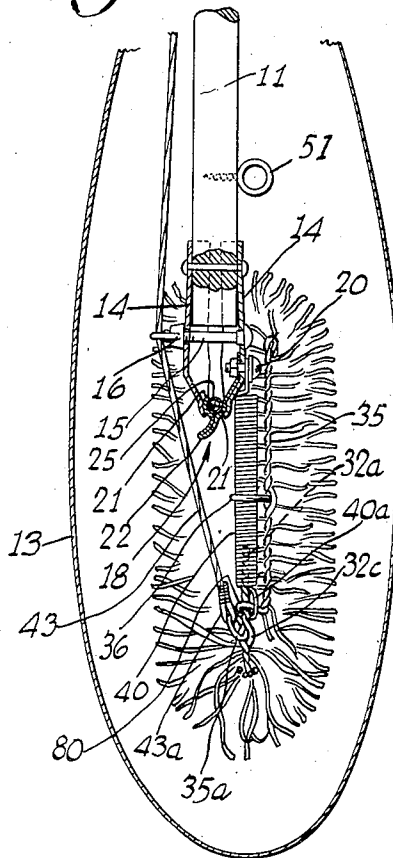


Fig. 4.

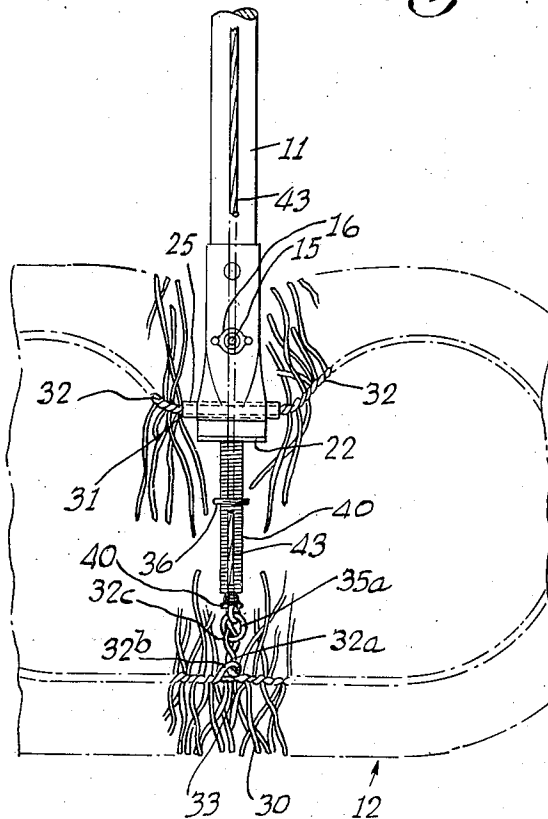
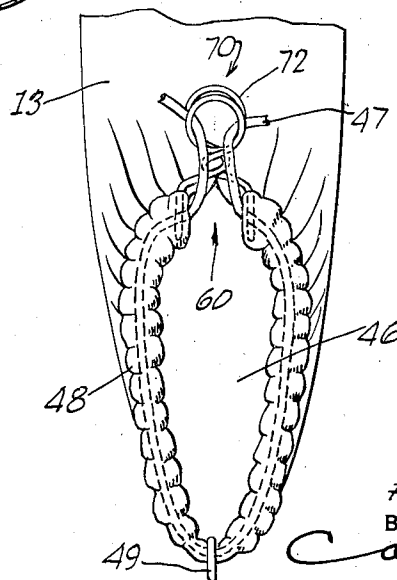
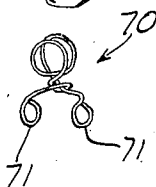


Fig. 5.

Fig. 6.



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DUST MOP WITH ATTACHABLE DUST BAG

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Application May 20, 1941, Serial No. 394,347

8 Claims. (Cl. 15—229)

This invention relates to dust mops with bags attached.

An object of this invention is to provide a dust mop comprising an elongated handle and a mop head thereon, and means to swing the mop relative to the handle to shake out the dust therefrom, so that the mop may be dusted within the bag which is carried by the handle, the mop head being provided with spring means to return the mop head to normal position after the mop head is swung out of such position.

I have found that a mop of the character described may be cleaned quickly and easily because the spring that swings the mop head and rebounds it, is forceful enough to throw off the dust and fuzz, and loosen and fluff the mopping yarn, and prevent the mop from becoming packed and flat.

By the use of this mop, it is unnecessary for the user to be exposed to bad weather when cleaning a mop, as it may be cleaned within the attachable bag or like any other mop, if so desired. The construction gives it the advantage and makes it possible to slide it through a space not much larger than the mop head itself, which prevents exposure of the operator and also prevents dust from blowing back into the room. It will be obvious, that a mop which may be cleaned within a bag may also be cleaned anywhere else, if so desired.

Another advantage of a mop embodying the invention, is that the same may be cleaned in the room where dusting is done, by using the attached bag, the bag being so mounted on the handle of the mop that the same may be swung around over the head of the mop and closed to prevent the dust from coming out while swinging the mop head back and forth to get the dust out of the mop head.

A further object of this invention is to provide a neat, compact and durable mop of the character described which shall be relatively inexpensive to manufacture, easy to manipulate, and yet practical and efficient to a high degree in use.

Other objects of this invention will in part be obvious and in part hereinafter pointed out.

The invention accordingly consists in the features of construction, combinations of elements, and arrangement of parts which will be exemplified in the construction hereinafter described, and of which the scope of application will be indicated in the following claims.

In the accompanying drawings, in which is shown one of the various possible illustrative embodiments of this invention,

Fig. 1 is a front elevational view of a mop;

Fig. 2 is a rear elevational view thereof;

Fig. 3 is an elevational cross-sectional view of the mop and bag showing the mop head within the bag;

Fig. 4 is an enlarged front view of the mop head and lower portion of the mop handle;

Fig. 5 is a front elevational view of the mouth of the bag; and

Fig. 6 is a perspective view of a wire catch at the mouth of the bag.

Referring now in detail to the drawings, 10 designates a mop embodying the invention, comprising generally an elongated handle 11, a mop head 12 mounted on the lower end thereof, and a dust bag 13 mounted thereon in such position that the same may be swung to receive the mop head, so that the head may be shaken out within the bag in a manner explained hereinafter.

Attached to the lower end of the handle 11 are a pair of symmetrically disposed clamp members 14 projecting below the handle. The clamp members may be tightened by means of a bolt 15 provided with a wing nut 16, for this purpose.

Between said clamp members is a member 18 attached to one of the clamp members by a bolt 20 and having curved jaw portions 21, and an outwardly curved flange 22 projecting below the clamp 14. Disposed between the curved jaw portions 21, is a small tube 25, for the purpose hereinafter appearing.

The mop head 12 is rotatably mounted on the tube 25. The same is made of twisted wire clamping the mop elements or strands 30. The head 12 comprises a portion 31 passing through the tube 25, and extending from the outer ends of portion 31, are looped portions 32 interconnected as at 33. Extending from interconnecting portion 33 is an upwardly extending rod portion 35 having a free upper end located just above the bolt 20. Rod portion 35 carries a ring 36, for the purpose hereinafter appearing.

Interconnecting the bolt 20 with the portion 33 of the mop head is a coil spring 40 passing through the ring 36 and disposed co-extensively to portion 35 of the mop head. Attached to portion 33 of the mop is the lower end of a cord or string 43, the upper end of which is attached to an intermediate portion of the handle, as at 44, in any suitable manner.

It will now be understood that upon pulling the string 43 upwardly, the mop head is swung about the tube 25 causing the spring 40 to be bent. When the string is released, said spring 40 tends to straighten out and swing the mop back to nor-

mal position. The spring may be forceful enough to shake out the dust and lint from the mop strands to keep it clean. Thus, by pulling the string up, and releasing a number of times, the mop is swung back and forth to thoroughly clean out the mop head.

The bag 13 is closed at its upper end 45, and has a mouth 46 at its lower end closed by a draw string 47. At the mouth of the bag is a tubular portion 48 to receive the draw string. Attached to one end of the tube 48 is an eye 49 carrying a spring catch 50, which may engage an eye 51 fixed to the lower end of the handle, just above the clamp members 14. The draw strings 47 extend to the upper end of the bag, and are attached to the upper or closed end of the bag, as at 55.

Attached to the upper end of the draw string is a coil spring 57, which may be hooked onto an eye 58 fixed to the handle.

When it is desired to use the bag for the purpose of cleaning out the mop, the spring 57 is unhooked from the eye or hook 58, and the bag is swung around the mop head, and the draw string is pulled to close the mouth of the bag around the handle. The string 43 may then be pulled repeatedly to shake out the mop.

The tube member 48 is open at one end, as at 60, and attached to the ends of said tubular portion of the bag is a spring catch 70 having looped portions 71 stitched to the ends of said tubular portion 48, and also a bifurcated spring portion 72, through which the draw string 47 passes.

In Figs. 3 and 4 there is illustrated the specific method of assembling the free ends of the looped portions 32 with the spring 40 and the anchor for the string or cord 43. As shown in the drawings, an end 32a of one of the loop portions 32 passes through a spread open portion of the twisted wire at the end of the other looped portion 32, indicated on the drawing at 32b. The free end 32a projects upwardly into the lower end of the coil spring 40.

Said wire portion 32a is spread apart at an intermediate portion thereof, as at 32c, and looped therethrough is a ring 35a, to which one end of the cord 43 is anchored, as at 43a.

The lower end 80 of the twisted wire 35 is looped about the wire portion 32a, above the spread open portion 32c thereof; and the lower end 40a of spring 40 is hooked into the loop 80 at the lower end of the wire 35. When the cord 43 is pulled to shake out the mop, the wire portion 32a causes more resistance when shaking the mop, and thus helps to strengthen the spring 40.

It will thus be seen that there is provided a device in which the several objects of this invention are achieved, and which is well adapted to meet the conditions of practical use.

As various possible embodiments might be made of the above invention, and as various changes might be made in the embodiment above set forth, it is to be understood that all matter herein set forth or shown in the accompanying drawings is to be interpreted as illustrative and not in a limiting sense.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. In combination, a mop handle, a clamp fixed to the lower end thereof, a tubular member on said clamp, a mop head comprising twisted wire carrying mopping elements, said mop head having a portion rotatably mounted within said tubular member, looped portions extending from the first

portion, a coil spring interconnecting the clamp with a portion of the mop head spaced from said clamp, a string connected to the mop head substantially at the point where the coil spring is attached to the mop head, and means to attach the string to the handle, one of said loop portions having a free end projecting into one end of said coil spring.

2. In combination, a mop handle, a mop head hinged to said handle, a coil spring interconnecting the handle with a portion of the mop head spaced from said handle, a string connected to the mop head substantially at the point where the coil spring is attached to the mop head, means to attach the string to the handle, a bag having a mouth at one end provided with a draw string, a spring catch at the mouth of the bag, an eye on the handle to receive the spring catch, said eye being located adjacent the clamp, and means to attach the closed end of the bag to a portion of the handle remote from said clamp by a detachable connection.

3. In combination, a mop handle, a clamp fixed to the lower end thereof, a tubular member on said clamp, a mop head comprising twisted wire carrying mopping elements, said mop head having a portion rotatably mounted within said tubular member, looped portions extending from the first portion, a coil spring interconnecting the clamp with a portion of the mop head spaced from said clamp, a string connected to the mop head substantially at the point where the coil spring is attached to the mop head, means to attach the string to the handle, a bag having a mouth at one end provided with a draw string, a spring catch at the mouth of the bag, an eye on the handle to receive the spring catch, said eye being located adjacent the clamp, means to attach the closed end of the bag to a portion of the handle remote from said clamp by a detachable connection, said bag having a tubular portion at its mouth to receive the draw string, said tubular portion being split at one end, and a member made of wire having portions stitched to the split ends of said tubular portion of the bag, and a bifurcated portion to receive the draw strings.

4. In combination, a mop handle, a clamp fixed to the lower end thereof, a tubular member on said clamp, a mop head made of twisted wire carrying mop elements, said mop head having an intermediate portion rotatably mounted within said tubular member, and loop portions extending from said intermediate portion, the free end of one loop portion passing through a spread open part at the free end of the other loop portion, a coil spring connected at one end to said clamp, said end of the first loop portion extending into the other end of said spring, a twisted wire rod connected at one end to said free end of said first loop portion, said other end of said spring being attached to said twisted wire rod at the point where said rod is attached to said free end of said first loop portion, said rod extending longitudinally of the spring, and means to connect said rod to said spring at a point remote from the point at which said rod is attached to said free end of said first loop portion.

5. In combination, a mop handle, a clamp fixed to the lower end thereof, a tubular member on said clamp, a mop head made of twisted wire carrying mop elements, said mop head having an intermediate portion rotatably mounted within said tubular member, and loop portions extending from said intermediate portion, the free end of one loop portion passing through a spread

open part at the free end of the other loop portion, a coil spring connected at one end to said clamp, said end of the first loop portion extending into the other end of said spring, a twisted wire rod connected at one end to said free end of said first loop portion, said other end of said spring being attached to said twisted wire rod at the point where said rod is attached to said free end of said first loop portion, said free end of said first loop portion being opened up, a ring passing through said opened up portion thereof, and a string attached at one end to said ring, and at the other end thereof to said handle.

6. In combination, a mop handle, a clamp fixed to the lower end thereof, a tubular member on said clamp, a mop head made of twisted wire carrying mop elements, said mop head having an intermediate portion rotatably mounted within said tubular member, and loop portions extending from said intermediate portion, the free end of one loop portion passing through a spread open part at the free end of the other loop portion, a coil spring connected at one end to said clamp, said end of the first loop portion extending into the other end of said spring, a twisted wire rod connected at one end to said free end of said first loop portion, said other end of said spring being attached to said twisted wire rod at the point where said rod is attached to said free end of said first loop portion, said free end of said first loop portion being opened up, a ring passing through said opened up portion thereof, a string attached at one end to said ring, and at the other end thereof to said

handle, said wire rod being spread open, and a ring passing through the spread open portion of said rod, and said spring passing through said last mentioned ring.

7. In combination, an elongated handle, a clamp at the lower end of the handle, a tubular member on the clamp, a mop head having a portion extending through the tubular member and freely rotatable therein, a string attached at one end to another portion of the mop head, means for attaching the string to the handle, a coil spring interconnecting the clamp with the mop head, said mop head having a portion projecting into one end of said coil, and a rod connected to said mop head at one end and being free at the other end and extending longitudinally of said spring, and means to connect said rod to said spring.

8. In combination, an elongated handle, a clamp at the lower end of the handle, a tubular member on the clamp, a mop head having a portion extending through the tubular member and freely rotatable therein, a string attached at one end to another portion of the mop head, means for attaching the string to the handle, a spring interconnecting a portion of the mop head with said clamp, said mop head being made of twisted wire, and a piece of twisted wire connected at one end of the mop head, and being coextensive with the spring, and a ring attached to said piece of twisted wire, said spring passing through said ring.

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