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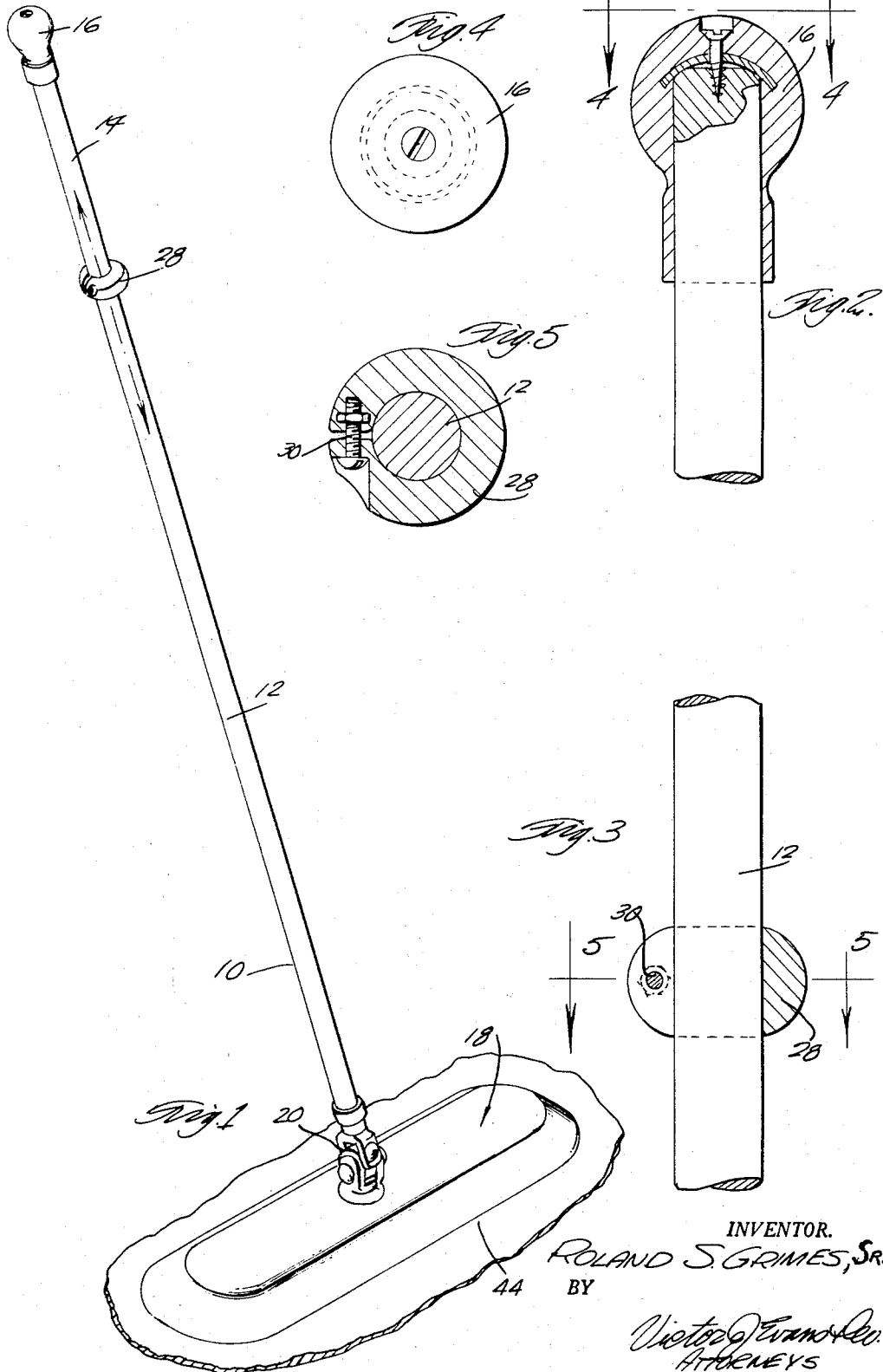
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DUST MOP HAVING PLASTIC FRAME FOR DUST-ABSORBING PAD

Filed Oct. 20, 1965

2 Sheets-Sheet 1



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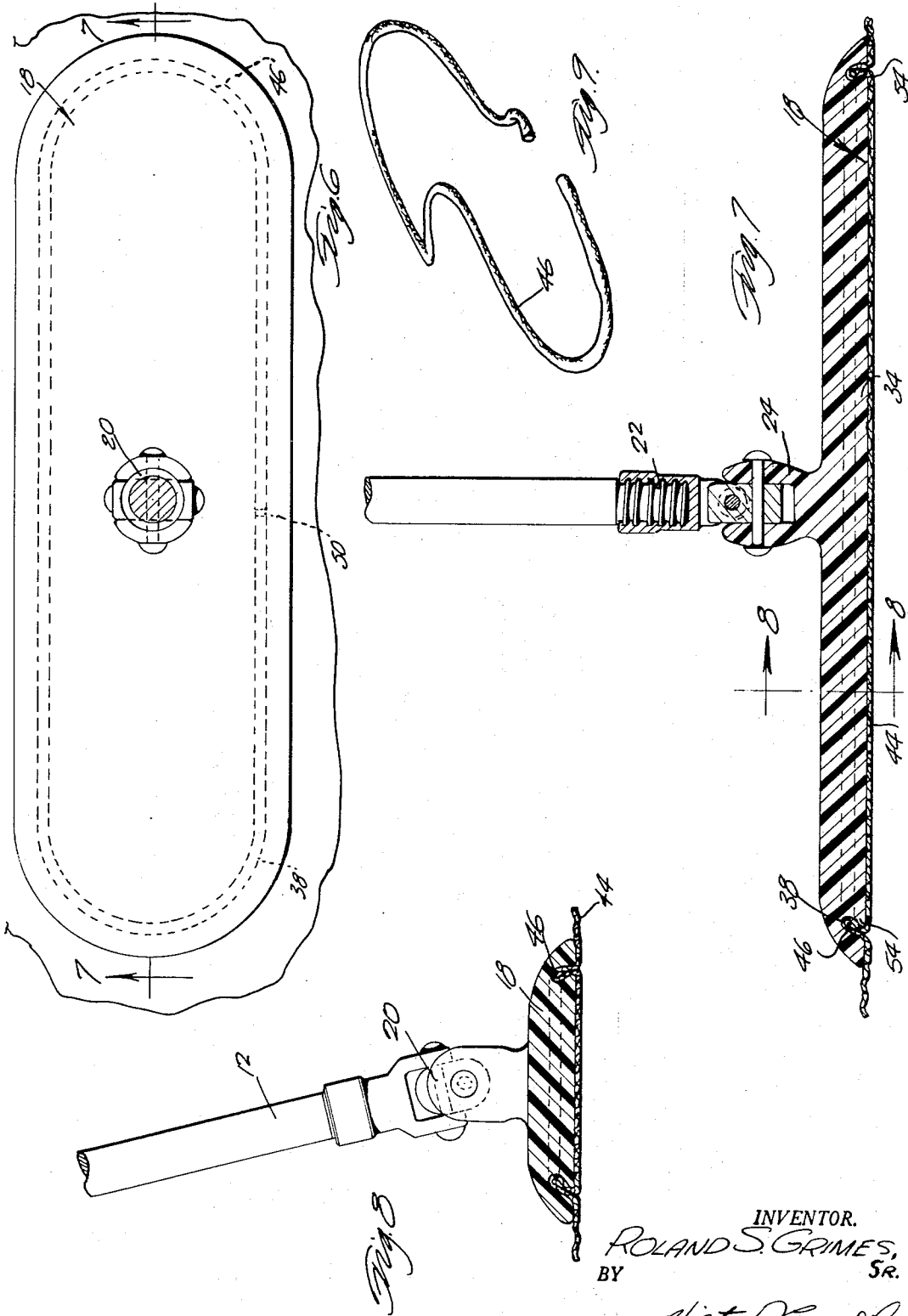
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**DUST MOP HAVING PLASTIC FRAME FOR
DUST-ABSORBING PAD**

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ABSTRACT OF THE DISCLOSURE

A dust mop having a plastic frame for supporting and holding a dust-absorbing pad by a substantially peripheral annular recess disposed about the surface of said plastic frame, and a plastic tubing disposed within said annular recess for securing the disposable dust-absorbing pad upon the surface of the frame.

The invention relates to a dust mop having a plastic frame for holding the fabric duster to the frame and is secured thereto by means not normally visible to the user, while it remains simple for attachment and removal therefrom.

More particularly, the invention relates to the construction and design of a plastic dust mop having a fabric duster fastened to an underframe that is simple in construction and economical in fabrication.

Within the purview of the invention, it is contemplated that the plastic dust mop is constructed of a polyethylene vinyl which is a lightweight plastic material that is strong and durable and which is contoured to have substantially peripheral annular recess extending along in an endless form like a bead, so that as a fiber pad of a sanitary synthetic and lightweight material, even the type having a magnetic dust-absorbing action, is applied to the working surface of the mop, the pad material is retained on the working surface of the mop by means of an elongated or endless plastic tubing inserted in said annular recess or bead for retaining the material in its working relation to the mop.

An object therefore of the invention is to provide a dust mop made of polyethylene vinyl, or other lightweight plastic material that is strong and durable, and which is adapted to be provided with a substantially peripheral recess along the working surface of the mop so that upon insertion of a plastic tubing therein, it retains a dust-absorbing material or pad on the working surface thereof.

A further object of the invention is to allow a dust mop to use a disposable dust-absorbing pad or material of fiber or the like, and which is adapted to have both sides thereof used, one at a time, by means of a plastic tube which interfits with an annular recess on the mop for retaining the disposable dust-absorbing pad or material on the mop.

The above and other objects and advantages of the invention will become apparent upon full consideration of the following detailed description and accompanying drawings in which:

FIG. 1 is a generally perspective view of a mop embodying the concepts of the present invention;

FIG. 2 is a cross-sectional view of the free end of the mop handle;

FIG. 3 is a holding means adapted to be disposed along an intermediate point of the handle for use as push-pullers, etc.;

FIG. 4 is an end view taken along the line 4—4 of FIG. 2;

FIG. 5 is a cross-sectional view taken along line 5—5 of FIG. 3;

FIG. 6 is a top view of the frame of the dust mop, as viewed from a point proximate to the universal joint in the mop handle;

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FIG. 7 shows a cross-sectional view taken along line 7—7 of FIG. 6;

FIG. 8 shows a cross-sectional view taken along line 8—8 of FIG. 7; and

5 FIG. 9 shows a plastic tubing that is adapted to be used in retaining and holding the pad on the plastic mop frame in accordance with the preferred embodiment of the invention.

Referring now to the drawings, there is shown a dust mop 10 including a handle 12 with a free end 14 terminating in a knob 16, and a mop frame 18 connected to the handle 12 by means of a universal or pivotal joint 20. The pivotal joint 20 is connected to the handle 12 by threaded engaging means 22, and the universal or pivotal joint 20 includes a portion 24 which is made integral with the mop frame 18. The mop frame may preferably be constructed of a lightweight vinyl plastic having a degree of resilience and flexibility without breaking or rusting.

20 Along an intermediate point of the handle 12 and 14, there is provided a toroidal ring or sleeve 28 which is adjustable by means of a nut and screw arrangement 30 so that it may be securely attached to the handle 12 at a desired point. This ring 28 provides means for allowing ease in push or pulling of the mop across a given floor surface, and is often useful in lieu of using the end knob 16, since the ring 28 is capable of providing shorter lengths for working the mop rather than the length provided from the knob 16 to the floor mop frame 18.

30 In the floor mop frame 18, there is a substantially flat surface 34 on the undersurface of the frame 18 which is provided with an annular groove or recess 38 extending endlessly around substantially the peripheral portion of the mop frame 18.

35 Engaging the surface 34 and the floor (not shown), there is provided a disposable dust-absorbing pad 44 that is constructed of fiber or other such pad of synthetic material, sanitary in construction and light in weight, and which may have a magnetic dust-absorbing action by the construction of such pad. The dust-absorbing pad 44 is capable of having either of its sides to engage the surface 34 and the floor, respectively, so that eventually both sides are used. The mop frame 18 is constructed of any convenient material including polyethylene vinyl or other lightweight plastic that is strong and durable.

40 The disposable dust-absorbing pad 44 is extended into the recess 38, and an elongated or endless plastic tube or tubing 46 is provided to fit within the recess 38 and maintain the pad 44 in a secure relation thereto. The embodiment of the tubing 46 illustrated in FIG. 6 shows that a determinable length is used and that it terminates approximate to point 50, but it is within the purview of the invention to use an endless loop of the plastic tubing 46. By means of this arrangement, the disposable dust-absorbing pad may be conveniently removed by withdrawing the plastic tubing 46 and by turning the pad 44 over to its opposite side for engaging the surface 34 and again securing the pad 44 onto and within the recess 38 by means of insertion of the tube 46.

60 It is seen that the recess 38 tapers to an apex point as the recess extends inwardly, the apex point being toward the knob 16 when the knob is disposed generally perpendicular with respect to the surface of the mop frame 18, as shown in FIG. 7. The construction of the recess 38 in this manner provides for an additional elastic retention characteristic when the tubing 46 is elongated or endless, so that the extension or lip 54 provides a ridge upon which the tubing 46 must ride over in order to be withdrawn from the recess 38.

70 Additional embodiments of the invention in this specification will occur to others and therefore it is intended that the scope of the invention be limited only by the

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appended claims and not by the embodiment described hereinabove. Accordingly, reference should be made to the following claims in determining the full scope of the invention.

What is claimed is:

1. A dust mop comprising a handle having an end knob at the free end and a push-puller ring means secured to an intermediate point along the length of said handle, and a mop frame coupled by a universal joint to the other end of said handle, said mop frame being constructed of a lightweight vinyl plastic having a degree of resilience and flexibility without breaking or rusting, and in which the plastic frame is provided with a substantially flat surface for pressing a disposable dust-absorbing pad against the floor when secured to the frame, said disposable dust-absorbing pad including means for absorbing dust on both sides thereof, and in which one side of said pad engages said surface, and a substantially peripheral annular recess disposed about said surface for retaining a plastic tubing therein while securing the disposable dust-absorbing pad upon the surface.

2. The invention according to claim 1 wherein said recess is provided with a lip extending down and out-

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wardly, while the recess extends upwardly and inwardly, for providing additional retention and securing advantages for the flexible tubing to retain the disposable dust-absorbing pad upon the surface of said frame dust mop.

3. The invention according to claim 2 wherein the flexible tubing is endless.

4. The invention according to claim 2 wherein the flexible tubing is of a single length and in which the ends thereof meet proximate to each other in said recess.

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