

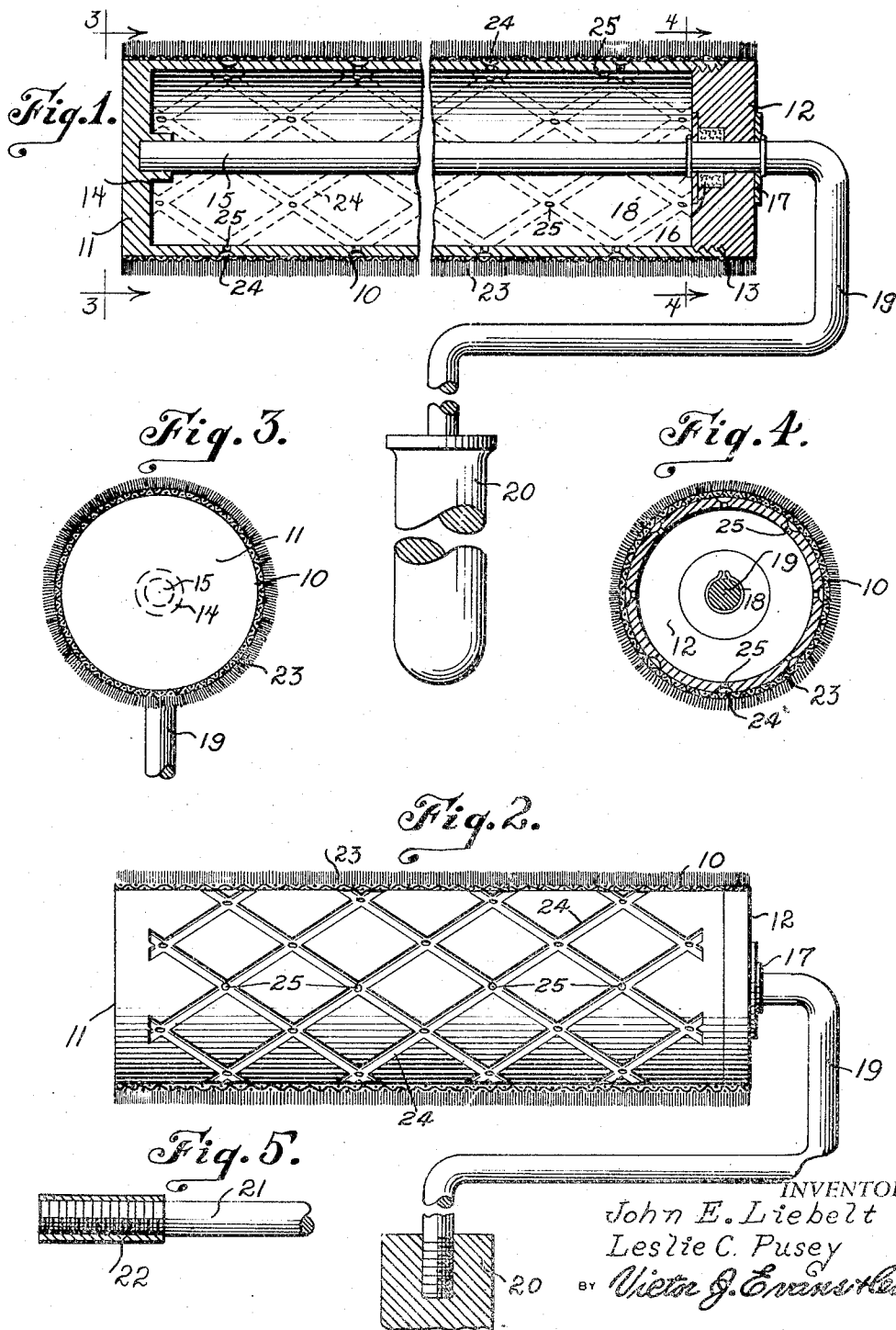
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SELF-DISPENSING ROLLER FOR APPLYING PAINT

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SELF-DISPENSING ROLLER FOR
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1 Claim. (Cl. 15—132.5)

1

The invention relates to an oil or water paint applicator, and more especially to an applying roller or the like for paint, varnish, enamel, or other liquid coating substances.

The primary object of the invention is the provision of a device of this character, wherein oil, water paints, varnishes, enamels or other liquid coating substances or materials, can be stored within an applying roller of the device, such roller thus forming a fountain or self-dispensing device for the substances or materials, so that they can be directly delivered to a surface therefrom, thus saving time in the application thereof, and with ease and dispatch.

Another object of the invention is the provision of a device of this character, wherein the substances or materials will be applied by a rolling action, thus avoiding streaks, as is the case in applying such substances or materials with a brush or other stroke implement, the substances or materials being applied evenly and smoothly with minimum exertion on the part of the user or operator of the device.

A further object of the invention is the provision of a device of this character, wherein it is of novel construction, and unique in assembly, it being hand operated and is readily and easily manipulated.

A still further object of the invention is the provision of a device of this character, which is simple in construction, thoroughly reliable and efficient in service, strong, durable, compact, possessed of few parts, and inexpensive to manufacture.

With these and other objects in view the invention consists in the features of construction, combination and arrangement of parts as will be hereinafter more fully described, illustrated in the accompanying drawing, which discloses the preferred embodiment of the invention, and pointed out in the claim hereunto appended.

In the accompanying drawing:

Figure 1 is an elevational view, partly in longitudinal section, of the device constructed in accordance with the invention;

Figure 2 is an elevational view of the device with part of the fabric covering shown on the roller removed;

Figure 3 is an end view taken from line 3—3 of Figure 1;

Figure 4 is a sectional view taken on the line 4—4 of Figure 1 looking in the direction of the arrows;

Figure 5 is a fragmentary elevation, partly

2

broken away, of a coupling piece for the extension of the handle of the device.

Similar reference characters indicate corresponding parts throughout the several views in the drawing:

Referring to the drawing in detail, the device constituting the present invention, comprises a cylindrical or tubiform body providing a hollow roller 10, in this instance having a permanently closed end 11, while the other end opposite the latter is of the closure type, its closure being a detachable or separable end closure head 12, and is threaded at 13 into the roller 10, although it may be otherwise attached, the threaded connection being best seen in Figure 1 of the drawing.

On removal of the head 12 from the roller 10 the latter is opened for the filling thereof with a determined quantity of liquid substance or material for the coating of a surface by application direct from the said roller through rolling action of the same thereon.

The permanently closed end 11 is formed with an inner centrally located bearing socket or seat 14 for an axle 15, rotatably supported in the said roller 10 and this axle 15 is carried through a stuffing box or packing gland 16 countersunk centrally in the head 12, it being held against displacement longitudinally on the axle 15 by stops 17 and 18, respectively, both outside and inside of the roller and engaged or anchored on the axle, as best seen in Figure 1 of the drawing.

The axle 15 has union with a cranked or elbowed arm 19, having a detachably fitted terminal handle or hand grip 20, which by the arm 19 locates it approximately at the transverse center of the roller 10 and protruded laterally outwardly therefrom in required spaced relation to its outer periphery. The arm 19 is adapted for lengthening at its handle or grip carrying end by a coupling extension piece 21, shown in Figure 5 of the drawing. The coupling sleeve for this piece 21 is identified at 22, and such extension piece may be of any selected or required length.

Covering the roller 10 exteriorly thereof is a piled absorbent fabric cover 23 adapted to be impregnated or permeated with the content of the roller 10, which is formed on its outer surface with spaced right and left hand spiral grooves 24 pierced or intersected by spaced outlet orifices or vents 25, so that the content within the hollow 26 of the roller 10 can be delivered to the cover 23, whence it can be transferred therefrom to a surface to be coated by painting or otherwise, through roller action of the device, without the use of an ordinary paint brush or the like. This

3

mode of application of paint, varnish, enamel or other liquid substance or material to a surface for the coating thereof relieves streaks thereto and avoids brush marks thereon, the roller 10 being filled quickly by simply detaching the body 5 constituting the same from the head 12 and thus opening such body for the pouring of the liquid substance or material therein. The head 12 when applied is adapted to seal the body 10 at the opening end thereof, which keeps the substance or 10 material from leaking out or dripping, as the latter being the case with a paint brush, and in this manner assuring a clean job.

It is preferable to construct the closed end of the roller 10 of a slightly greater diameter than 15 the remaining portion of the body of the latter, thus providing a bearing for the absorbent cover, and the removable end being constructed in a similar manner, so as to provide a bearing for the said cover, the purpose being additionally to prevent dripping of the contained liquid and to effect 20 the keeping of the cover in wearing position on the said roller.

What is claimed is:

A paint applicator comprising a tubular roller 25 having an end wall closing one end thereof, a detachable filler head threadedly mounted in the other end of said tubular roller whereby said tubular roller may be filled with surface coating material, a bearing socket centrally positioned in 30 said end wall and opening toward said filler head, an axle journaled in said filler head and extending axially in said tubular roller, said axle positioned with the inner end thereof rotatably mounted in said bearing socket of the end wall 35 whereby the tubular roller is supported for rota-

4

tion on said axle, an arm extending laterally from the outer end of said axle and at substantially right angles thereto, a rod extending laterally from said arm and substantially parallel to said 5 axle, a second rod extended from the end of said rod and positioned at substantially right angles thereto, said rods, arm and axle positioned in a common plane, a handle grip secured to said second rod, a pile fabric sleeve mounted on said tubular roller periphery, a plurality of oppositely 10 directed intersecting spiral grooves formed on the outside periphery of said tubular roller, said tubular roller having vent openings therethrough positioned at the intersections of said grooves whereby the fluid contents from within the roller 15 are fed to said grooves and distributed lengthwise of said roller for absorption by said fabric sleeve to thereby coat a surface upon contact thereof with said sleeve and rotation of the tubular 20 member.

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