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METHOD AND APPARATUS FOR CLEANING
THE JACKETS OF PAINT ROLLERS
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Fig. 1.

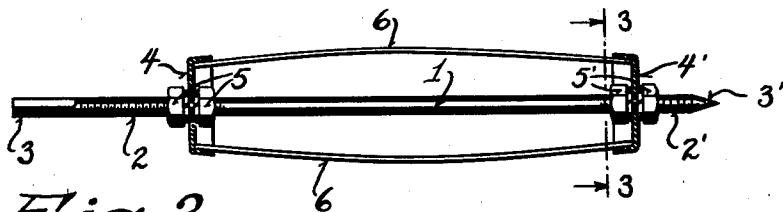


Fig. 2.

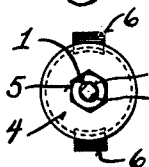


Fig. 3.

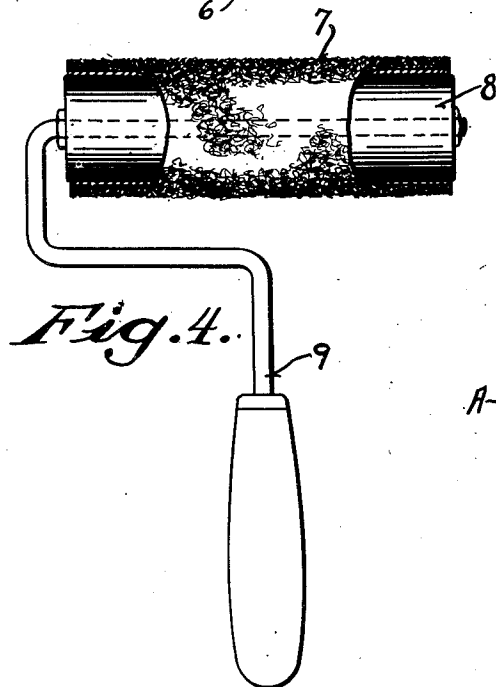
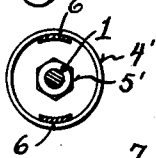
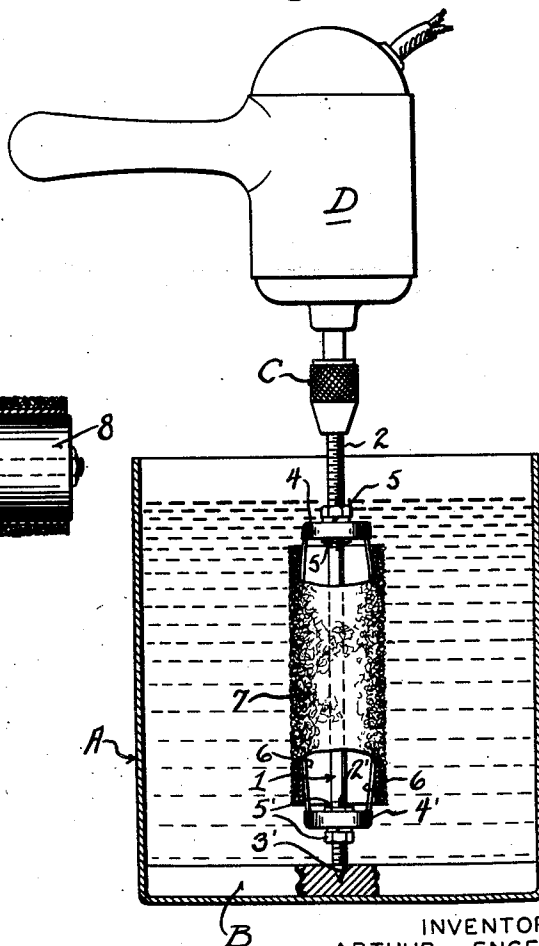


Fig. 5.



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UNITED STATES PATENT OFFICE

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METHOD AND APPARATUS FOR CLEANING
THE JACKETS OF PAINT ROLLERS

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3 Claims. (Cl. 69—19)

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My invention refers to cleaners for rollers used for applying paint upon walls or other surfaces, as a substitute for paint brushes, whereby such surfaces are treated speedily and more effectually finished.

The invention particularly refers to apparatus and a method of cleaning the paint carrying jackets of paint rollers.

The primary object of my invention is to provide an apparatus and method for effectually cleaning old saturated paint from the pliable spongy jacket of a standard roller and thereafter drying the cleansed roller jacket, whereby its surface is rendered soft, pliable and fluffy for the next painting job, it being understood that the jacket is usually composed of wooly sheepskin or similar material, and that said jacket is removed from the paint roller for cleansing the same and is then telescopically mounted upon a skeleton frame, preparatory to being inserted in a cleansing solution. The jacket frame is mounted upon a shaft and when the frame is emersed in a vessel containing a cleansing solution, it is rotated by its shaft at high speed to thoroughly eliminate all paint therefrom.

The skeleton frame carrying the jacket, after being cleansed of the paint is then inserted in an empty vessel and rotated at high speed, and due to centrifugal force, the saturated solution in the jacket is expelled and the jacket is thoroughly dried by this last mentioned air treated operation.

With the above and other objects in view, which will appear as the description proceeds, the invention resides in the novel construction, method and construction, combination and arrangement of parts, substantially as hereinafter described, and more particularly defined by the appended claims, it being understood that such changes in the precise embodiment of the herein disclosed invention may be made as come within the scope of the claims.

In the accompanying drawings is illustrated one complete example of the physical embodiment of the present invention constructed according to the best mode so far devised for the practical application of the principles thereof.

In the drawings:

Figure 1 represents a sectional elevation of a skeleton frame embodying one of the features of my invention.

Figure 2 is an end view of the same.

Figure 3 is a cross sectional view of the frame, the section being indicated by line 3, 3 of Figure 1.

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Figure 4 illustrates a face view of a standard paint roller having mounted thereon a flexible jacket of wooly material, parts being broken away and in section to more clearly illustrate structural features; and

Figure 5 is a side elevation of the skeleton frame emersed in the vessel containing cleansing fluid, the shaft of the frame being coupled to an electric motor for driving said frame, parts being in section to more clearly illustrate structural features.

Referring by characters to the drawings, 1 indicates a drive shaft having threads 2, 2' at its opposite ends and the threaded end 2 terminates with a rectangular coupling connection 3.

Mounted upon each end of the shaft are flanged apertured heads 4, 4', which heads are secured to the shaft by pairs of clamping bolts 5, 5' that engage the opposite faces of the heads.

The companion heads 4, 4' have secured to their flanges a pair of spring strips 6, 6', the ends of which strips may be spot welded to the head flanges or otherwise secured.

As indicated in Figure 1 of the drawings, the strips 6 are preferably bowed as shown and the bow may be varied, when desired, by shifting one of the flanged heads back and forth by manipulating the clamping nuts which confine said head to the shaft.

As shown in Figure 4 of the drawings, the roller jacket 7, which is preferably formed from sheepskin, is mounted upon the standard roller 8 that may be manually manipulated by an axle handle 9. When this jacket 7, in its use, becomes thoroughly impregnated with paint, in order to cleanse the same, it is removed from the roller 8 and telescopically inserted about the jacket frame, illustrated in Figure 1 of the drawings, whereby the bowed strips will securely confine said jacket, it being understood that while I have illustrated two of said bowed strips, the number may be increased, whereby the frame will present the appearance of a skeleton cylinder.

The threaded bottom end 2' of the shaft terminates with a bearing point 3', upon which bearing point the skeleton frame is rotated.

After the paint saturated jacket is mounted upon the skeleton frame, in a cleaning operation, the said frame is inserted in a vessel A containing any suitable cleansing solution. The pointed end 3' of the frame shaft 1 is anchored in a fiber strip B in the bottom of the vessel, whereby a rotatory bearing is developed for said frame, as indicated in Figure 5 of the drawings.

It will be noted that the jacket 7 is firmly

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affixed to the skeleton frame when it is emersed in the cleaning solution, and the upper coupling end 3 of the shaft 1 has fitted thereto a coupling C, which coupling is carried by the shaft of an electric motor D, hence, in this vertical position current is introduced into the motor, whereby the frame shaft is rotated at high speed to effectually clean out all inside and outside paint deposited upon the jacket.

While for convenience I have illustrated a motor for imparting drive to the jacket frame, I may substitute for said electric motor any manually controlled gear driven attachment which may be coupled to the motor shaft 1.

After the cleansing operation of the jacket within the chemical solution has been completed, the operator removes the device from the fluid and inserts the same in a similar empty vessel, and after said device has been properly centered in the bottom of said empty vessel, the shaft of the frame is again rotated at high speed, whereby due to centrifugal force, the saturated cleansing fluid of the jacket is instantly thrown off and by the continuous rotation of the apparatus, the air currents will thoroughly dry out said jacket and render the wooly surface of the jacket fluffy and pliable for the next painting operation, it being understood that by my method of cleansing the jacket, no expert operator is required.

I claim:

1. A method for cleaning a paint roller jacket consisting of removing the paint absorbed jacket

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from its roller, telescoping the same upon a shaft carried skeleton frame, thereafter submerging the jacket and frame into a vessel containing a chemical paint removing solution, rotating the shaft of the skeleton frame at high speed, whereby all paint is thrown off from the jacket, and finally inserting the frame and its cleansed moist jacket into a similar empty vessel and again subjecting the frame shaft to high speed rotation for centrifrically throwing off the retained solution and drying the same to renew the fluffy pliable surface of the jacket, preparatory to again mounting said jacket upon a paint roller for use.

2. A skeleton cleaning frame for paint roller tubular jackets, comprising a shaft threaded at its opposite ends, apertured flanged heads mounted upon the shaft, binding nuts engaging the threaded shaft in abutment with the faces of the heads, a plurality of bowed spring strips secured to the heads, adapted to receive a roller jacket and a driving power mechanism in coupled connection with one end of the frame shaft, whereby the same is rotated at high speed.

3. In a skeleton cleaner frame for paint roller tubular jackets, comprising a driven shaft, heads carried by the shaft and two or more bowed spring strips secured to the heads adapted to receive a tubular paint roller jacket and frictionally grip the same.

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No references cited.