July 10, 1934. A. W. SCOLES 1,965,753

PAINT STRIPER

Filed Nov. 21, 1932

Fig. 1.

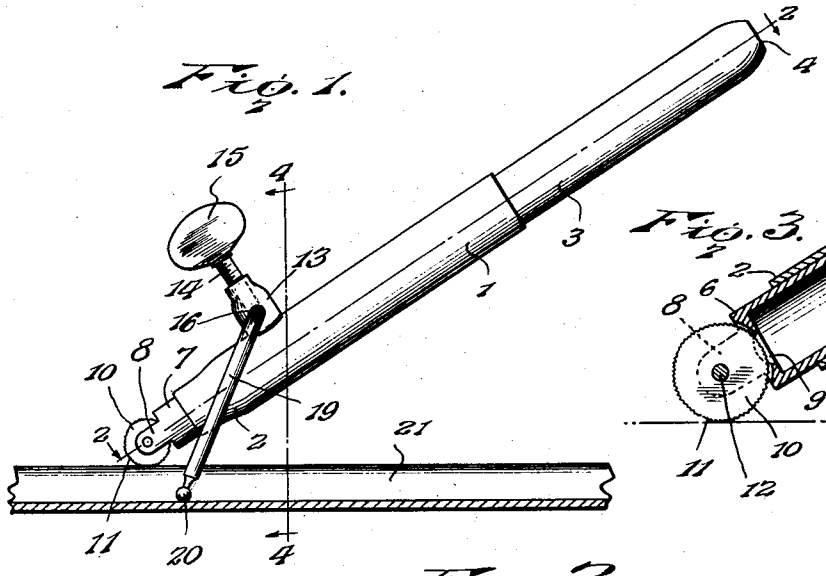


Fig. 3.

Fig. 2.

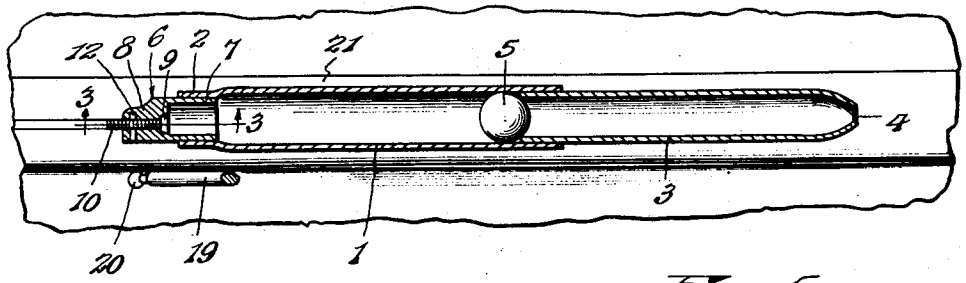


Fig. 4.

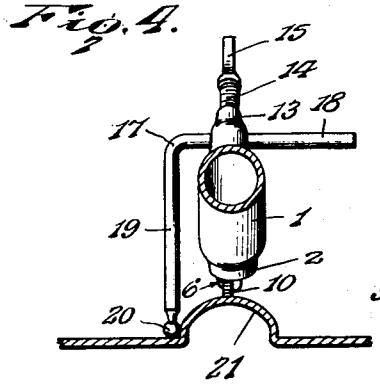
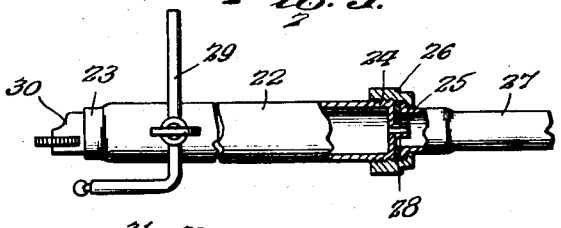


Fig. 5.



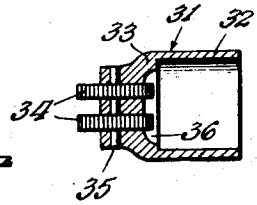


Fig. 6.

Inventor

A. W. Scoles.

By Lacey & Lacey. Attorneys

Patented July 10, 1934 1,965,753

UNITED STATES PATENT OFFICE

1,965,753

PAINT STRIPER

Arthur W. Scoles, Kansas City, Mo.

Application November 21, 1932, Serial No. 643,748

2 Claims. (Cl. 91—62.6)

This invention relates to an improved paint striper, and seeks, among other objects, to provide a device of this character which may be employed for applying paint to a surface in the form of a stripe of a desired width.

Another object of the invention is to provide a paint striper wherein means are employed to insure a steady flow of paint to the head or applicator employed.

A further object of the invention is to provide a paint striper embodying a guide which will permit the device being drawn along a surface to follow a given course, said guide being adjustable to different positions for different work.

A further object of the invention is to provide a paint striper which will be light in weight and which may be handled with the utmost facility.

And a still further object of the invention is to provide a device of this character wherein the applicators employed are interchangeable so that stripes of varying widths may be applied.

Other and incidental objects of the invention, not particularly mentioned in the foregoing, will be apparent during the course of the following description.

In the drawing forming a part of the application,

Figure 1 is a side elevation showing the device as it would appear in engagement with a surface to be striped,

Fig. 2 is a transverse sectional view of the device on the line 2—2 of Fig. 1, looking in the direction indicated by the arrows,

Fig. 3 is an enlarged fragmentary vertical sectional view of the device on the line 3—3 of Fig. 2,

Fig. 4 is an enlarged fragmentary vertical sectional view of the device on the line 4—4 of Fig. 1,

Fig. 5 is a plan view showing a slightly modified form of the invention, and

Fig. 6 is an enlarged sectional view showing a slightly modified form of applicator.

Referring now more particularly to the accompanying drawing the numeral 1 indicates a preferably light-weight metal cylindrical barrel which is open at both ends and is reduced in width near its lower end, as indicated by the numeral 2. The barrel 1 may be knurled intermediate its length to provide a firm manual grip, if desired.

Normally carried with the barrel 1, in telescopic relation thereto, is a tubular sleeve 3 which is likewise formed of a lightweight metal and is open at both ends. The upper end of the sleeve 3 is reduced to provide a relatively small opening 4 which will permit of ready flow of air into the sleeve. Normally carried in the barrel 1 and normally disposed adjacent the open inner end of the sleeve 3 is a metal ball piston 5. The ball piston will be snugly received in the barrel 1 but will be permitted to roll within said barrel and will prevent capillary withholding of liquid in the barrel and will permit ready flow toward the lower end thereof. The ball piston will likewise prevent flow of liquid through the rear end when the device is tilted rearwardly. It will be seen that by sliding the sleeve 3 into the barrel 1, the effective length of the interior of the barrel is controlled.

Normally carried within the reduced portion 2 of the barrel 1 is a removable applicator, a typical one of which is indicated in general by the numeral 6. The applicator comprises a tubular portion 7 and a reduced head portion 8 which is slotted. As best seen in Fig. 3 of the drawing, the head portion is provided at its interior and at the base of the tubular portion 7 with a recess 9. Snugly but rotatably mounted in the head portion 8 and disposed near one side thereof is an applicator disk 10 having a portion of its circumference extending into the recess 9. The applicator disk 10 is preferably formed of metal and is provided at its circumference with serrations 11. Rotatably connecting the disk 10 with the head portion 8 is a pin 12. The applicator disk 10 is adapted to receive the paint from the barrel flowing into the tubular portion 7 and into the recess 9 and is intended to feed the paint to a surface in the form of a stripe in a manner which will be described in more detail hereinafter.

Mounted on the barrel 1, at right angles thereto, and disposed near the reduced portion thereof is a guide supporting post 13 having a binding nut 14 screwed into its upper end. The binding nut will have a flattened head 15. The guide supporting post 13 is welded or otherwise secured to the barrel 1 and is provided with a transverse opening 16 which is disposed at right angles to the axis of the barrel 1. Normally carried by the guide supporting post is a guide 17 which preferably comprises a rod having a straight portion 18 extending through the opening 16 of the post 13 and a downwardly directed portion 19 terminating in a bead 20 at its lower end, the bead 20 being adapted to permit smooth engagement of the guide with a surface, a shoulder, or the like. As will be understood, the binding nut 14 is adapted to bind the straight portion 18 of the guide in any position along said straight portion so that the guide may be se-

cured in any angular position relative to the barrel, it only being necessary to loosen the binding nut 14 by manual engagement with the flattened head 15 for changing the position of the guide in accordance with the desires of the operator.

In use, the device is first filled by withdrawing the sleeve 3 from within the barrel 1 which will permit the ball piston 5 to roll rearwardly within the barrel. The applicator 6 is then removed and the desired amount of paint is then poured into the barrel 1. After the desired amount of paint is placed in the barrel, the applicator is replaced in position in the reduced portion 2 with the applicator disk 10 disposed vertically in parallel spaced relation to the downwardly directed portion 19 of the guide 17, as best seen in Fig. 4 of the drawing. If desired, a line or indicating mark may be placed upon the reduced portion 2 for the purpose of permitting the disk 10 to be placed at the proper angle in the device. The device is then tilted to the desired angle and engaged with a surface to be striped, such a surface being shown in the form of a bead and indicated by the numeral 21. As best seen in Fig. 4 of the drawing, the applicator disk 10 may be disposed to engage the crown of the bead 21 and the bead 20 of the depending portion 19 of the guide 17 will be disposed at the base of said bead 21 so that the device may be moved along the bead 21 in such a manner that a uniform stripe throughout the length of the bead may be applied. It is, of course, to be understood that the device may be used for free hand work and in such case, the guide would be removed. This may be done by simply loosening the binding screw 14 and removing the guide from the supporting post 13. It will be seen that when the device is in use, the ball piston 5 will overlie the upper surface of the paint in the barrel and will serve as a follower so that a uniform flow of paint into the tubular portion 7 and recess 9 of the applicator 6 will be provided, and, as before stated, the ball piston will prevent capillary withholding of paint from the recess of the applicator, air being admitted to the tube behind the ball piston through the opening 4. The ball piston 5 will, of course, prevent the flow of paint through the rear end of the barrel when it is tilted rearwardly. The serrations 11 on the disk 10 will permit an even flow of paint to be deposited on the surface to be striped and, inasmuch as the disk 10 is snugly rotatable in the head 8, leakage of paint down the sides of the disk will be prevented. Attention is called to the fact that the serrations 11 of the disk 10 will function in a manner similar to vanes on a rotary pump. That is to say, a small quantity of paint will be carried in each serration and will be deposited on the surface to be striped. In this manner, the paint will be prevented from spreading over too great a surface. It is obvious that the closeness of the serrations to each other and the tendency of paint to spread slightly will insure the formation of a continuous line. Attention is further directed to the fact that the rotation of the disk 10 with consequent feeding of paint will create a slight vacuum and will prevent the follower from rolling rearwardly when the position of the barrel is suddenly changed.

The sleeve 3 may be moved inwardly to provide additional pressure if desired and said sleeve will cooperate with the valve to provide a long handle so that the hand of the user will not be cramped when using the device.

Referring now to the modification of the invention as shown in Fig. 5 of the drawing, I employ a tubular barrel 22 which is reduced at one end portion, as shown at 23. The opposite end portion of the barrel is threaded, as shown at 24, and is provided with a nipple 25. Normally screwed on the threaded portion 24 of the barrel 22 is a coupling 26 and carried by said coupling is the end portion of a hose 27 which may be connected to a supply of paint under pressure, or, if desired, may be connected to an air supply. A washer 28 is disposed between the end of the hose and the end of the barrel 22 so that leakage about the coupling will be prevented. A guide 29 and an applicator 30 are employed and they are of identical construction with the preferred form. The device is operated in a manner identical with the preferred form with the exception that the ball and sleeve are omitted and pressure is obtained from an exterior source.

In Fig. 6, I have shown a slightly modified form of applicator which may be used with either the preferred form of the invention or the modified form, as shown in Fig. 5. The numeral 31 indicates, in general, the modified applicator which comprises a tubular portion 32 and a head 33 which is provided with a pair of slots. Snugly but rotatably carried in the slots of the head is a pair of disks 34 which are disposed in parallel spaced relation and are of identical diameter. The disks 34 are held in place by a pin 35 extending through the head 33 and said disks have a portion of their circumferences extending into a recess 36 disposed at the lower end of the tubular portion 32. It will be seen that by substituting the modified form of the applicator 31 for either the applicator 8 or 30, I can apply a double stripe to a surface in the same uniform and highly efficient manner. The device would operate in an identical manner when using the modified form of applicator or the preferred form.

It is believed that from the foregoing description, taken in conjunction wtih the drawings, it will be seen that I have provided a simple yet highly efficient paint striper which may be manufactured with the utmost facility.

Having thus described the invention, I claim:

1. A paint striper including a barrel reduced at one end, a sleeve carried in the barrel, a ball piston carried in the barrel below the sleeve and adapted to shift in said barrel, and an applicator carried in the reduced portion of the barrel and adapted to conduct a fluid from the barrel to a surface to be striped, said ball piston overlying the fluid and permitting a constant flow of fluid from the applicator to the surface, said sleeve being shiftable in the barrel for varying the effective length thereof.

2. A paint striper including a barrel open at both ends and provided with a reduced portion, a sleeve slidable into the barrel at one end, a ball piston carried in the barrel and limited against outward displacement at one end by the sleeve and at the other end by the reduced portion, and an applicator carried by the reduced portion and comprising a tubular portion, a head and a disk, said applicator conducting a flow of liquid from the barrel to a surface to be striped, said sleeve and ball piston being shiftable for varying the effective fluid-containing space within the barrel.

ARTHUR W. SCOLES. [L. S.]