Sept. 22, 1953 A. SPRUNG 2,652,774

COATING DEVICE

Filed Sept. 26, 1952

Fig. 1.

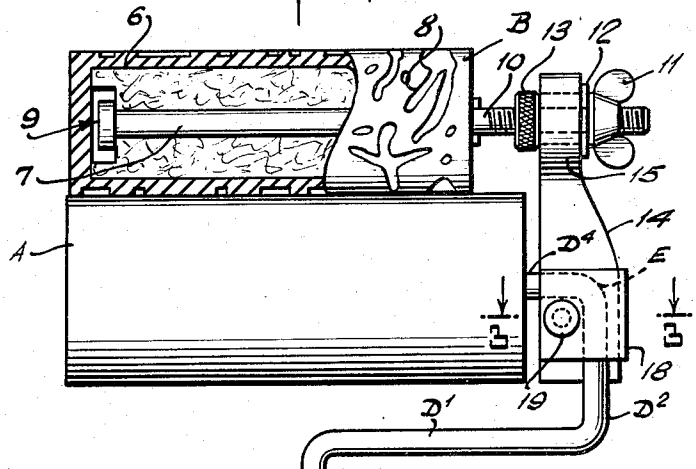
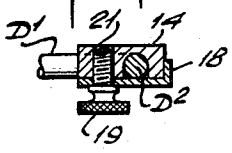


Fig. 3.



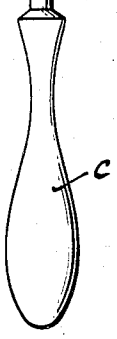


Fig. 2.

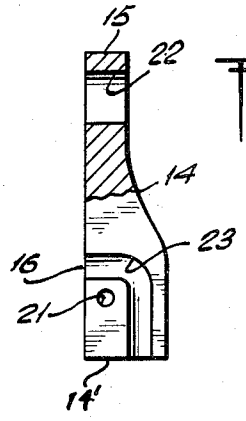


Fig. 5.

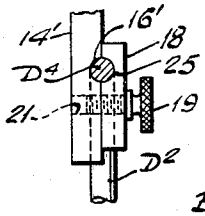
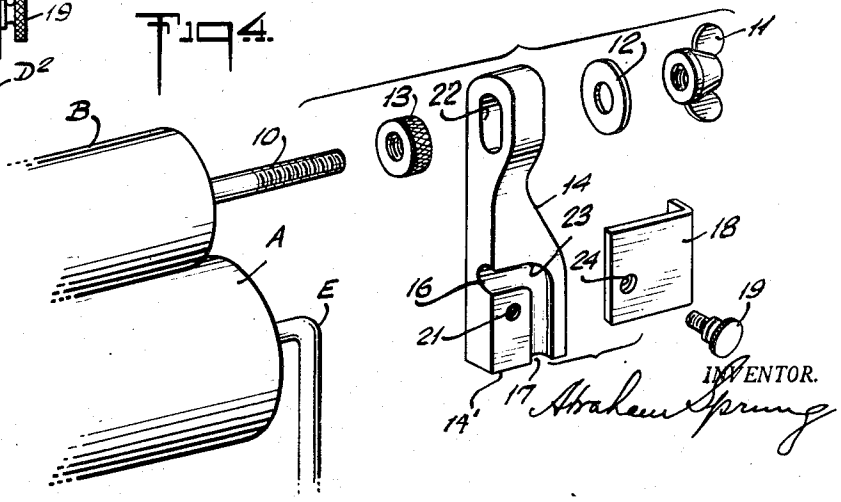


Fig. 4.



INVENTOR.

Abraham Sprung

Patented Sept. 22, 1953

2,652,774

UNITED STATES PATENT OFFICE

2,652,774

COATING DEVICE

Abraham Sprung, Brooklyn, N. Y., assignor to
Decorola Corporation, Brooklyn, N. Y.

Application September 26, 1952, Serial No. 311,608

4 Claims. (Cl. 101—329)

1

This invention relates to coating devices of the roller type which are particularly adapted for coating or printing continuous surfaces or applying designs, paint or ornaments on walls, ceilings, cloth, and other surfaces, and comprehends improvements in the structures of my prior applications Serial No. 241,004, filed August 9, 1951, now Patent No. 2,610,582, and Serial No. 280,553, filed April 4, 1952, now Patent No. 2,616,367.

It is the object of the present invention to provide a design roller attachment which can readily be applied to any conventional paint roller applicator, the attaching structure being inexpensive, quickly applied, and readily attachable, interchangeable and adjustable to suit circumstances and designs in accordance with the desires of the operator.

Another object of the invention lies in the easy and inexpensive conversion whenever desired of a conventional paint applicator roller to a paint feed roller used for feeding paint to a design applicator roller attachment.

Other features of the invention will more clearly hereinafter appear by reference to the accompanying drawings forming a part of the specification in which like characters of reference designate the corresponding parts throughout the several views, in which:

Fig. 1 is a side elevation of the device;

Fig. 2 is a side elevation, partly in section, of the body of the clamp bracket;

Fig. 3 is a transverse section on line 3—3 of Fig. 1;

Fig. 4 is an exploded perspective view showing the various parts of the assembly; and

Fig. 5 is a fragmentary end elevation of a modified form of base of the clamp bracket and clamp plate with the shank in position.

In the present disclosure the applicator roll is illustrated by reference character A, and the coating roll at B. The applicator roll A is normally provided with a handle C which is spaced from and extends transversely of the medial portion of the applicator roll, as best shown in Fig. 1. The handle C is connected to and supports the applicator roll A by virtue of the connecting shank D which is offset at D^2 by connecting portion D' which extends laterally of the shank portion D to a point suitably spaced laterally of one end of the applicator roll A to the offset portion aforementioned. The offset shank D^2 is bent inwardly at E to provide the shank extremity D^4 which projects through and is connected axially of the applicator roll A. By this handle and shank structure the applicator roll A may be conveniently manipulated to perform its various functions.

2

For applying a predetermined design or color, the applicator roll A is designed to be associated with the coating roll B and this association comprehends the use of the clamp bracket 14, forming the subject matter of the instant application. In order that the coating roll B may be adapted for association with the applicator roll A through the use of the clamp 14, the coating roll B is provided with a core 6 having an axial bore 7 through which extends the bolt 9, the threaded end of the bolt 9, as indicated at 10, being of such length as to project substantially beyond the bracket 14 with which it is connected. The projecting threaded end 10 of bolt 9 is provided with a thumb nut 11 and a washer 12 which are used to clamp the coating roll assembly to the bracket 14 and against the adjustable stop nut 13 as will more clearly hereinafter appear. The soft outer cylindrical pattern carrying sheet is indicated by reference character 8 and is removable with respect to the core 6.

The structure embodying the present inventive concept is primarily the clamp bracket 14 which includes a relatively wide base 14' and a relatively reduced neck portion 15, the latter being provided with an elongated, longitudinally extending slot 22 through which the threaded extremity 10 of the bolt 9 is adapted to project and by means of the stop nut 13, washer 12 and the thumb nut 11 to be adjustably clamped thereto. The relatively wide base portion of the clamp bracket, indicated by reference character 14', has its side faces relatively flat and one of these faces shown at 16—23 is formed with a deep groove of angular form adapted to receive and seat the angular portion E of the offset shank portion D^2. The depth of the groove 16 may be sufficient to totally receive beneath the surface of the bracket the shank portion E, as shown in Fig. 3, and in this structure the angular portion E of the offset shank is clamped in position by the clamp plate 18 which may be formed by stamping from sheet metal and provided with inwardly projecting flange, the latter being adapted to engage the outer adjacent wall of the base portion 14' of the clamp bracket. The clamp bracket of Fig. 3 is secured in position by the thumb screw 19 which is threaded in registering openings 21—24 which are formed in the base of the clamp bracket within the confines of the groove 16, as best shown in Fig. 2, and in the clamp plate 18.

If preferred, the groove 16 may be of such a depth as to receive substantially one-half of the

thickness of the shank portion E and in this event a clamp plate such as shown in Fig. 5 may be used. In this form the clamp plate is of substantially the same thickness throughout and is provided with a groove 25 corresponding to the groove 16'—23 in the bracket, and of substantially the same depth, it being intended that the grooves in the plate and in the bracket shall register to provide a passageway suitable to snugly receive the angular portion E of the shank. The same type of fastening is provided in the modification of Fig. 5, this fastening being the bolt 19, threaded through both the plate and the base of the clamp.

It will be obvious to one skilled in the art that the present invention has reduced to a minimum the simplicity of the structure and consequently the costs of the attachment. At the same time the connecting clamp bracket shown and described provides means for adjustably supporting the coating roll with respect to the applicator roll A, the means not only providing for the simplest form of adjustment of the coating roll, but also forming the simplest form of connecting means between the coating roll and applicator roll. To remove the coating roll the thumb nut 11 is unscrewed and the roll moved to free the bolt from the elongated recess. To adjust the coating roll with respect to the applicator roll, the thumb nut 11 may be first loosened by turning to the left and the stop screw 13 can then be shifted to such a position as may be deemed advisable to properly position the coating roll with respect to the applicator roll, To remove the attachment from the applicator roll, it is simply necessary to remove the screw 19 from the base of the clamp bracket. The removal of screw 19 permits the lifting of the plate 18 and the release of the bracket from shank portion E. The clamp bracket body may be made as a simple casting by any well known process or method and may be made of any suitable material, such as aluminum, or otherwise. The clamp plate 18 may be made of sheet metal by a simple stamping operation, or a casting as shown at 18'. Otherwise, the parts for connecting the coating roll to the applicator roll are conventional and readily available on the open market.

What I claim is:

1. In combination, a coating device including an applicator roll, a handle for the applicator roll, and a connecting shank structure connecting the handle and the roll, said shank structure including an offset angular portion lying laterally of the roll, a bracket including a body portion having a relatively wide flat base portion defined in part by straight vertical parallel side walls, said flat base portion being formed with an angular groove for receiving the angular portion of the offset portion of the handle, a clamp plate adapted to overlie said groove to secure the angular portion in its groove, means for fastening the clamp plate in position, and a neck extension for the bracket provided with an elongated longitudinally extending slot, a coating roll mounting adjustably supported in said slot, and a coating roll carried by the coating roll mounting.

2. The structure of claim 1 characterized in that the clamp plate is formed with a flange adapted to engage with one of the vertical walls of the bracket.

3. The structure of claim 1 characterized in that the bracket is formed with a flat inner face adapted to lie parallel to the end face of the applicator roll, and the bracket is tapered from its widened base portion to its upper end in the direction of the flat face.

4. In combination, a coating device including an applicator roll, a handle and a connecting shank structure, said shank structure including an angular portion laterally offset from and immediately adjacent to the end of the roll, a clamp bracket having a flat body portion and a neck extension formed with an elongated slot, the flat body portion being formed with an angular groove for correspondingly engaging part of said offset angular portion, a flat plate member formed with an oppositely faced similar angular groove and adapted to overlie and enclose the said offset angular portion, means for drawing together said plate member and body portion for locking said bracket to said shank structure, and a coating roll mounting adjustably supported in said elongated slot and a coating roll mounted thereon.

ABRAHAM SPRUNG.

References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
232,744	Miller	Sept. 28, 1880
450,307	Zichtl et al.	Apr. 14, 1891
587,253	Adler	July 27, 1897
1,070,763	Bauman et al.	Aug. 19, 1913
2,035,127	Hinton	Mar. 24, 1936
2,237,228	Jobe	Apr. 1, 1941
2,610,582	Sprung	Sept. 16, 1952
2,616,367	Sprung	Nov. 4, 1952