Oct. 10, 1939. E. B. ARCHER 2,175,587

PAINT BRUSH ATTACHMENT

Filed March 25, 1939

Fig. 1.

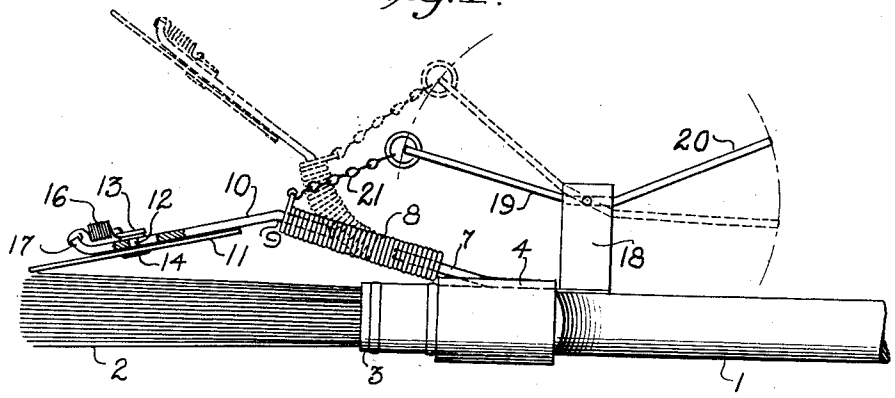


Fig. 2.

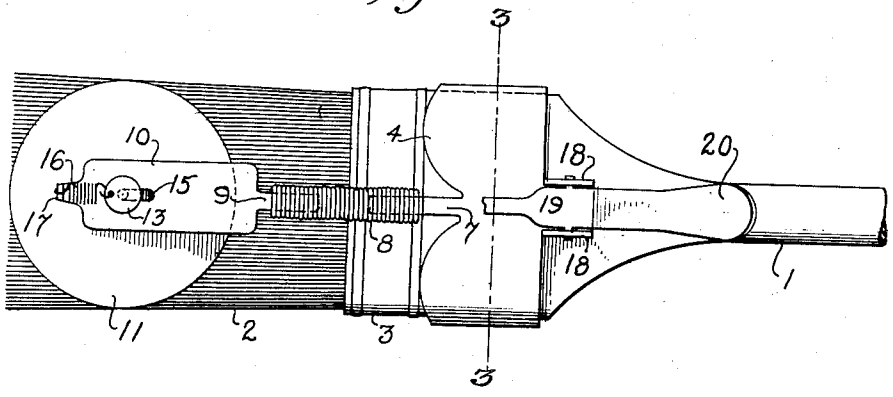


Fig. 3.

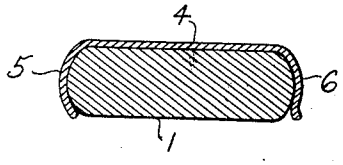
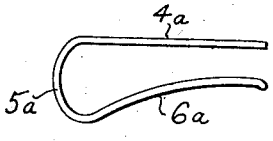


Fig. 4.



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PAINT BRUSH ATTACHMENT

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14 Claims. (Cl. 91—65)

The present invention relates to a paint brush attachment, and more particularly to an attachment for paint brushes which facilitates painting a surface contiguous to another surface without getting paint on said other surface where it is not desired.

There are many situations where a surface to be painted lies contiguous to another surface where the paint is not desired. Typical of such situations may be mentioned the painting of sash where the paint should not get on the glass; the painting of interior trim such as casings, base boards, moldings, etc., where the paint should be kept from walls, floors, etc.; and in two-tone painting where the paint of one color should not lap over onto the surface painted with the other color. Although an experienced painter who has developed a good deal of skill in the use of a paint brush may be able by the exercise of great care to produce satisfactory results in such situations, it is a fact of common knowledge and observation that window panes, floors and walls adjacent to trim, hardware such as escutcheon plates, hinge butts, etc., are usually smeared with paint adjacent to the surfaces that have been freshly painted. Many attempts have been made to provide some means for avoiding this difficulty, and to shorten the time required even by experienced painters to paint such surfaces, and in particular to assist inexperienced painters to produce satisfactory results under these circumstances. None of these attempts, so far as I am aware, has been satisfactory, and so far as I know there is no device on the market which satisfactorily fulfills the demands of the trade and public for a paint brush attachment adapted to confine the paint to the surface being painted.

I have invented a paint brush attachment which can readily be attached to the handle of a paint brush and which enables even an unskilled person quickly and accurately to paint a surface without getting paint onto adjacent surfaces where it is not desired. The brush attachment embodying my invention, moreover, is satisfactory to skilled painters and enables them to do faster work without sacrifice in the workmanship and quality thereof.

It is an object of my invention to provide a paint brush attachment which facilitates painting a surface without getting paint on adjacent surfaces where it is not desired.

It is a further object of my invention to provide a paint brush attachment having a guard adapted to lie adjacent to the ends of the bristles in operative position and having manually operable means to move the guard to a position away from the bristles so that the user may dip the brush into a supply of paint without getting it on the guard.

Another object of my invention is the provision of a paint brush attachment having a guard angularly positioned with respect to the bristles and having its periphery adjacent to the ends of the bristles.

My invention also contemplates the provision of a guard disc rotatably and slidably mounted on a paint brush handle with the periphery of the disc adjacent to the ends of the bristles but capable of yieldingly retracting to permit variation in pressure on the bristles in use.

Other objects and advantages of my invention will become apparent from the following detailed description of an illustrative embodiment thereof, taken in conjunction with the drawing, in which:

Fig. 1 depicts a side elevation of an illustrative embodiment of my invention, partly in section, shown attached to a paint brush;

Fig. 2 is a plan view of the device shown in Fig. 1, certain parts being omitted and broken away for the sake of clarity;

Fig. 3 illustrates a sectional view taken along the line 3—3 of Fig. 2; and

Fig. 4 is an end elevation of a modified form of clamp for securing the attachment to a paint brush handle.

Broadly speaking, my invention comprises an attachment having means adapted to be secured to a paint brush handle and including a guard which lies, in operative position, adjacent to the ends of the bristles. The guard is preferably angularly related to the bristles in its operative position. In order to permit the painter to vary the pressure on the bristles during a painting stroke, I prefer to mount the guard in a slot and provide resilient means yieldingly holding the guard remote from the means which secures the attachment to the handle of the brush. The guard may advantageously be in the form of a rotatably mounted disc to facilitate moving it along the line separating the surface to be painted from the surface it is desired to protect against the paint. In using the attachment it is desirable to keep the face of the guard opposite the bristles free from paint, and to enable the user to dip the brush into a supply of paint without getting paint on the guard, I have provided a mounting for the guard which permits it to be moved away from the bristles. I prefer to use manually operable means conveniently mounted for engagement by a digit of the hand holding the brush to move the guard

from its operative position adjacent to the bristles to a position remote therefrom.

Referring now more particularly to the drawing, I have depicted a preferred embodiment of my invention attached to a conventional paint brush having a handle 1, bristles 2 set in rubber or the like and secured to the handle 1 by a metal sleeve 3. In the specification and claims the handle is considered to include the metal sleeve 3, unless otherwise stated. The attachment is preferably removably secured to the handle 1 when the brush is being used for painting a surface contiguous to another surface where the paint is not desired. Means such as a metal stamping 4 having an arcuate end 5 and a latch end 6, as clearly illustrated in Fig. 3, forms a convenient and simple clamp for removably holding the attachment to the conventional type of paint brush handle. An alternative form of clamp is shown in Fig. 4 where the stamping 4a comprises an arcuate portion 5a and a spring arm 6a extending generally parallel to the main body of the stamping so that the handle 1 may be clamped between the arms 4a and 6a. In some instances, I may dispense with the parts 5 or 5a and 6 or 6a, respectively, and fasten the stamping 4 to the handle by a bolt, rivet, or any other desired means.

The stamping 4 is illustrated as having an integral projection 7 extending forwardly and upwardly from the plane of the handle. A relatively heavy coil spring 8 is secured at one end to the projection 7, for example, by being screwed onto the same. A projection 9 extending rearwardly and downwardly from a plate 10 is secured in similar manner in the other end of spring 8. It will be understood, of course, that a leaf spring could be used in place of coil spring 8, or that the stamping 4 and plate 10 could be made of a single piece of metal of suitable resiliency to avoid taking a permanent set when flexed in a manner more fully set forth hereinafter. Generally speaking, however, I prefer to use a relatively heavy coil spring as illustrated in the drawing, this structure permitting a guard 11 mounted on plate 10 to have a certain degree of universal movement and thereby enabling it to follow the bristles more closely during painting strokes. The connection between the guard 11 and the stamping 4 should be sufficiently stiff to give good support to the guard 11 but capable of flexing toward the bristles during a painting stroke to enable the painter to cover the surface being painted right up to the line separating it from the adjacent surface being protected by the guard 11.

The guard 11 may be rigidly secured to plate 10 or even be integral therewith, and should extend substantially to the end of the bristles as shown in Figs. 1 and 2. I have found it to be distinctly advantageous in use to have the guard angularly related to the bristles 2 as illustrated in Fig. 1. The angle between the guard and the bristles should be at least several degrees, for example, about 10 to 15 degrees. This arrangement not only permits the periphery of the guard to lie closely adjacent to the ends of the bristles without substantially disturbing their natural position, but also keeps the major portion of the guard out of contact with the bristles. This is of particular advantage where the guard 11 is in the form of a disc rotatably mounted to the plate 10 by a short shaft 12 having heads 13 and 14 retaining the parts in assembled relation, as illustrated in Figs. 1 and 2, and which is the preferred structure for general application. The angular relation of the guard to the bristles substantially prevents the transfer of paint from the brush to the center of the disc where it would hamper free rotation of the disc 11.

In order to permit the painter to vary the pressure on the bristles during painting strokes, I prefer to provide plate 10 with a slot 15 in which shaft 12 is free to slide. Resilient means such as the relatively light coil spring 16 yieldingly holds the guard disc 11 in a position remote from the stamping 4 but permits motion toward the same as pressure on the bristles is increased. The spring 16 may conveniently be secured at one end to the head 13 of shaft 12 and at the other end to a struck up lug 17 on the plate 10.

When the brush is to be dipped into a supply of paint, it is preferred to move the guard 11 away from its operative position adjacent to the bristles in order to avoid getting paint thereon. A convenient means for accomplishing this purpose comprises a pair of upstanding arms 18 integral with the stamping 4 between which a lever 19 is pivotally mounted. The rearwardly extending arm 20 of the lever functions as a finger piece in convenient position for engagement by a digit of the hand of the painter in which the brush is held. The forwardly extending arm of the lever 19 is joined with the plate 10 or the spring 8, for example, by a flexible linkage 21. It will be apparent that by depressing finger piece 20 the guard 11 will be moved to a position away from the bristles, somewhat as indicated in the dotted lines of Fig. 1.

The operation of my brush attachment will be apparent from the foregoing description of the structure. When the painter is about to paint a sash, interior trim, or other surface lying contiguous to a surface which should not be covered with the paint, the attachment may quickly and easily be clamped to the handle of the brush and adjusted longitudinally so that the periphery of the guard 11 lies near the end of the bristles as shown in the drawing. By depressing finger piece 20, the guard 11 is swung away from the bristles to the dotted line position of Fig. 1 thereby permitting the painter to dip the ends of the bristles into a supply of paint without getting the guard into the paint. As soon as the finger piece is released the guard is returned to operative position by spring 8. The brush is then applied to the work so that the guard 11 lies between the bristles and the surface it is desired to protect from the paint. The periphery of the guard disc 11 is readily guided along the line separating the surface to be painted from the surface to be protected, and it effectively confines the bristles to the surface being painted.

Although the foregoing description has been directed to a specific embodiment of the present invention, it is to be understood that modifications and variations in the structure and arrangements of parts are contemplated as coming within the scope thereof. Moreover, certain elements of the specific novel combination illustrated in the drawing may, under certain circumstances, be dispensed with and still provide a satisfactory and efficient guard attachment for paint brushes. Such combinations of fewer elements will be apparent to one skilled in the art from the foregoing description and the appended claims.

I claim:

1. A brush attachment comprising means adapted to be secured to a paint brush handle, a guard movably mounted on said means yieldingly held in operative position adjacent to the ends of the bristles, and manually operable means for

moving said guard away from said bristles when the brush is to be dipped into a supply of paint.

2. A brush attachment comprising means adapted to be secured to a paint brush handle, a plate movably mounted on said means, a guard disc rotatably mounted on said plate and adapted to be held in operative position with the periphery thereof adjacent to the ends of the bristles, and manually operable means for moving said plate and guard disc away from the bristles when the brush is to be dipped into a supply of paint.

3. A brush attachment comprising means adapted to be secured to a paint brush handle, a plate movably mounted on said means, a guard disc rotatably and slidably mounted on said plate and adapted to be held in operative position with the periphery thereof adjacent to the ends of the bristles, resilient means yieldingly holding the guard disc in this position but permitting sliding movement toward said first named means, and manually operable means for moving said plate and guard disc away from the bristles when the brush is to be dipped into a supply of paint.

4. A brush attachment comprising means adapted to be secured to a paint brush handle, a flexible member mounted at one end on said means, a guard secured to the other end of said flexible member adapted yieldingly to be held thereby adjacent to the ends of the bristles of the brush, and manually operable means mounted on said first named means adapted to bend the flexible member and move the guard away from the bristles.

5. A brush attachment comprising means adapted to be secured to a paint brush handle, a flexible member mounted at one end on said means, a plate secured to the other end of said flexible member, a guard disc rotatably mounted on said plate adapted to be yieldingly held by said flexible member with its periphery adjacent to the ends of the bristles of the brush, and manually operable means mounted on said first named means adapted to bend the flexible member and move the guard disc away from the bristles.

6. A brush attachment comprising means adapted to be secured to a paint brush handle, a flexible member mounted at one end on said means, a plate secured to the other end of said flexible member, a guard disc rotatably and slidably mounted on said plate and adapted to be held by said flexible member with its periphery adjacent to the ends of the bristles of the brush, resilient means yieldingly holding said disc in a position remote from said first named means but permitting motion toward the same, and means including a lever mounted on said first named means adapted to bend the flexible member and move the guard disc away from the bristles.

7. A brush attachment comprising a metal stamping having means for removably clamping it to the handle of a paint brush, a flexible member secured at one end to said stamping, a plate secured to the other end of said flexible member and having a slot therein, a guard disc rotatably and slidably mounted in said slot, resilient means yieldingly holding said disc at the end of the slot remote from said stamping, and means including a lever mounted on said stamping adapted to bend the flexible member and move the guard disc relative to the stamping.

8. A brush attachment comprising a metal stamping having means for removably clamping it to the handle of a paint brush, a flexible member secured at one end to said stamping, a plate secured to the other end of said flexible member, and a guard disc rotatably mounted on said plate; said disc in operative position forming an angle of several degrees with the plane of that portion of the stamping which is adapted to lie against the handle.

9. A brush attachment comprising means adapted to be secured on a paint brush handle, means movably mounted on said first named means, a guard disc rotatably mounted on said second named means, said guard disc when the attachment is secured on a brush being held in operative position adjacent to the ends of the bristles thereof and at an angle of several degrees with respect thereto.

10. A brush attachment comprising means adapted to be secured to a paint brush handle, and a guard disc rotatably mounted on said means, said guard disc when the attachment is secured on a brush being held in operative position adjacent to the ends of the bristles thereof and at an angle of several degrees with respect thereto.

11. A brush attachment comprising means adapted to be secured to the handle of a paint brush, means having a slot movably mounted on said first named means, a guard disc rotatably and slidably mounted in the slot of said second named means, and resilient means yieldingly holding said disc at the end of the slot remote from said first named means.

12. A brush attachment comprising means adapted to be secured to the handle of a paint brush, said means having a slot therein, a guard disc rotatably and slidably mounted in said slot, and resilient means yieldingly holding said disc at the end of the slot remote from the place of attachment to the handle.

13. A brush attachment comprising means adapted to be secured to the handle of a paint brush, said means having a slot therein, a guard slidably mounted in said slot, and resilient means yieldingly holding said disc at the end of the slot remote from the place of attachment to the handle.

14. A brush attachment comprising means adapted to be secured to the handle of a paint brush, a guard, means movably joining said guard to said first named means, means for holding said guard in operative position adjacent to the ends of the bristles of the brush, and means for moving the guard to an inoperative position remote from the bristles.

ERLING B. ARCHER.