Nov. 29, 1949 R. T. EMBREE 2,489,875

SUPPORT FOR BRUSHES

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FIG. 1.

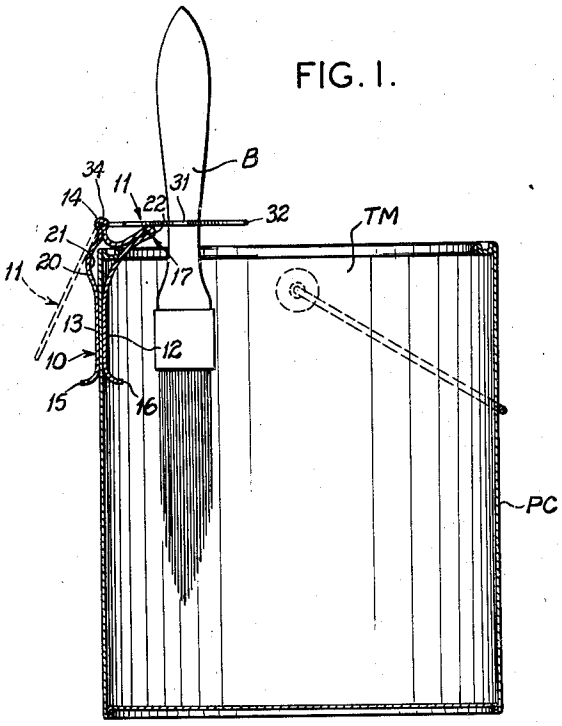


FIG. 3.

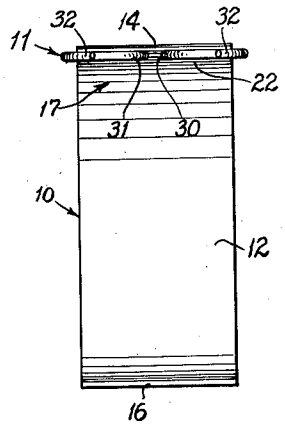


FIG. 4.

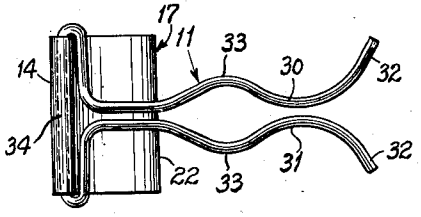


FIG. 2.

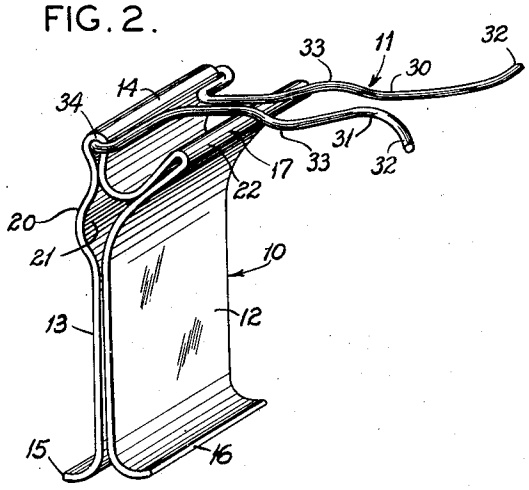
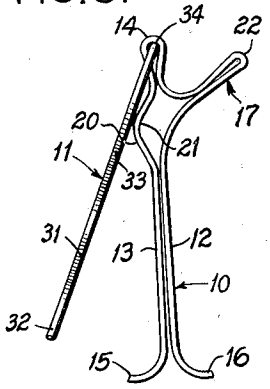


FIG. 5.



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SUPPORT FOR BRUSHES

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2 Claims. (Cl. 248—204)

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This invention relates to supports for brushes, and more particularly to a retractible brush holding clamp of a type adapted for supporting a handled brush from and within the wall of a container, for example, in the support of a paint brush by its handle in a vertical position within a paint bucket or the like.

Various structures have heretofore been evolved in an attempt to provide a holder for a paint brush or plurality thereof, in containers of various types, in a manner to relieve the bristles of the weight of the brush, and in a manner to protect against smearing and loss of paint. However, none of such devices heretofore available to the trade is wholly adequate for its intended purpose. A major shortcoming of earlier brush holding clips and the like is found in their instability and their tendency to become deformed and distorted after a period of use when subjected repeatedly to the weight of the brush heavily laden with paint. It is accordingly a major object of the present invention to realize an improved design of device for the purpose noted, which may be instantly applied and as quickly removed from the upper margin of the wall of a paint can or bucket; one in which the brush holding clip may be swung to an out-of-action position so as to clear the opening to the bucket during periods of painting, and one which, when in use to support the brush, is exceedingly sturdy, will serve reliably for long periods of time to support the brush in a vertical position with its weight off of the bristles, and entirely clear of the inner wall of the container.

A further and important objective of the invention is realized in a device for the purpose noted which need consist of no more than two parts movably related, viz., a spring clamp engaging the wall of the container, and a spring clip which serves to grip and support the brush.

A still further and important objective of the invention is realized in an improved construction of clamp per se, which provides a more positive support for the brush clip than has heretofore been realized.

The foregoing and numerous other objects of the invention will more clearly appear from the following detailed description of a presently preferred embodiment, particularly when considered in connection with the accompanying drawing, in which:

Fig. 1 is a vertical sectional view of a brush support, together with a container and brush, all in a position of usage of the support;

Fig. 2 is an isometric view, somewhat enlarged, of a holder exemplifying the present improvements;

Fig. 3 is a side elevation of the holder of Fig. 2;

Fig. 4 is a top or plan view of the assembly of Fig. 2, and

Fig. 5 is a lateral or edgewise view of the structure shown by Fig. 2.

Referring now by characters of reference to the drawing, in order to render more meaningful the advantages of the present improvements, they are illustrated under conditions of an exemplary situation in which the brush is held in repose between periods of use, suspended vertically within and clear of the walls of a paint can or container PC, the upper margin of the open container being indicated at TM and the brush of usual handle and bristle type, being generally indicated at B.

The holder as an assembly may conveniently be described as consisting of two major elements, viz., a spring clamp generally indicated at 10, and a spring clip or brush holder proper, pivotally connected to member 10 and generally indicated at 11.

First to describe the clamp, in the preferred form illustrated this consists of two dissimilar furcations or jaws 12 and 13, the furcate jaws being connected in a pivot-forming bight portion 14 normally at the top of this assembly, and serving pivotally to receive the spring clip, as will hereinafter be more fully described. The lowermost or free ends of the jaws are outturned in divergent-convergent relation, the outturned terminals being indicated at 15 and 16. These serve in a manner now obvious from Fig. 1, to facilitate application of the clamp over the top margin TM of the bucket or can PC.

By preference the clamp 10 is formed of a spring metal stock of such resilience that when formed up, the jaws 12 and 13 are biased toward each other, or otherwise expressed, coact in gripping relation to the vertical can wall embraced therebetween.

An important feature of the present improvement consists in providing one of the jaws such as 12, with an upwardly and outwardly projecting strut portion 17. An economical arrangement thereof consists in forming the strut 17 as a doubled, folded portion of the jaw or leg 12, causing the strut-forming part to project at an acute angle, for example of the order of 45 degrees, to the planar portion of the jaw 12. The strut is extended in a direction inwardly of the can with which the device is to be employed, a distance such that a brush supported by the device will be

suspended entirely free and with a substantial spacing from the nearest container wall. This is indicated in order to avoid distortion of the bristles of the brush and their possible disarrangement, as might otherwise occur. That portion of the jaw or furcation 12 upwardly beyond the strut 17 is, in forming, bent over to form a part-cylindrical journal or pivot portion for the reception of a pivot-forming part of the wire clip to be described. Proceeding from this bight or journal portion of the clamp, the opposite jaw or leg 13 is, in a region opposite the root of the strut portion, bowed outwardly as will readily appear from Figs. 2 and 5, and as indicated at 20. This bowed portion it will be observed, lies substantially opposite the divergent root of the strut 17 so as to define in this region a horizontal recess 21 (Fig. 5) so proportioned as to accommodate the usual bead, chime or other thickened portion in the region of the upper edge of the wall of the bucket or can. Such a formation permits the clamp to be free, or substantially so, of any such peripheral projection and still assume a position such that the jaws 12 and 13 lie in close parallelism to the opposite sides of the can wall with firm gripping engagement thereof.

The angle, linear extent and other characteristics of the strut 17 are such that its outermost end 22, forming as will appear, a rest or support for the intermediate part of the brush clip, lies slightly below the pivot axis defined by the bight or journal portion 14. In this manner, the clip will assume in its position of use, a horizontal position and is thus sturdily supported to withstand the sometimes considerable loading of larger brushes even when filled with lead or other relatively heavy types of paint and finishing materials.

Proceeding now to describe with more particularity the preferred form of spring clip generally indicated at 11, this is of a generally T shape, and by preference but without restriction, is formed of a resilient wire stock of suitable gauge. The clip is comprised of a pair of arms or jaws 30 and 31, each jaw provided with outturned terminal portions 32 and about centrally of the clip with outwardly bowed formations 33 which coact to form therebetween a gripping seat normally embracing, as in Fig. 1, the reduced-sectional portion of the handle of brush B. The temper of the stock of this clip is such that it exhibits a rather secure frictional engagement with the opposite sides of the handle and virtually completely embraces it in this region. The resilience of the wire stock is further such that an appreciable yet minor effort in forcing the brush handle into the mouth between the divergent terminals 32 of the clip, serves to separate the jaws 30—31 momentarily which thereafter close about the neck of the brush handle.

The two arms or jaws of the clip 11 converge just rearwardly of the brush seat formed by and between the bowed portions 33, and thereupon are bent oppositely with corresponding parts aligned, thence reentrantly formed to constitute the pivot portion of the clip which extends through and substantially completely occupies the journal-forming bight region 14 of the bifurcate clamp structure.

It is a preference of course, separately to form the clamp 10 and clip 11. Assembly may be readily effected by introducing the pivot part 34 of the clip between the divergent ends 15—16 of the clamp, thence upwardly between the jaws, and with some resistance, into the final assembled

relation of the parts as shown. The resilience of the stock and its close convergence just below the portion 14 are more than adequate to maintain the coacting pivot elements in assembly.

The manner of application of the device to a metal container such as a paint can or bucket, will now have become obvious at least in part. It is necessary, once the can cover is removed or top portion cut away as may be required, to press the clamp over the can edge so as to cause the introduction of the margin TM of the container to the zone between the divergent lips 15—16 of the clamp. Continued downward movement will bring the clamp to a position such that its bead or rim will become firmly seated in the recess or pocket 21 therefor between the furcations or jaws of the clamp.

In order to bring the clip to a position of usage it is moved clockwise (Figs. 1 and 5) to horizontal position as shown, in which the strut 22 bears against an intermediate part of the wire clip, and by preference it is shown engaging the region adjacent the bowed portions 33 of the jaws 30 and 31.

It will now have appeared that the spring clip 11 is thus supported at relatively widely spaced points, and one of which is, the outer extremity of the strut 17, more specifically the zone indicated at 22, the other spaced supporting point being in the pivot zone. In this manner there are obviated many of the shortcomings of the former devices for intended and comparable usage in relying solely on a fulcrum support or stop in the immediate region of the pivot of a clip or the like.

It will have been noted that the present device inherently provides a feature of retractibility, or otherwise expressed, the assembly enables the brush supporting member to be moved, counterclockwise in the arrangement of the drawings (Figs. 1, 2 and 5) so that the clip lies entirely externally of the container and thus offers no obstruction to or interference with normal movements of the brush in and out of the container, incident to painting operations.

It is to be understood of course that although the arrangement has been described for brevity in the form of a single unit, a plurality of wire clips such as 11 may be utilized in assembly of a multiple holder. The supporting clamp structure may in such case consist of a plurality of the individual clamps, strapped or otherwise assembled in side-by-side relation, or alternately, somewhat wider clamps 10 may be employed, in which separate spaced pivot portions 14 are provided for assembly of the individual clips.

It will now have appeared that the device as described in a presently preferred embodiment, will serve as an unusually rugged and compact arrangement for the noted purpose; that it may be manufactured at a low cost, and supplied commercially at a reasonable figure, all in full realization of the several objects hereinabove expressed as well as others implied.

Although the invention has been described by making reference to a single selected embodiment, the detail of description is to be understood solely in an instructive rather than in any limiting sense, numerous variants being possible within the intended scope of the claims hereunto appended.

I claim as my invention:

1. In a holder for the support of a paint brush or the like vertically within and spaced from the wall of a paint bucket, a bifurcate clamp formed of spring metal, the furcations of which comprise a pair of spring jaws, the jaws being

normally self-biased toward each other, the free ends of the furcate jaws being divergent whereby to facilitate application of the clamp over the vertical wall of the container with one of the jaws located within the container, said internal jaw having a doubled and folded portion projected upwardly at an acute angle to the plane of the jaw to form a strut, thence being continued to a region slightly above said strut, in a rounded bight portion forming a journal for a brush clip; a brush clip of resilient wire stock and furcate construction including a substantially rectilinear pivot portion extending through and swingably supported within the journal portion of the clamp, the clip being extended in a direction inwardly of the container with which the device is used to form a pair of spring arms, the arms being formed and coacting to provide a loop-like handle socket for receiving a narrow part of a paint brush handle, the free extremities of the clip being formed divergently to facilitate introduction of the brush handle to its supported position in the clip, the clip being engaged by the strut in a region close to the brush handle, and the clip being swingably movable to a position exteriorly of the container and approaching the outside jaw or furcation of said clamp.

2. In a holder for supporting a paint brush or the like in vertical position from the walls of a container, a bifurcate spring clamp adapted to

be inserted over an upper margin of a vertical wall of a container such as a paint can, the clamp furcations constituting two jaws, respectively internally and externally of the container, said internal jaw including a doubled and folded portion projected upwardly and outwardly of the remainder of the jaw at an angle of the order of 45 degrees to constitute a strut, said jaws coacting in the zone of their connection to form a pivot portion, a spring brush holder pivotally mounted in the last said portion and normally assuming, in a position of use, a substantially horizontal position, the jaws being formed in a region below the pivot portion to provide a horizontal bore between the jaws adapted to receive the bead or like enlargement on the upper margin of the can, said strut and pivot portion of the clamp coacting to support the wire clip respectively in zones adjacent the brush engaging part of the clip, and at one end of the said clip.

ROY T. EMBREE.

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