

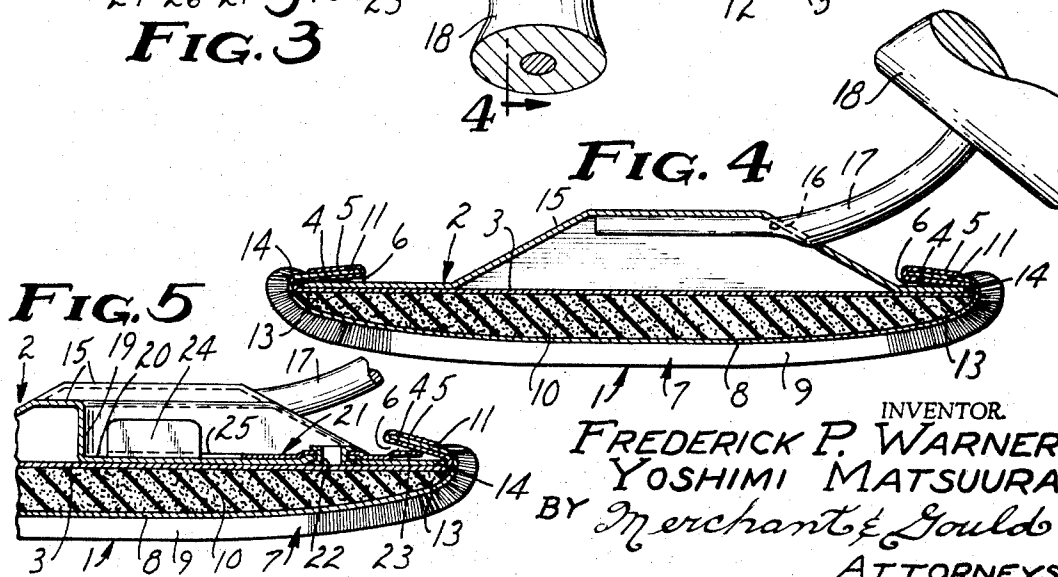
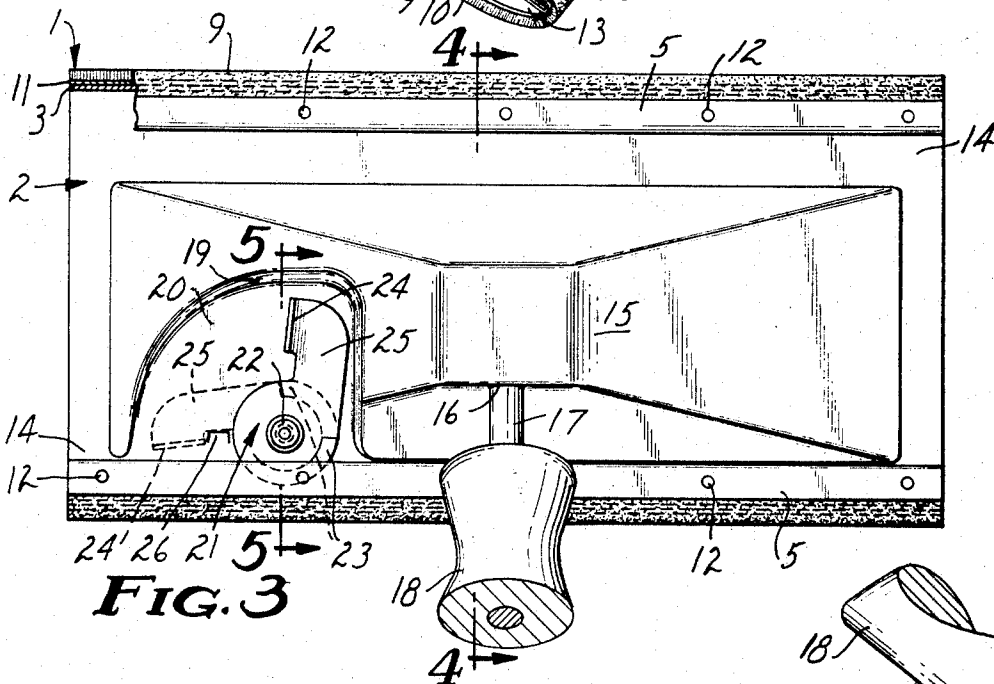
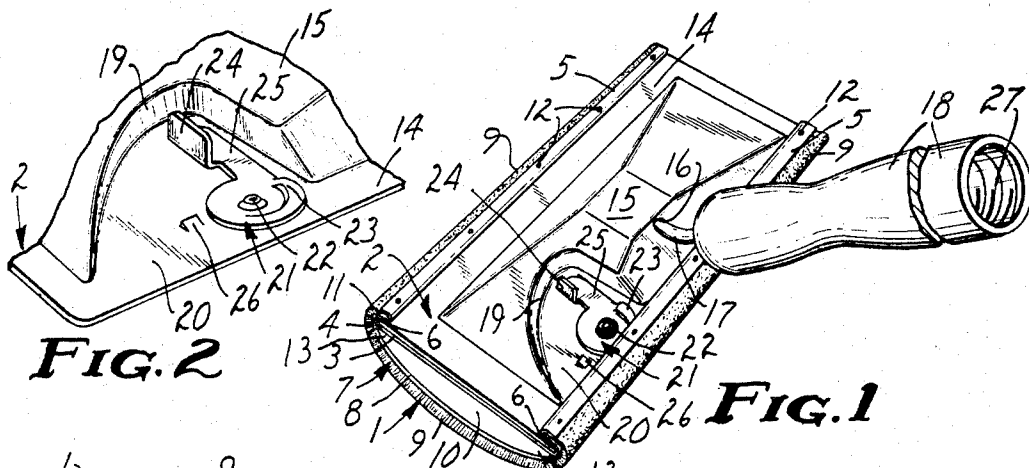
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APPLICATOR FOR PAINT AND THE LIKE

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APPLICATOR FOR PAINT AND THE LIKE
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ABSTRACT OF THE DISCLOSURE

An applicator head having channel defining portions for slidable reception of a holder, and means on the holder for releasably locking the head on the holder against sliding movements therebetween. The applicator head includes a mounting plate and a filament pile equipped applicator sheet anchored at opposite side edge portions to adjacent portions of the mounting plate, a cushioning pad being interposed between the applicator sheet and mounting plate.

Background of the invention

Applicators for paint or other liquid coatings, utilizing pile fabric applicator sheets are well known, as exemplified by such United States patents as 2,066,829, 2,156,270, 2,810,148, 2,975,453, and others. Some of these relate to applicator elements or sheets having handle-equipped holders adhered thereto, others having applicator elements detachably secured to handle equipped holding devices. With those applicators wherein the applicator sheets are more or less permanently adhered to the holders, the holders are discarded with the applicators when the sheets become worn out. With those applicators having removable applicator elements, the elements are either difficult to remove and replace, or may accidentally shift on the holder during use, making it necessary to frequently reset the same.

Summary of the invention

An important object of this invention is the provision of an applicator for paint or other coating liquid utilizing an applicator head and a holder therefor, in which the head may be quickly and easily attached to the holder and locked thereon against movement relative to the holder. To this end, we provide an applicator which includes a mounting plate formed to provide a pair of opposed channels for slidable reception of opposite side edges of a handle-equipped plate-like holder. A generally rectangular filament pile equipped applicator sheet is rigidly secured at its opposite side edges of the mounting plate. The holder is provided with a locking device for releasably locking the mounting plate against movement relative to the holder in any desired set position of sliding movement therebetween.

Description of the drawings

In the accompanying drawings, which illustrate the invention, and in which like reference characters indicate like parts throughout the several views:

FIG. 1 is a view in perspective of an applicator for paint and the like produced in accordance with this invention;

FIG. 2 is an enlarged fragmentary view of a locking device;

FIG. 3 is a view in top plan, some parts being broken away and some parts being shown in section;

FIG. 4 is a further enlarged fragmentary section taken substantially on the line 4—4 of FIG. 3; and

FIG. 5 is an enlarged fragmentary section taken substantially on the line 5—5 of FIG. 3.

General description

In the preferred embodiment of the invention illustrated, the applicator is shown as comprising an applicator head 1 and a holder 2. The applicator head 1 includes a flat generally rectangular mounting plate 3, preferably of sheet metal formed at its opposite longitudinal side edge portions to provide laterally intumed flanges 4 disposed in overlying spaced relationship to the top surface of the mounting plate 3, and out-turned flanges 5 disposed in overlying spaced relationship to respective ones of the intumed flanges 4, see particularly FIGS. 4 and 5. The intumed flanges 4 diverge from the underlying portions of the mounting plate 3 in a laterally inward direction, and cooperate therewith to define opposed laterally inwardly opening longitudinal channels 6. The applicator head 1 further includes a generally rectangular applicator sheet 7 comprising a fabric backing 8 and a filament pile 9 projecting outwardly from the bottom surface of the backing 8, and a flexible resilient cushioning pad 10 interposed between the bottom surface of the mounting plate 3 and the upper surface of the fabric backing 8. The cushioning pad 10 is preferably made from foam rubber or highly resilient foam plastic material. Each of the out-turned flanges 5 is disposed in spaced parallel relationship to its underlying intumed flange 4 and cooperates therewith to define a laterally outwardly opening channel for reception of an adjacent one of the longitudinal side edge portions 11 of the applicator sheet 7. Each side edge portion 11 is compressed between its adjacent flanges 4 and 5 and securely anchored therebetween by a plurality of longitudinally spaced indentations or extrusions 12 in each of the flanges 5. Normally, the cushioning pad 10 is of uniform thickness throughout the area thereof. However the width of the applicator sheet 7 is such, that when the opposite side edge portions 11 thereof are received and anchored between their respective flanges 4 and 5, the opposite side edge portions 13 of the pad 10 becomes compressed between the applicator sheet 7 and the overlying mounting plate 3. Thus, the applicator sheet 7 becomes gently curved at its opposite side portions, the same being flat in a direction longitudinally of the applicator head 1.

The holder 2 is preferably stamped from sheet metal of somewhat heavier gage than the mounting plate 3, and is formed to provide a flat marginal edge portion including opposite longitudinal side edge portions 14 that are longitudinally slidably received in the inwardly opening channels 6 of the mounting plate 3. The holder 2 is further formed to provide an upwardly projecting longitudinally extending dome-like rib 15 having an opening 16 in one side thereof and through which extends the shank portion 17 of a handle 18. The shank portion 17, inwardly of the opening 16, is rigidly secured to the undersurface of the rib 15, by welding or the like. Preferably, the holder 2 is coextensive in length with the applicator head 1 and, when the applicator head 1 is mounted on the holder 2, the flat marginal portion of the holder 2 aids in maintaining the mounting plate 3 in a flat condition while in use.

For the purpose of releasably locking the applicator head 1 on the holder 2, the rib 15 is formed adjacent one end thereof to provide a recess 19, the bottom 20 of which is coplanar with the marginal edge portion of the holder 2, including the side edge portions 14, and on which is pivotally mounted a wedging element 21, by means of a tubular rivet or the like 22. The wedging element 21 is formed to provide an arcuate wedging portion 23 that is adapted to move into an out of the adjacent channel 6 whereby to become wedged between the top surface of the adjacent edge portion 14 and the adjacent intumed flange 4, see particularly FIGS. 3 and 5, whereby to firmly lock the applicator head 1 against movement relative to

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the holder 2. The wedging element 21 further includes an operating handle 24 having a shank portion 25 that engages an abutment element 26 projecting upwardly from the bottom 20 of the recess 19 to limit pivotal movement of the wedging element 21 in an applicator head 5 releasing direction, as shown by dotted lines in FIG. 3.

In normal use, with the wedging element 21 moved to its dotted line position of FIG. 3, the applicator head 1 is quickly and easily mounted on the holder by longitudinally sliding the side edge portions 14 of the holder 10 longitudinally in the inwardly opening channels 6 until the applicator head 1 is longitudinally centered on the holder 2, after which the wedge element 21 is rotated toward its full line position of FIG. 2 to lock the holder and applicator head against longitudinal movement relative to each other. In some instances, where it is desired to apply a coating of paint or other liquid to the wall of a relatively deep recess or the like, it is only necessary to loosen the wedging element 21 and displace the applicator head 1 longitudinally of the holder 2 to the desired amount after which the wedging element 21 is operated to lock the applicator head 1 in the desired set position. Thus, the applicator of this invention is easily adapted for use in applying paint or the like to surfaces confined by closely over-hanging projections and the like. By longitudinally offsetting the applicator head 1 relative to the holder 2 to any desired extent, that end of the holder 2, which projects longitudinally beyond the adjacent end of the applicator head 1, may be used as a gage against one of a pair of angularly displaced surfaces, with a filament pile engaging the other surface, whereby to paint or otherwise coat said other surface in predetermined spaced relation to said one of the surfaces. By properly longitudinally offsetting the head 1 and holder 2, paint may be readily applied to one wall up to an inside corner defined by the adjacent walls, or one wall and a ceiling, without overlap. Removal of the applicator head 1 for cleaning or replacement is a simple and easy matter, it being only necessary to loosen the wedging element 21 and sliding the applicator head 1 out of engagement with the holder 2.

It has been further found, that by making the applicator sheet 7 of such width to partially compress the side edge portions 13 of the cushioning pad 10, the resulting gently curved working surface of the filament pile 9 substantially facilitates application of paint or other liquid coating to a work area. When the filament pile 9 becomes worn to a point wherein it is no longer effective, the applicator head 1, which is a relatively inexpensive component, may be removed from the holder 2 and a new applicator head mounted thereon with a minimum expenditure of time and effort.

Preferably, and as shown, the outer end portion of the handle 18 is hollow, as indicated at 27, for reception of a suitable handle extension or pole, not shown, but by means of which the applicator may be used for painting high walls or ceilings without the necessity for a ladder or scaffolding.

While we have shown and described a commercial embodiment of our applicator, it will be understood that the same is capable of modification, without departure from the spirit and scope of the invention, as defined in the claims.

What is claimed is:

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1. An applicator for paint and the like comprising:
 - (a) an applicator head including:
 - (1) a generally rectangular mounting plate having top and bottom surfaces and laterally spaced longitudinal portions formed to provide inturned flanges cooperating with said top surfaces to define a pair of opposed laterally inwardly opening channels, and a pair of laterally out-turned flanges each overlying a different one of said inturned flanges and cooperating therewith to define laterally outwardly opening channels.
 - (2) a generally rectangular applicator sheet underlying said mounting plate and having a fabric backing and a filament pile on one side of said backing, the other side of said backing facing said bottom surface of the mounting plate,
 - (3) said applicator sheet having opposite side edge portions received in said outwardly opening channels and compressed between adjacent ones of said inturned and out-turned flanges;
 - (b) a generally rectangular plate-like holder having opposite side edge portions longitudinally slidably received in said inwardly opening channels;
 - (c) a handle on said holder;
 - (d) and locking means releasably locking said holder and mounting plate against movement relative to each other in opposite directions longitudinally of said last mentioned channels.
2. The applicator defined in claim 1, characterized by a flexible resilient cushioning pad interposed between said fabric backing and said mounting plate, said cushioning pad being normally of uniform thickness over its entire area, said applicator sheet compressing said pad toward said mounting plate gradually from the central portion thereof toward the side edges thereof, whereby said applicator sheet follows a continuous curve between the side edges thereof.
3. The applicator defined in claim 1, in which said locking means comprises a wedge element mounted on said holder for movements into and out of one of said inwardly opening channels, whereby to having wedging engagement with an underlying portion of said holder and an overlying portion of the adjacent one of said inturned flanges.
4. The applicator defined in claim 3, in which said wedge element is pivotally mounted on said holder, characterized by an arcuate wedge portion and an operating handle portion, and a stop element on said holder for limiting pivotal movement of said wedge element in one direction.

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DANIEL BLUM, *Primary Examiner.*

U.S. Cl. X.R.

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