V. JANSEN.

PAINTER'S STRIPING MECHANISM.

APPLICATION FILED MAY 21, 1917.

1,305,545. Patented June 3, 1919.

Fig. 1.

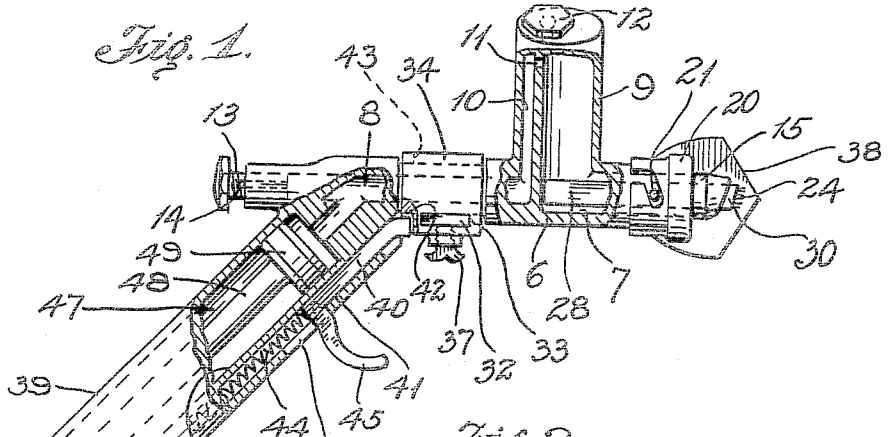


Fig. 2.

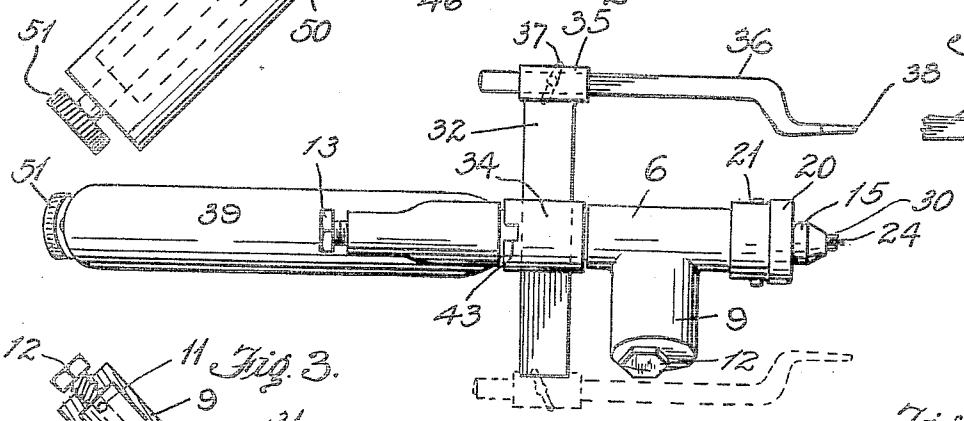


Fig. 9.

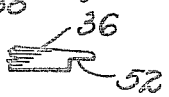


Fig. 3.

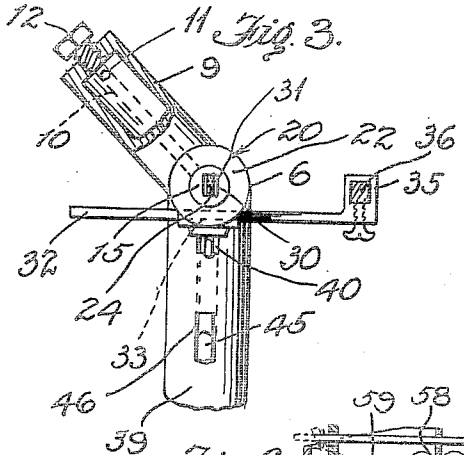


Fig. 4.

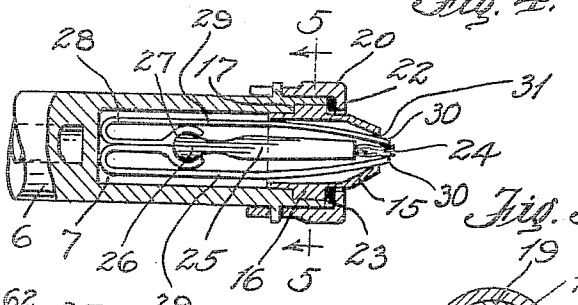


Fig. 5.

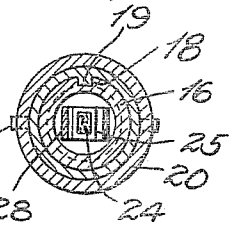


Fig. 6.

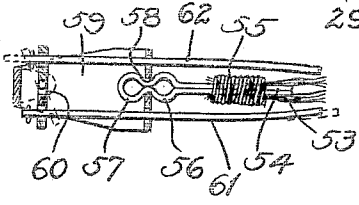


Fig. 8.

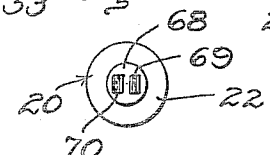
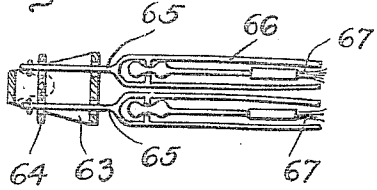


Fig. 7.



WITNESS:

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PAINTER'S STRIPING MECHANISM.

1,305,545. Specification of Letters Patent. Patented June 3, 1919.

Application filed May 21, 1917. Serial No. 169,835.

To all whom it may concern:

Be it known that I, VICTOR JANSEN, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented certain new and useful Improvements in Painters' Striping Mechanism, of which the following is a specification.

This invention relates to improvements in a painter's striping mechanism to facilitate in the striping, glazing and varnishing of any articles to be decorated.

It is an object of the invention to provide a striping device having means for carrying a striping brush and provided with guiding means, whereby the brush is accurately guided in making the stripes.

It is also an object of the invention to provide a fountain brush striping device.

It is a further object of the invention to provide a fountain brush striping device having means for filling the mechanism with the paint, color, or varnish to be used, said means also being capable of emptying the fountain device and preparing it for the use of different colors or ingredients.

It is a still further object of the invention to provide a painter's striping device with an adjustable guide means adapted to be spaced for guiding the brush at any desired distance from the given edge or molding, the guiding device also being adjustable for moving it to one side of the brush or the other, whereby the fountain supplying the paint or color to the brush will also be maintained in gravity feeding position.

It is another object of the invention to provide a striping mechanism with adjustable brush holding means, whereby brushes of different sizes and kinds may be interchangeably employed in the use of the device.

With these and other objects in view, the invention comprises certain novel features, combinations and arrangements of parts, as will be hereinafter more fully described and claimed.

In the accompanying drawing forming a part of this specification:

Figure 1 is a side elevation of a painter's striping mechanism constructed in accordance with the present invention, portions thereof being broken away and shown in section to reveal the interior structure thereof.

Fig. 2 is a top plan view of the striping mechanism.

Fig. 3 is a front end elevation of the striping mechanism portions of the reservoir and the guide arm being shown in section, and portions of the handle being broken away.

Fig. 4 is an enlarged detail sectional view taken horizontally through the brush holding chamber of the device.

Fig. 5 is a detail transverse sectional view taken upon the line 5—5 of Fig. 4.

Fig. 6 is a detail plan view of a different form of brush holder from that shown in Fig. 4, a portion of said holder being shown in section.

Fig. 7 is a top plan view of a modified form of brush holder.

Fig. 8 is a front end elevation of end cap piece employed with a double brush like that shown in Fig. 7.

Fig. 9 is a fragmentary detail view showing a modified form of a guide bar for the striping device.

With the mechanism forming the subject matter of the present invention, it is possible for any one to run a stripe in a straight, curved or other direction, and to properly space the same with respect to other decorations, or with respect to the edges, molding, paneling, or other parts of the article to be decorated. The details and features of the invention will now be more specifically described and claimed with reference to the accompanying illustration, in which a preferred form of the device has been illustrated. In the drawing 6 indicates a casing or body having central bores 7 and 8 extending in the opposite ends thereof. Rising from an intermediate point on said casing is a reservoir 9, the said reservoir communicating at the point directly with the bores 7. An auxiliary passage 10 for air is provided within the said reservoir communicating with the same through a small opening 11. The inner end of the air passage 10 communicates directly with the bore 8 in the casing. The outer end of the reservoir 9 is adapted to be closed by a screw 12 which fits in an opening in the end of the reservoir. The said opening which receives the screw 12 is preferably so located that a cleansing wire or tool could extend into either the reservoir proper or into the air passage 10 in the event of the clogging of the passages in any way. The outer end of the bore 8 is inwardly screw threaded, and is adapted to be closed by a screw threaded plug 13. The said plug 13 may be removed

at any time for cleaning the bore 8 of the casing. At times it is desirable to allow a little air to enter the bore 8, and the plug 13 is therefore provided with a small bore 14, which enters the side of the screw and passes out axially of the screw at the inner end thereof. When the plug is unscrewed sufficiently to uncover the outer end of the bore 14 as shown in Fig. 1 of the drawing, sufficient air will be admitted to the interior of the casing 6 to insure a free flowing of the paint or other liquid from the reservoir to the brush held in the end of the casing opposite to that occupied by the plug 13.

The bore 7 is adapted to receive through its outer opening end a striping brush and means for holding the same. A cap member 15 is fitted in the outer end of said bore 7, and adapted to hold a brush device in position for doing the striping work. The said cap member 15 is preferably provided with an annular flange 16, adapted to fit into and be seated in an annular recess 17 formed in the outer end of the bore 7. The flange 16 is provided with a recess or notch 18 at one point in its circumference, adapted to fit upon and receive a lug 19 which projects in the annular recess or seat 17, as shown in Figs. 4 and 5 of the drawing, for the purpose of preventing the turning of the cap member 15 in the end of the bore 7. The cap member is removably held in position by a collar 20, which slips upon the end of the casing 6, and is formed with bayonet fastenings 21, whereby it is directly held in place. An inturned flange 22 on the said collar overhangs the flange 16 of the cap member for holding it in place. Preferably a gasket 23 is interposed between the said flange 22 and the flange 16, for making a liquid tight joint and prevent the escape of paints or other liquids, except through the brush orifice.

In ordinary striping, various kinds of brushes are employed, a narrow brush being used for fine and narrow lines, and broader brushes for wide lines. The brush as 24 may be made with any kind of hair or bristles desired, usually carried by a casing 25, which incloses and holds the hair and bristles together, except at the end. The inner end of the brush casing, is preferably somewhat enlarged at 26 to engage a socket 27 formed in a brush holding member 28. The said holding member is preferably provided with outturned bars or arms 29, which extend along the outside of the bristle casing and engage the hairs or bristles pressing upon the same from the sides and forming nibs 30 at their ends to control the width and shape of the brush. The said nibs 30 and the hairs or bristles between them, preferably pass through an aperture 31 in the outer end of the cap member 15, which aperture is just the right size to receive the parts and keep the bristles or hairs in the right shape to make a fine or coarse line as desired. In assembling the parts, the collar 20 is first removed and the cap member 15 taken out of place, when it is only necessary to insert the brush holding member 28 with the bristles or bristle casing in place within the bore 7, after which the cap member 15 is put in position and the collar 20 is turned upon the bayonet fastenings to clamp the parts in place. Of course, the brushes can be as readily removed by reversing the operation. As shown in Figs. 1 and 2, the reservoir 9 is preferably mounted upon the casing 6, so as to extend upwardly therefrom at an angle approximately 45°, instead of vertically therefrom. This arrangement of the reservoir is of great advantage, in that the paint will always be fed by gravity to the brush from the said reservoir, when the brush is moving either horizontally in one direction or vertically, and at all points intermediate thereto, as in making certain curves.

In order to properly space the stripes or bands to be painted, a bracket arm 32 is adjustably attached to the casing 6, and arranged to extend transversely with respect thereto. The said bracket arm passes through a slot 33 formed in the sleeve 34, which is loosely mounted in an annular depression formed upon the said casing 6, so that said sleeve can be turned upon the casing to throw the bracket arm 32 from one side around to the other. One end of the arm 32 is formed with a sleeve 35 extending transversely of the arm 32, and is adapted to receive the shank or stem of a guide arm or piece 36. A clamping screw 37 carried by the sleeve 34 is adapted to clamp and grip the said guide arm in the sleeve 35. The outer end of the guide arm is preferably bent inwardly as shown in Fig. 2 of the drawing, and is formed with a guiding edge portion 38. The guide piece may be set at different distances from the paint brush by adjusting the bracket arm 32 in the slot 33, as will be readily understood. The device is preferably provided with a handle 39, which extends downwardly and rearwardly from the rear of the casing 6, and a latch 40 mounted in a guideway 41 formed within the said handle 39, is adapted to project at its upper end into notches 42 and 43 formed in the rear edge of the sleeve 34, so that the bracket arm 32 is positively held in its adjusted positions, on either side of the brush 24. A spring 44 normally forces the latch 40 toward the said sleeve 34. The said latch 40 can be retracted against the action of said spring 44, by a handle 45 which projects from the said latch 40 through a slot 46 into the handle. When the latch is withdrawn, the sleeve 34 may be turned upon the casing 6, and the guide arm 36 thrown from one

side of the device to the other side thereof, where the latch will again engage one of the notches in the sleeve and lock it in place.

In order to facilitate the filling of the reservoir and passages in the casing 6 with the paint or color to be employed in striping, a pump 47 is provided in the handle 39, comprising a piston rod 48 and a plunger or piston 49, moving in a barrel 50 within the handle 39. A knob 51 upon the outer end of the piston rod 48 is used to reciprocate the said piston 49. By working the piston back and forth, a charge of paint, varnish or other liquid can be drawn into the casing 6 and the reservoir 9, the plug 13 having been screwed into place to cover the bore 14. The piston 49 may be pushed back into the pump, without ejecting the paint or liquid by partially unscrewing the plug 13, so as to permit air to escape therethrough. By forcing the piston 49 inwardly, the casing may be emptied of its contents and by sucking gasolene or other cleansing liquid through the mechanism for forcing it back and forth therein, the device may be thoroughly cleansed when not being used, or when a new color is to be employed therein.

Different kinds of guide or gaging arms may be employed according to the formation of the article which is being painted. For instance, a guide arm like that shown at 36 is adapted to follow the edge of a molding and be guided thereby in directing the movement of the paint brush and spacing it properly with respect to said mold. If the edge of springs or other portions of vehicles, are to be engaged by the guide arm, the guide arm may be provided with an offset or shouldered recess 52 as shown in Fig. 9 of the drawing formed on the free end of the said guide arm. Any other form of guide arm may be employed within the spirit of the invention as preferred.

The bristle holder and the brush holder may be considerably varied also within the spirit of the invention as desired, thus as shown in Fig. 6 of the drawing, the bristles or hairs 53 may be applied upon opposite sides of a central piece 54, so as to leave a small color receiving opening at 55 between the bunches of bristles, whereby the color or paint will readily be fed into and through the brush. In this instance the bristles may be bound to the said piece 54 in any desired way, as for instance by winding a core or thread about the bristles as shown at 55. The center piece 54 is preferably provided with enlarged portions at 56 and 57, which adapt it to be inserted in a notch 58 formed in a holder plate 59. The said holder plate 59 also carries a transverse pivoted member 60, the ends of which loosely fit over the inner ends of the nib bars or pieces 61 and 62. The other end of said nib pieces extend opposite the bristles or hairs of the brush, and are adapted to be brought reasonably close together upon opposite sides of the brush when they are passed through the aperture 31 in the cap piece 15. The pivotal mounting for the inner ends of said nib pieces, permits the nibs to adjust themselves to any unevenness in the surface of the article being painted at any curvature thereof.

As shown in Fig. 7 double lines or stripes may be made by duplicating the bristle casing and the brush holders. Thus a brush holder plate 63 may be provided having a pivotal cross piece 64 mounted within the same and having brush holders 65 extending outwardly from said pivotal cross piece. In this instance, the brush holders 65 have forked nib pieces 66 and brushes 67 mounted within said forks. The ends of the forks can thus adjust themselves to bear squarely upon inclined or curved surfaces, as well as upon straight flat surfaces, because of their connection with the pivoted cross piece 64. In using this style of brush, a cap piece 68 is preferably used having two openings 69 and 70 properly spaced from each other, for receiving the brushes and the end of the nibs bearing on each side thereof, as will be readily understood.

It will thus be evident that the details of the device may be considerably varied within the scope of the invention. It will also be understood that fine narrow brushes or broader brushes or a plurality of brushes, side by side may be used, without departing from the spirit of the invention. It will further be understood that any of the modified forms of the brush holders can be inserted within or removed from the bore 7, whereby the same instrument may be adapted for many kinds of striping. By adjusting the sleeve 34, the device may be held so as to form vertical or horizontal lines, or intermediate bends or curved portions, and still keep the reservoir 9 in a position sufficiently above the bore 7 to insure the constant feeding of the paint to the bristles of the brush.

In using some forms of paints or ingredients in the device, the material may in some instances, be rather thick to draw into the device through the brushes and the brush opening, in which case, the material may be placed in the reservoir by removing the screw 12 and introducing the same through the upper open end of the reservoir. The materials used, are however, usually sufficiently thin to be drawn through the brush opening by the operation of the pump or plunger.

In using the device, a brush suitable for making the stripe of the desired size is selected, and after first removing the collar 20 and the cap member 15, the brush holder is fitted with the desired brush and inserted in

the brush receiving recess 7, after which the cap member 15 with the gasket 23 is replaced and the securing collar 20 is operated to bind the parts in position. If a wider brush or a brush carried by a different kind of a brush holder is desired, it is only necessary to move the cap and collar in order to substitute the new brush with its particular holder and fasten the same in position again.

What is claimed is:

1. A painter's striping device, comprising a casing, a striping brush mounted therein, a guide member adjustably mounted thereon, means for holding said guide member at different distances laterally from said brush and means for holding it in different positions circumferentially thereof.

2. A painter's striping device of the character referred to comprising a casing of angular form, one portion of which constitutes a handle, a reservoir in the other portion thereof, and means in the handle portion thereof for forcing liquid from the reservoir to a brush, a brush detachably held in said reservoir portion of said device and adapted to be fed from said reservoir, and means for holding and guiding said device for making stripes, substantially as described.

3. A painter's striping device comprising a body having a paint reservoir therein, a brush, means for detachably securing said brush to said body in position to receive paint from said reservoir, a sleeve revolubly mounted on said body, a latch for holding said sleeve in different positions circumferentially of said body, and a guide slidably connected with said sleeve and projecting laterally from said body, substantially as described.

4. In a painter's striping device, a body having a brush-receiving chamber therein, a brush holder adapted to said brush-receiving chamber, means for holding the same therein, and a striping brush provided with means for detachably holding it in said brush holder with only the ends of its bristles projecting from said holding means, substantially as described.

5. In a device of the character referred to, a body having a brush-receiving chamber in its end, a brush holding member adapted to said chamber, a cap member through which said brush holder projects, and a brush connected with said brush holding member and projecting therewith through said cap, said brush holding member having nibs at the opposite sides of the ends of the brush bristles, substantially as shown and described.

In testimony whereof, I have hereunto set my hand.

VICTOR JANSEN.

Witness:
D. P. KENDRICK.