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2,987,035

MUNTIN PAINTER

Filed Dec, 15, 1958

4 Sheets-Sheet 2

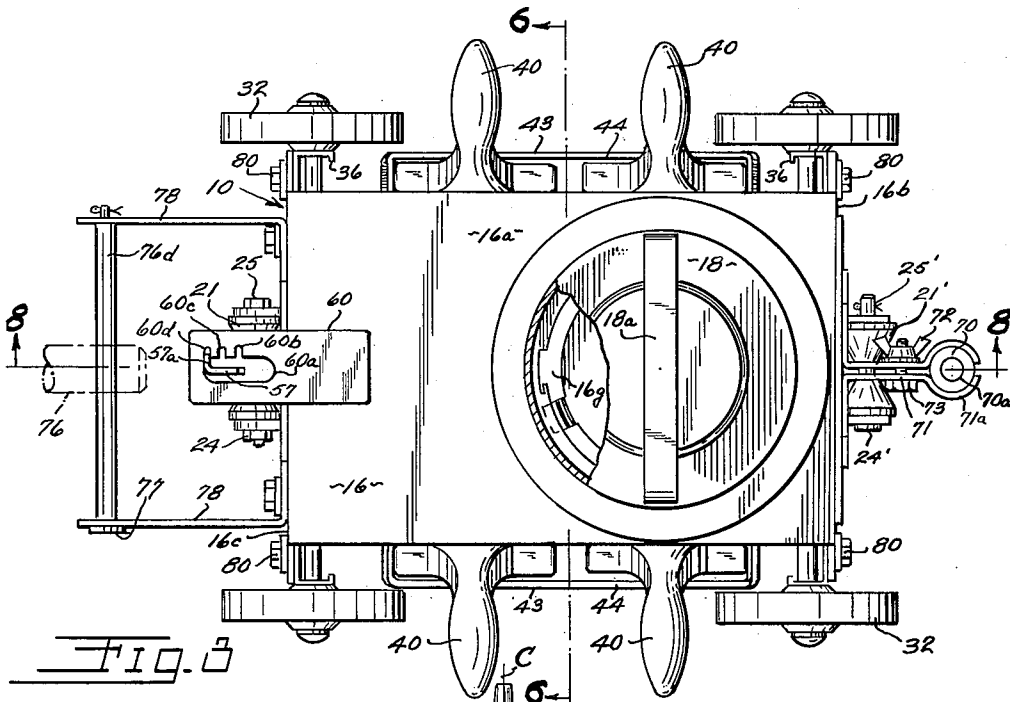


FIG. 3

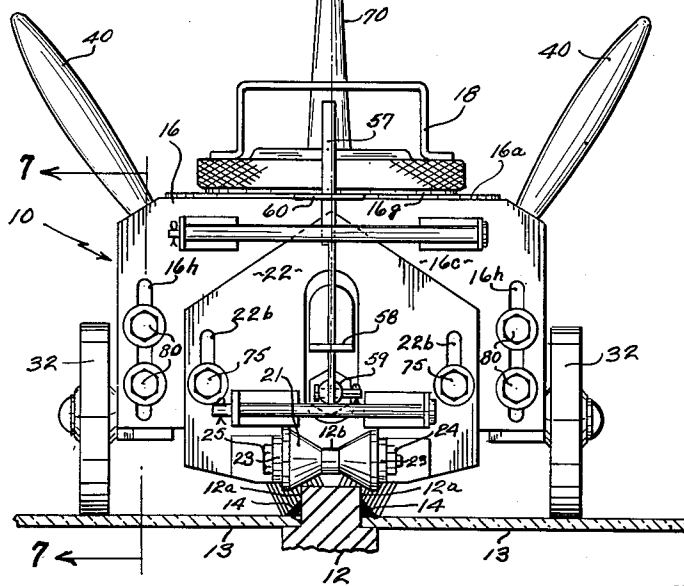


FIG. 4

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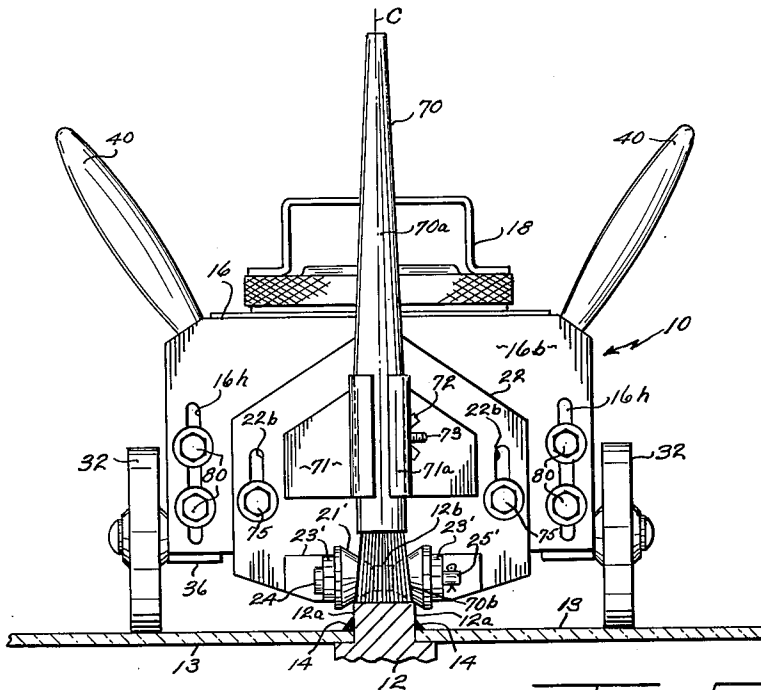


Fig. 5

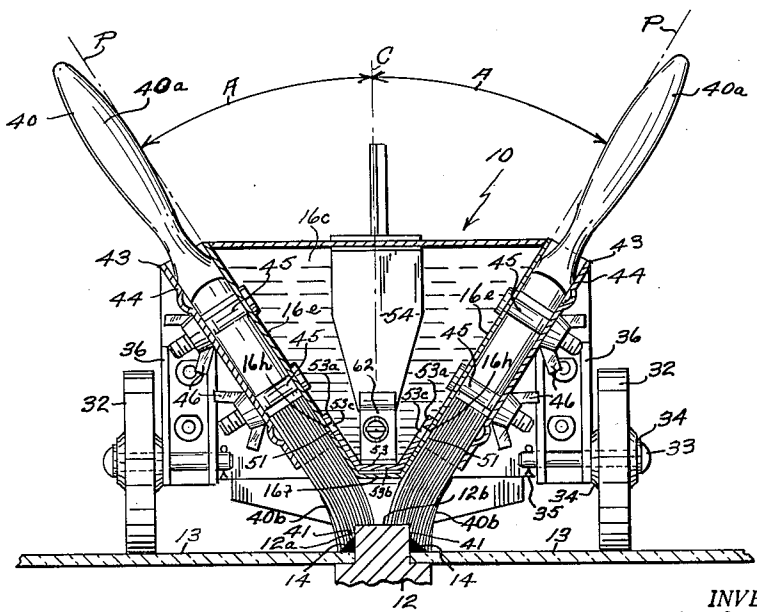


Fig. 6

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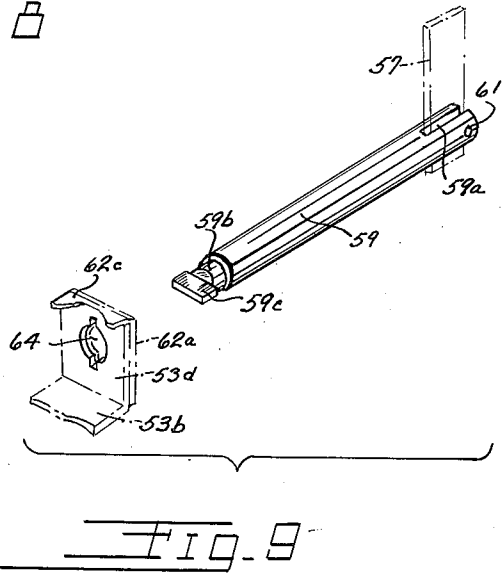
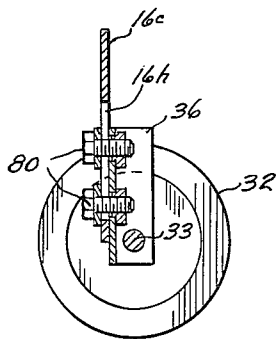
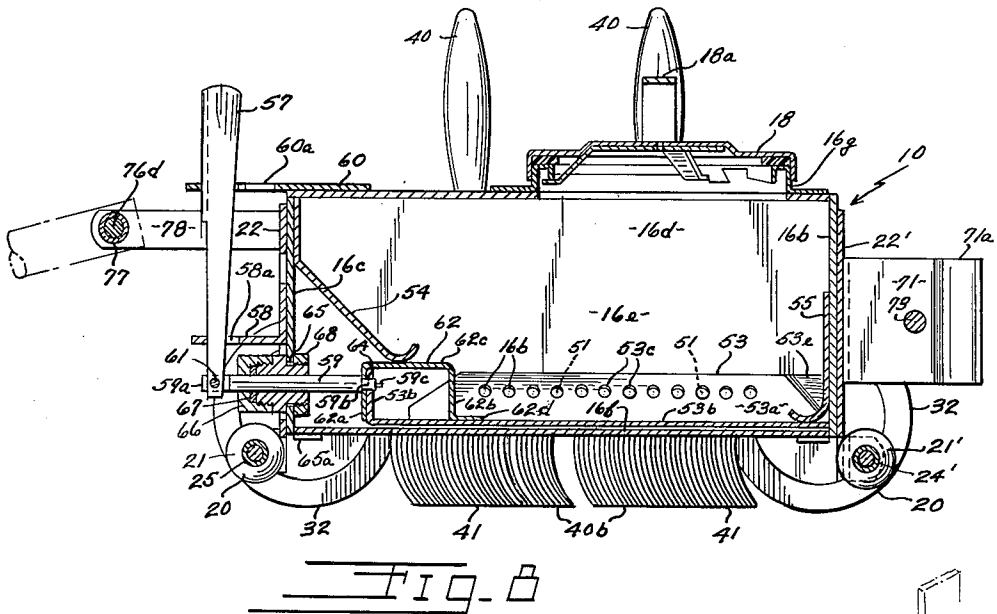


FIG. 7

FIG. 9

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1

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3 Claims. (Cl. 118-208)

This invention relates to improvements in a bar painting apparatus and more particularly to a muntin or sash bar painter especially adapted for rapidly painting greenhouse exteriors.

One of the objects of the present invention is to provide a painting apparatus for spreading on and brushing in paint with the same action as hand brushing but for applying the paint many times faster and in locations difficult to reach for hand painting.

A further object of the present invention is to provide a painting apparatus having a paint feed mechanism of simple construction, easily controlled, and adapted to keep the brush bristles wet by direct paint contact.

A further object of the present invention is to provide a painting apparatus using brushes of standard size, which brushes are easily removed for cleaning and for use elsewhere as double purpose brushes.

A further object of the present invention is to provide a bar painting apparatus having guiding means for keeping the apparatus accurately positioned on the bar.

A further object of the present invention is to provide a bar painting apparatus having four wheels providing good and even weight distribution for safety, easy handling and positive apparatus control.

A further object of the present invention is to provide a bar painting apparatus having individually adjustable guide means, tilt resisting wheels, and/or paint applying means, such as brushes, so that the apparatus can be adjusted to fit any size bar.

A further object of the present invention is to provide a bar painting apparatus characterized by the large inlet opening to its paint reservoir for easy loading, multiple section handle to provide a large painting range with handle sections usable individually or together, easy disassembly for quick cleaning, inexpensive manufacturing cost, ease of assembly of its component parts, structural simplicity, compactness of design, strong and sturdy nature, ease and efficiency of operation and/or low operating cost.

Other features of this invention reside in the arrangement and design of the parts for carrying out their appropriate functions.

Other objects and advantages of this invention will be apparent from the accompanying drawings and description and the essential features will be set forth in the appended claims.

In the drawings,

FIG. 1 is a perspective view of the disclosed bar painting apparatus in operative position on the bar;

FIG. 2 is a perspective view of the construction in FIG. 1 taken from another angle;

FIG. 3 is a top view of the apparatus in the FIG. 2 position;

FIG. 4 is a front end view (the handle end) of the apparatus in FIG. 3 with the handle omitted;

FIG. 5 is a back end view (the finishing brush end view) of the apparatus;

FIG. 6 is a transverse, vertical sectional view taken generally along the line 6-6 of FIG. 3 between the side brushes and through the reservoir, paint distributing holes and flow controlling gate valve;

2

FIG. 7 is a view taken along the line 7-7 of FIG. 4 of the adjustable mounting construction for the wheels;

FIG. 8 is a longitudinal sectional view taken along the line 8-8 of FIG. 3 with the rear brush and muntin bar omitted; while

FIG. 9 is a perspective view of the valve pin axially disassembled from the valve with all other parts omitted for clarity.

Before the bar painter here illustrated is specifically described, it is to be understood that the invention here involved is not limited to the structural details or arrangement of parts here shown since painters embodying the present invention may take various forms. It is also to be understood that the phraseology or terminology herein employed is for purposes of description and not of limitation since the scope of the present invention is denoted by the appended claims.

The drawings disclose a bar painting apparatus or painter 10 for painting each muntin or sash bar 12 on a greenhouse roof. The bars 12 in FIG. 1 are spaced along the roof, are parallel to each other, and extend upwardly to the ridgepole of the greenhouse. Each bar is generally an inverted T-shape in cross section with each cross bar of the T supporting glass panes 13 with one end of each pane overlapped in shingle-like formation. The joint between the glass and the adjacent bar 12 may be sealed with putty 14. This apparatus 10 is designed to coat, as it travels along bar 12 on guide means 20, all exposed surfaces of the bar 12 and any putty 14 associated therewith down to the junction between the glass pane 13 and seal 14 or bar 12. This painter will coat with paint from reservoir 16 opposite sides 12a, 12a of the bar by brushes 40 in FIG. 6 and bar top surfaces 12b by brush 70 in FIG. 5.

Painter 10 includes a carriage or general frame work carrying its component parts. This carriage supports paint reservoir 16 comprising welded together top plate 16a, rear end plate 16b, front end plate 16c, and bottom and side plate 16d. Plate 16d is bent, before welding and assembly, into a bottom plate portion 16f and opposite sides 16e converging downwardly toward bar 12 in the operative position shown in FIG. 6. A collar or neck 16g in FIG. 8 is welded or otherwise secured to a filler hole in top plate 16a. Vented cap 18 is detachably connected to neck 16g by the usual partly rotatable bayonet lock by manipulation of inverted U-shaped handle 18a secured thereto.

My invention is used with suitable carriage guide and support means. This includes as a preferred form in the present disclosure a guide means 20 on the carriage for engaging bar 12 in the operative position of FIGS. 1, 2, 4, 5 and 6 to direct the carriage in travel movement along bar 12, and includes side support means 30 for engaging glass panes 13 for preventing substantial tilting movement of the carriage about the longitudinal axis.

Guide means 20 includes a front spool element 21 and a rear spool element 21' in FIGS. 1, 2, 3, 4, 5 and 8 located along the length of travel movement of the carriage and along the length of the bar, and straddling the paint applying brushes located therebetween. These elements are carried by their respective front and rear end plates 22 and 22' secured to the respective reservoir end plates 16c and 16b. These end plates 22 and 22' support their spool elements by spool brackets 23 and 23' secured to the end plates. Spool 21 is engageable with bar 16 in the operative position shown in FIGS. 1 and 4 but is fixed

against rolling contact with respect to this bar by having a screw 25 extend through aligned holes in the parallel straddling arms of bracket 23 and in slide element 21 with a nut 24 screwed thereon to pull the arms of bracket 23 firmly against the opposite ends of spool 21 to prevent rotation thereof. Spool 21' is rotatably mounted so that upon engagement with bar 12 and travel of the carriage along the bar, spool 21' will rotate about an axis extending transverse to this bar in the operative position shown in FIGS 2 and 5. This axis is coaxial with pin 24' extending through aligned holes in spool 21' and the straddling arms of spool bracket 23'. Pin 24' is locked against axial removal by cotter pin 25'.

Side support means 30 includes four wheels 32 in FIGS. 1-8 with each wheel 32 being rotatably mounted on a pin 33 having washers 34 straddling wheel 32 and a cotter pin 35 preventing axial removal of pin 33 from wheel 32 and its wheel supporting bracket 36 suitably carried by one of the reservoir end plates 16b or 16c.

Suitable paint applying means is provided on the carriage and arranged to engage exposed bar surfaces 12a, 12a and 12b and to apply paint from reservoir 16 onto the surfaces when spools 21 and 21' are in operative position on bar 12 in the manner shown in FIGS. 1, 2, 4, 5 and 6.

This paint applying means includes paint applying devices, here shown as side brushes 40, illustrated as four in number. Each of these flat brushes 40 is secured flat against the outside surface of one of the opposite reservoir sides 16e and is directed downwardly and inwardly so that the brushes are in converging relationship toward bar 12 for engaging this bar in the operative position of the painter shown in FIG. 6 in a contacting zone 41 along a length dimension parallel of bar 12. These brushes 40 engage opposite side surfaces 12a of bar 12 in the operative position for applying paint fed from reservoir 16 to the brushes. Opposite sides 16e and the brushes associated therewith form an included angle of about 66 degrees, with each brush lying in a position plane P in Fig. 6, and with each brush, its associated side 16e and its position plane forming an angle A of about 33 degrees with respect to and converging downwardly toward the central plane C through bar 12 in the operative position illustrated in FIG. 6.

Each brush 40 is a conventional paint brush having a handle 40a with bristles 40b secured thereto shown engaged with bar 12 in FIG. 6. Each brush may be square cut or flat trim, chisel trim, etc., whichever is desired. Hence, when each of these brushes 40 is removed from the painter 10, it may be used for other type hand painting.

Brushes 40 are held in pairs against each side 16e by a brush holder 43 comprising side 16e serving as a base plate and extending parallel to bar 12, a U-shaped clamp arranged with side 16e closing the open end of the U-shape, and two parallel screws extending through side 16e with each having its head welded to the inner side of reservoir 16, and having a wing nut 46 screwed onto its threads to serve as a fastening means for pulling the center of the U-shaped clamp 44 toward side 16e to clamp two flat brushes 40 within this U-shape in straddling relationship to screws 45.

This construction has many advantages. Converging sides 16e mount brushes 40 at the preferred angle of 66 degrees for good painting operation, serve as a base for the brush clamps, and assure that the painter will still operate even when the level of the paint in the reservoir is extremely low because the converging cross section of the reservoir in FIG. 6 gives good feed even when the paint in the reservoir is at a low level. Also, the brushes 40 may be removed and used as standard paint brushes so as to keep down the cost of operation.

The paint applying means includes suitable paint feeding means comprising means for distributing paint flow from reservoir 16 onto each brush 40 substantially uniformly along the length dimension of bar 12 at a paint receiving zone 51 on each brush 40 in FIG. 6 spaced

above bar contacting zone 41 so that paint will flow by gravity over the bristles 40b of these brushes to contacting zone 41 for application to this bar. Preferably zone 51 is about one inch above zone 41 to give opportunity for the paint to spread evenly through the brush bristles, although one-half inch will do. Each reservoir side 16e has a plurality of holes 16h, here shown as twelve holes 16h in each side 16e, equally spaced along a line parallel to bar 12 and in communication with the interior of reservoir 16 to permit gravity paint flow from the reservoir out onto the brushes 40 in paint receiving zone 51.

This paint applying means includes a paint flow control means for simultaneously controlling flow throughout the length of zone 51 by simultaneously changing the flow area of each hole 16h. Here, a gate or valve 53 is located within reservoir 16. It has converging side walls 53a, 53a generally conforming with and contacting the inner surface of opposite reservoir sides 16e with a bottom wall 53b connecting these side walls 53a. Each side wall 53a has a plurality of holes 53c, here shown as twelve holes 53c in each wall 53a, equally spaced along a line parallel to bar 12. Holes 53c simultaneously coincide with holes 16h in their respective contacting sides 16e in the valve open position to permit paint flow from reservoir 16 to bar 12. Holes 53c and 16h are respectively arranged symmetrically with respect to central plane C. Front and rear springs 54 and 55 in FIGS. 6 and 8 are secured at their upper ends to the inner surfaces of front and rear end plates 16c and 16b respectively while their lower or distal ends bear against bottom wall 53b to press gate 53 downwardly to maintain the contacting relationship between side walls 53a and the inner surfaces of sides 16e.

Valve 53 is movable horizontally back and forth parallel to bar 12 by actuation of handle 57 in FIGS. 1, 3, 8 and 9. Handle 57 extends downwardly through slot 58a in valve bracket 58 welded to end wall 16c with slot 58a acting as a pivot. The lower end of handle 57 is pivotally held in a notch 59a on the outer end of valve pin 59 by cotter pin 61. Handle 57 is restrained to movement in a plane parallel to bar 16 by traveling in slot 60a in FIG. 3 of notched plate 60 welded to top plate 16a. It should be apparent that as handle 57 is moved along slot 60a, it will pivot in slot 58a and move valve pin 59 axially through end plate 16c. The inner end of valve pin 59 has integrally secured thereto a cylindrical neck 59b of smaller diameter and a flat 59c with a length, or largest diametrical dimension, greater than the diameter of neck 59b and substantially the same as the diameter of pin 59 for the major portion of its length.

Pin 59 is coupled with one end of valve 53 so that pivotal movement of handle 57 will move pin 59 axially and move valve 53 in a similar manner in either of two opposite directions. The left end of valve 53 has secured thereto in FIG. 8 a connecting strap 62 having vertical portions 62a and 62b joined by a horizontal portion 62c and having another horizontal portion 62d extending away from vertical portion 62b. Horizontal portion 62d is welded or otherwise secured to the top of bottom wall 53b, and vertical portion 62a is welded or otherwise secured to upwardly bent lug 53d integrally formed as an extension of bottom wall 53b which in turn is integral with side walls 53a on valve 53. Hole 64 is formed through portion 62a and lug 53d, has a cylindrical portion only slightly greater in diameter than neck 59b but smaller in diameter than the major portion of pin 59 and the largest diametrical dimension of flat 59c, and has opposite slot ends diametrically aligned with the transverse inside dimension slightly greater in length than the largest diametrical dimension of flat 59c. Hence, pin 59 and hole 64 are easily assembled by moving pin 59 axially toward the left in FIG. 9, with flat 59c aligned with the slot ends in hole 64, until the neck 59b is laterally aligned with and located within hole 64, and then rotating

5

pin 59 a one-quarter turn to lock flat 59c behind lug 53d. This final position aligns notch or slot 59a in pin 59 vertically to properly receive the lower end of handle 57, as shown in FIG. 9.

Valve pin 59 is mounted for telescopic movement through a hole in end wall 16c with suitable surrounding structure in FIG. 8 to prevent paint leakage through this hole and around pin 59. A seal 65 has opposite threaded ends with a wrench receiving hexagonal type flange 65a therebetween. The threads on the right end of seal 65 in FIG. 8 are telescoped inwardly through a hole in end wall 16c and a nut 68 is screwed onto these threads inside reservoir 16 to lock seal 65 in position. Pin 59 extends through an axial bore through seal 65 with leakage around pin 59 prevented by a packing washer 67 axially compressed by an outside nut 66 screwed over the threads on the outer end of seal 65.

The operation of flow controlling gate 53 should now be readily apparent. As handle 57 in FIG. 8 is pivoted in slot 58a, its lower end moves pin 59 axially in either one of opposite axial directions. Holes 16h in sides 16e and holes 53c in side walls 53a are equally spaced and arranged along parallel lines so that associated holes in FIGS. 6 and 8 will be brought into coaxial alignment or moved laterally out of alignment in response to movement of gate 53 in these opposite directions. Then, holes 16h will be either simultaneously uncovered to permit full flow, partially covered to permit less than full flow, or completely covered to shut off flow. Springs 54 and 55 resiliently urge these gate walls 53a against side 16e with bottom walls 16b and 53c in spaced relationship so as to keep the gate valve 53 resiliently in sealing relationship with sides 16e to prevent flow through holes 16h in valve closed position. These springs 54 and 55 urge gate 53 against sides 16e in a direction perpendicular to the direction of gate movement by pin 59 and urge the converging shapes of side 16e and side walls 53a into nesting relationship.

Handle 57 has a laterally bent flange 57a in FIG. 3 at one end adapted to be moved along the length of slot 60a or sprung laterally across slot 60a into or out of valve "closed" or "off" notch 60b, "half open" notch 60c or "fully open" notch 60d to maintain gate 53 respectively in these designated flow positions.

This paint applying means includes a rear paint applying device, such as rear brush 70 in FIGS. 2, 3 and 5, spaced rearwardly along bar 12 from brushes 40 for spreading paint, deposited on bar 12 by brushes 40, over top bar surface 12b as painter 10 travels along bar 12. This device may be of any suitable type but is shown herein as being a round finishing or sash brush having a handle 70a carrying bristles 70b with a square cut end engaging bar surface 12b. Brush 70 is supported for vertical adjustment by bracket 71 having two arms with one end of each arm welded to rear end plate 22' with the opposite ends forming a cylindrical split socket 71a for holding brush handle 70a by being clamped thereon by tightening nut 72 on screw 73 extending through aligned holes in the arms of bracket 71 to pull them together and close the socket 71a on handle 70a.

Means is provided for adjustably securing spools 21 and 21' of guide means 20 relative to brushes 40 for movement along central plane C in FIGS. 4 and 5 to adjust for depth of bar 12 so that brushes 40 will properly paint the opposite sides 12a of bar 12. Two screws 75 extend through two parallel slots 22b in each end plate 22 and 22' into threaded holes in front and rear end plates 16c and 16b. When screws 75 are loosened, spools 21 and 21' may be moved vertically along central plane C to vary the contact depth of brushes 40 on bar side surfaces 12a to adjust for bar depth. When the proper depth has been reached, screws 75 may be turned and locked to secure end plates 22 and 22' against vertical movement relative to reservoir 16 so as to maintain this adjustment.

6

It should be noted that rear brush 70 is carried on this end plate 22' closely adjacent spool 21' so that once brush 70 is adjusted relative to rear spool 21', the brush 70 does not have to be readjusted vertically in its bracket 71 when a bar 12 of greater depth is to be painted. Then, end plate 22' and rear spool 21' need only be moved vertically relative to brushes 40 and brush 70 will move with spool 21' while the spacing will be maintained between brush 70 and bar engaging portion or spool 21'.

It should be noted the brushes 40 are movable up and down along their position planes P in FIG. 6 relative to reservoir 16 by loosening wing nuts 46 in FIG. 6 to adjust for bar width. As brushes 40 are moved upwardly, the distance between the distal end of their bristles 40b in FIG. 6 will be increased to permit painting a bar of greater width. Brushes 40 are moved downwardly for bars of less width.

Hence, loosening screws 75 permits adjustment of the painter for bar depth, and loosening wing nuts 46 permits adjustment of brushes 40 along planes P for adjustment for different bar width.

Means is also provided for adjustably mounting the side supports or wheels 32 on reservoir end plates 16b or 16c for adjusting the distance between the bottom of each wheel 32 and the top surface of glass panes 13 and for adjusting the distance between the plane formed by the bottom of these wheels and the reservoir 16. Here, each end plate 16b and 16c has two parallel slots 16h with one corresponding to each wheel 32. Each wheel bracket 36 in FIGS. 1 and 7 is adjustably secured in one of these slots 16h by two lock screws 80 extending through associated slot 16h and threaded into holes in wheel bracket 36.

A handle 76 is provided for this paint applying apparatus with this handle including one or more detachably connected sections, such as section 76a, 76b and 76c in FIG. 1, detachably connected together in any suitable manner, such as the standard telescopic bayonet joint permitting quick detachment and providing firm connection. Handle section 76a has a pivot sleeve 76d extending there-through. A pivot pin 77 extends through sleeve 76d and is secured at opposite ends to parallel straps 78 welded at their opposite ends to reservoir front end plate 16c. This provides a free pivot extending transverse to the length of bar 12. No chains or pivot limiting devices are required because the apparatus has four wheels 32 for controlling the reservoir 16 and the structure associated therewith.

The mode of operation of this bar painting apparatus should now be readily apparent. Before filling reservoir 16, the apparatus should be adjusted to the size and shape of bar 12. First, the four brushes 40 should be mounted between clamps 44 and sides 16e, and brush 70 should be mounted in bracket socket 71a. Second, place the apparatus on bar 12 in the manner shown in FIG. 6. Third, side brushes 40 should be moved in their planes P to adjust for width of bar 12 so that the distal ends of their bristles 40b contact opposite bar sides 12a properly so that the proper bristle action takes place as the painter is moved back and forth along the length of bar 12. Then, wing nuts 46 are tightened to clamp brushes 40 in place and nut 72 is tightened to clamp brush 70 in place. Fourth, guide spools 21 and 21' are raised or lowered, after screws 75 are loosened, to adjust for bar depth so that the bristles contact the junction between glass panes 13 and bar 12 with just enough pressure so that proper bristle action takes place as the painter 10 is moved back and forth along the length of bar 12. FIG. 8 shows how the bristles should drag to one side along the painted surface (when the device is moving toward the left in FIG. 8). Then, screws 75 are tightened to lock this adjustment. Fifth, when the spools and brushes are properly adjusted, loosen the four lock screws 80 and position each wheel 32 before tightening these screws again. These wheels are positioned vertically to just clear the glass panes 13 because painter 10 should ride on guide spools 21 and 21'

while using the four wheels 32 only for side support to prevent tilting about the longitudinal axis of bar 16.

The proper number of handle section 76a, 76b and/or 76c should be assembled so that the apparatus operator, while standing on the ground or in the gutter of multiple range construction, can push the brushes up to a zone close to the ridgepole.

Paint should be prepared, the reservoir filled, and painter 10 mounted on bar 12 as follows. First, the paint should be smooth, well stirred, free from skins and pigment lumps, and about the consistency of heavy cream. Second, set handle 57 in the "closed" or "off" notch 60b, removed filler cap 18 from reservoir 16 by twisting cap 18 off filler neck 16g, fill reservoir 16, and replace cap 18 by turning it into locking position. Third, place painter 10, previously adjusted to fit bar 12, in place on bar 12, and set valve control handle 57 in half open notch 60c if the paint is on the thin side or in the full open notch 60d if the paint is rather heavy. Fourth, work the painter 10 back and forth on bar 12 over a length of two to three feet until paint begins to flow and fill the bristles 40b. Rate of paint flow will depend upon consistency of the paint and the paint control setting of handle 57. A little experience will soon enable the operator to determine the correct paint consistency, setting of handle 57, and speed of movement of apparatus 10 over bar 12 to obtain the desired results. If the paint flows too freely or not fast enough, adjustment of either handle 57 or paint consistency should be made.

When the paint is flowing properly, painter 10 can be used to paint the bar 12. Painter 10 should be started at the bottom of the bar and moved upwardly toward the ridgepole with an up and down movement along the length of bar 12 to help bristles 40b and 70b work the paint into every crevice. The paint is spread on and brushed in which the same action as hand brushing but many times faster. The tips or distal ends of the bristles are bent over slightly to trail the direction of movement of the apparatus, as shown in FIG. 8, and are bent backwardly and forwardly as the apparatus 10 reverses direction of movement along bar 6 so as to closely simulate the hand painting action. Finishing brush 70 picks up excess paint on bar 12 and distributes it over bar top surface 12b. As the apparatus 10 reaches the top of bar 12 near the ridgepole, painter 10 is allowed to return downwardly along bar 12 to the operator on the ground in one sweep to even off the paint already applied to bar 12.

As mentioned earlier, the guide spool 21 engages bar 12 with a sliding action and does not roll or rotate in the same manner as spool 21'. This spool 21 is preferably fixed and not rotatably mounted so that minimum paint splashing occurs where the paint layer is the thickest on the trailing side of brushes 40 during normal carriage advance movement up the bar 12 toward the ridgepole during initial paint application. Spool 21 engages bar 12 below the paint applying brushes 40 where gravity flow would generally provide a heavier paint layer.

It should be noted that the four wheels 32 make it easier for the operator to maintain the apparatus 10 on bar 12, and to control the reservoir 16, heavily laden with paint, by providing even weight distribution to prevent tilting and to reduce the chance of cracking the glass by the wheel load on the panes 13.

Painter 10 is easily cleaned after use. Thorough cleaning after use is desirable to keep the apparatus free of pain skin formation. First, remove the brushes 40 and 70 and wash the brushes in solvent. Second, remove the paint from reservoir 16, pour solvent in reservoir 16, agitate the solvent, and pour off the solvent. Third, disassemble painter 10. Remove cotter pin 61 from the left end of handle 57 in FIG. 8, pull handle 57 upwardly and remove it from slot 60a, and turn valve pin 59 one quarter turn and pull axially out of reservoir 16 to disengage it from hole 64. Reach hand through the open-

ing in the filler neck 16g, grasp inwardly bent corner 53e of gate valve 53 in FIG. 8, slide valve 53 toward the front of reservoir 16 to disengage it from rear spring 55, and lift the rear end of valve 53 to remove it through the opening of filler neck 16g. Fourth, clean thoroughly all parts and the inside of reservoir 16.

Various changes in details and arrangement of parts can be made by one skilled in the art without departing from either the spirit of this invention or the scope of the appended claims.

What is claimed is:

1. A bar painting apparatus, comprising a paint reservoir, a carriage supporting said reservoir, carriage guide means on the carriage for engaging the bar in operative position to direct the carriage in movement along the bar, said reservoir having opposite sides converging toward the operative position of said bar, and paint applying means on said carriage arranged to engage exposed surfaces of said bar and to apply paint from said reservoir to said bar when said guide means is in operative position on said bar; said paint applying means including a flow controlling gate having converging side walls associated with said reservoir and generally conforming with and contacting said opposite sides, said sides having holes adapted to be covered or uncovered by gate movement in opposite directions, and means for resiliently urging said gate walls against said sides perpendicular to said directions and urging the converging shape of said sides and walls into nesting relationship.

2. A bar painting apparatus, comprising a paint reservoir, a carriage supporting said reservoir, carriage guide means on the carriage for engaging the bar in operative position to direct the carriage in movement along the bar, said reservoir having opposite sides converging toward the operative position of said bar, and paint applying means on said carriage arranged to engage exposed surfaces of said bar and to apply paint from said reservoir to said bar when said guide means is in operative position on said bar; said paint applying means including flat brushes secured flat against the outside surfaces of said opposite reservoir sides and converging toward said bar engaging said bar in a contacting zone along a length dimension parallel to said bar, means for distributing paint from said reservoir on each brush substantially uniformly along said length dimension at a paint receiving zone spaced above said contacting zone so that the paint will flow by gravity over said brushes to said contacting zone for application to said bar, said distributing means including a plurality of holes along a line in each reservoir side parallel to said length dimension and in fluid communication with the interior of said reservoir, a flow controlling gate having converging side walls located within said reservoir and generally conforming with and contacting the inner surface of said opposite sides, said holes in said sides adapted to be simultaneously covered or uncovered by gate movement in opposite directions for simultaneously controlling flow throughout said length by simultaneously changing the flow area of each hole, and means resiliently urging said gate walls against said sides perpendicular to said directions and urging the converging shape of said sides and walls into nesting relationship.

3. In apparatus for painting an elongated bar extending substantially uniformly above generally flat surfaces on each side thereof and having a paint reservoir and a carriage supporting said reservoir for movement along said flat surfaces, and guide means on the carriage for engaging said bar in operative position for directing said carriage in movement along said bar; the combination therewith of said reservoir having opposite flat sides converging downwardly, means for holding flat brushes respectively against the outer surfaces of said flat sides and in position to brush against opposite sides of said bar, there being paint discharge openings through said reservoir flat sides at an intermediate zone of said brushes

above the bar-brushing ends thereof, and adjustable gate means in said reservoir operatively associated with said openings and controlling paint flow therethrough, whereby the rate of paint flow is controlled independently of said brushes and the paint is evenly distributed between said discharge openings and the bar-brushing ends of said brushes by paint flow between said flat sides and said brushes.

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