

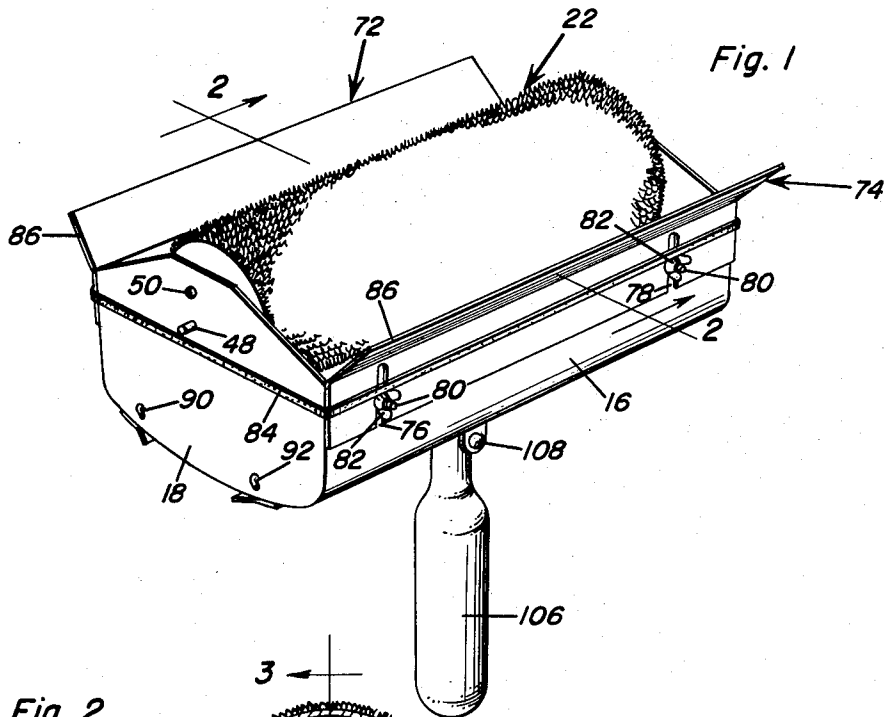
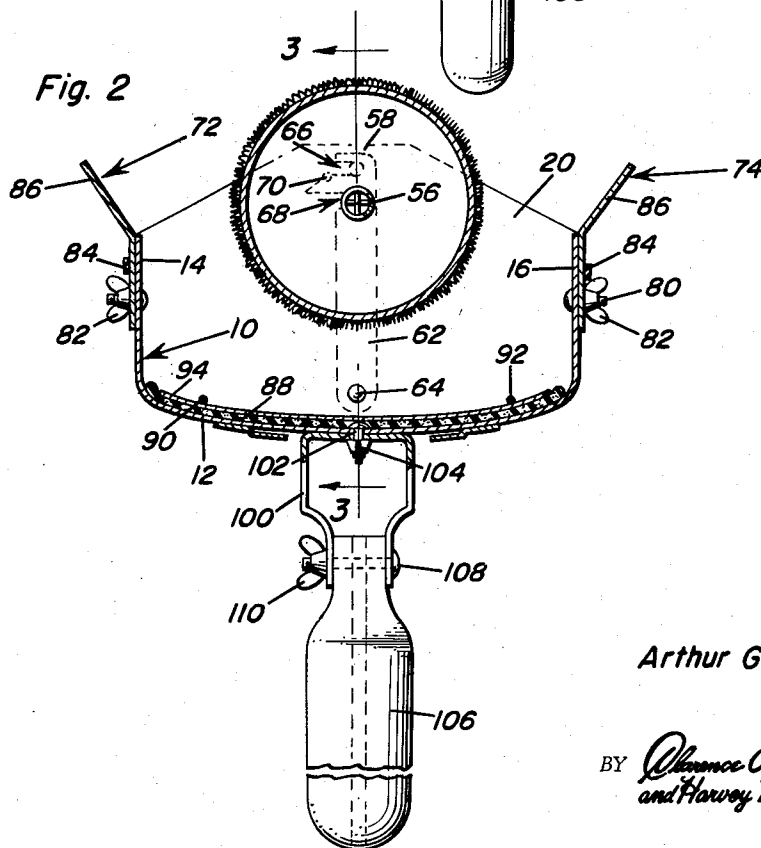
Dec. 31, 1963

A. G. CHURCH
PAINT APPLICATOR

3,115,659

Filed June 21, 1960

3 Sheets-Sheet 1



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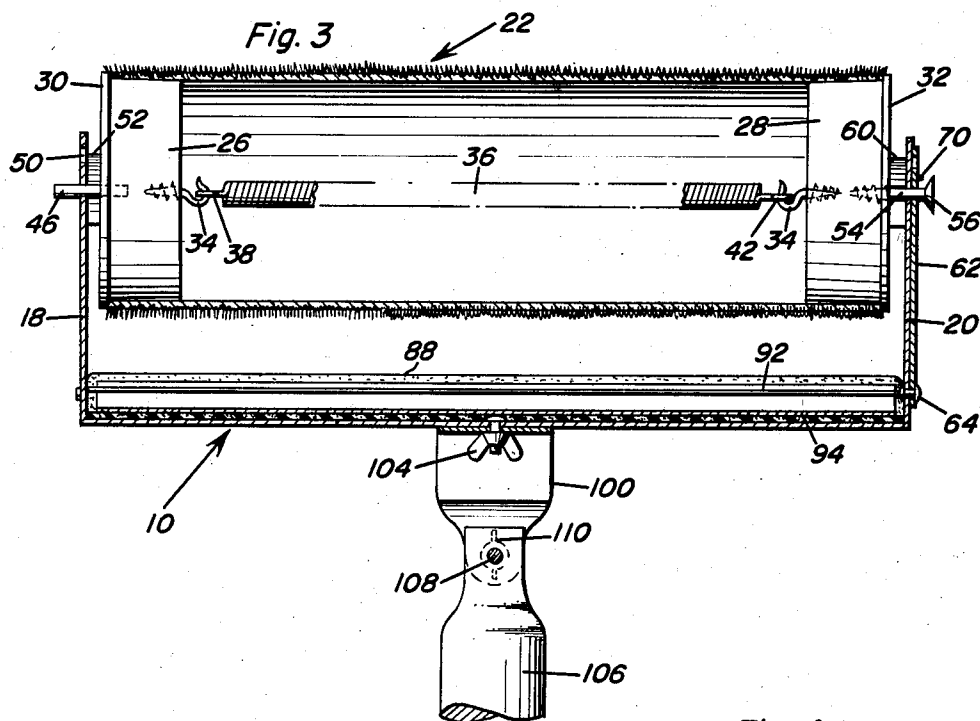
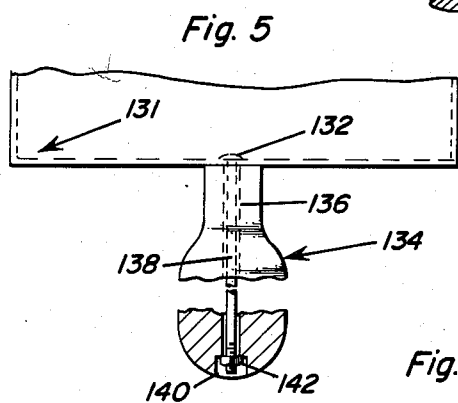
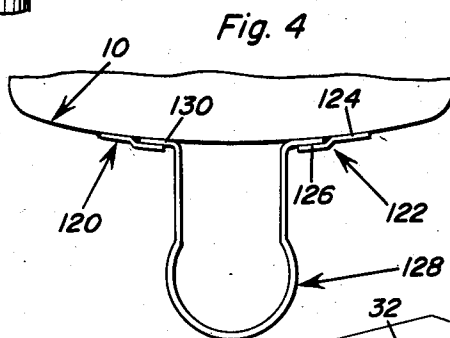
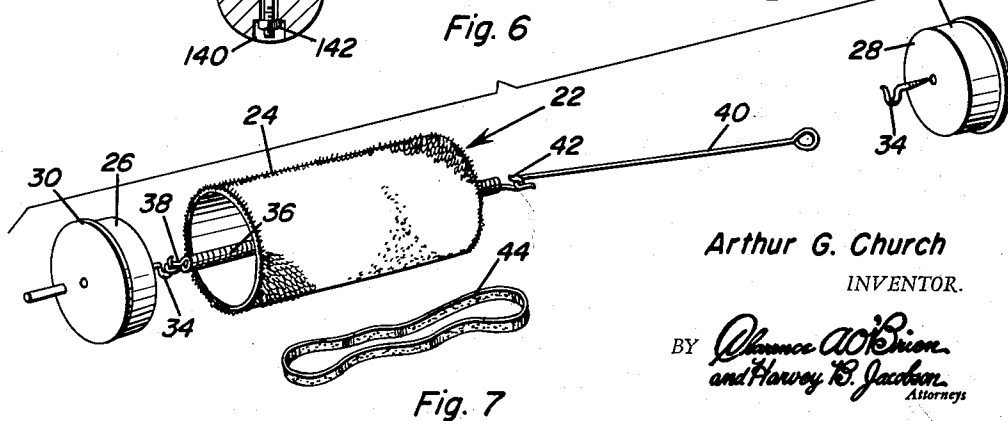
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A. G. CHURCH
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3 Sheets-Sheet 2



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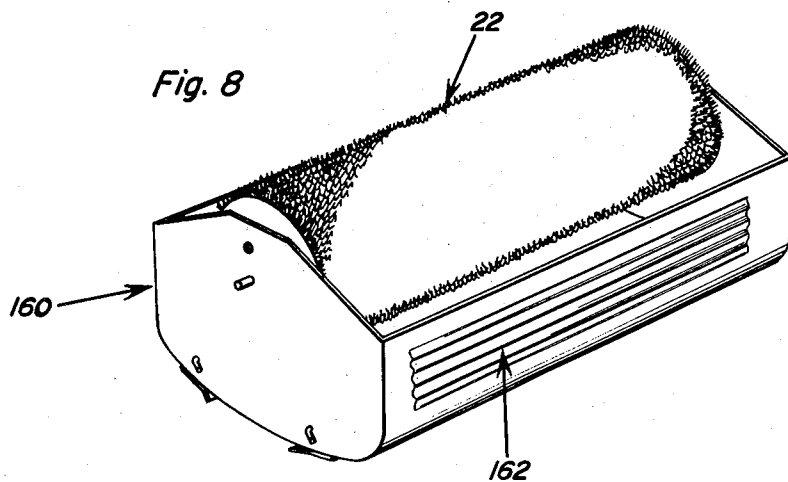
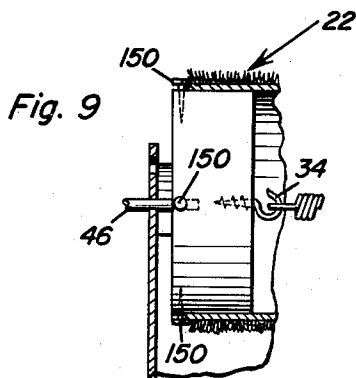
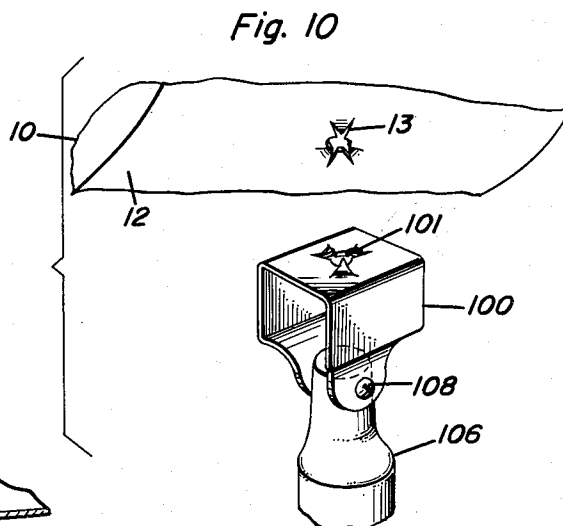
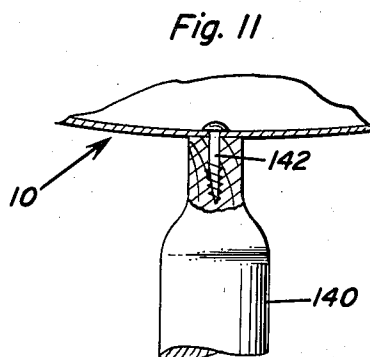
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A. G. CHURCH
PAINT APPLICATOR

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3 Sheets-Sheet 3



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3,115,659

PAINT APPLICATOR

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2 Claims. (Cl. 15—230)

This invention relates generally to painting equipment and more particularly to a paint applicator including a rotatably mounted roller secured to a pan having a handle mounted thereon for allowing wall and ceiling surfaces to be painted while assuring a minimum of paint drippings.

In recent years, the popularity of paint roller applicators have increased considerably. There appears to be no question that it is easier and faster to paint large flat surfaces with a roller rather than a conventional brush. A significant disadvantage of the roller lies in the fact that the paint is often dripped therefrom. It is the principal object of this invention to provide a novel paint applicator utilizing a paint roller wherein means are provided for preventing paint drippings from the roller.

It is a more particular object of this invention to provide a novel paint applicator construction utilizing the paint roller assembly rotatably supported on a pan having a handle attached thereto. The paint drippings from the roller are caught by the pan and are thereby prevented from undesirable spotting of adjacent walls, floors, furniture pieces, etc. By mounting the handle for adjustable movement with respect to the pan, the roller may be efficiently utilized for painting both horizontal and vertical surfaces with equal success.

It is a still more particular object of this invention to provide a novel paint applicator construction including a novel paint roller assembly which may be easily mounted on and easily removed from the supporting pan. Further, means are provided for adjustably mounting the roller in the pan in either of two positions.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

FIGURE 1 is a perspective view of the paint applicator;

FIGURE 2 is a sectional view taken substantially along the plane 2—2 of FIGURE 1;

FIGURE 3 is a sectional view taken substantially along the plane 3—3 of FIGURE 2;

FIGURE 4 is a fragmentary end elevational view of a second form of handle construction;

FIGURE 5 is a fragmentary side elevational view, partially broken away, of a third form of handle construction;

FIGURE 6 is a perspective view of the disassembled elements which in their assembled form comprise the paint roller assembly;

FIGURE 7 is a perspective view of a rubber band which may be substituted for the spring illustrated in FIGURE 6 for resiliently urging the rigid cylindrical members toward each other within the cylindrical roller cover;

FIGURE 8 is a perspective view of a modified form of the paint applicator;

FIGURE 9 is a fragmentary sectional view showing an alternate and less expensive cylindrical end member on which the absorbent paint cover may be mounted;

FIGURE 10 is a fragmentary perspective view of the handle and pan particularly illustrating cooperating means preventing rotational movement therebetween; and

FIGURE 11 is a fragmentary sectional view illustrating a further and less expensive manner for securing the handle to the pan.

Attention is now drawn to the drawings with initial

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reference being made to FIGURES 1, 2, 3 and 6. A pan 10 is provided having a bottom surface 12, a pair of side walls 14 and 16, and a pair of end walls 18 and 20 extending upwardly therefrom.

A paint roller assembly is adapted to be rotatably supported between the end walls 18 and 20. The roller assembly generally designated by the numeral 22 includes a flexible and absorbent cylindrical cover 24. A pair of flanged rigid cylindrical members 26 and 28 are provided each being flanged at 30 and 32 respectively. Hooks 34 are terminally threaded or screwed into the members 26 and 28 along the axis thereof remote from the flanges 30 and 32. A spring 36 is provided with a terminal eye 38 which engages hook 34 on member 30. A hooked rod 40 is provided for extending through the roller 24 to engage the end 42 of the spring 36 for pulling the spring 36 through the cover 24. The terminal hook 42 of the spring 36 is then adapted to be engaged with the hook 34 on member 28. In lieu of the spring 36, a rubber band 44 may be utilized for resiliently securing the members 26 and 28 together urging them into the cylindrical hollow defined by the cover 24. This assembly may be used with any 7 inch roller cover or with any 9 inch roller cover readily commercially available.

A pin 46 extends axially outwardly from the member 26 and passes through an aperture 48 defined in the end wall 18. Aperture 50 is defined in the end wall 18 above aperture 48 and if desired, the pin 46 may be placed there-through dependent upon the desired position of the roller assembly 22 in the pan 10. A spacer 52 is disposed around the axial pin 46 between the wall 18 and the member 30.

A screw 54 is terminally and axially threaded into the member 28. The screw 54 is provided with a flat head 56 remote from the member 28. The wall 20 of the pan 10 is slotted at 58 and screw 54 is received therethrough. A spacer 60 is disposed about the screw 54 between the wall 20 and the member 32.

An arm 62 is pivotally mounted parallel to the wall 20 about pin 64. The arm 62 is provided with recesses 66 and 68 which are registerable with the slot 58 upon pivotal movement of the arm 62 about pin 64. A detent 70 is supported on the wall 20 for retaining the arm 62 in the vertical position, as is illustrated in FIGURE 2. In lieu of the detent means 70 a small bolt, lock-washer and nut may be used for retaining the arm in a desired position. By tightening or loosening this small bolt you obtain the required tension to hold arm 62 in any position required. The wall 20 on one side of the slot 58 provides a confining edge for the screw 54 while the arm 62 adjacent the recess 68 forms a second confining edge. It will be appreciated that as illustrated in FIGURES 1 through 3, the roller assembly 22 is rotatably mounted for movement about the axis defined by pin 46 and screw 54 as pin and screw extend through and rotate in walls 18 and 20. As previously noted, if desired, the roller assembly 22 may be raised with respect to walls 18 and 20 passing pin 46 through aperture 50 and extending screw 54 through recess 66.

Wing assemblies 72 and 74 are slotted at 76 and 78 and pass screws 80 secured to the side walls therethrough. Wing nuts 82 are received on the screws 80 for tightening the wing assemblies into vertical position with respect to the side walls. In lieu of the wing nuts and screw assemblies 80 and 82, a strong rubber band 84 may be utilized to vertically secure the wing assemblies 72 and 74 in position on the side walls 14 and 16. Each of the wing assemblies 72 and 74 upwardly terminates in outwardly diverging portions 86.

It is desirable to secure an absorbent sheet of paper or a sponge, designated by the numeral 88 on the upper side of the bottom surface 12. Rods 90 and 92 extend between the walls 18 and 20 and bend beyond either side

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as particularly illustrated in FIGURE 1. The paper or sponge 88 fits beneath the rods 90 and 92 with a wire screen or suitable material 94 preferably being disposed therebetween.

An inverted U-shaped yoke 100 includes a bight portion passing bolt 102 therethrough. The bolt 102 is retained by the bottom surface 12 of the pan 10 and receives a wing nut 104 securing the yoke 100 to the pan 10. A handle 106 extends between the legs of the yoke 100 and a bolt 108 extends through aligned openings in the legs and handle receiving a wing nut 110 thereon. It should be appreciated that by adjusting the wing nut 110, the handle may be moved into any desired angular position with respect to the pan 10. The adjustability of the wing nut 104 allows for the handle to angularly extend in any desired direction. Accordingly, the applicator may be utilized equally as well when painting a vertical or horizontal surface for the purpose of preventing paint drippings. Inasmuch as the different positions which the handle may assume are apparent, all the particular manners in which the handle and pan may be utilized shall not be here discussed. However, it is assumed that the versatility of the particular construction will be appreciated.

Attention is now called to FIGURE 4 wherein a different type of handle construction is utilized. The pan 10 is shaped in a substantially identical manner with that illustrated in FIGURES 1 through 3. Elongated members 120 and 122 are provided with a flat portion 124 which is secured to the bottom surface 12 of the pan 10 as by solder. Portion 126 of the members 120 and 122 are spaced from the bottom surface 12 of the pan 10. Accordingly, the handle 128 being provided with flanges 130 may be secured to the pan 10 by sliding the flanges 130 between the portions 126 of the members 120 and 122 and the bottom surface 12 of pan 10.

Attention is now called to FIGURE 5 wherein numeral 131 generally designates a pan construction which is substantially rectangular in cross section being provided with upstanding walls which are perpendicular to the bottom surface. Another handle construction 134 is illustrated having a central bore 136 passing a bolt 138. The bore 136 is countersunk at 140 and a nut 142 is received on the bolt 132 for securing the bolt and retaining the handle 134 on pan 131.

Attention is now called to FIGURE 11. Therein an alternate and less expensive method of securing the pan 10 to a solid handle 140 is shown. An opening is provided in the bottom surface 12 of the pan and a round head screw 142 is inserted therethrough and threaded into the solid handle 140. The use of the screw 142 in lieu of the bolt 138 shown in FIGURE 5 represents a saving in material and installation time.

In order to prevent the handle from turning relative to the pan when the arrangement of FIGURE 2 is employed, the feature shown in FIGURE 10 may be utilized. Therein the bight portion of the yoke 100 secured to handle 106 has projections 101 struck therefrom adjacent the central bolt hole provided. The bottom surface 12 of the pan 10 also has portions 13 struck upwardly therefrom defining indentations adjacent the bolt hole provided therein. The projections 101 on the yoke 100 extend into the indentations defined in the surface 12 and accordingly prevent relative turning between the handle and the pan.

In order to further reduce the cost of the applicator an inexpensive useful feature is shown in FIGURE 9. In lieu of the flanges 30 and 32 defined on the cylindrical members 26 and 28, radially extending brads 150 may

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be utilized. Although the brads 150 are functionally equivalent to the flanges 30 and 32 they would be considerably less expensive to utilize where relatively few applicators are being constructed.

In order to give greater versatility to the applicator, the pan 160 shown in FIGURE 8 may be used. The pan 160 is similar to the pan 10 previously described but however the side walls 14 and 16 are provided with corrugations 162. The corrugations permit the use of the applicator without a handle. The pan 160 is held in the palm of the hand with the fingers gripping the corrugations. The pan 160 may then be utilized in a manner similar to a blackboard eraser.

It should be appreciated that a novel and versatile paint applicator has been disclosed for allowing paint to be rolled on a surface while minimizing paint drippings from the roller. By frequently replacing the paper or sponge 88 the pan may be retained in a clean condition at all times.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. A paint applicator comprising a pan defining a bottom surface and opposed ends walls and side walls extending upwardly therefrom, securing means for fixing a handle to the underside of said bottom surface and a paint roller assembly rotatably supported between said end walls, said roller assembly including a hollow cylindrically shaped roller cover, and a roller core received within said cover, said roller assembly further comprising a pair of flanged rigid cylindrical end cap members, each of said members extending into said hollow cover from opposed ends thereof, and resilient means disposed within said core connecting said members, an axial pin projecting from a first of said members, an aperture defined in a first of said end walls, said axial pin rotatably received in said aperture, a screw axially projecting from a second of said members, a vertically opening slot provided in a second of said end walls, said screw extending through said slot and an arm defining a recess therein, said arm pivotally connected to said second end wall for receiving said screw into said recess, each of said side walls defining corrugations therein which extend longitudinally from near one end wall to near the other end wall.

2. The paint applicator of claim 1, having a readily removable absorbent sheet disposed on the inside of said pan and means overlying said sheet to retain the same fixedly spaced from the roller surface.

References Cited in the file of this patent

UNITED STATES PATENTS

207,160	Brown	Aug. 20, 1878
1,455,656	Phillips et al.	May 15, 1923
2,778,050	Meinhardt	Jan. 22, 1957
2,820,978	Brady	Jan. 28, 1958
2,887,707	Heintzelman	May 26, 1959
2,902,706	Gaetke	Sept. 8, 1959

FOREIGN PATENTS

271,143	Switzerland	Jan. 3, 1951
395,478	Germany	May 9, 1924