

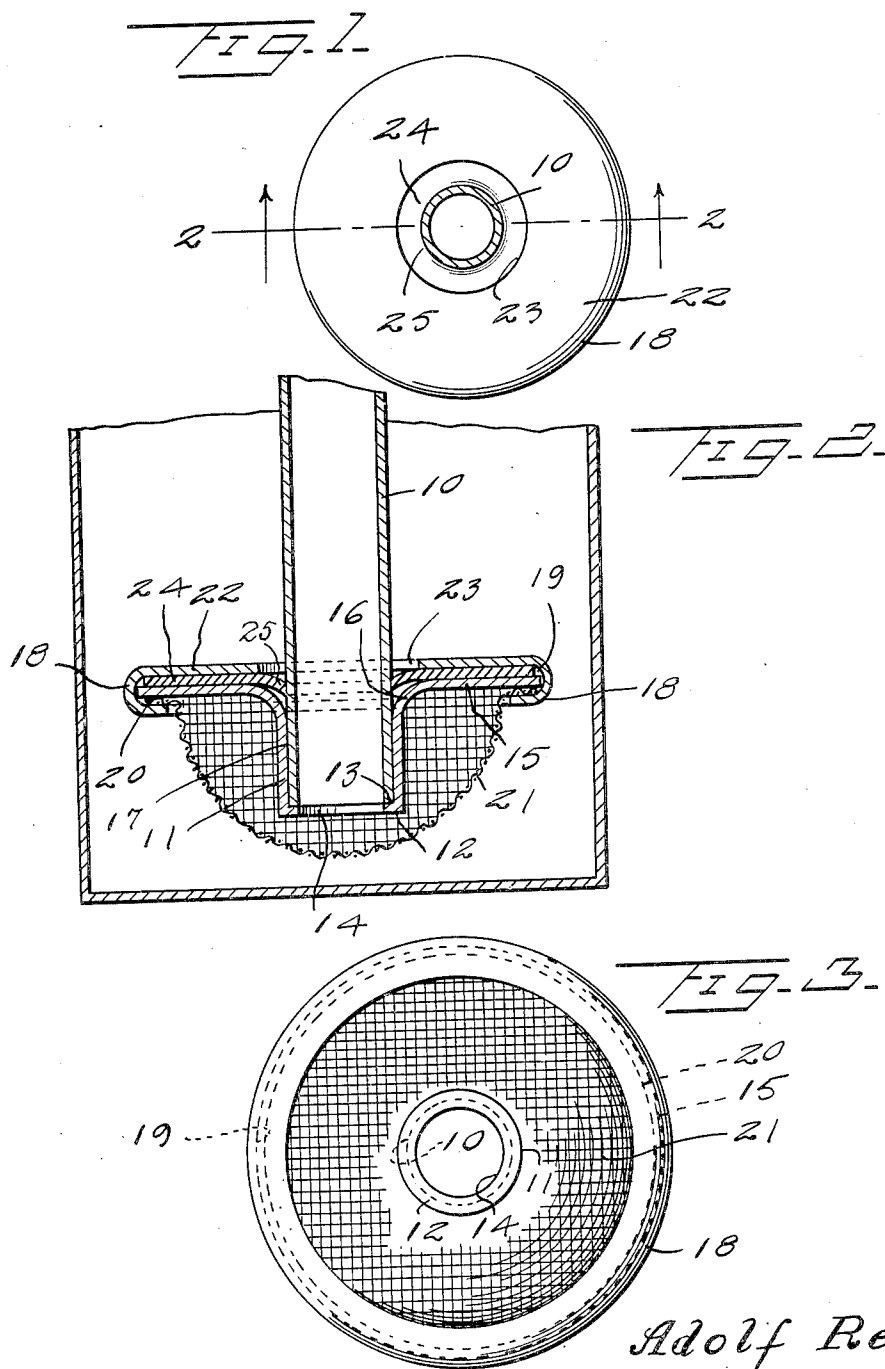
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STRAINER FOR PAINT SPRAY GUNS

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STRAINER FOR PAINT SPRAY GUNS

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1 Claim. (Cl. 210-94)

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This invention relates to a strainer for paint spray guns and the object thereof is to provide a novel and simple strainer adapted to be used in a container or cup employed in connection with paint spray guns to strain the paint drawn into the gun for discharge through the nozzle thereof so that clogging of the nozzle will be prevented.

Another object of the invention is to provide a strainer having novel means for holding the wire gauze through which the paint is drawn and means associated therewith for mounting the device on the spray tube which extends into the cup or container to provide a stop limiting the engagement of the strainer with respect to said tube.

With the above and other objects in view, my invention consists in the arrangement, combination and details of construction disclosed in the drawing and specification, and then more particularly pointed out in the appended claim.

In the drawing:

Figure 1 is a sectional top plan view of the strainer as applied to the tube leading to a spray gun,

Figure 2 is a diametrical sectional view taken on the line 2-2 of Figure 1; and

Figure 3 is a bottom plan view partly broken away.

Referring to the drawing, 10 designates the tube which is inserted in the paint container or cup of a spray gun of any well known type. This tube has its lower end freely open and its upper end connects with the flexible hose leading to the gun for discharge of the paint in a spray through the nozzle thereof, being drawn from the container or cup through the tube usually by means of a suction pump or otherwise and forced through the valve controlled nozzle in the usual way. The strainer constituting the particular subject matter of my invention consists of a short outer tube 11 of metal or other suitable material in which the tube 10 frictionally fits or may be secured. The tube 11 has a stop 12 at the lower end thereof which extends down into the spray gun paint container or cup near the bottom thereof. This stop is in the form of an inturned annular flange shown of angular, preferably right-angled cross section with a top shoulder or upwardly facing seat 13 internally of the tube 11 and freely open at the inside as indicated at 14. The seat 13 receives thereon the lower end of and forms a support for the discharge tube 10 and limiting member for a gauze, screen, reticulated, perforated or foraminous strainer (to be later described) on, for and of the spray tube 10, limiting the displacement thereof and preventing the

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tube 10 from dropping down or projecting below the lower end of the tube 11 concentrically fitted thereon.

An annular flange 15 is provided on the tube 11 at its upper end and is of circular form flanged or curved horizontally outwardly from the top of the tube 10 as indicated at 15. A strainer 21 formed of reticulated, perforated or foraminous member or cup, such as fine screen wire or wire gauze usually of metal, such as bronze, copper or the like, is formed with an outwardly directed flange 20 adapted to underlie the flange 15. An annular top plate 22 of metal or other material has a central opening 23 receiving and spaced around or loose over the tube 10 above the flange 15 and is formed with the downwardly and inwardly curved peripheral outer edge or rim flange 18 to extend beneath the plate 15 and receive the outwardly directed peripheral flange 20 of the strainer 21 therebetween in clamped position with the strainer depending therefrom to encompass the lower ends of the tubes 10 and 11. An annular cushion plate or rubber ring or packing washer 24 may be inserted or interposed between flange 15 and plate 22 beneath the latter, and received and clamped therebetween. The inner edge portion of ring or washer 24 is directed or curved downwardly as at 25 to engage frictionally in supporting, liquid and air tight connection or contact with the periphery of the tube 10 above the short tube 11 and in spaced relation to the curved portion 16 of the tube 11. This is due to the flexing of the inner portion or annulus 25 of washer or packing 24 upon fixing or mounting the same and attached parts and strainer on the lower end of tube 10. In this manner, the paint in the container or cup of the spray gun is drawn or sucked through the strainer 21 and through the lower end of the tube 10 to be discharged from the nozzle of the spray gun after passing through said tube 10 and the flexible hose usually provided on such devices, so as to remove any solid matter that may be in the paint. Of course, it is to be understood that the paint is usually strained or filtered before being used so that the present device is an extra precaution to insure the proper quantity of paint flowing and to maintain the fluid character thereof sufficiently thin to insure proper discharge from the gun as a spray and prevent clogging.

I do not mean to confine myself to the exact details of construction herein disclosed, but claim all variations falling within the purview of the appended claim.

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What I claim is:

A paint strainer for a spray gun having a container and a tube extending therein and freely open at its lower end near the bottom of the container, comprising a tubular open ended member engaging over the lower end portion of the spray gun tube and having means thereon engaging the tube for limiting the upward movement of said tubular member relative thereto, an outwardly extending flange formed on the upper end of said tubular member, an annular plate overlying said flange and loosely engaging about the spray gun tube, a downwardly and inwardly curved rim formed on the peripheral edge of said plate forming an inwardly facing seat adapted to receive the periphery of said flange, a perforated cup-shaped strainer member encompassing the lower ends of the tube and said tubular member and formed with an outwardly directed flange on the upper edge thereof adapted to underlie said first mentioned flange and engage within said inwardly

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facing seat, and a flexible annular cushion member disposed between said plate and said first mentioned flange and adapted to frictionally engage about the spray gun tube.

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