FIG. 1.

FIG. 4.

FIG. 5.

FIG. 2.

FIG. 3.

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This invention relates to a novel spray gun holder, and more particularly, to a spray gun holder designed to hold a spray gun used in self-service, coin-operated car washing establishments.

Self-service car washing establishments can now be found in many locations throughout the country. An automobile can be driven to a car washing station, and washed by the use of a spray gun provided at the station. The spray gun is adapted to dispense water and/or liquid detergent in response to deposit of a coin in equipment provided at the station.

The car washing station is usually open and the spray gun is mounted by a pair of brackets on a conveniently accessible wall at the station. Excess liquid detergent and/or water has been found to drain from the spray gun after use and cover portions of the floor area of the wash station. In winter, the drainage would freeze, providing a dangerous and slippery condition in the wash area. Furthermore, it had been found that persons walking around the wash area would accidentally bump into the wall-mounted spray gun jetting out into the wash area, thereby providing a source of potential injury to users of the wash equipment.

Accordingly, it is an object of this invention to provide a novel spray gun holder for a spray gun used in self-service coin-operated car washing establishments, which is designed to alleviate the problems discussed above.

A more specific object of this invention is to provide a spray gun holder of the character indicated which can be mounted on a wall structure for receiving and supporting a spray gun therein, and which is adapted to drain the discharge from the spray gun after use, and recirculate it to the washer or accumulate it in a floor drain.

Another object of this invention is to provide a spray gun holder for draining the discharge from a spray gun after use to a location remote from the wash area, thereby preventing accumulation of the discharge on the floor of the wash area and freezing of the same.

A still further object of this invention is to provide a spray gun holder of the character indicated, wherein the drainage is effective through gravity and without the necessity to use special equipment.

Still another object of this invention is to provide a spray gun holder at a car washing establishment which is adapted to be mounted in a substantially flush position on a wall structure, so as to preclude accidental injury to customers by contact with the spray gun.

Further objects and advantages of the invention will become apparent from the following description and from the accompanying drawings, wherein:

FIGURE 1 is a fragmentary perspective view illustrating a wall of a car wash establishment mounting the spray gun holder of the present invention, and further illustrating the spray gun immediately prior to being inserted within the holder.

FIGURE 2 is a cross-sectional view taken substantially along the plane indicated by the line 2—2 of FIGURE 1 and further illustrating in phantom lines, the manner in which the spray gun is supported within the holder.

FIGURE 3 is an end view in elevation of the holder and its associated mounting structure as seen from the right hand end of FIGURE 2.

FIGURE 4 is a cross-sectional view taken substantially along the plane indicated by the line 4—4 of FIGURE 2.

FIGURE 5 is a view similar to FIGURE 4, but illustrating a slightly modified form of holder.

The present invention relates to a holder for a spray gun, generally designated by the numeral 10, used to provide water and/or liquid detergent at self-service, coin-operated car washing establishments and other desirable locations. The spray gun 10 is adapted to be supported, when not in use, within a holder generally designated by the numeral 12, mounted upon an upright wall panel 14 at the wash area, which is exposed to atmospheric conditions.

Preferably, the wall panel 14 constitutes a wall of a conventional insulated or heated enclosure for housing equipment used at the establishment.

The spray gun 10 includes a gun barrel 18 connected to a hand grip 19 by means of a T-joint pipe fitting 24. A water supply hose 22 is connected to the T-fitting 24 and is adapted to supply water to the barrel 18 for discharge through a nozzle 20 at the forward end of the barrel. In previous mounting arrangements used to support the gun 10 when not in use, excess water and/or liquid detergent would drain from the barrel 18 through the nozzle 20 onto the floor of the wash area. In winter, this presented a dangerous situation, since the water on the floor of the wash area would freeze and render the same slippery.

Thus, a holder 12 has been provided which extends through a hole 26 in the wall panel 14 and a hole 28 cut at an acute angle to the vertical in the insulation 16. The holder 12 includes a substantially planar face plate 30 and a tubular scabbard 34 for receiving and supporting therein the spray gun barrel 18. The tubular scabbard 34 projects downwardly and rearwardly from the face plate through the wall opening 26 and angular hole 28 in the insulation 16.

The tubular scabbard 34 is integral with the face plate 30 and projects downwardly and rearwardly at an acute angle with respect to the plane of the face plate 30. Because of the downward projection of the scabbard from the rear of the face plate 30, drainage discharge from the spray gun barrel 18 will flow into the scabbard 34 by gravity.

The face plate 30 has an opening 32 defining an entrance into the interior of the tubular scabbard 34. The face plate 30 is adapted to be mounted on the wall panel 14 in overlying relationship to the opening 26 therein. For this purpose, a pair of mounting plates or brackets 36 and 38 are provided on the opposite side of the wall panel 14 and insulation 16 for clamping the face plate 30 substantially flush with the panel 14. Mounting bolts 40 are provided which extend through the wall panel 14 and insulation 16 for snugly binding the mounting plates 36 and 38 against the interior of the wall 14 and insulation 16 to hold the face plate 30 in snug engagement with the interior of the wall.

The end of the tubular scabbard 34 opposite from the face plate 30 is substantially closed as shown at 42. Hence, drainage from the barrel 18 of the spray gun 10 will tend to accumulate within the bottom of the tubular scabbard 34.

A drain passage 44 is provided in the scabbard adjacent its closed end 42 for draining the discharge of the spray gun from the interior of the scabbard. An internally threaded socket 46 for receiving a hose connector nipple 48 is provided in communication with the drain passage 44. The socket 46 can be welded to the scabbard concentrically with the drain passage 44. A drainage conduit or hose 50 connected to the connector nipple 48 can thus be placed in communication with the interior of the scabbard 34.
The drainage from the barrel of the spray gun will flow by gravity to the bottom of the scabbard 34, through the drain passage 44, socket 46, connector nipple 48 and discharge conduit 50. Within the enclosure defined by a plurality of wall panels, such as wall panel 14, a drain pipe 54 may be provided in the floor 52 for receiving the discharge from the conduit 50. The drainage can then be re-circulated to a reservoir or accumulated.

A pump or other mechanical equipment could be placed in communication with the interior of the scabbard through the conduit 50 to draw the drainage therefrom. However, by means of the downwardly and rearwardly projecting scabbard 34, drainage will occur by gravity and the use of expensive equipment is rendered unnecessary.

FIGURE 4 illustrates that the socket 46 and drain passage can be laterally disposed with respect to the scabbard 34. In the modification illustrated in FIGURE 5, wherein like parts are indicated by primed numerals, the drain passage 44' and the socket 46' can be connected directly to the closed end wall 42' of the scabbard 34'.

Because of the insulated enclosure to which the drainage flows, freezing in winter of the drainage is precluded. Furthermore, the flush mounting of the face plate 30 on the wall panel 14, substantially precludes accidental engagement in the wash area with the spray gun 10, and presents a neat appearance for the apparatus.

While specific embodiments of the invention have been disclosed in the foregoing description, it will be understood that various modifications within the spirit of the invention may occur to those skilled in the art. Therefore, it is intended that no limitations be placed on the invention except as defined by the scope of the appended claims.

What is claimed is:

1. In combination with an upright wall structure having an opening therethrough, a spray gun holder comprising a face plate, means for mounting one side of said face plate on said wall structure in overlying relationship to the opening therein, said means including a pair of mounting strips disposed on the opposite side of said side wall and bolt means for connecting said strips to said face plate, a tubular scabbard for receiving and supporting a spray gun barrel therein projecting downwardly and rearwardly from said face plate through said wall opening, said face plate having an opening therein defining an entrance into the interior of said tubular scabbard through one end thereof, the other end of said tubular scabbard being closed, a drain passage adjacent the closed end of said scabbard for draining the discharge from a spray gun barrel, and means including a conduit connector nipple for receiving a drainage conduit secured to said scabbard in communication with said drain passage.

2. A spray gun holder comprising a face plate, means for mounting said face plate on one side of a wall structure, said means including a pair of mounting strips disposed on the opposite side of said wall and bolt means for connecting said strips to said face plate, a tubular scabbard for receiving and supporting a spray gun barrel therein projecting rearwardly and downwardly from said face plate, said face plate having an opening therein defining an entrance into the interior of said tubular scabbard through one end thereof, the other end of said tubular scabbard being closed, a drain passage adjacent the closed end of said scabbard for draining the discharge from a spray gun barrel, and means including a conduit connector nipple for receiving a drainage conduit secured to said scabbard in communication with said drain passage.

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