Feb. 5, 1963 F. G. VALLES 3,076,608

HOLDER FOR USE WITH SPRAY GUNS

Filed May 1, 1961

FIG. 1.

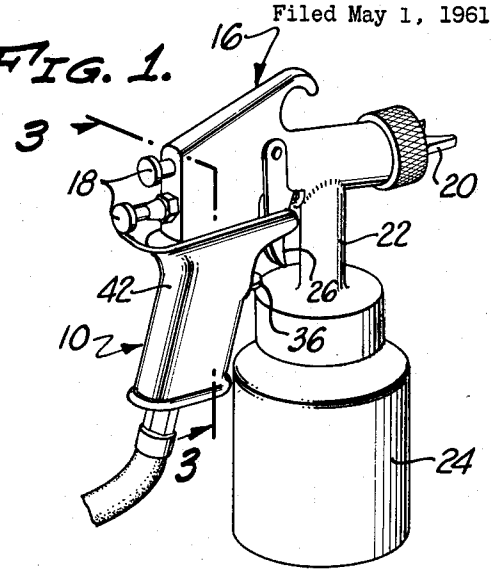


FIG. 2.

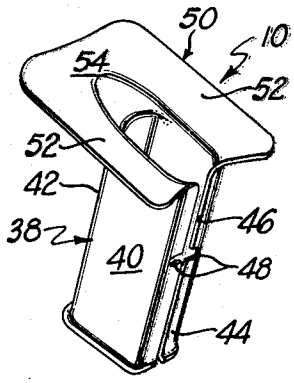


FIG. 3.

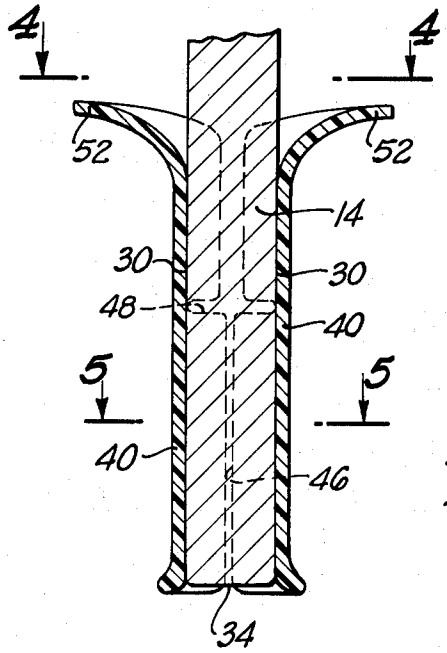


FIG. 4.

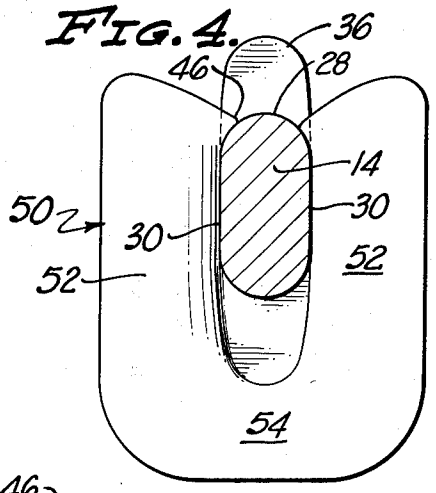
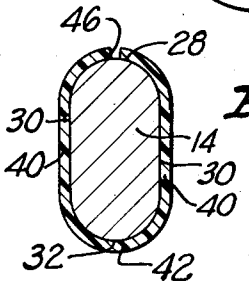


FIG. 5.



INVENTOR.
FRED G. VALLES
BY
O'BRIAN & BLACKHAM
ATTORNEYS

United States Patent Office 3,076,608 Patented Feb. 5, 1963

3,076,608

HOLDER FOR USE WITH SPRAY GUNS

Fred G. Valles, 14372 Purdy St., Westminster, Calif.

Filed May 1, 1961, Ser. No. 106,658
1 Claim. (Cl. 239—526)

This invention pertains to new and improved holders for use with spray guns.

Many types and styles of spray guns are presently being manufactured and sold. It is presently considered that the majority of such spray guns are of a type used for applying paints, lacquers, varnishes and the like to various surfaces. Guns of this generalized type are commonly formed so as to include a pistol grip or handle and an enlarged gun portion attached to an extermity of this grip or handle. Such a gun portion normally includes various controls, a nozzle for dispensing paint or the like and a structure for use in holding a reservoir or container of paint so that this material may be taken from the reservoir or container and dispensed through the nozzle. Further, a conventional paint type of spray gun normally includes means for introducing air into the gun through the extermity of the grip or handle remote from the gun portion and for conveying this air through the grip or handle into the gun portion where it is utilized in a spraying operation.

Structures of this generalized category are well known and have been used effectively for many years. During such use several different disadvantages affecting the utilization of this type of structure have been apparent. One of these disadvantages relates to the ease with which a paint-type of spray gun can be held by the hand of an individual. Normally in a gun of this type the gun portion is "unbalanced" with respect to the grip or handle. As a consequence of this it becomes very tiring to hold a handle in a paint type of spray gun for a prolonged period, especially since the grip or handle in a conventional spray gun is not formed so as to effectively coincide in shape and configuration with the parts of a hand of an individual which are considered to be best suited in supporting a paint-type of spray gun.

Another factor which has been considered to be disadvantageous with respect to conventional paint-spray type guns is the factor of cleanliness. As these guns are utilized frequently a certain amount of paint or other material accumulates in the general region of the grip or handle on such a gun. Such accumulation of material frequently leads to a great deal of contamination and "messiness" of an undesired character. It is considered to be comparatively difficult to remove such accumulation of material from the grip or handle structure of a conventional type spray gun.

An object of the present invention is to provide holders which are adapted to be used with the pistol grip or handle structures of conventional spray guns in order to overcome the aforegoing and various related disadvantages such as are indicated in the preceding discussion encountered in the use of conventional spray guns and other related structures. A further object of the present invention is to provide holders for this type of use which may be inexpensively manufactured, and which may be easily attached to or removed from conventional pistol grip or handle portions of spray guns. A further object of the present invention is to provide holders of the type indicated which are constructed in such a manner as to effectively distribute the weight of the gun portion of a paint or similar type spray gun so that a spray gun of this variety can be utilized for a prolonged period without undue strain upon the muscles in the hand of an individual. A still further object of the present invention is to provide holders of the type indicated which may be utilized so as to protect the hands of an individual from contamination with unwanted paint or the like, and which may be easily removed from a spray gun for cleaning purposes.

These and other objects of this invention, as well as many specific advantages of it, will be more fully apparent from a detailed consideration of the remainder of this specification including the appended claim and the accompanying drawing in which:

FIG. 1 shows a perspective view of a presently preferred embodiment of a holder of this invention in use upon a conventional paint type of spray gun;

FIG. 2 is a perspective view of this holder apart from the spray gun;

FIG. 3 is a cross-sectional view taken at line 3—3 of FIG. 1;

FIG. 4 is a cross-sectional view taken at line 4—4 of FIG. 3; and

FIG. 5 is a cross-sectional view taken at line 5—5 of FIG. 3.

It is to be understood that the accompanying drawing is primarily intended to clearly illustrate a presently preferred embodiment or form of a holder of this invention. From a consideration of the remainder of this specification it will be realized that holders falling within the scope of this invention as defined by the appended claim need not be constructed so as to have the exact shape illustrated in the accompanying drawing. Thus, various design modifications or changes of a routine engineering nature may be made so as to adapt the precise holder shown for use with various differently shaped, known handles or pistol grips on various types of spray guns.

As an aid to understanding this invention it can be stated in essentially summary form that it concerns holders for use with spray guns such as spray guns of the paint-type which have a pistol grip or handle and a gun portion attached to one extremity of this grip. Holders of this invention include a tubular portion corresponding to the shape of the handle or grip and a flared end located on the tubular portion. Both the tubular portion and the flared end are designed so as to be engaged by the hand of an individual in such a manner that the thumb and forefinger of the hand extend along the flared end so as to normally carry the principal weight of the gun portion of a spray gun.

The actual details of this invention are best more fully explained by referring to the accompanying drawing. In this drawing there is shown a holder **10** of this invention which is utilized in conjunction with a conventional paint type of spray gun **12** having a pistol grip or handle **14** which is attached to and carries a gun portion **16**. This gun portion **16** includes at its rear extremity various known control knobs **18** and carries at its forward extremity a nozzle **20**. Intermediate to the ends of the gun portion **16** there is formed an extension **22** which holds a conventional container **24** for paint or the like. This gun portion **16** also carries a movable trigger **26** which extends parallel to the front edge **28** of the grip or handle **14**.

From a consideration of the drawing it will be realized that the grip or handle **14** has essentially flat, parallel sides **30** and a rear edge **32** and a lower end **34** located remote from the gun portion **16**. It will be further realized that these edges **28** and **32** are of a rounded or curved configuration. Along the front edge **28** a small projection **36** is normally formed on the grip or handle **14**. This projection **36** is adapted to engage one of the fingers of the hand of an individual during the use of the grip or handle **14** so as to aid in stabilizing the entire gun **12**.

The holder **10** has a tubular body portion **38** consisting of sides **40** and a curved rear edge **42** and a curved front edge **44**. These sides **40** and edges **42** and **44** are formed so as to fit closely against the entire exterior of the grip

or handle 14 as illustrated in FIGS. 3 and 5 of the drawing. Along the front edge 44 there is formed an elongated slot 46 which extends completely between the extremities of the holder 10 and which is used for a purpose as hereinafter explained. Notches 48 in the edges of the slot 46 are employed so as to accommodate the projection 36 used with the grip or handle 14.

The end 50 of the tubular portion 38 of the holder 10 adjacent to the gun portion 16 is flared outwardly from the tubular portion 38 as indicated in FIGS. 1, 2, 3 and 4 of the drawing so as to provide side flanges 52 and a contiguous rear flange 54. These flanges all curve away from the sides 40 and the rear edge 42 of the body portion 38 so as to diverge from the tubular body 38 generally around the gun portion 16. During the use of the holder 10 the end 50 engages the gun portion 16 so as to rest against this gun portion.

With this type of structure the end 50 in effect "shields" the tubular body 38 so as to protect against drippage or the like from the gun portion 16. It is noted that the end 50 does not have a flange portion extending from the front edge 44 in the vicinity of the trigger 26. This allows normal movement of this trigger during the operation of the complete gun 12.

The holder 10 preferably is manufactured so that the shape of the surface of the end 50 adjacent to the tubular portion or body 38 corresponds to the configuration or curvature of the thumb or forefinger of an individual's hand when these digits are extended so as to be roughly parallel to one another. Because of this type of configuration of the end 50 the weight of the gun 12 is normally supported upon the adjacent parts of the thumb and forefinger of an individual's hand during the use of the gun 12 in conjunction with the holder 10. These two primary digits of the hand as well as the portion of the hand connecting them are considered to be better adapted to hold weight than the remaining fingers of the hand. Further, they can support the weight of the gun 12 in such a manner that the muscles in a hand do not constantly have to tightly grasp or tighten about the grip or handle 14. During the use of the gun 10, however, the digits other than the thumb or forefinger are normally tightened about the tubular portion or body 38 of the holder 10.

The holder 10 can conveniently be manufactured as illustrated out of a somewhat resilient, self-supporting plastic material such as polystyrene, various self-supporting grades of polyethylene or the like. When the holder 10 is manufactured out of such resilient, self-supporting materials of this category it may be easily snapped onto or off of a grip or handle such as the grip or handle 14 with a minimum of difficulty so that whenever it is desirable as for cleaning or other purposes it may be removed from the gun 12. Further, the holder 10 preferably is manufactured out of materials such as the above which may be readily cleaned as with the use of known solvents or the like when it is removed from the gun 12. This latter is considered to be important in preventing contamination and in enabling cleanliness to be maintained at all times.

Because of the nature of this invention it is to be considered as being limited solely by the appended claim forming a part of this disclosure.

I claim:

A holder for use with a spray gun having a pistol grip type of handle, a projection extending from the front edge of said handle and a gun portion attached to one end of said handle, said holder comprising: a tubular body portion having a flat, generally parallel sides and a curved rear edge connecting said sides and curved front edges converging towards one another so as to define a slot extending the complete length of said body portion, said front edges having opposed notches formed therein to accommodate a projection on the handle of a spray gun, side flanges and a contiguous rear flange located at one end of said body portion, both of said side flanges extending from adjacent to said slot defined by said front edges outwardly from said body portion, said rear flange extending from said rear edge outwardly from said body portion, said side and rear flanges curving away from said body portion and corresponding in shape to the configuration of the thumb and forefinger on a human hand as these digits are extended generally parallel to one another, said front and rear flanges being joined together so as to serve as a shield to protect a hand from paint during the use of said holder, said holder being formed of a resilient, self-supporting material capable of being deformed so as to allow the dimensions of said slot to be increased sufficiently to allow said holder to be located upon the handle of a spray gun.

References Cited in the file of this patent

UNITED STATES PATENTS

1,049,739	Leach	Jan. 7, 1913
1,819,115	Preble et al.	Aug. 18, 1931

OTHER REFERENCES

Thirteenth Annual Gun Digest, Edition 1959, the illustration on the front page is cited.