J. H. SCHROEDER

VALVE CONSTRUCTION FOR FLUID DISPENSERS

Filed March 13, 1933

FIG. 1.
Patented July 10, 1934 1,966,143

UNITED STATES PATENT OFFICE

1,966,143

VALVE CONSTRUCTION FOR FLUID DISPENSERS


Application March 13, 1933, Serial No. 660,570

1 Claim. (Cl. 15—138)

This invention relates to improvements in valve construction for fluid dispensers.

The principal object of the invention is to produce a small valve which may be readily applied in a limited space.

A further object is to produce a valve of this character, which is economical to manufacture and simple to install.

An additional object is to produce a device wherein the liability of closing or sticking is practically eliminated.

Other objects and advantages will be apparent during the course of the following description.

In the accompanying drawing forming a part of this specification and in which like numerals are employed to designate like parts throughout the same,

Fig. 1 is a side elevation of a bottle having a cleaning cap, with my valve positioned therein,

Fig. 2 is a fragmentary side elevation of Fig. 1,

Fig. 3 is an enlarged detail cross sectional view on the line 2—3 of Fig. 2,

Fig. 4 is a side elevation of the valve stem,

Fig. 5 is a cross sectional view of the valve casing and valve seat, and

Fig. 6 is a side elevation of the valve spring.

In applying cleaning fluids or other liquids from a bottle, it is essential that some means be provided for regulating the flow of the fluid from the bottle to the cleaner, which may be in the form of a brush or pad. Due to the extremely small size of these devices, it is necessary that a small valve be utilized and due to the sale price of the completed article, it is obvious that a valve must be incorporated at the least possible expense.

I have, therefore, devised a cleaner which consists of a wooden cap tightly placed over the customary screw threaded top of a bottle cap through which a hole has been punched. This cleaner may carry a pad or may carry bristles as shown in the drawing. By simply drilling a single hole through the side of the wooden member I am able to control the flow of liquid from the valve to the bristles of the brush.

In the accompanying drawing wherein for the purpose of illustration is shown a preferred embodiment of my invention, the numeral 5 designates a block preferably of wood, in one end of which is inserted bristles 6. At the opposite end of this block 1 I provide a cavity 7 which is of such size that it will tightly engage the outer surface of the ordinarily threaded bottle cap 8, which threadedly engages the upper end of a bottle such as shown at 9. In using my device it is necessary to punch a hole 11 through the top of the cap 8, which hole will register with a slot 12 formed in the block 5. A bore 13 connects the slot 12 with the bristles 6.

A cross bore 14 permits the valve casing 16, which is in tubular form, to be snugly fitted there-