Sept. 14, 1926. 1,599,669

A. MITCHELL

MUCILAGE BOTTLE

Filed Oct. 28, 1925

Fig. 1.

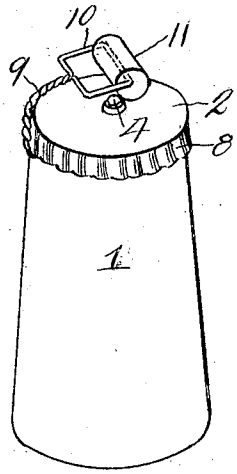
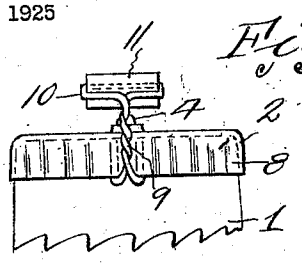


Fig. 2.



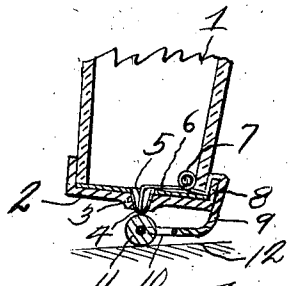


Fig. 3.

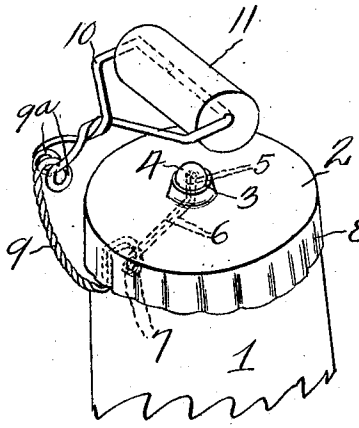


Fig. 4.

Inventor
Andrew Mitchell

By Philip A. H. Sewell
Attorney

Patented Sept. 14, 1926. 1,599,669

UNITED STATES PATENT OFFICE.

ANDREW MITCHELL, OF OMAHA, NEBRASKA.

MUCILAGE BOTTLE.

Application filed October 28, 1925. Serial No. 65,322.

The invention relates to mucilage bottles of the type wherein the bottle top is provided with a spring closed valve and has for its object to provide an arm overlying the cap and terminating in a spreading roller adjacent the valve and which roller, when the pressure is applied thereto, when in engagement with a piece of paper or object, unseats the valve and allows mucilage to be deposited thereon, and the roller to be utilized for spreading the mucilage when rolled over the paper.

A further object is to provide the spring arm, which overlies the cap, with an extension, which extends under the cap and into the chamber of the bottle and terminates in arms extending into the valve for maintaining said valve seated when the roller is out of engagement therewith. Also to provide the arms with convolutions for increasing the flexibility thereof.

With the above and other objects in view the invention resides in the combination and arrangement of parts as hereinafter set forth, shown in the drawing, described and claimed, it being understood that changes in the precise embodiment of the invention may be made within the scope of what is claimed without departing from the spirit of the invention.

In the drawing:—

Figure 1 is a perspective view of a mucilage bottle showing the spreader applied thereto.

Figure 2 is a front elevation of a portion of the mucilage bottle and spreader.

Figure 3 is a sectional view through a portion of the mucilage bottle showing the same in inverted position for use.

Figure 4 is a perspective view of a modified form of spreader showing the same applied to a mucilage bottle.

Referring to the drawing the numeral 1 designates a conventional form of mucilage bottle and 2 a crimped cap on the upper end thereof. Cap 2, centrally thereof, is provided with a conically shaped discharge opening 3 in which a chambered conically shaped valve 4 is disposed. Valve 4 is normally maintained closed by the arms 5 of outwardly extending springs 6 when the bottle is not in use. The spring arms 6, adjacent the wall of the bottle 1 are provided with convolutions 7 for increasing the flexibility thereof. Arms 6 beyond the convolutions extend over the upper edge of the bottle 1, thence downwardly and over the flange 8 of the cap 2 and are twisted together to form a spring arm 9 which terminates above the cap 2, and in the looped end 10 of which is rotatably mounted a spreader roller 11. Roller 11 is disposed above the valve 4 and it will be seen that when the same is placed in engagement with a surface 12 with the bottle inverted, and pressure applied on the bottle, the roller 11 will be forced against the valve 4 and said valve will be unseated against the action of the spring arm 6, thereby allowing glue or mucilage to flow from the bottle 1 on to the roller, and said roller as it is rolled over the surface 12 will spread the mucilage. When pressure is relieved from the bottle 1 the spring arms 6 immediately seat the valve 4 and the spring arm 9 forces the roller 11 out of engagement with the valve. It will be seen that the device is formed, with the exception of the roller and valve, from a single piece of wire bent to form, and the device can be cheaply manufactured and sold. It will also be seen that the spring arms 6, which are formed from the same piece of wire will positively control the valve 4 and will maintain the same seated, and at the same time the relatively wide range of flexibility of the arms 6 will allow the valve to be easily unseated and danger of sticking prevented.

Referring to Figure 4 the structure is substantially the same as shown in Figures 1 to 3, however the arm 9 is provided with convolutions 9^a, which increase the range of flexibility of the arm 9, however the operation of the device is the same as shown in the other figures.

From the above it will be seen that a mucilage spreading device is provided which is particularly adapted for use in connection with crimped tops of mucilage bottles, and not only a spreading roller is provided and supported by a single arm but said arm is provided with spring arms extending under the crimp cap and cooperating with a valve for normally maintaining said valve seated.

The invention having been set forth what is claimed as new and useful is:—

1. The combination with a mucilage bottle, a cap carried thereby, a valve seat in said cap, a spring closed valve carried by said cap and cooperating with the valve seat in the cap, of a flexible arm carried

by the cap, a roller carried by said flexible arm and disposed adjacent the valve, said roller forming means during a mucilage discharging operation for unseating the valve and simultaneously spreading the mucilage as it is deposited on the roller.

2. The combination with a mucilage bottle having a cap provided with a spring closed valve cooperating with a valve seat, of a spring arm carried by said cap and overlying the cap and a roller carried by said spring arm adjacent the valve and forming means for unseating the valve and spreading material deposited on the roller.

3. The combination with a crimped mucilage bottle cap disposed on a mucilage bottle, a chambered valve disposed within said cap and cooperating with a valve seat in the cap, a spring arm carried by the cap and overlying the outer side thereof, a roller carried by said spring arm and cooperating with the valve, of an extension carried by said spring arm and extending into the bottle and cap under one side of the cap, said extension being formed from spring material and provided with a convolution, and an arm carried by said extension and extending into the chamber of the valve.

4. The combination with a crimped mucilage bottle cap carried by a mucilage bottle, a valve disposed within said cap and cooperating with a seat in the cap, of a spring arm disposed within the cap and cooperating with the valve maintaining the valve seated, said spring arm extending over one side of the bottle and under the cap and overlying the outer side of the cap and a roller carried by said spring arm adjacent the valve and outside the cap and cooperating with the valve.

5. The combination with a cap disposed on a mucilage bottle and provided with a valve cooperating with a valve seat in the cap, of an arm extending under said cap at one side thereof being formed from spring material and cooperating with the valve for maintaining the same normally seated, said arm extending over one side of the cap and terminating adjacent the valve and a roller carried by said arm and cooperating with the valve, whereby upon downward pressure on the bottle with the roller in engagement with an object, said valve will be unseated.

In testimony whereof I hereunto affix my signature.

ANDREW MITCHELL.