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REMOTE CONTROL OF PRESSURIZED SPRAY CAN

Filed Aug. 12, 1957

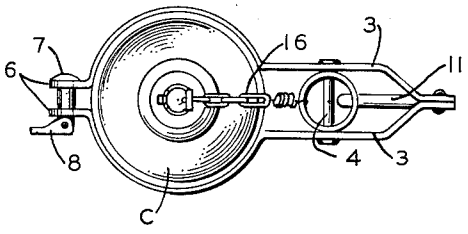


FIG. 1

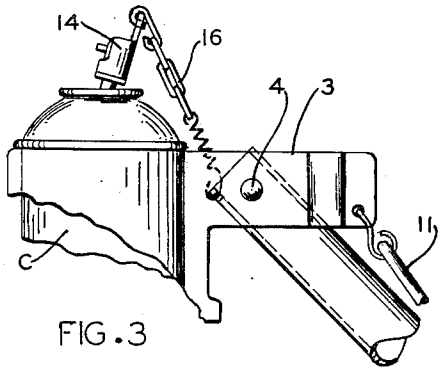


FIG. 3

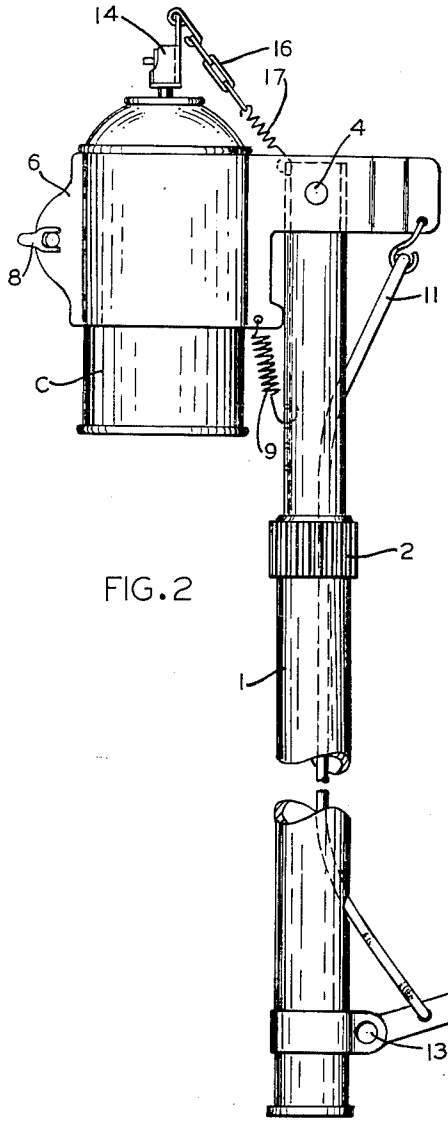


FIG. 2

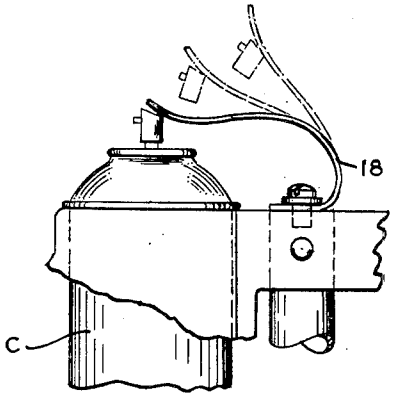


FIG. 4

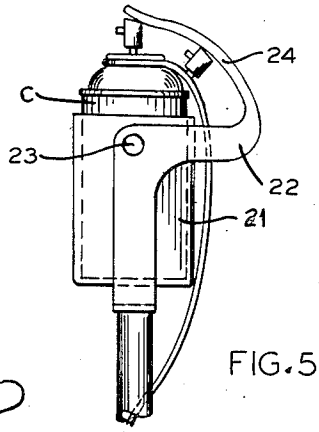


FIG. 5

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REMOTE CONTROL OF PRESSURIZED SPRAY CAN

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4 Claims. (Cl. 222—164)

This invention relates to pressurized spray cans of the type having a valve to control the outlet, there being two types now on the market in one of which the nozzle has to be tipped to open the valve and in the other of which the nozzle has to be pressed inwardly to open the valve.

Objects of the present invention are to provide a device for supporting such a can in elevated position, as for example in spraying trees and vines, and at the same time to control the outlet in different positions of the can support whether upright position or inclined position.

According to the present invention the device comprises an elongate support with a can holder movably mounted on one end of the support for movement from a normal position to different operative positions and a handle at the other end of the support, together with an actuator interconnecting the handle and holder to move the can from one position to another in accordance with movement of the handle, and means responsive to the aforesaid movement of the can automatically to open its valve. In the preferred embodiment the support is in the form of a rod or tube for elevating the can, with the can holder pivotally mounted on the upper end of the rod or tube and the handle mounted on the lower end. The means for actuating the valve preferably includes a spring which is tensioned by the aforesaid movement of the can relative to the support. Preferably the spring is a coil spring for use with valves actuated by tipping the nozzle and a leaf spring for use with valves opened by inward pressure.

For the purpose of illustration typical embodiments of the invention are shown in the accompanying drawings in which

FIG. 1 is a plan view of one embodiment;

FIG. 2 is a side view of the same embodiment with the can in normal position;

FIG. 3 is a similar view with the can tipped relatively to its support;

FIG. 4 is a view like FIG. 2 showing a modification; and

FIG. 5 is a similar view of another modification.

The particular embodiment shown in FIGS. 1 to 3 comprises a tubular support 1 in telescoping sections so that the length of the support may be adjusted, with a lock nut 2 at the junction between each two sections to lock the sections in adjusted position. Pivotally mounted on the upper end of the support is a can holder comprising two sections 3 which straddle the support and are connected thereto by a pivot pin 4. The forward ends of the support are shaped to fit around the can C and are provided with ears 6 interconnected by a pin 7 carrying a locking lever 8 for clamping the holder around the can. A tension spring 9 holds the can in the position shown in FIGS. 1 and 2 wherein its axis is parallel to that of the support. Connected to the rear end of the can holder is a cable 11 which extends down through the hollow support to a handle at the lower end of the support. As shown in FIG. 2 the handle is in the form of a lever 12 pivotally mounted on the support at 13. However the handle may be in the form of a knot or loop on the lower end of the cable. By pulling the handle downwardly the can holder is tipped relatively to the support as shown in FIG. 3. By tipping the can holder more or less the can may be kept in vertical position irrespective of the inclination

of the support. Thus vines or shrubbery may be sprayed from top to bottom.

To open the nozzle when the can holder is tipped the nozzle 14 is connected to the end of the support by a connector 16 including a tension spring 17. By anchoring the connector to the support at a point between the can and the pivot 4 the connector is subjected to tension when the can is tipped. The spring should be strong enough to open the valve as the can begins to tip, merely elongating as the can is tipped farther.

The modification shown in FIG. 4 is like that shown in FIGS. 1 to 3 except that the connector 16 is replaced by a leaf spring 18 which engages the outer end of a nozzle of the type which is opened by inward pressure instead of tipping. Here again the spring should be stiff enough to open the valve as the can begins to tip, thereafter flexing to the positions shown in broken lines as the can is tipped farther and farther.

The modification shown in FIG. 5 is also adapted for cans of the press-nozzle type. In this case the can holder 21 is pivoted to swing about an axis extending through the can by means of a yoke 22 straddling the can, the holder 21 being pivotally mounted on the yoke by means of trunnions 23. The yoke 22 has a cam 24 curving over the can, the inner surface of the cam being substantially concentric with the trunnions 23 and the upper end of the cam curving upwardly. Thus as the can begins to tip the nozzle is depressed and remains depressed as the can is tipped farther and farther.

From the foregoing it will be evident that this device permits foliage to be sprayed at various heights without the use of a ladder. Moreover the can may be kept in upright position at the various elevations by inclining the support more and more as the actuator is pulled downwardly.

It should be understood that the present disclosure is for the purpose of illustration only and that this invention includes all modifications and equivalents which fall within the scope of the appended claims.

I claim:

1. For the remote control of a pressurized spray can having a valve movable relative its body to control its outlet, apparatus comprising a pole, a can holder tiltably mounted on one end of the pole, means operable from the other end of the pole for tilting the can holder, and means, responsive to a tilting movement of the can holder with respect to the pole, for moving the valve of a can held in the can holder relative the body of that can so as to discharge its contents, said last means including valve-tensioning means to permit continued tilting movement of the container after the valve has been moved as aforesaid.

2. For the remote control of a pressurized spray can having a tiltable valve to control its outlet, apparatus comprising a pole, a can holder tiltably mounted on a pivot near one end of the pole, a short portion of the pole extending beyond the pivot, means operable from the other end of the pole for tilting the can holder, and means for interconnecting the valve on a can held in the can holder and said short portion of the pole whereby when the can holder is tilted with respect to the pole the valve will be tilted relative the can, said interconnecting means including a spring whereby the tilting of the valve does not limit the further movement of the can holder.

3. For the remote control of a pressurized spray can having a depressible valve to control its outlet, apparatus comprising a pole, a can holder tiltably mounted on one end of the pole, means operable from the other end of the pole for tilting the can holder, and a cam attached to the pole and extending adjacent of the valve of a spray can held in the can holder for depressing that

valve when the can holder is tilted, the depressing of the valve not limiting the further tilting of the can holder.

4. For the remote control of a pressurized spray can having a depressible valve to control its outlet, apparatus comprising a pole, a can holder tiltably mounted at one end of the pole, means operable from the other end of the pole for tilting the can holder, and a leaf spring attached to the pole and extending adjacent to the valve of a spray can held in the can holder for depressing that valve when the can holder is tilted, the depressing of the valve not limiting the further tilting of the can holder.

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