

R. B. WILLIAMSON.

SPRAYER.

APPLICATION FILED JUNE 18, 1907.

951,895.

Patented Mar. 15, 1910.

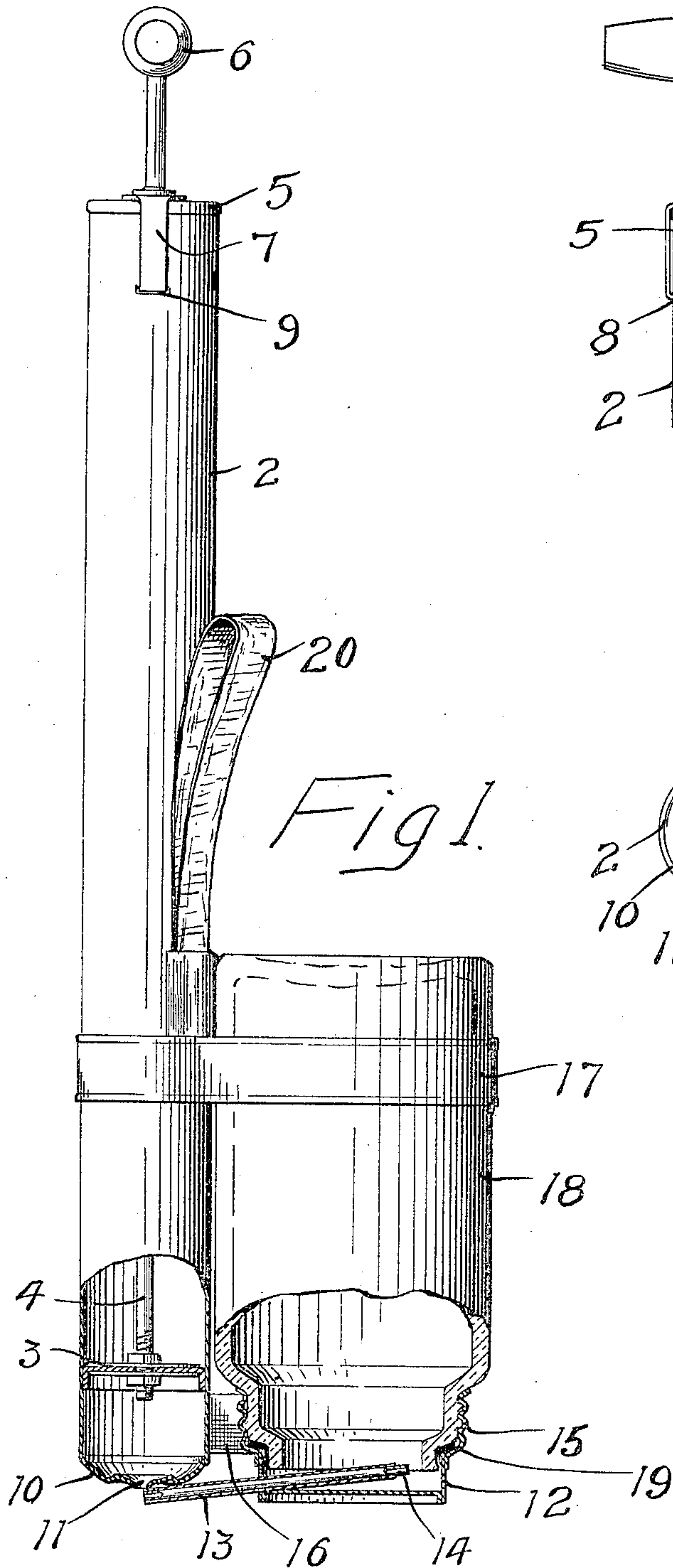


Fig. 1.

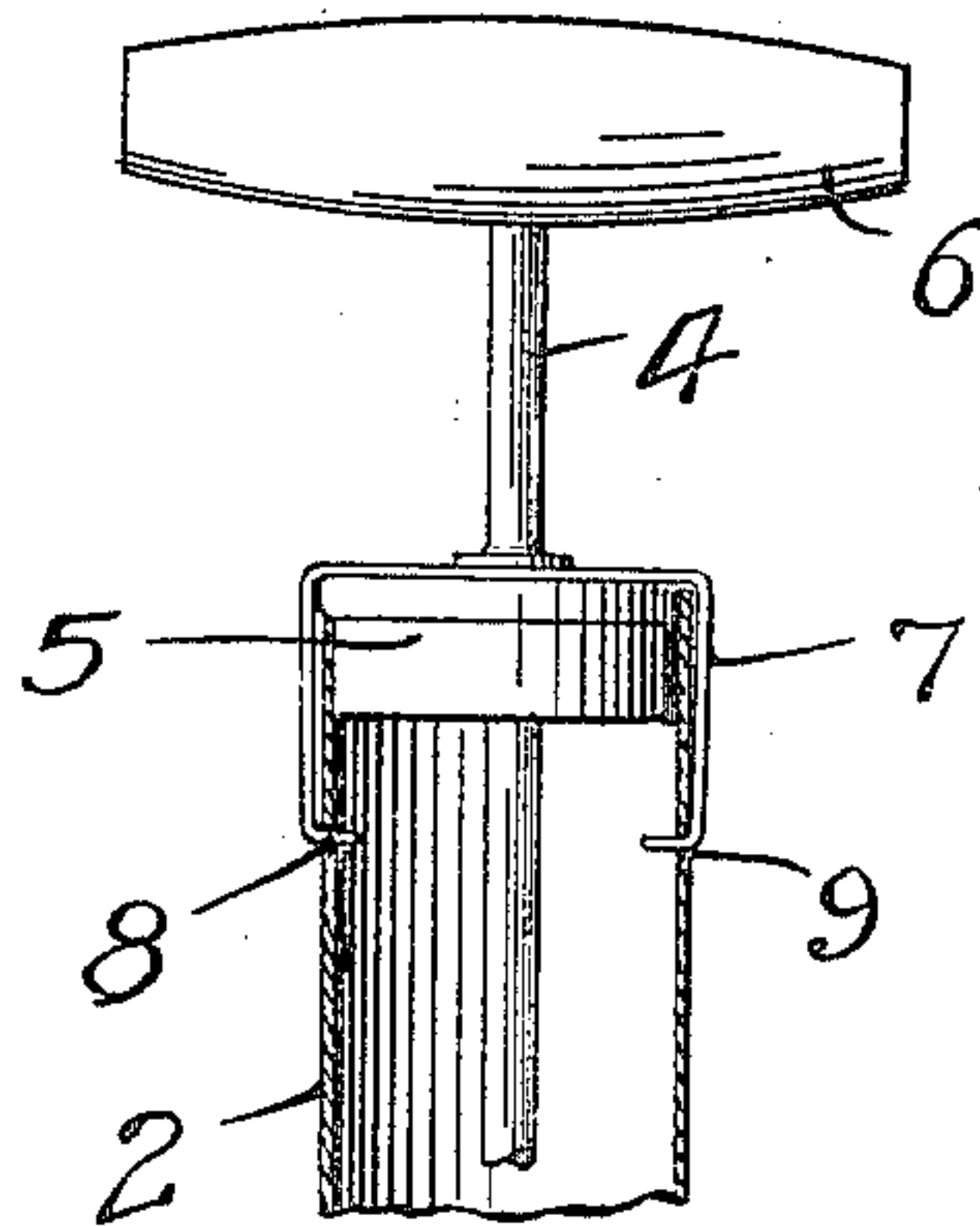


Fig. 3.

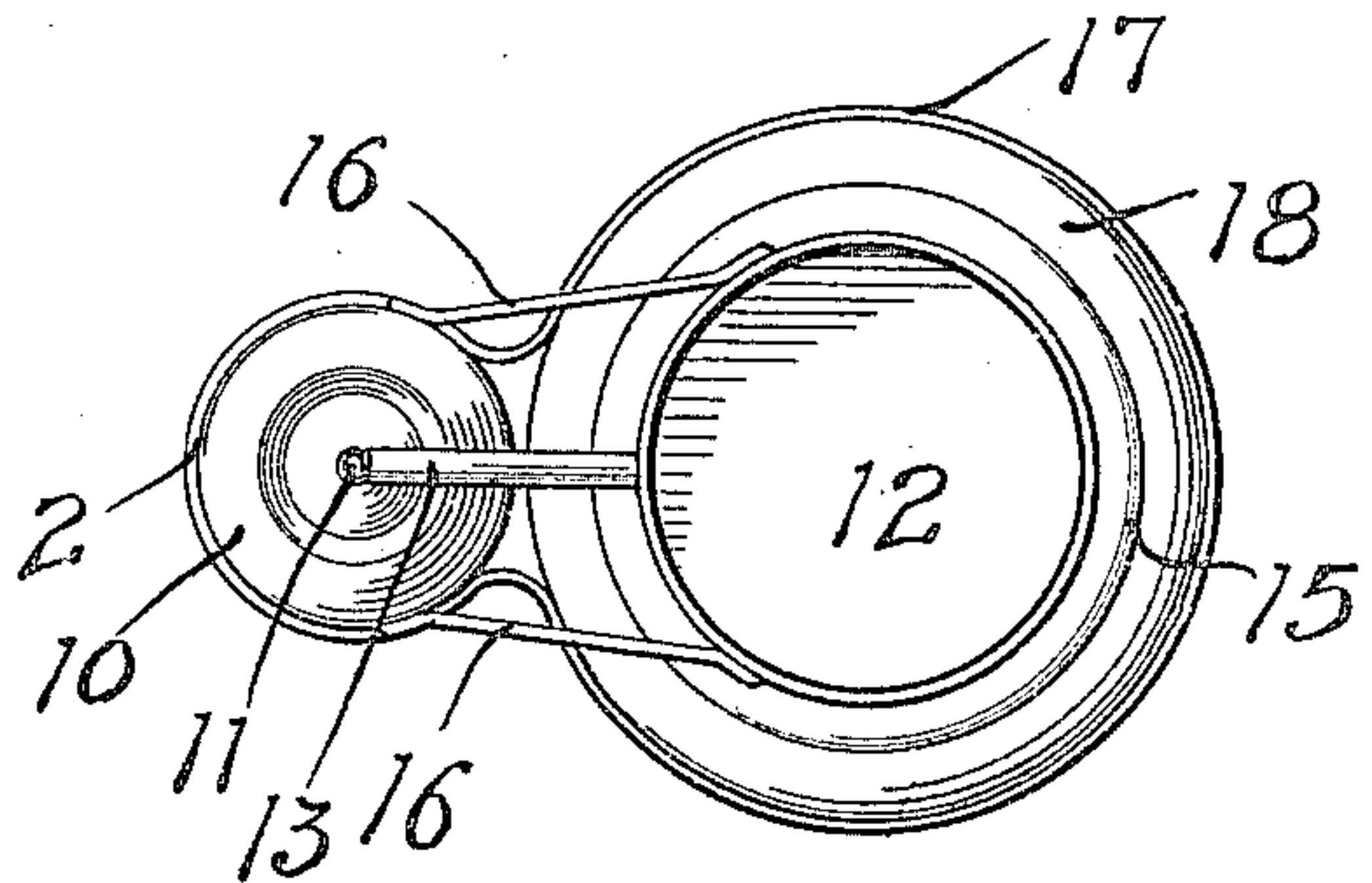


Fig. 2.

WITNESSES

M. W. Johnson
J. B. Era

INVENTOR
RUSSELL B. WILLIAMSON

By *Paul H. Paul*
HIS ATTORNEYS.

UNITED STATES PATENT OFFICE.

RUSSELL B. WILLIAMSON, OF CLIFTON SPRINGS, NEW YORK.

SPRAYER.

951,895.

Specification of Letters Patent.

Patented Mar. 15, 1910.

Application filed June 18, 1907. Serial No. 379,630.

To all whom it may concern:

Be it known that I, RUSSELL B. WILLIAMSON, of Clifton Springs, Ontario county, New York, have invented certain new and useful Improvements in Sprayers, of which the following is a specification.

The object of my invention is to provide an improved form of receptacle or can for use in connection with the sprayer, and improved means for securing the can or receptacle to the barrel of the plunger, to the end that the can may be removed easily and quickly for filling or cleansing purposes.

Other objects of the invention will appear from the following detailed description.

The invention consists generally in various constructions and combinations, all as hereinafter described and particularly pointed out in the claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a side view of a spraying device embodying my invention, one end being shown in section to illustrate the manner of securing the can or receptacle thereto. Fig. 2 is an end view of the sprayer. Fig. 3 is a detail view showing the means for securing the plunger rod in the barrel.

In the drawing, 2 represents the barrel of the sprayer device having a piston 3 provided with a rod 4 which extends out through the end or head 5 and is provided with a suitable handle 6. A strap 7 has a hole through which the rod 4 passes, and the ends of the strap are bent down beside the walls of the barrel and have inwardly turned lugs 8 that are adapted to snap into slots 9 in the barrel and lock the strap and the head 5 in place therein. At the opposite end of the barrel a head 10 is provided having a discharge opening 11. Beneath the head 10 a cap 12 is arranged and a tube 13 is mounted in said cap and has an open end in front of and near the opening 11, so that the blast of air when forced out of the barrel will rush across the open end of the tube. Within the tube 13 a removable tube 14 is arranged which may be used when it is desired to decrease the volume of the spray.

A threaded ring 15 is secured to the cap 12 and to the end of the barrel by means of a strap 16, and a second strap 17 is provided

on the barrel and adapted to support a can 18, preferably of glass, and having a threaded end adapted to fit into the ring 13 and form a tight joint therewith, the open lower end of the tube 13 being opposite the open mouth of the can and immersed in the liquid with which the can is filled. This strap 17 has loops or bends formed therein opposite the space between the pump and the can, and these loops are capable of being pressed outwardly to enlarge the band, and adapting the band for cans of different sizes. There is considerable variation in the diameter of these fruit jars or cans and it is quite important to have a supporting bend which is capable of sufficient expansion to accommodate all the different sizes of jars or cans. Any suitable can or receptacle may be used, but for convenience, I prefer to employ the ordinary glass fruit jar which can be purchased in any market and easily replaced when broken. The glass jar enables the user of the sprayer to ascertain at any time the amount of liquid in the can and it is more easily kept clean than a can of metallic construction. Between the ring 15 and the shoulder on the neck of the can I provide the usual rubber gasket 19 which insures a tight joint at that point preventing the entrance of air and the escape of the liquid. I prefer to provide a flexible loop 20 on the barrel into which the hand is inserted while using the device.

In operation, the piston is moved back and forth in the barrel and the blast of air passing across the open mouth of the tube 13 will cause the atomization of the liquid in the can and deliver it in a fine spray upon the plants, vegetables or trees which it is desired to treat.

I claim as my invention:

1. In a spraying device, the combination, with a pump barrel and a plunger therefor having an operating rod and handle, of a head fitting within one end of said barrel and closing the same and having a central opening wherein said rod is slidable and a strap arranged to extend across said head and having ends bent at right angles, substantially to the middle portion of said strap, said ends terminating in inwardly turned points that are adapted to enter slots in the

wall of said barrel and thereby lock said head therein.

2. The combination, with a pump barrel and plunger, of a can adapted to contain
5 liquid, a strap encircling said barrel and can, said strap having loops formed therein opposite the space between said can and barrel, said loops being capable of outward

bending to permit enlargement of said bend and adapt it for cans of different diameters. 10

In witness whereof, I have hereunto set my hand this 5th day of June 1907.

RUSSELL B. WILLIAMSON.

Witnesses:

WM. TURCK,

EMMA TURCK.