

Sept. 13, 1960

H. E. RUBERY

2,952,257

POULTRY VACCINATING MACHINE

Filed Oct. 3, 1958

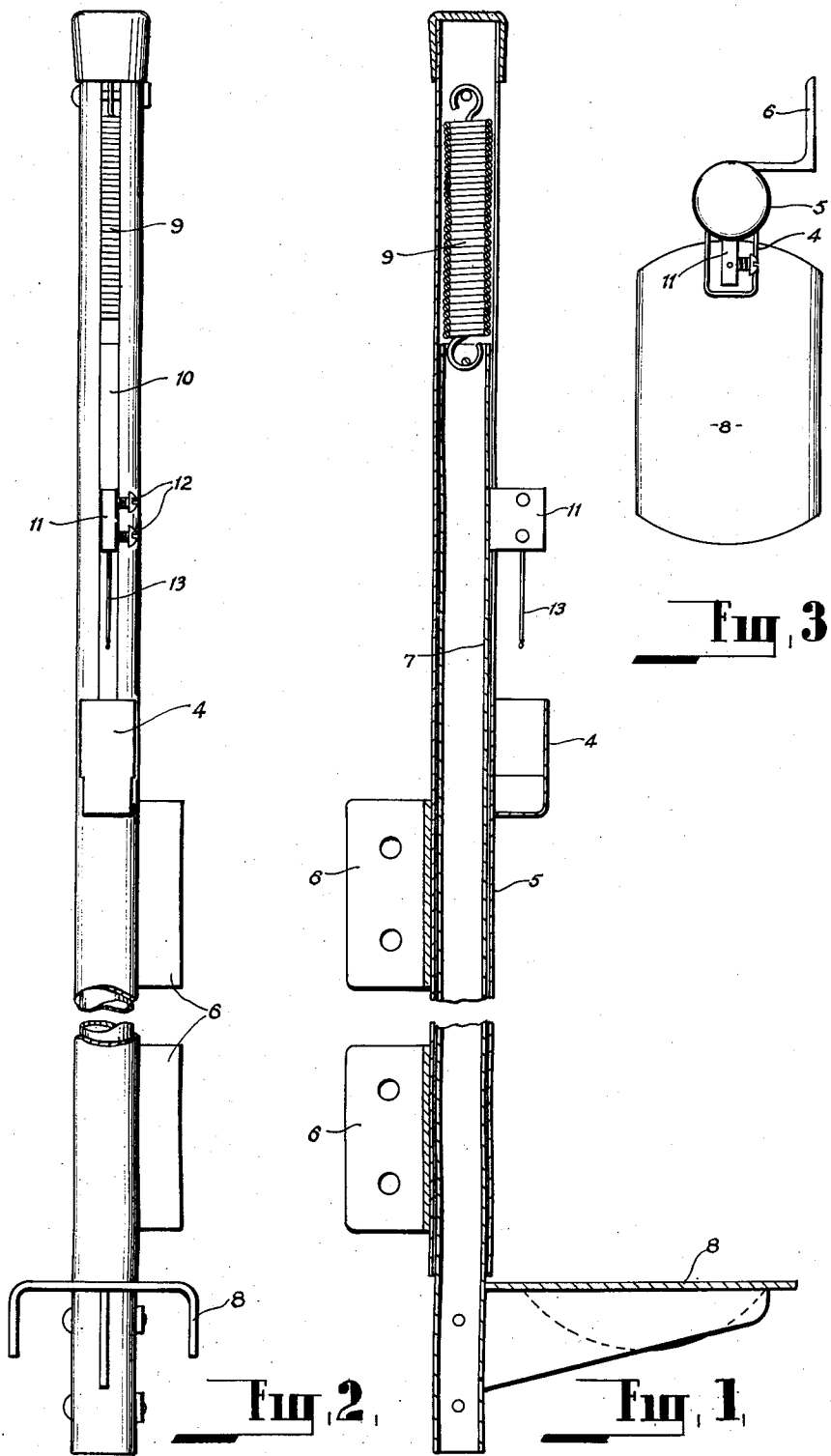


Fig. 2

Fig. 1

Fig. 3

1

2,952,257

POULTRY VACCINATING MACHINE

Herbert Ernest Rubery, Morrison Road, Swan View,
Western Australia, Australia

Filed Oct. 3, 1958, Ser. No. 765,169

Claims priority, application Australia Oct. 9, 1957

6 Claims. (Cl. 128—253)

This invention relates to a poultry vaccinating machine.

At present the vaccinating of poultry throughout Australia is done manually, making it a laborious and time-consuming operation for at least two persons. One person holds the bird while the other person applies the vaccine.

The object of the present invention is to provide a machine which will enable birds to be vaccinated with a minimum of effort.

Broadly, the invention resides in a poultry vaccinating machine comprising a container for a supply of vaccine, a needle positioned above the container, and reciprocating means for pushing the needle through portion of a bird's body held above the container and into the vaccine in the container so that a quantity of vaccine is deposited on the bird's body on the return stroke of the needle.

The invention will be better understood by reference to the following description of one specific embodiment thereof as shown in the accompanying drawings, wherein:

Fig. 1 is a sectional elevation;

Fig. 2 is a front view; and

Fig. 3 is a plan view.

As shown in the drawings, a bottle holder 4 appropriately shaped to receive a bottle of vaccine (not shown) and hold it firmly in place is secured towards the upper end of a first tubular member 5 provided with brackets 6 to enable it to be mounted on a post or wall. A second tubular member 7 is slidably mounted in the first tubular member. The lower end of the second tubular member 7 projects beyond the lower end of the first tubular member 5 and is provided with a foot pedal 8 while the upper end of the second tubular member is connected to one end of a coiled spring 9, the other end of which is connected to the top of the first tubular member. A portion of the wall of the first tubular member above the bottle holder is provided with a slot 10 to expose the upper portion of the second tubular member. A needle holder 11 is secured to the exposed upper portion of the second tubular member, the needle holder being provided with set screws 12 or other suitable means for holding the needle 13 in the desired position.

In operation, the web portion of one wing of a bird is held over the top of the bottle of vaccine in the bottle holder and the foot pedal pushed down, extending the coiled spring. The needle is pushed downwardly through the web into the bottle of vaccine. When the foot pedal is released, the needle returns to its initial position under the action of the spring. As the needle is withdrawn from the web, some of the vaccine adhering thereto is deposited in the web, thereby vaccinating the bird.

Preferably the top of the bottle holder projects above the top of the bottle to support the web of the bird. Alternatively the bottle holder is fitted with a cover plate which is provided with an orifice or passage for the needle and which acts to support the web of the bird. Also, the bottle holder may be provided with a slot or cut-away portion so that the quantity of vaccine remaining in the bottle is readily visible to the operator.

A machine constructed as described above greatly reduces the time and labour required to vaccinate a flock of birds. For example, with one person operating the machine and one person catching the birds, it is possible to vaccinate as many as 600 birds an hour, whereas with the existing manual procedure three or more persons are

2

required to vaccinate birds at the rate of two hundred an hour.

While the invention has been described with particular reference to one specific embodiment thereof, it is not limited thereto. Many modifications are possible.

I claim:

1. A poultry vaccinating machine comprising a bottle holder adapted to receive a bottle of vaccine secured to the upper end of a first tubular member, a second tubular member slidably mounted in the first tubular member, a needle holder secured to the second tubular member and projecting through a slot in the first tubular member, and means for moving the second tubular member with respect to the first tubular member so that the needle is pushed downwardly into the bottle of vaccine.

2. A poultry vaccinating machine comprising a bottle holder adapted to receive a bottle of vaccine secured to the upper end of a first tubular member, a second tubular member slidably mounted in the first tubular member, a needle holder secured to the second tubular member and projecting through a slot in the first tubular member, and means for moving the second tubular member with respect to the first tubular member so that the needle is pushed downwardly into the bottle of vaccine, the upper end of the second tubular member being connected to one end of a coiled spring, the other end of which is connected to the upper end of the first tubular member.

3. A poultry vaccinating machine comprising a bottle holder adapted to receive a bottle of vaccine secured to the upper end of a first tubular member, a second tubular member slidably mounted in the first tubular member, a needle holder secured to the second tubular member and projecting through a slot in the first tubular member, and means for moving the second tubular member with respect to the first tubular member so that the needle is pushed downwardly into the bottle of vaccine, the upper end of the second tubular member being connected to one end of a coiled spring, the other end of which is connected to the upper end of the first tubular member, and the lower end of the second tubular member projecting beyond the lower end of the first tubular member and being provided with a foot pedal.

4. A poultry vaccinating machine as claimed in claim 3 wherein the first tubular member is provided with brackets to enable it to be mounted on a post or wall.

5. A poultry vaccinating machine comprising a bottle holder adapted to receive a bottle of vaccine secured to the upper end of a first tubular member, the top of the bottle holder projecting above the top of the bottle, a second tubular member slidably mounted in the first tubular member, a needle holder secured to the second tubular member and projecting through a slot in the first tubular member, and means for moving the second tubular member with respect to the first tubular member so that the needle is pushed downwardly into the bottle of vaccine.

6. A poultry vaccinating machine comprising a bottle holder adapted to receive a bottle of vaccine secured to the upper end of a first tubular member, a second tubular member slidably mounted in the first tubular member, a needle holder secured to the second tubular member and projecting through a slot in the first tubular member, and means for moving the second tubular member with respect to the first tubular member so that the needle is pushed downwardly into the bottle of vaccine, and a cover plate provided with an orifice or passage for the needle positioned above the bottle holder.

References Cited in the file of this patent

UNITED STATES PATENTS

2,575,648 Willson ----- Nov. 20, 1951