L. H. ARCHARD.

WEED EXTERMINATING DEVICE.

APPLICATION FILED JULY 20, 1912.

1,054,485. Patented Feb. 25, 1913.

Fig. 1.

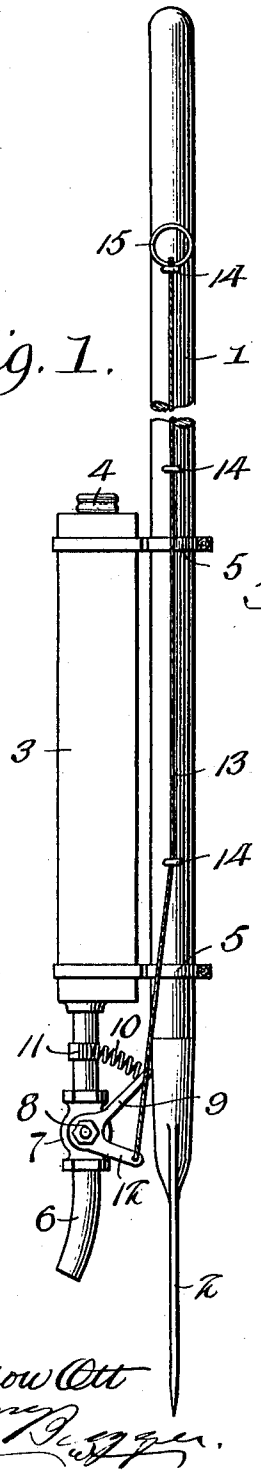


Fig. 2.

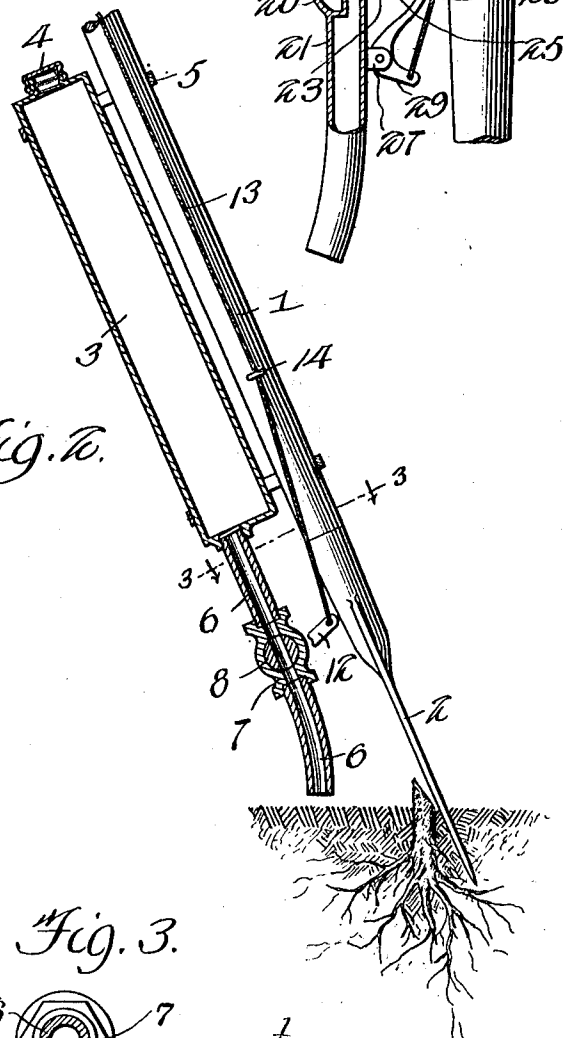
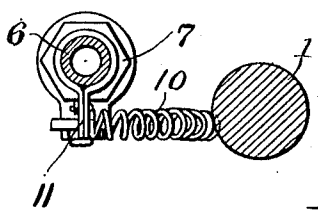


Fig. 4.

Fig. 3.



Witnesses

Harrison Ott

Inventor

L. H. Archard

By Victor J. Evans

Attorney

UNITED STATES PATENT OFFICE.

LEONIDAS H. ARCHARD, OF WYMORE, NEBRASKA.

WEED-EXTERMINATING DEVICE.

1,054,485. Specification of Letters Patent. Patented Feb. 25, 1913.

Application filed July 20, 1912. Serial No. 710,634.

To all whom it may concern:

Be it known that I, LEONIDAS H. ARCHARD, a citizen of the United States, residing at Wymore, in the county of Gage and State of Nebraska, have invented new and useful Improvements in Weed-Exterminating Devices, of which the following is a specification.

This invention relates to devices for exterminating weeds and particularly to that class of weed exterminators which are provided with cutting devices and with means for applying to the roots of weeds that have been cut a liquid or solution of some kind which will effectively and permanently destroy the weed.

The present invention has for its object to produce a simple and effective device of the class described including a liquid receptacle having a valved discharge spout and valve actuating means.

A further object of the invention is to simplify and improve the construction and arrangement of the component parts of the device.

With these and other ends in view which will readily appear as the nature of the invention is better understood, the same consists in the improved construction and novel arrangement and combination of parts which will be hereinafter fully described and particularly pointed out in the claims.

In the accompanying drawing has been illustrated a simple and preferred form of the invention, it being, however, understood that no limitation is necessarily made to the precise structural details therein exhibited, but that changes, alterations and modifications within the scope of the claims may be resorted to when desired.

In the drawing,—Figure 1 is a side elevation of a device constructed in accordance with the invention. Fig. 2 is a side elevation, partly in section, showing the invention applied in operative position adjacent to a weed which has been cut. Fig. 3 is a sectional detail view taken on the line 3—3 in Fig. 2. Fig. 4 is a sectional detail view illustrating a modification.

Corresponding parts in the several figures are denoted by like characters of reference.

A handle 1 of suitable dimensions is provided at its lower end with a spade or cutting tool 2. A receptacle 3 having a screw cap or cover 4 is mounted on the handle 1 a suitable distance above the cutting tool 2 by means of clamps 5. The receptacle 3 has at its lower end a discharge spout 6 provided with a valve 7, the stem of which, 8, is provided with a bell crank, one arm of which, 9, extends upwardly and is pressed by a spring 10 which is interposed between the lever arm and a seat 11 on the spout 6, the tendency of said spring being to force the lever arm 9 in the direction of the handle 1 which obstructs the further movement of said lever arm. When the lever arm 9 is forced by the spring 10 into engagement with the handle 1, the valve will be in a position to obstruct the passage of liquid through the spout 6. The other arm 12 of the bell crank which extends from the valve stem at an angle to the arm 9 is connected with the lower end of an operating member consisting of a cord or wire 13 which may be guided through keepers 14 on the handle and which is provided at its upper end with a ring or link 15 to receive the finger of the operator.

In Fig. 4 a modified form of the valve has been shown. Under the construction shown in said figure, the valve 20 which obstructs the flow of liquid through the tube or nozzle 21 is provided with a stem 22 that extends through a stuffing box 23 and is provided with a stop member, such as a button or a pin 24, between which and the stuffing box a spring 25 is coiled on the valve stem to force the valve in the direction of its seat 26. A bell crank, which is fulcrumed on a lug 27 that projects laterally from the tube 21, has one arm 28 extended in the path of the valve stem 22, and the other arm 29 of the bell crank is connected with the cord or wire 13, whereby said bell crank may be actuated to unseat the valve, as will be readily understood.

In the operation of this device, the operator standing in an upright position and grasping the handle of the implement with one hand, places his forefinger in the ring or link 15. The cutting tool 12 is utilized for severing the stem of the weed, and the action of severing such stem, as will be seen in Fig. 2, will bring the end of the discharge nozzle 6 in close proximity to the root of the plant. By pulling on the ring or link 15 with his forefinger, the operator may now open the valve, thus causing a portion of the contents of the receptacle to be discharged upon the root of the plant. Any well known liquid or solution may be used

which will serve to effectually exterminate the plant to the root of which it is applied.

Having thus described the invention, what is claimed as new, is:—

1. In a device of the class described, a handle having a cutting tool, a receptacle mounted on said handle and having a discharge spout, a valve to regulate the discharge of liquid passing through the spout, said valve having a stem provided with two arms substantially at right angles to one another, a spring whereby one of the arms is forced in the direction of the handle whereby it is obstructed, and a suitably guided operating member connected with the other arm and having a finger ring.

2. A device of the class described including a handle having a cutting tool, a receptacle mounted on the handle and having a discharge spout, a valve to regulate the discharge of liquid passing through the spout, a bell crank for actuating said valve, a spring operating to keep the valve normally in obstructing position, and a suitably guided operating member connected with one arm of the bell crank and having a ring to be engaged by the finger of the operator.

In testimony whereof I affix my signature in presence of two witnesses.

LEONIDAS H. ARCHARD.

Witnesses:
ALBERT ARCHARD,
C. L. CLARY.