No. 839,810. PATENTED JAN. 1, 1907.

E. F. CAMERON.

WEED EXTERMINATOR.

APPLICATION FILED JULY 19, 1906.

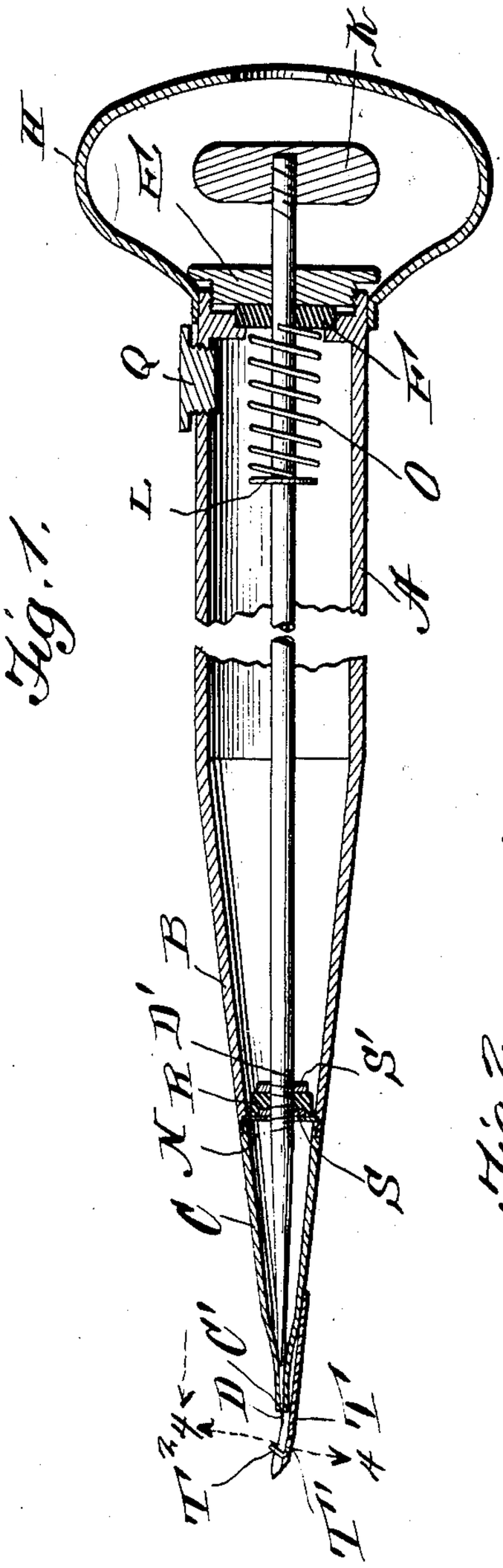

Fig. 1.

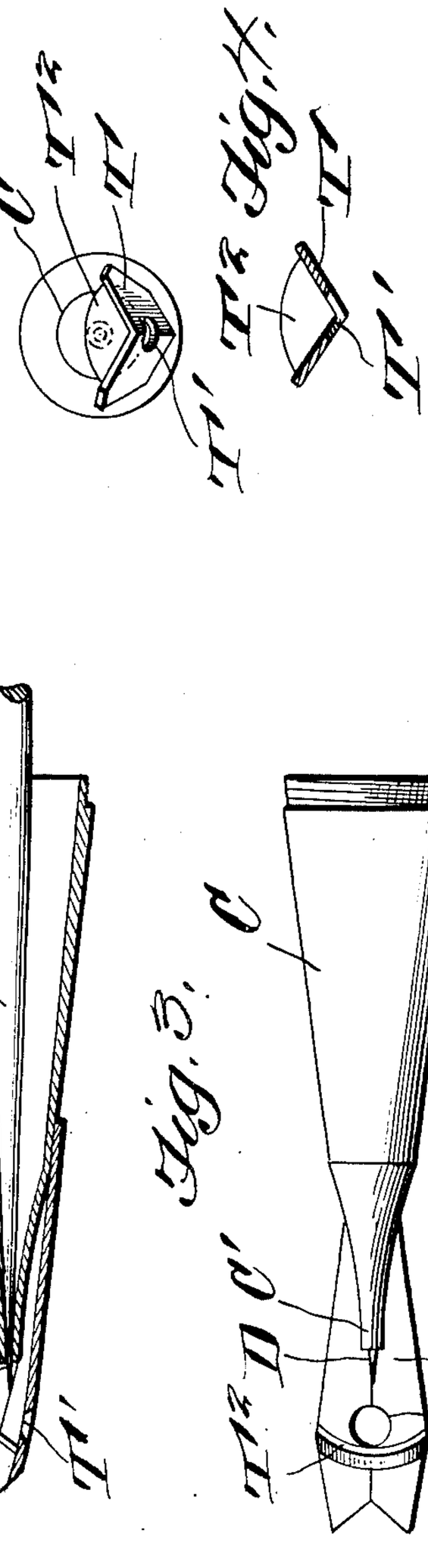

Fig. 5.

Fig. 4.

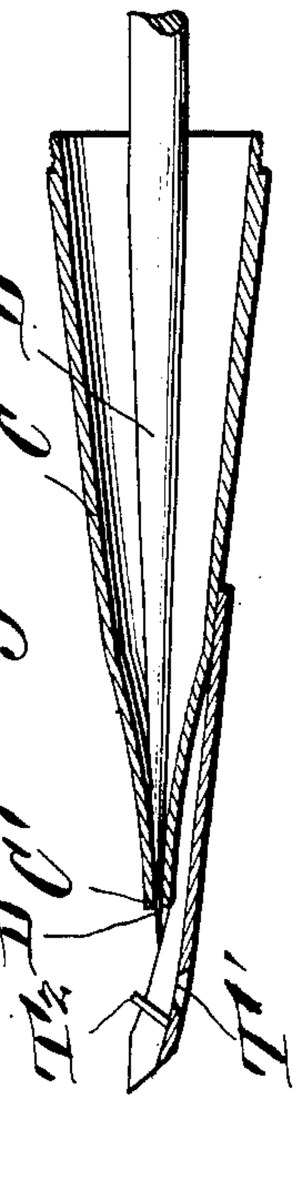

Fig. 2.

Fig. 3.

Witnesses
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EDWARD F. CAMERON, OF HELENA, MONTANA.

WEED-EXTERMINATOR.

No. 839,810. Specification of Letters Patent. Patented Jan. 1, 1907.

Application filed July 19, 1906. Serial No. 326,905.

To all whom it may concern:

Be it known that I, EDWARD F. CAMERON, a citizen of the United States, residing at Helena, in the county of Lewis and Clark and State of Montana, have invented certain new and useful Improvements in Weed-Exterminators; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in apparatus for exterminating noxious weeds and destroying parasites, and comprises a tube having a nozzle at one end, through which a needle-valve projects, and in the provision of a knife having an angled cutting edge and ribbed to allow the liquid which is dispensed from the tube to pass through an aperture in the knife and upon the plant which has been severed by the knife.

The invention comprises various other details of construction and combinations and arrangements of parts, which will be hereinafter fully described and then specifically defined in the appended claims.

I illustrate my invention in the accompanying drawings, in which—

Figure 1 is a central longitudinal sectional view through my invention. Fig. 2 is an enlarged detail view of the nozzle. Fig. 3 is a front elevation of the nozzle. Fig. 4 is a cross-sectional view on line 4 4 of Fig. 1, and Fig. 5 is a top plan view of the nozzle.

Reference now being had to the details of the drawings by letter, A designates a tube, which may be of any size or length and has a portion thereof tapered, as at B. C designates a nozzle which is fastened to said tube and tapers continuously with the tapering portion of the latter and terminates in a point C′, having a minute opening through which the needle-point D at the end of the rod D′ passes. The opposite end of the tube is provided with a threaded plug E, and interposed between said plug and the end of the tube is a suitable washer F, adapted to make the joint tight to prevent any leakage therefrom. H designates a handhold which is fastened to the end of the tube to which said plug is fastened. Said plug is centrally apertured to receive the rod D′ and is provided with a knob K, having threaded connection therewith.

L designates a disk which is fixed to the rod D′, and O is a coil-spring interposed between said disk L and the washer F, serving normally to hold the nozzle closed. Q designates a threaded plug utilized as a closure to a filling-aperture whereby poisonous liquid may be poured into the tube. N designates a disk which is fastened to the inner tapering wall of the tube and serves as a valve-seat. R designates an elastic valve which is held by the threaded disks S and S′ upon the rod D′. T designates a knife which is secured to said nozzle, and a portion of said knife, which is angular, projects beyond the end of the nozzle. Said knife, which has an angled cutting edge, is preferably longitudinally troughed and is provided with an opening T′ in the bottom of the trough a short distance from the angled cutting end thereof. A curved guard T^2 rises from the upper surface of the knife and is adjacent to the forward marginal edge of the opening T′ and is disposed at an inclination to said knife, the object of said guard being to deflect the liquid which is dispensed from the nozzle and cause the same to run through the opening T′ upon the weed which has been severed by the cutting edge of the knife. It will be noted that the under edge of said opening is countersunken for the purpose of preventing the hole being easily clogged up.

In operation the device should be held at an inclination, preferably forty-five degrees, and the cutting edge of the knife be inserted underneath the surface of the ground and caused to sever the root of the weed adjacent to the surface of the ground, the shield pushing back the top of the weed and protecting the hole in the knife. This brings the top of the root immediately under the hole. The knob at the end of the rod is then drawn up slightly with the fingers of the operator and a few drops of the liquid dispensed, which, striking the shield, will be deflected thereby through the hole in the knife directly upon the severed root without the poisonous liquid coming in contact with the grass about the weed.

From the foregoing it will be noted that by the provision of the device shown and described a simple and efficient means is afforded for effectually killing weeds, parasites, &c., by the simple cutting of the root and applying the poisonous liquid thereto

without in any way affecting the surrounding blades of grass.

What I claim is—

1. A device for destroying noxious weeds and exterminating parasites, comprising a tube having a nozzle, a movable rod mounted within said tube and provided with a needle-valve extending through said nozzle, an apertured knife fixed to said nozzle, and a guard for deflecting the liquid dispensed from the nozzle, causing the same to pass through the aperture of said knife, as set forth.

2. A device for destroying noxious weeds and exterminating parasites, comprising a tube having a nozzle, a movable rod mounted within said tube and provided with a needle-valve extending through said nozzle, an angled knife fixed to said nozzle and projecting beyond the end thereof, the upper surface of said knife being troughed and apertured adjacent to its end, the under marginal edge of the aperture being countersunken, and a guard rising from the upper face of the knife adjacent to said aperture, as set forth.

3. An apparatus for exterminating weeds, comprising a tube having a nozzle, a rod mounted within said tube and having a needle-point extending through the nozzle, a valve-seat within the tapering portion of the tube, a valve mounted upon said rod and adapted to contact with said seat, a disk fixed to said rod, a threaded plug at the end of the tube and through which said rod passes, a spring interposed between said disk and plug, a knife fixed to the nozzle, and a guard rising adjacent to the marginal edge of an opening in said knife, as set forth.

4. An apparatus for exterminating weeds, comprising a tube having a nozzle, a rod mounted within said tube and having a needle-point extending through the nozzle, a valve-seat within the tapering portion of the tube, a valve mounted upon said rod and adapted to contact with said seat, a disk fixed to said rod, a threaded plug at the end of the tube through which said rod passes, a spring interposed between said disk and plug, a knob having threaded connection with the end of said rod, a handhold upon the tube, an angled knife fixed to said nozzle and projecting beyond the end thereof and provided with an aperture, the under marginal edge of which is countersunken, a curved guard rising from the knife adjacent to the marginal edge of said aperture, as set forth.

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

EDWARD F. CAMERON.

Witnesses:

A. WINKELMAN,

ALBAN NIXON.