Aug. 19, 1952 W. C. FENTON 2,607,164

ELECTRIC DEVICE TO BRING EARTHWORMS TO THE SURFACE OF THE GROUND

Filed March 10, 1948

Fig. 1.

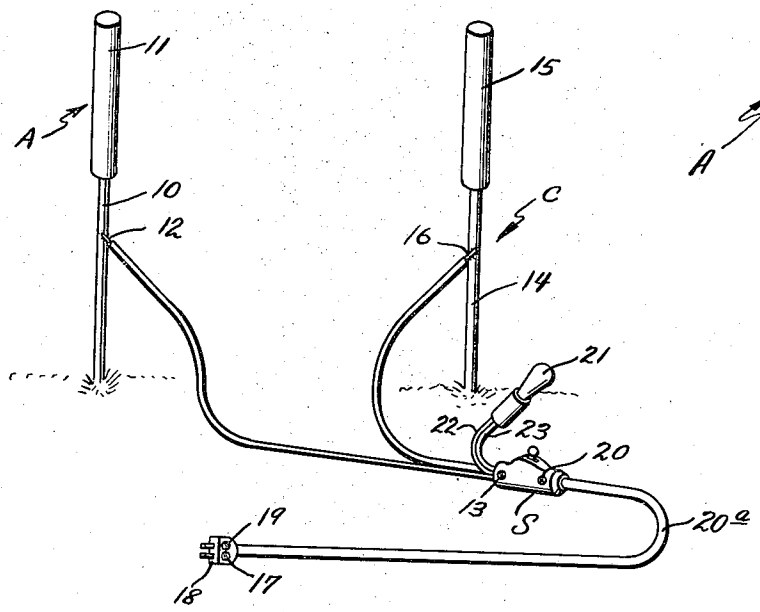


Fig. 2.

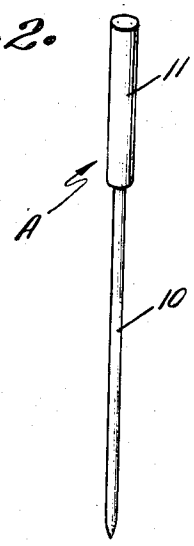


Fig. 3.

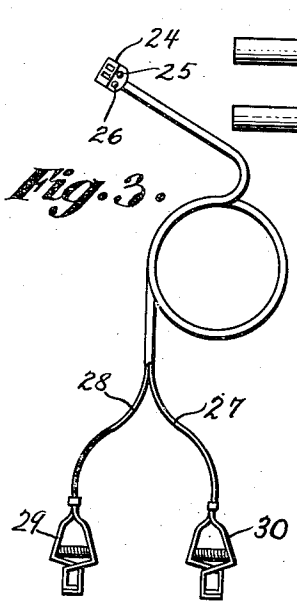
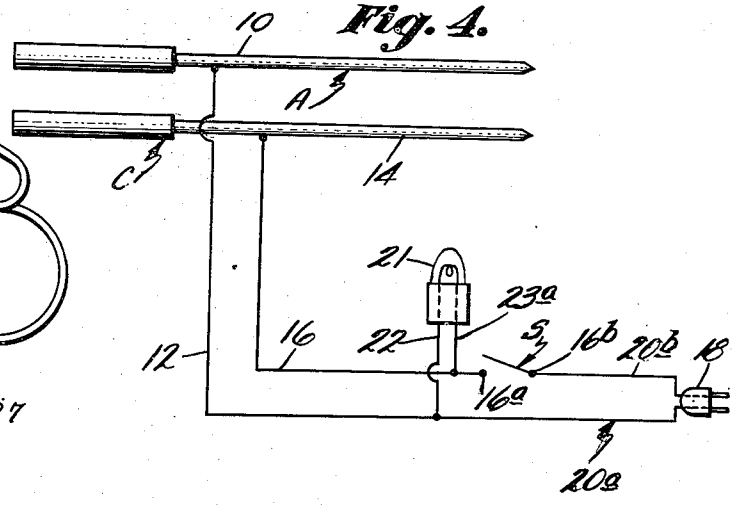


Fig. 4.



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ELECTRIC DEVICE TO BRING EARTHWORMS TO THE SURFACE OF THE GROUND

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1 Claim. (Cl. 47—1.3)

1

My invention relates to electrocultural devices adapted to bring earth worms and the like to the surface of the ground and an object of my invention is to provide a device of the character indicated above, which may be energized by connecting it to an outlet of a current or to an internal combustion engine or the like.

Another object of my invention is to provide a device of the character indicated above, which is equipped with a pilot light to indicate, if the electric current passes from the anode of the device through the ground to the cathode.

Other objects of my invention not specifically mentioned may appear in the following specification describing it with reference to the accompanying drawing illustrating a preferred embodiment of my invention. It is, however, to be understood, that my invention is not to be limited or restricted to the exact construction and combination of parts described in the specification and shown in the drawing, but that such changes and modifications can be made which fall within the scope of the claim appended hereto.

In order that my invention may be better understood I will now proceed to describe the same with reference to the accompanying drawing, in the several figures of which similar parts are indicated by similar reference characters and in which:

Figure 1 is a view in perspective of an electrocultural device embodying the invention;

Figure 2 is a view in perspective of one of the anodes herein employed; and

Figure 3 is a view in plan and of a diagrammatic character of a modification of the invention.

Figure 4 shows the wiring diagram for the device.

The electrocultural device to bring earth worms and the like to the surface of the ground forming the subject matter of my invention comprises an anode A consisting of a pointed metal rod 10 having a non-conducting handle 11. An insulated electric wire 12 is secured on and electrically connected with the anode rod 10 and leads to and through a switch casing S. A cathode C consists of a pointed metal rod 14 having a non-conducting handle 15. An insulated electric wire 16 is secured to and electrically connected with the cathode rod 14. The switch is of a conventional type having two separable casing portions which are secured together by transverse screws 13 and 20.

The electric wire 12 comprises one of two wires forming the cable 20*a* and this wire 12 passes

2

directly through the switch S to and is electrically connected with the terminal in a conventional type of plug 18 which, as is well known, usually comprises two casing sections which are joined together by transverse screws, here designated 17 and 19.

The wire 16 is electrically connected within the switch casing at its other end to one of the two switch terminals designated 16*a* in the wiring diagram. The other switch terminal which is designated 16*b* in the wiring diagram, has attached thereto the other one of the two wires which are in the cable 20*a*, such other wire being shown in the circuit diagram only and designated 20*b*.

No details have been shown of the inside parts of the switch S in view of the fact that such a switch is of standard well known construction as above pointed out and it is not believed that such detailed illustration is required for the proper understanding of the connections referred to.

When the anode and cathode rods 10 and 14 respectively are inserted in the ground at a requisite distance from each other, the plug 18 is connected in the conventional manner with a suitable source of electricity (not shown) and the switch S is closed. The current flows through the ground from the anode rod 10 to the cathode rod 14 driving earth worms and the like, which are present in the ground, to the surface thereof.

The efficient distance between the anode and cathode rods depends on the degree of moisture in the ground, since wet ground is a better conductor than dry ground, and on the power of the electric current. In order to ascertain if the current flows from the anode rod to the cathode rod, an electric light 21 is provided and is connected by means of the wires 22 and 23, connected with and across the conductors 12 and 16, between the switch S and the electrodes 10 and 14, so that the electric light 21 will be energized when the switch S is closed and the current flows from the anode rod to the cathode. Preferably, a neon light is used for this purpose, since neon lights are energized by direct current as well as by alternating current.

When the electrocultural device of my invention is to be used in the field where no outlet for an established source of electricity is available, a socket coupling 24 is coupled with the electric plug 18. With the two terminals (not shown) in the socket coupling 24, are connected the insulated electric wires 27 and 28 and on the free end of each of these wires a metal clasp 29 and

30 respectively, or the like, is secured. One of said clasps is connected with one of the spark plugs of an internal combustion engine (not shown), and the other clasp is connected with a metal part of the vehicle on which the engine is mounted. Then the engine is started.

The above description shows clearly that the electrocultural device of my invention works in dry ground as well as in wet ground and drives earth worms or the like to the surface of the ground in bright daylight, so that they can be collected easily. It also shows that my device may be energized by direct or alternating current.

I claim:

A device of the character described for driving worms from the ground, comprising two metal electric current conducting rods adapted to be thrust into the ground in spaced relation, a terminal plug having two terminals for connection with opposite sides of a current supply line, a current conducting wire connected between one rod and a terminal, a current conducting wire

and a switch therein connected between the other rod and the other one of the terminals, and an electric lamp connected across the wires on the side of the switch nearest to the rods.

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