Feb. 7, 1939. C. P. RIEPL 2,146,229

ELECTRICALLY CHARGED STOCK ENCLOSURE

Filed Jan. 30, 1935

Fig. 1.

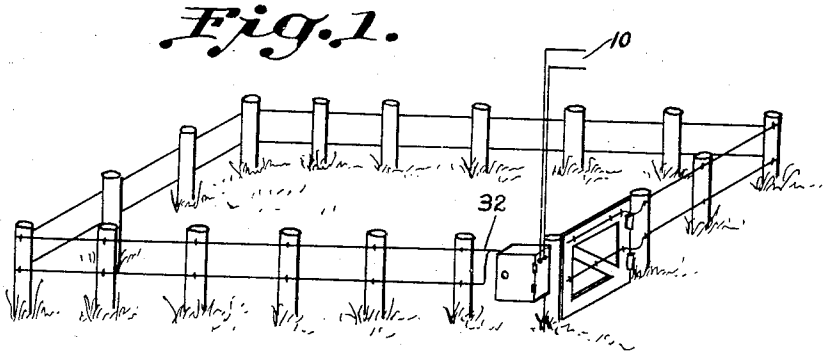
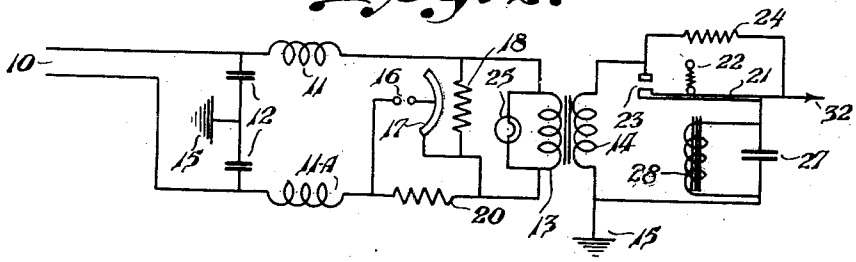


Fig. 2.



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ELECTRICALLY CHARGED STOCK ENCLOSURE

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2 Claims. (Cl. 256—10)

My invention pertains to stock enclosures that are electrically charged and more particularly to single or multiple electrically charged wires mounted on supports, encircling a field or yard, thereby forming an enclosure.

The object of my invention is to provide an enclosure that has the electricity controlled in such a manner that it will not prove fatal to the animal contacting it.

Other and further objects of my invention will become readily apparent to persons skilled in the art from a consideration of the following description when taken in conjunction with the drawing, wherein

Fig. 1 illustrates the enclosure in perspective, with the electrical control unit mounted on one of the posts or supports.

Figure 2 illustrates the method employed to vary the current by shorting a resistor.

Similar characters of reference indicate corresponding parts throughout the several views, and referring now to the same, character 10, indicates the current supply lines to the unit. Choke coils are shown by the character 11, and the character 12 indicates condensers. The primary windings of the transformer are indicated by a numeral 13, while the secondary windings or coils of the transformer are shown as 14, on the drawing. The character 15, applies to the ground wire. There is a circuit closing device, on which the contact points are shown as 16, and the metal strip on the circuit closer is indicated as 17. There is a heating element 18, which acts on the metallic strip 17 of the circuit closer, causing same to expand and contract periodically. The character 20, shows a resistor to allow the current to pass when the points are open in the circuit closer, while character 21, indicates the contact arm. Character 22, illustrates a spring to actuate the contact arm. Character 23, indicates contact points, while 24, designates a resistor to pass the current when contact points are opened. Lamps in the circuits are shown as 25. These lamps flash periodically to act as a signal and/or prevent dead shorting of source of supply. Condensers are shown as 27, and the electro-magnets as 28, in the drawing. The actual fence wire is indicated by the numeral 32.

In operation the unit controls the electricity reaching the fence wire in the following manner. Parts 11, 11A and 12 constitute an interference filter, while the parts 16, 17 and 18, compose a conventional type of circuit closer which opens and closes periodically due to the expansion and contraction of the strip 17, acted upon by the heating element 18. The current flows through choke coil 11, and the primary winding 13, of the transformer, back to the supply line 10, through the choke coil 11A. While the current flows through the primary winding 13, it induces a current in the secondary winding 14, of the transformer, which charges the fence.

The illustration in Fig. 2 shows a circuit closer composed of parts 16, 17 and 18, to vary the current periodically through the primary winding 13, of the transformer. This is accomplished by shorting the resistor 20, and varying current is thus induced in the secondary winding 14. It is again varied by the combination of parts 21, 22, 23, 24, 27 and 28, before imparted to the enclosure wire 32. The device for varying the secondary current functions on the principle of a buzzer, but contact points 23, are held open longer due to energy absorbed by the condenser 27. The shorting of the resistor 24, by the points 23, varies the current. This electro-magnetic current varying device completes the cycle comparatively faster than the circuit closer in the primary circuit and the ultimate result is a varied current imparted to the wire forming the enclosure. The lamp 25, acts as a signal device.

I have entered into a detailed description of the construction and relative arrangement of parts embraced in the preferred embodiments of my invention in order to impart a full, clear, and exact understanding of the said embodiments. I do not desire, however, to be understood as confining myself to the said specific construction and relative arrangement of parts inasmuch as in the future practice of the invention, various changes and modifications may be made such as fall within the scope of the invention as defined by my appended claims.

Having thus described my invention, what I claim and desire to secure by Letters Patent in the United States, is:

1. A stock enclosure of the character described, comprising an electric current supply, a contact means for engagement by stock confined in the enclosure, a transformer having a primary winding and a secondary winding, a resistor in series with the said primary winding, a circuit making and breaking device connected across said resistor for varying the current in the said primary winding, and an electro-magnetically operated vibrator in series with the said secondary winding for charging the enclosure contact means.

2. A stock enclosure of the character described, comprising the leads from an electric current supply, a contact means for engagement by stock

confined in the enclosure, a filter circuit including a choke coil in each of the said supply leads, condensers connected across said supply leads, said condensers being grounded, a transformer having a primary winding and a secondary winding, a resistor in series with the said primary winding, a periodically operating circuit closer connected across said resistor for varying current in the circuit of the said primary winding, and an electro-magnetically operated vibrator in series with the said secondary winding for charging the enclosed contact means.

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