E. HEFLIN & W. J. ROBERTS.

VETERINARY APPLIANCE.

APPLICATION FILED OCT. 14, 1913.

1,110,686. Patented Sept. 15, 1914.

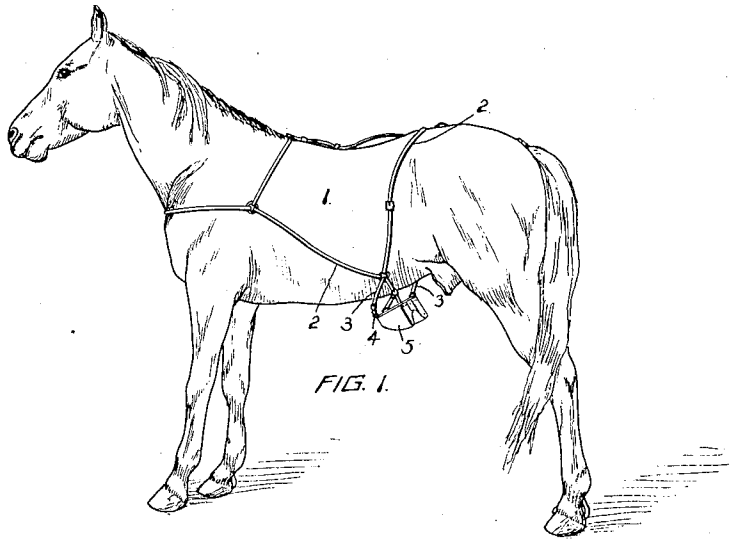


FIG. 1.

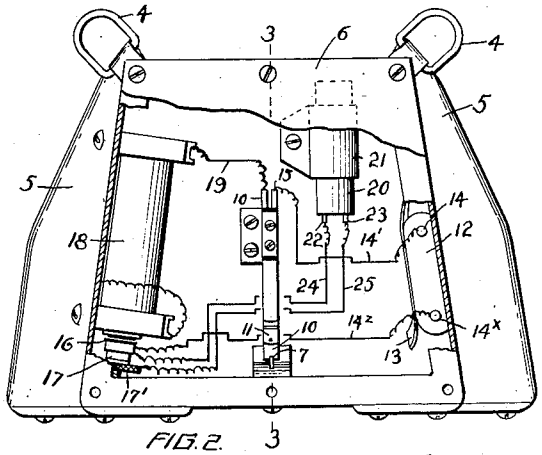


FIG. 2.

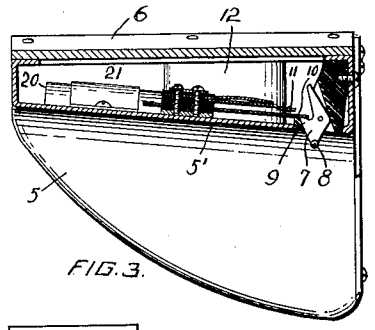


FIG. 3.

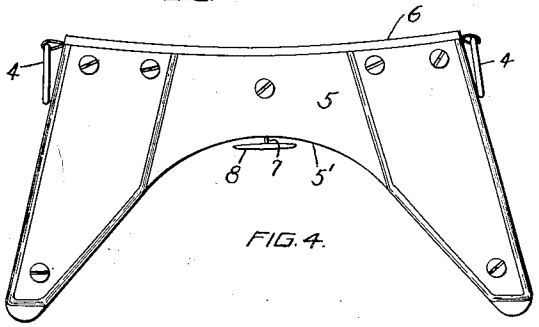


FIG. 4.

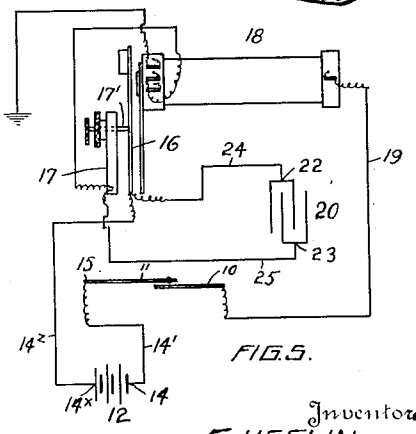


FIG. 5.

Witnesses
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UNITED STATES PATENT OFFICE.

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VETERINARY APPLIANCE.

1,110,686. Specification of Letters Patent. Patented Sept. 15, 1914.

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To all whom it may concern:

Be it known that we, ELLSWORTH HEFLIN and WILLIAM J. ROBERTS, citizens of the United States, residing at Red Oak, in the county of Montgomery and State of Iowa, have invented certain new and useful Improvements in Veterinary Appliances, of which the following is a specification.

Our invention relates to improvements in veterinary appliances and refers particularly to what may be termed a shield or protector for stallions, the object of the invention being the provision of an appliance capable of ready application to the animal, and which will not prove an annoyance or interference, which will be of simple and inexpensive construction, and prove thoroughly efficient and practical for the intended purpose.

With this object in view, our invention consists of a stallion shield or protector embodying novel features of construction and combination of parts for the intended purpose, substantially as shown, described and claimed.

In order that the construction in detail and the operation of our appliance may be understood, and its many advantages be fully appreciated and for a more complete understanding of the improvement, we invite attention to the accompanying drawings.

Figure 1 represents a view of the stallion showing the improvement in position. Fig. 2 represents a bottom plan view of the appliance removed and shown on an enlarged scale, the cover being broken away to disclose details of construction. Fig. 3 represents a sectional view on the line 3—3 of Fig. 2. Fig. 4 represents an end elevation of the appliance, and Fig. 5 represents a diagram view showing the system of wiring and arrangement of the coöperating elements.

Referring by numerals to the drawings, in which similar characters of reference are employed to designate corresponding parts in all the views:

The numeral 1 designates the animal, upon which is properly supported the harness or supporting straps 2, which support the device in proper position and have connected thereto the series of branch straps 3, whose lower ends are secured to the loops 4, carried by the metal casing 5, of the appliance, which loops are retained in place by the cover of the appliance, said cover being curved and preferably made of leather or other suitable material.

It is thus apparent that the appliance is properly suspended from the animal and consists of the metal casing which has its under wall 5′ curved and has mounted in one end the pivoted trigger or contact 7, which is provided at its outer end with a head or enlargement 8. This head or enlargement is adapted to receive contact from the animal and when such contact is made the trigger moves upward and forward bringing the engaging portion 9 thereof in contact with the plate 10, which raises the contact plate into engagement with the contact plate 11.

Within the casing at one side is disposed the dry battery 12, which for convenience in application and removal, is retained in place by the spring clip 13, and from one pole 14 of the battery leads the wire 14′, to the binding post 15 of the contact plate, and from the other pole 14^x of the battery leads the wire 14^z, this wire 14^z leading to the plate 16, adjacent to plate 16, is the plate 17 provided with the adjusting contact 17′, said contact engaging the vibrating plate 16, which is disposed adjacent one end of the coil 18. The other end of the coil is connected by means of the wire 19, with the contact plate 10, and from this construction it will be observed that movement of the pivoted contact brings the spring contact plate upward into engagement with the contact plate 11, establishing a circuit between the battery and contact means, and with the metal conducting casing, causing such metal casing to instantly transmit a shock from the current to the animal. The effect of the coil is to give a vibrating or pricking action to the shock, which is highly desirable for the intended purpose.

The invention through the medium of the contact plate, battery and coil, will produce the desired result, but for further efficiency and for the purpose of conserving the electricity and also continuing the shock, I employ the concentrator or condenser 20, secured to the casing by the loop or bracket 21, and having connection through its binding posts 22 and 23, and connecting wires 24 and 25, with the vibrating contact plate 16. This condenser receives and stores the electricity from the battery and coil and causes a strengthening of the shock.

From the foregoing description, taken in

connection with the drawings, the operation and advantages of our invention will be readily understood and appreciated, and it will be noted that the device is supported in proper position upon the animal, and instantly upon receiving contact by the animal with the pivoted trigger contact, the effect is to close the circuit between the contact means and battery and with the casing, forming an electrode, produce a quick and painful electric shock, and thus attaining in a thoroughly efficient manner the purpose for which the invention is intended.

We claim:

1. A stallion shield or protector, consisting of a casing formed of suitable metal and adapted to be supported in proper position to the animal, a pivoted contact plate mounted in said metal casing and formed with an engagement head, a battery arranged in one side of the casing, a spring clip for detachably securing the battery, contact means in circuit with said battery, a condenser and an induction coil also in circuit with the battery and contact means.

2. A stallion shield or protector, consisting of a metal casing adapted to be supported in proper position upon the animal and consisting of contact plates and a plate pivoted in said casing and having an engagement head and a contact trigger to operate upon the spring contact plates, contact means operated by the animal, a battery and induction coil included in the circuit in connection with said contact means, and a condenser also arranged in said circuit.

In testimony whereof we affix our signatures in presence of two witnesses.

ELLSWORTH HEFLIN.
WILLIAM J. ROBERTS.

Witnesses:
HUBERT BAMFORD,
OTTO BYERS.