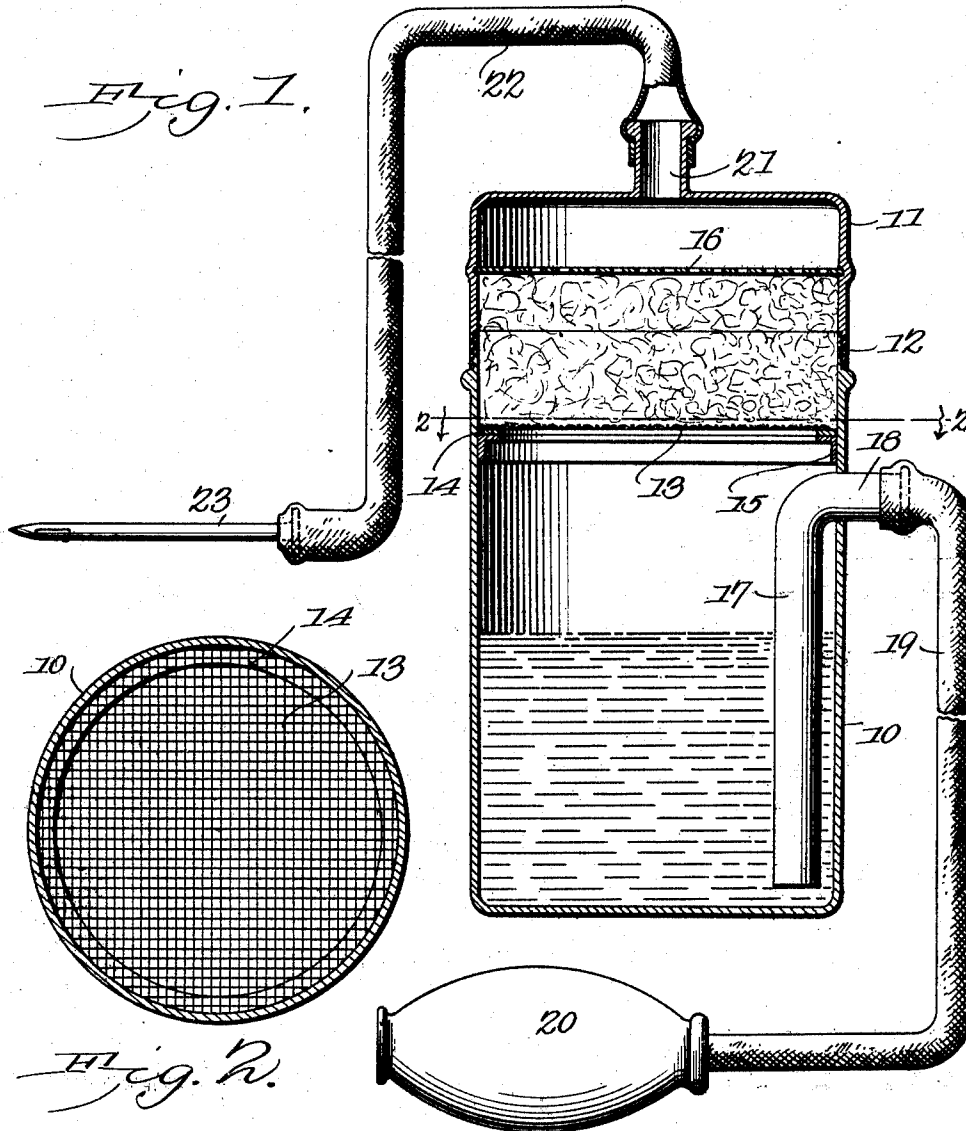


No. 788,577.

PATENTED MAY 2, 1905.

G. B. BLACKMAN.
VETERINARY INJECTOR.
APPLICATION FILED MAR. 29, 1904.



Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE BASS BLACKMAN, OF CHATTANOOGA, TENNESSEE.

VETERINARY INJECTOR.

SPECIFICATION forming part of Letters Patent No. 788,577, dated May 2, 1905.

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To all whom it may concern:

Be it known that I, GEORGE BASS BLACKMAN, a citizen of the United States, residing at Chattanooga, in the county of Hamilton and State of Tennessee, have invented a new and useful Veterinary Injector, of which the following is a specification.

This invention relates to devices for treating air or other gases for charging the same with other elements or for extracting certain predetermined elements therefrom, and has for its object to simplify and improve the construction and produce a device of this character adapted for a variety of purposes and which may be manufactured at small expense and in portable shape.

With these and other objects in view, which will appear as the nature of the invention is better understood, the same consists in certain novel features of construction as hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which corresponding parts are denoted by like designating characters, is illustrated the preferred form of the embodiment of the invention capable of carrying the same into practical operation, it being understood that the invention is not necessarily limited thereto, as various changes in the shape, proportions, and general assemblage of the parts may be resorted to without departing from the principle of the invention or sacrificing any of its advantages, and the right is therefore reserved of making all the changes and modifications which fall within the scope of the invention and the claim made therefor.

In the drawings thus employed, Figure 1 is a sectional longitudinal elevation. Fig. 2 is a transverse section on the line 22 of Fig. 1.

The improved device is adapted for a variety of purposes and for treating air or other gases in a variety of ways, but will generally be employed for medicinal purposes—as, for instance, in treating cows for parturient paresis or apoplexy, commonly called “milk fever,” to which it is more particularly adapted—and by means of which the udders can be readily inflated with oxygen gas, and for the purpose of illustration the improved device

is shown arranged for the above or a similar purpose.

The improved device consists of a receiver 10 of any suitable size or material, having a relatively high cover 11 detachably connected, as by screw-threads, at 12. Supported in the receiver 10 at an intermediate point is a foraminous diaphragm 13, preferably detachable from the casing to provide for the introduction of the charging and sterilizing medium or compound into the receiver. The diaphragm will preferably be provided with a ring-frame 14, resting upon an annular bracket 15, by which means it may be readily supported detachably within the receiver at any desired point, as determined by the location of the bracket. Supported immediately within the cover 11 is another foraminous diaphragm 16, spaced from the diaphragm 13 within the receiver and also spaced from the upper side of the cover member, whereby the apparatus is divided into three compartments—a lower compartment beneath the intermediate diaphragm 13 for the charging compound, an intermediate compartment between the two diaphragms for an absorbent or filtering medium or material, and an upper compartment within the cover above the upper diaphragm, in which the charged air, gas, or other fluid accumulates after passing through the absorbent material.

The means for inducing the passage of air or other fluid to be charged through the sterilizing and filtering mediums consists of a pipe 17 passing through the wall of the receiver and terminating near the bottom of the same and provided exteriorly with a nipple 18, to which a section of hose 19, having an air-bulb 20 of the ordinary construction, is attached.

The cover 11 is provided with a nipple 21, to which a section of hose 22 is attached, terminating in a discharge nozzle or needle 23 or other means for conducting the charged gas to the affected parts.

When it is desired to discharge oxygen gas from the member 23, a supply of peroxid of hydrogen is placed in the receiver-compartment beneath the diaphragm 13 and the intermediate compartment between the diaphragms supplied with absorbent material, such as an-

tiseptic cotton. Air is then forced through the compound in the receiver by compressing the bulb 20, the compound removing deleterious germs or foreign matter from the air and setting free the ozone, which passes through the antiseptic mass between the diaphragms and thence passes as pure ozone to the conductor-hose 22 and discharge member 23. The air is thus thoroughly sterilized and aseptized and passes to the affected parts in the best possible condition to produce the desired results. All danger of infection is thus obviated, and as the udders of cows, as well as other parts which may require the treatment, are very susceptible to infection from disease germs the apparatus above described will be found very efficacious in treating diseases which can be reached thereby.

Of course it will be understood that compounds and materials other than those enumerated may be employed in the receiver and between the diaphragms for producing other effects or results than those cited without departing from the principle of the invention.

By this simple arrangement shown it will be obvious that the mass of absorbent material may be tightly compressed in the com-

partment between the diaphragms by merely screwing the cover down upon the receiver.

By this simple device a farmer or stock-raiser can have at hand a convenient and readily-operated device whereby diseases of the class noted can be quickly and easily treated and at small expense and without the necessity for delay incident to calling in the services of a veterinarian or other practitioner.

Having thus described the invention, what is claimed is—

A device of the class described comprising a receiver to contain a sterilizing liquid, spaced foraminous diaphragms disposed above the liquid, an antisepticized filtering medium arranged between the diaphragms, an injecting-nozzle operatively connected with the device above the filter, and means for forcing air through the liquid and the filtering medium and through the nozzle.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

GEORGE BASS BLACKMAN.

Witnesses:

GEORGE V. THAYER,
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