

W. & A. M. HENDERSON.
CAPSULE.
APPLICATION FILED NOV. 2, 1910.

1,024,259.

Patented Apr. 23, 1912.

Fig. 1.

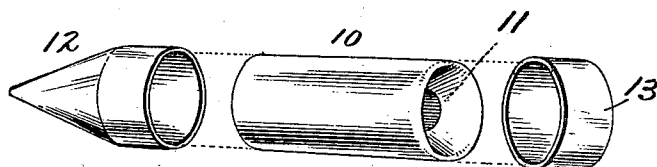
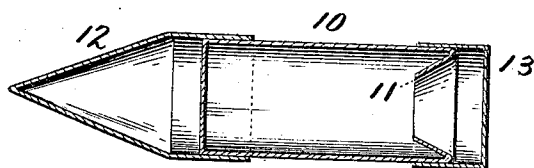


Fig. 2.



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UNITED STATES PATENT OFFICE.

WILLIAM HENDERSON AND ALEXANDER M. HENDERSON, OF AURORA, ILLINOIS.

CAPSULE.

1,024,259.

Specification of Letters Patent.

Patented Apr. 23, 1912.

Application filed November 2, 1910. Serial No. 590,401.

To all whom it may concern:

Be it known that we, WILLIAM HENDERSON and ALEXANDER M. HENDERSON, of Aurora, in the county of Kane and in the State of Illinois, have invented a certain new and useful Improvement in Capsules, and do hereby declare that the following is a full, clear, and exact description thereof.

This invention relates to breeding appliances, and more particularly to such as are used in the impregnation of mares.

The object of the invention is to provide a device for the purpose stated which will possess the desirable qualities of great efficiency, simplicity, capability of use even by a layman, and security against infection of the mare, and to this end the invention consists in the impregnating capsule constructed substantially as hereinafter specified and claimed.

Referring to the annexed drawings: Figure 1 is a perspective view of a capsule embodying the invention, the several parts being shown as separated; Fig. 2 is a longitudinal section thereof, the parts being assembled.

As preferably constructed, the device is composed of three members made of gelatin. One is the capsule proper, or body, 10 of tubular form, with one end closed and the other open, but with an inwardly turned, tapering or conical flange or rim 11, that is joined at its larger end to the end of the tube by a convexly rounded portion. Each of the other members is a cap, one cap 12 having a tapering or conical form with a short cylindrical open end to slip over the closed end of the body 10; and the other cap 13 being of blunt, cylindrical form, and adapted to slip over the open end of the capsule body 10 to form a closure.

The manner of use of the capsule is as follows:—The mare is served by a stallion. If she is not a sure breeder, an attendant places a capsule without the closure cap 13, in the palm of his hand, and then inserts it in the vagina and scoops up therefrom some

of the semen, which readily enters the open end of the capsule body and is retained therein by the rim or flange 11, even if the opening is turned downward. Moreover, the rounded edge that is formed by the intumed flange prevents laceration or injury of the floor of the vagina from the scooping operation. Again the intumed flange or rim affords a good bearing for the end of the finger so that the latter can effectually close the opening by being placed therein and access of air to the interior of the capsule be prevented, which is desirable when transferring semen from one mare to another, for this is one of the uses to which the invention may be put, so that the service of one mare may be used where more than one mare is to be bred; it being possible for five or six mares to be thus bred. The capsule being charged with semen by the scooping operation described, it is inserted into the uterus of the mare, and left there, where it will dissolve and free the semen. Its insertion is rendered easy by the tapering pointed cap, which dilates the neck of the uterus gradually and easily, and its presence in the uterus causes the latter to contract and so prevent the escape of the semen.

A capsule, of course, is used but once, and its superiority in this regard over the use of a syringe that is repeatedly used will be apparent in that danger of infection is avoided, and no breeding place for bacteria is afforded. The opening-closing cap is used only when the semen is to be sent long distances, as by mail or express. If need be, it could be sent a thousand miles.

By means of this invention mares regarded as sterile may be gotten in foal.

What we claim as our invention, is:—

1. A soluble capsule comprising a hollow body that has an opening with an inwardly turned flange.

2. A soluble capsule comprising a hollow body with an exterior that is rounded and which is elongated and has at one end an opening with an inwardly turned flange.

3. A soluble capsule comprising a hollow body with an exterior that is rounded and which is elongated, and has at one end an opening with an inwardly turned flange, and a tapering extension at the other end.

5 4. A soluble capsule comprising a hollow body with an exterior that is rounded and which is elongated and has at one end an opening with an inwardly turned flange, a

removable cap for said end, and a tapering extension at the other end.

In testimony that we claim the foregoing we have hereunto set our hands.

WILLIAM HENDERSON.

ALEXANDER M. HENDERSON.

Witnesses:

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