

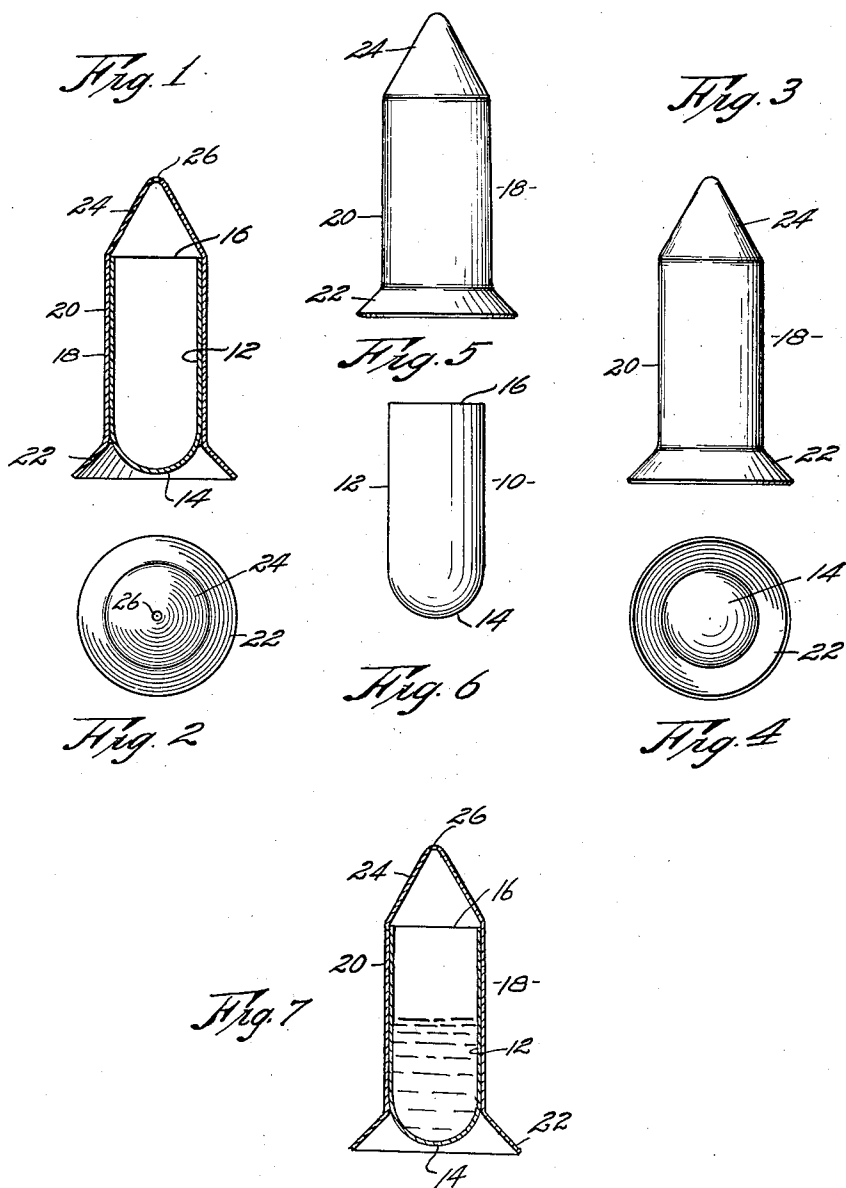
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BREEDING CAPSULE

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BREEDING CAPSULE

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4 Claims. (Cl. 128-272)

This invention relates to capsules and particularly to water soluble capsules suitable for use in impregnating animals.

A method of impregnating animals, and especially mares, that is becoming extensively used, contemplates the breeding of several mares by a single natural service of the stallion. This, in general, is accomplished as follows: The stallion is allowed to make a natural service in the regular way. The semen which is deposited in the uterus or vagina is collected within the mare in several capsule containers; the containers are removed from the mare, enclosed by a suitable cap and then one of these loaded capsules is inserted into the uterus of each of the mares to be bred.

Since the success of this method of breeding depends to a marked degree on the proper handling of the semen in order to keep the cells alive, the temperature of the semen must be maintained with certain limits; also it must not be exposed too much to the light.

The capsules are made of a water soluble material such as gelatine, therefore much care must be taken to complete the breeding operation before the capsule has had time to soften sufficiently to collapse before it has been deposited in the uterus of the mare to be bred. When using the standard capsule much difficulty is experienced due to the fact that the container becomes moistened when the semen is being obtained from the mare, and if a delay is experienced in positioning the cap on the container, then the body of the container may collapse and a proper service cannot be made. It is to overcome these difficulties and to make it possible for those less experienced in this method of impregnation to successfully perform the process that this invention has been developed.

The principal object of the present invention is the production of a capsule for breeding purposes, having a container and a cap having a side wall coextensive with the side wall of the container and adapted to substantially cover the same.

A further object is the production of a breeding capsule having a cap flared outwardly at its open end and gradually reduced at its opposite end with a relatively small opening formed through the outer extremity thereof.

With these and other objects which will appear during the course of the specification in view, reference will now be had to the drawing, wherein:

Figure 1 is a longitudinal central section of a capsule embodying this invention.

Fig. 2 is a plan view of the capsule.

Fig. 3 is an elevation of the capsule.

Fig. 4 is an inverted plan view of the capsule.

Fig. 5 is an elevation of cap.

Fig. 6 is an elevation of container, and

Fig. 7 is a sectional view of the capsule with a charge of semen contained therein.

The container or body of the capsule 10, comprises preferably a hollow cylindrical shaped wall 12 with a semi-spherical closed end 14 and an open end 16. This form of container is now in general use and has proven very satisfactory, however, without departing from the spirit of this invention many other forms might be used. The cap 18 which is made to telescope and snugly fit the container is provided with side wall 20 which is preferably coextensive with the side wall of the container, thereby producing substantially a double wall for the capsule when in use. The open end of the cap is flared outwardly to produce a substantially frusto-conical flange 22. The opposite end of the cap is gradually reduced to produce a pointed nose 24 which is substantially conical in shape. Formed through the outer wall of nose 24 is a relatively small opening 26.

The container and cap are constructed of a water soluble material such as gelatine, etc. which will readily dissolve when in the uterus, thereby releasing the semen.

The function of the perforated cap is to allow a flow of a sufficient quantity of the fluid from within the container to lubricate the capsule and the adjacent membranes to facilitate proper lubrication.

In the use of the capsule the semen is gathered into the container and then withdrawn from the animal. The cap is then slipped to position over the container, thereby presenting a clean, dry outer surface for convenient handling. The flared open end of the cap not only makes it possible to easily position the cap on the container but also serves as a finger hold while placing the capsule during the breeding operation. The double wall of the capsule when capped, presents a structure that will remain rigid and permit handling for a period of time sufficient for the breeding operation.

The perforation in the cap also functions to permit air to escape from the capsule as the cap is being moved to position on the container. This is very important since with a closed cap and a

moist container the cap has a tendency to rebound because of the compression of air within the capsule. Furthermore, this opening allows a flow of semen to the membranes of the uterus sufficient to cause a dissolving of the capsule and to start the natural action of the cells.

By this method of breeding it is apparent that mares, or other animals, having malformation of the reproductive organs, which could not be bred in the natural way, may be bred by the use of this improved breeding capsule.

The use of this capsule is not to be limited to any particular species of animal, neither is it necessary to follow any definitely prescribed procedure in its operation. Since this capsule is easily and quickly capped and may be held substantially covered in the operator's hand, the temperature of the semen will not drop sufficiently to effect its usefulness nor will it be exposed too long to the light.

It is apparent that this novelly constructed breeding capsule will function to properly transfer semen from one mare to another, can be easily and quickly capped and will effect proper lubricating of the membranes whenever necessary.

Having thus described the invention, what is claimed as new and desired to be secured by Letters Patent is:

1. A breeding capsule comprising a container

having an open end; a cap having a side wall co-extensive with and adapted to contact the side wall of said container; an outwardly extending flange at the open end of said cap; and a conical shaped nose at the other end of said cap.

2. A breeding capsule of water soluble material comprising a container having a cylindrical shaped side wall and a semi-spherical end wall; a cap having cylindrical shaped side walls coextensive with the side wall of said container, a conical shaped nose extending from one end of said cap and an outwardly extending flange projecting from the other end thereof.

3. A breeding capsule comprising a container having an open end and a closed end; a cap having a conical nose adapted to completely encompass said container to close the open end thereof; and an outwardly projecting flange at the open end of said cap extending beyond the normally closed end of said container.

4. A soluble breeding capsule comprising a container having an open end; a cap having a side wall coextensive with the side wall of said container; a flange at the open end of said cap and a reduced nose having a relatively small opening formed therethrough at the other end thereof.

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