United States Patent

Haller

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[54] **CONTRACEPTIVE CERVICAL OBTURATOR**

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[30] **Foreign Application Priority Data**

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[52] **U.S. Cl.** **128/130,** 128/271, 128/131

[51] **Int. Cl.**.....**A61f 5/46,** A61f 15/00

[58] **Field of Search**.....128/271, 260, 127, 130, 131; 424/331, 230, 14, 16, 19, 31

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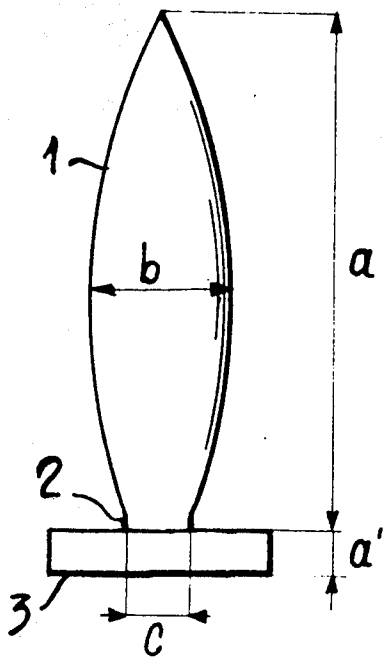
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[57] **ABSTRACT**

A cervical obturator for contraceptive use, containing an active substance, constituted by a fusiform shaped pastille terminating at one of its ends in an enlarged base, exercising an effect of obturation and having appropriate dimensions. The active substance is acetylsalicylic acid in powder.

2 Claims, 3 Drawing Figures



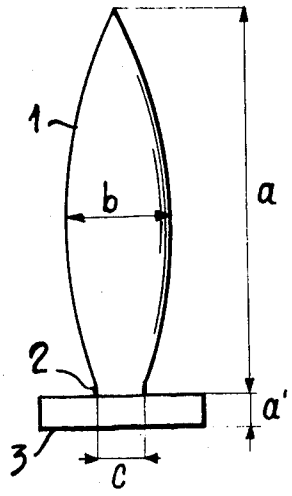


Fig. 1

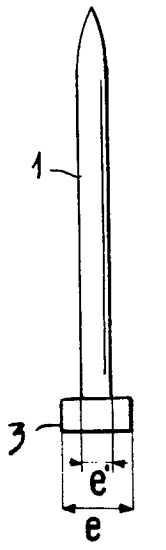


Fig. 2

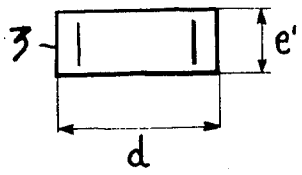


Fig. 3

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CONTRACEPTIVE CERVICAL OBTURATOR

The subject of the present invention is a cervical obturator for use as a contraceptive, containing an active substance, characterized in that it is constituted by a pastille presenting a fusiform part, terminating at one of its ends in an enlarged base, acting as an obturator and having the appropriate dimensions.

The attached drawing illustrates, schematically and by way of example, one embodiment of the invention.

FIG. 1 is a longitudinal view of the pastille.

FIG. 2 is a side view of the pastille.

FIG. 3 is a top view of the base of the pastille.

The cervical obturator comprises a fusiform part 1 terminating in a point at one end (the summit of the pastille), and at the other end, after a slight narrowing 2 (neck of the pastille) in an enlarged base 3.

The fusiform part has a length *a* of 2.3 centimeters. It is rounded off and bulging at the sides, having a maximum width *b* of 0.6 centimeter in the zone of the greatest bulge and at the level of the neck 2 a minimum width *c* of 0.3 centimeter.

This fusiform part, seen in side view, as shown in FIG. 2, is flat and presents a plane surface of uniform thickness *e* of 0.2 centimeter.

The base 3 appears in plan view, as illustrated in FIG. 3, in the form of a small rectangle, with straight edges, transversally elongated and flattened from front to the rear; the thickness *e'* is 00.4 centimeter and the length *d* varies from 0.5 to 1.5 centimeter according to the opening of the orifice of the neck of the uterus. The height *a'* of this base is 0.2 centimeter, with the result that the total height of the cervical obturator, i.e. the height *a* of the fusiform part added to the height *a'* of the base, is equal to 2.5 centimeters.

Such an obturator is placed in the neck of the uterus, the fusiform part 1 being directed towards the internal orifice of the neck of the uterus, while the base comes to obturate the external orifice of the neck. The "barrel" shape of the pastille and its flattened surface fits entirely the form of the neck.

The obturators are manufactured by giving well determined dimensions to the base corresponding to the opening of the external orifice of the neck of the uterus. For example, the length *d* of the base is 0.5 centimeter for obturators meant for nullipara subjects, 1 centimeter for obturators meant for primipara subjects, and 1.5 centimeter for obturators meant for multipara subjects. The fitting is thus perfectly occlusive.

The substance constituting the obturator could be an active contraceptive material of the type known, mixed with excipients.

The pastille, once introduced into the neck of the uterus, acts by virtue of its constituting material, which dissolves "in situ," as well as by the effect of obturation exercised by the base 3 of this pastille.

As an interesting detail, the material constituting the obturator could be an acid material, in the form of a powder, which is compressed in a mould, giving it the form of the obturator. This material could notably be the acetylsalicylic acid, which offers the advantage of durable local action attaining a duration of 8 to 10 hours, and the advantage of its absolute harmlessness for the cervical mucous membrane. The concentration will be 0.50 of the acetylsalicylic acid, thus letting maintain "in situ" a pH of 4.5.

The cervical obturator described above, thus offers a double advantage of contraception protection, mechanical, due to its base and spermicidal, due to its active acid product.

I claim:

1. A cervical obturator for contraceptive purposes comprising a compressed acid powder with spermicidal properties and having a widened base exerting an obturating effect, characterized in that it is entirely composed of said powder and in that said powder is compressed in the form of a tablet having a fusiform appearance, said powder intended to be in direct contact with the human body and dissolving upon use.

2. Cervical obturator according to claim 1, characterized in that the powder is acetylsalicylic acid.

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