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MILKING APPARATUS

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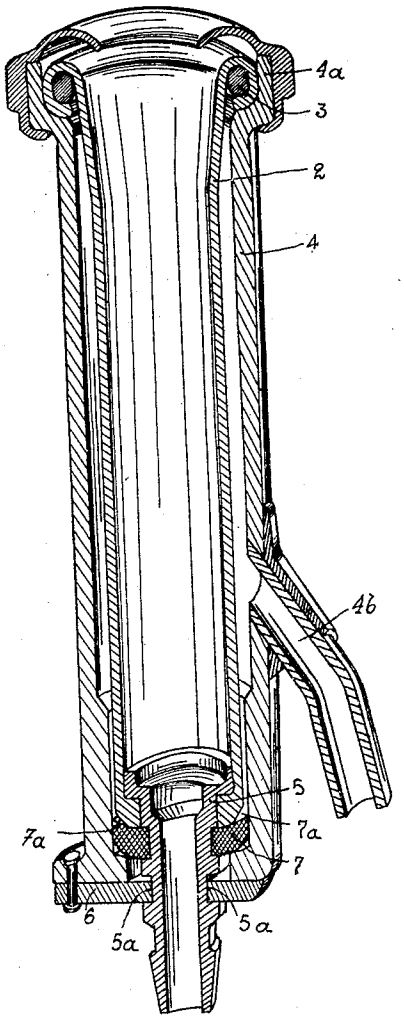

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MILKING APPARATUS

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The present invention relates to an apparatus for milking, in which the milking cup, made of an elastic material, is subjected to the action of a vacuum existing in a space or chamber between the said cup and a rigid casing surrounding the latter.

As this cup is generally formed of rubber and must be kept under tension during the milking, it is necessary for this cup to be relaxed when the apparatus is not in use, with a view to the preservation of the cup.

For this purpose the invention provides for the milking cup to be kept under tension during milking by bearing against the above mentioned rigid casing, the tension of the said cup being removed during the idle periods of the apparatus.

With this object in view, the cup is secured at one end to the upper part of the casing for example by means of a removable ring and at the other end by means of a member rigid with the said end and adapted to occupy different relative positions with respect to the lower part of the casing, the said member being capable of being employed as a connecting duct leading to the milk reservoir or reservoirs.

This member is rigidly connected with the lower part of the envelope in such a way as to tension the cup, such rigid connection being obtained for example by means of a removable key.

In order to prevent air from entering into the space or chamber between the cup and the casing, a packing is provided between the said tensioning member and the said casing which packing may be formed in one piece with the elastic cup itself.

The accompanying drawing illustrates by way of example and in a non-limiting manner one embodiment of the invention, the single figure showing a sectional perspective view of such embodiment.

The milking cup 2 is held at its upper part by a ring 3 bearing against a flange 4*a* on a rigid casing 4. At its lower part the cup is rigidly connected with a member 5 which is employed in the arrangement represented as a connecting tube leading towards the milk reservoir, not shown.

This member 5 is formed with a groove 5*a* in which engages a key 6 holding the said member against the lower part of the casing 4 and maintaining this action in spite of the tension produced in the said cup 2. The vacuum in the space or chamber comprised between the cup 2 and the casing 4 is produced by a suitable machine connected to a pipe 4*b*.

In order to prevent air from entering into the said space or chamber, a packing 7, formed for example of rubber, is wedged between the member 5 and the casing 4 and becomes deformed into the position shown.

It goes without saying that the said packing 7 may be made in a single piece with the cup 2, provided that spaces such as 7*a* are allowed with a view to permitting the free deformation of the packing.

During the idle periods of the apparatus the key 6 is removed, thus permitting the cup to relax and then be removed from the casing 4 together with the members 5, 7 and 3 which are rigid with it.

According to the invention the locking device 6, 5*a* may be of any kind; for example, the key 6 may be pivoted upon the end of the casing 4 as shown.

What I claim is:

1. A double-walled milking cup having one of its walls elastic and the other rigid, means positioned at the base of the said elastic wall and in axial alignment with the cup formed by said rigid wall for draining the milk, a portion of said milk draining means having an annular grove, and a movable plate engageable in said groove for maintaining said elastic wall under tension when engaged therewith and for releasing said wall to relieve the same from tension.

2. A double walled milking cup having one of its walls elastic and the other rigid, means positioned at the base of the said elastic wall and in axial alignment with the cup formed by said wall for draining the milk, said milk draining means having an annular groove and a movable plate engaged in said groove for maintaining said elastic wall under tension when engaged therewith and for releasing said wall to relieve the same from tension,

said milk draining means having a second annular groove disposed adjacent the elastic wall and a removable packing disposed in this second groove for forcible engagement with the lower end thereof.

In testimony whereof I have affixed my signature.

FERNAND HENRARD.