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R. NUNES

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ADJUSTABLE HOSE CLAMP FOR MILKING MACHINES.

Filed Feb. 24, 1927

Fig. 1.

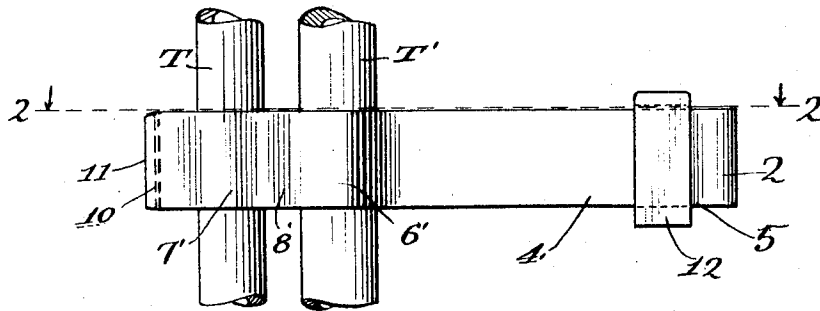


Fig. 2.

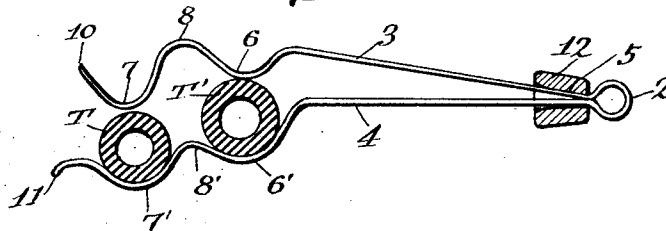


Fig. 3.

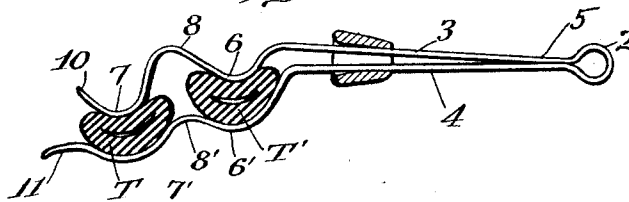
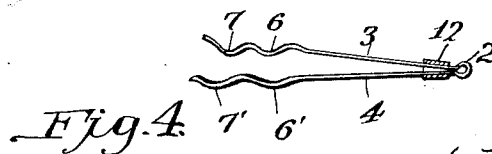


Fig. 4.



Inventor:
Roland Nunes.
by Hazen and Miller
Attorneys.

UNITED STATES PATENT OFFICE.

ROLAND NUNES, OF CORONA, CALIFORNIA.

ADJUSTABLE HOSE CLAMP FOR MILKING MACHINES.

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This invention relates to dairying and more particularly to an adjustable hose-clamp for milking machines, and it is an object of my invention to provide a clamp that
5 can be used on practically every milking-machine to control the capacity of each tube.

A second object of my invention is to provide a clamp which is strong and durable, efficient in its operation, has few moving
10 parts, which is not likely to get out of order, and which is well adapted to perform the services required of it.

My invention however, is of universal application and can be used for example, on
15 the rubber tube of a water-bag. It can also be used on water-hoses of various sizes, and for various other purposes either to shut off the water completely or lessen the pressure within the tube without necessitating the
20 turning of the faucet handle or valve. The device can also be used as a clothes pin on blankets, quilts, carpets or the like, as well as for domestic purposes such as for lifting hot pie-plates, stove-lids or the like.

25 My device however, was primarily designed for dairy use. When cows first freshen, the quantity of milk given from each quarter is practically the same, but for various reasons this quantity does not always remain the same. My adjustable hose-clamp is to be used for lessening the pressure and suction of air on the light quarters. Then, when the cups are taken off the
30 cow, each quarter will be dry or nearly so, as these quarters will have been milked proportionately.

35 With the foregoing and other objects in view, which will be made manifest in the following detailed description and specifically pointed out in the appended claim, reference is had to the accompanying drawings for an illustrative embodiment of the invention, wherein:

45 Figure 1 is a plan view of my adjustable clamp showing the same applied to a pair of tubes.

Figure 2 is a sectional view taken along the lines 2—2 of Figure 1.

50 Figure 3 is a side elevation partly in vertical section showing my adjustable clamp in such position on a pair of tubes that they are restricted to control the flow of fluid therethrough, and

Figure 4 is a view of a slightly modified and preferred form of my invention. 55

Referring to the accompanying drawings wherein similar reference characters designate similar parts throughout, my improved hose-clamp comprises a section of sheet material bent upon itself as at 2, to form a
60 pair of substantially parallel arms 3 and 4. At the point of bending, the material is sprung outwardly slightly as at 5, so that the arms are urged apart by the natural resiliency of the metal of which the clamp is
65 formed. The outer ends of the arms 3 and 4 are formed in a serpentine fashion, there being a pair of troughs 6 and 7, 6' and 7' and a crest 8 and 8' on each arm respectively. The outer ends of the arms are in-
70 clined outwardly so as to extend away from each other as shown at 10 and 11. A suitable collar 12 is mounted on the arms 3 and 4 for sliding movement.

In the modification shown in Figure 4, the
75 troughs 6 and 7 have been brought nearer to each other while the troughs 6' and 7' have remained the same so that the pair of tubes shown at T and T' respectively when held in position and clamped by my adjustable
80 clamp, will be separated so that their adjacent sides will not interfere with each other.

My device is used as follows. The tubes T and T' are placed in the depressions 6' and 7' between the outer ends of the arms
85 3 and 4. An adjustment of the collar 12 then will serve to bring the outer ends of the arms together so that the trough 6 extends into the trough 6', and the trough 7 extends into the trough 7' thus clamping firmly the
90 tubes as clearly shown in Figure 3, and restricting flow therethrough, the amount of restriction being readily variable by altering the position of the collar 12 upon the
95 arms 3 and 4.

It will be understood that various changes in the detail of construction may be made without departing from the spirit or scope of the invention as defined by the
100 appended claim.

I claim:

A clamp adapted to hold a plurality of flexible tubes and deform the same, said clamp comprising a flat sheet of material bent upon itself to form substantially parallel arms normally tending to be repelled,
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the outer ends of said arms being in the form of a serpentine and providing troughs and crests, the troughs of one of said arms being closer together than the troughs of the other of said arms, and a collar slidable on said member adapted to force said arms towards each other, and an outwardly sprung portion on said member adjacent its bend adapted to prevent said collar from being removed. 10

5 In testimony whereof I have signed my name to this specification.

ROLAND NUNES.