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E. VON ALLMEN

DETACHABLE UNION

Filed June 11, 1924

Fig. 1.

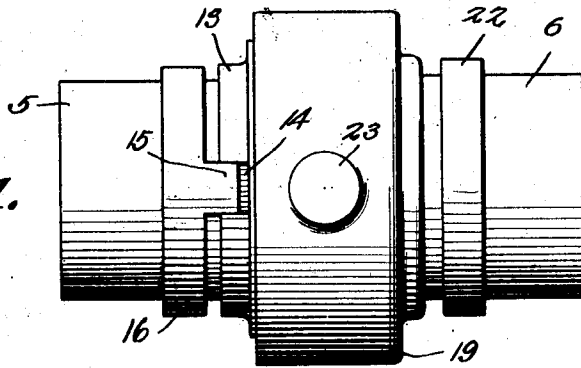


Fig. 2.

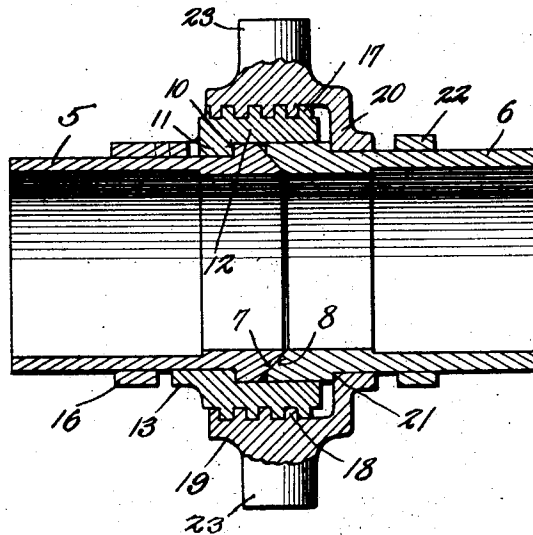
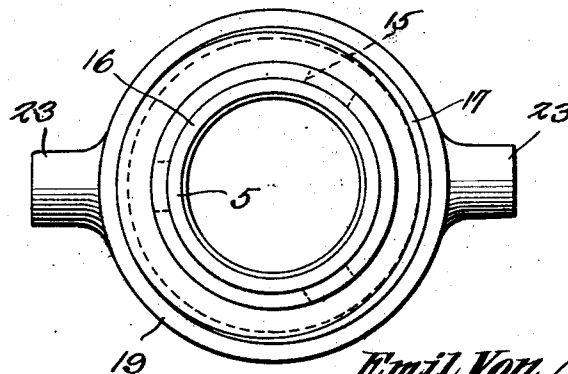


Fig. 3.



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DETACHABLE UNION.

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This invention relates to ground unions, and more particularly ground unions employed in connection with machines for treating milk wherein it is necessary to disconnect the union from the pipes and tank associated therewith to facilitate the cleaning thereof.

An important object of the invention is to provide a union of this type wherein the ground surfaces thereof will be protected against distortion if dropped during the process of cleaning, thereby insuring a tight connection between the ground surfaces of the union when assembled.

Another important object of the invention is to provide a union wherein the elements may be moved with respect to each other to facilitate the cleaning thereof.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, may be made within the scope of what is claimed, without departing from the spirit of the invention.

Referring to the drawing:

Figure 1 is a plan view of a union constructed in accordance with the invention.

Figure 2 is a longitudinal sectional view therethrough.

Figure 3 is an end elevational view thereof.

Referring to the drawing in detail, the reference character 5 indicates the male section of the union and the reference character 6 designates the female section thereof, the sections being provided with cooperating ground surfaces 7 and 8 respectively which when engaging each other provide a fluid-tight connection between the sections.

The section 5 is provided with a circumferential rib disposed adjacent to the ground surface 7 thereof, which rib defines a shoulder 10 providing an abutment for the inwardly extended rib 11 formed on the collar 12, which is of a length to overlap a portion of the section 6, as clearly shown by Figure 2 of the drawing. As illustrated by

Figure 1, the collar 12 is provided with a rearwardly extended flange 13 formed with a cut out portion 14 to accommodate the lug 15 provided on the collar 16 that is secured to the section 5 at a point to normally lie in spaced relation with the flange 13 permitting of a slight movement of the collar 12 so that fluid used in cleaning may contact with all of the surfaces thereof.

External threads 17 are provided on the collar 12 and are designed to cooperate with threads 18 provided on the ring nut 19 which has an inwardly extended flange 20 adapted to engage the collar 21 formed on the section 6 so that when the nut 19 is rotated, the collar 12 will be drawn against the shoulder 10 in a manner to force the sections 5 and 6 into close engagement with each other.

In order that movement of the nut 19 with respect to the sections 6 will be restricted, a ring member 22 is secured to the section 6 and arranged so that the ring nut 19 normally lies in spaced relation therewith, allowing for a slight movement of the nut 19 to facilitate the cleaning of the section.

Extensions 23 are provided on the nut 19 and afford means whereby the ring nut 19 may be engaged by a wrench or gripped by the hand of the operator in assembling the union so that a close fit between the elements of the union will be insured.

From the foregoing it will be obvious that due to this construction, when the union is disconnected from the pipes or tank of a milk treating machine, to facilitate the cleaning thereof, should the sections of the union be dropped, the ground surfaces of the union will be guarded and will not contact with the usual concrete floor of the building in which the machine is located, to distort or injure the ground surfaces in any way to impair their operativeness.

I claim:—

A union including a male section and a female section having external shoulders formed adjacent to the ends thereof, a collar secured to the male section and spaced from the shoulder formed on the male section, said collar having an extension, a threaded collar having a shoulder adapted

to engage the shoulder of the male section and having a cut out portion to receive the extension to permit of sliding movement of the second mentioned collar longitudinally of the male section, a ring nut having
5 threads cooperating with the threads of the second mentioned collar and having a shoulder to engage the shoulder of the female

section to draw the sections together, and a ring member secured to the female section 10 in spaced relation with the ring nut to permit of rotary movement of the ring nut.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature.

EMIL VON ALLMEN.