A method of washing and scalding tripe comprising the steps of: (1) opening the paunch and dumping the contents therefrom; (2) folding the paunch or tripe in half and hanging it on a conveyor with the knap side out; (3) conveying the tripe through a wash cabinet which spreads out the tripe to expose both sides thereof; (4) washing the manure from the tripe in the wash cabinet by spraying 110°F water onto all of the surfaces thereof; (5) conveying the tripe through an automatic scald cabinet which sprays 180°F water only onto the knap side of the tripe to cook the knap loose from the tripe; (6) placing the scalded tripe into a tripe final wash machine; and (7) removing the tripe from the final wash machine.
1 METHOD OF WASHING TRIPE

BACKGROUND OF THE INVENTION

This invention relates to a method of washing tripe. Tripe has commercial value since it is used extensively in the manufacture of dog food. Tripe is also used for sausage or the like. However, the problems associated with the present methods of washing and preparing the tripe are enormous. The knaps must be removed or washed from the tripe in order for the tripe to have commercial value. The washing of tripe has not varied much during the past twenty-five years. The normal procedure is as follows:

1. The paunch is opened and the contents dumped.
2. The tripe is placed on an "umbrella" with the knap side up.
3. The manure is washed from the tripe with a water hose.
4. The tripe is placed in a tripe scalding.
5. Chemicals and soap are added to the tripe scalding to gradually wash the knap from the tripe.

The normal method described above is objectionable for several reasons. One objectionable feature of the normal method is that excessive soap and chemicals must be used. The knap from the tripe, soap, and chemicals are dumped into the sewage system thereby contributing a considerable load on the sewage system. An excessive shrink of product is also experienced due to the use of chemicals and soap together with the hot water employed in the scalding. Product shrink is also caused by the length of time that the tripe must remain in the scalding. Still another objection to the normal method of washing the tripe is that the chemicals emulsify the knap which makes it practically impossible to recover or collect the knap if the knap is to be subsequently processed. The pH of the tripe is also increased by the soap used in the scalding which makes the tripe unsatisfactory to dog food manufacturers. If the pH of the tripe is objectionably high, the tripe must be rinsed until the pH is lowered to the proper level.

Therefore, it is a principal object of the invention to provide a method for washing tripe.

A further object of the invention is to provide an improved method for washing tripe which reduces product shrink.

A further object of the invention is to provide a method of washing tripe which is ecologically satisfactory.

A further object of the invention is to provide a method of washing tripe which does not require an excessive amount of soap and chemicals to be used.

A further object of the invention is to provide a method of washing tripe wherein the knap may be recovered for subsequent processing.

A further object of the invention is to provide a method of washing tripe which maintains the tripe at the proper pH level.

A further object of the invention is to provide a method of washing tripe which prevents the emulsification of the knap.

A further object of the invention is to provide a method of washing knap which satisfactorily bleaches the tripe.

A further object of the invention is to provide a method of washing tripe which is economical.

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2 These and other objects will be apparent to those skilled in the art.

BRIEF DESCRIPTION OF THE DRAWINGS

This invention consists of the construction, arrangements and combination of the various parts of the device, whereby the objects contemplated are attained as hereinafter more fully set forth, specifically pointed out in the claims, and illustrated in the accompanying drawings, in which:

FIG. 1 is a schematic perspective view of the wash and scald system of this invention;
FIG. 2 is a partial perspective view of the wash cabinet; and
FIG. 3 is a partial perspective view of the scald cabinet.

BRIEF DESCRIPTION OF THE PREFERRED METHOD

With respect to FIG. 1, the numeral 10 generally refers to the system of this invention. The numeral 12 refers to an area wherein the unwashed paunches are received. The numeral 14 refers to a mono-rail tripe conveyor having a plurality of hooked supports 16 secured thereto in a spaced apart relationship. The conveyor is powered by suitable means in the direction indicated by the arrows in FIG. 1.

The paunches 18 are opened in the paunch receiving area 12 and the contents dumped therefrom. The paunch or tripe is then folded in half with the knap side out and hung on one of the hooked supports 16. The conveyor 14 conveys the tripe through a wash cabinet referred to generally by the reference numeral 20.

Wash cabinet 20 comprises a cabinet 22 having suitable openings 24 and 26 provided at the opposite ends as well as an opening 28 extending across the upper end thereof. A stainless steel spacer bar 30 is positioned beneath the conveyor 14 as seen in FIG. 1 and fans out to the configuration seen in FIG. 2 within the wash cabinet. As seen in FIG. 2, the spreader mechanism 32 comprises a pair of inclined supports 34 and 36 which are constructed of spaced apart bars or the like. A plurality of spaced apart bars 37 extend from the forward end of the inclined support members 34 and 36 and are secured to the spreader bar 30 as also seen in FIG. 2. A pair of spray members 38 and 40 are positioned adjacent the support members 34 and 36 as depicted in FIG. 2 for spraying the knap side of the tripe as it passes therethrough. A pair of spray members 42 and 44 are positioned beneath the support members 34 and 36 for spraying the other side of the tripe. The spray members 38, 40, 42 and 44 are in communication with a source of water under pressure having a temperature of approximately 110° F.

The conveyor moves the tripe into the wash cabinet 20 with the spreader assembly 32 spreading the tripe so that the spray members previously described may spray the 110° F. water on both sides of the tripe so as to wash the manure therefrom. The floor of the wash cabinet 22 has a suitable drain for draining the water and manure to the proper collecting area.

The washed tripe is then moved from the wash cabinet 20 through a scald cabinet referred to generally by the reference numeral 46. The design of the scald cabinet 46 is identical to the wash cabinet 20 and will not be described in detail. A pair of spaced apart spray members 48 and 50 are positioned in the scald cabinet.
and are in communication with a source of water under pressure having an approximate temperature of 180°F. The conveyor 14 conveys the tripe through the scald cabinet 46 and the spray members 48 and 50 spray the 180°F water on only the knap side of the tripe due to the relationship of the spray members with respect to the tripe.

The 180°F water being sprayed onto the knap side of the tripe cooks the knap loose from the tripe which tends to fall therefrom in chunks rather than being emulsified as in the normal tripe washing systems. The water and knap collected in the scald cabinet 46 is passed through a screen to permit the collection of the knap so that it may be subsequently processed.

The scaled tripe is then conveyed to the vacinity of a batching hopper 52 adapted to collect the tripe which are dumped from the conveyor by an automatic tripe drop mechanism referred to generally by the reference numeral 54. The tripe in the batching hopper 52 are conveyed to a tripe wash machine 54 as desired wherein the tripe is passed through its final wash. The tripe wash machine 54 is adapted to dump the tripe therefrom onto a drain table 56 upon completion of the final wash cycle. The edible tripe is then collected and packed for shipment.

The instant method represents a distinct improvement over the prior art since only the knap side of the tripe is subjected to the scalding water within the scald cabinet 46. The fact that only the knap side of the tripe is subjected to the scalding water substantially reduces product shrink. The elimination of soap and chemicals in the present method substantially reduces the load placed on the sewage system and prevents the pH of the tripe from being raised to an objectionable level. Further, the elimination of the soap and chemicals prevents the knap from being emulsified so that it may be collected and processed. It should be understood that while the present method discloses the use of spray members for removing the manure and knap from the tripe, it should be understood that a combination of brushes and water could be used.

Thus it can be seen that the invention accomplishes at least all of its stated objectives.

I claim:

1. A method of washing tripe and separating the knap therefrom, said tripe having a knap side and an opposite side, said method comprising, opening the tripe and removing the contents therefrom, folding said tripe to allow subsequent exposure of the entire knap side of said tripe to scalding and to prevent subsequent exposure of the opposite side of said tripe to scalding, water washing both the knap side and the opposite side of said tripe, and scalding only the knap side of said tripe to cook the knap loose from said tripe.

2. The method of claim 1 wherein the scaled tripe is then placed in a final wash machine.

3. The method of claim 1 wherein said tripe is folded in half and hung on a conveyor after the contents have been dumped from the tripe, said tripe then being conveyed through a wash area, both sides of said tripe being washed in said wash area, said tripe then being conveyed to a scald area for said scalding.

4. The method of claim 3 wherein water having an approximate temperature of 110°F is sprayed onto said tripe in said wash area.

5. The method of claim 3 wherein said tripe is scalded with water having an approximate temperature of 180°F.

6. The method of claim 3 wherein said tripe is spread out in said wash area to permit both sides of said tripe to be washed.

7. The method of claim 3 wherein said tripe is scalded with water having a temperature of no more than 180°F.

8. The method of claim 7 wherein wash water is sprayed onto said tripe in said wash area, with the temperature of said wash water being less than the temperature wherein said tripe is scalded.