H. D. MIXA.

CHEESE HOOP.

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1,286,386.

Patented Dec. 3, 1918.

Fig. 1.

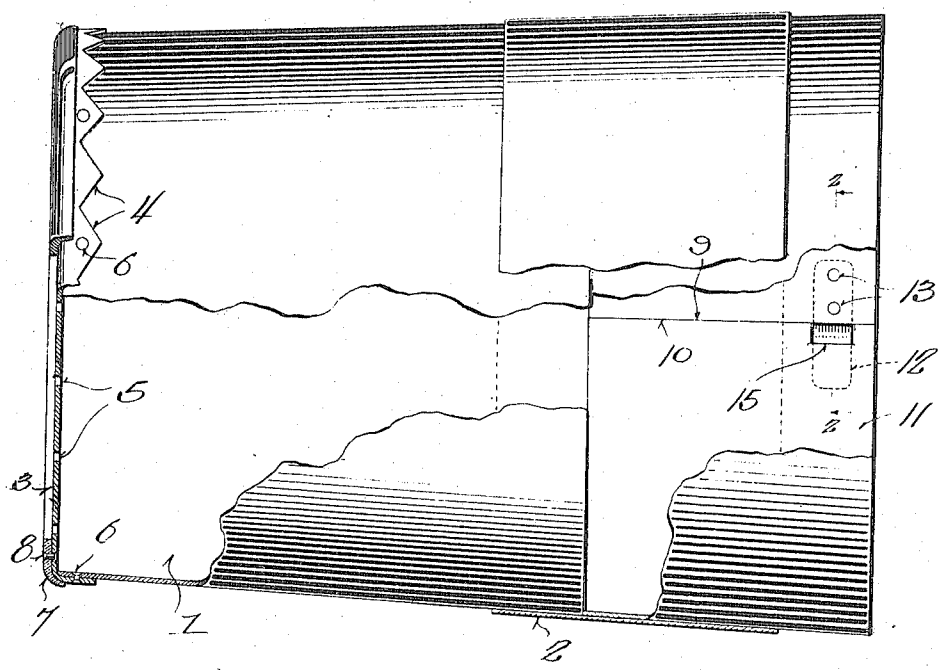
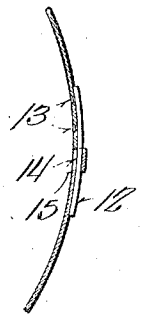


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

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CHEESE-HOOP.

1,286,386. Specification of Letters Patent. Patented Dec. 3, 1918.

Application filed July 30, 1917. Serial No. 183,451.

To all whom it may concern:

Be it known that I, HENRY D. MIXA, a citizen of the United States, and resident of Two Rivers, in the county of Manitowoc and State of Wisconsin, have invented certain new and useful Improvements in Cheese-Hoops; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention refers to improvements in cheese hoops.

In practice it has been found that cheese hoops of ordinary construction are relatively short-lived, inasmuch as the bottoms soon become so badly dented, or otherwise malformed, that they will not fit the parts with which it is necessary to engage them during the pressing operation of the cheese. The other parts of the hoop last practically indefinitely because there is relatively no wear thereon, and therefore, the principal object of this invention is to provide an arrangement whereby the bottoms of cheese hoops may be protected so that the period of usefulness of such hoops will be greatly prolonged.

An analogous object is to provide an arrangement whereby new reinforcing members may be placed on the bottoms of the hoops when the initial reinforcing members have become worn.

It has, also, been discovered that it is preferable to have a catch of some sort for holding the adjacent engaging edges of the usual bandage ring used on cheese hoops together, whereby to prevent said edges from springing out of engagement when the ring is in operation. The specific form of means for holding the edges of the bandage ring together, which is shown in the present application, has been found to be most efficient.

With the foregoing objects and advantages in view, the invention resides in the novel features of construction, combination and arrangement of parts which will be hereinafter more particularly described and claimed, and shown in the drawing wherein:

Figure 1 represents a side elevation, partly in section, of a cheese hoop and bandage ring provided with my invention.

Fig. 2 is a detail sectional view taken substantially on the plane of the line 2—2 of Fig. 1.

In the drawing above referred to, it will be noted that I preferably construct a cheese hoop of inner and outer annular wall portions 1 and 2, respectively, substantially as set forth in my Letters Patent No. 1,249,801. As pointed out in that patent it is practically necessary to employ a two-part wall, as it is extremely difficult to draw a seamless wall portion of required length from a single piece of sheet metal. The two parts 1 and 2 of the wall portion of the hoop are similarly tapered so that in operation the hoop shown may form one of a number of such hoops which are nested together. The present cheese hoop differs from that shown in the above referred to patent in the respect that it is provided with a bottom portion 3 formed of a metal plate separate and distinct from the metal from which the wall portions are constructed. In forming this bottom portion a flat, circular sheet metal plate is used, the edge of which is notched or scalloped as shown at 4, and the central portion is, also provided with a plurality of whey passages 5. The diameter of this plate 3 is somewhat larger than the diameter of the bottom end of the inner wall portion 1 to permit the edge portions of said plate to be bent laterally to dispose the same for engagement with the outer surface of said wall portion 1 to which it is secured by rivets or the like 6. The provision of the notches or scallops in the edge of the plate 3 allows the same to be stamped into the substantially cup-shaped member shown, without buckling.

Although such a bottom portion is obviously stronger than that shown in the foregoing application, I preferably further provide an annular reinforcing plate 7, the diameter of which is, also, slightly greater than the diameter of the adjacent portion of the inner wall 1. This excess diameter is necessary since the outer edge portion of the plate 7 is adapted to be turned laterally to receive the bottom portion 3 to which it is secured by rivets, or the like, 8. The opening in the plate permits the whey to pass through the passages 5 without interference, yet the plate is of sufficient width to effec-

tively protect the bottom of the cheese hoop to prevent its becoming indented, or otherwise marred. When this reinforcing plate becomes worn, it is obvious that it may be readily removed and a new one substituted therefor, which substitution will render the cheese hoop practically as good as new.

The other part of my invention is located at the opposite end of the cheese hoop and consists, as hereinbefore indicated, of means for holding the engaging edges 9 and 10 of a bandage ring 11 together when the same is in operation. From Fig. 1 it will be seen that when the ring is in the latter position its inner end engages the outer end of the inner wall portion 1, and since said wall portion and the ring are formed of substantially the same gage sheet metal, the joint therebetween will be smooth and unbroken. The preferred form of catch for holding the edges of the ring together consists of a tongue 12, riveted as at 13 to the ring in position to have one end extended beyond the edge 9, said projecting end of the tongue being adapted to coact with a socket 14 disposed adjacent the other edge 10. The socket is formed by providing a slit 15 of a length substantially equal to the width of the tongue 12 parallel to the edge 10, and forcing the metal between this edge and the slit outwardly, whereby it will be disposed in a different plane from that occupied by the main portions of the ring, as will be obvious from examination of Fig. 2. In connecting the tongue with its socket it will be seen that the edges of the ring are moved apart until the free end of the tongue can slide within said socket. When the two parts of the catch are connected, the edges 9 and 10 will be prevented from springing laterally, and, also, always be held in contact with one another, the inner surface of the bandage ring being thus practically smooth and unbroken.

From the foregoing description taken in connection with the accompanying drawing it will be obvious that a very efficient cheese hoop and bandage ring have been constructed which, when combined, will be a considerable improvement over any similar device for forming cheese, which is at present in use.

Attention is directed to the fact that the catch means is located adjacent the top edge of the ring, so that when assembled with the parts with which it is normally associated, it is above the similar edge of the upper portion 2 of the hoop. This assembly is clearly shown in Fig. 1 wherein it will be noted that the tapered sections 1 and 2 which form the hoop are slid together until they frictionally engage and bind, and after which the bandage ring is inserted into the part 2 until its lower end contacts with the upper edge of the part 1.

I claim:—

In a cheese hoop of sheet material having upper and lower tapered sections in telescopic union, the combination with a split annular tapered bandage ring of sheet material adapted to nest within the upper hoop section and extended above the upper edge thereof, the inner end of the ring being in abutting flush relation with the upper edge of the lower hoop section, means for holding the engaging edges of the ring in abutting flush relation including a socket formed by providing a slit in the upper portion of the ring above the adjacent edge of the upper hoop section, said slit being adjacent one engaging edge of the ring and parallel therewith, the metal between this edge and the slit being pressed outwardly whereby to dispose it in a different plane from that occupied by the main portion of the ring, and a tongue secured to the outer surface of the ring to dispose the same in a different plane from that of the main portion of the ring and in the same plane as said socket, said tongue being disposed above the upper edge of the upper hoop section and extended beyond both engaging edges of the ring and disposed in said socket.

In testimony that I claim the foregoing I have hereunto set my hand at Two Rivers, in the county of Manitowoc and State of Wisconsin.

HENRY D. MIXA.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."