E. K. WOLFE.

WIRE PROTECTOR FOR NURSING BOTTLES.

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1,345,654.

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Figure 1.

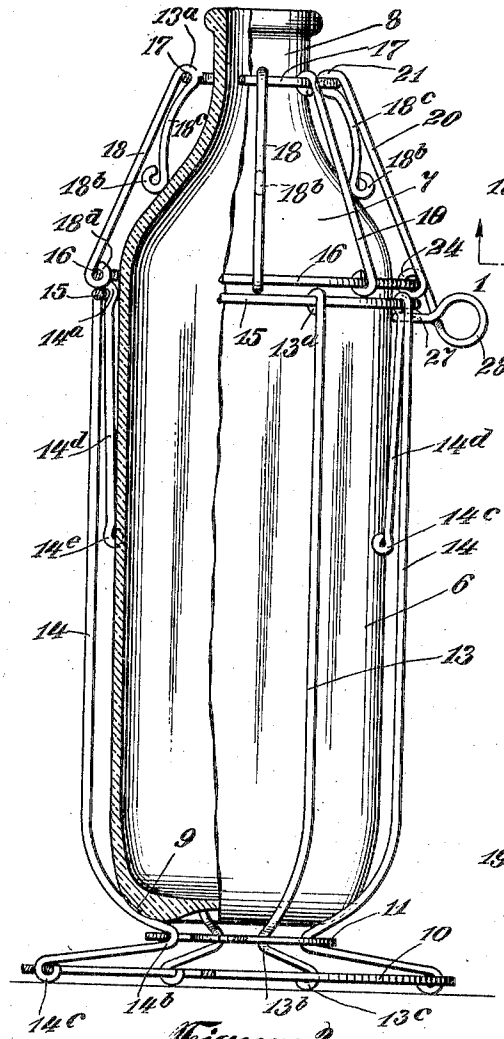
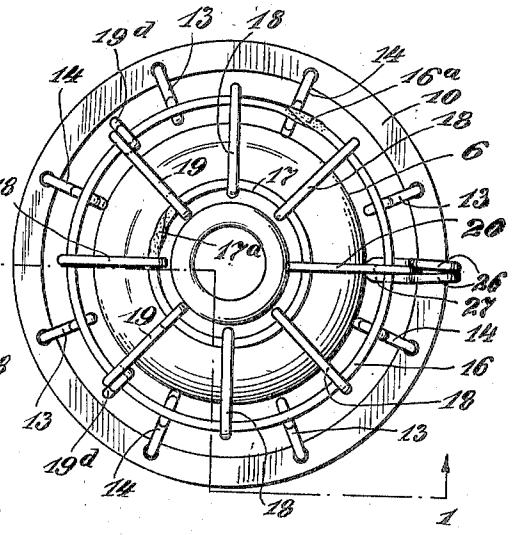


Figure 2.



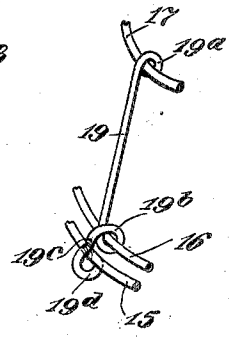


Figure 4.

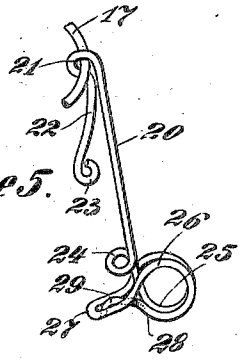


Figure 5.

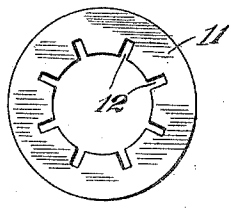


Figure 3.

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WIRE PROTECTOR FOR NURSING-BOTTLES.

1,345,654. Specification of Letters Patent. Patented July 6, 1920.

Application filed April 5, 1918. Serial No. 226,805.

To all whom it may concern:

Be it known that I, EVERETT K. WOLFE, a citizen of the United States, residing at Westchester, in the county of Bronx and State of New York, have invented certain new and useful Improvements in Wire Protectors for Nursing-Bottles, of which the following is a full, clear, and exact description.

My invention relates to wire protectors for nursing bottles, the purpose of the device being to prevent the bottle from being broken by the application of heat used in preparing the contents of the nursing bottle, and for the further purpose of protecting the bottle from jars and blows, especially during the time while the bottle is being handled by an infant.

More particularly stated, I seek to make my improved bottle protector principally of wire, so arranged that the bottle is practically spring mounted and thus protected from shocks and jars, which may be accidentally administered, the device being in two parts which are separable, these two parts being provided with means whereby they are secured quickly and firmly together and released at the will of the operator.

Reference is made to the accomypanying drawings, forming a part of this application, in which reference characters indicate like parts in the several figures.

Figure 1 is a side view, partly in elevation and partly in section, showing the device as used with a nursing bottle of ordinary so-called cylindrical form.

Fig. 2 is a plan view of the same.

Fig. 3 is a plan view of the waist ring forming a part of the base of the device.

Fig. 4 is a fragmentary perspective showing one of the fastening members for holding together the two separate parts of the device.

Fig. 5 is a fragmentary perspective of another one of the fastening members.

The nursing bottle appears at 6, and is provided with a substantially conical portion 7 and with a neck 8, these parts being of the usual or any desired construction. The bottle is further provided with a rounded base portion 9.

A base ring of metal is shown at 10 and above it is a waist ring 11 of smaller diameter. These two rings or either of them may, if desired, be made of sheet metal, as here shown. The waist ring 11 is provided internally with a number of radially disposed slots.

A number of wire ribs are shown at 13 and extend upwardly substantially parallel with each other. The upper end of each rib 13 terminates in an eye 13^a. Each rib 13 is further provided with a V-bend 13^b and with an eye 13^c, this eye being connected with the base ring 10. Interspersed between the various ribs 13 are other ribs 14, each having a little different form than one of the ribs 13, as may be understood more particularly from Fig. 1. Each rib 14 is provided with a curved portion 14^a, conveniently termed a bend, and is further provided with a V-bend 14^b and with an eye 14^c. The eye 14^c is connected with the base ring 10 and the V-bend 14^b, like each V-bend 13^b, extends through one of the slots 12 in the waist ring 11. Each rib 14 is further provided with a reverting spring portion 14^d, the latter at its lower end terminating in an eye 14^e, which is adapted to press gently inward against the adjacent surface of the nursing bottle 6. A spacing ring 15 is engaged by each eye 13^a and by each bend 14^a. This spacing ring, together with the other parts thus far described in detail, collectively constitute the lower or basket portion of the device.

I will now describe the upper portion of the device. There are two spacing rings 16 and 17, the ring 17 being of somewhat smaller diameter than the ring 16. The ring 17 is provided with a joint 17^a, preferably soldered, and the ring 16 is provided with a similar joint 16^a. Extending from the ring 16 to the ring 17 are a number of wire links 18. Each of these links is provided with a bend 18^a and with a reverting spring portion 18^c terminating in an eye 18^b; also with an eye 18^d, the latter encircling the ring 16.

Engaging the spacing rings 16 and 17 are also a number of wire links 19, each provided at its upper end with an eye 19^a and adjacent its lower end with a lip 19^b and with a spring portion 19^c, carrying a snap eye 19^d. The links 19 are so arranged that when the upper or top portion of the bottle protector is brought into engagement with the bottom portion, as indicated in Fig. 1, the snap eyes *d*, by engaging the spacing ring 15, securely hold the two main parts of the device together.

There are two of the links 19.

As may be seen more particularly in Fig. 5, I use another link 20 as a fastening member. This link is provided with a bend 21 and with a reverting portion 22, the latter serving as a spring and being provided with an eye 23. The link 20 is provided with a loop 24, which loosely encircles the adjacent portion of the spacing ring 16. The link 20 is further provided with loops 25, 26 of somewhat larger diameter than the loop 24, the loops 25, 26 being connected together by a V-bend 27. The loop 26 is provided with a spring portion 28 terminating in a curved end portion 29, this latter portion being adapted to co-act with the loop 24 so that the portion 29, by pressing upwardly against the spacing ring 15, holds the spacing ring 16 tightly in its lowermost position, as it rests upon the spacing ring 15.

The operation of my device is as follows:

The parts being assembled and arranged, the lower or body portion is rested upon a table or upon the bottom of a heating vessel, or upon other convenient member for supporting it. The nursing bottle is now placed within the body portion and the top portion is brought into position. The link 20 is then forced down into position so that the curved portion 29 of wire engages the under side of the spacing ring 15.

In order to release the top portion from the bottom portion the operator grasps the loops 25, 26, which collectively act as a thumb piece, and by swinging the link 20 laterally, so as to cause its lower end to travel a short distance along the spacing ring 15, causes the disengagement of the upper and lower members of the bottle protector. It will be noted that, with the parts in position, as indicated in Fig. 1, the nursing bottle is spring mounted and when subjected to any reasonable shock or jar is not easily broken thereby. It will also be noted that if the bottle and its accompanying parts be subjected to the action of heat, as for instance in a heating vessel used for the purpose, the heat is distributed more or less uniformly and the bottle is not likely to be cracked in consequence.

I claim:—

1. In a wire protector for nursing bottles the combination of a pair of wire cage members fitted together in order to inclose a bottle, one of said wire cage members having a ring, and a number of separate pieces of spring wire each bent partially around said ring, each of said separate pieces of spring wire being provided with a portion extending inwardly from said ring and terminating abruptly, said portion being at its end bent into an eye, and so disposed that the edge of said eye presses directly against the adjacent surface of the bottle.

2. In a wire protector for nursing bottles, the combination of a waist ring made of sheet metal and provided internally with radially disposed slots, a base ring disposed adjacent said waist ring and a plurality of wire ribs each provided with means for connecting it to said base ring and provided with a V-bend for engaging said waist ring and for extending through a slot thereof.

3. In a protector for nursing bottles, a body member provided with an open end portion carrying a ring, a top member detachably engaging said body portion and carrying a ring mating said ring of said body member, and a fastening member carried by said top member for the purpose of securing said top member and said body member together, said fastening member being formed of stiff spring wire and provided with a portion loosely encircling the ring carried by said top member, so as to allow said fastening member to swing slightly along the adjacent portion of said last mentioned ring, said fastening member being further provided with a loop encircling said last mentioned ring and with a portion for detachably engaging the adjacent portion of said ring carried by said body member.

EVERETT K. WOLFE.