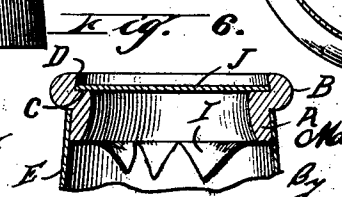
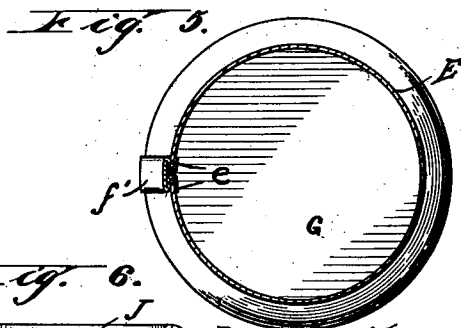
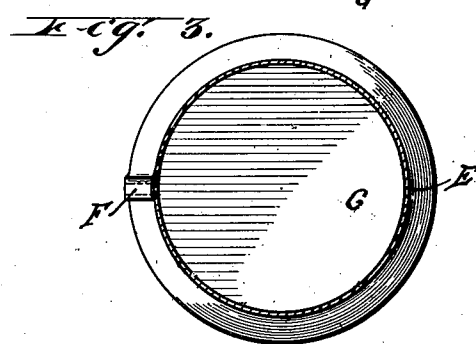
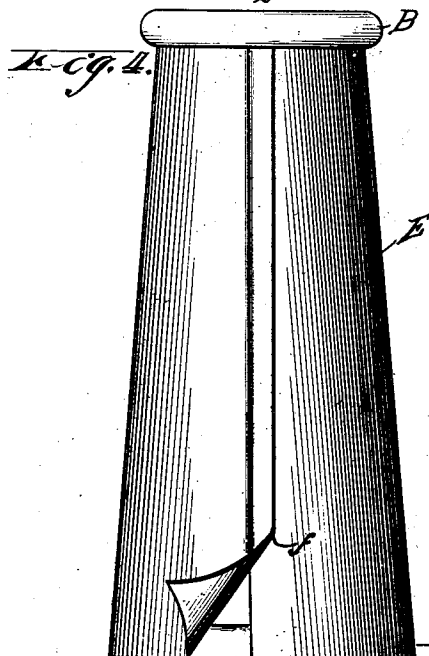
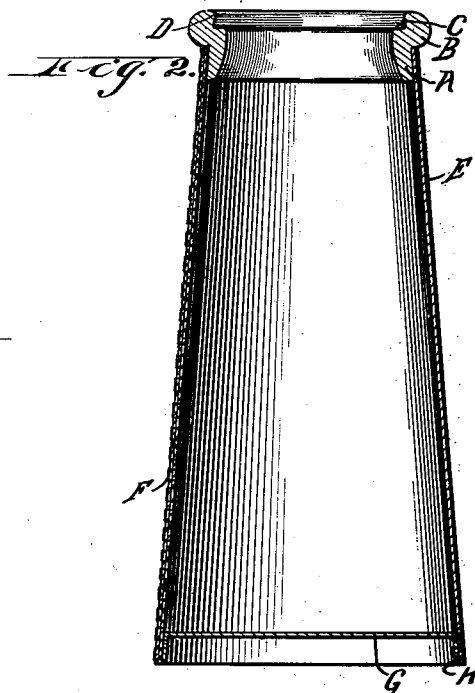
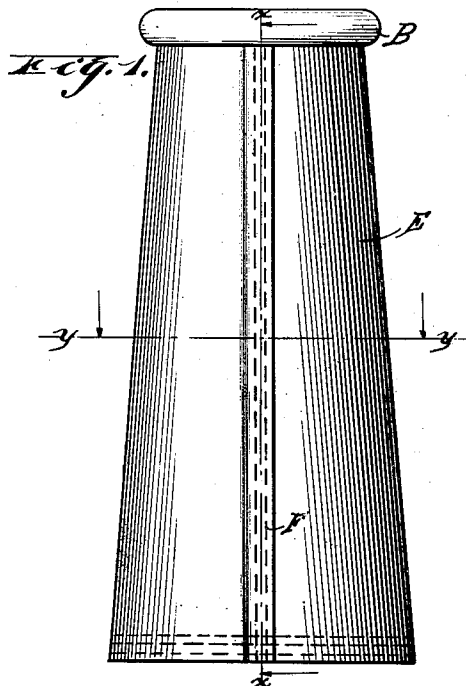


M. P. JANISCH.
MILK RECEPTACLE.
APPLICATION FILED MAR. 19, 1910.

988,102.

Patented Mar. 28, 1911.



Witnesses:
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UNITED STATES PATENT OFFICE.

MAXIMILLIAN P. JANISCH, OF MILWAUKEE, WISCONSIN.

MILK-RECEPTACLE.

988,102.

Specification of Letters Patent. Patented Mar. 28, 1911.

Application filed March 19, 1910. Serial No. 550,364.

To all whom it may concern:

Be it known that I, MAXIMILLIAN P. JANISCH, citizen of the United States, residing at Milwaukee, county of Milwaukee, and State of Wisconsin, have invented new and useful Improvements in Milk-Receptacles, of which the following is a specification.

My invention relates to improvements in receptacles.

10 The object of my invention is to provide a form of construction which will be sufficiently inexpensive to meet the requirements for a bottle which is to be filled but once, and which will also have stability when
15 loaded in a wagon or other vehicle used for delivery purposes and which will readily fit any ordinary frame which may be used in such a vehicle to support the upper ends of the bottles.

20 A further object of my invention is to provide a bottle of light weight and sufficient durability for the desired purpose, which can be capped by the ordinary capping machines now used for capping glass bottles.

25 A further object of my invention is to provide an absolutely sanitary bottle, the interior being hermetically sealed up to the time that the bottle is filled.

30 In the following description, reference is had to the accompanying drawings, in which—

35 Figure 1 is an elevation of a milk bottle embodying my invention. Fig. 2 is a sectional view of the same drawn on line $x-x$ of Fig. 1. Fig. 3 is a view in horizontal section, drawn on line $y-y$ of Fig. 1. Fig. 4 is a view similar to Fig. 1, showing a slightly modified form of construction. Fig. 5 is a sectional view, drawn to the same plane as
40 Fig. 3 and showing a third form of construction. Fig. 6 is a detail sectional view of the mouth piece, showing the sealing sheet after the same has been broken by the filling funnel and also showing the cap piece in position.

45 Like parts are identified by the same reference characters throughout the several views.

50 A bottle is provided with a mouth piece, having a downwardly extending portion A, the outer surface of which is substantially cylindrical in form, and an upper portion B having a rounded outer surface and an interior groove forming a shoulder at C, this groove being slightly under cut, *i. e.* the diameter at the shoulder is slightly greater
55 than the diameter at D above the shoulder.

The mouth piece composed of the parts A and B, as above explained, may be formed of wood, or of any other suitable material, wood being probably the least expensive at
60 the present time. The part B extends outward abruptly from the part A forming a shoulder against which abuts the side wall E of the bottle. This side wall is preferably formed of paper rolled to produce a conically tapered cylinder, the upper end of
65 which is adapted to fit the part A of the mouth piece member. The meeting edges of the rolled sheet which forms the side walls, may be stitched together, as shown at F in Fig. 1, or gummed together as indicated at
70 f in Fig. 4, or, if desired, they may be connected by means of a metallic clip f' , as shown in Fig. 5, said clip having laterally turned lips e adapted to pass between the
75 margins of the wall E and engage the inner surfaces of said wall with a clenching or clamping action. It will therefore be observed that it is not material to my invention what means are employed to connect
80 the side margins of the wall E, since any form of liquid tight, sanitary joint may be employed. The bottom of the receptacle is also constructed of paper, pressed into the form of a shallow cup, having a wall G
85 which forms the bottom proper and side flanges H, this cup shaped structure being inserted into the lower end of the receptacle in an inverted position and the walls H gummed to the lower margins of the wall
90 E or secured thereto by stitching or in any other convenient manner. The bottle thus formed, is coated with paraffin, preferably both inside and out, the paraffin rendering the same liquid tight and air tight, when
95 the mouth is closed.

If desired, a sheet of oiled paper, or equivalent material I is applied to the lower margin of the portion A of the mouth piece and secured thereto by the paraffin or in any
100 other suitable manner. This sheet of paper I will preferably be applied and secured in position before the bottom G is inserted, after which the body of the bottle is dipped in paraffin and the bottom G inserted and
105 sealed, either by a subsequent dipping in hot paraffin, or by inserting the bottom G before the coating of paraffin on the side walls E is permitted to cool. When the bottle is to be filled, the insertion of a filling
110 funnel will break the sealing sheet I, and as soon as the bottle has been filled, it

is transferred to the capping machine and a cap J inserted in the mouth into contact with the shoulder C. This cap J is also preferably of paper and is of the same form as those now in common use for glass bottles.

It is not material to my invention whether the sealing sheet I is applied to the lower margin of the mouth piece member or whether it is applied to the shoulder C, since this sheet of paper will be sufficiently thin so that it will not interfere with the insertion of the cap. The sealing sheet need not be removed when perforated by the insertion of the funnel. Where the bottles are capped under sanitary conditions preparatory to being used, it will not, of course, be necessary to employ the sealing sheet I and this may therefore be dispensed with, if desired.

It will be observed that the mouth piece is so formed that it may be forced into the upper end of the receptacle, the convergence of the side walls being insufficient to prevent a sufficiently close fit to secure a liquid tight joint with the aid of the paraffin coating. This coating is the only securing means required for positively connecting the mouth piece to the side walls, for the parts are non-metallic and fibrous, and the walls, particularly the side walls, will yield sufficiently under pressure to permit the lower margin of the mouth piece to pass the upper margins of the side walls. It will be further observed that the cap is supported by the mouth piece above the margins of the side walls, thus allowing sufficient stock in a non-metallic member, to avoid liability of breakage without unduly contracting the opening, for the mouth piece is thickened outwardly beyond the side walls.

By locating the cap above the side wall margins, caps may be used having a diameter nearly as great as that of the opening at the upper end of the side walls in which the mouth piece is inserted, and the rounded portion B of the mouth piece not only rests upon the side wall margins and prevents the mouth piece from being forced inwardly,

but also extends beyond the side walls and protects them against jamming or buckling pressures, and in addition thereto provides the necessary stock to prevent breakage at the point where the cap is inserted. The downwardly extending member or flange A may thus have an opening as large as in ordinary milk bottles.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a receptacle having paper side walls, of an annular non-metallic mouth piece having a rounded surface covering and extending outwardly beyond the upper margins of the side walls and provided with a downwardly projecting flange fitting said side walls, said mouth piece having an interior shoulder adapted to receive a disk shaped cap, and a gradually contracting annular inner surface above the shoulder adapted to permit the insertion and removal of a flexible non-metallic cap.

2. The combination with a receptacle having paper side walls, of a non-metallic mouth piece covering the upper margins of the side walls and provided with a downwardly projecting apertured member fitting said side walls, said mouth piece having an interior shoulder adapted to receive a disk shaped cap, and a gradually contracting inner surface above the shoulder adapted to permit the insertion and removal of a flexible non-metallic cap, said cap receiving shoulder being located above the plane of the upper margins of the side walls, and the mouth piece being thickened outwardly above said wall margins, to impart the necessary rigidity and strength to the cap retaining portion of said mouth piece and prevent the latter from being forced downwardly into the receptacle.

In testimony whereof I affix my signature in the presence of two witnesses.

MAXIMILLIAN P. JANISCH.

Witnesses:

LEVERETT C. WHEELER,
O. R. ERWIN.