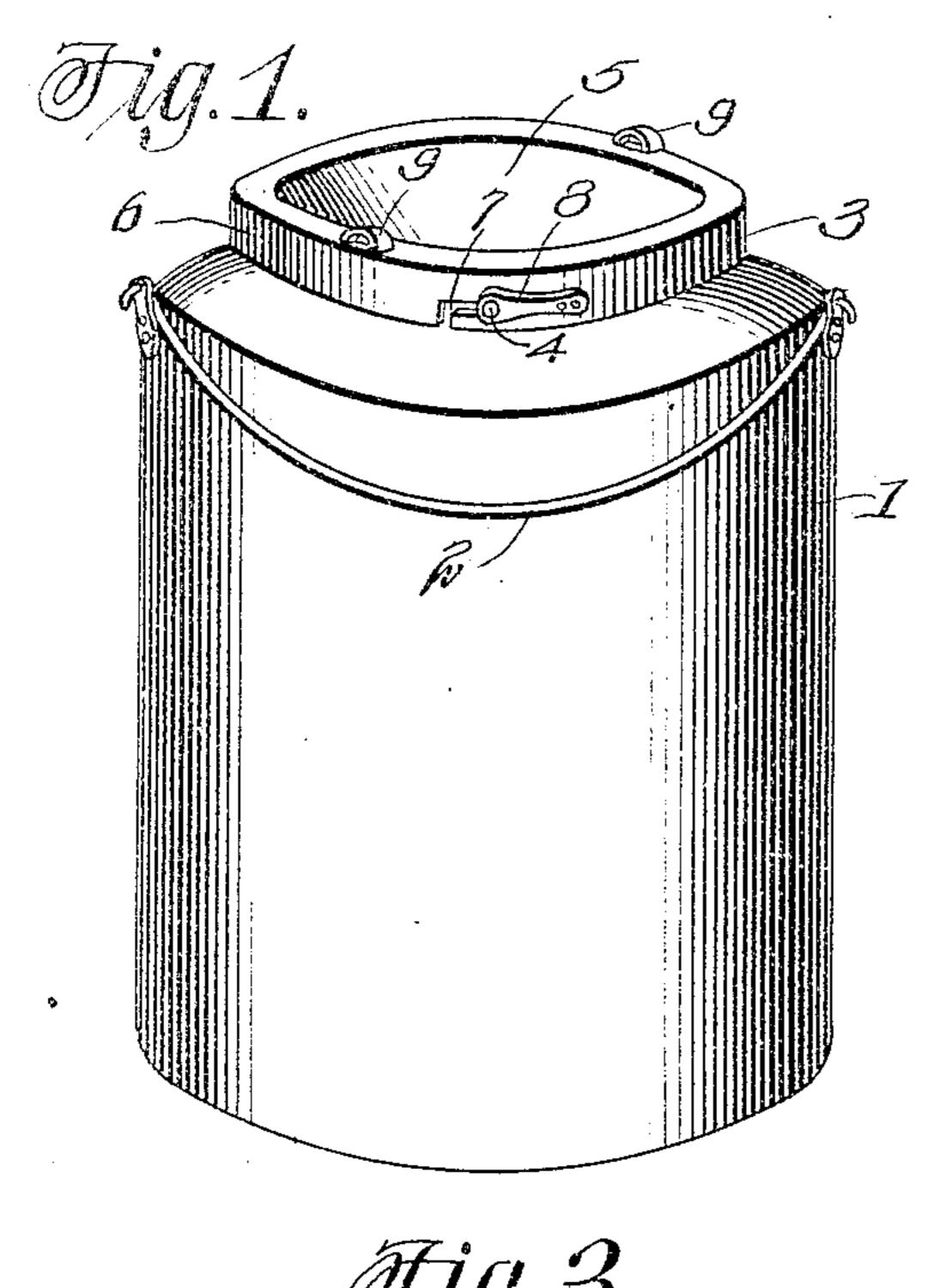
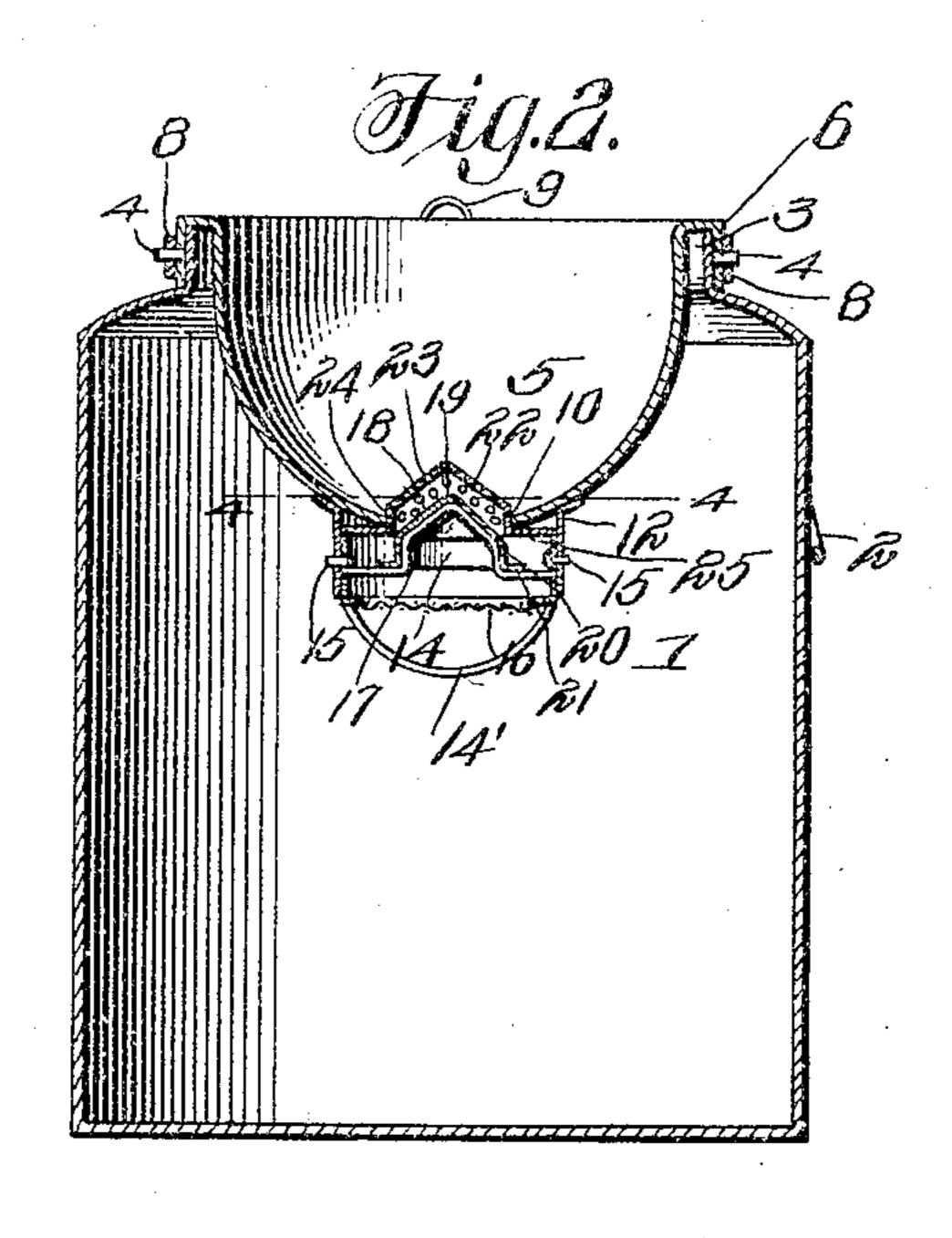
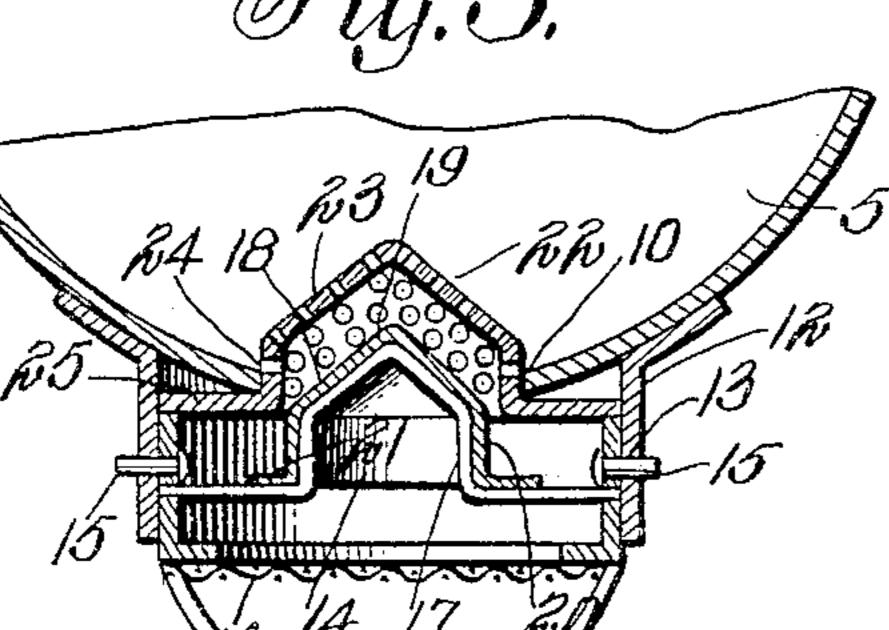
J. H. KING.

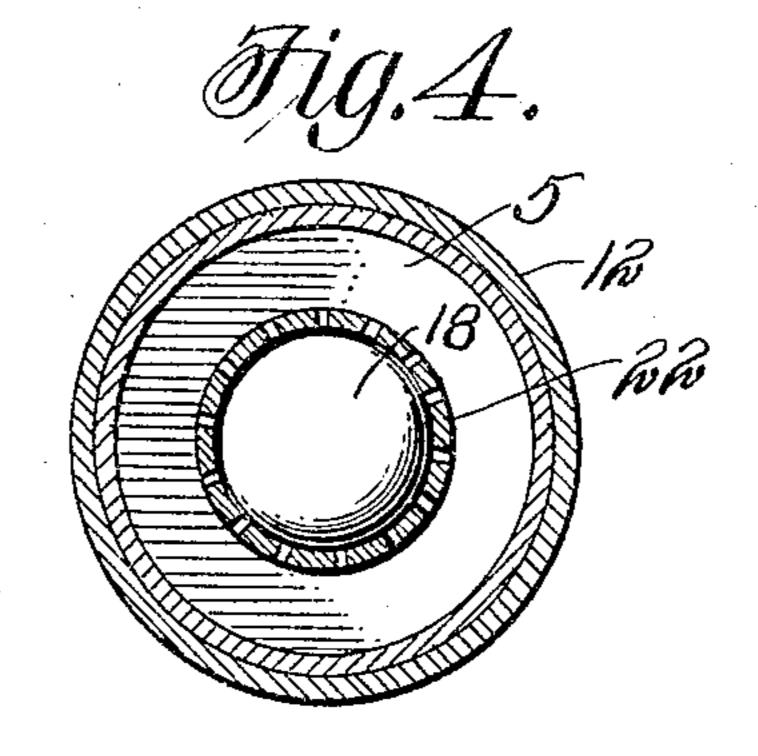
NON-SPILLABLE MILK PAIL.

APPLICATION FILED AUG. 4, 1904.









Witnesses MCC. Tyddanc. C. H. Grestaner. John H. Kina
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United States Patent Office.

JOHN HEUSTIS KING, OF GARRITY, ALABAMA.

NON-SPILLABLE MILK-PAIL.

SPECIFICATION forming part of Letters Patent No. 778,678, dated December 27, 1904.

Application filed August 4, 1904. Serial No. 219,504.

To all whom it may concern:

Be it known that I, John Heustis King, a citizen of the United States, residing at Garrity, in the county of Mobile and State of Alabama, have invented certain new and useful Improvements in Non-Spillable Milk-Pails; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in

non-spillable milk-pails.

The object of the invention is to provide a milk-pail of this character which if casually upset will still retain the milk or other contents of the same.

Another object is to provide a pail of this character which may be used as a milking-pail, means being provided whereby dirt and particles of foreign matter will be excluded from the pail.

A further object is to provide a pail of this character which may be readily converted into

a churn.

With these and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be hereinafter more fully described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of a pail constructed in accordance with the invention. Fig. 2 is a vertical sectional view of the same. Fig. 3 is an enlarged detail vertical sectional view of the lower end of the receiving-bowl, showing the arrangement of the strainers and the automatic closing-valve. Fig. 4 is a horizontal sectional view of the parts shown in Fig. 1.

Referring more particularly to the drawings, 1 denotes a pail or receptacle, which may
be of any suitable shape and is provided with
a bail or handle 2 and with an upwardly-projecting annular flange 3. At diametrically
opposite points on the outer side of the flange
45 3 are formed laterally - projecting pins or
lugs 4.

Adapted to be inserted into the open end of the pail 1 is an apertured bowl 5, which has formed on its upper edge a downwardly-pro-5° jecting annular flange 6, which is adapted to

project over and to engage the annular flange 3 of said pail. At diametrically opposite points on the flange 6 are formed right-angular-shaped slots 7, which are adapted to be engaged with the pins or lugs 4. When so 55 engaged, the bowl may be turned, thereby locking the same into engagement with the flange on the end of said pail. On the flange 6, adjacent to the closed ends of the slots 7, are secured apertured spring-catches 8, which 60 are adapted to engage the ends of said pins or lugs 4, thereby preventing said bowl from being turned, and thus preventing disengagement with the slots 7 from said lugs. On the upper end of the bowl 5 are formed upwardly- 65 projecting eyes or loops 9, by which the bowl may be turned to disengage the slots 7 on the lugs 4, thereby permitting said bowl to be removed.

In the lower end of the bowl 5 is formed an 70 aperture 10, around which and secured to the bowl is a downwardly-projecting annular flange 12, in which is formed at diametrically opposite points right-angular-shaped slots 13. Into the lower open end of the flange 12 is 75 adapted to be inserted a cap 14, on the sides of which at diametrically opposite points are formed pins or lugs 15, which are adapted to engage the right-angular-shaped slots 13, thereby connecting said cap to said flange. 80 The lower end of the bottom of the cap 14 is composed of wire-netting, thereby forming a strainer 16.

Within the cap 14 is arranged a spider 17, which is constructed of diagonally-arranged 85 wire rods, which are bent to form a centrally-disposed substantially conical or triangular-shaped support upon which is normally adapted to rest a valve 18. Said valve 18 consists of a centrally-disposed conical-shaped portion 90 19, annular side walls 20, and a horizontal radially-disposed annular flange 21. When the pail 1 is in an upright position, the valve 18 is adapted to rest upon the bars or arms of the spider 17.

If desired, a handle 14' may be secured to the lower edge of the cap 14, said handle being here shown as bail-shaped in form.

Within the aperture 10 of the bowl 5 is arranged a strainer 22. Said strainer consists 100

of the conical-shaped portion 23 and perforated annular side walls 24, around the lower end of which is formed a horizontally-disposed annular flange 25, which is adapted to rest upon the outer edge of the cap 14, thereby

holding the strainer 22 in place.

When the pail 1 is in an upright position, the valve 18 drops upon and is supported by the spider 17, and should said pail become upset or tilted while containing milk or other liquid said valve 17 will be forced upwardly or outwardly by the contents of said pail and held thereby into engagement with the strainer 22, thereby closing the aperture in the lower end of the bowl 5, thus preventing any of the liquid contained in said pail from being spilled out.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

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

3º Patent, is—

tially as described.

1. In a non-spillable milk-pail, the combination with a pail or vessel, of an apertured bowl removably suspended therein, a depending annular flange secured to the outer side of 35 said bowl around said aperture, a cap adapted to be inserted in and removably connected to said flange, said cap having a strainer-bottom, a conical-shaped strainer having an annular radially-disposed flange formed on its 40 lower edge, said flange being adapted to rest on the upper edge of said cap with the conical portion of the same projecting through the aperture in said bowl, a spider arranged in said cap, and a valve supported on said spi-45 der whereby should said pail be upset said valve will enter said conical-shaped strainer and close the aperture in said bowl, substan-

2. In a non-spillable milk-pail, having an upwardly-projecting annular flange or rim, 50 the combination with an apertured bowl, having on its upper edge a downwardly-projecting annular flange adapted to engage the annular flange on said pail, means whereby said flanges are locked together to hold said bowl 55 in place, an annular depending flange arranged on the lower end of said bowl around said aperture, a cap adapted to be inserted into said flange, means for retaining said cap in place, a strainer arranged in the bottom of said cap, a 60 conical-shaped strainer arranged in the aperture of said bowl, said conical strainer having an annular flange whereby the same is supported upon the upper edge of said cap, a conicalshaped frame or spider arranged in said cap, 65 a conical-shaped valve normally adapted to be supported on said spider but which when said pail upsets will enter said conical strainer thereby closing the aperture in said bowl, substantially as described.

3. In a non-spillable milk-pail having an upwardly-projecting annular flange or rim, the combination with an apertured bowl, having on its upper edge a downwardly-projecting annular flange adapted to engage the an- 75 nular flange on said pail, and having formed therein oppositely-disposed right-angularlyformed slots adapted to engage pins or studs formed on the flange of said pail, apertured spring-catches secured to said bowl-flange and 80 adapted to engage said pins, thereby locking said bowl and pail together, an annular depending flange arranged on the lower end of said bowl around the aperture therein, a cap removably connected to said flange, a strainer 85 arranged in the bottom of said cap, a strainer arranged in the aperture of said bowl, and a valve adapted to close said aperture when said pail is upset, substantially as described.

In testimony whereof I have hereunto set 9° my hand in presence of two subscribing wit-

nesses.

JOHN HEUSTIS KING.

Witnesses:
GEO. BEAMER,
ROBT. H. SMITH.