

(No Model.)

J. A. HATCH.
STRAINER SHIELD FOR MILK PAILS.

No. 549,640.

Patented Nov. 12, 1895.

Fig. 1.

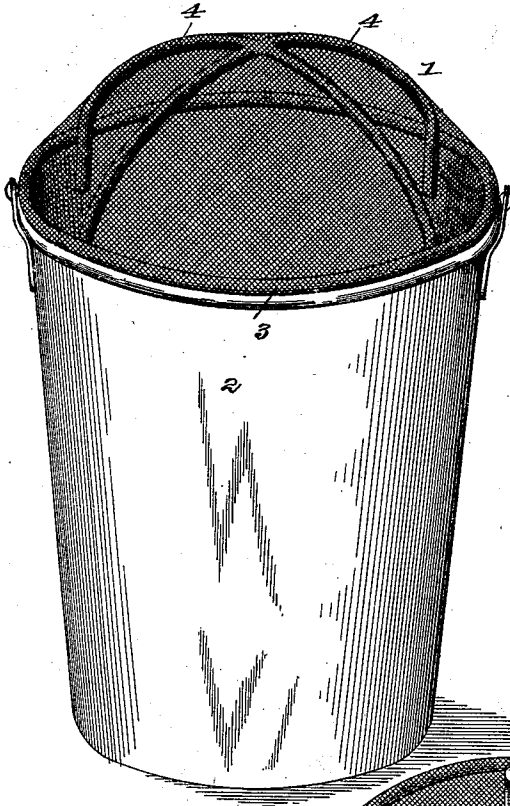


Fig. 2.

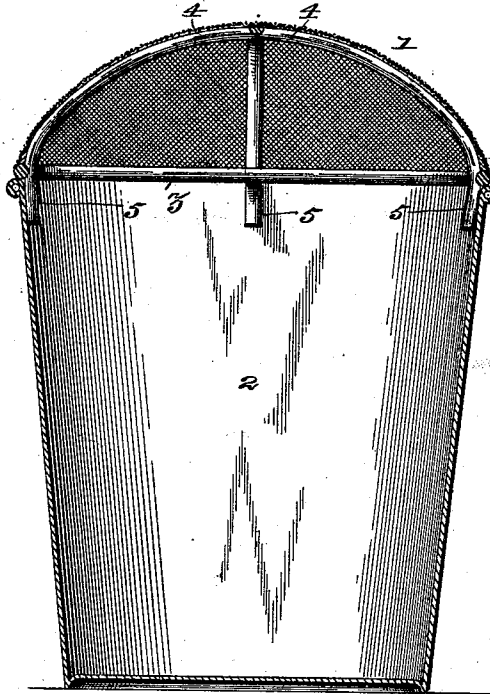
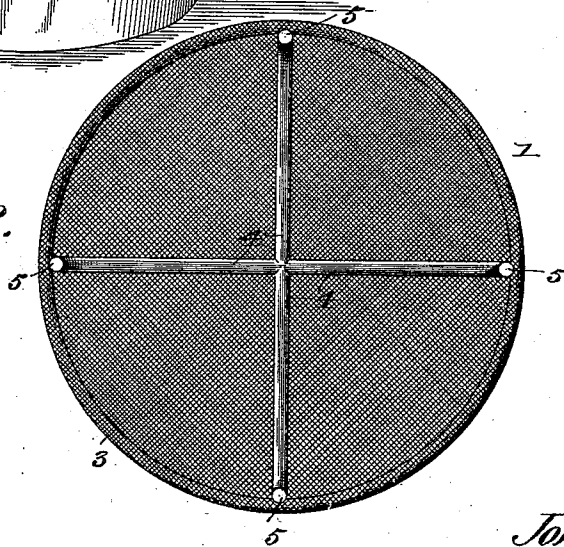


Fig. 3.



Witnesses

E. H. Monroe.

By his Attorneys,

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UNITED STATES PATENT OFFICE.

JOHN A. HATCH, OF PHILIPSBURG, PENNSYLVANIA.

STRAINER-SHIELD FOR MILK-PAILS.

SPECIFICATION forming part of Letters Patent No. 549,640, dated November 12, 1895.

Application filed August 15, 1894. Serial No. 520,409. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. HATCH, a citizen of the United States, residing at Philipsburg, in the county of Centre and State of Pennsylvania, have invented a new and useful Strainer-Shield for Milk-Pails, of which the following is a specification.

The invention relates to improvements in strainer-shields for milk-pails.

Heretofore milk-pails have been provided with straining devices; but they have been arranged on the inside, so that the dirt will collect on the exterior of the shield, causing the milk to percolate through such accumulation, and also requiring the shield to be frequently cleaned.

The object of the present invention is to avoid the above objections and to provide practically a self-cleaning shield of peculiar construction from which the dirt will be caused to shed itself and not allowed to remain thereon to become dissolved and pass through into the pail.

The invention consists in the construction and novel combination and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claim hereto appended.

In the drawings, Figure 1 is a perspective view of a shield constructed in accordance with this invention and shown applied to a milk-pail. Fig. 2 is a vertical sectional view of the same. Fig. 3 is a detail plan view of the shield inverted.

Like numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates a concavo-convex shield arranged on the upper edges of a milk-pail 2, forming an exteriorly-arranged foraminous cap or cover for the same and presenting an exterior convex surface. The shield consists of finely-woven wire-cloth and is maintained in proper shape by a supporting-frame, which is composed of a ring 3, arranged at the lower edges of the shield and having the edges of the wire-cloth secured to it, and the arched cross-pieces 4, crossing each other at the top of the shield and located on the inner face of the wire-cloth and secured to the ring 2. The ring 2 rests upon the upper edges of the

pail, and it is held thereon and retained against lateral movement by depending extensions 5 of the cross-pieces. The extensions 5 of the cross-pieces form catches or stops. They are located on the interior of the milk-pail, and they may have sufficient resiliency to hold the shield firmly in position. The parts of the supporting-frame are secured together by soldering, brazing, or the like, and the edges of the wire-cloth are similarly attached to the ring and are partially rolled on the same. The shield conforms to the configuration of a milk-pail. It presents an exterior convex surface, and it is thereby adapted for shedding any dirt or accumulation collecting on the exterior. By this construction there is nothing to stop the downward passage of dirt on the inclined sides of the shield, and it will reach the lower edges of the same and roll off, whereby the shield is practically self-cleaning.

In using the shield the milk will strike the inclined sides of the foraminous cap and will readily pass through the wire-cloth, and the meshes thereof are sufficiently fine to exclude all dirt, insects, and other extraneous matter, and there is no liability of the shield becoming clogged. The milk striking on the shield will also tend to cause the foreign matter to pass down the inclined sides of the shield and leave the latter perfectly free.

It will be seen that the shield is simple and comparatively inexpensive in construction, that it is adapted to be readily placed on and removed from a milk-pail, and that it is practically self-cleaning. It will also be seen that the shield is arranged for shedding dirt and other foreign matter, that it prevents accumulation of the same, and that the milk is not caused to pass through the entire collection or accumulation of such matter, and it is unnecessary to remove and clean the shield during the operation of milking.

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.

What I claim is—

A self-cleaning strainer shield for milk pails consisting of a stiffened concavo-convex

screen cap adapted to rest directly on the upper edge of a milk pail to form a dirt shedding cover therefor, said screen cap being of the same diameter as the open upper end of a
5 milk pail to lie flush with the outside thereof, and also presenting a smooth exterior convex surface that is wholly elevated above the top of the pail, and provided with means for maintaining it in that position whereby accumu-
10 lations of foreign matter on the shield will be

caused to fall entirely outside of the pail, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOHN A. HATCH.

Witnesses:

E. G. SIGGERS,

GEO. H. SNYDER.