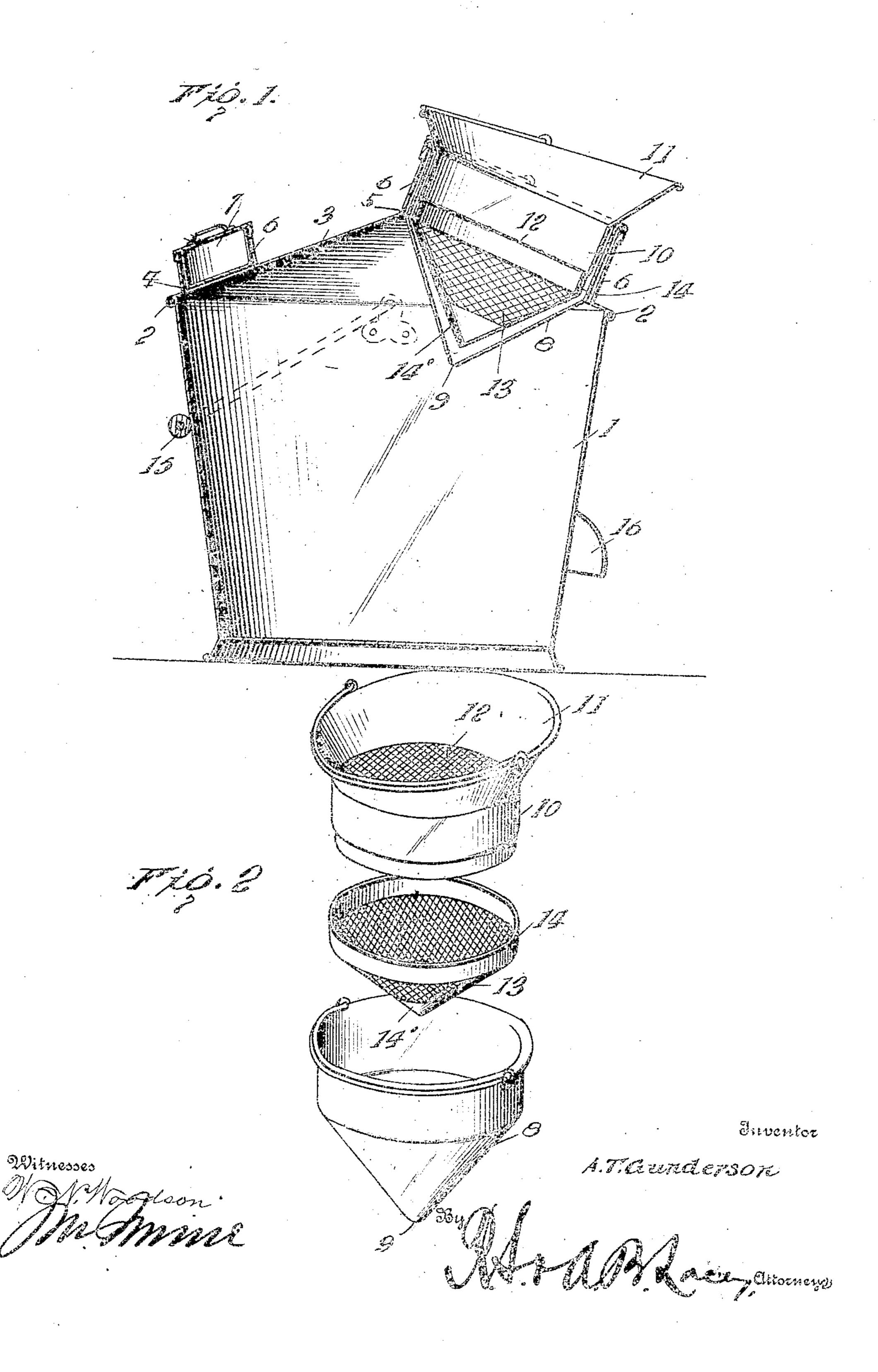
## A. T. GUNDERSON. MILK PAIL AND STRAINER. APPLICATION FILED NOV. 8, 1905.



## UNITED STATES PATENT OFFICE.

## ADOLPH T. GUNDERSON, OF DUNBAR, IOWA.

## MILK PAIL AND STRAINER.

No. 310,408.

Specification of Letters Patent.

Patented Jan. 23, 1906.

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To all whom it may concern:

Be it known that I, ADOLPH T. GUNDERSON, a citizen of the United States, residing at Dunbar, in the county of Marshall and State of 5 Iowa, have invented certain new and useful Improvements in Milk Pails and Strainers, of which the following is a specification.

The present invention relates to improvements in milk-pails of that type which are pro-10 vided with means for straining the milk, and has for its object to provide a device of this character which will effectually prevent all dirt and foreign matter from entering the pail and which is so constructed as to render it 15 practically impossible to spill the contents. Heretofore the principal objection which has been advanced toward these pails has been that they were unsanitary, owing to the fact that the strainer could not be properly cleansed; 20 and a further object of this invention has consequently been to so construct the straining mechanism that it can be readily and quickly taken apart for cleaning purposes.

For a full description of the invention and 25 the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result, reference is to be had to the following description and accompany-

ing drawings, in which—

Figure 1 is a vertical sectional view through a milk-pail constructed in accordance with my invention. Fig. 2 is a detail perspective view showing the various members of the strainer as separated.

Corresponding and like parts are referred to in the following description and indicated in both views of the drawings by the same

reference characters.

The numeral 1 designates the milk-pail 40 proper, which is of the usual construction and is provided around its upper edge with a reinforcing-wire 2. The cover 3 to the pail is preferably passed outward and is rigidly secured in position by solder or other suitable 45 means. A small opening 4 and a larger opening 5 are provided in the cover 3 and are surrounded by externally-projecting flanges 6, having their outer edges rolled back upon themselves to form a reinforcing-band and to 50 thicken the edges. The smaller opening 4 serves as an outlet and is provided with a cover 7, which is closed at both ends and has its outer end formed with the usual stop-flange and han dle. A safety-tube 8 fits snugly within the 55 larger opening 5 and has its outer end reinforced by a wire forming an annular enlarge-

ment, which engages with the outer edgé of the flange 6, while its inner end is contracted and converges to a small opening 9. The straining-tube 10 is located within the safety-tube 8 60 and is provided at its upper end with a funnelshaped receiver 11, one side of which extends outward a greater distance than the opposite side, so as to form a large receiving area for the milk, which is located upon one side of 65 the pail. The lower end of the strainingtube 10 is contracted, and a straining-screen 12 is located immediately above the contracted portion. A conical-shaped straining member 13 is detachably connected to the straining- 70 tube 10 by means of a collar 14 at its larger end, which fits over the contracted portion. The lower extremity of the straining member 13 is provided with a conical pocket 14', which catches all the solid particles which may pass 75 through the upper screen 12. It will be observed that the lower end of the strainingtube is contracted a sufficient amount so that the collar 14 is spaced from the sides of the safety-tube 8. This enables the member 13 80 to be readily withdrawn with the strainingtube 10 and at the same time forms an annular pocket which will catch any of the milk which might pass through the small opening 9 should the pail be overturned.

In the operation of this device the milk will be separated from all the larger particles when it passes through the upper screen 12, and, owing to the fact that the lower screen 13 is inclined, the finer particles will work 90 their way into the pocket 14', while the milk will enter the pail through the opening 9. Owing to the construction of the pail, it will be apparent that should it be in any manner overturned there will be only a small quantity 95 of the milk which will find its way through the opening 9, and this will be caught by the annular pocket formed by the contracted portion of the straining-tube 10, as has hereinbefore been mentioned. When it is desired 100 to remove the milk from the pail, it is poured through the opening 4, and the usual form of bail 15 and handle 16 are provided for that

purpose.

From the foregoing description it will be 105 readily understood that the various members constituting the straining device can be readily taken apart for cleaning and can be assembled with equal facility.

Having thus described the invention, what 110 is claimed as new is--

1. The combination of a milk-pail, a safety-

a small opening, a straining-tube supported by the safety-tube, a funnel-shaped receiving member at the outer end of the straining-tube, a straining-screen within the straining-tube, and a straining member secured to the inner end of said straining-tube.

2. The combination of a milk-pail having an opening therein, a safety-tube located vithin said opening and having its inner end contracted, a straining member supported by

the safety-tube and converging to a point and a pocket located at said point and adapted to eatch the solid particles intercepted by the straining members.

In testimony whereof Luffix my signature in

presence of two witnesses.

ADOLPH T. GUNDERSON. [L. s.]

Witnesses:
Eneos Sawyer,
Tonner-Landvand.

15