

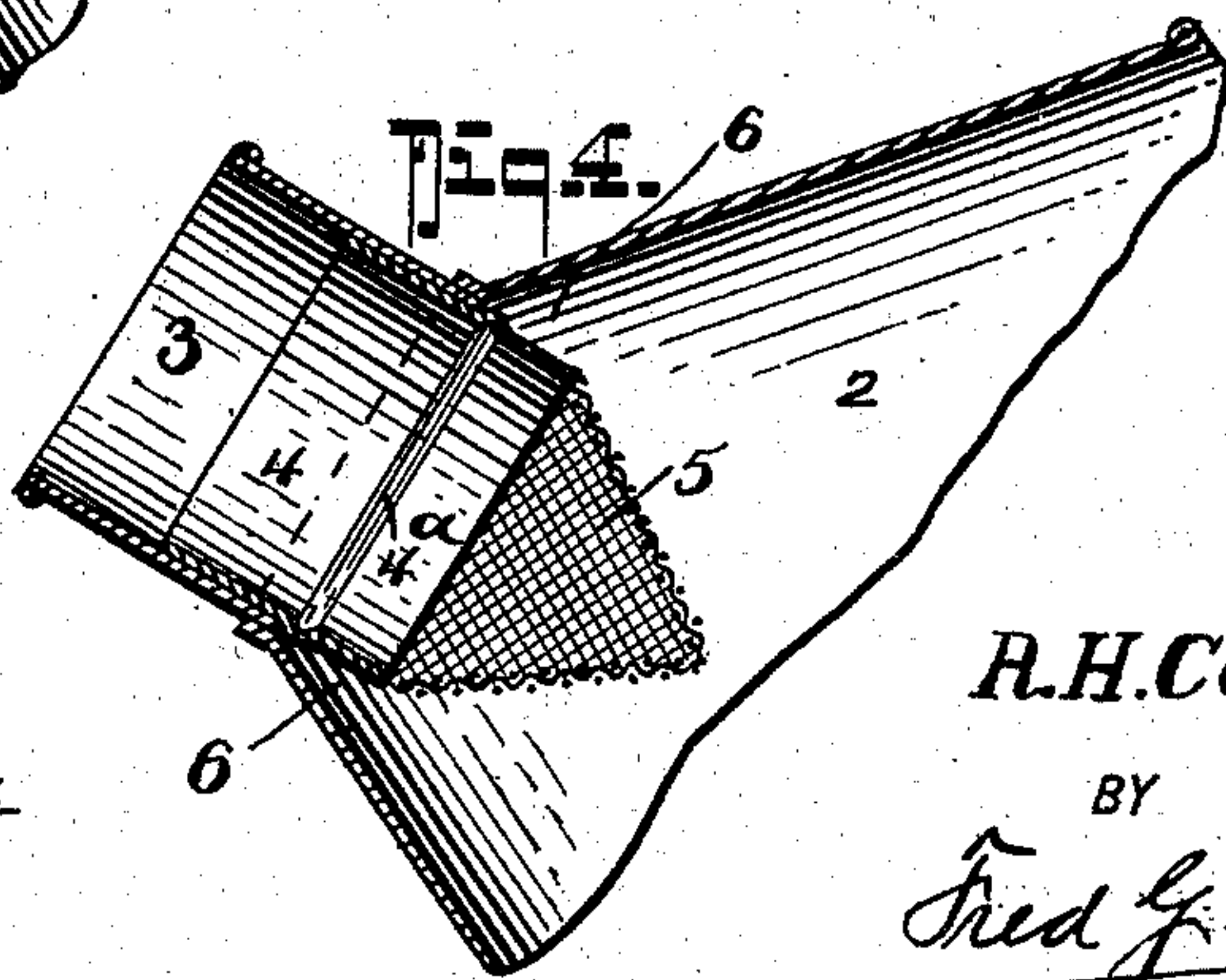
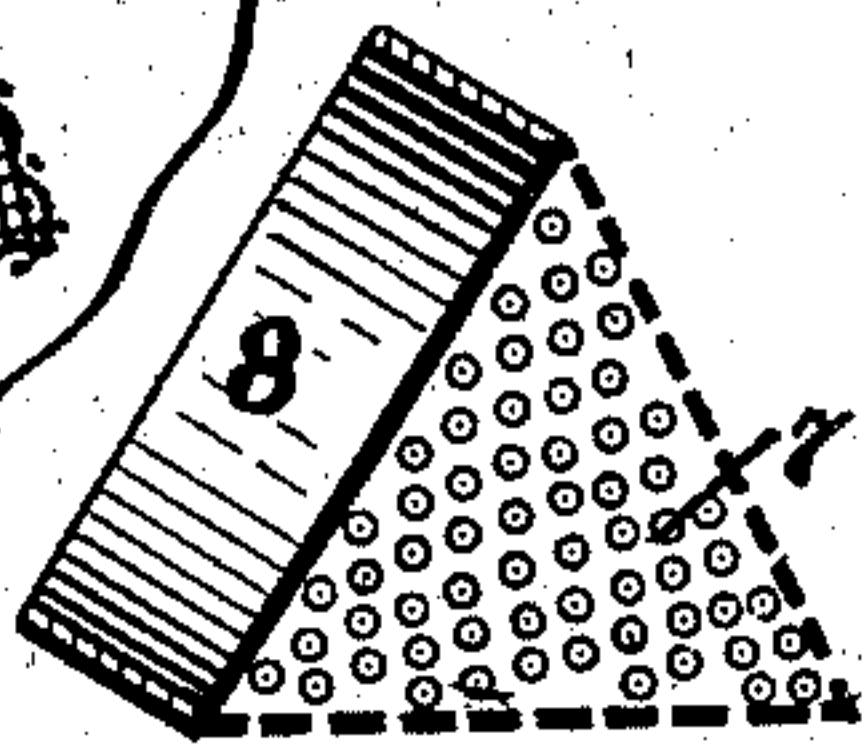
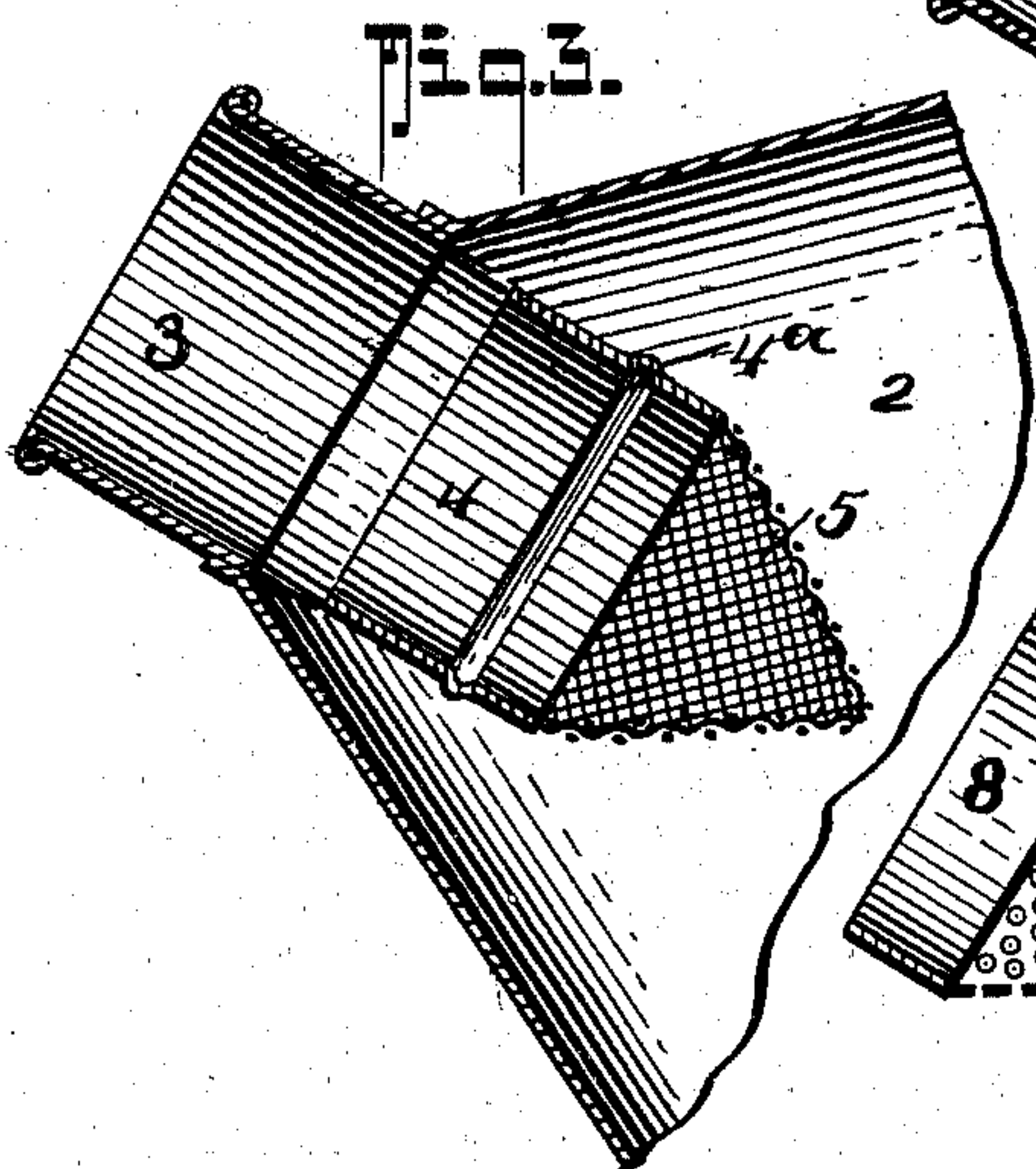
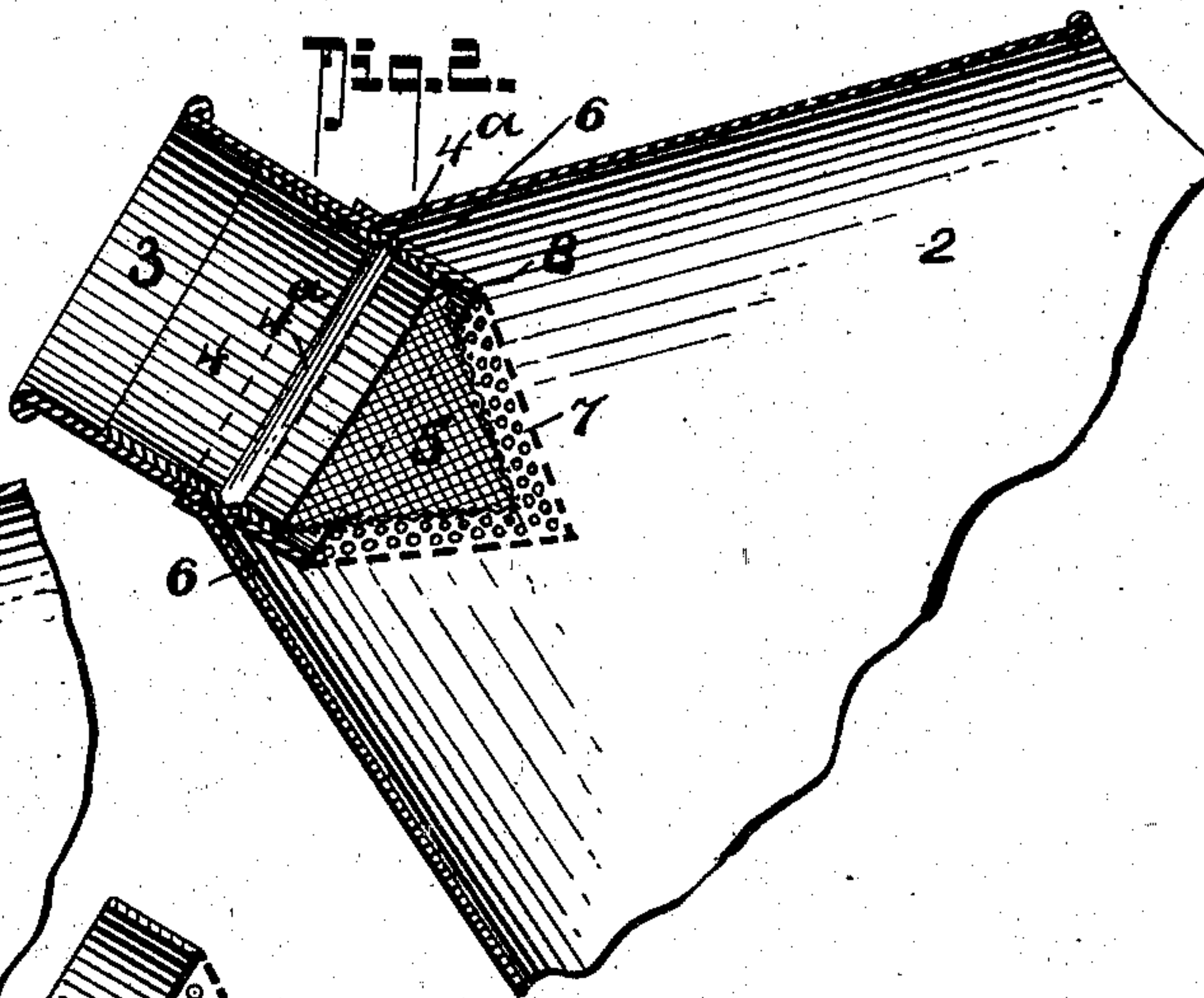
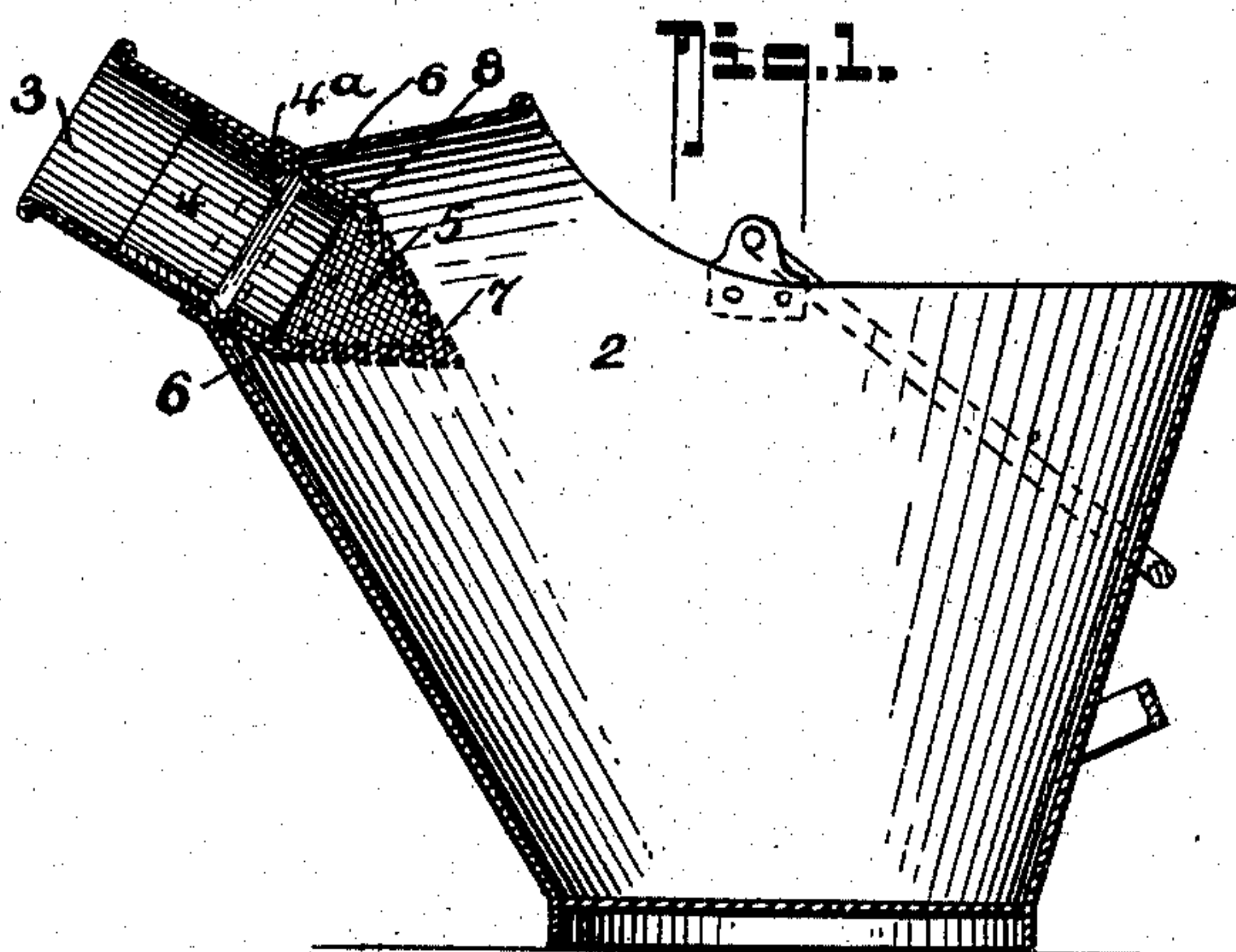
No. 712,360.

Patented Oct. 28, 1902.

R. H. CASSWELL.  
STRAINER.

(Application filed Mar. 3, 1902.)

(No Model.)



WITNESSES:

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# UNITED STATES PATENT OFFICE.

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TO WILLIAM ERNEST BURNS, OF VANCOUVER, BRITISH COLUMBIA,  
CANADA.

## STRAINER.

SPECIFICATION forming part of Letters Patent No. 712,360, dated October 28, 1902.

Application filed March 3, 1902. Serial No. 96,513. (No model.)

*To all whom it may concern:*

Be it known that I, RICHARD H. CASSWELL, a citizen of the Dominion of Canada, residing at Vancouver, in the Province of British Columbia, Canada, have invented a new and useful Strainer, of which the following is a specification.

My invention relates to a milk-pail strainer designed to be removably attached to the outlet or spout of a milk-pail of ordinary construction.

The device has several advantageous and novel features of arrangement and construction, which are fully described and illustrated in the following specification and the accompanying drawings, in which—

Figure 1 is a vertical longitudinal section through a milk-pail having my strainer attached. Fig. 2 is an enlarged longitudinal section of the spout, showing my strainer in place therein. Fig. 3 shows the same detached, and Fig. 4 shows an alternative design having only a single straining-cone.

In the drawings, 2 represents the conical draw from the body of the pail terminating in the cylindrical spout or outlet 3, which is the general construction in pails of this class. Instead, however, of connecting the strainer to the outer end of the spout, as is the common practice, which necessitates the use of a screw connection or similar security to prevent the strainer-cap being carried off by the pressure of the flow from within while pouring, I place mine in the inner end of the spout 3. By this change I am enabled to dispense with the screw attachment and use a simple socket connection 4, checked against the inner end of 3 by a simple bead or shoulder 4<sup>a</sup>. I further construct the wire-gauze straining-surface in the form of a cone, as 5, secured to the socket 4 around its base. By this construction I am enabled to secure a larger straining area, and by directing the apex of the cone toward the interior of the pail the dust, hair, &c., which it is designed to retain, are prevented from obstructing the straining-surface, as such are carried by the flow along the sloping sides of the cone toward its base into the annular pocket 6, formed between the prolongation of the socket-sleeve 4 inward and the conical draw 2 of the pail.

In my preferred construction (shown in Figs. 1 and 2) I provide outside of the gauze strainer proper, 5—i. e., to the inside of the pail—a similarly-shaped cone 7 made of perforated sheet metal, the sleeve 8 of which is checked by the opposite side of the same bead or shoulder 4<sup>a</sup>, which prevents 4 being pressed too far into the spout 3 of the pail. The object of this provision is that I not only obtain a double strainer, the first of which arrests the coarser dirt, but I am enabled to use for this first strainer-cone 7 perforated sheet metal, which having a smoother surface than wire-gauze enables the coarser dirt to slide more freely off it toward the annular pocket 6 before referred to.

The several advantages of my internal conical strainer will be manifest to any one having the use of such. They are: a more effective strainer that will retain its efficiency for a longer time in use and can more quickly be removed for cleansing, one that is less liable to damage, as it is not so exposed as when attached to the outer end of the spout, and withal one simpler and cheaper to manufacture than such as require a screw connection.

Although I have designed my strainer for and described it throughout in its application to a milk-pail, the same construction is clearly applicable to many purposes having similar requirements, in which it may be necessary to furnish a further graduation of straining-cones, and I desire my patent to be inclusive of such.

Having now particularly described my invention and the manner of its application, I declare that what I claim as new, and desire to be protected in by Letters Patent, is—

1. In a pail of the class described, having an inwardly-projecting conical gauze strainer connected by a sleeve to the inner end of the spout, and a bead whereby a short distance of the sleeve projects within the pail; a further conical strainer attached by means of a sleeve to the inward portion of the sleeve of the first named.

2. In a pail wherein it is desired to strain its contents during pouring from the spout; a series of conical graded strainers socketed one within the other and to the inwardly end

of the spout, the apexes of the cones being directed to within the pail.

3. In a pail of the character described, the combination with the cone-shaped end, including the cylindrical pouring-spout; of a strainer, consisting of a cylindrical sleeve, adapted to snugly enter the pouring-spout from the inside, and having an annular bead, whereby to limit the movement of the sleeve into the spout, and to provide an inwardly-projecting portion, the inner end of said pro-

jecting portion terminating in a conical straining-surface, and a second cone-shaped strainer having an imperforate sleeve, adapted to snugly fit over the inwardly-projecting end of the other strainer-sleeve portion, substantially as shown and for the purposes described. 15

RICHARD H. CASSWELL.

Witnesses:

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