

(No Model.)

R. D. SMITH.  
MILK PAIL ATTACHMENT.

No. 542,575.

Patented July 9, 1895.

Fig. 1

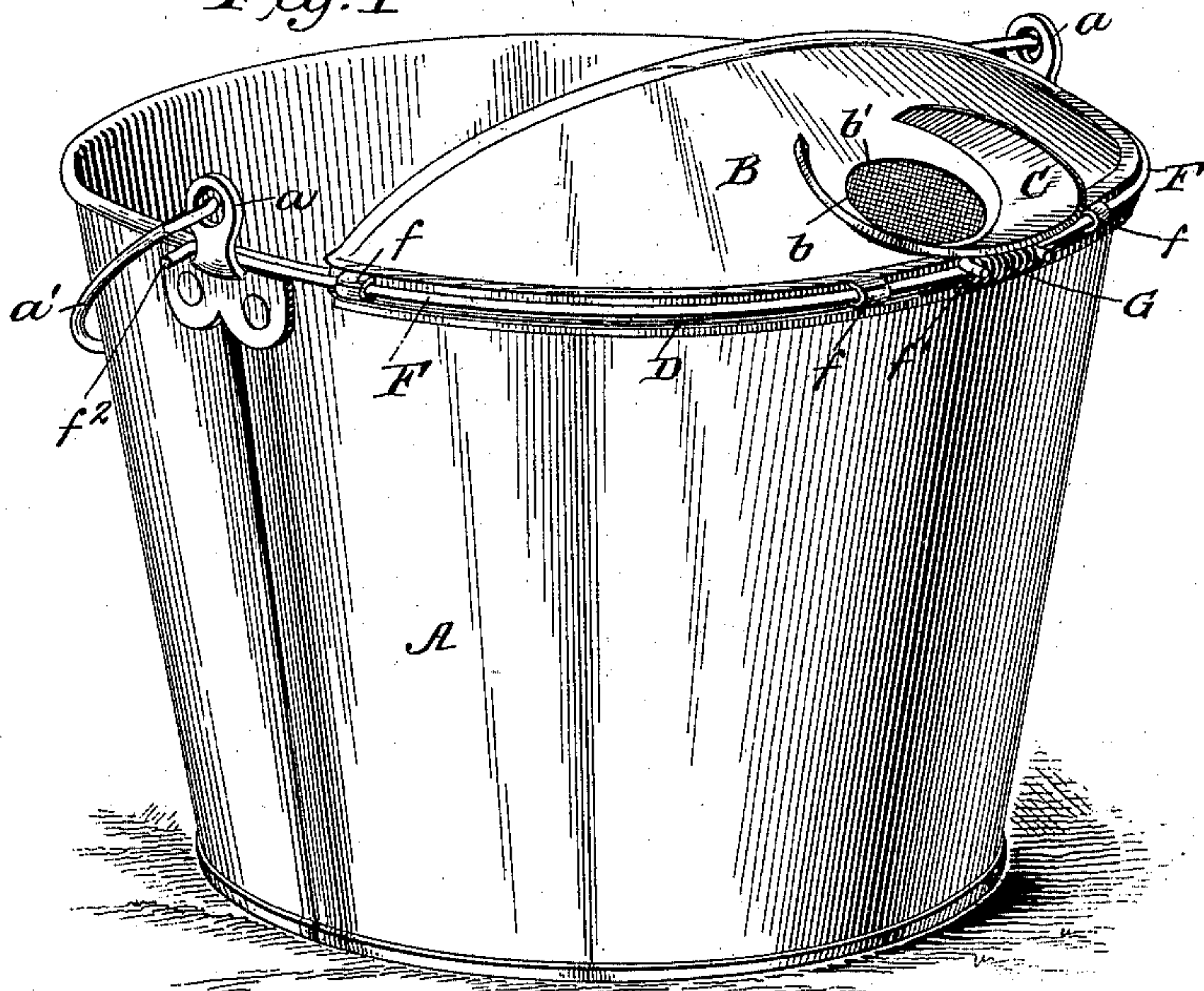


Fig. 2.

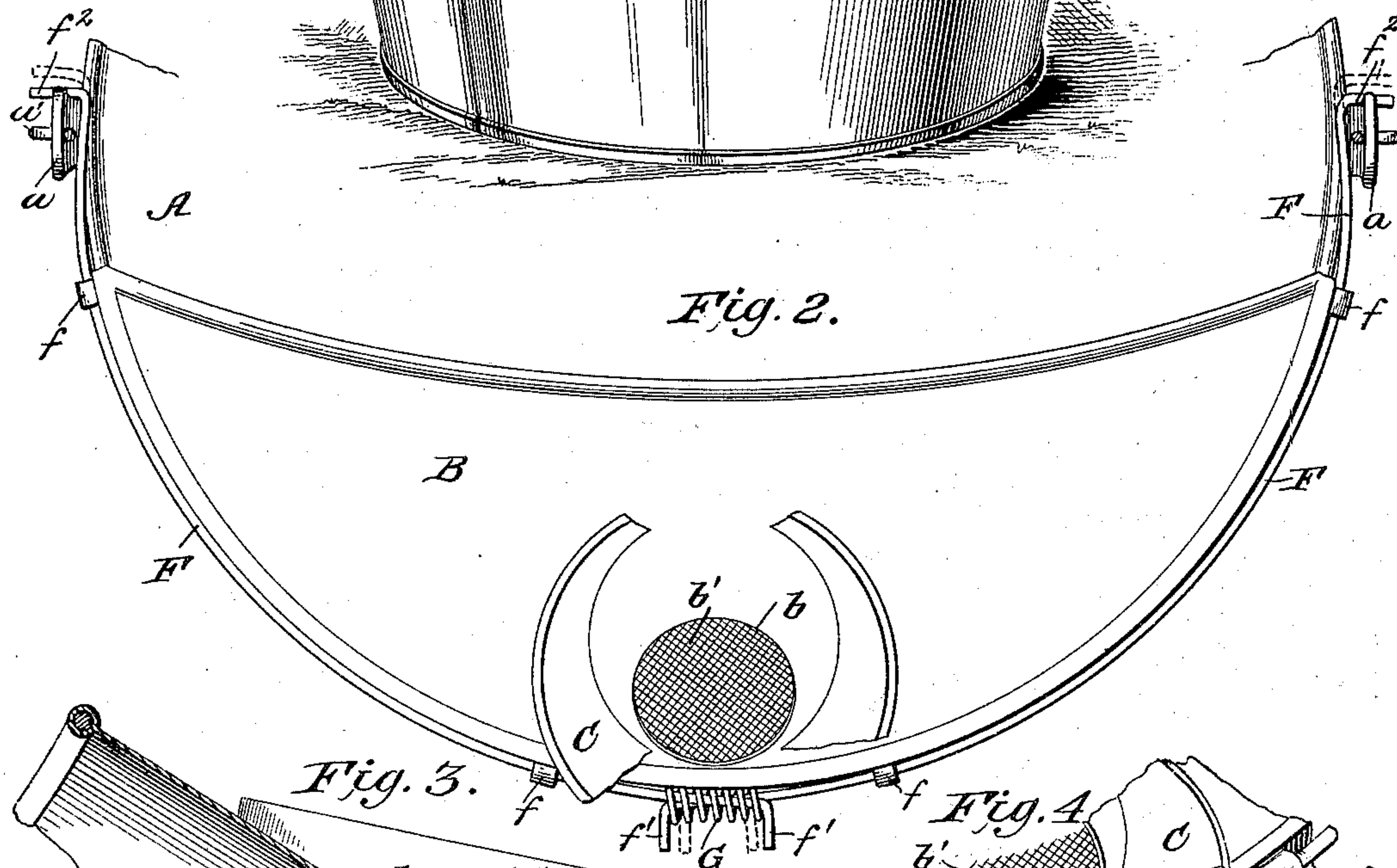
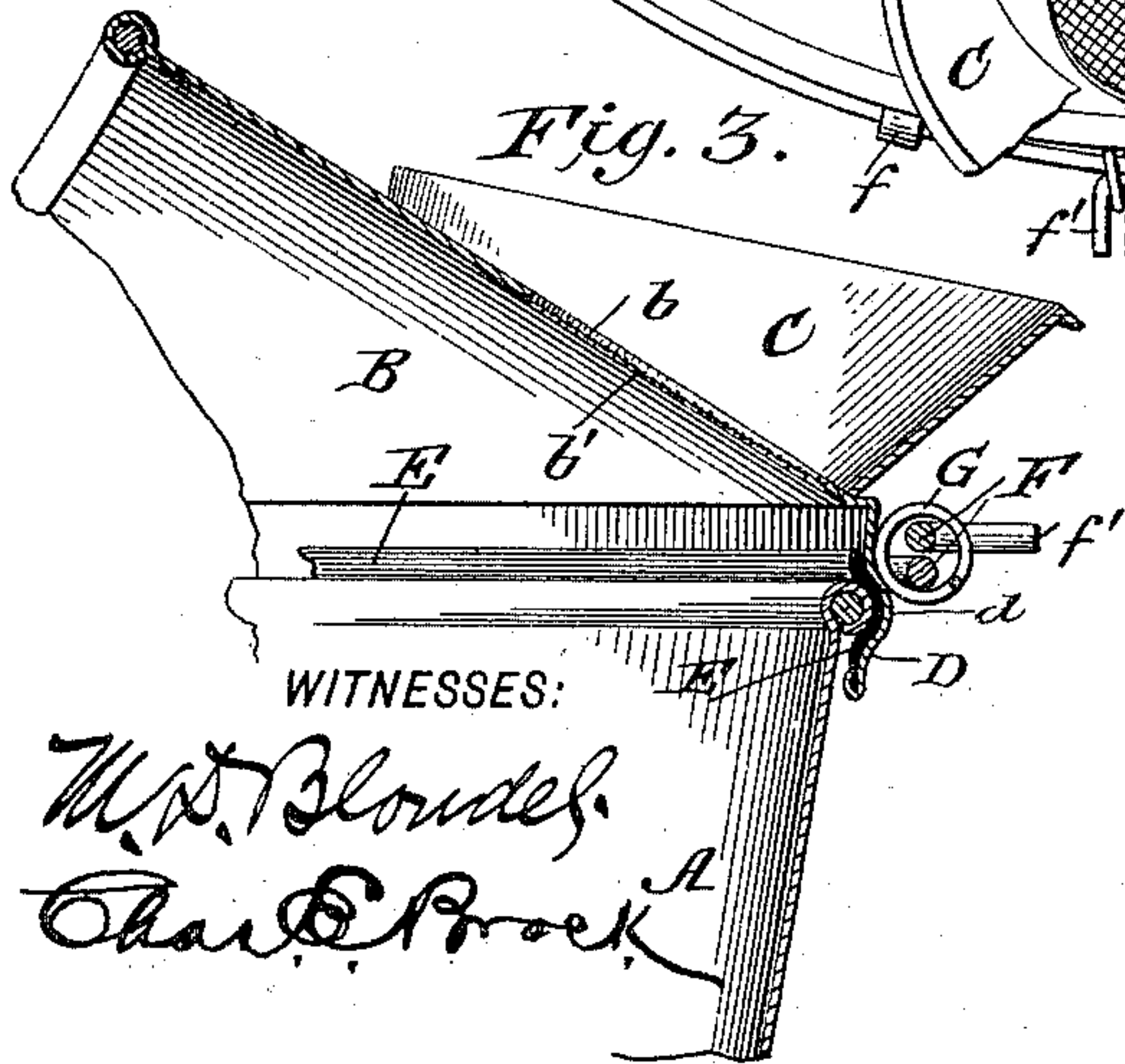


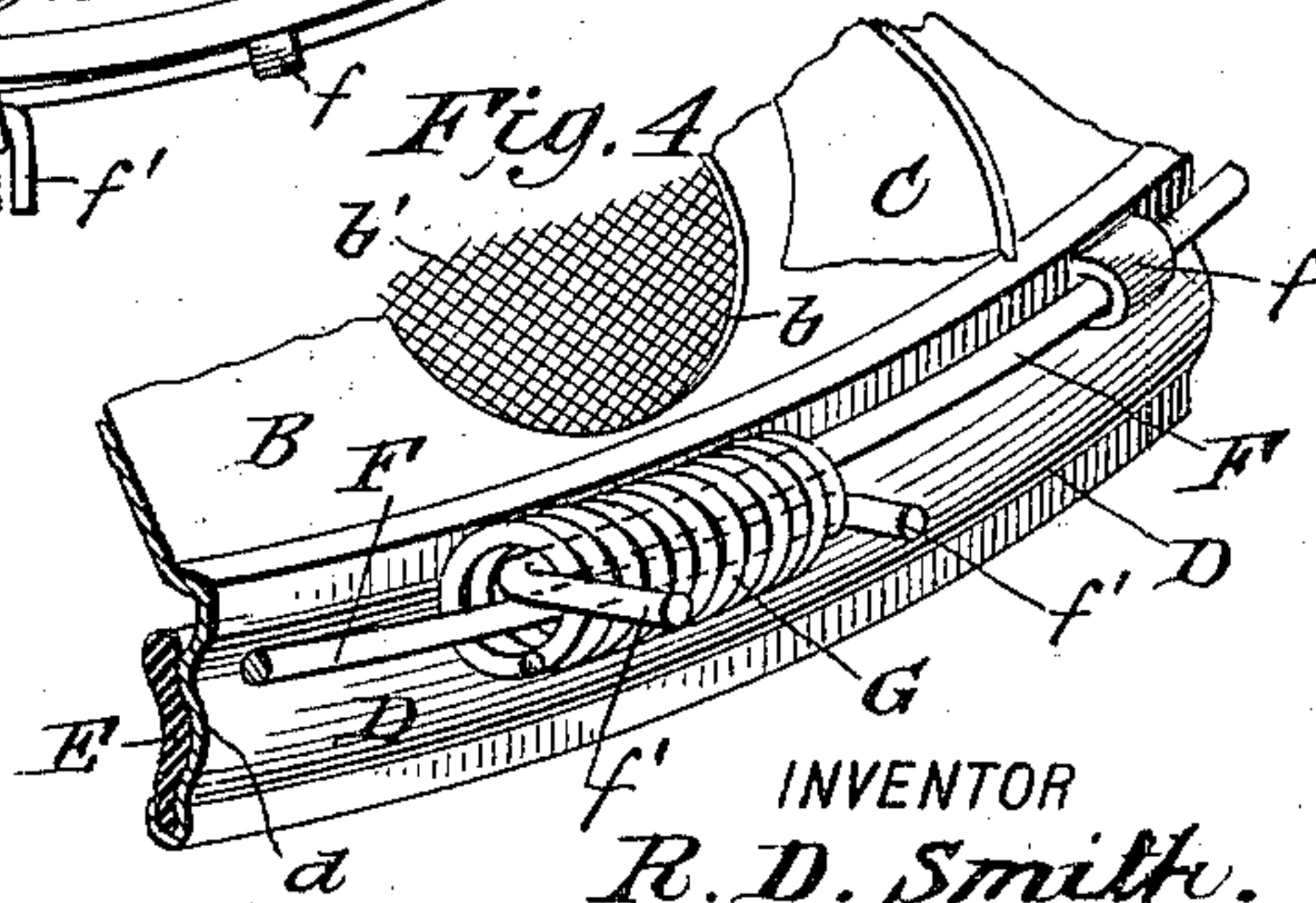
Fig. 3.



WITNESSES:

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Fig. 4.



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# UNITED STATES PATENT OFFICE.

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## MILK-PAIL ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 542,575, dated July 9, 1895.

Application filed November 15, 1894. Serial No. 528,912. (No model.)

*To all whom it may concern:*

Be it known that I, RAY D. SMITH, a citizen of the United States, residing at Greenwood, in the county of Steuben, State of New York, have invented certain new and useful Improvements in Milk-Pail Attachments; and I do hereby 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 is an improved strainer attachment for milk-pails, the object of my invention being to provide a simple contrivance which can be readily attached to and detached from an ordinary milk pail or bucket. Numerous attachments have been devised for this purpose, but they are complicated in construction and are not easily attached to the bucket. Another objection is that they are constructed in such a manner that the bucket must also be of unusual construction. My attachment is designed to avoid all these objections, being very cheap and simple in construction, readily attached, and capable of use upon an ordinary bucket.

With these various objects in view my invention consists essentially in a segment-shaped breast provided with a flange, and carrying spring-actuated rods having hooked ends adapted to engage the ears of the bucket and hold the breast securely upon the bucket or pail, said breast being constructed with a strainer and spout.

My invention consists also in certain details of construction and combination of parts, all of which will be fully described hereinafter, and pointed out in the appended claims.

In the drawings hereunto annexed and forming a part of this specification, Figure 1 is a perspective view of a bucket or pail provided with my improved attachment. Fig. 2 is a detail view showing the means of attaching and detaching the same. Fig. 3 is a transverse sectional view showing the preferred manner of securing the packing, and Fig. 4 is an enlarged detail view of a portion intended to show more clearly the manner of connecting the springs and rods.

Referring to the drawings, A indicates a milk pail or bucket,  $\alpha$  the ears at each side, and  $\alpha'$  the bail secured thereto, all of which

are of the usual or any approved construction.

In constructing my improved strainer attachment, I employ a segment-shaped breast B, which is formed with an opening  $b$ , covered with wire-gauze  $b'$ , providing a strainer, and attached to this breast and surrounding the strainer is a spout C. The curved edge of the breast is also provided with a flange D, which is adapted to fit the edge of the bucket or pail, said flange being formed with a longitudinal groove, crimp or corrugation  $d$ , which receives the beaded edge of the bucket, and carried in said groove or crimp is a packing-strip E, preferably of rubber, to make a tight joint between the flange and bucket to prevent the escape of milk. This packing-strip may be secured in any suitable manner; but I prefer to clamp the lower edge of the same in the bead on the lower edge of the flange, and thus hold the same securely in place, as shown most clearly in Fig. 3.

The strainer thus constructed can be clamped to the bucket in various ways; but one of the features of my invention is the manner of connecting the strainer and bucket, and with this end in view I employ two wire rods F F, which are held upon the outside of the flange D by means of guide  $f$ , the ends of said wires being hooked or bent at right angles, as shown at  $f'$   $f^2$ , and the inner ends of said wires are so arranged that they overlap each other, and surrounding the wires where they overlap and between the opposing hooked ends  $f'$  is a coiled spring G, the tendency of which is to hold the hooks  $f'$  apart, and thereby draw the hooks  $f^2$  toward the ends of the breast.

The device as thus constructed is complete and ready for attachment to an ordinary milk pail or bucket, and the manner of making the connection is as follows: The bail of the bucket is raised to vertical position and hooks  $f^2$  placed behind the ears  $\alpha$ . The breast is then pressed forward until the flange has been passed over the edge of the bucket and the attachment is complete. During this operation the hooks  $f'$  have been drawn close together and the spring G compressed, and as the tendency of this spring is to hold the hooks  $f'$  apart and draw the hooks  $f^2$  forward, it is



clear that the attachment will be held securely upon the bucket, and as the flange is grooved and provided with a packing-strip, it is obvious that no milk can escape between  
5 said flange and bucket. In order to detach the strainer the hooks  $f^2$  can be drawn back, if desired; but I prefer to press the hooks  $f'$  together, thus compressing the spring G and throwing the hooks  $f^2$  away from the ears, and  
10 the attachment can then be easily removed.

By having the ends of the wires overlap and connected by a coil-spring it is obvious that my attachment can be used upon different-sized buckets within certain limits.

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

1. A milk pail attachment comprising a breast provided with a strainer and spout, and  
20 spring actuated wire rods connected with said breast, and having hooks at their rear ends, adapted to engage the ears upon the pail substantially as shown and described.

2. A milk pail attachment comprising a  
25 breast provided with a strainer and spout, the wire rods connected with said breast and having hooks at each end, the hooks at the outer ends being adapted to engage the ears upon the pail the inner ends of said wires overlap-

ping, and a coiled spring surrounding said 30 overlapping portions between the hooks, substantially as shown and described.

3. A milk pail attachment, consisting of a breast having a strainer and spout, a flange carried by said breast, and the wire rods con- 35 nected with said flange having hooks at each end, the hooks at the rear end being adapted to engage the ears of the pail and a coiled spring connecting the adjacent ends of said wire rods, substantially as shown and de- 40 scribed.

4. In a milk pail attachment, a segment shaped breast having a strainer or spout, a depending flange, the packing strip, the 45 guides, the wire rods held by said guides, said rods being hooked or bent at each end, and a coiled spring surrounding the adjacent ends of said wire rods, and adapted to bring the hooks at the rear end of its rods into engage- 50 ment with the ears of the pails substantially as shown and described.

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

RAY D. SMITH.

Witnesses:

MERRITT F. SMITH,  
MINOR SHAW.