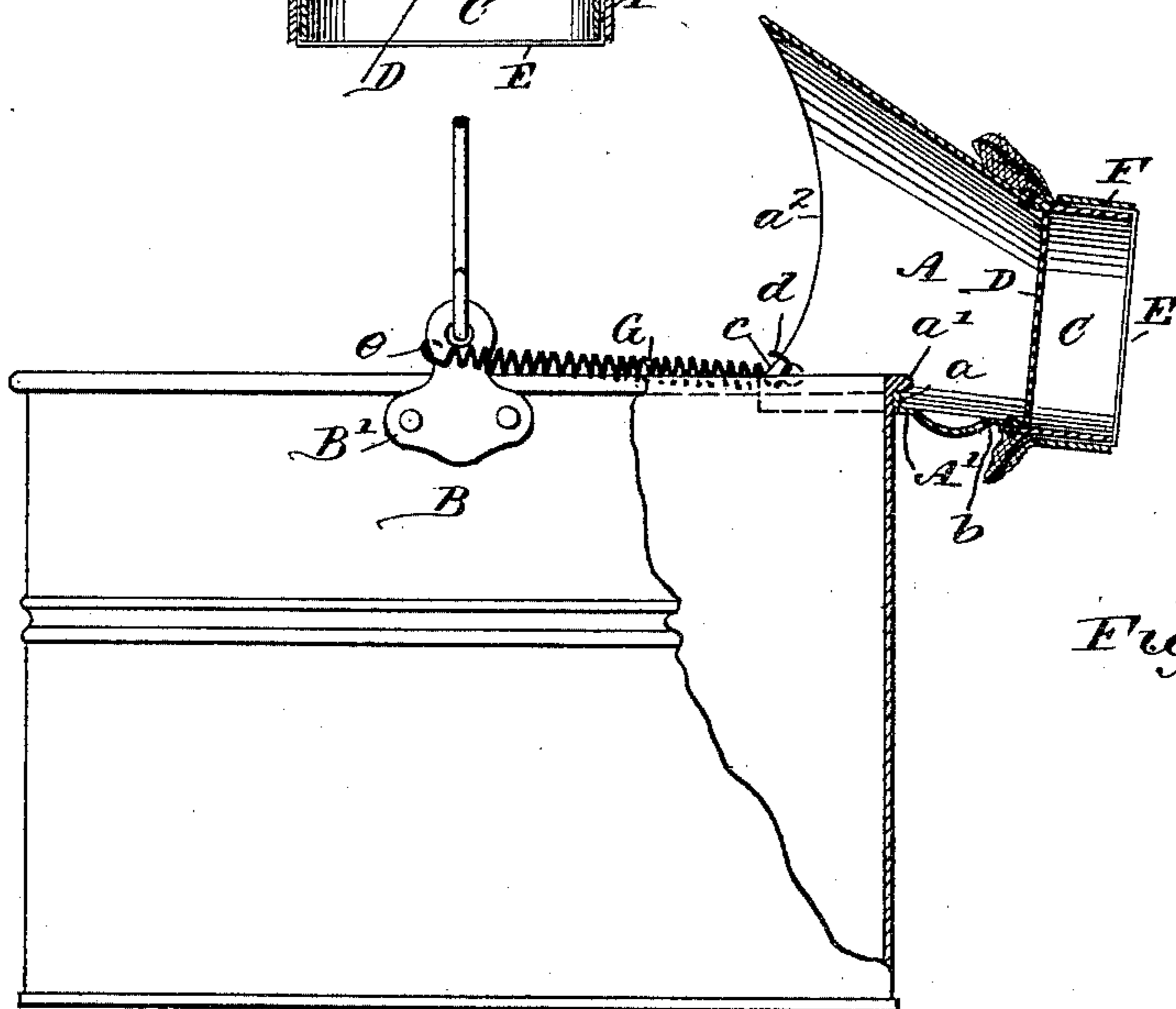
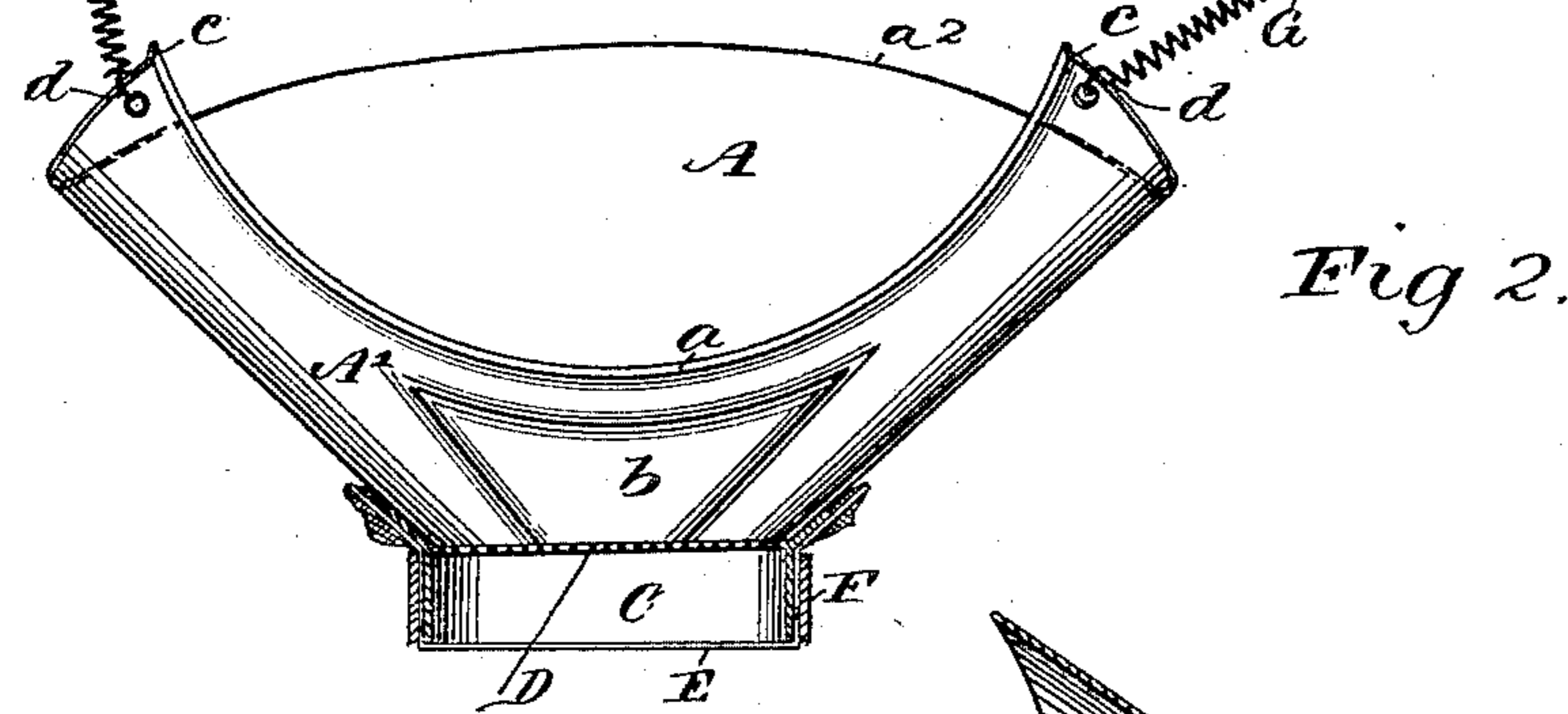
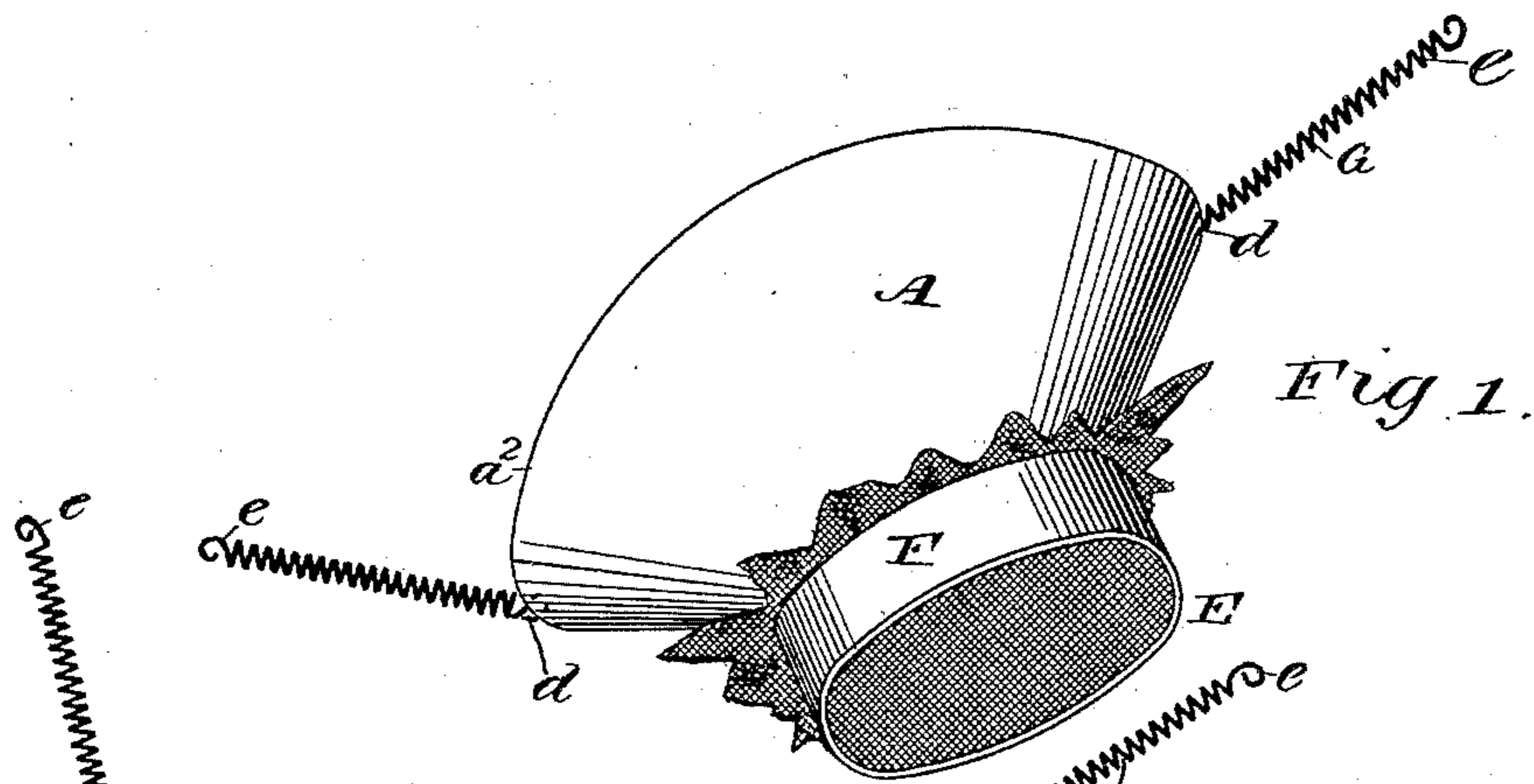


(No Model.)

I. HEIMBAUGH.
MILK STRAINER.

No. 453,081.

Patented May 26, 1891.



WITNESSES:

Paul Johst
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UNITED STATES PATENT OFFICE.

IRIS HEIMBAUGH, OF MONTROSE, IOWA.

MILK-STRAINER.

SPECIFICATION forming part of Letters Patent No. 453,081, dated May 26, 1891.

Application filed February 14, 1891. Serial No. 381,425. (No model.)

To all whom it may concern:

Be it known that I, IRIS HEIMBAUGH, of Montrose, in the county of Lee and State of Iowa, have invented a new and useful Milk-Strainer, of which the following is a full, clear, and exact description.

The objects of this invention are to provide a simple, compact, inexpensive, and convenient strainer for milk or other liquids, which can be quickly and removably attached to a pail containing the fluid to be strained and be adapted to receive and thoroughly strain the contents of the pail poured therefrom into the strainer.

To these ends my invention consists in certain features of construction and combination of parts, as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the views.

Figure 1 is a perspective view of the device. Fig. 2 is a view of the strainer in another position, a portion of the side wall being in section, showing interior construction; and Fig. 3 is a transverse section of the strainer in position upon a pail, shown broken away at the side where the strainer engages it.

The main portion of the strainer is made of sheet metal, tin-plate being preferably used in its construction. It consists of a funnel-shaped receptacle A, having a portion of its flaring wall flattened, as indicated at A' in Figs. 2 and 3. The upper edge of the flattened wall portion A' is recurved or cut away so as to have a curvature that will enable it to conform to the exterior surface of the cylindrical side wall of a milk-pail B, it is to be attached to for service. The recurved edge of the wall portion A' is inwardly flanged, as at *a*, (see Fig. 3,) whereby it is stiffened and adapted to fit beneath and around the outwardly-projecting bead or wired edge *a'* of the pail B when the strainer is connected therewith.

Upon the lower end of the funnel portion of the strainer a cylindrical throat-ring C is secured, and at the junction of the pieces A

and C a flat screen D, made of wire-cloth or perforated sheet metal, is located, which screen may be permanently or removably attached to the parts named.

A finer strainer E, preferably made of pliable fibrous material of a proper mesh to allow milk to pass through it, is secured removably upon the free end of the throat-ring C by an encircling band F, which is of such a proportionate diameter as will allow it to bind and stretch the strainer-cloth E when said band is placed in position over the cloth margin and upon the throat-ring, as represented. There is a shallow recess *b* preferably formed in the flattened wall portion A' between the flange *a* and the screen D, which will be further mentioned. Near the corners *c*, produced on the funnel-piece A by the junction of the recurved edge *a* and rim *a'* of the remaining portion of said piece, perforations are formed for the attachment of one end *d* of the similar spiral springs G, which are proportioned in length to suit the distance between the edge of the piece A and the ears B' of the pail B, one being shown in Fig. 3, so that when the hooks *e* on opposite ends of the springs are clasped upon the pail-ears, as shown in Fig. 3, the flange *a* will be forcibly drawn beneath and around the bead *a'*, as before mentioned, and the straining device be held firmly in connection with the pail projected from its edge and adapted to receive the liquid contents of the pail when the latter is tipped sufficiently to decant the milk. When the entire contents of the pail have been poured through the straining device, all impurities will be arrested by the screen D and cloth E, and the froth of the milk that may remain on the side of the funnel-piece A will drain into the recess *b* if the device is left standing in the position shown in Fig. 3 a sufficient length of time to allow the froth to assume a liquid form.

Preferably the funnel-piece A and throat-ring C are formed from a single piece of sheet metal raised by dies into shape; but if facilities for such a construction are not available the parts named may be made separately and joined, as before stated.

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

1. A liquid-straining device having a funnel-piece that is flattened on one side and has its edge recurved to afford a fit on the side of a cylindrical pail, springs adapted to engage the ears of a pail and hold the strainer on it, a screen in the funnel-piece, a throat-ring thereon, a strainer-cloth on the throat-ring, and a sliding band engaging the strainer-cloth, substantially as set forth.

2. The combination, with a pail having bail-ears, of a straining device having a funnel-piece with a flat side which is recurved on its edge to bear below the pail-rim when the straining device is secured on the pail, and two springs which are secured on the

edge of the funnel-piece and are adapted to hook upon the pail-ears, substantially as set forth.

3. The combination, with a pail having bail-ears, of a straining device having a funnel-piece with a flat side wherein a recess is formed, and which is recurved on its edge and is provided with an inwardly-bent flange adapted to engage a projecting bead on the pail edge, a screen in the funnel-piece, a throat-ring thereon, a strainer-cloth stretched on the throat-ring, and a sliding band engaging the strainer-cloth, substantially as set forth.

IRIS HEIMBAUGH.

Witnesses:

H. T. BALLOU,
MARGARET A. BALLOU.