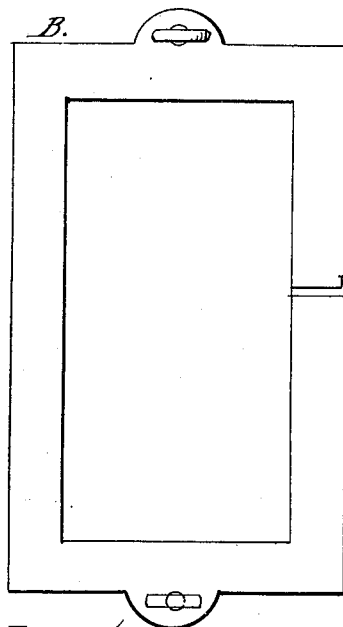
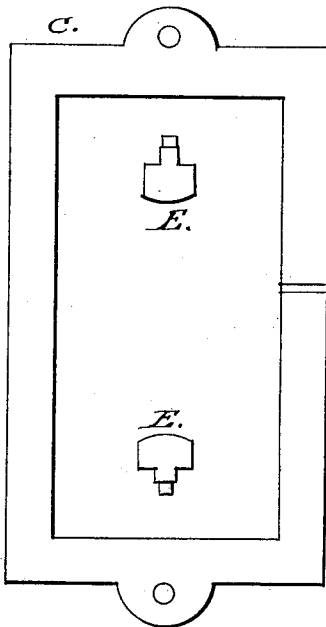
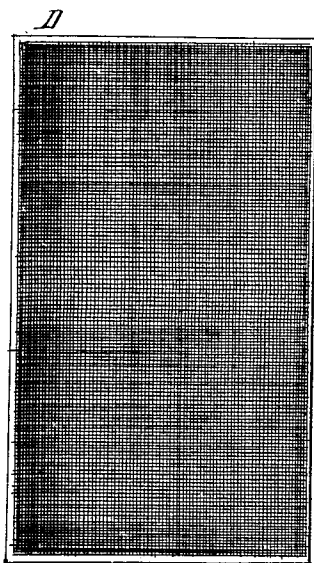
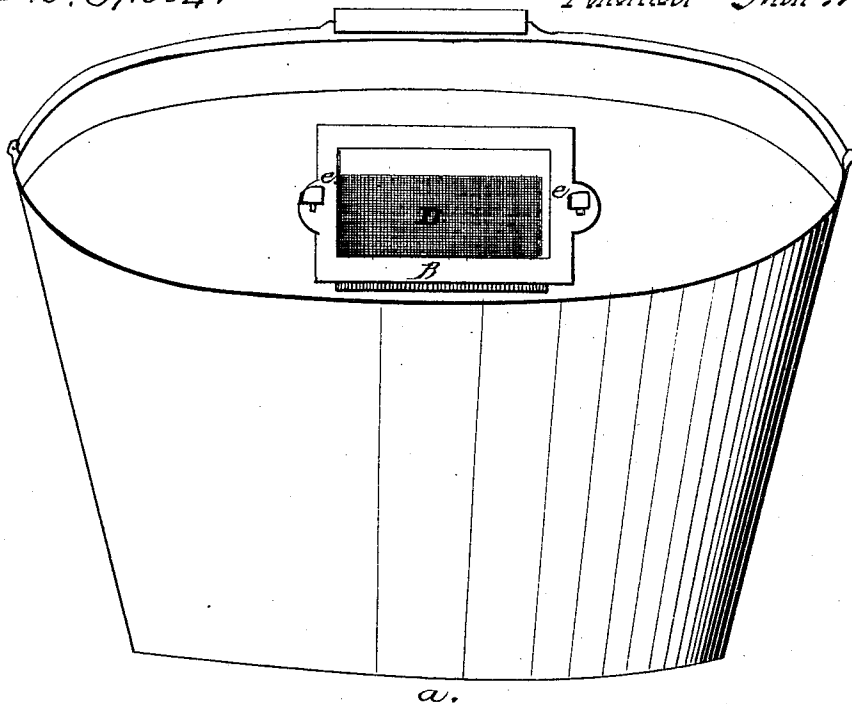


A. A. Bingham,

Milk Strainer.

No. 87,904.

Patented Mar. 16, 1869.



Witnesses:
George W. Hance
Edw. P. Cory

Inventor:
Alonzo A. Bingham

United States Patent Office.

ALONZO A. BINGHAM, OF COOPERSTOWN, NEW YORK, ASSIGNOR TO HIMSELF AND
GEORGE McNAMEE, OF SAME PLACE.

Letters Patent No. 87,904, dated March 16, 1869.

IMPROVEMENT IN MILK-STRAINER

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, ALONZO A. BINGHAM, of the village of Cooperstown, in the county of Otsego, and State of New York, have invented a new and improved Mode of Attaching Strainers to Milk-Pails and other vessels; and I do hereby declare the following to be a full and exact description thereof, reference being had to the accompanying drawing, forming a part of this specification, in which—

A represents the milk-pail;

C, the strainer-frame, secured to the spout of the pail;

B, the detachable, or outer strainer-frame;

D, a piece of wire straining-cloth; and

E E, thumb-screws, by which the two frames are fastened together.

The nature of my invention consists in an improved mode of securing a piece of plain wire gauze, or strainer-cloth, to the spout of a milk-pail, by the use of a frame soldered, or otherwise secured to the spout, upon which a detachable frame shall closely fit, and be secured by means of thumb-screws, or other equivalent devices, so that the wire gauze may be readily placed, and confined between the frames, and as readily removed therefrom.

The object thereof is to permit a renewal of the strainer at any moment, so soon as it becomes foul, at a trifling cost, and without the need of tools, or of sending the pail to a tinman for repair.

The dairyman, supplied with a piece of wire strainer-cloth, may, with a pair of common shears, cut out his strainers from the wire cloth, and apply a new one to his pail, at his pleasure, with economy in time and expense. Hence I have named my invention "The Dairyman's Friend."

My improved milk-straining pail A is provided with a spout of any desired shape, either square or otherwise, polygonal, or round, or oblong, in section, which is securely fitted to the upper part of the pail, at any desired point.

To the end of this spout I solder, or otherwise securely fasten, a simple metallic frame, G, of the same general form as that of the end of the spout, viz, square, round, oblong, or polygonal, and having a central opening, coincident with that of the spout.

Upon this frame C, I place a second frame, B, the

exact counterpart thereof, and fasten it thereon by means of thumb-screws E E, passing through simple apertures in the outer detachable frame B, and screwing into threaded apertures in the fixed frame C.

The frames B C may be stamped out, at a very low cost, from tinned iron, and will outwear several pails, to which they may be successively attached.

Spring-catches, hooks, and slots, or other equivalent devices, may be used, instead of the thumb-screws E, to secure the plates together, but I prefer the latter, because of their simplicity.

The strainer is made ready for use by cutting out, with ordinary shears, from a sheet of wire straining-gauze, or cloth, a piece, D, slightly larger than the opening in the frames, placing it upon the fixed frame C, then adjusting the outer frame B to its place, screwing it tightly down, so as to hold the edges of the wire cloth firmly and securely.

Although I prefer to use a fixed inner frame, C, soldered to the end of the spout, as a support for the outer frame B, yet I contemplate bending or stamping the edges of the rim of the spout outwardly, to form a support for said outer frame.

I am aware that detachable strainers, made of wire straining-cloth, soldered to a detachable seat, and variously secured to the spouts of milk-pails, have been heretofore employed; and also that pieces of simple wire cloth, held in place within the spout of a pail by an end piece screwing into the spout against the strainer, and by an elastic wire sprung into the spout, against the wire cloth, have been used, and hence I disclaim the use of a detachable piece of wire cloth, as a strainer for a milk-pail; but having fully described my invention,

I claim therein as new, and desire to secure by Letters Patent—

The detachable plate, or frame B, when combined with the fixed plate C, secured upon the end of the spout of a milk-pail, and fastened to said fixed plate C, substantially as herein described, for the purpose of retaining a piece of wire straining-cloth, D, over the mouth of the spout, as herein set forth.

ALONZO A. BINGHAM.

Witnesses:

GEORGE McNAMEE,
ELLERY P. CORY.