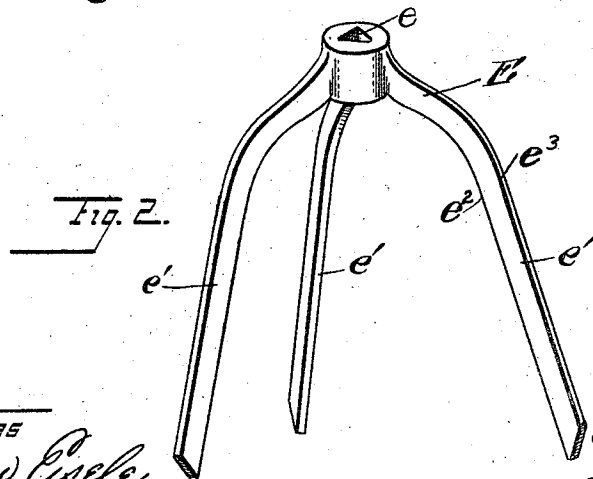
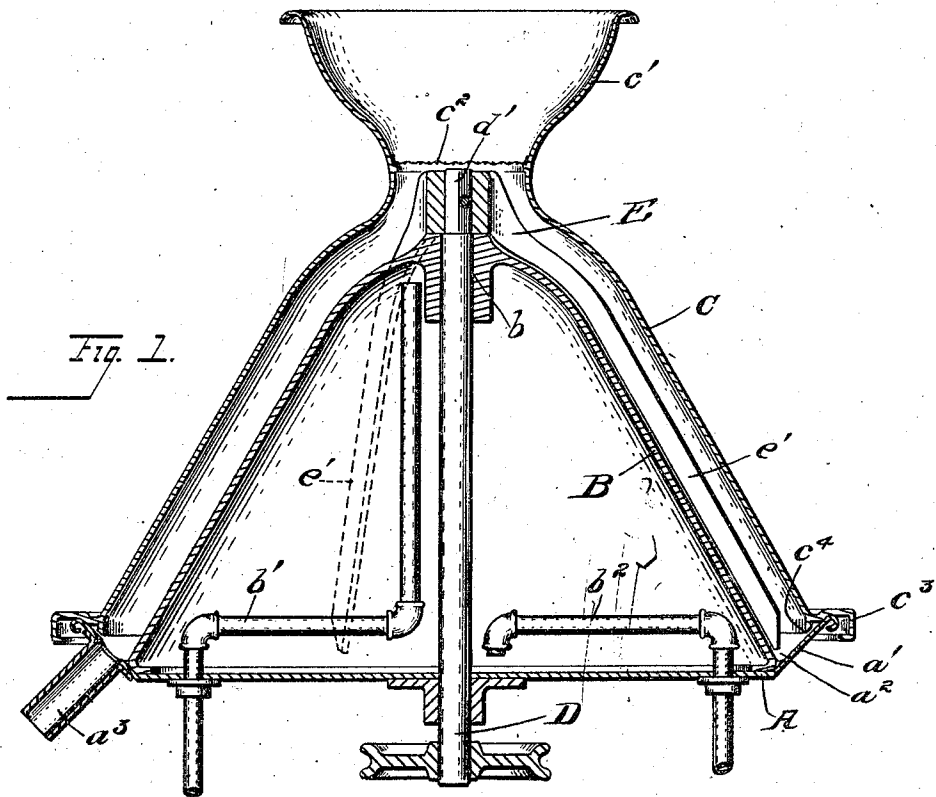


G. A. FISCHER.
PASTEURIZING MACHINE.
APPLICATION FILED MAY 16, 1911.

1,028,818.

Patented June 4, 1912.



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UNITED STATES PATENT OFFICE.

GUSTAV A. FISCHER, OF CLEVELAND, OHIO.

PASTEURIZING-MACHINE.

1,028,818.

Specification of Letters Patent.

Patented June 4, 1912.

Application filed May 16, 1911. Serial No. 627,439.

To all whom it may concern:

Be it known that I, GUSTAV A. FISCHER, a citizen of the United States, resident of Cleveland, county of Cuyahoga, and State of Ohio, have invented a new and useful Improvement in Pasteurizing-Machines, of which the following is a specification, the principle of the invention being herein explained and the best mode in which I have contemplated applying that principle, so as to distinguish it from other inventions.

This invention has reference to a pasteurizing machine, and more particularly to the operative relation of certain specific elements of construction.

The object is to provide a machine of this character which while simple and economical in manufacture, will be more efficient.

The said invention consists of means which are hereinafter fully described and particularly set forth in the claims.

The annexed drawings and the following description set forth in detail certain means embodying my invention, the disclosed means, however, constituting but one of various mechanical forms in which the principle of my invention may be employed.

Referring to the drawing:—Figure 1 is a vertical section of a pasteurizing machine embodying my invention. Fig. 2 is an elevation of one inventive feature.

The machine comprises, in the disclosed form, a circular pan A having the sides a' . Resting upon the base of this pan and precisely covering the same so as to form a trough a'' in conjunction with the sides a' is a dome B formed at its apex with an axial bearing b . This trough is provided with an outlet a^3 , as shown. The dome, otherwise closed, is provided with a steam inlet pipe b' and steam outlet pipe b'' , these being adapted to effect the heating of the dome in the customary manner.

A skirt C covers the dome B and, as represented in Fig. 1, gravitationally rests upon the edges of the sides a' . The skirt is of sufficient dimensions to insure its being spaced a necessary distance from the dome. Furthermore, the skirt in accordance with my invention and as constituting one feature thereof, should be stationary. It is provided at the top with the usual funnel-shaped receiving inlet c' and sieve c'' across its constricted connecting portion. The lower annular edge of the skirt is fashioned as a flange c^3 to preclude dust and sediment

of various kinds from settling in the trough or upon the contents therein. A depending annular flange c^4 is also provided interiorly of the edge of the trough, to insure the guidance and eventual dripping of any fluid coming in contact with the skirt into the trough.

A suitable driving-shaft D projects up through the bearing b of the dome to a point above the top thereof, and is provided at that point with a triangular extremity d' . Mounted upon this extremity through the medium of a corresponding triangular opening e , so as to rotate with it, is a rotary wiper E. This wiper is formed, as clearly seen in Fig. 2, with a plurality, in the present instance by way of exemplification, three depending and preferably rigid fingers e' , overlying the upper surface of the dome B. The under surface e'' of each of these fingers substantially conforms in curvature to the upper surface of the dome. The fingers e' are also substantially similar in shape, and are equally spaced each with reference to the other, and hence necessarily diverge downwardly. They moreover extend to a point near the bottom of the trough, as clearly seen in Fig. 1. The under surface e'' of the wiping fingers e' may be in light contact with the surface of the dome, though preferably immediately adjacent and not actually contiguous thereto, as clearly appearing in Fig. 1. The thickness, or that dimension of the wiping fingers e' which is substantially perpendicular to the surface of the dome at that point, is such that a sufficient free space is afforded between their upper surfaces e^3 and the inner surface of the skirt.

In operation, assuming the dome properly heated and the rotary wiper to have been started, the milk or other liquid which is to be subjected to the pasteurizing process, is poured into the receiving inlet c' and immediately after passing through the sieve c'' is whipped about upon the upper surface of the dome. The wiping fingers e' serve in addition to prevent any tendency on the part of certain fluids to thicken and accordingly insure a continuous flow into the trough and out of the outlet a^3 . It should be especially noted that during the operation of the machine, the skirt C constantly remains stationary and furthermore entirely covering the trough, as it does by inclosing the upper edge, positively precludes

any objectionable matter reaching the fluid under treatment. Then, too, the wiping means is positive and absolutely independent of both the dome and skirt by reason of which it is calculated to attain the consummate efficiency desired.

Having fully described my invention, what I claim and desire to secure by Letters Patent is:

10 1. A pasteurizing machine comprising the combination of a chamber having an inclined upper surface, means for heating said chamber and positioned beneath said surface, a removable skirt conforming to and
15 substantially inclosing said surface, and an interposed wiper having a finger conforming to such upper surface and independently movable relative to the chamber and skirt.

20 2. A pasteurizing machine comprising the combination of a dome, means for heating the same, a trough surrounding the lower portion of said dome, a removable skirt covering said dome and gravitationally resting upon said trough, and a wiper having divergent fingers interposed between and movable
25 relatively to said dome and skirt.

3. A pasteurizing machine comprising the

combination of a dome, means for heating the same, a trough surrounding the lower portion of said dome and provided with an outlet, a removable skirt spaced from said dome and resting upon said trough, said skirt being provided above with a receiving inlet, a driving shaft extending to the top of said dome, and a rotary wiper secured to said shaft and including a plurality of downwardly divergent fingers interposed between said dome and skirt.

4. A pasteurizing machine comprising the combination of a stationary dome, means for heating the same, and positioned entirely within said dome, a trough surrounding the lower portion of said dome and provided with an outlet, a driving shaft projecting up through said dome, a rotary wiper secured to said shaft and overlying said dome, and a removable skirt covering said wiper and trough, and provided above with a single receiving inlet.

Signed by me, this 15th day of May, 1911.

GUSTAV A. FISCHER.

Attested by—

CURT B. MUELLER,
JOHN MENTSCHIK.