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LARD-STRAINER.

Specification of Letters Patent. Patented June 10, 1913. Application filed April 22, 1912. Serial No. 692,447.

To all whom it may concern:

1,064,243.

Be it known that we, CHARLES NAEGELEN and AUGUST G. KLAWITTER, both citizens of the United States, and residing in Cincin-5 nati, Hamilton county, State of Ohio, have invented certain new and useful Improvements in Lard-Strainers; and we do declare the following to be a clear, full, and exact description of the invention, attention being 10 called to the drawing which accompanies

this application and forms a part thereof. Lard leaves the kettles and containers in which it has been rendered in consistency of a limpid fluid. While still in this condi-

15 tion it is caused to flow through straining devices to free it of matter not reducible to lard like for instance remnants of skin and meat, fibrous matter and cracklings.

Our invention relates to such straining de-20 vices and consists of a device constructed with a view to make it adaptable for the particular purpose of rendering lard.

In the following specification and particularly pointed out in the claims at the end

- 25 thereof, will be found a full description of our invention, together with its operation, parts and construction, which latter is also illustrated in the accompanying drawing, in which:—
- 30 Figure 1, is a top-view of our lard straining device. Fig. 2, is a vertical cross-section of the same. Fig. 3, shows in side-elevation, partly in section, one of the separable parts detached.
- 35 Our strainer consists of a number of individual strainer-elements, each comprising a multi-perforated diaphragm A, through which the lard is adapted to pass and a frame a which supports this diaphragm.
- 40 These elements are arranged so that a number of them, with perforations of graduated sizes, may be assembled in a manner causing the lard to flow through them successively. The element with the largest per-
- 45 forations is encountered first by the lard which passes successively through the other elements with the smaller perforations, the element through which the lard passes last having the smallest perforations. The
- 50 frames which support the diaphragms are annular and each consists of two supplementary members 6 and 7, of congruent shape, which hold between them the edges of the diaphragms. These frame-members 55 are held to each other by clamping-screws 8.

The diaphragms are by preference in form of screens made of wire cloth and to hold their edges securely the opposite surface of the frame-members between which these edges are held are offset as shown at 9, the 60 edge of the cloth being clamped around these off-sets. Three elements are shown in the drawing and they are arranged in form of a stack. They are held alined, one superposed upon the other, by having the oppo- 65 site surfaces of the frames where they rest upon each other off-set as shown at 10. The strainer-elements rest in a settling chamber 11, being introduced through the open top thereof. The bottom of this chamber is 70 provided with an annular ridge 12, upon which the frame of the lower-most strainerelement rests, said ridge being spaced from the chamber-wall to which it is concentric and its top being off-set in a manner similar 75 to the opposite surfaces between the frames which are fitted to said top. The diameter of this chamber is of a size to permit the lard which discharges from a conduit 13, to flow into the space outside of the strain- 80 ers, in which space it rises until it overflows therefrom into the upper-most strainer no pressure being applied. The lard passes through all the elements below and discharges through an outlet 14 below the 85 lower-most strainer. Foreign matter which by reason of its size and weight does not flow with the lard is thus held back in the settling chamber, so that the strainers are not encumbered thereby. This matter may 90 be let out from time to time through a valvecontrolled drain-pipe 15, the inflow through conduit 13 being cut off for the time being. The frame of each strainer-element is provided with handles 16, to permit them to be 95 manipulated, lifted out for cleaning and replaced again.

The elements may be readily placed and interchanged by reason of their inter-fitting frames.

Having described our invention, we claim as new:

1. In a lard strainer, the combination of a cylindrical settling chamber, a series of superposed strainer-elements stacked therein and comprising annular frames and diaphragms with openings of graduated sizes, the element with the largest openings being uppermost but below the top of the settling chamber, the frames of the elements being 110

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smaller in diameter than the inside of the chamber and closely fitted to each other to produce an annular space around the elements, but closed against them, a supply 5 conduit to admit lard to this space in which it rises and flows into the upper - most strainer-element, an outlet for the strained lard below the lower-most element and an independent outlet from the settling-cham-10 ber.

 In a lard strainer, the combination of a cylindrical settling-chamber having an open top and an annular ridge on its bottom spaced from the side of the chamber, an
outlet in said bottom and within this ridge, a stack of strainer-elements smaller in diameter than the chamber and with openings of graduated sizes resting upon this ridge, and a supply conduit to admit lard to the space
between the outside of the strainer elements and the chamber in which it rises and flows over into the upper-most strainer-element

and through all the elements to the outlet below them.

3. A lard strainer element consisting of 25 two annular, superposed complementary frame-members provided with inter-fitting off-sets between their contiguous sides, a perforated diaphragm supported transversely between these frame-members and 30 extending with its edge between them and over their inter-fitting off-sets and screws whereby the two frame-members are permanently secured to each other with the edge of the diaphragm clamped between their offsets, to form the element complete.

In testimony whereof, we hereunto affix our signatures in the presence of two witnesses.

CHARLES NAEGELEN. AUGUST G. KLAWITTER. Witnesses: C. Spengel,

T. LE BEAU.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents. Washington, D. C."