A. R. JUDSON.

Lard Cooler.

No. 47,361. Patented April 18, 1865.

Fig. 1.

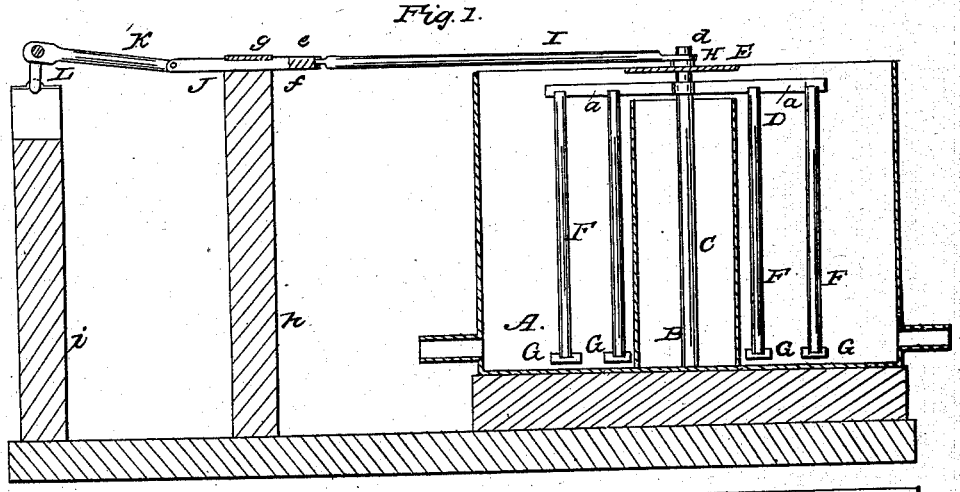
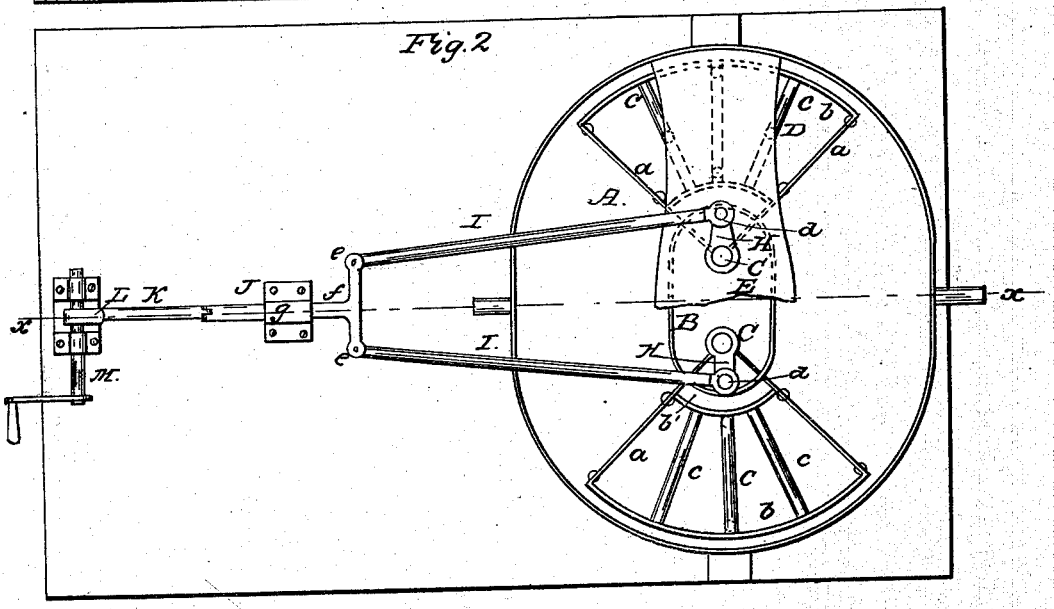


Fig. 2



Witnesses
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UNITED STATES PATENT OFFICE.

ALONZO R. JUDSON, OF NEW YORK, ASSIGNOR TO HIMSELF, E. H. CLARK, OF NEW YORK, AND JAMES D. GRAY, OF BROOKLYN, N. Y.

IMPROVED APPARATUS FOR STIRRING AND COOLING LARD.

Specification forming part of Letters Patent No. **47,361**, dated April 18, 1865.

To all whom it may concern:

Be it known that I, ALONZO R. JUDSON, of the city, county, and State of New York, have invented a new and Improved Device for Cooling Lard; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side sectional view of my invention, taken in the line *x x'*, Fig. 2; Fig. 2, a plan or top view of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to a new and improved device for cooling lard; and it consists in the employment or use of two oscillating frames or stirrers arranged uprightly in a vat, and operated in a manner hereinafter fully described, whereby lard may be stirred and cooled very expeditiously, and with but a very moderate expenditure of power, as there is but little friction attending the working parts of the device.

A represents a vat, which may be constructed of either metal or wood, and is of elliptical form in its horizontal section, said vat having centrally within it a vertical trunk, B, which is also of elliptical form in its horizontal section, and in which the shafts C C, of two stirrers or frames, D D, are fitted, the upper bearings of said shafts being in a plate, E, which extends across the top of the vat A.

The stirrers or frames D D are composed of two horizontal arms, *a a*, attached radially to the upper part of each shaft C, above the trunk B, said arms projecting from the shafts about at right angles with each other, and connected at their ends by a curved bar, *b*, and connected near their inner ends by a curved bar, *b'*, concentric with *b*. (See Fig. 2.) Between the curved bars *b b'*, there are fitted and secured bars *c*, radial with the shafts C C, and these bars *c*, as well as the arms *a a*, have pendent rods F attached to them, which extend downward nearly to the bottom of the vat A, and have each a short horizontal blade, G, attached to them, as shown in Fig. 1. The upper end of each shaft C, has a crank, H, attached to it, said cranks having an upright pin, *d*, at their ends, on which rods I are fitted, the opposite ends of the rods being connected by joints *e* with a cross-head, *f*, at one end of a horizontal slide, J, which works in a guide, *g*, on the upper end of an upright, *h*. The opposite end of the slide J is connected by a pitman, K, with a crank, L, the shaft M of which has its bearings in an upright, *i*.

The operation is as follows: The warm lard is placed in the vat A, and the shaft M is driven by any convenient power. A reciprocating motion is communicated from said shaft to the slide J by means of the crank H and pitman K, and the stirrers or frames D D have an oscillating movement given them from slide J by means of the rods I and cranks H, the stirrers or frames working simultaneously in opposite directions, and by their movement stirring and agitating the lard, so as to expeditiously cool the same.

I am aware that automatic stirrers have before been used for the same purpose as mine, and that such stirrers are frequently operated by cranks. This, therefore, I do not claim; but

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

The combination of the cranks H H, vertical shafts C C, radial arms D D, and stirrers F G, all constructed and arranged as herein described, so as to oscillate the said stirrers simultaneously in horizontal planes and in opposite directions, as explained.

A. R. JUDSON.

Witnesses:

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