

G. C. NAPHEYS.  
Apparatus for Refining Lard.

No. 51,075.

Patented Nov. 21, 1865.

Fig. 1.

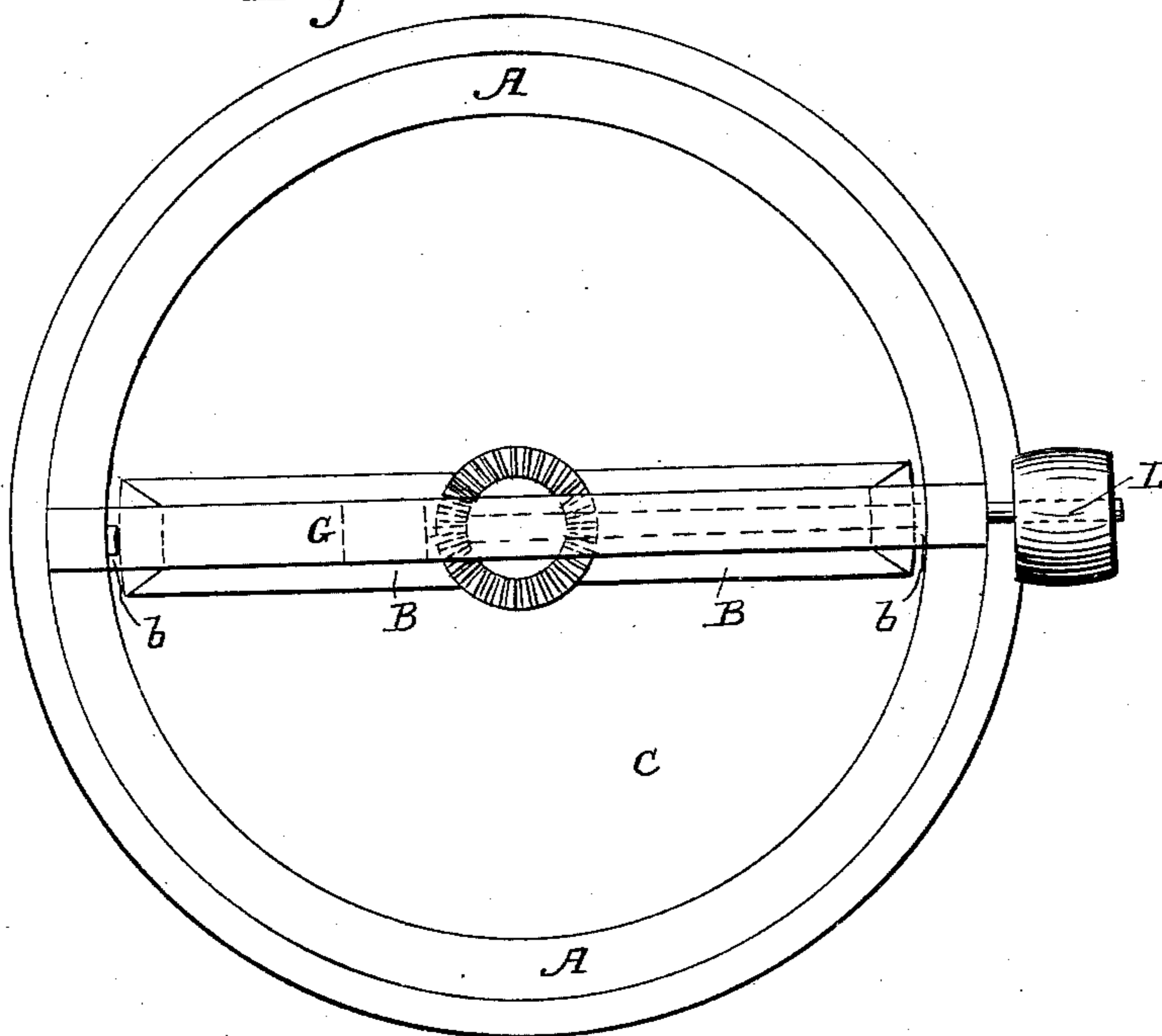
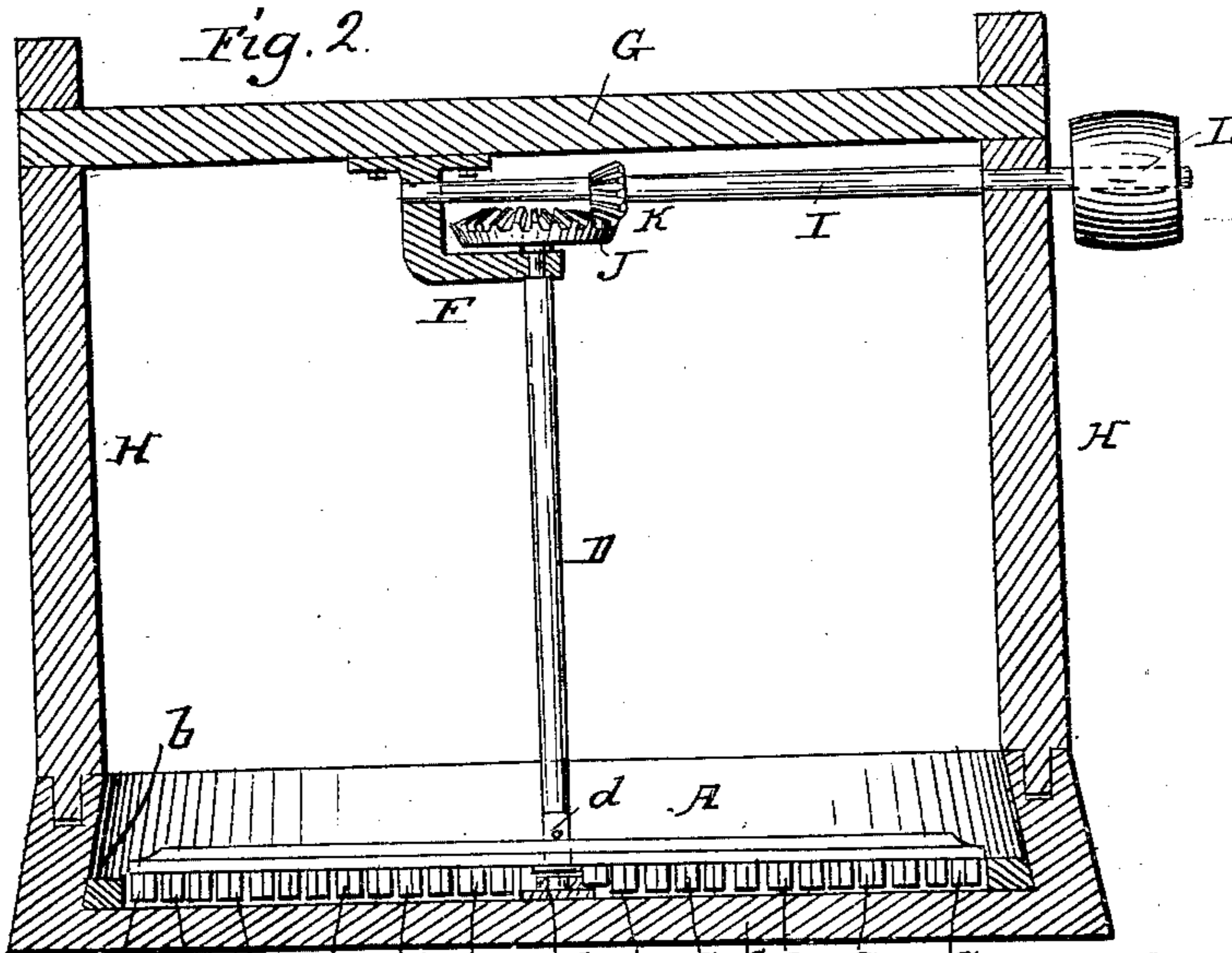


Fig. 2.



Witnesses:  
*Stephen M. Smith*  
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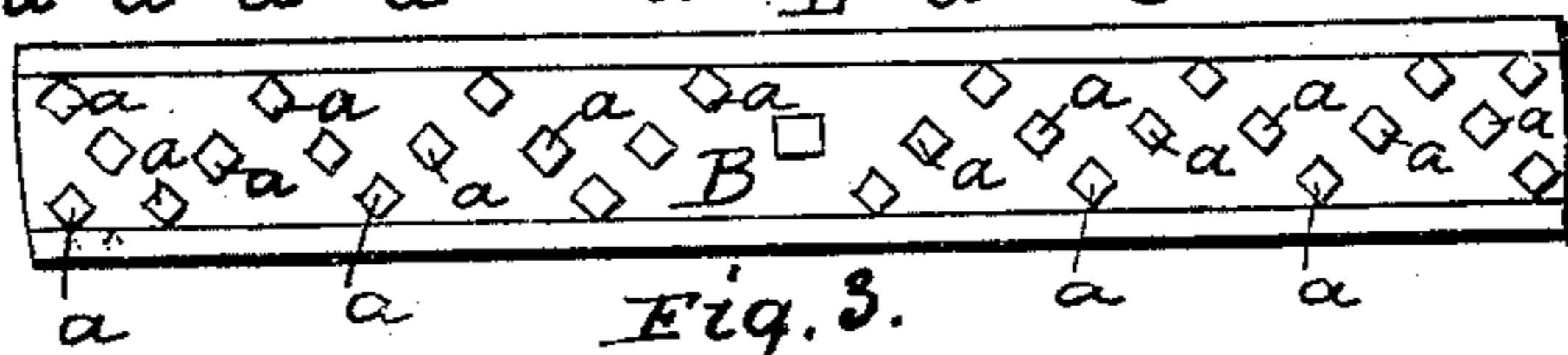


Fig. 3.

# UNITED STATES PATENT OFFICE.

GEORGE C. NAPHEYS, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVED APPARATUS FOR REFINING LARD.

Specification forming part of Letters Patent No. 51,075, dated November 21, 1865.

*To all whom it may concern:*

Be it known that I, GEO. C. NAPHEYS, of the city and county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Machines for Manufacturing Refined Lard; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a plan or top view of the machine. Fig. 2 is a vertical section of the same. Fig. 3 is a view of the agitator or stirrer B inverted.

Like letters in all the figures indicate the same parts.

The nature of my invention and improvement consists in combining a revolving agitator or stirrer with a cooler in such a manner that the lard is thoroughly mixed while cooling, and by its constant agitation is prevented from granulating.

To enable others skilled in the art to which my improvement appertains to make and use my invention, I will proceed to describe its construction and operation.

A is a cooler, into which the lard is run in its liquid state at a temperature of 100° or 120°. There is an agitator or stirrer, B, which has vertical teeth or projections *a* on its under side, which, in consequence of the revolving motion imparted to it in the manner I will hereinafter describe, completely mixes it while in its fluid state and keeps it thoroughly mixed until it becomes cool and thick. Thus the granulation of the lard is prevented, and it is made perfectly smooth and of even consistency throughout. There are lugs or stationary pieces *b b* secured to the bottom C of the cooler to prevent the lard being carried round by the agitator or stirrer. The said stirrer is placed

at right angles on the vertical shaft D, resting on the collar *c* of the square part *d*, on which it has an easy fit, to admit of its being elevated and hooked up out of the way when not in operation. The lower end of said shaft D turns in the step E and its upper end in the hanger F on the under side of the cap-piece G, which is connected with the uprights H H. I is the driving-shaft which gives motion to the vertical shaft D, being connected therewith by means of the wheel J and pinion K. L is a pulley on the driving-shaft, over which a belt passes from a steam-engine or other motive power to drive the stirrer B.

The operation is as follows: The lard is poured into the cooler to about one-half the depth of the same, at a temperature of 100° or 120°, and the stirrer is made to revolve, as above described, with sufficient velocity to mix the lard thoroughly and to keep it well mixed until it becomes cold. The stirrer B is then elevated above the cooler, out of the way, for the purpose of removing the lard preparatory to refilling the cooler.

Having thus fully described my improvement in machines for manufacturing refined lard, what I claim therein as new, and desire to secure by Letters Patent, is—

1. Combining and arranging the agitator or stirrer B with the cooler A, substantially in the manner hereinbefore described, and for the purpose specified.

2. Combining the lugs *b* with the cooler A, substantially in the manner and for the purpose above set forth.

In testimony that the above is my invention I have hereunto set my hand and affixed my seal this 15th day of September, 1865.

GEO. C. NAPHEYS. [L. S.]

Witnesses:

STEPHEN USTICK,  
JOHN WHITE.