

W. P. HARVEY.

LARD COOLER.

No. 189,032.

Patented April 3, 1877.

Fig. 1.

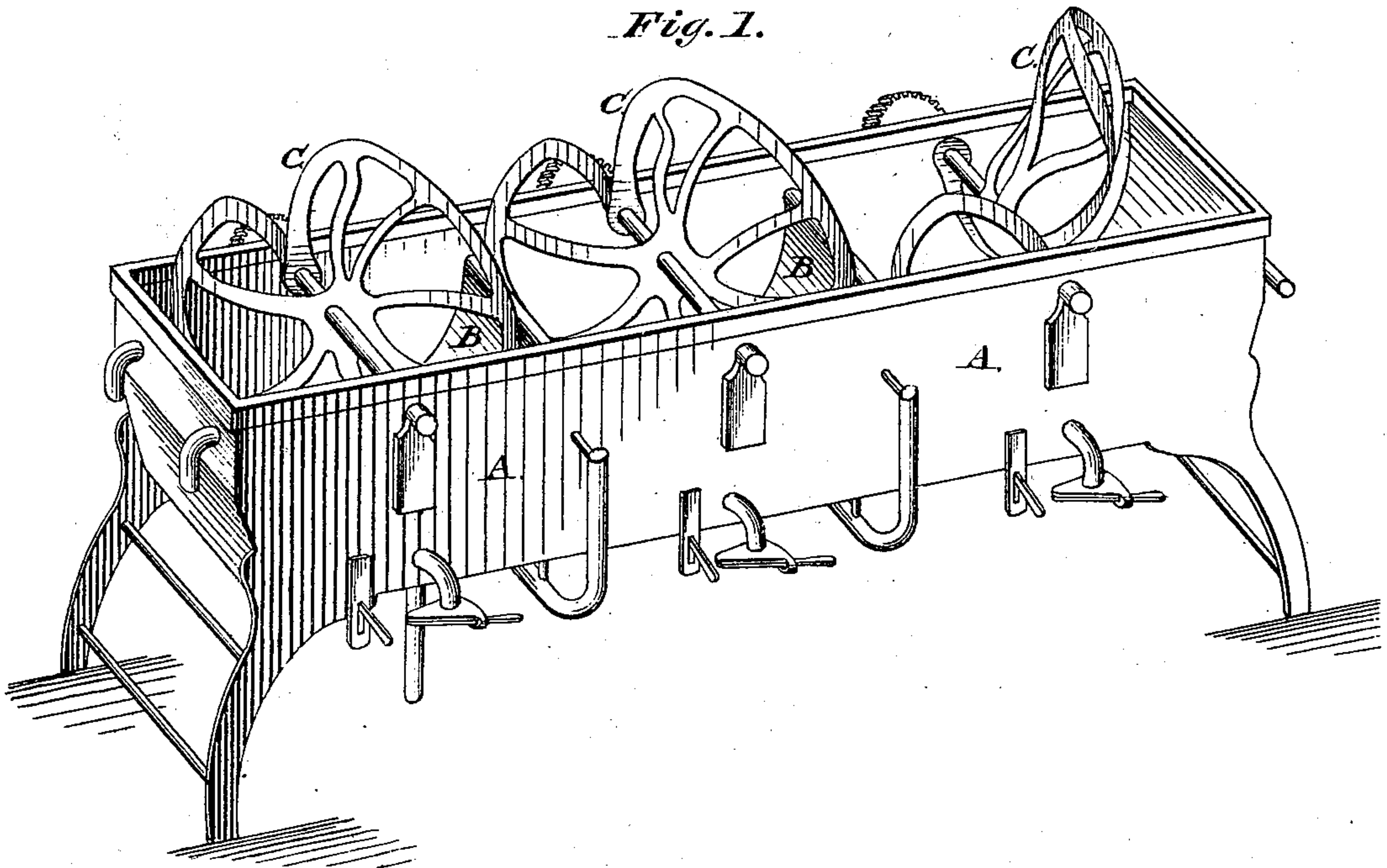


Fig. 2.

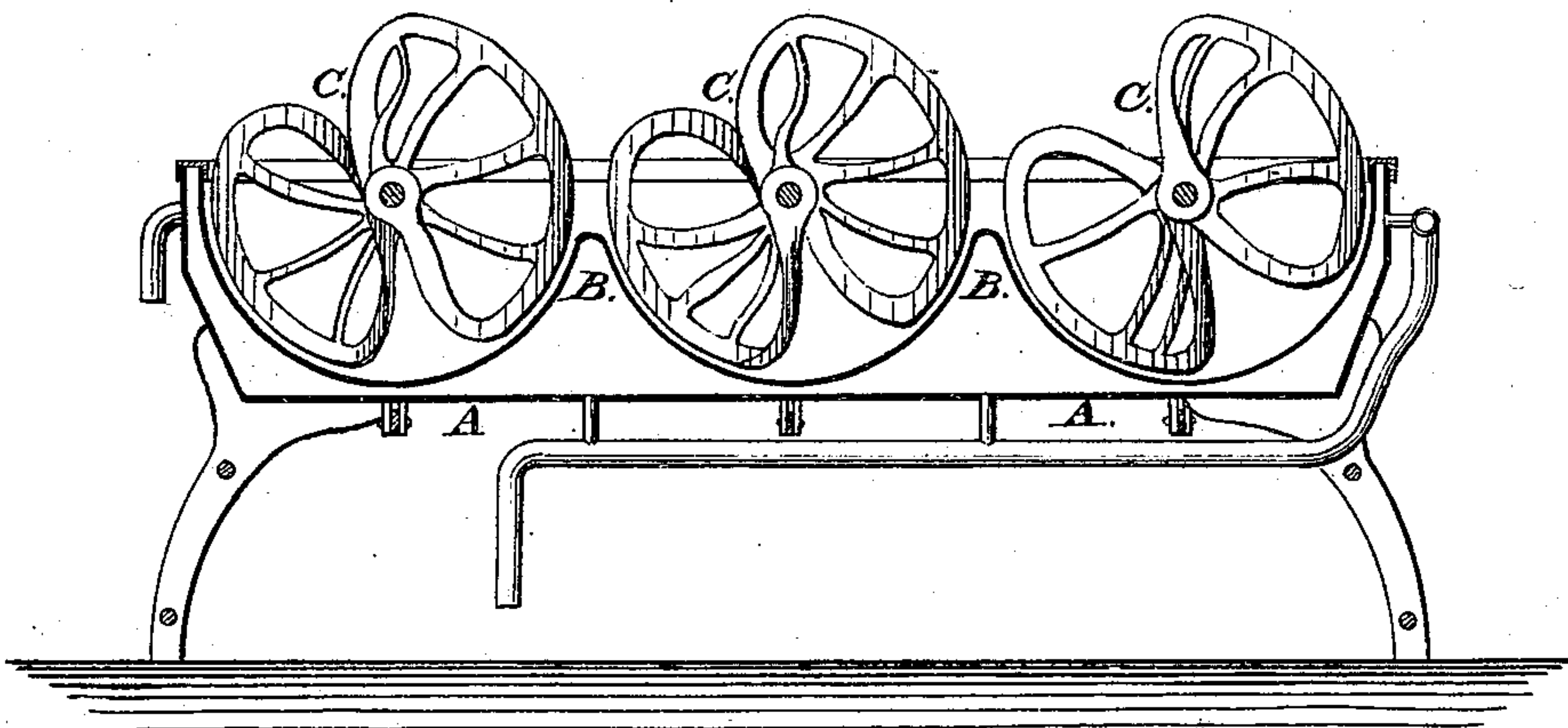
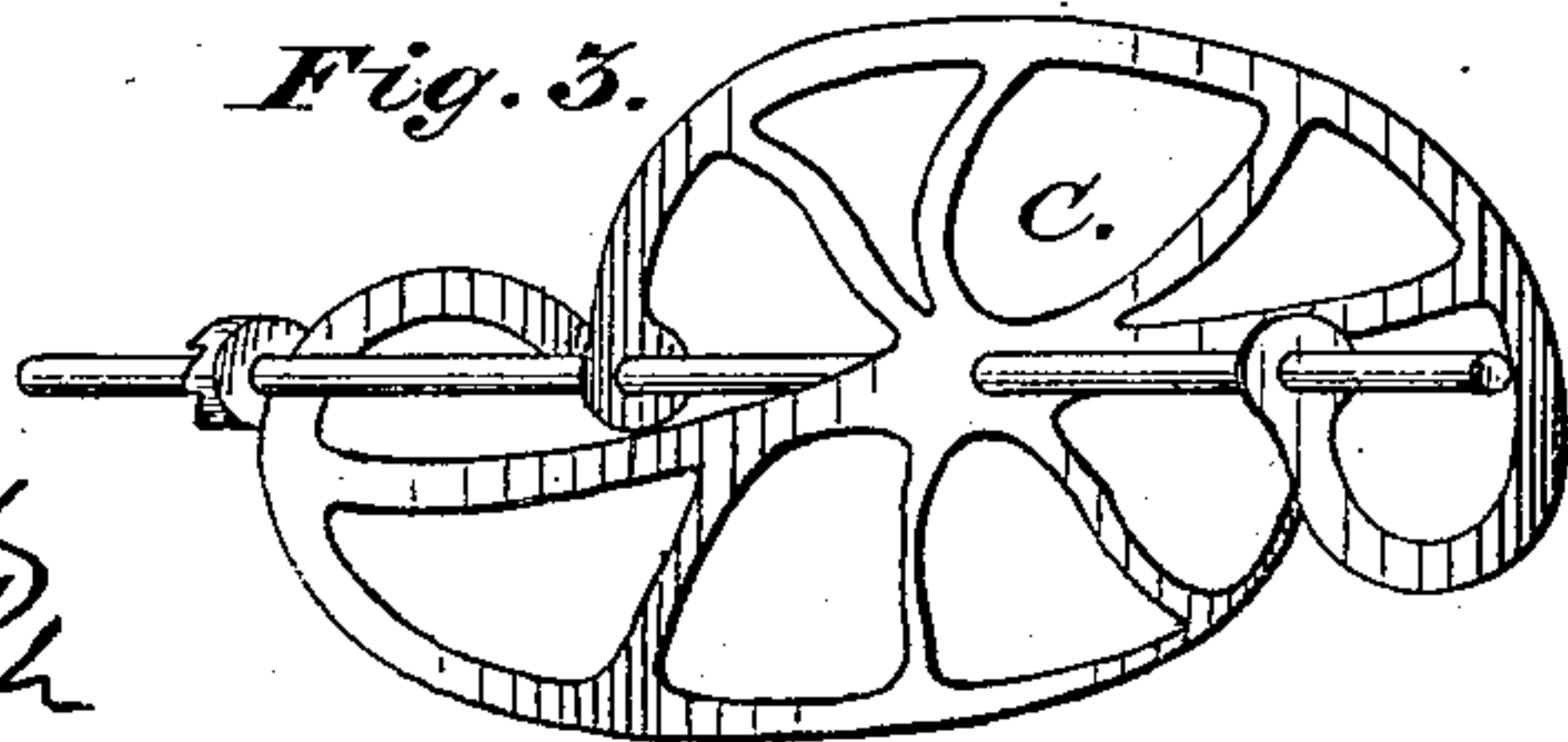


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAM P. HARVEY, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN LARD-COOLERS.

Specification forming part of Letters Patent No. **189,032**, dated April 3, 1877; application filed February 9, 1877.

To all whom it may concern:

Be it known that I, WILLIAM P. HARVEY, of the city of Baltimore, in the State of Maryland, have invented a new and useful Improvement in Lard-Coolers, which improvement is fully set forth in the following specification and accompanying drawing, in which—

Figure 1 is a perspective view of a lard-cooler with my improved compartments and agitators. Fig. 2 is a transverse vertical section of the same with the agitators. Fig. 3 is a perspective view of one of my agitators.

A A represent the ordinary outside form of the lard-cooler. B B represent the hollow partitions, by means of which I divide the same into separate compartments. C C C are the agitators, one of which is placed in each compartment.

It will be seen that the partitions of the compartments are hollow, as is the outside of the cooler, the whole being constructed of metal adapted for the purpose. Through the hollow walls of these partitions cold water is kept in constant flow by means of pipes, through which the water is forced.

The advantages of this subdivision of the cooler into compartments in this manner are a large increase of water-surface, contact with which facilitates the cooling of the boiling lard, and economy in adaptation to use in a single compartment for a smaller quantity of material than is necessary to fill a whole cooler of the usual construction.

The agitators C C C, Fig. 3, are of peculiar

construction, acting somewhat on the principle of a screw-propeller. They are made of sheet or rolled metal, of sufficient thickness to bear the strain, and open enough to permit the melted lard to pass through the fans, which are fastened to an axle, which runs across each compartment. These agitators each fit into the separate compartments as closely as may be necessary to bring all the contents thereof within their reach, and have an arm or projection, both front and rear, on either side of the center of said axle, which, in revolving, serves to agitate the melted lard from one side to the other of the compartment as well as backward and forward, the effect of which, through agitation, is to facilitate the process of cooling.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A lard-cooler provided with an inclosing-jacket chamber, a series of transverse curved hollow partitions communicating therewith, suitable inlet and outlet pipes for the admission and discharge of the refrigerant, and a series of revolving spiral agitators for promoting the rapid cooling of the lard, the several parts being relatively arranged substantially as herein set forth.

WILLIAM P. HARVEY.

Witnesses:

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