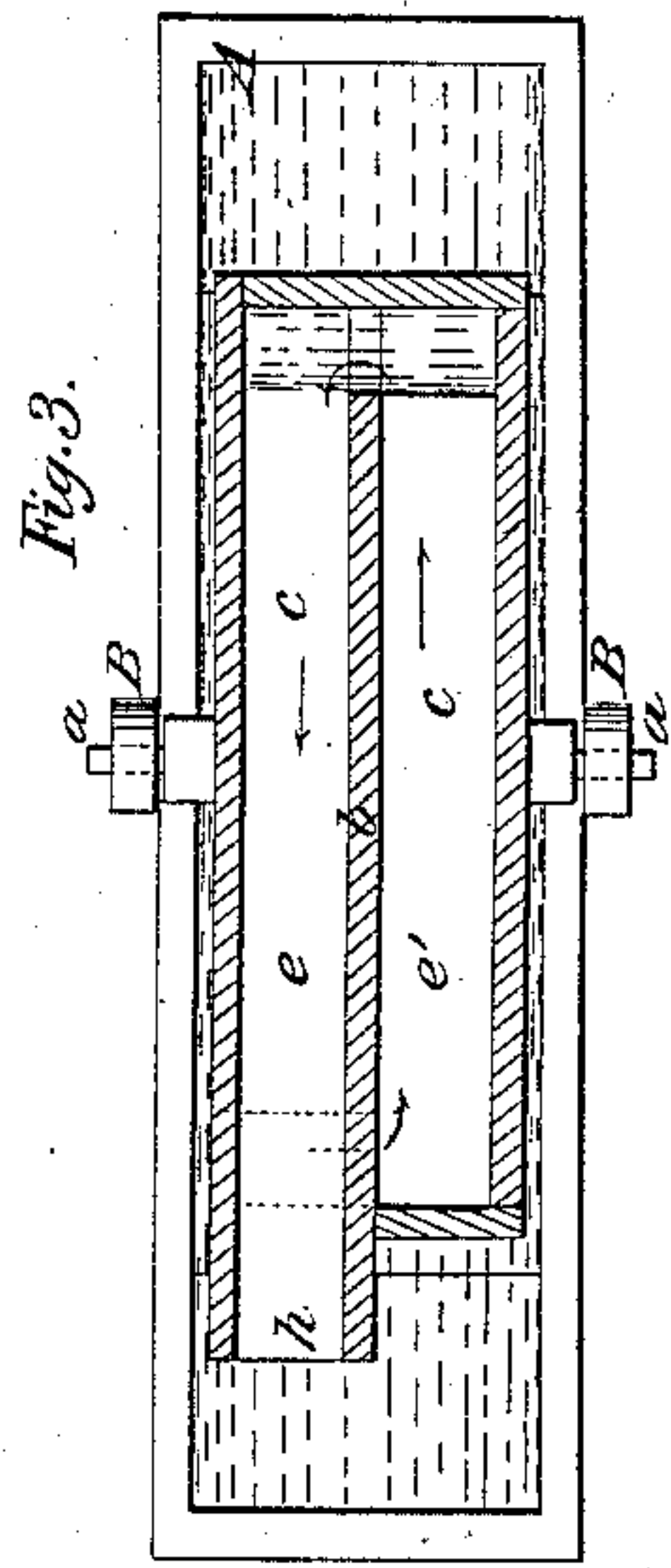
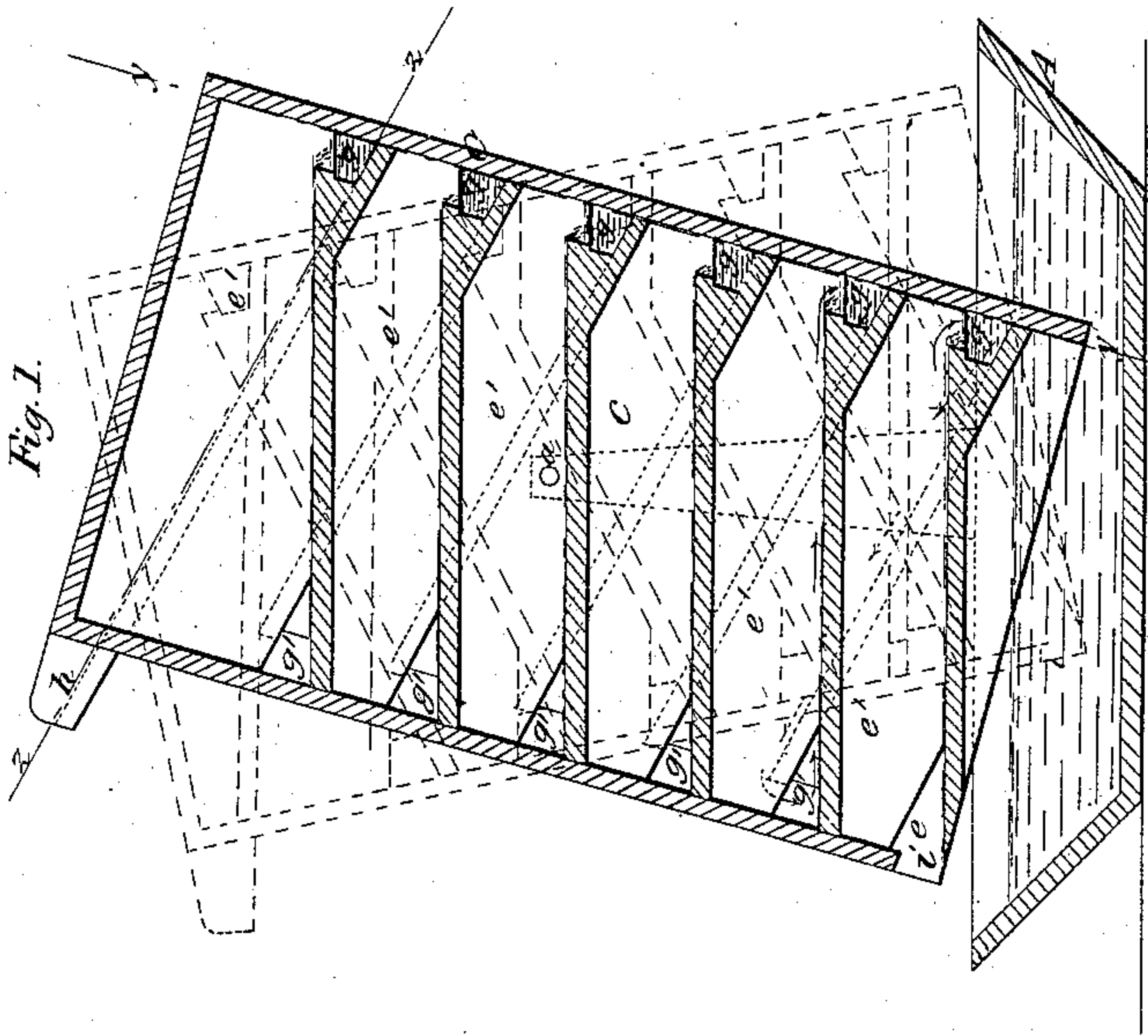
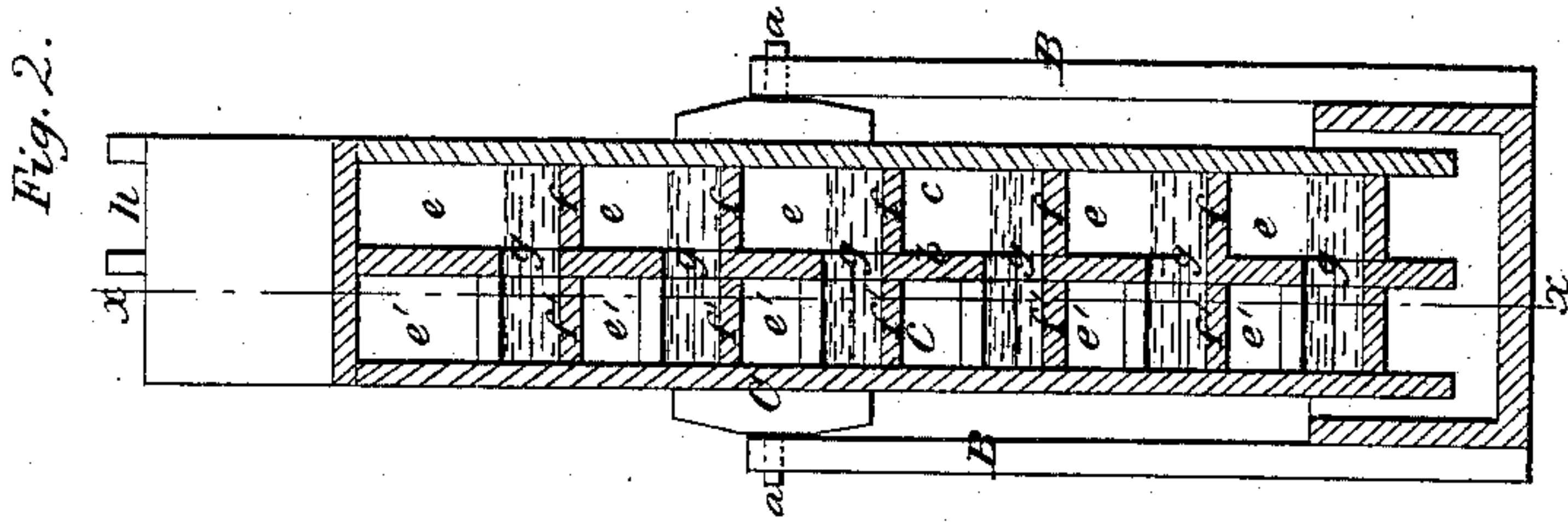


M. A. Shepard,

Oscillating Pump,

N^o 32,655.

Patented June 25, 1861.



Witnesses,
J. W. Brown
R. S. Spencer

Inventor,
M. A. Shepard
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attorney

UNITED STATES PATENT OFFICE.

M. A. SHEPARD, OF BRIDGEPORT, ILLINOIS.

WATER-ELEVATOR.

Specification of Letters Patent No. 32,655, dated June 25, 1861.

To all whom it may concern:

Be it known that I, M. A. SHEPARD, of Bridgeport, in the county of Lawrence and State of Illinois, have invented a new and Improved Device for Elevating Water and other Substances; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawing, making a 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 is a transverse section of the same, taken in the line *y, y*, Fig. 1. Fig. 3 is a section of the same, taken in the line *z, z*, Fig. 1.

Similar letters of reference indicate corresponding parts in the several figures.

The object of this invention is to obtain a simple device for elevating water and other substances, either by the oscillating of the device alone on suitable journals or by the rocking of the support to which the device is attached.

The invention is applicable to vessels of navigation, serving, while the vessel is in motion, as a self-acting means for elevating water from the hold.

The invention consists in the employment or use of a rectangular case divided by a vertical central partition into two compartments, and each compartment provided with partitions having oblique or inclined positions, the partitions of one compartment having a reverse position to that of the other, and the compartments communicating with each other; all being arranged as hereinafter shown to effect the desired result.

To enable those skilled in the art to fully understand and construct my invention I will proceed to describe it.

A represents a vessel which is provided at each side with an upright B, between which a rectangular box C, is placed or suspended on pivots *a, a*, and allowed to work or oscillate thereon freely. The box C, is divided by a vertical central partition *b*, into two compartments *c, c'*, and said compartments are subdivided respectively into a series of compartments *e, e'*, by inclined partitions *f, f'*, the partitions of one compartment having a reverse position to that of the other. The compartments *e, e'*, communicate with

each other at their ends as shown at *g, g*, and the upper compartment *e*, is furnished with a discharge spout *h*, while the lowest compartment *e'*, is provided with an induction opening *i'*.

From the above description it will be seen that if the vessel A, contain water and the lower part of the box C, be immersed therein, and said box be oscillated or vibrated on its pivots *a, a*, the water will, by the oscillation of box C, pass upward consecutively through the compartments *e, e'*, the water at each tilting of the box passing through the apertures *g*, or *g'*, whichever are depressed, and consequently passing from one series of compartments to the other, the water being elevated the distance of one compartment at each tilting or vibration of the box C, and discharged from spout *h*, each time said spout is depressed by the tilting of the box. By this arrangement it will be seen that when a vessel is in motion at sea and rocked by the waves the box C, will be oscillated and tilted by the motion thereof, the box being clutched so that it cannot turn on its pivots, and water in the hold will be elevated and discharged from the vessel without any labor. When the vessel is at rest or has no rocking motion, the box C, may be oscillated by any convenient power for the purpose of elevating the water.

This invention will answer a good purpose for elevating all fluids, as well as grain and other substances. It may be operated with but a small expenditure of power, the box C, being balanced on its pivots.

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

An oscillating or swinging box C, divided into two compartments *c, c'*, by a central partition *b*, and said compartments subdivided into compartments *e, e'*, by partitions *f, f'*; the compartments *e, e'*, communicating with each other by openings *g, g'*, and all arranged to operate substantially as and for the purpose set forth.

M. A. SHEPARD.

Witnesses:

CHARLES CUQUA,
R. H. HUDSON.