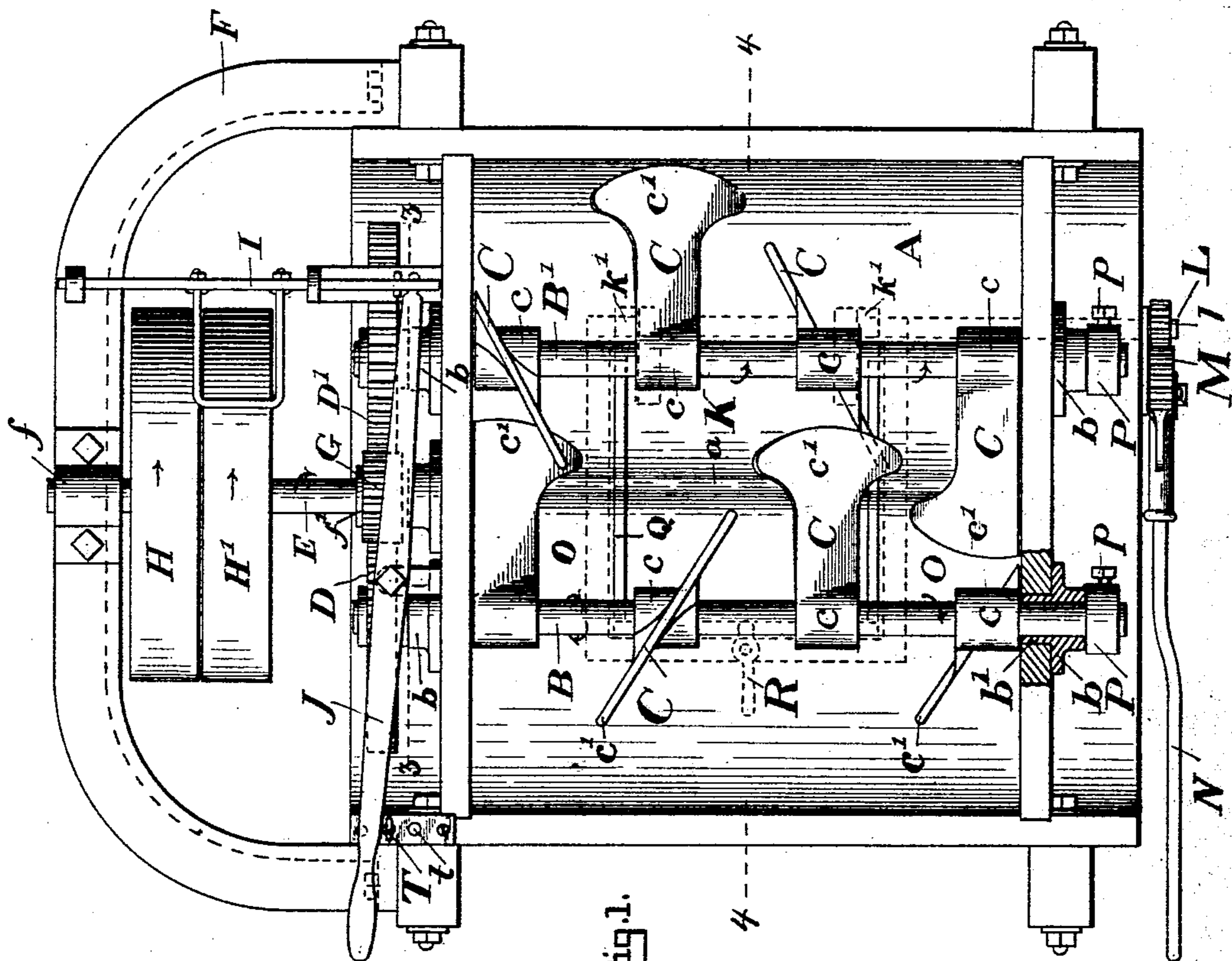
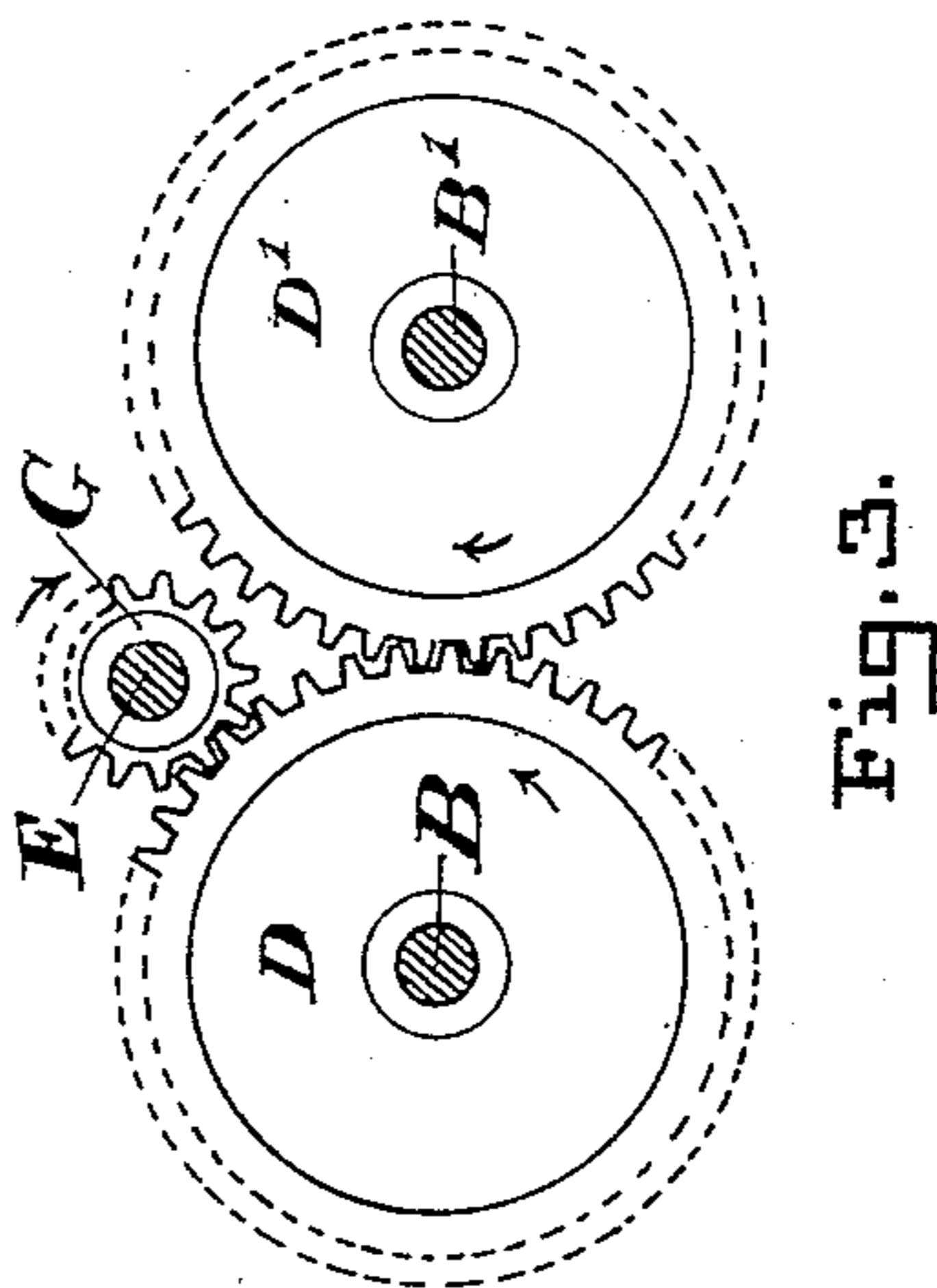
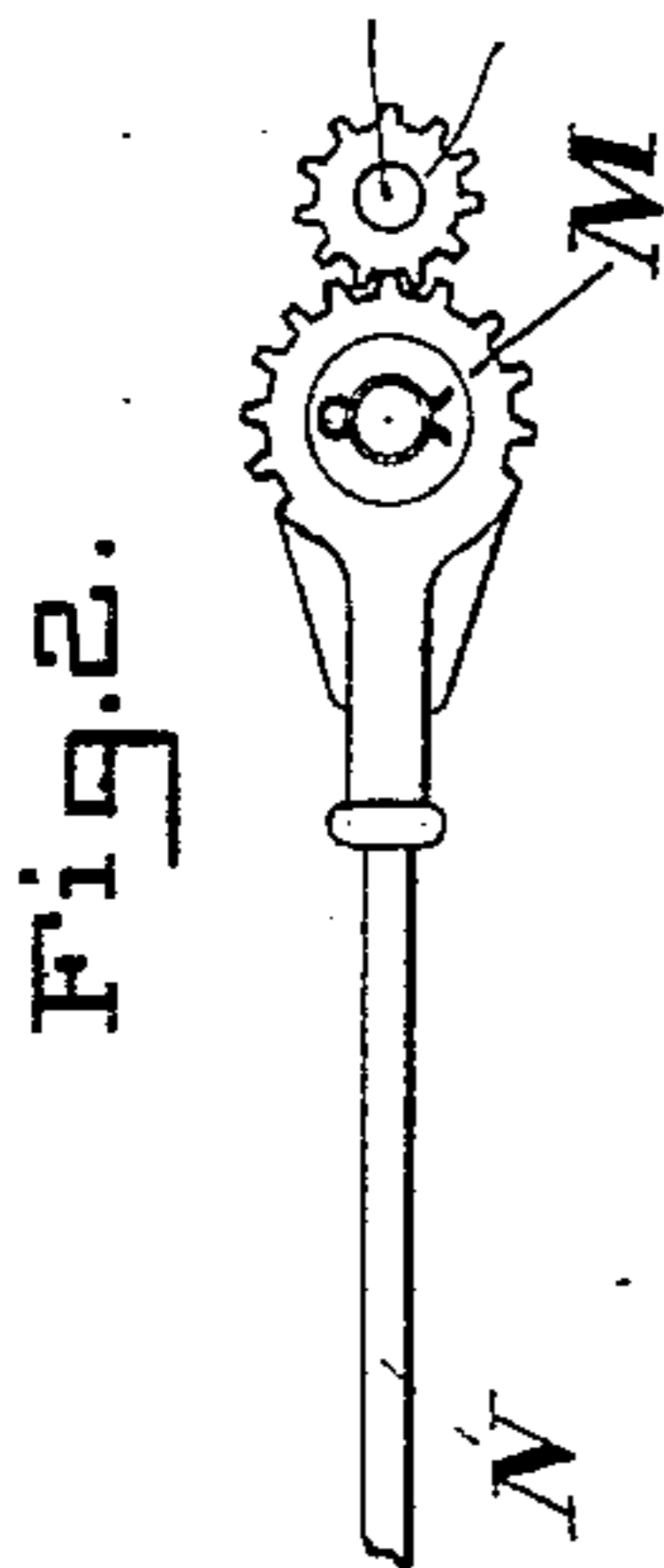


L. WAGNER.  
MEAT MIXER.

No. 514,048.

Patented Feb. 6, 1894.



A. O. Babendreier.

Alvan Macauley.

Fig. 1

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Louis Wagner

By *Chas B. Mann*  
Attorney.

(No Model.)

2 Sheets—Sheet 2.

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Fig. 5.

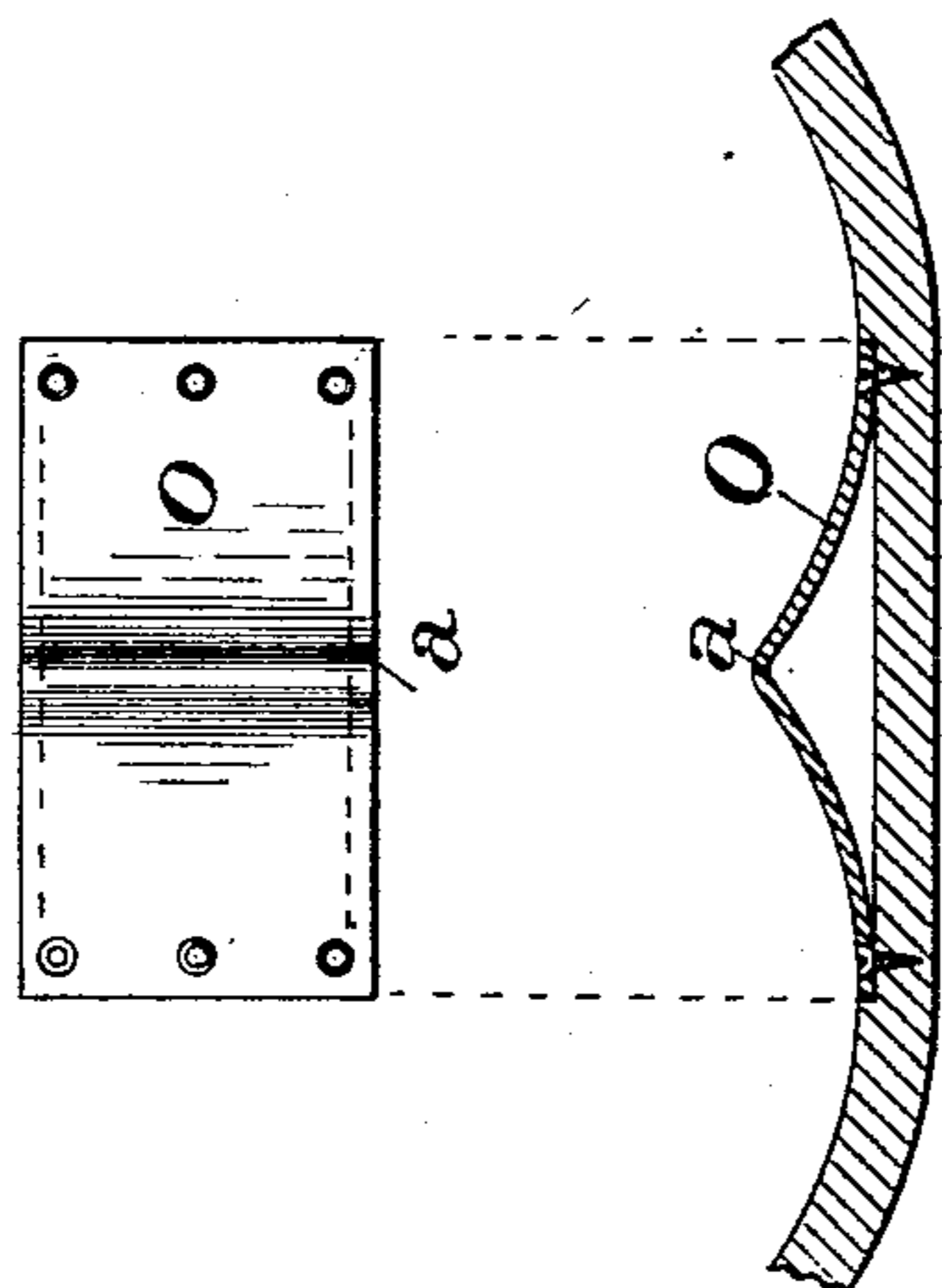


Fig. 6.

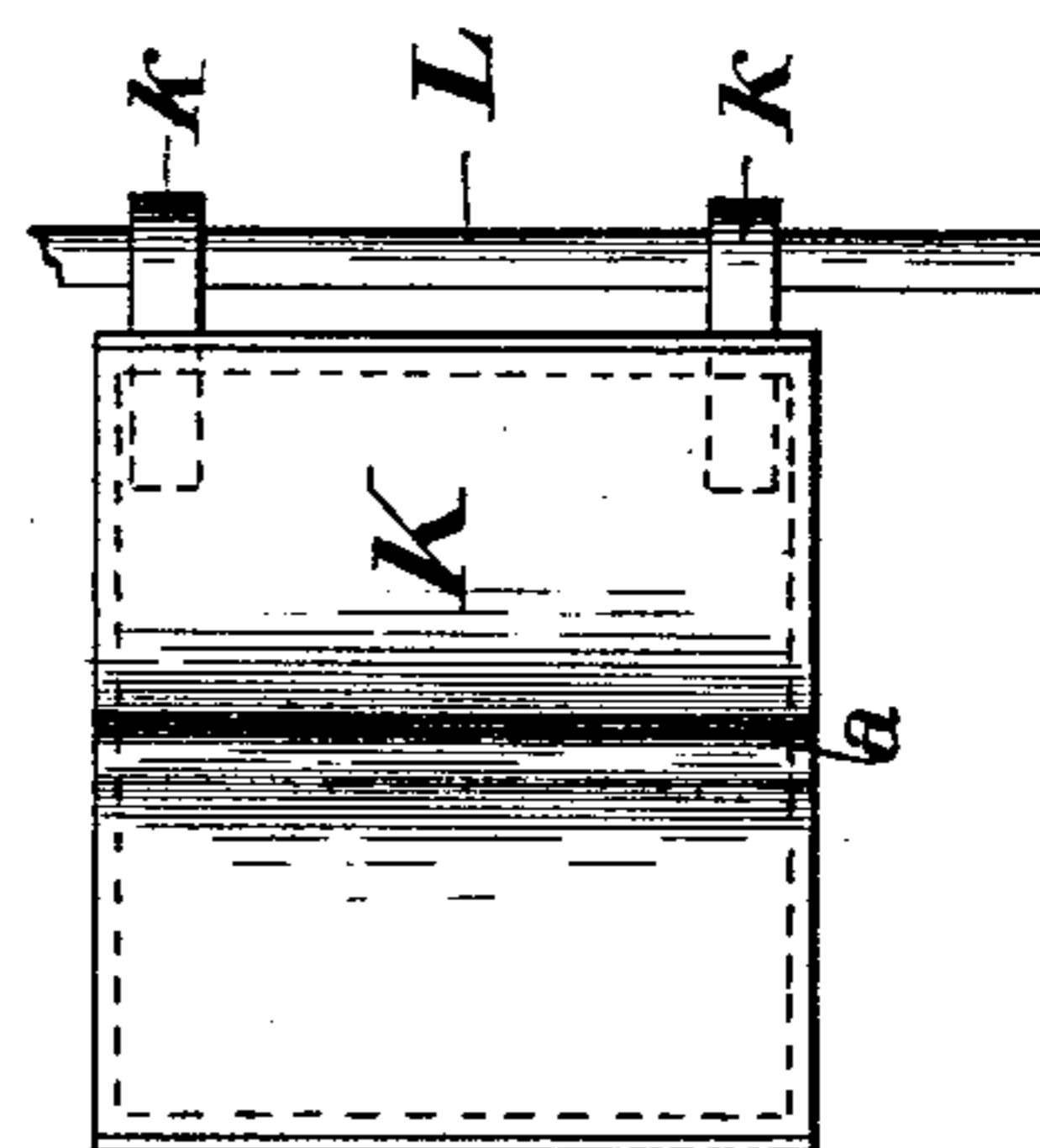


Fig. 7.

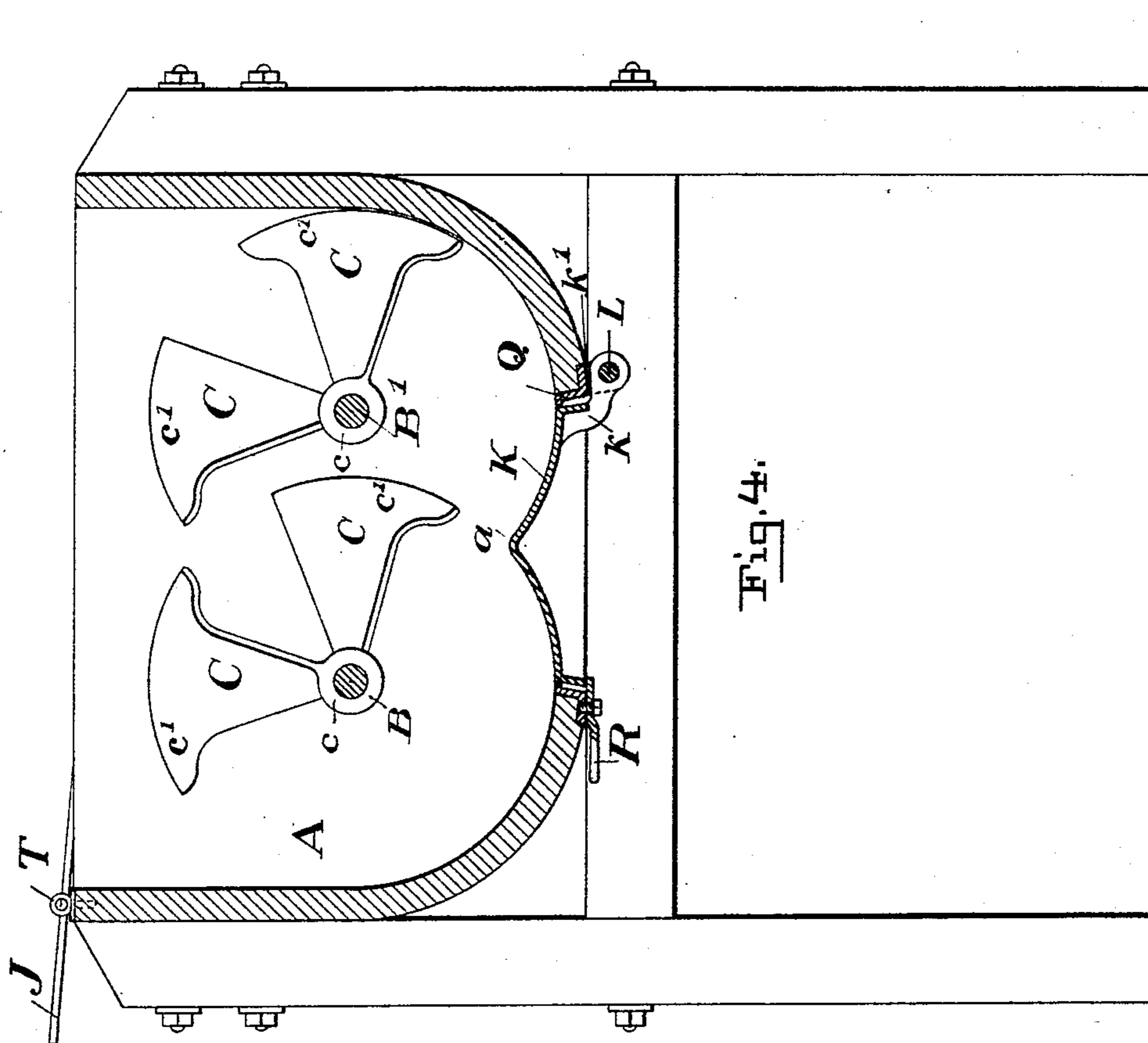


Fig. 4.

Witnesses:—

N. O. Babendreier.

Alvan Macaulay.

Inventor:—

Louis Wagner

By Chas B. Mann  
Attorney.

# UNITED STATES PATENT OFFICE.

LOUIS WAGNER, OF BALTIMORE, MARYLAND.

## MEAT-MIXER.

SPECIFICATION forming part of Letters Patent No. 514,048, dated February 6, 1894.

Application filed May 6, 1893. Serial No. 473,202. (No model.)

*To all whom it may concern:*

Be it known that I, LOUIS WAGNER, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Meat-Mixers, of which the following is a specification.

This invention relates to an improvement in mixers, and has for its object to provide means for thoroughly and quickly mixing meat and other articles.

In the accompanying drawings, Figure 1, is a top plan view of the machine, showing the mixing tub, mixing blades, operating mechanism, and door in the bottom of the tub. Fig. 2, is a detail view of mechanism for operating the said door; Fig. 3, a detail of the mechanism for driving the shafts on which the mixing blades are mounted, section on line 3—3. Fig. 4, is a cross section on line 4—4 of Fig. 1. Fig. 5, is a plan view, and Fig. 6, is a section of a portion of the mixing tub; Fig. 7, a detail of the door in the bottom of the mixing tub.

Referring to the drawings the letter, A, indicates the tub, which has a rounded bottom but which is broken by a central ridge, *a*; B, B', two shafts which pass longitudinally through the mixing tub and carry mixing-blades, C;—these two shafts are on the same horizontal plane; D, D', two gear-wheels each of which is mounted upon an end of one of the shafts, B, B', outside of the mixing tub; E, a driveshaft journaled at one end in a bearing, *f*, in a frame, F, and at the other in a bearing, *f'*, in the end of the mixing tub, and on which is mounted a pinion, G, which inter-meshes with the gear-wheel, D, upon the shaft, B; a loose pulley H, and a fast pulley, H', are upon the drive-shaft, E; I, is a belt-shifter of usual construction, for throwing a belt from the loose pulley, H, to the fixed pulley, H' or vice-versa. A lever, J, serves to operate the belt-shifter. In the bottom of the tub is a door, K, having ears, *k*, on one edge, and through which the rod, L, passes, being rigid with respect to said ears, whereby when the rod is turned, it will cause the said door to open; a pinion, *l*, is fixed upon the end of the rod, L, and meshes with a segment rack, M, having a handle, N; O, (see Fig. 5,) design-

ates a rigid metallic plate, of which there are two, one on each side of the rigid door, K.

The mixing device is operated as follows: Power is applied to the belt-wheel, H', which actuates drive-shaft, E, and pinion, G, secured thereon, rotates the intermeshing gear-wheel D, which in turn rotates the gear wheel, D'. The shafts, B, B', rotate in bearings, *b*, on the ends of the mixing tub. Bushings, *b'*, extend from said bearings along the said shafts through the ends of the mixing-tub. A collar P, having set-screw, *p*, is mounted upon the end of each shaft, B, B', outside the bearing, *b*, whereby the said shafts are adjustable longitudinally. There are preferably four mixing blades or paddles, C, mounted upon each of the shafts, B, B', to which they are secured by collars, *c*, which embrace said shafts. Said mixing blades or paddles have broadened flat ends, *c'*, set at an angle to the axis of the shaft upon which they are mounted. On the same shaft, by preference, alternate blades are diametrically opposite each other. Succeeding blades are at substantially right angles to each other. The door, K, fitting within the door-frame, Q, is located in the bottom of the tub, for convenience in removing the contents of said tub. The operating rod, L, which, as already stated, is rigidly secured to ears, *k*, on the door, K, passes loosely through and turns in bearings, *k'*, secured to the bottom of the mixing tub. By means of said handle, N, the door, K, may be opened or closed. A turn-button, R, pivoted to the bottom of the tub, locks the said door in a closed position. The central ridge, *a*, formed along the bottom of the tub extends the entire length thereof. The said ridge is made up in sections, part of it being formed in the door, K, and the rest in the contiguous plates, O. This ridge causes the broadened ends of the mixing blades to rotate close to the bottom of the tub and thus keep the entire contents of the tub in agitation. The shift lever, J, employed to operate the belt-shifter, I, is locked in any desired position by a pin, T, engaging one of the series of holes, *t*, in the upper edge of the tub.

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

1. In a device of the class described, the combination of the mixing tub; two shafts on the same horizontal plane, each shaft bearing mixing blades and passing through the tub; intermeshing gear-wheels secured on the ends of the shafts; a frame, F, secured to the end of the tub; a drive shaft having a bearing at one end in frame, F, and at the other in the end of the tub; a pinion mounted on the drive-shaft and meshing with one of the gear-wheels upon the blade-carrying shafts; and means for imparting motion to the drive-shaft.

2. In a device of the class described the combination of the mixing tub; blade-carrying shafts passing through the tub, and extending beyond and outside of the ends of the same; bearings for the said shafts secured on the ends of the tub; bushings extending from the said bearings through the ends of the tub; collars on said shafts, outside of said bearings and having set-screws; and means for operating the blade-carrying shafts.

3. In a device of the class described, the combination of the mixing-tub having a rounded bottom broken by a central ridge;

two shafts on the same horizontal plane and passing through the said tub and bearing mixing-blades; mechanism for operating the said shafts; a rod, L, turning in bearings secured to the bottom of the tub; a door, fitting within a door frame Q, in the bottom of the tub; and means for turning the rod, L, to open and close the said door.

4. In a device of the class described, the combination of the mixing-tub; shafts passing through the tub and bearing mixing blades; mechanism for rotating the said shafts; a rod, L, turning in bearings in the bottom of the tub; a pinion upon the end of said rod; a segment rack meshing with the said pinion and having an operating handle; and a door located in the bottom of the tub and having ears rigidly secured to the rod, L, for the purpose set forth.

In testimony whereof I affix my signature in the presence of two witnesses.

LOUIS WAGNER.

Witnesses:

A. O. BABENDREIER,  
CHAS. B. MANN, Jr.