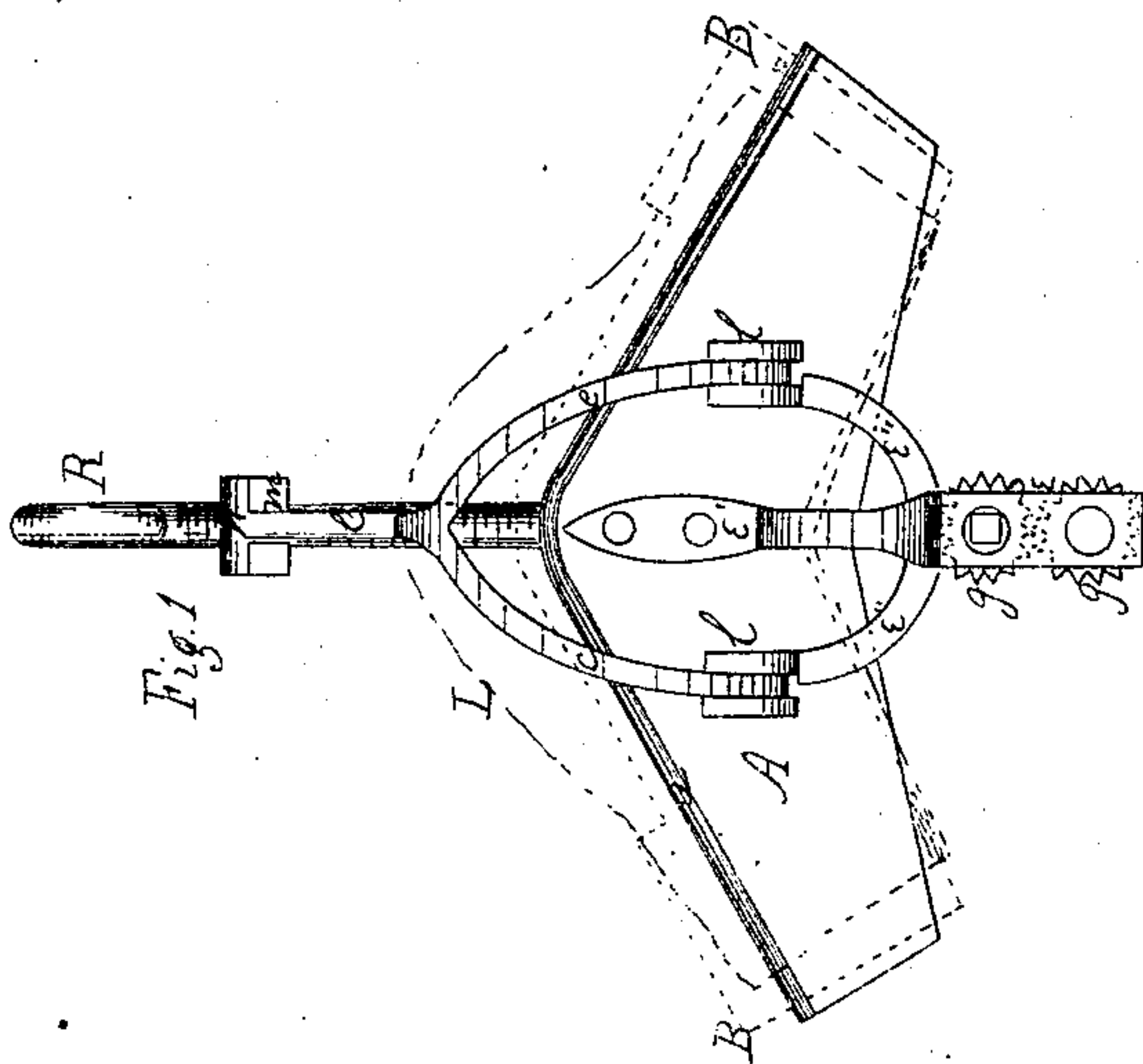
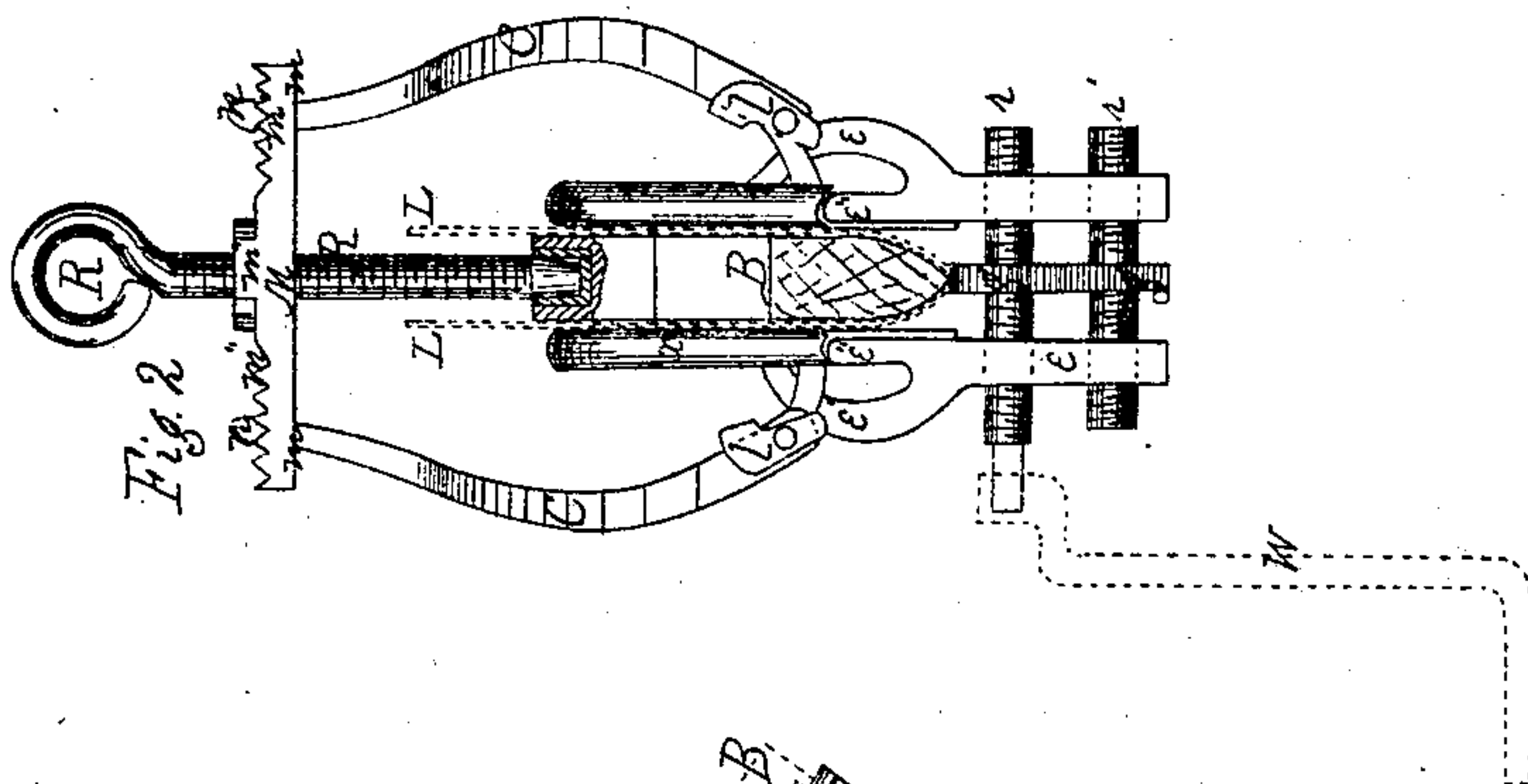
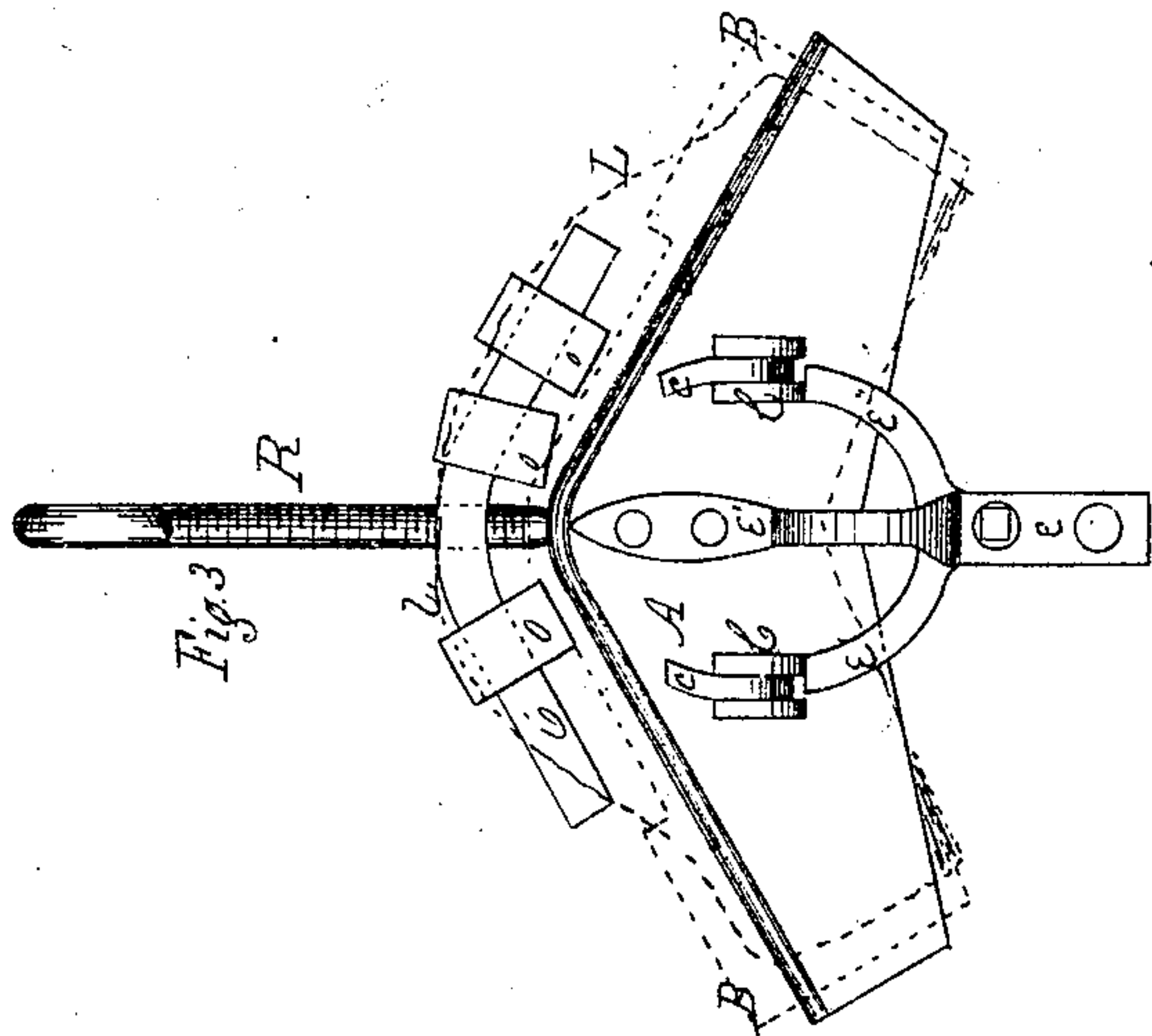


Tipton & Carl.
Boot-Crimp.

Nº 73554

Patented Jan. 21, 1868.



Witnesses
S. L. Kemon
L. A. Pettit

Inventors
J. Tipton, J. Carl
By Thurman & Co
Attorneys

United States Patent Office.

JOHN TIPTON AND J. CARL, OF MALAGA, OHIO, ASSIGNORS TO JOHN TIPTON.

Letters Patent No. 73,554, dated January 21, 1868.

IMPROVED BOOT-CRIMP.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that we, JOHN TIPTON and J. CARL, of Malaga, in the county of Monroe, and State of Ohio, have invented a new and improved Boot-Crimp; and we do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, and in which—

Figure 1 is a side elevation of my invention,

Figure 2 is an end view of the same, and

Figure 3 is also a side view of the invention, representing the parts at a different stage of the process of crimping from that shown in fig. 1.

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

This invention is an improved device for crimping leather for the manufacture of boots, shoes, &c., by which the operation can be performed more easily, quicker, and better than by the methods hitherto in use.

In the drawings, A A represent two similar right and left metallic plates, bent at the middle, and having the upper edge turned outward so as to form a flange, *a*. These plates are arranged in parallel vertical planes alongside of each other, and the crimping-board B is enclosed between them. The leather, represented by the red lines in the drawings, is pressed between the plates and the crimping-board until it is properly stretched and prepared for use. The crimping-board itself is shown in blue lines.

The process of inserting the leather in the instrument and crimping it will be better understood by a description of all the parts of the apparatus, which we will proceed to give. An arm, *e*, is attached to each plate, A, so as to project downward from the angle at the centre. For the purpose of strength, we attach these arms by three braces or shanks, one, *e'*, at the centre, bolted to the outside of the plate, and one on each side of the central one, represented in the drawings by *e'' e''*, likewise bolted to the outside of the plate. The central one is curved out at its middle, as shown in fig. 2, so as to brace against the plate with great strength. The side arms *e'' e''* are curved, as shown in figs. 1 and 3, so as to effectually resist any attempt of either plate to slide or move longitudinally out of position. The arms *e e*, below the plates, are connected by two screw-rods *r r'*, furnished with gear-wheels, *g g*, of equal size, by which, when one of the rods is turned, the other moves with the same velocity. Each rod is cut into a right and left screw, the screws on one rod running in a direction opposite to that of the similar screws on the other rod. The object of thus connecting the rods and arranging the screws is, that by turning one rod, by means of a crank or wrench, *w*, the upper and lower ends of the arm *e* may be caused to approach or recede from each other equally, preserving the parallel position of the plates A A. It is evident that, by turning the wrench properly, the plates may be forced with any degree of violence against the crimping-board B, and that in approaching it they will bear equally against the leather at all points of contact and on both sides of the board. The arms *e'' e''* bear lugs *l l* at their upper extremities, and in the lugs are pivoted the lower ends of forked rods, C C, in such a manner that the upper end of the fork shall be capable of swinging out and in on the pivoting-lugs. An iron bar, M, having deep recesses, *m m*, in its ends, a vertical female screw, *m'*, at its centre, and a series of ratchet-teeth, *m''*, along its upper surface, from the screw to the extremities of the bar, is employed to unite the upper ends of the rods C C. Each rod C terminates in a head or nut, *n*, at its upper end. The bar M is placed across the instrument over its centre, a stout screw-rod, R, having been first inserted in it. The upper ends of the upright rods C C are placed in the recesses *m m* at the end of the bar, the heads *n n* resting upon the upper surface of the bar on the ratchet, which holds the rods in position, the under surface of the heads being provided with a projection which catches in the ratchets. The lower end of the screw-rod R is placed against the upper edge of the crimping-board, and the rod is turned. This screws the bar M and the crimping-board apart, but, as the bar is prevented from rising, the crimping-board alone must yield and be forced down between the plates A A, pressing the leather between the board and plates, and effectually crimping it to the shape required. The force with which the plates will act against it depends, of course, upon the force with which the screws *r r'* are applied to bring the plates together, and may be adjusted at pleasure.

The instrument, as thus applied, is clearly shown in figs. 1 and 2. If this were the only means employed the device would be imperfect, first, because the upper edge of the leather at *i i i* would not be stretched at all,

and, secondly, because for every piece of leather undergoing the process of crimping and drying, a separate instrument would have to be used. It would not do to remove the crimping-board and leather from the instrument till the leather was dry, and meanwhile another instrument must be employed upon other work. The expense attendant upon this makes it an object to be avoided.

These difficulties are entirely overcome by the use of a bent iron plate, O, the side elevation of which is clearly shown in fig. 3, and the cross-section of which is of a U-shape, in connection with jaws *o o o*. The upper edge of the leather, L, is drawn up alongside of the plate O, the jaws are placed over it, astride of the bent plate, and forced tightly down upon it, clamping the leather firmly to the plate. The screw-rod R is then inserted through the centre of the plate, passing through a female screw provided for the purpose. When the rod is turned in the proper direction it will now raise the plate from the apparatus, and stretch the upper edge of the leather to any required degree. The jaws *o o* are made as usual, with serrated inner surfaces, and are simply pressed down over the leather, not having any screw or other device for operating them in any manner, except as described. The leather being held in the position described, by means of the forming or crimping-board B, plate O, jaws *o o*, and screw-rod R, as shown in fig. 3, the rest of the apparatus may be removed. In this manner, one set of side-plates A A, with their attached parts, will answer to crimp all the leather used about an ordinary shop, it being only necessary to multiply the parts B, O, *o*, and R, which are required to hold the leather in position while it is drying.

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

1. The combination of the plates A A with the two right and left screws *r r'*, and spur-wheels *g g*, substantially as and for the purpose specified.
2. The combination and arrangement of the plates A A with the arms *e e*, braces *e' e''*, joints *l*, and arms C C, substantially as and for the purpose specified.
3. The bar M, when constructed with slotted ends, a ratchet surface on its upper side, and a central female screw, substantially as and for the purposes set forth.
4. The combination of the plates A A with the arms C C, bar M, screw-rod R, and board B, substantially as and for the purposes specified.
5. The combination of the plate O, board B, jaws *o o o*, and screw-rod R, when the parts are constructed and applied together, substantially in the manner and for the purposes specified.

JOHN TIPTON,
J. CARL.

Witnesses:

JAMES M. THORNBERRY,
THOMAS S. FOWLER.