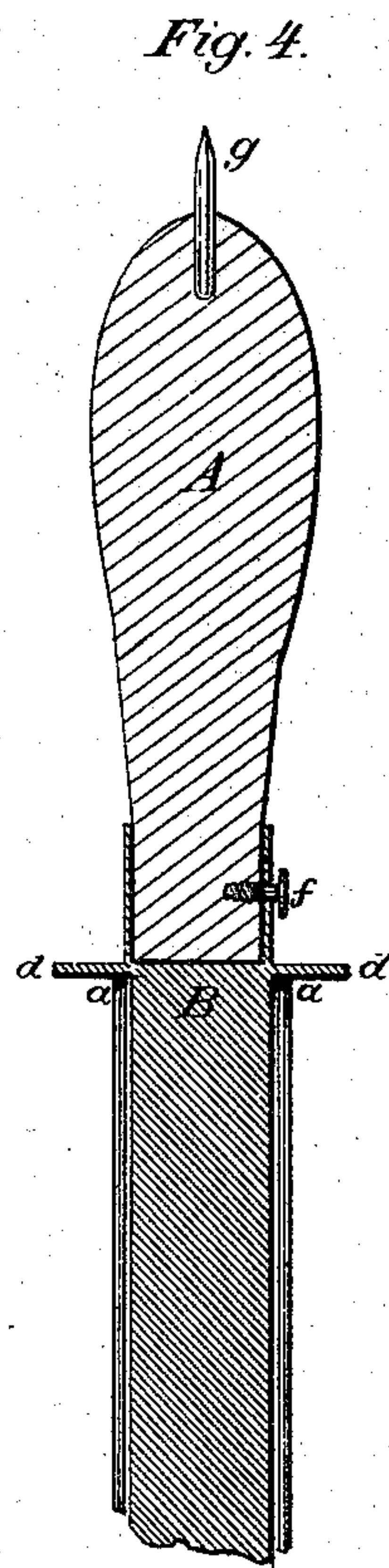
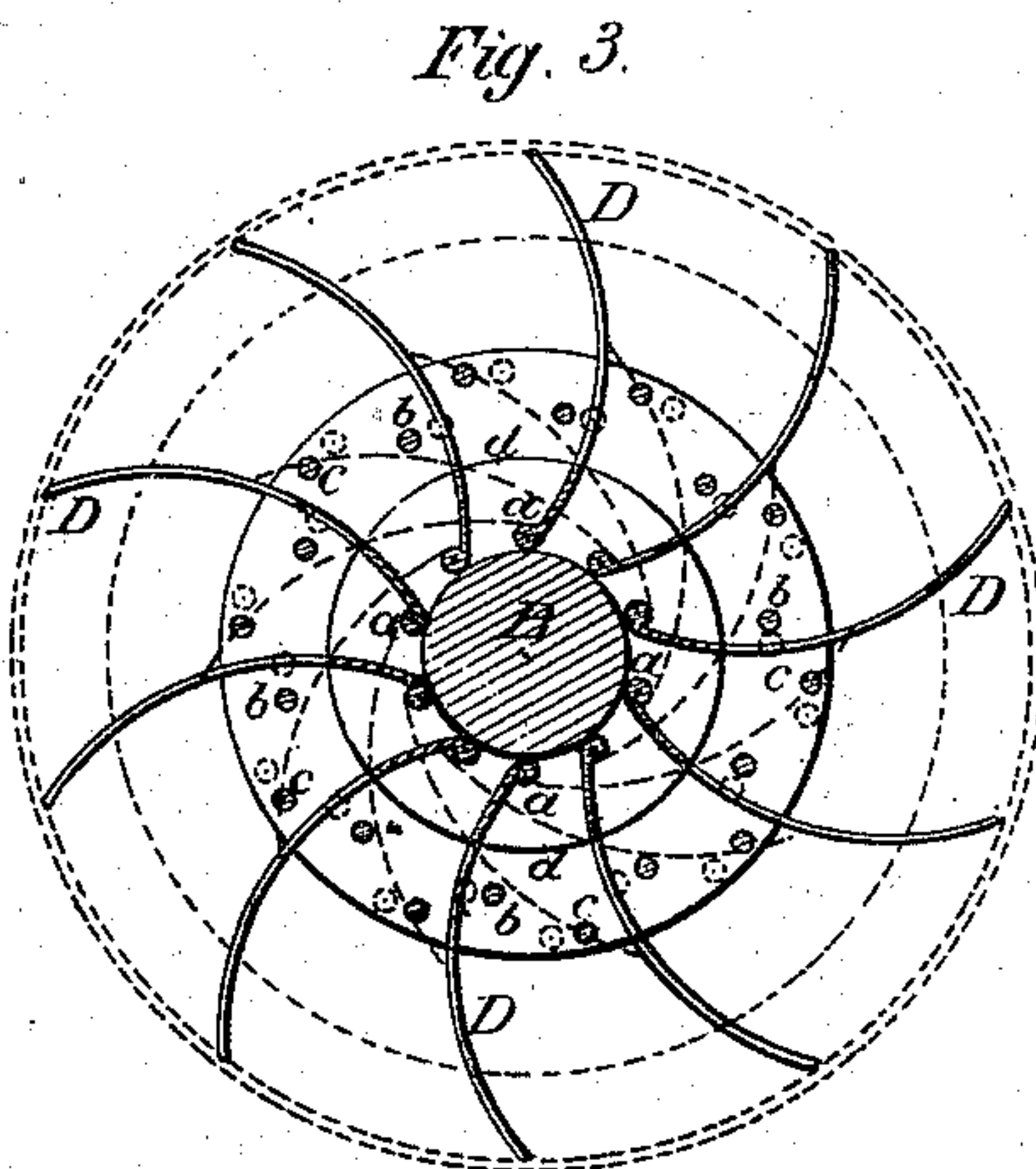
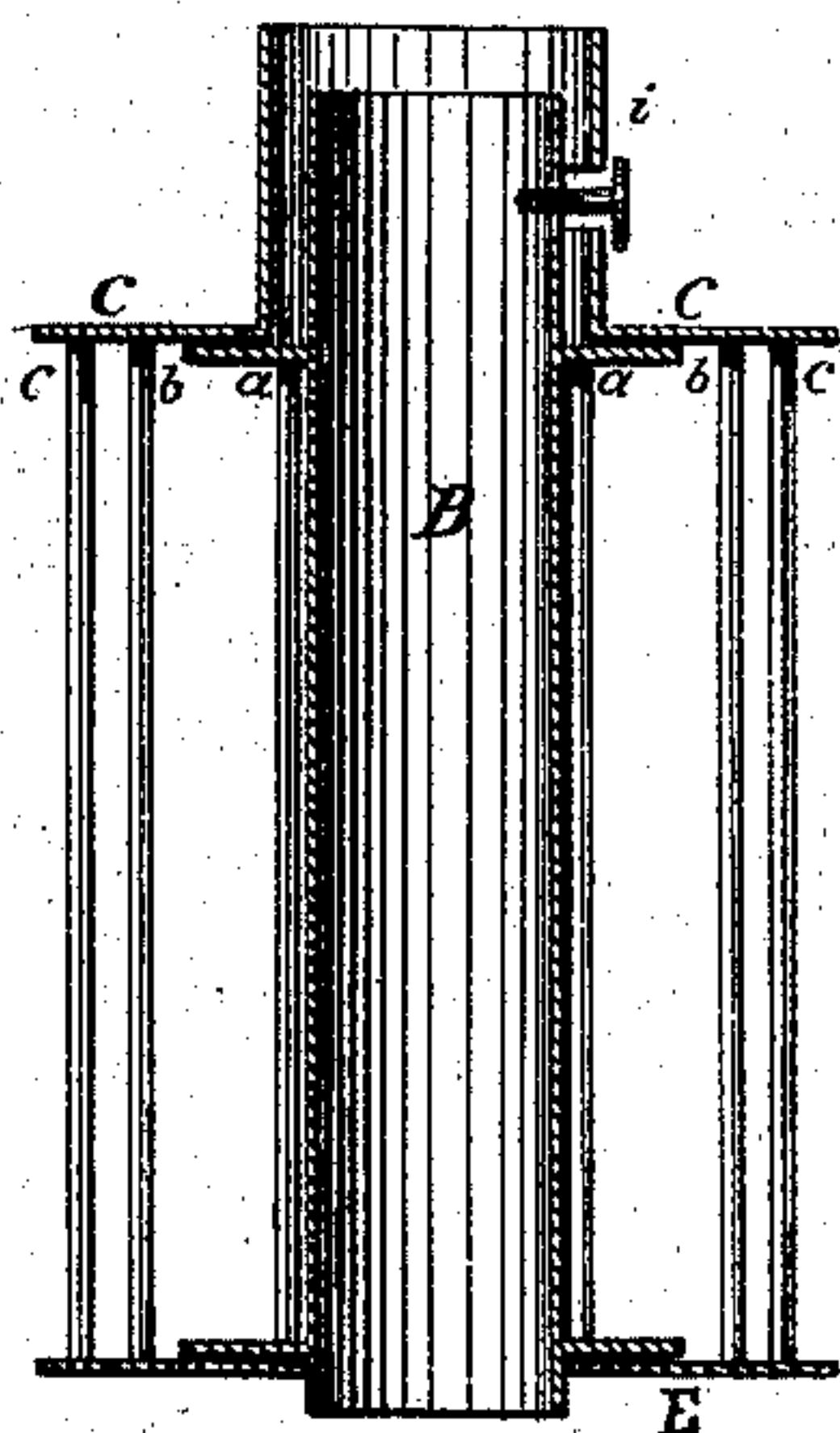
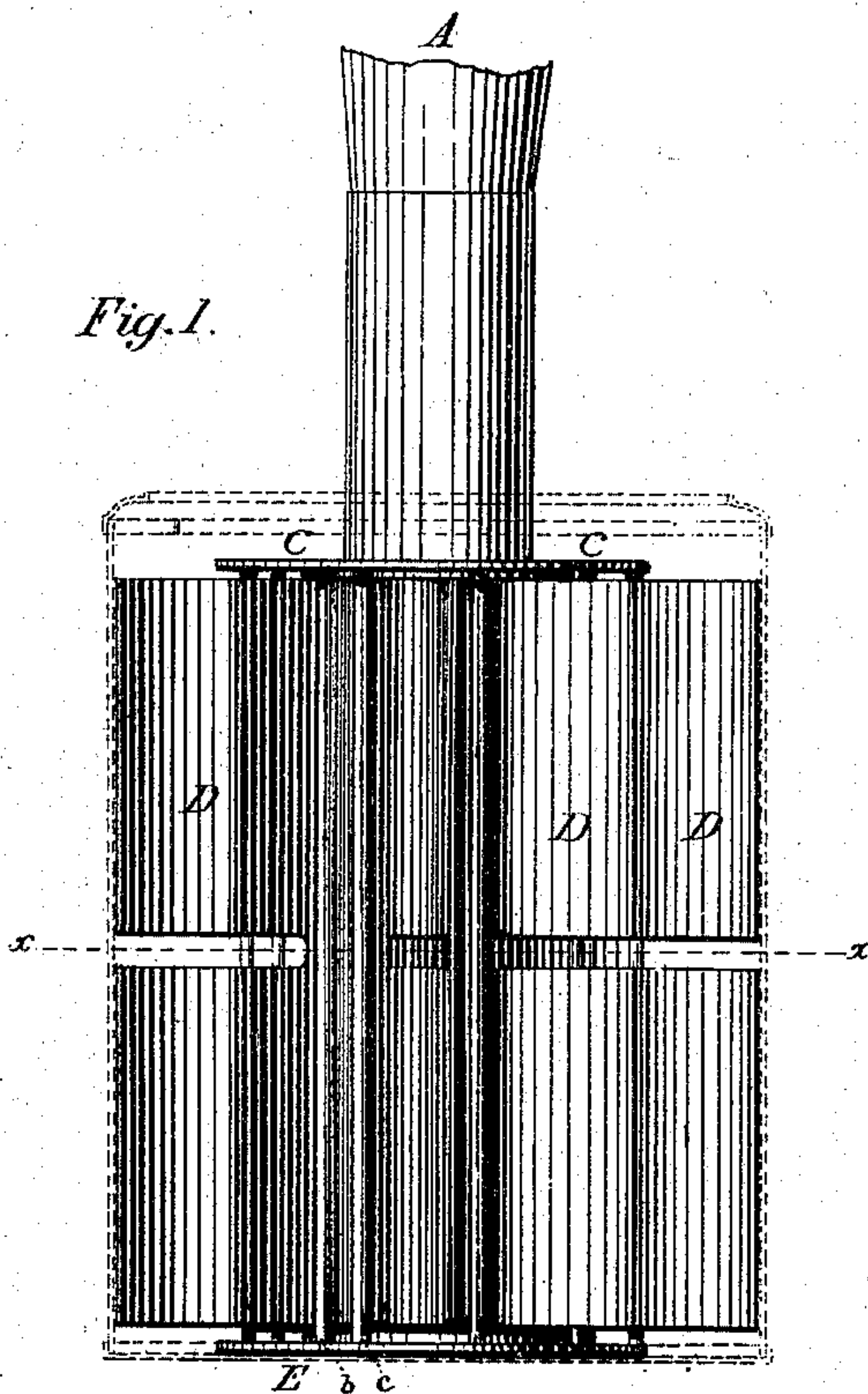


A. V. ALLEN.
Can Soldering-Machines.

No. 156,402.

Patented Nov. 3, 1874.



Attest:

Wm. L. Garrison.
C. A. Goddard

Inventor:

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UNITED STATES PATENT OFFICE.

AUGUSTUS V. ALLEN, OF JOPLIN, MISSOURI.

IMPROVEMENT IN CAN-SOLDERING MACHINES.

Specification forming part of Letters Patent No. 156,402, dated November 3, 1874; application filed August 1, 1874.

To all whom it may concern :

Be it known that I, AUGUSTUS V. ALLEN, of Joplin, in the county of Jasper and State of Missouri, have invented a new and useful Machine for Soldering Cans; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which are hereby made a part of this specification.

Like letters in the drawings indicate the same parts.

Figure 1 is an upright view of the machine. Fig. 2 is a view of the machine, the wings D D not being shown. This figure shows more particularly the arrangement of the rods *a*, *b*, and *c*, the rods *b* and *c* extending through perforations in the plate C to corresponding perforations in the base E. B is the cylinder or axis furnished with flanges at the top and bottom, through which extend the rods *a*. It is also furnished near the top and above the plate C with a screw or catch, *f*, which works in the slotted throat at *i*. Fig. 3 shows a cross-section of the machine, taken through the line *x*. Fig. 4 shows handle furnished with a pivot-point, and having a screw or pin catch, *f*, which operates in the slot *e* in the socket-rim.

My invention relates to devices for holding and adjusting tin cans in soldering; and consists in the construction and arrangement of the parts hereinafter fully described.

The machine consists of several parts: The handle A, which is attached to the cylinder B, the cylinder being furnished with perforated circular flanges *d d* at the top and bottom; the curvilinear wings D; and three rows of rods, *a b c*. The rods *a* extend through the perforations in the top and bottom flanges *d d*, the wings D being attached to them, while the rods *b* and *c* extend through the perforations in the socket-plate C to the base-plate E.

The construction of the machine may be described as follows: A wooden handle, A, having a pivot-pin, *g*, projecting from its butt, and furnished with a screw or pin, *f*, is made fast in the inner socket or end of cylinder B, Fig. 2, the pin *f* being made to pass through a slot in the throat *i*, Fig. 2, said throat being firmly attached to the plate C. The handle

A is made to fit tightly in the cylinder B, so that the cylinder will move with the handle. The handle A may be made to pass through the cylinder, as described, or the cylinder with its flanges may be cast solid, and the handle fitted at the top by means of a socket or other device. The cylinder B is furnished at both ends with perforated flanges *d d*, through which pass the row of rods *a*. Attached to the rods *a* are the wings D, curvilinear in form, and slotted across the center about three-fourths of the width of the wings, as shown at the dotted line *x*, the wings being so arranged as, in operating, to pass between the rows of rods *b* and *c*, the said rods being arranged as follows: The rods *b b* pass through the middle row of perforations in the socket-plate C and extend to the corresponding row of perforations in the base-plate E, while the rods *c c* pass through the outer row of perforations in the socket-plate C, and extend to the corresponding row in the base-plate E.

The operation of the machine is as follows: The can being formed, the bottom is placed on the bench before the workman. The body of the can is then put on the bottom. Then the top of the can is placed on the body. Take hold of the machine by the handle, having the wings closed, and place it inside the can through the opening at the top. Then, holding the can firmly, twist the handle suddenly and as far around as it will go. The cylinder B, revolving, operates upon the wings D, throwing them against the rods *b c*, causing them to be distended, and to impinge on the inner surface of the can, which is represented by the dotted lines in Fig. 1. The body of the can is then fitted to the top and bottom and ready for soldering, which is done in the usual manner.

The operation of the screw or pin *f* is as follows: The handle A being twisted and the wings D distended, as soon as the screw *f* passes the center it impinges on the bottom of the slot *e*, and thus holds the wings D in place. The object of slotting the wings D, as shown at the line *x*, will be at once apparent in fitting a can which is tapering or irregular, as the wings above or below the slots will be more or less distended according to the shape

of the can. The rods *b* and *c* in operating the machine serve as guides to the wings D. The pivot-point *g* on the butt of the handle is necessary to hold the can conveniently when soldering the top, the workman holding the can by the bottom and resting the point *g* on the edge of the work-bench.

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

1. The wings D, slotted transversely at or near their center, and hinged to the cylinder B, substantially as described.

2. The combination of the rods *a a*, *b b*, *c c*, the wings D, and the cylinder B, substantially as described.

A. V. ALLEN.

Witnesses:

J. McKENNEY,
C. A. GRAY.