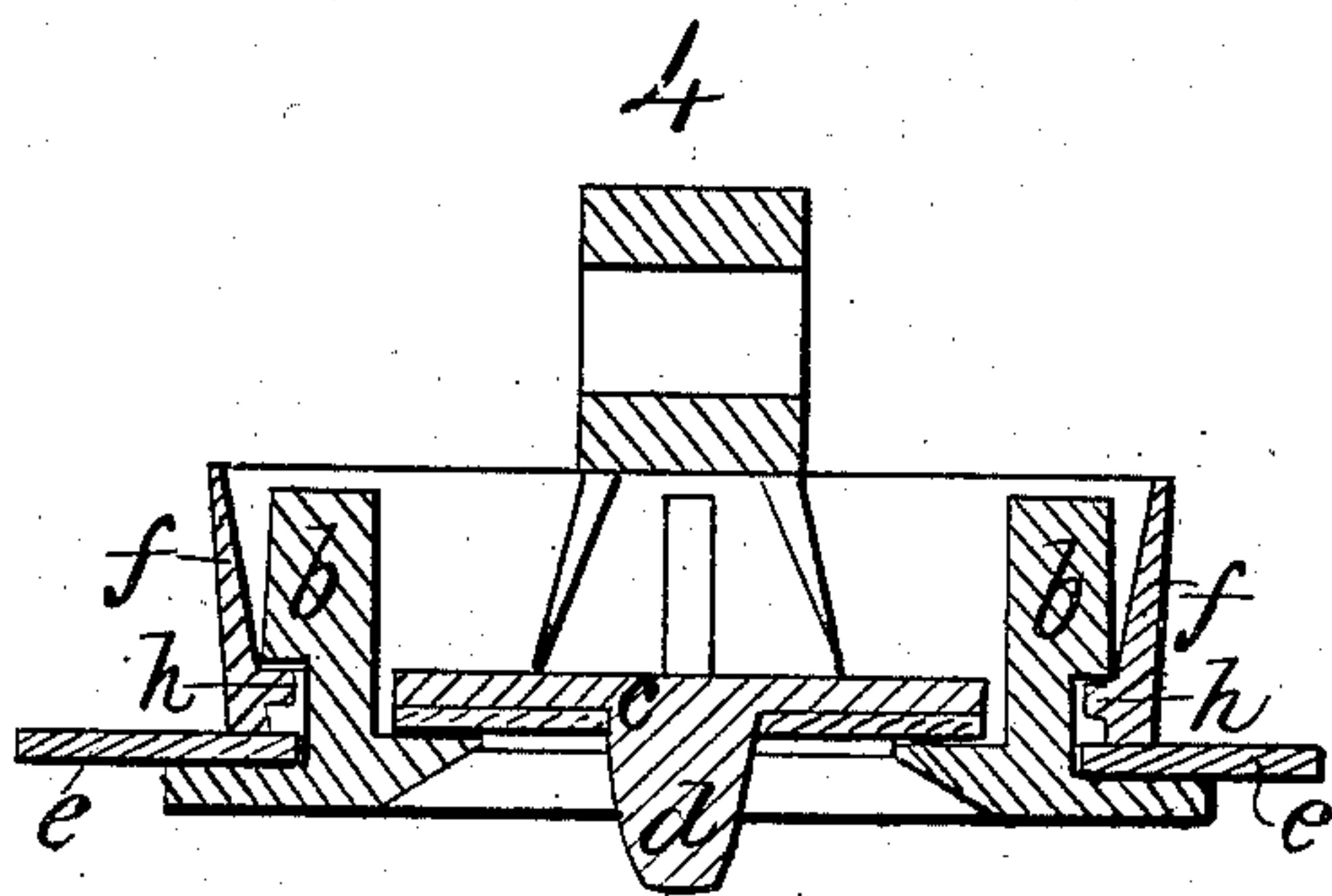
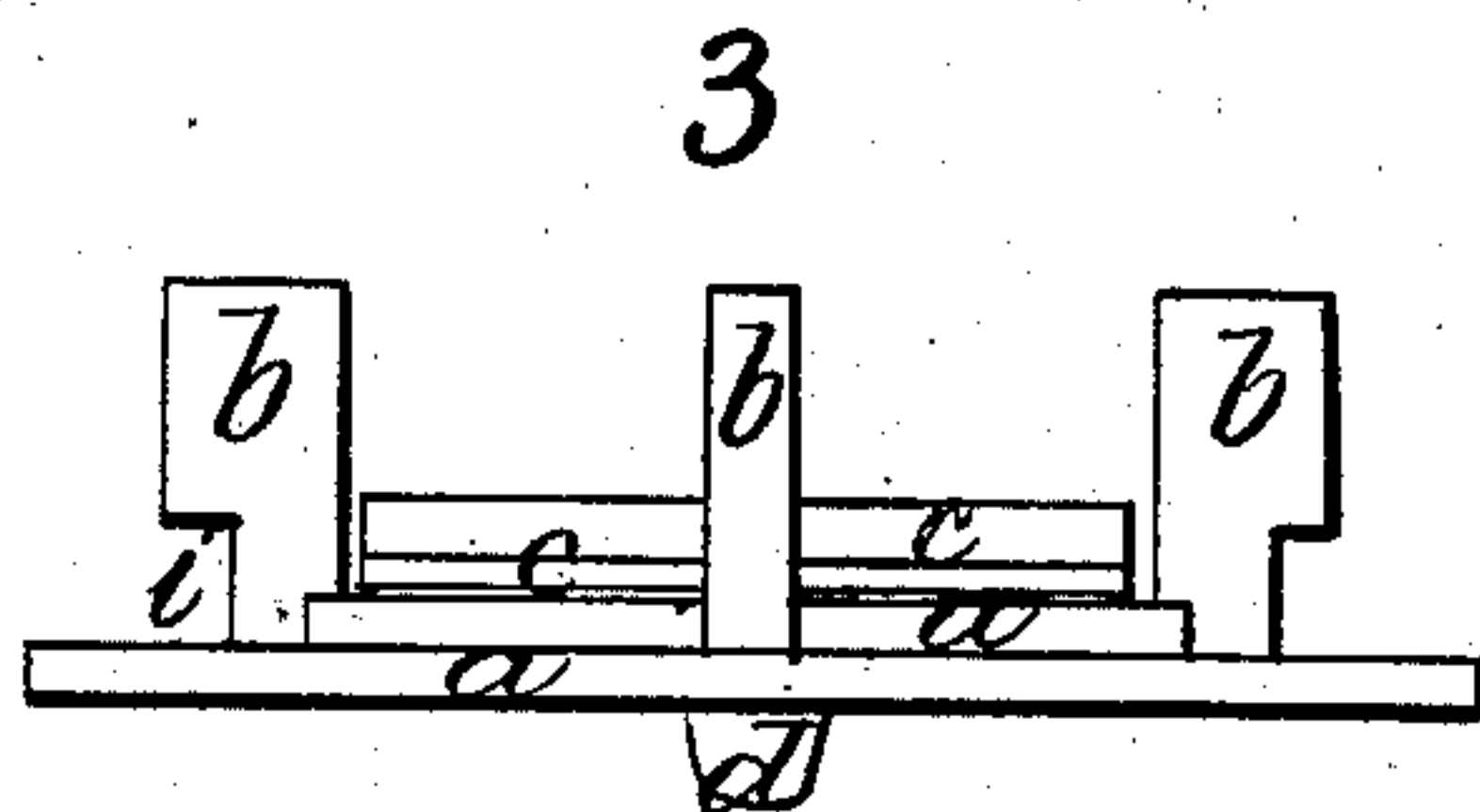
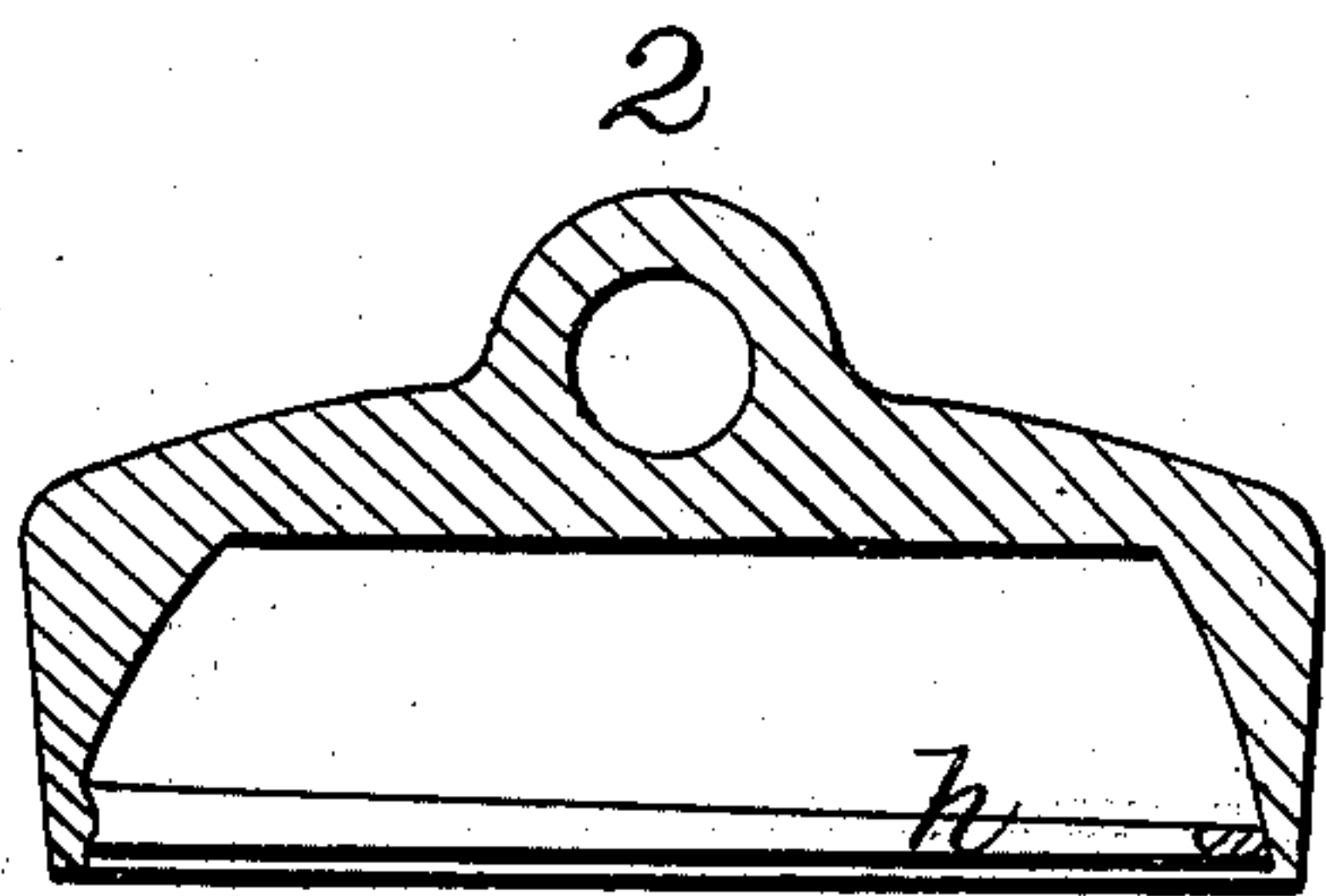
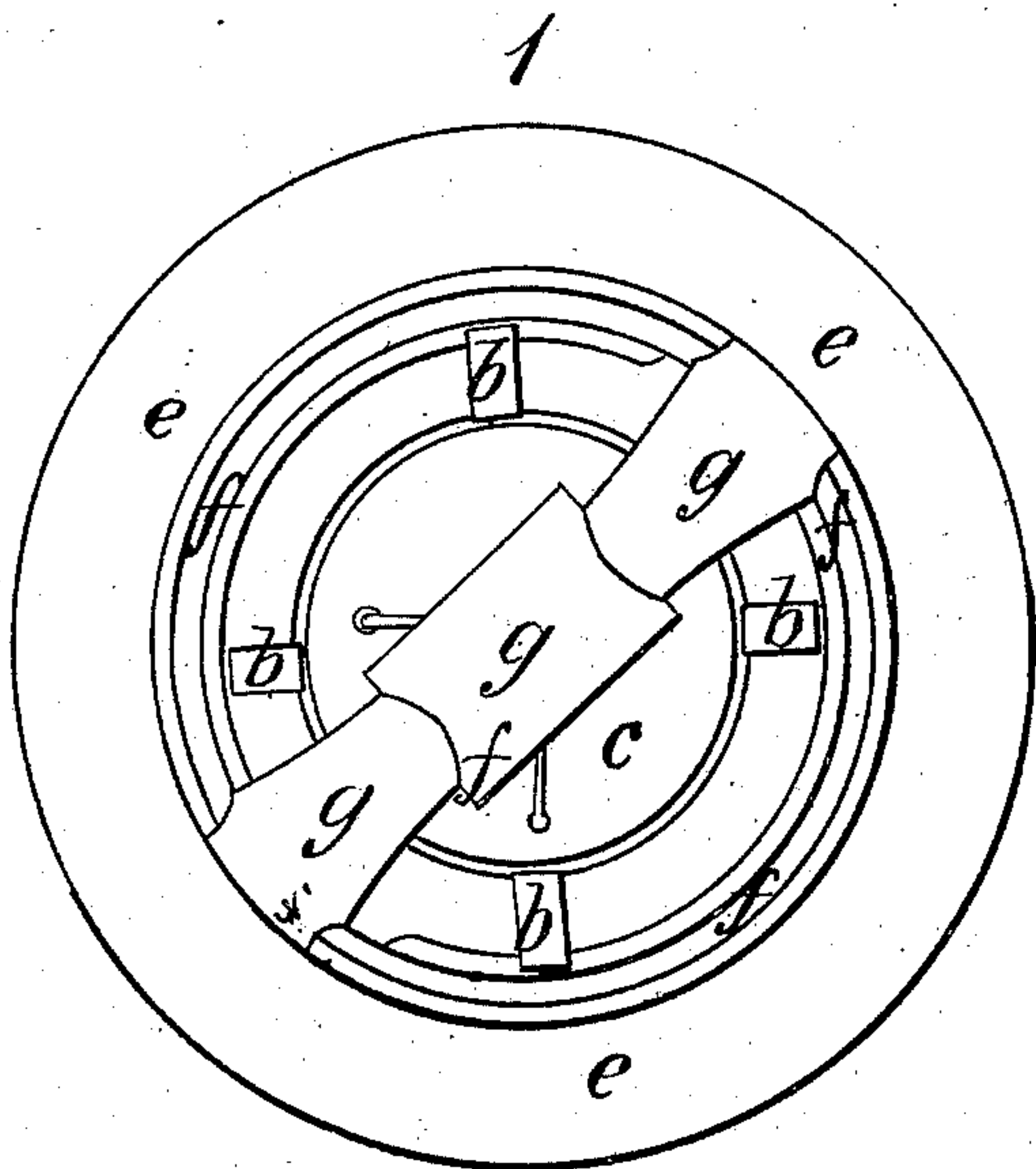


A. F. Fletcher,

Pump Piston.

N^o 58,085.

Patented Sept. 18, 1866.



Witnesses;
G. W. Riekey.
Geo. L. Stratton.

Inventor
A. F. Fletcher.

UNITED STATES PATENT OFFICE.

A. F. FLETCHER, OF ATHOL, MASSACHUSETTS.

IMPROVEMENT IN PUMPS.

Specification forming part of Letters Patent No. 58,085, dated September 18, 1866.

To all whom it may concern:

Be it known that I, A. F. FLETCHER, of Athol, in the county of Worcester and State of Massachusetts, have invented a new and Improved Pump-Box; and I do hereby declare the following to be a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, in which.

Figure 1 is a plan of the pump-box. Fig. 2 is a section showing the thread *h* of screw. Fig. 3 is an elevation of the base *a* and valve *c*. Fig. 4 is a section of the pump-box.

The nature of my invention is set forth in the following description.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

I make my improved pump-box of five principal parts, although the number of the parts is not essential to the successful working of the box. The lower part or base, *a*, should be of metal or other suitable material, circular in form, of diameter nearly equal to the bore of the pump, and of sufficient thickness to secure the requisite strength. In the center of the base *a* is an opening, through which the water passes, and around this opening are two or more upright pins or guides, *b*, for the purpose of holding and keeping in place the valve *c*.

The valve *c* is a circular piece of metal of suitable size to cover the opening in the base *a*, and not so large but that it may move with ease within the guides *b*. There may be cast upon the lower side and center of the valve a stem or button, *d*, for the purpose of giving to the valve a vertical inclination, and to raise it from its seat when the box is lowered to let off the water.

The valve *c* should be lined with leather or some suitable material, as shown in the drawings.

The part *e*, as shown in the drawings, is a

ring of leather or other suitable material, which surrounds the opening in the base *a*, and is fitted to the guides *b*, rests upon the base *a*, and extends beyond, so as to fill the tube or bore of the pump, rendering the same water and air tight. The ring *e* is held to the base *a*, by means of the upper part, *f*, of the box, which is substantially a section of a cylinder of metal or other suitable material, of suitable height, and of a size somewhat less than the bore or tube of the pump.

A bar, *g*, of metal passes from one side of the box to the other, to which the rod from the pump-handle is connected.

On the inside of the section of cylinder *f* is made a thread of a screw or projection, *h*, which is so arranged as to run in slots *i* in some or all of the guides *b*, so that by turning the part *f* the ring *e* will be compressed between the lower edge of the cylinder *f* and the base *a*, so as to make the joints water and air tight and hold the parts of the box together.

By this method of construction the box is easily taken apart for repairs, and obviates the necessity of nailing the packing or leather ring to the other parts of the box, as in the old method, whereby it was rendered less durable, more complicated, and more liable to get out of order than a box made according to my method.

I do not in this application claim the guides *b*.

What I claim as my invention, and desire to secure by Letters Patent, is—

A pump-box constructed in two or more parts, so arranged and combined as to secure the parts to each other and the packing of leather or other suitable material to the pump-box, in the manner substantially as and for the purposes described.

A. F. FLETCHER.

Witnesses:

G. W. RICKEY,
T. W. SAVAGE.