

R. RATHBONE.
Gun-Wad Punch.

No. 72,903.

Patented Dec. 31, 1867.

Fig. 2.

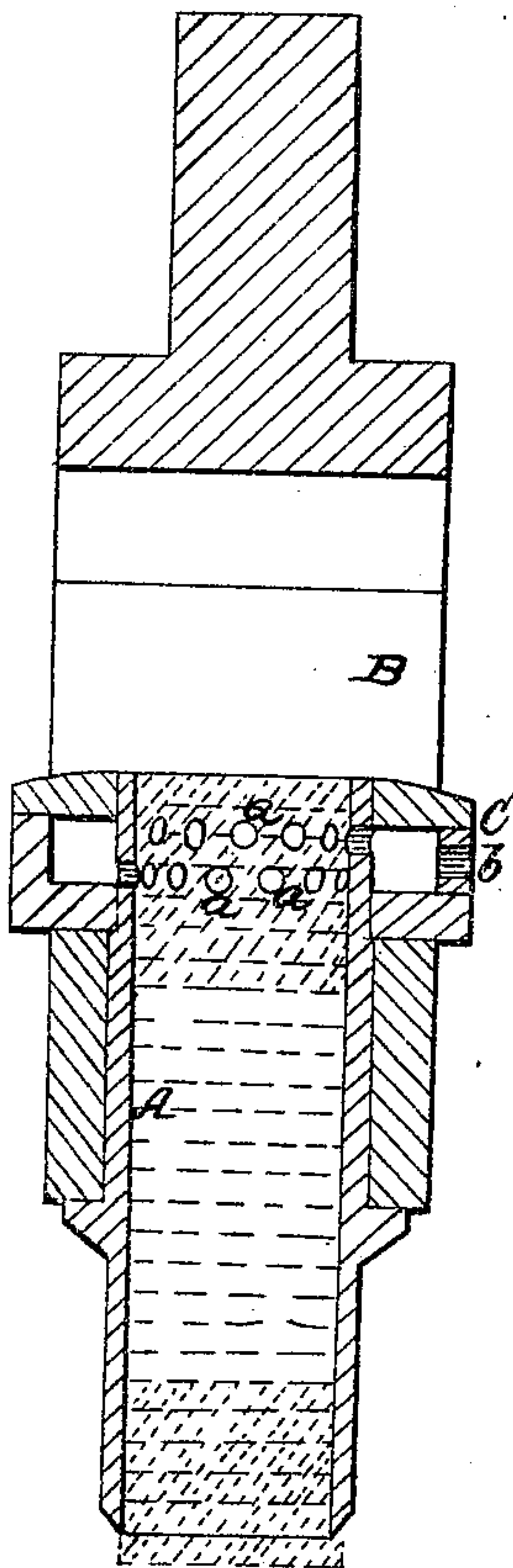


Fig. 1.

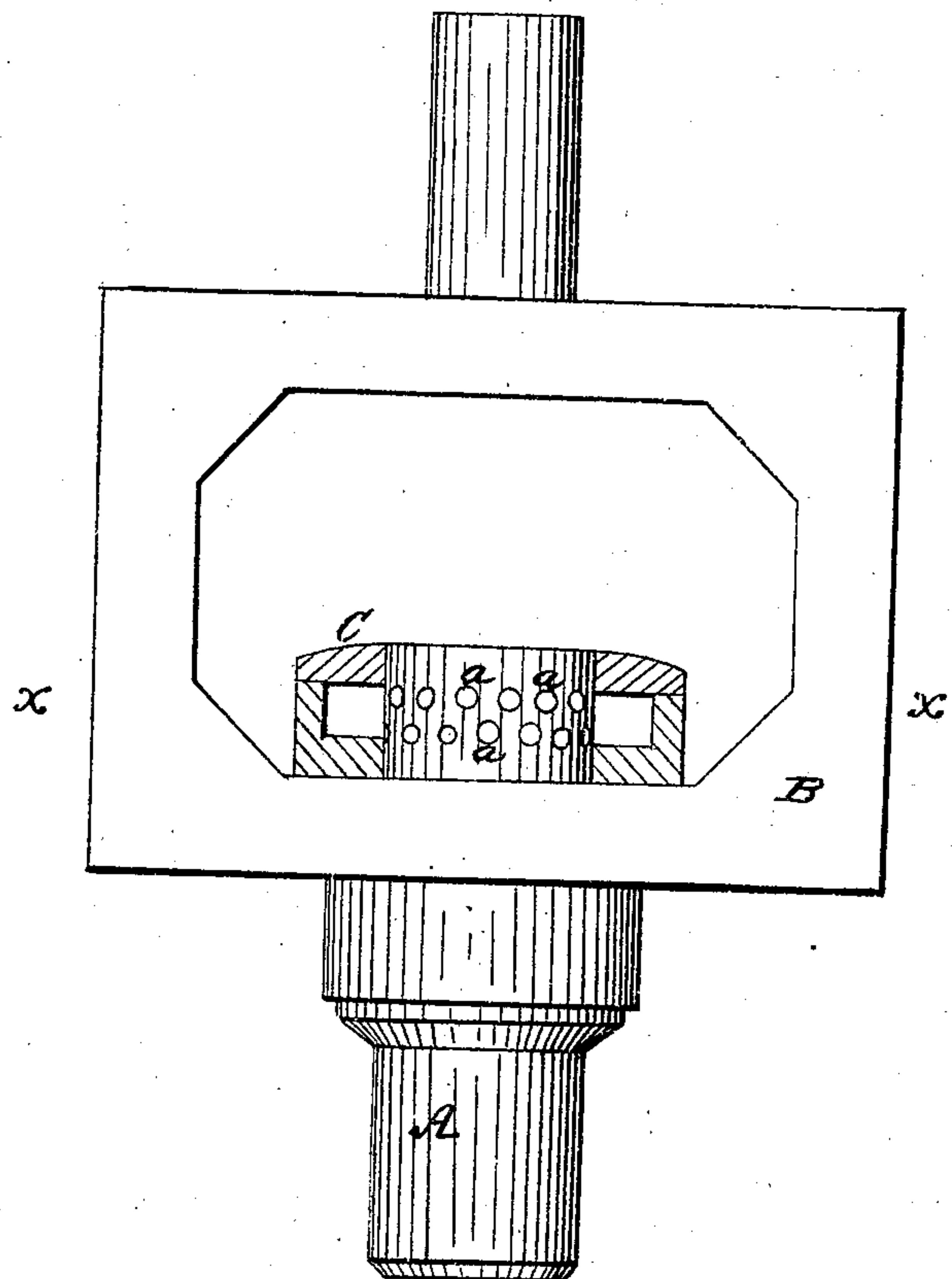
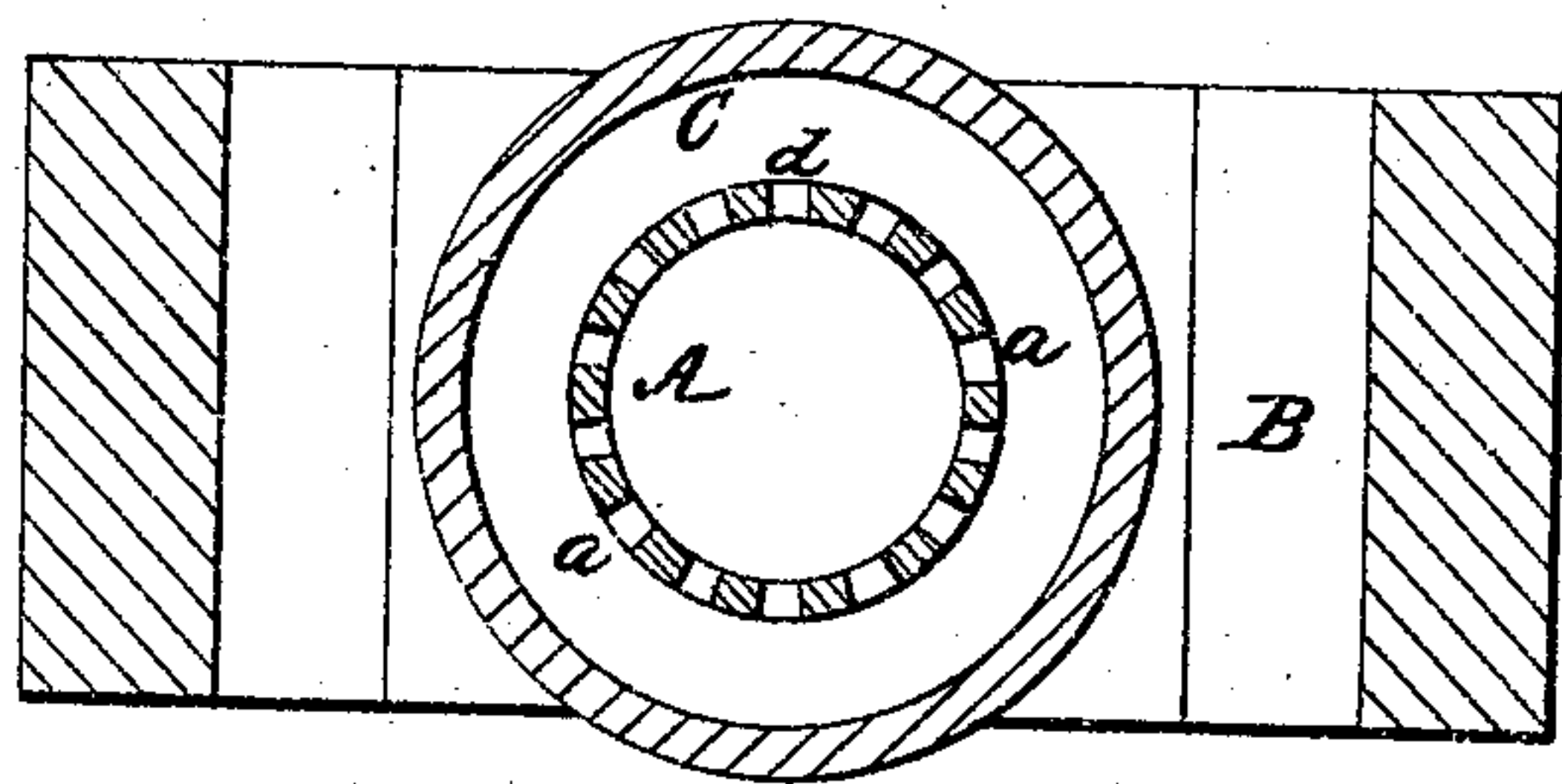


Fig. 3.



Witnesses:

J. Moomby
J. W. Reed

Inventor:

Ransom Rathbone.

United States Patent Office.

RANSOM RATHBONE, OF NEW YORK, N. Y.

Letters Patent No. 72,903, dated December 31, 1867.

IMPROVEMENT IN GUN-WAD PUNCHES.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that I, RANSOM RATHBONE, of the city, county, and State of New York, have invented a certain new and useful Punch for Cutting and Greasing Wads, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, forming part of this specification, and in which—

Figure 1 represents a side elevation of a wad-punch constructed according to my improvement, in connection with a stock or carrier thereto.

Figure 2, a vertical section of the same at upright angles to fig. 1; and

Figure 3, a horizontal section thereof through the line *x x* in fig. 1.

Like letters indicate corresponding parts throughout the several figures.

The nature of my invention consists in a punch for cutting gun-wads, provided with perforations or ways at or near its delivery-end, and made to operate in combination with an oil or grease-box in such manner as that the wads, on or as they are being delivered from the punch, are greased on their edges by the oil or grease drawn or caused to flow from the box, through the ways or perforations of the punch, and whereby the wads are cut and greased by or during the reciprocating action of the punch.

Referring to the accompanying drawing, A represents the tubular wad-punch, connected, say, with a vertically-reciprocating stock or carrier, B, and operating to cut the wads from the sheet, and to pass or deliver them successively in an upward direction through the punch, as well known and understood in the action of other wad-punches, and as represented by red lines in fig. 2. The feed of the sheet, which may be made of any suitable fibrous material, to render absorbent the edges of the wads, and means for working the punch, may be variously devised and arranged.

As represented in the accompanying drawing, the upper end or portion of the wad-punch A, which may be extended for the purpose, is provided with a series of lateral perforations, *a*, in communication with a surrounding grease-box or chamber, C, that may be connected, at an aperture, *b*, with any suitable supply-tank containing the oil or grease, and which may either be made to reciprocate with the carrier B, or may be stationary and coupled to the box C by any flexible or jointed tubular attachment. The box C may also be stationary, if desired, and the punch made to reciprocate within or through it, with the ways or perforations *a* under cover of the box, but it is here represented as an attachment to the punch or its carrier, and reciprocating with the same. The lubricating ways or perforations *a*, for transmitting the oil or grease to the edges of the wads, may be of any desired form, size, and number, but I prefer to make them circular apertures arranged in rows, one below the other, so as to break joint as it were with each other.

From this description it will be obvious that as the punch A is reciprocated in the ordinary-rapid manner, the wads, as they are cut by it, will in succession be forced upwardly through the punch and out at its top end, and that in being thus delivered, the edges of the wads will absorb oil or grease oozing or issuing from the perforations *a*. In this way are the wads formed and greased on their edges by or during the reciprocating action of the punch, and delivered therefrom as perfect or finished articles of the kind.

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

A wad-punch, provided at or near its delivery-end with lubricating ways or perforations, for operating in combination with an outside supply-chamber or box, from which the oil or grease is drawn or fed to the interior of the punch, for greasing the edges of the wads as or before they are delivered from the punch, substantially as specified.

RANSOM RATHBONE.

Witnesses:

HENRY T. BROWN;

J. W. COOMBS.