

(No Model.)

J. T. HART.  
CHURN DASHER.

No. 414,532.

Patented Nov. 5, 1889.

Fig. 1.

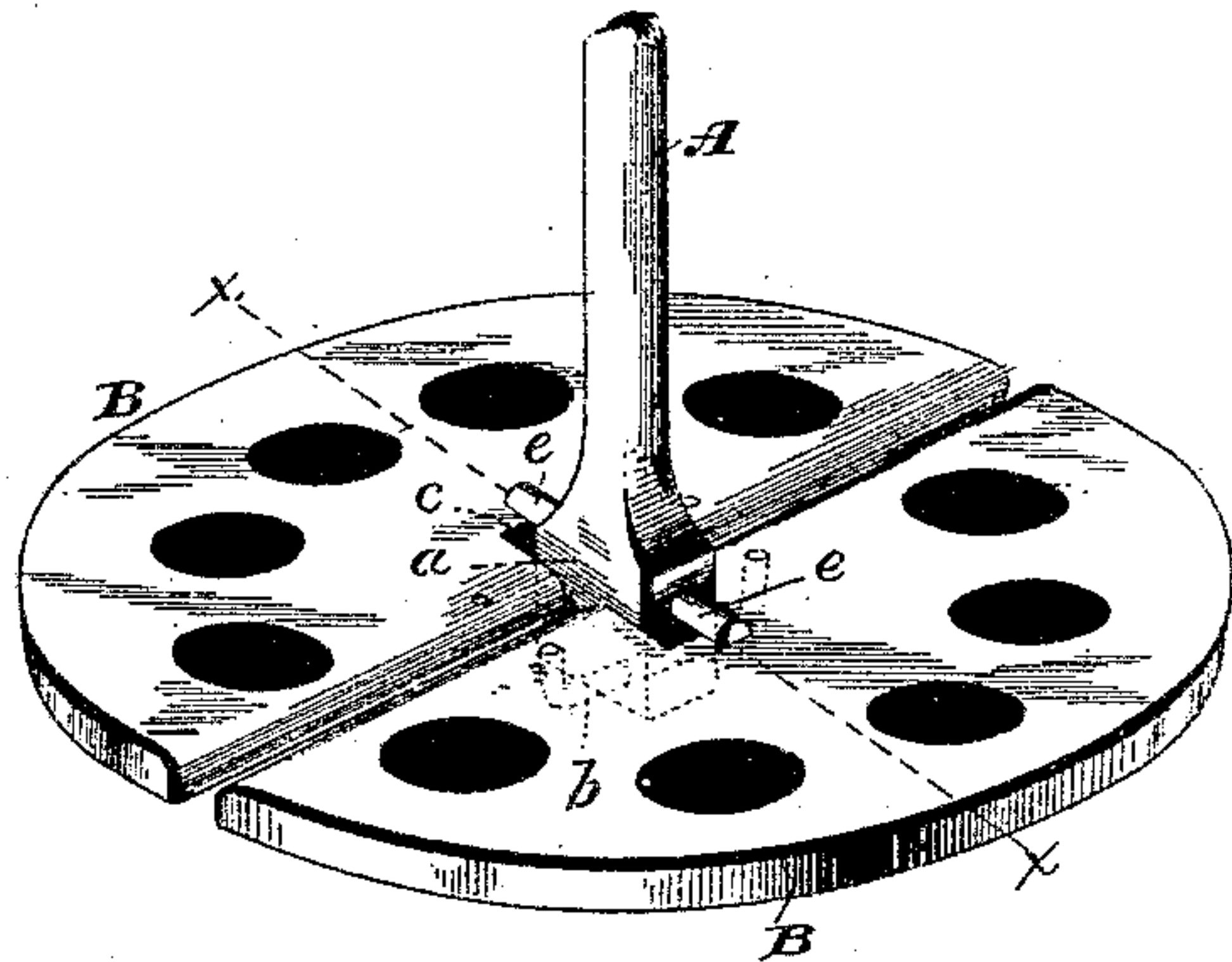


Fig. 2.

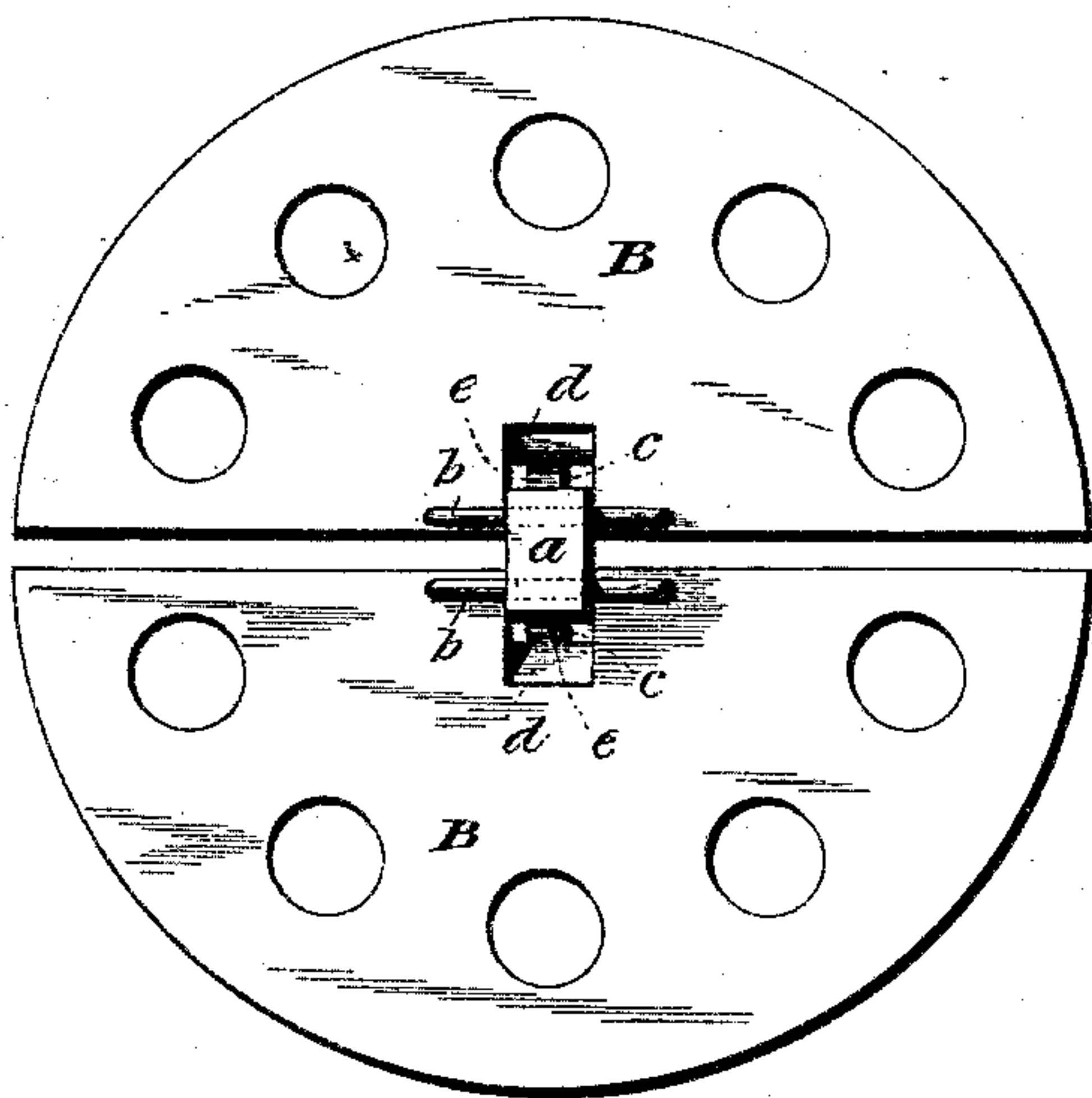
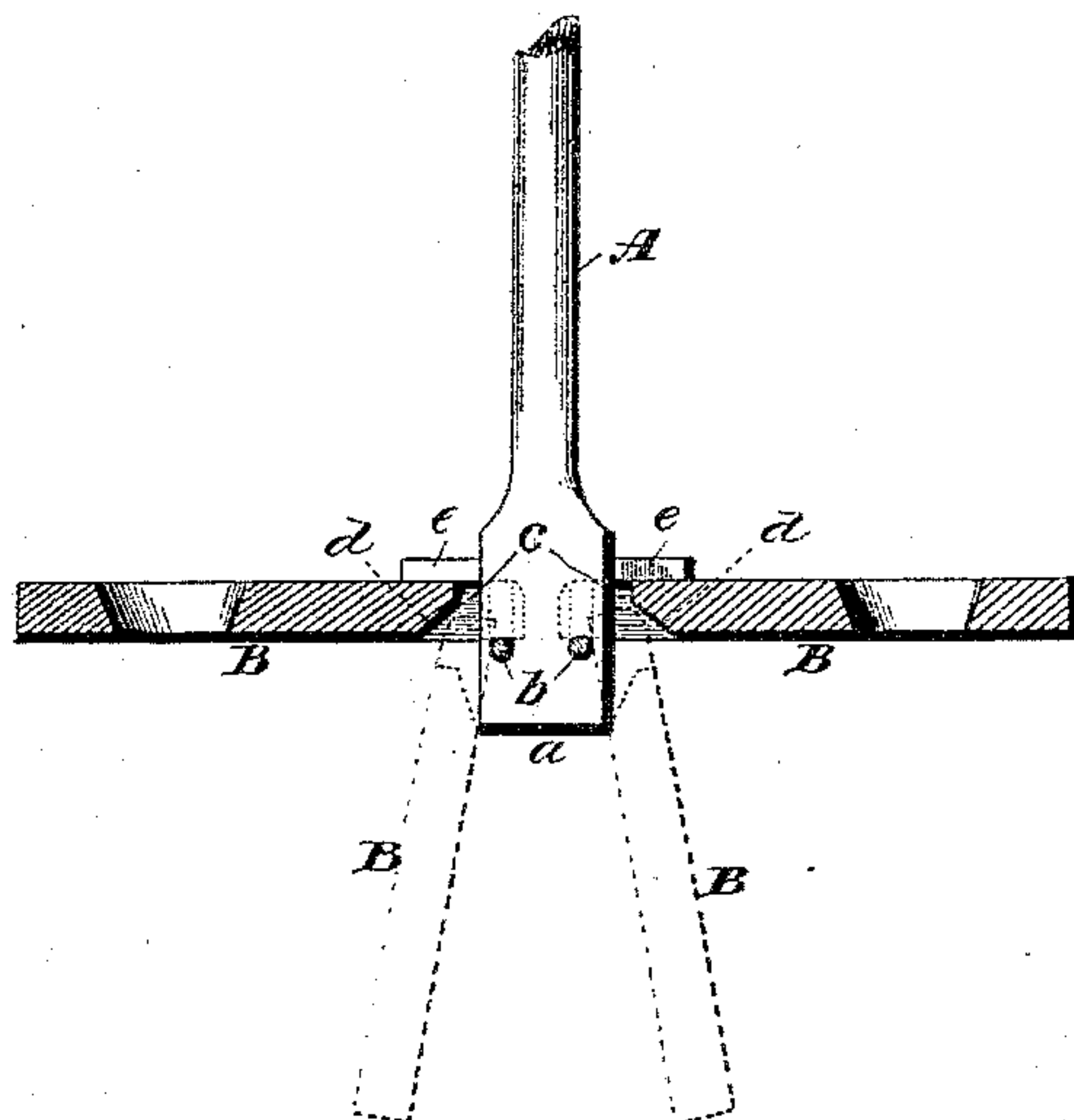


Fig. 3.



Witnesses  
Chas. Williamson  
H. Curtis,

Inventor  
Joel T. Hart.  
per  
Chas. H. Fowler  
Attorney.



# UNITED STATES PATENT OFFICE.

JOEL T. HART, OF FOSTER, MISSOURI, ASSIGNOR OF ONE-HALF TO JOHN D. HART, OF SAME PLACE.

## CHURN-DASHER.

SPECIFICATION forming part of Letters Patent No. 414,532, dated November 5, 1889.

Application filed July 9, 1889. Serial No. 316,931. (No model.)

*To all whom it may concern:*

Be it known that I, JOEL T. HART, a citizen of the United States, residing at Foster, in the county of Bates and State of Missouri, have invented certain new and useful Improvements in Churn-Dashers; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

This invention relates to certain new and useful improvements in churn-dashers; and the novelty resides in the peculiar combinations and the construction, arrangement, and adaptation of parts, all as more fully hereinafter described, shown in the drawings, and then particularly pointed out in the appended claim.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a perspective view of a dasher embodying my improvements. Fig. 2 is a bottom plan thereof. Fig. 3 is a vertical section through the line *x x* of Fig. 1.

Referring now to the details of the drawings by letter, A designates the dasher shaft or rod, provided near its lower end with an enlargement *a*.

B B are the substantially semicircular portions of the dasher. They are perforated, as shown, the walls of the perforations being tapered, as shown.

Passed loosely through suitable holes in the enlargement of the dasher-shaft are the stout wires *b*, which form the hinges on which the dasher-sections turn. These wires are arranged parallel with each other in a horizontal plane and have their ends bent upwardly at right angles to their length and preferably slightly outward from each other, as shown, these ends being inserted in suitable holes in the adjacent edges of the dasher-sections. The adjacent edges of the dasher-sections are provided with a recess *c* to receive the enlargement of the dasher-shaft, so as to allow the same to be passed by the said sections without friction. The outer wall of this recess, on the under side of the section, is beveled, as shown at *d*, and the parts so arranged that as the dasher-sections fall into

the position shown in dotted lines in Fig. 3 they are prevented from coming to quite a vertical position, so that they will be readily moved into a horizontal position as the dasher-shaft is moved downward.

To limit the upward movement of the dasher-sections and stop them in a horizontal position, I provide the stops *e e*, which may be provided either by a single pin passed through the dasher-shaft or by two pins projecting from opposite sides thereof in such positions as to engage the dasher-sections, as shown, and limit the upward movement thereof.

In operation the downward movement of the dasher-shaft causes the dasher-sections to assume a horizontal position, being stopped in that position by engagement of the sections with the pins. As the dasher-shaft is drawn upward the sections fall by the side of the shaft, and in this manner offer very little resistance to the upward movement thereof.

The wire hinges are considered an important feature and an improvement over ordinary hinges, inasmuch as they allow of freer movement of the dasher-sections and are not liable to become clogged and rusty at the joint, and thus become stiff and perhaps inoperative.

What I claim as new is—

As an improved article of manufacture, the churn-dasher herein described, consisting of a shaft having an enlarged lower end, the transverse pins *e* in said enlarged head, the semicircular dasher-sections provided upon their adjacent edges with recesses, the outer walls of which are beveled, as shown, and the wires *b*, extending through the lower end of the shaft parallel with each other in a horizontal direction, and having their ends bent upwardly at right angles to their length, and said ends secured in the adjacent dasher-sections, substantially as shown and described, and for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOEL T. HART.

Witnesses:

W. C. ROUTZONF,  
J. G. McPEAK.