

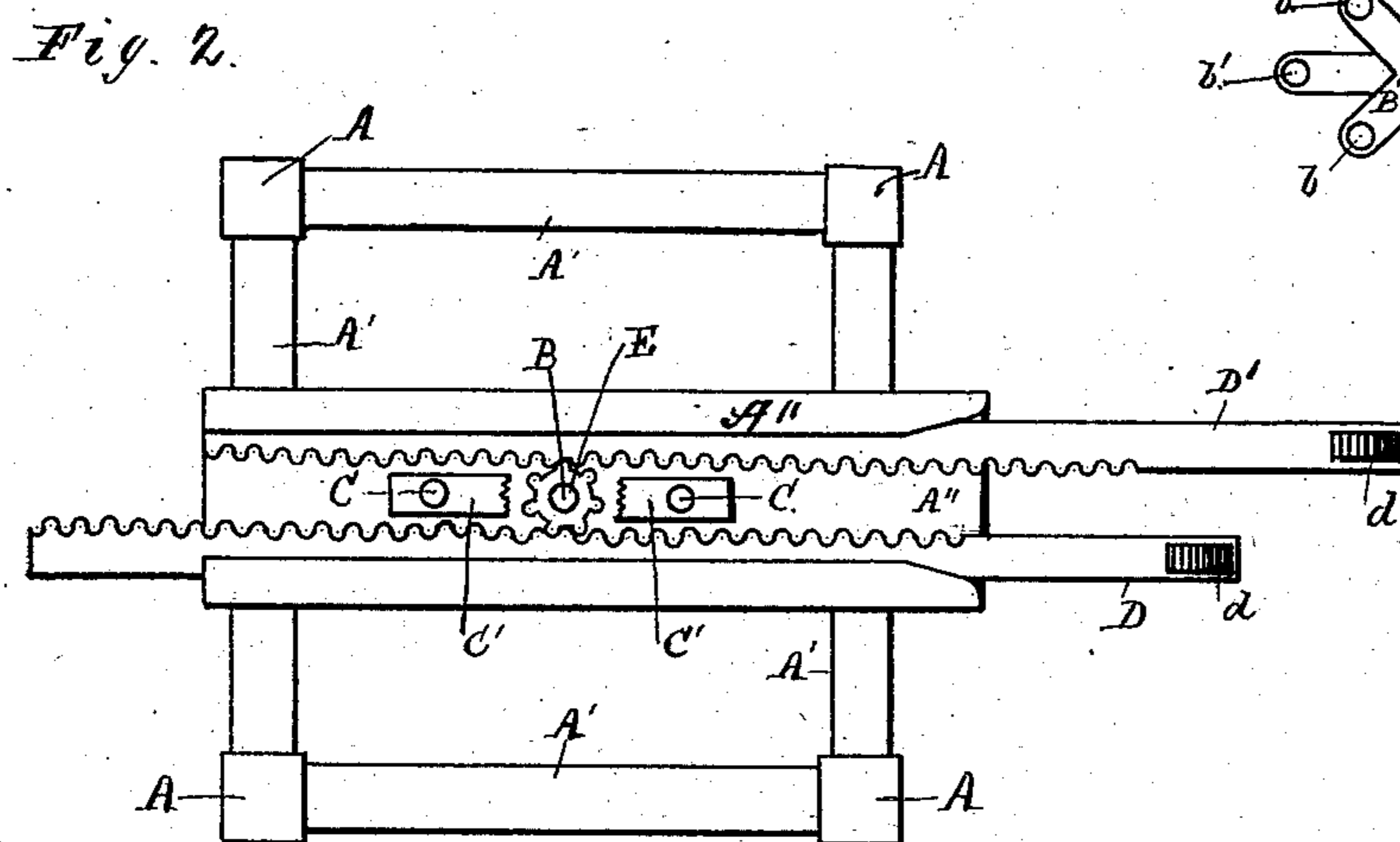
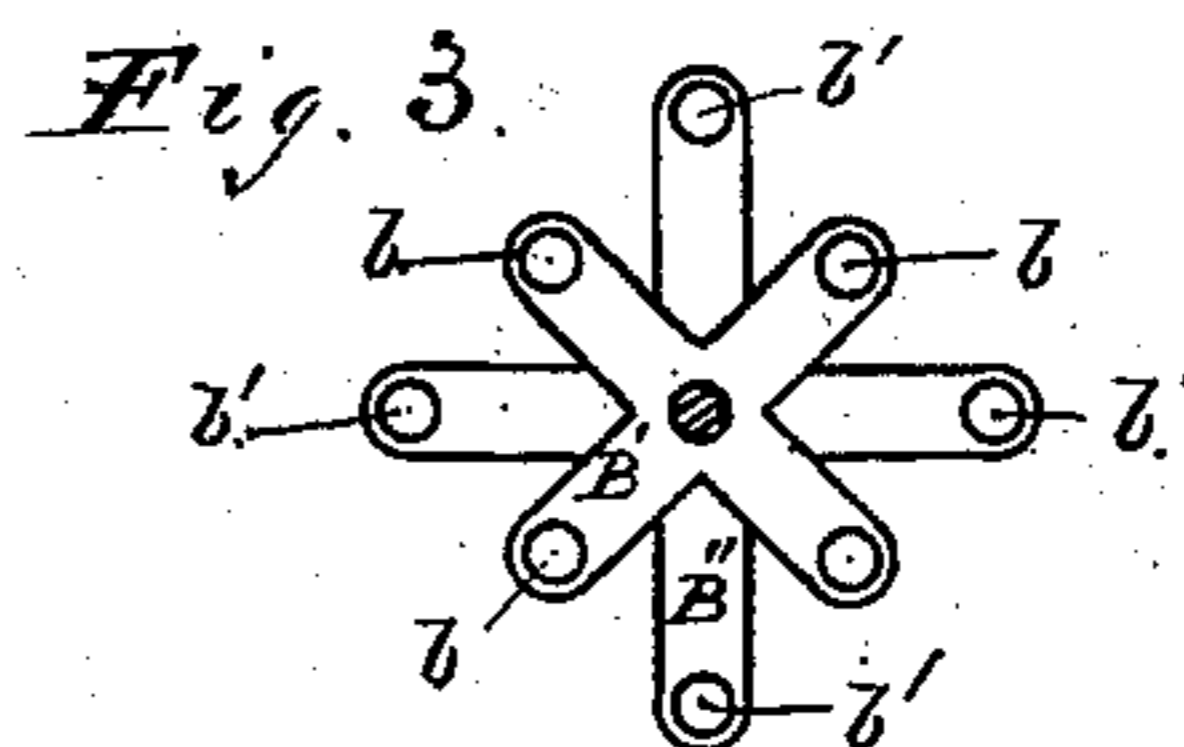
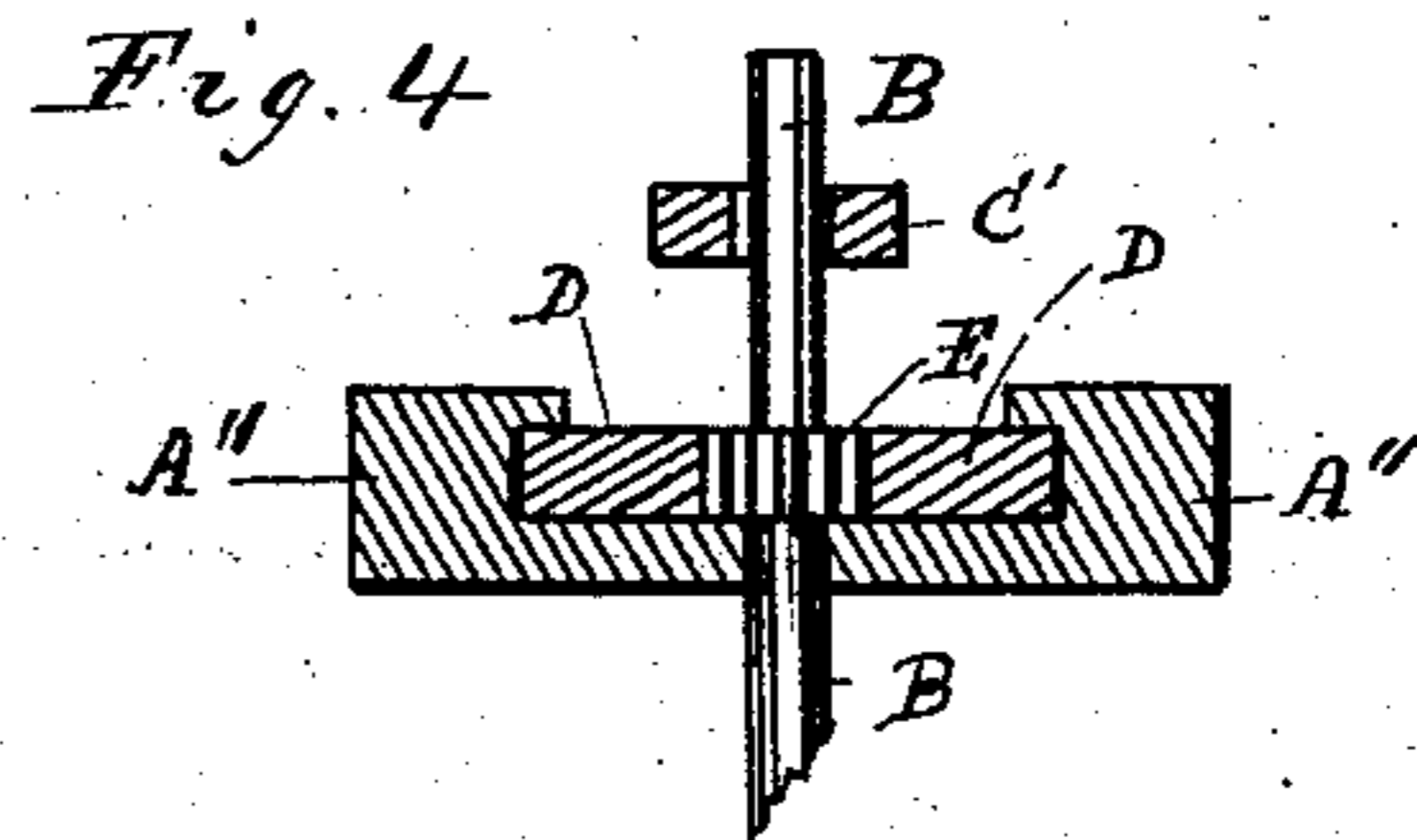
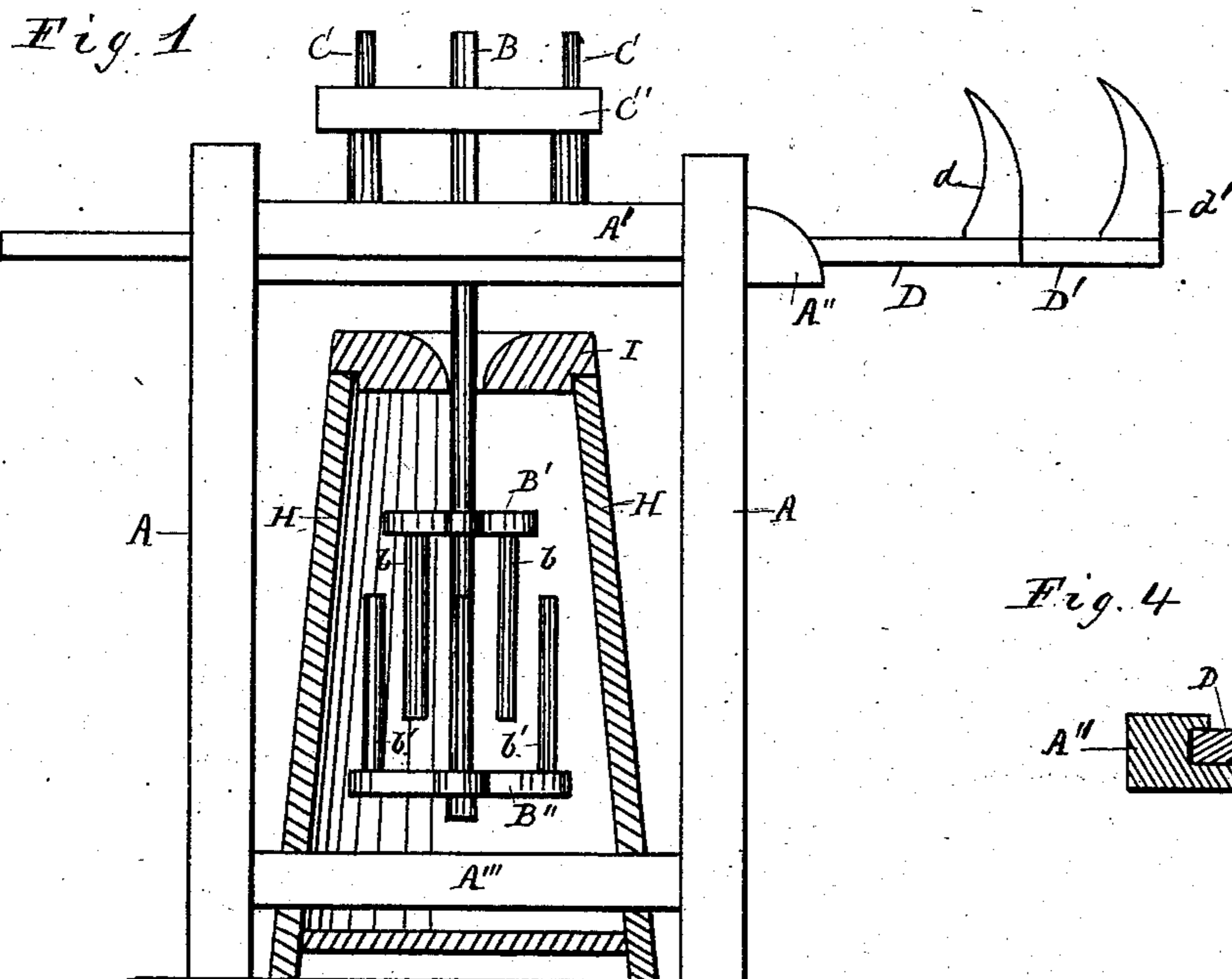
(No Model.)

H. T. BRANTLEY.

CHURN.

No. 289,968.

Patented Dec. 11, 1883.



WITNESSES

J. H. Semmes.  
J. C. Smith

INVENTOR

INVENTOR  
Henry T. Brantley.  
By Morton Toulmin

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# UNITED STATES PATENT OFFICE.

HENRY T. BRANTLEY, OF JAMISON, ALABAMA.

## CHURN.

SPECIFICATION forming part of Letters Patent No. 289,968, dated December 11, 1883.

Application filed May 10, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY T. BRANTLEY, a citizen of the United States, residing at Jamison, in the county of Chilton and State of Alabama, have invented certain new and useful Improvements in Churns; of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to new and useful improvements in rotary churns, and has for its object to give rotary motion in opposite directions to the churn-dasher in a simple and efficient manner. This object is accomplished by the mechanism illustrated in the drawings forming a part of this specification, in which—

Figure 1 is an elevation. Fig. 2 is a plan. Fig. 3 is a detailed view of some of the parts. Fig. 4 is a detailed sectional view of slide-box and reciprocating bars D D'.

The letter A represents four corner-posts of the frame which carries the operating devices, and A' A'' the cross-pieces.

A'' is a slide-box, which carries the reciprocating bars D D', the inner sides of which are cut into racks, which engage with a pinion, E, attached to a vertical dash-shaft, B, having bearings in the piece C' and in the slide-box A''. The piece C' is held in position by standards C, the lower ends of which are secured to the slide-box A'', and the upper ends are rounded to fit circular openings in the piece C'. The rack-bars D D' are each provided with a handle, d d', by which they are operated. The shaft B has secured near its lower extremity the cross-pieces B' B''. The fastening of the pieces B' B'' may be permanent or of a nature to permit adjustment to different points on the shaft. The cross-piece B'' is provided with four vertical pins, b', extending in an upward direction, and the cross-piece B' with four pins, b, extending downwardly, so as to interlace with the pins b'', as shown in Fig. 1.

The frame A A' A'' may be placed over a churn of ordinary construction—such as H, shown in Fig. 1 in section—and if the cover of the churn I is made in halves the introduction to or the removal of the dasher from the interior of the churn will be facilitated.

The frame A A' A'' may be constructed of any convenient size, so as to permit the operator to grasp the horn-shaped handles d d'—one in each hand—and by a backward and forward movement of the hands cause a reciprocating motion to be imparted to the rack-bars D D', and thus impart a rotary motion, first in one direction and then in the other, to the pinion E and its shaft B.

I am aware that rack-bars and spur-wheels have been employed to change reciprocating into rotary motion, and thus operate churn-dashers and other machinery, as shown in the following patents, viz: No. 118,320, Wilcox, August 22, 1871; No. 160,288, Simmons, March 2, 1875, vibrating churns, and English Patent No. 75 of 1862. I do not claim any of these, or such construction, broadly; but,

Having described my invention, what I do claim, and desire to secure by Letters Patent, is—

In a churn, the combination of the frame A A' A'', the slide-box A'', the standards C, the removable bearing C', the vertical shaft B, having cross-pieces B' B'', vertical pins b b', and pinion E, with rack-bars D D', having horn-shaped handles d d', as described, and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY T. BRANTLEY.

Witnesses:

B. M. GENTRY,  
WILLIAM WILLIS.