

(No Model.)

2 Sheets—Sheet 1.

J. W. BROWN, Jr.
RAISIN SEEDER.

No. 591,322.

Patented Oct. 5, 1897.

FIG. 1.

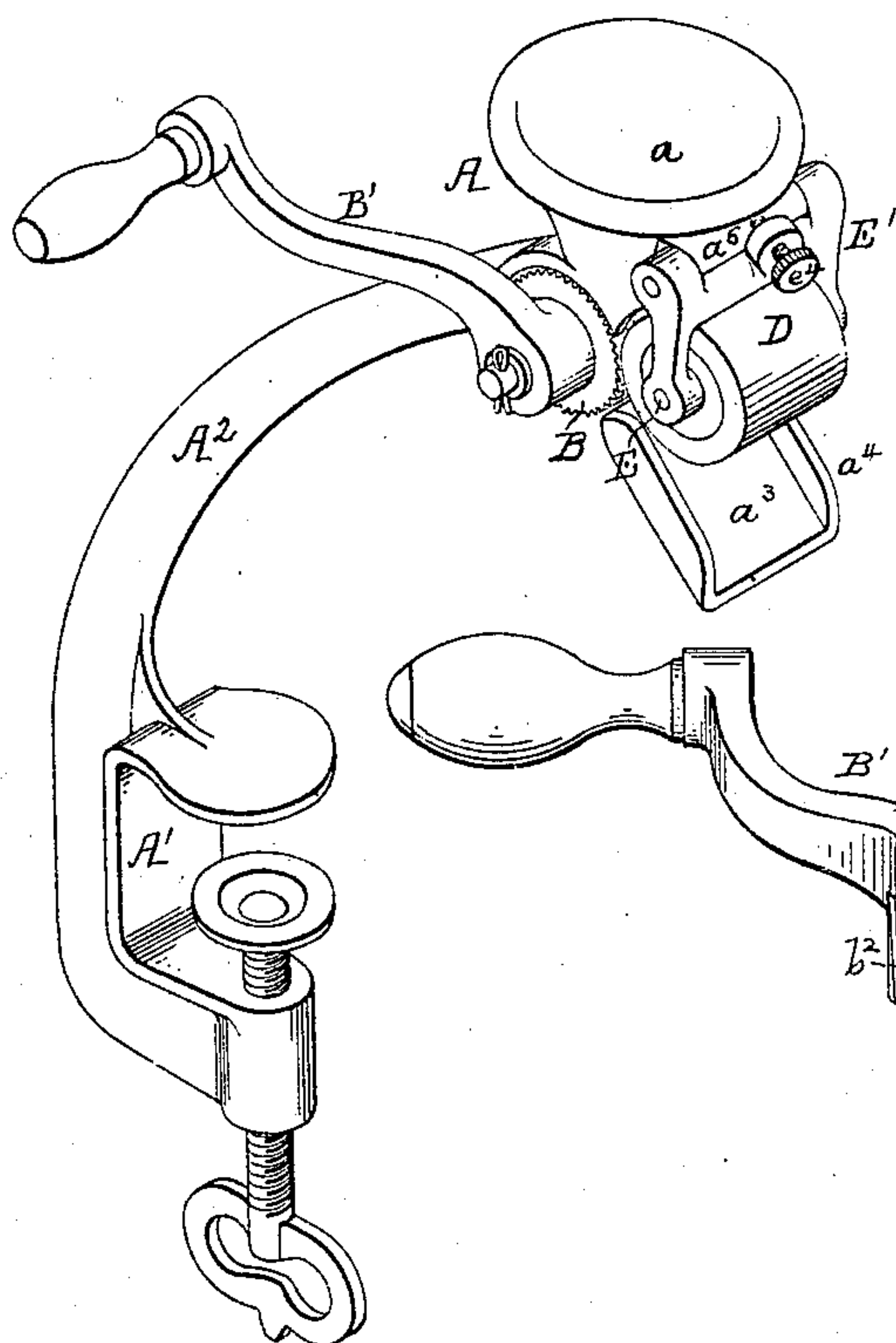


FIG. 7.

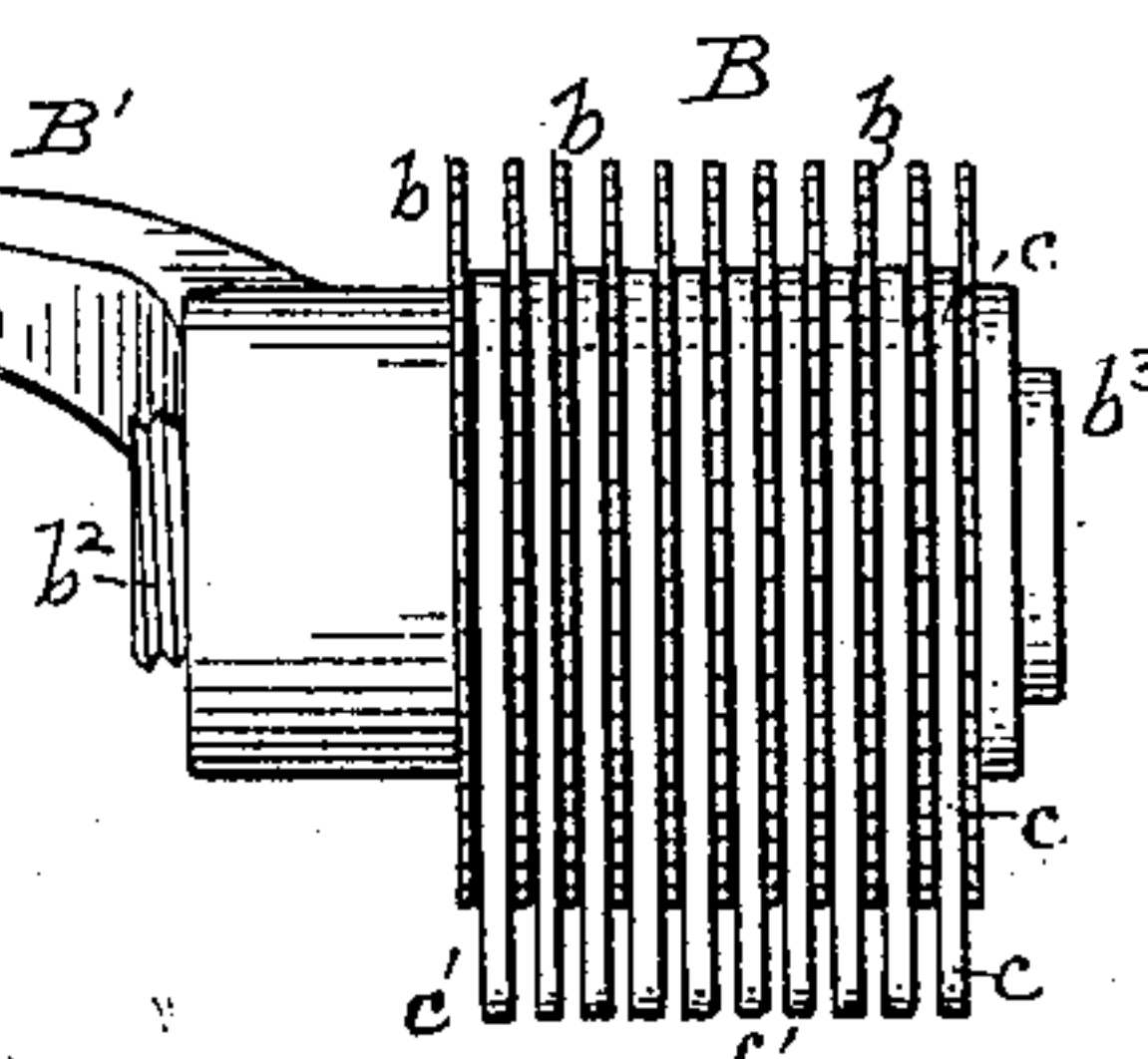


FIG. 8.

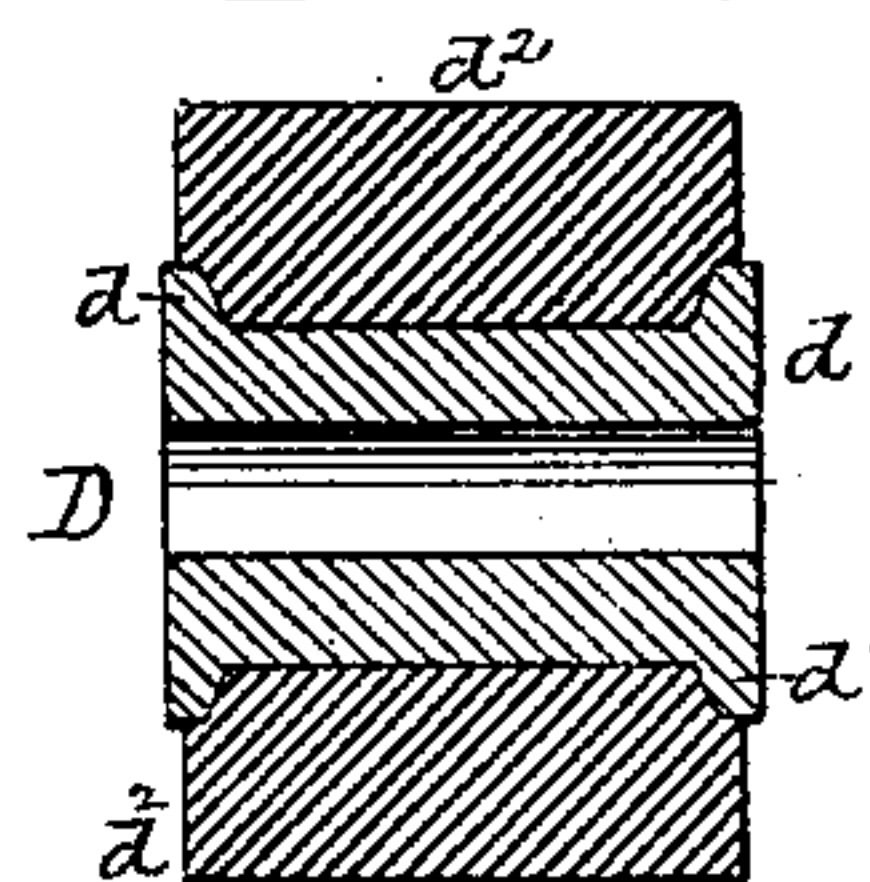
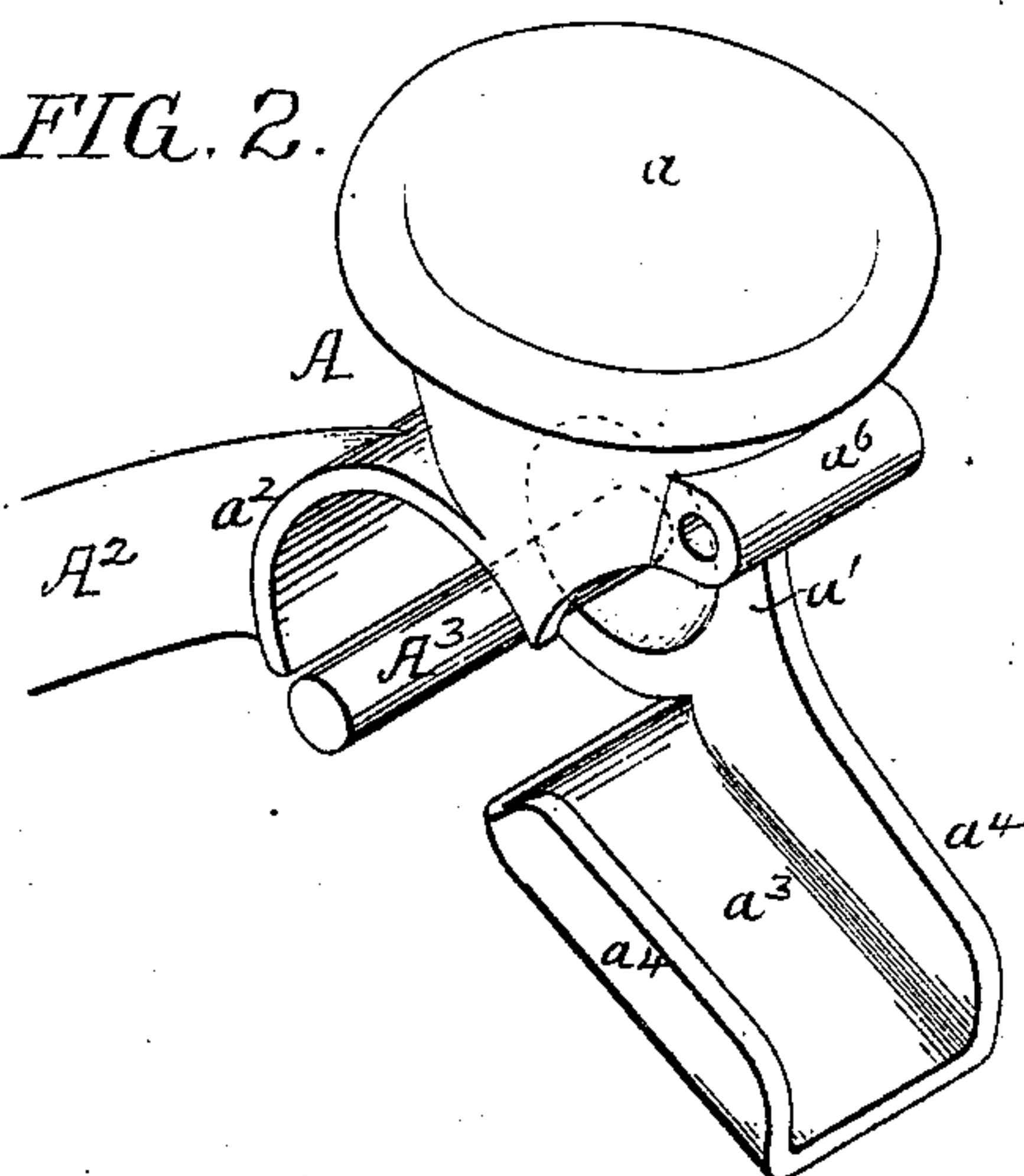


FIG. 2.



Witnesses:

Hamilton D. Turner
Murray E. Boyer

Inventor:
John Wilson Brown Jr.
by his Attorneys,
Howson & Howson

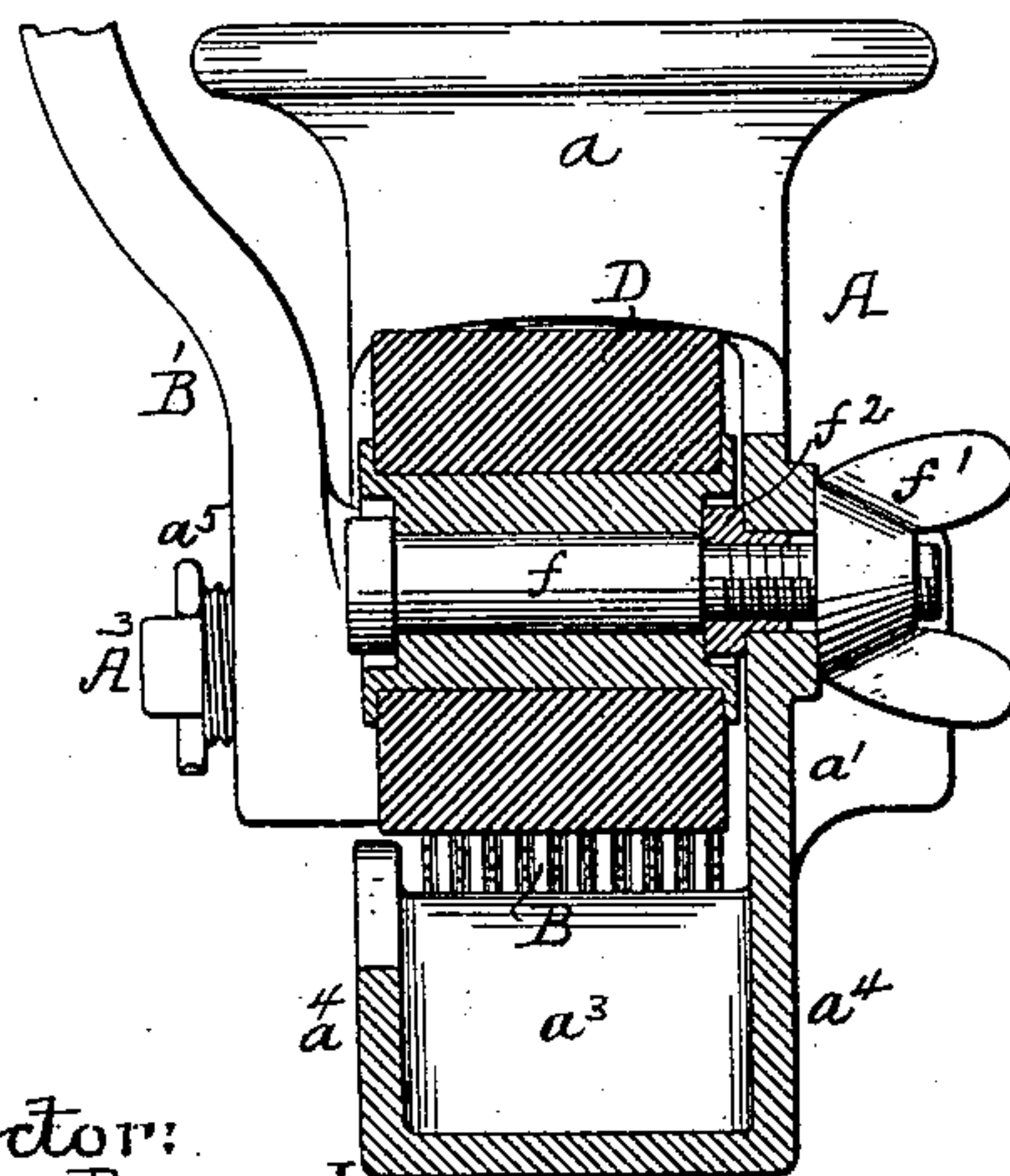
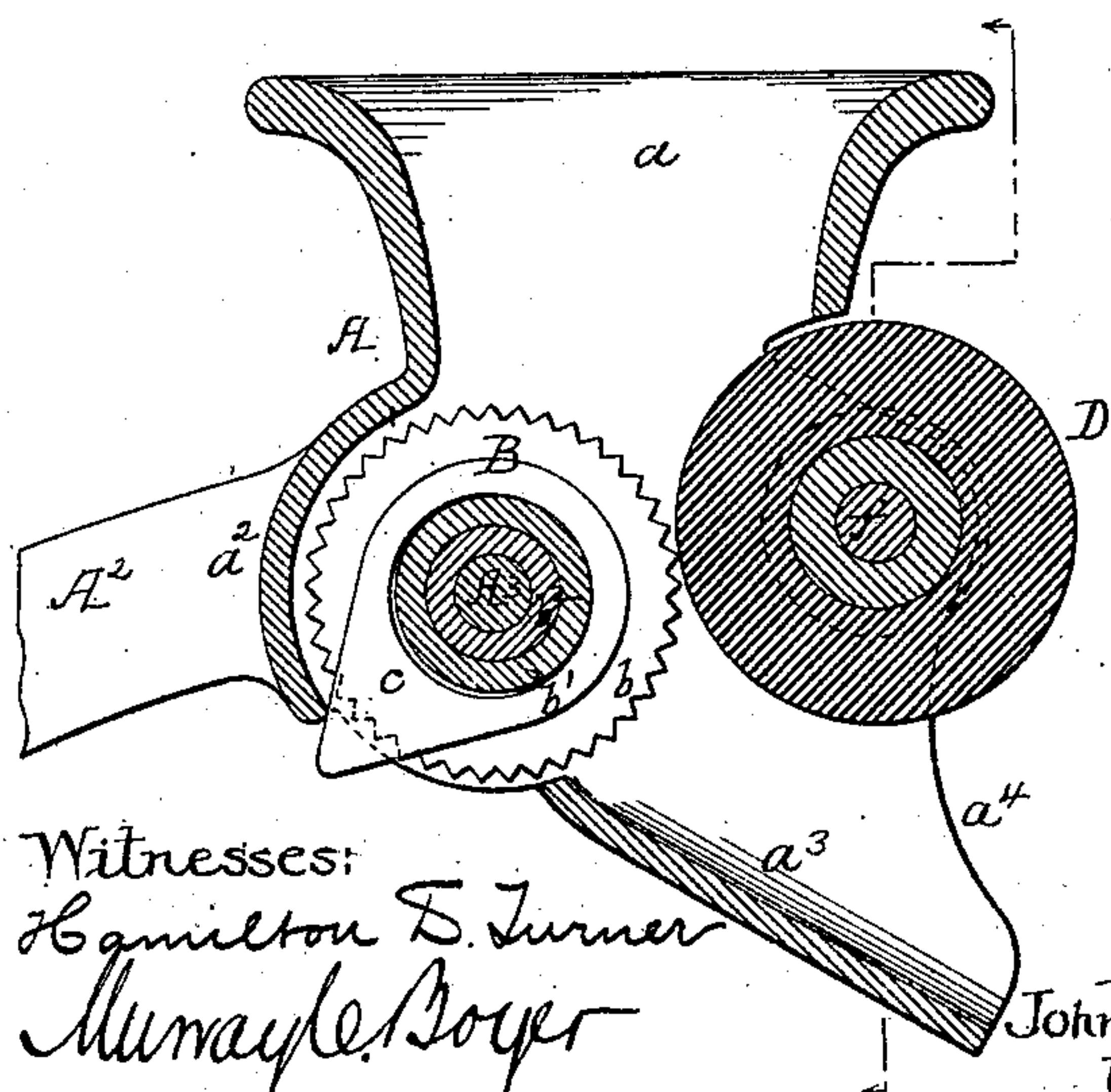
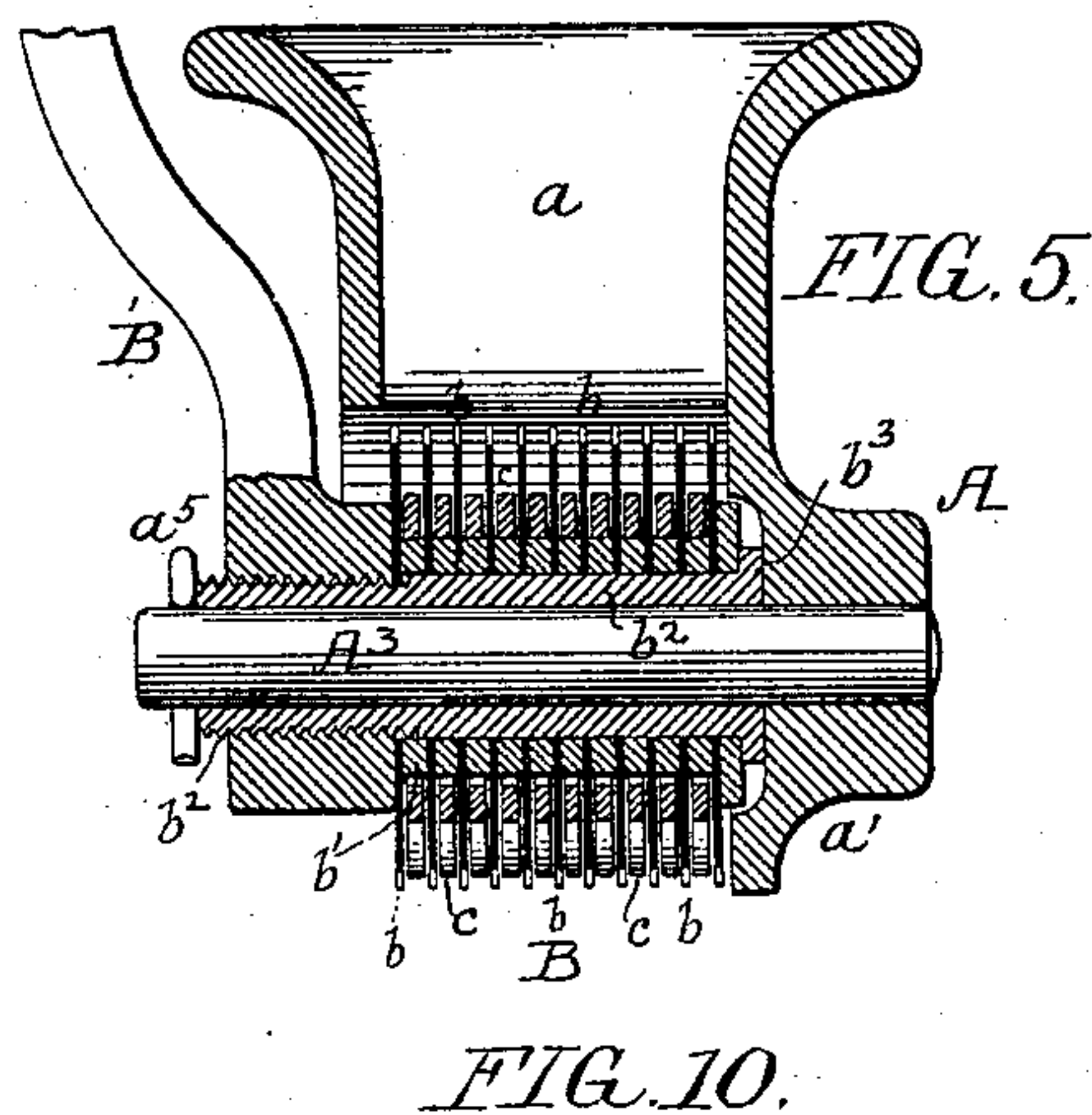
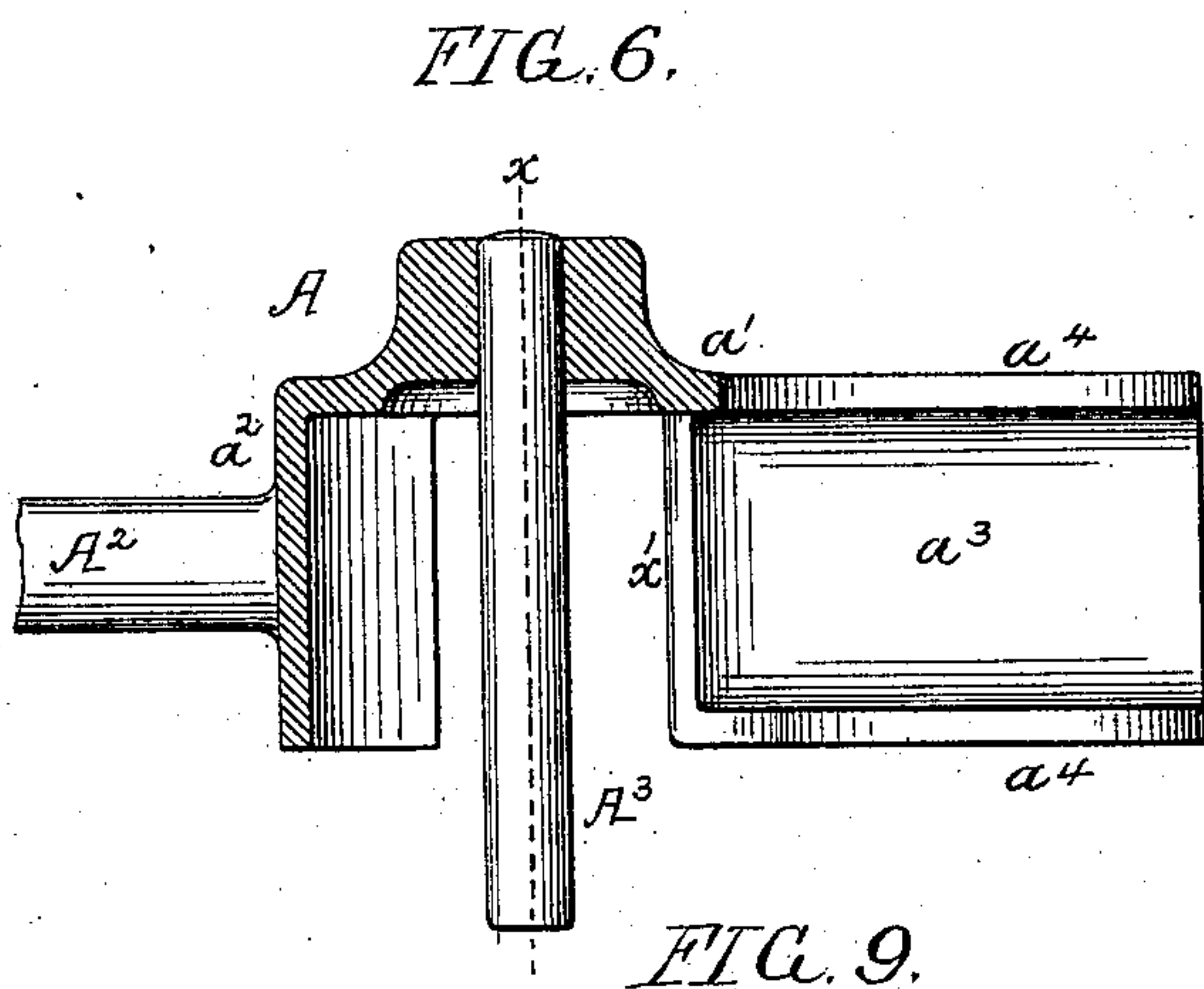
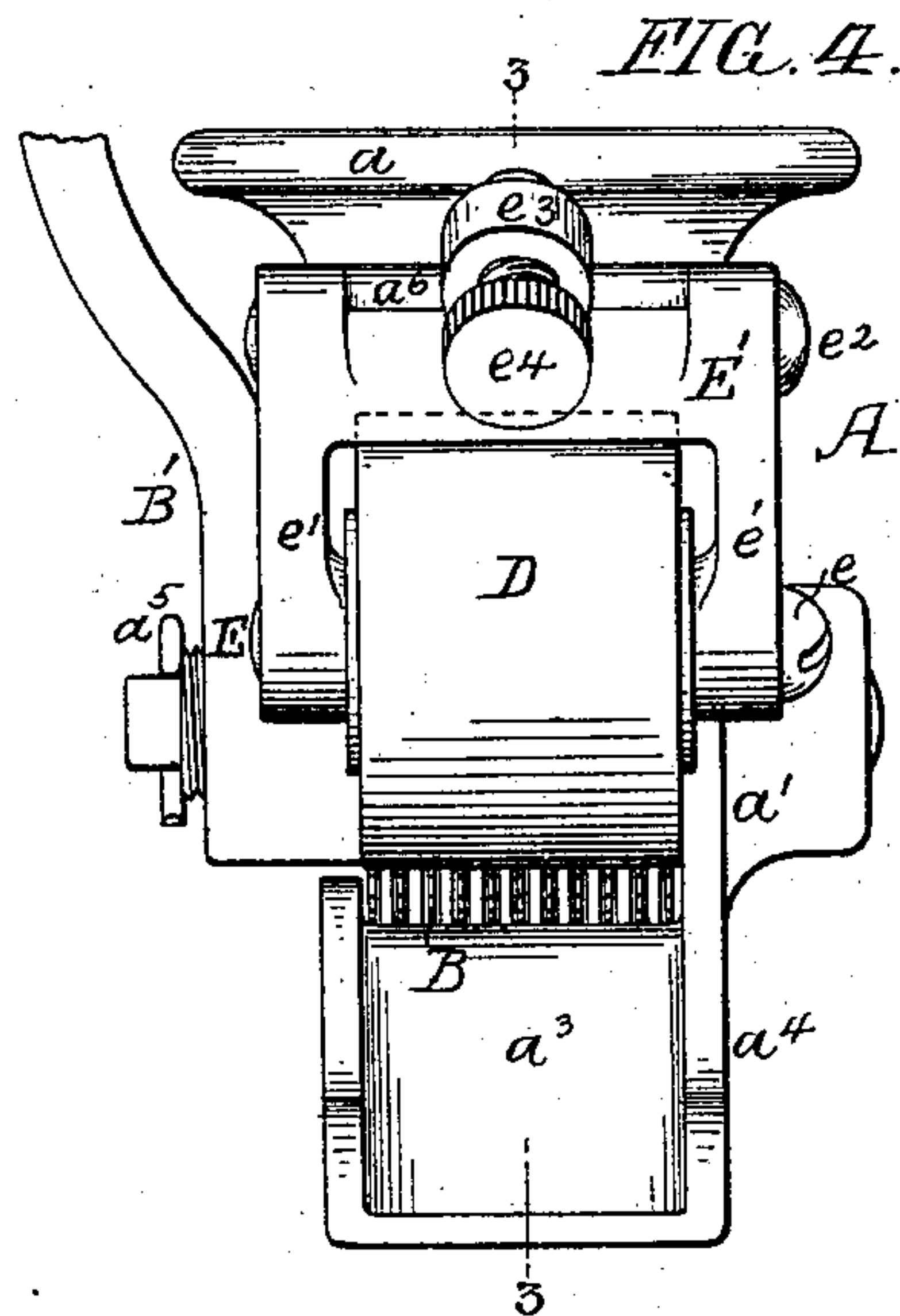
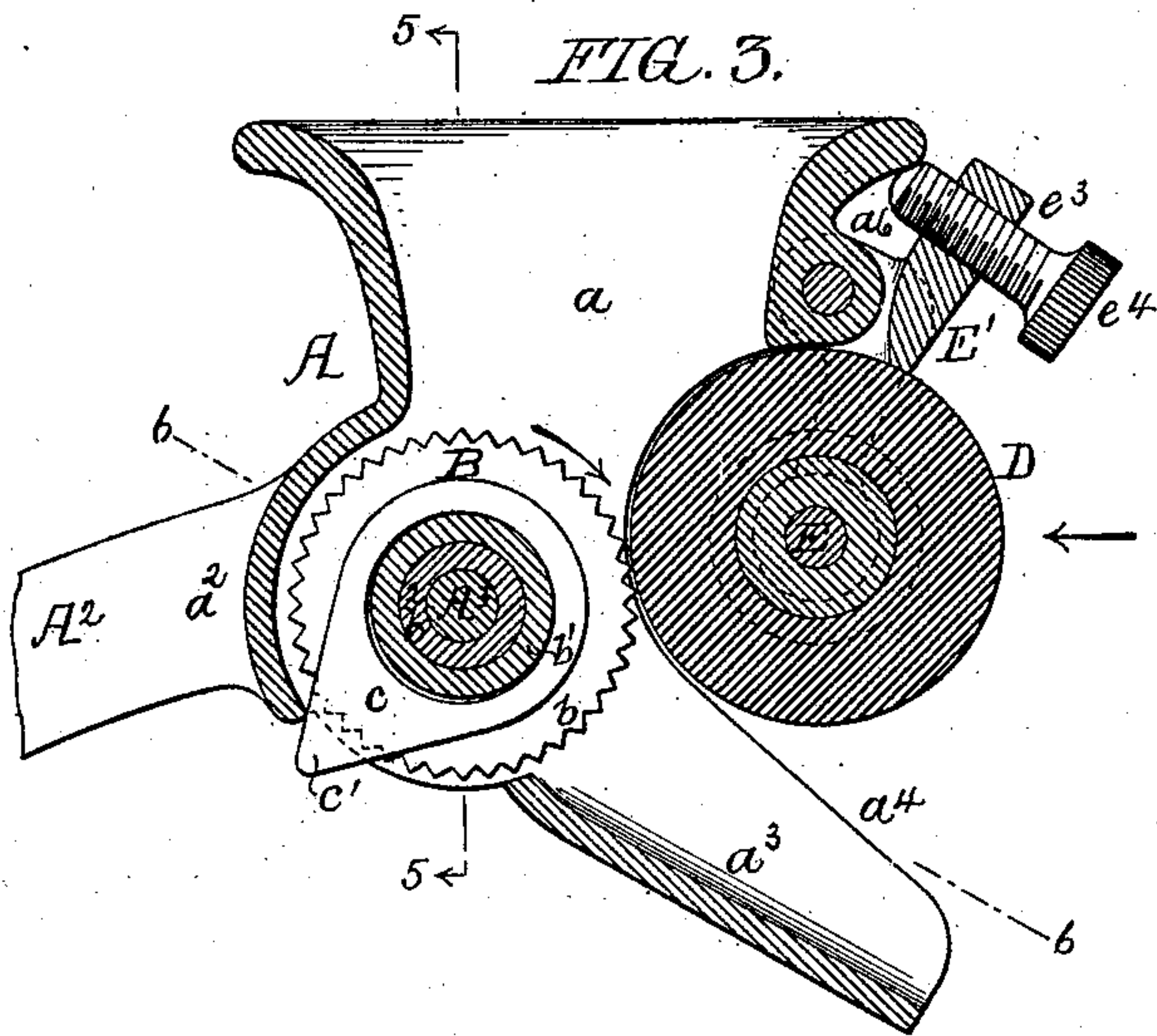
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2 Sheets—Sheet 2.

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Hamilton S. Turner
Murray E. Boyer

Inventor:
John Wilson Brown Jr.
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UNITED STATES PATENT OFFICE.

JOHN WILSON BROWN, JR., OF PHILADELPHIA, PENNSYLVANIA.

RAISIN-SEEDER.

SPECIFICATION forming part of Letters Patent No. 591,322, dated October 5, 1897.

Application filed November 27, 1896. Serial No. 613,593. (No model.)

To all whom it may concern:

Be it known that I, JOHN WILSON BROWN, Jr., a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Raisin-Seeders, of which the following is a specification.

My invention relates to certain improvements in raisin-seeders, for which Letters Patent were granted on the 2d day of April, 1895, No. 536,778.

The object of my invention is to cheapen the manufacture of the machine and to so construct it that it can be dismembered for cleansing and put together again without the liability of the parts not registering.

A further object of the invention is to provide means for adjusting the presser-roll toward and from the seeding-roll.

In machines of this class, which are used mainly in the household, the parts must be so arranged that the machine can be dismantled for cleansing and put together without having to readjust the parts. The great difficulty heretofore experienced with raisin-seeders of this class has been that they must be set absolutely correct, otherwise they will not properly seed the raisins. Consequently these raisin-seeders have performed the work satisfactorily at first, but, as they must be constantly cleansed, the parts in time do not register and the machine has to be discarded.

Referring to the accompanying drawings, Figure 1 is a perspective view of my improved raisin-seeder. Fig. 2 is a perspective view of the head with the detachable parts removed. Fig. 3 is a section on the line 3 3, Fig. 4. Fig. 4 is a view looking in the direction of the arrow, Fig. 3. Fig. 5 is a section on the line 5 5, Fig. 3. Fig. 6 is a section on the line 6 6, Fig. 3, with the seeding-roll removed. Fig. 7 is a view of the seeding-roll detached. Fig. 8 is a detached sectional view of the presser-roll, and Figs. 9 and 10 are views of a modification.

A is the head of the device, connected to a clamp A' in the present instance by a curved neck A². This clamp is constructed in the ordinary manner and is adapted to be secured to a table, shelf, or other fixture. The head A is arranged to overhang the table, so that a

bowl or other vessel can be placed thereunder to receive the meat of the raisins.

a is the hopper, *a'* the side plate, and *a*² a curved back plate. Extending from the side plate *a'* is a spout *a*³, having flanges *a*⁴ at each side. This spout is an integral part of the cast head A.

B is the seeding-roll, and D is the presser-roll. The seeding-roll B is made as shown in Fig. 7 and is adapted to a stud A³, permanently fixed to the head A. The stud in the present instance projects from the side plate *a'*, which is thickened, so as to form a rigid support for the stud. The stud can be secured to the head either by casting the head around it or by riveting it to the head after it is in proper position. The central line *x* of the stud must bear a fixed relation to the inner edge *x'* of the spout *a*³, Fig. 6, so that when the seeding-roll is slipped onto the stud its relation to the spout will be fixed, so that no matter how carelessly the device is taken apart and put together it is impossible to assemble them out of line. This is accomplished, therefore, by making the spout, spindle, and head a unit, as shown clearly in Fig. 2. It will be seen that the roller is supported throughout its length by the stud, which is rigidly fixed to the frame, and overcomes the objectionable overhanging feature found in other seeders, and the stud being permanently fixed to the side plate overcomes a great difficulty in raisin-seeders as heretofore made, where the rotating shaft was journaled in a side bearing, making the structure weak and permitting an uneven and wabbling motion of the shaft after the least wear upon the bearing.

The lower portion of the hopper *a* is shaped to conform to the rolls B and D, and the back plate *a*³ of the casing is curved to conform to the roll B.

The seeding-roll B is made up of a series of plates *b*, which alternate with washers *b'*, mounted on the sleeve *b*². This sleeve has a head *b*³ at one end and is screw-threaded at the opposite end. The handle B' in the present instance is in the form of a nut having a screw-thread adapted to the thread on the sleeve *b*², so that on screwing up the handle

the blades are confined between the head b^3 of the sleeve and the handle. The blades b are serrated in the present instance, somewhat similar to saw-teeth, so that they will puncture the raisin, and they are so spaced that the meat alone will enter the spaces between the blades while the seeds are held on the periphery. In the present instance loosely hung between the blades are doffers c , each of which has a projection c' extending beyond the periphery of the roll B and into the space between the curved back plate a^2 and the rear end of the spout a^3 . These doffers are for the purpose of extracting the meat of the raisin from between the blades after the seeds have been scraped off the face of the roll by the rear edge of the spout a^3 . The roll B is loose on the spindle A^3 and is prevented from moving longitudinally thereon by a cotter a^5 or other suitable fastening.

The inner end of the spout a^3 is preferably turned up, as shown in Fig. 3, to form a comparatively sharp edge to act as a scraper, so that it will more readily remove the seeds from the periphery of the roll B.

Directly in front of the roll B is the presser-roll D, made in the present instance of rubber or other elastic material, and this presser-roll is so adjusted in respect to the seeding-roll B that as the raisin passes between the two rolls the meat of the raisin will be forced into the spaces between the blades, while the seeds will be embedded more or less into the yielding surface of the roll D. This roll in the present instance is made, as shown in Fig. 8, of a spool d , preferably having flanges d' at each end, and over this spool d is passed a rubber sleeve d^2 , preferably recessed at each end to receive the flanges d' of the spool. The spool is mounted on a spindle E, which has a head e at one end and screw-thread at the opposite end. The spindle is adapted to the arms e' of a lever E' , hung at e^2 to a bearing a^6 , in the present instance formed on the face of the hopper a . This lever E' has an arm e^3 projecting beyond the pivot e^2 , and adapted to this arm is a set-screw e^4 , which bears against the hopper. By means of this set-screw the roll can be adjusted toward and from the seeding-roll B. This adjusting-lever can be modified without departing from the main feature of the invention, which feature is to provide an accurate means of adjusting the presser-roll and to fix the roll in the adjusted position.

The operation of the machine is as follows: The roll D is adjusted in respect to the roll B, as above described, so that as the raisins, which are inserted in the hopper, are drawn between the rolls by the turning of the roll B in the direction of the arrow, Fig. 3, the meat of the raisins will pass into the space between the blades of the roll B, while the seeds will remain on the surface, and as the roll B revolves the seeds will be scraped off by the edge of the spout a^3 and be directed into a

suitable receptacle, while the meat will pass the spout and will be discharged by the doffers into a receptacle under the machine.

To cleanse the machine after seeding the raisins, all that is necessary is to draw the cotter a^5 and remove the roll B with the handle B' from the fixed spindle A^3 and cleanse this roll. The other parts of the machine can be readily wiped off. After the roll is cleansed it can be again placed on the spindle and the machine returned to its proper place and the machine will be in accurate working order, as the relative position of the spindle and hopper is fixed. In some instances the machine may be cleansed without removing the roll B.

In Figs. 9 and 10 I have shown the roll D of yielding material mounted on a stud f , secured to the side of the head by a wing-nut f' . The stud has a sleeve f^2 , adapted to a slot in the frame of the machine, so that upon loosening the wing-nut the roll D can be moved toward or from the roll B.

I claim as my invention—

1. As a new article of manufacture the frame of a raisin-seeder, having the discharge-spout formed integral therewith and having a spindle fixed thereto for the reception of the seeding-wheel, the spindle and spout being rigid in respect to each other so that when the machine is dismembered for cleansing the relation of the spout to the spindle cannot be altered, substantially as described.

2. As a new article of manufacture a head of a raisin-seeder, consisting of an integral structure having a hopper, side plate and discharge-spout for the seeds cast integral therewith and open at one side for the removal of the seeding-roll, and having a permanent stud upon which the seeding-roll is mounted, substantially as described.

3. The herein-described raisin-seeder consisting of a casing having an upwardly-extending hopper provided with bearings for seeding and presser rolls, a seeding-roll mounted in the bearings at the bottom of the hopper, a presser-roll mounted in its bearings in front of the seeding-roll, the said casing having a discharge-spout extending downwardly therefrom below the rolls, the inner edge of said spout being turned up and extending close to the surface of the seeding-roll to form a scraping edge, substantially as described.

4. The herein-described raisin-seeder consisting of a casing comprising an overhanging arm A' , having a hopper extending upwardly therefrom, a downwardly-extending discharge-spout having its inner edge turned up to form a scraping edge, a seeding-roll mounted in bearings at the bottom of the hopper and rotating close to the scraping edge of the spout, and a presser-roll mounted in front of the seeding-roll, substantially as and for the purpose set forth.

5. The herein-described raisin-seeder consisting of a casing having an upwardly-ex-

tending hopper, the lower portion of said hopper being shaped to conform to seeding and presser rolls, and provided with a downwardly-extending spout, the inner edge of which forms a scraping edge, a seeding-roll mounted in said hopper, close to the said scraping edge, doffers carried by the shaft of said seeding-roll and extending through an opening in the casing formed by the inner edge of the spout-bottom and the lower portion of the back section of the casing, substantially as and for the purpose set forth.

6. The combination in a raisin-seeder, of the casing having a hopper and spout, a presser of yielding material, a stud projecting from the frame, a sleeve carried thereby and confined longitudinally thereon, toothed disks and washers mounted on the sleeve, a handled nut screwed onto the sleeve and adapted to confine the disks thereto, with loose rings *e* between the disks and having projections *e'* adapted to rest against the back portion of the frame and discharge the raisin-pulp from the machine, substantially as described.

7. The combination in a raisin-seeder, of the casing, a stud projecting therefrom, a sleeve mounted on the said stud having a head at one end and screw-threaded at the opposite end, a series of disks and rings alternately arranged upon the said sleeve, a

handled nut adapted to the screw-threaded portion of the sleeve and acting to clamp the disks and rings to the sleeve, substantially as described.

8. The combination in a raisin-seeder, of the main frame having the feed-hopper thereon, the seeding-roll mounted on said frame below the hopper, a frame pivoted to the hopper above the seeding-roll and carrying in its lower end a presser-roll of yielding material in front of the seeding-roll, and a lug extending upwardly from said frame and provided with a set-screw bearing against the side of the hopper, substantially as described.

9. The combination in a raisin-seeder, of the main frame having the feed-hopper therein, the seeding-roll mounted on said frame below the hopper, a yoked frame carrying a presser-roll and pivoted to the main frame above the seeding-roll, a lug extending upwardly from said frame, and a set-screw carried by said lug and bearing against the outwardly-flaring side of the hopper, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN WILSON BROWN, JR.

Witnesses:

WILL. A. BARR,
JOS. H. KLEIN.