

WILLIAM T. CARROLL.
Improvement in Spinning-Rings.

No. 115,160.

Patented May 23, 1871.

Fig. 1.

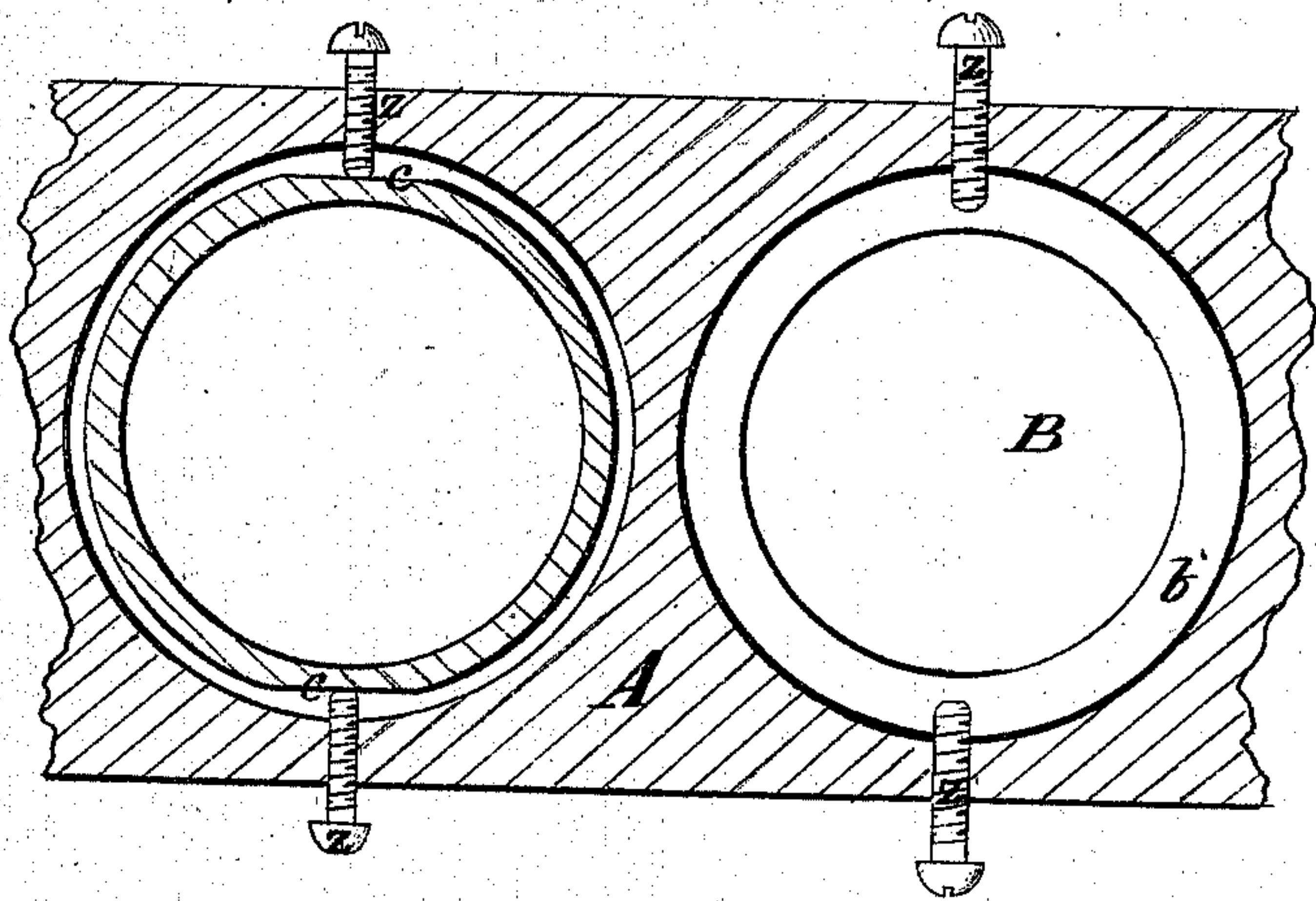


Fig. 5.

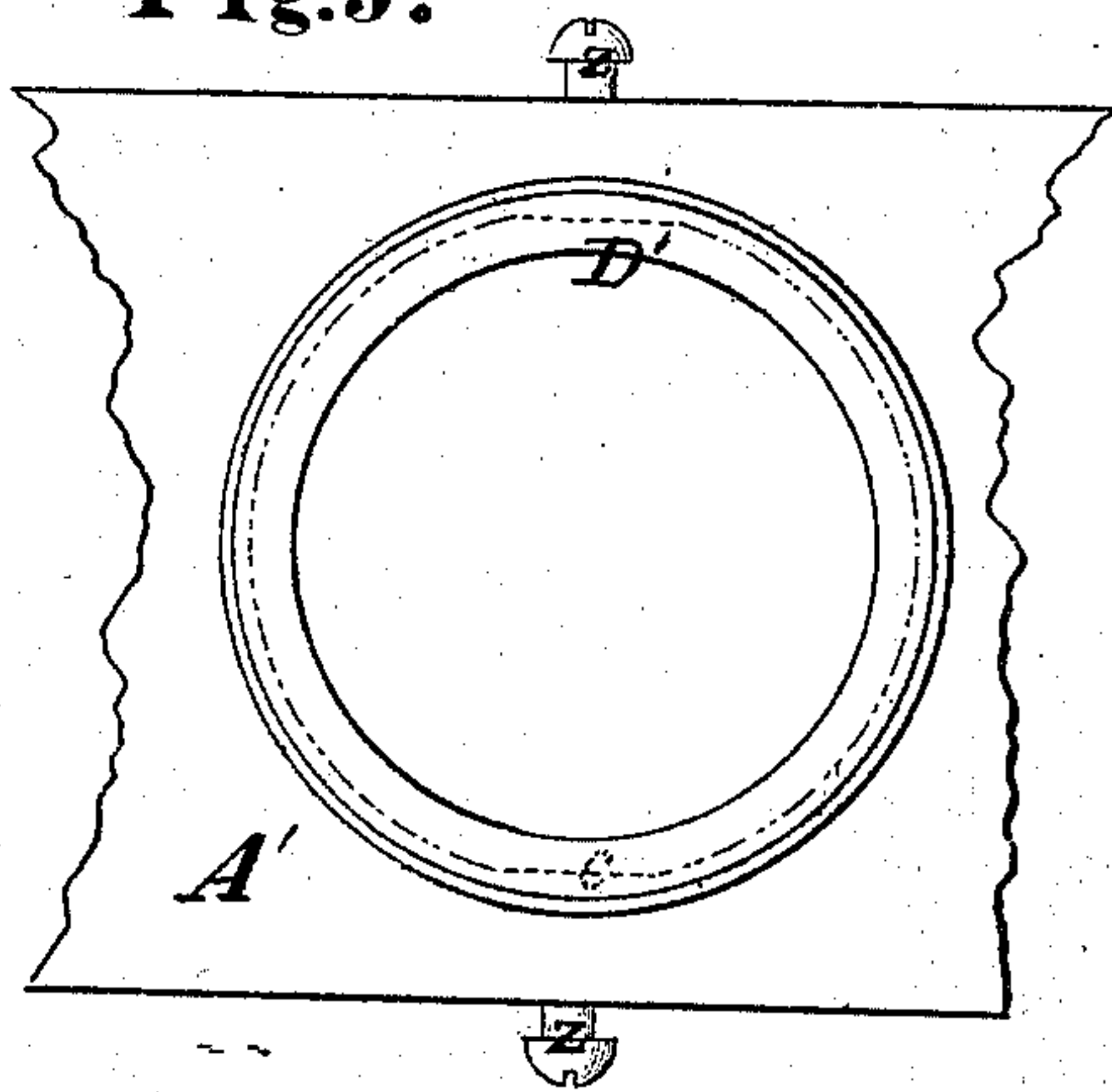


Fig. 2.

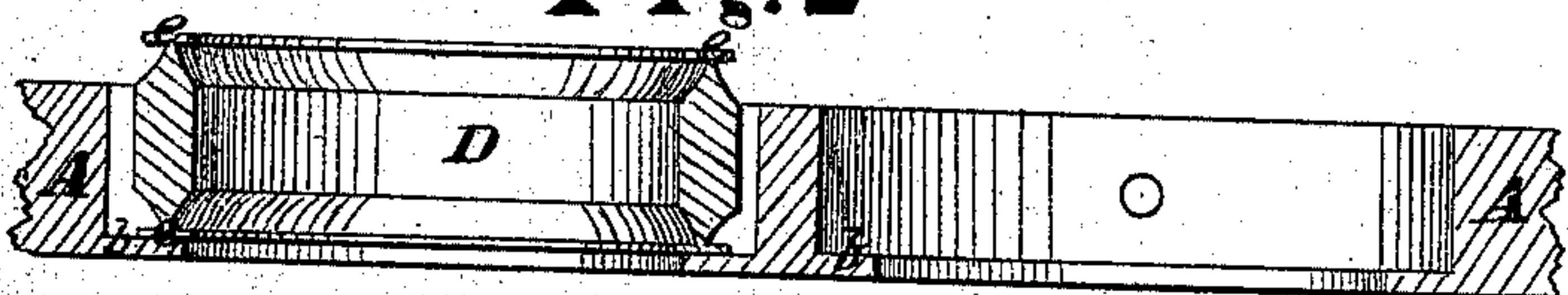


Fig. 6.

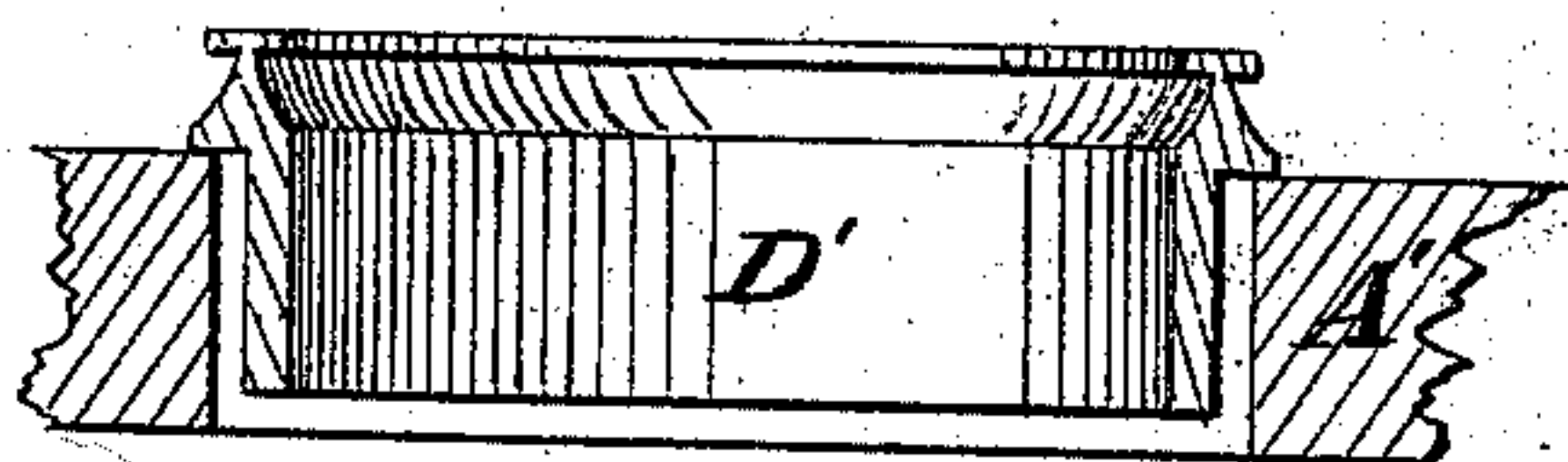


Fig. 3.

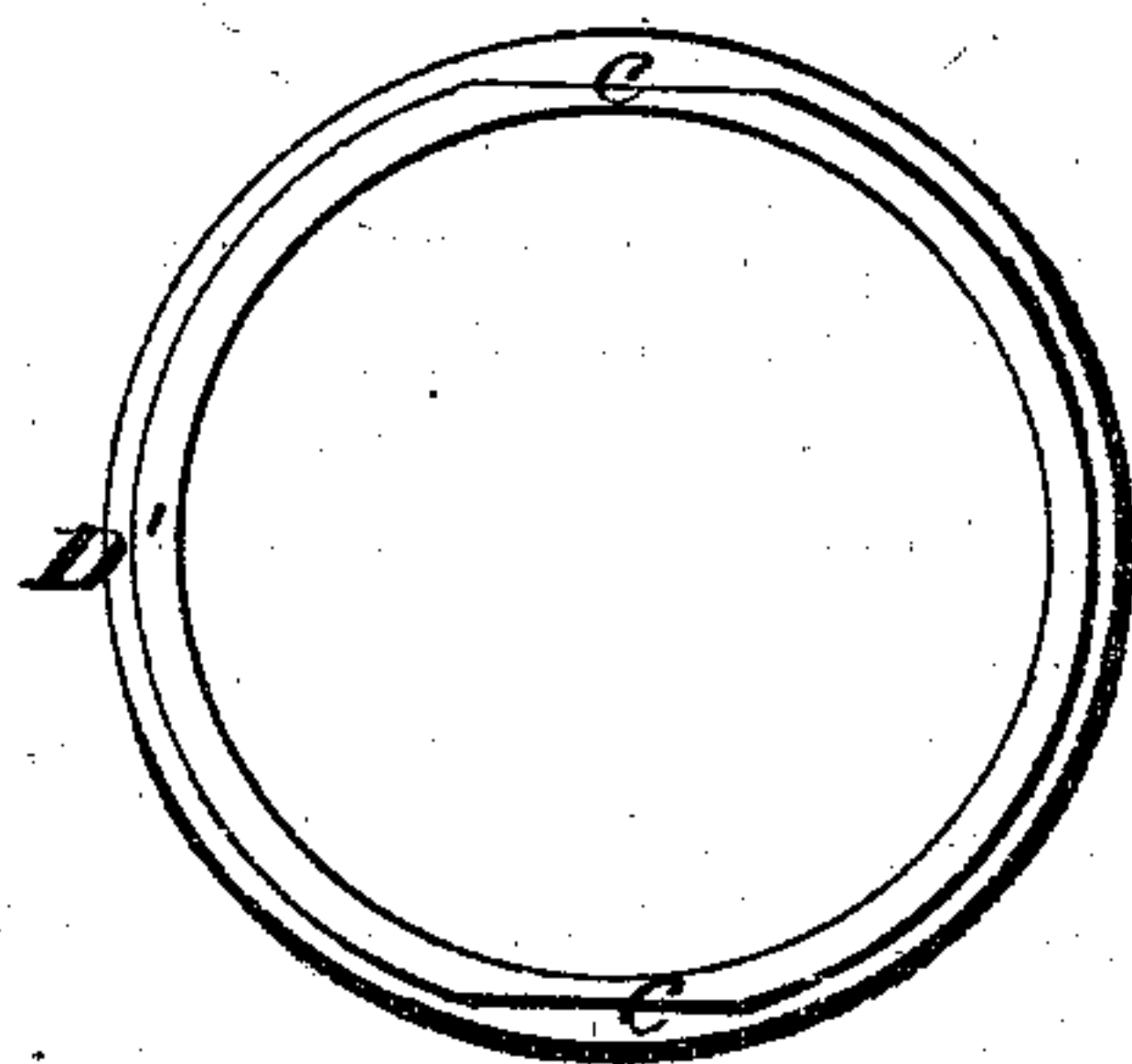
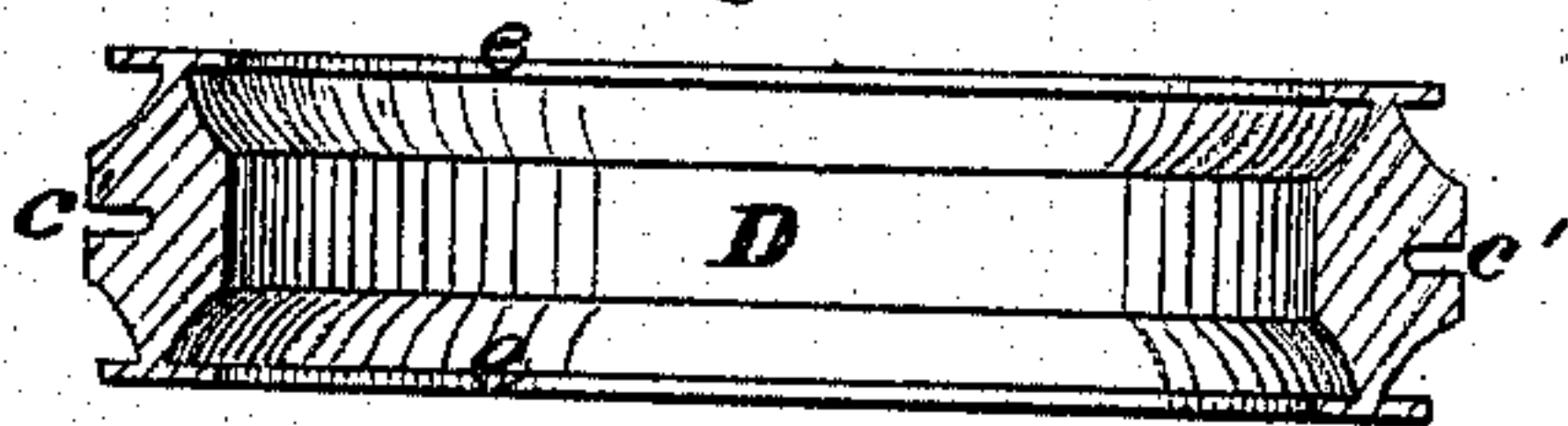


Fig. 7.

Fig. 4.



Witnesses.
E. M. Anderson,
Chas. Kenyon

Inventor.
W. T. Carroll,
Chipman, Hosmer & Co
Attorneys.

UNITED STATES PATENT OFFICE.

WILLIAM T. CARROLL, OF MEDWAY, MASSACHUSETTS.

IMPROVEMENT IN SPINNING-RINGS.

Specification forming part of Letters Patent No. 115,160, dated May 23, 1871.

To all whom it may concern:

Be it known that I, WILLIAM T. CARROLL, of Medway, in the county of Norfolk and State of Massachusetts, have invented a new and valuable Improvement in Ring-Spinning; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a horizontal section of my invention. Fig. 2 is a representation of a vertical section of the same. Fig. 3 is an external view of the ring, showing it provided with a slot, *c'*. Fig. 2 is a central vertical section of the same. Figs. 5, 6, and 7 show my method of adjustment applied to a single-flanch spinning-ring.

My invention relates to ring-spinning, and consists mainly in the novel construction of the ring and the rail, as hereinafter described, whereby the ring may be more easily held in place and adjusted so as to be made concentric with the spindle.

The letter A of the drawing designates the ring-rail, provided with the openings B B for the spinning-rings D D, and the inner circular flanches *b b* for the rings to rest upon. D represents my spinning-ring. It is provided with a circular flanch, *e*, both at the top and bottom, for the traveler to run upon. It is, therefore, reversible, and when one flanch is worn out the other may be used.

It is well known that in ring-spinning the great difficulty is to keep the ring or the orbit of the traveler concentric with the spindle. Various means have been tried with more or less success. My spinning-ring is flattened for a certain distance on each side thereof.

These flat spaces or planes are lettered *c c* on the drawing, and are situated upon the exterior surface of the circular swell of the double-flanch ring between the flanches. These plane surfaces *c c* are designed to re-

ceive the ends of the set-screws Z Z, which pass through the wall of the opening in the ring-rail, at its narrowest parts, or where the circumference of the opening approaches nearest the edge of the rail. Thus it requires but little work to introduce the set-screws through the ring-rail. Sometimes, instead of flattening the swell of the double-flanch ring, I form a groove, *c'*, therein, on each side of the ring, in the middle of the swell, between the flanches.

My improved method of adjustment can be readily applied to the single-flanch rings in use by filing the necessary flat places on each side of that portion which is seated in the rail, as represented in Figs. 5, 6, and 7, in which A' is the rail, D' the ring, and *c* the flat places thereon; and but little expense is involved in this alteration, as the set-screws are inserted in the ring-rail without much labor.

The advantages of economy and facility of adjustment are attained by these improvements, the adjusting arrangement being simple and inexpensive.

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

1. The ring-rail A, provided with a flange, *b*, in combination with the reversible double-flanch ring having flattened surfaces *c c* or grooves *c' c'* on the two opposite sides, and adjusted and held in position by but two set-screws, as specified.

2. The ring D', having its neck provided with the flattened surfaces *c c* on two opposite sides, so as to render it adjustable in the ring-rail A' by but two set-screws, Z Z, substantially as set forth.

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

WILLIAM T. CARROLL.

Witnesses:

G. P. SMITH,
M. M. FISHER.