

J. MAWSON.

BOBBINS FOR SPINNING MACHINES.

No. 184,404.

Patented Nov. 14, 1876.

Fig 1

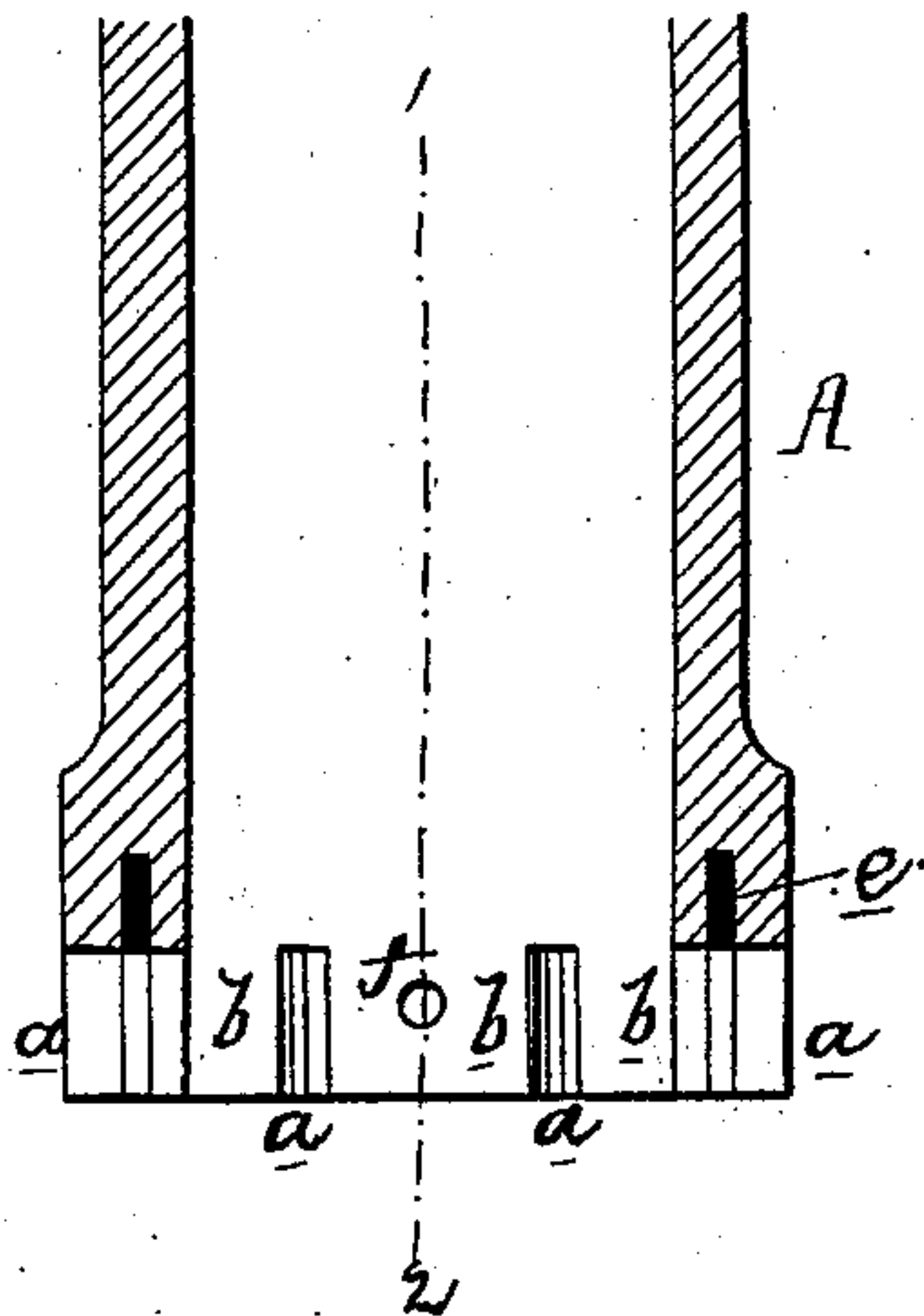


Fig 2

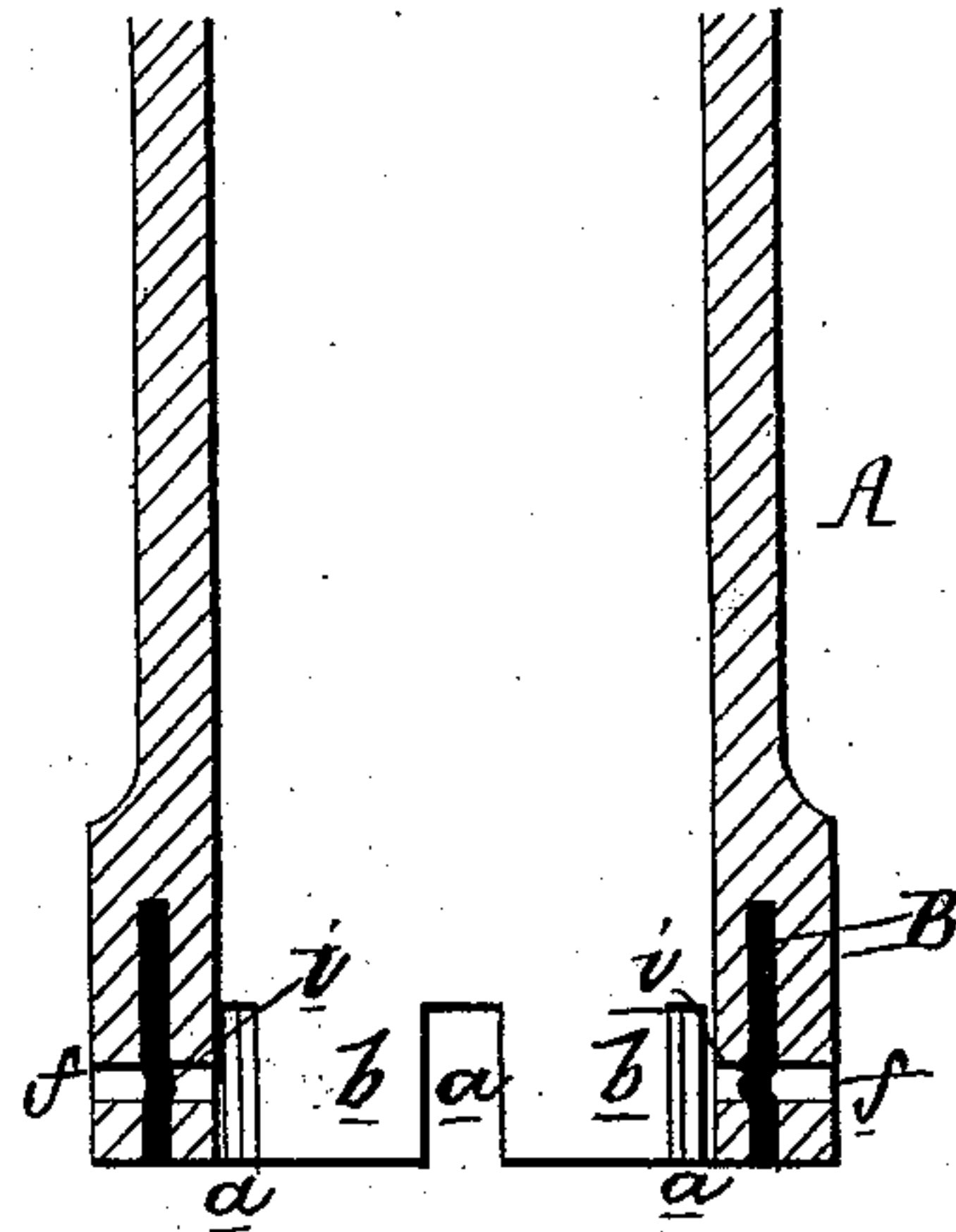
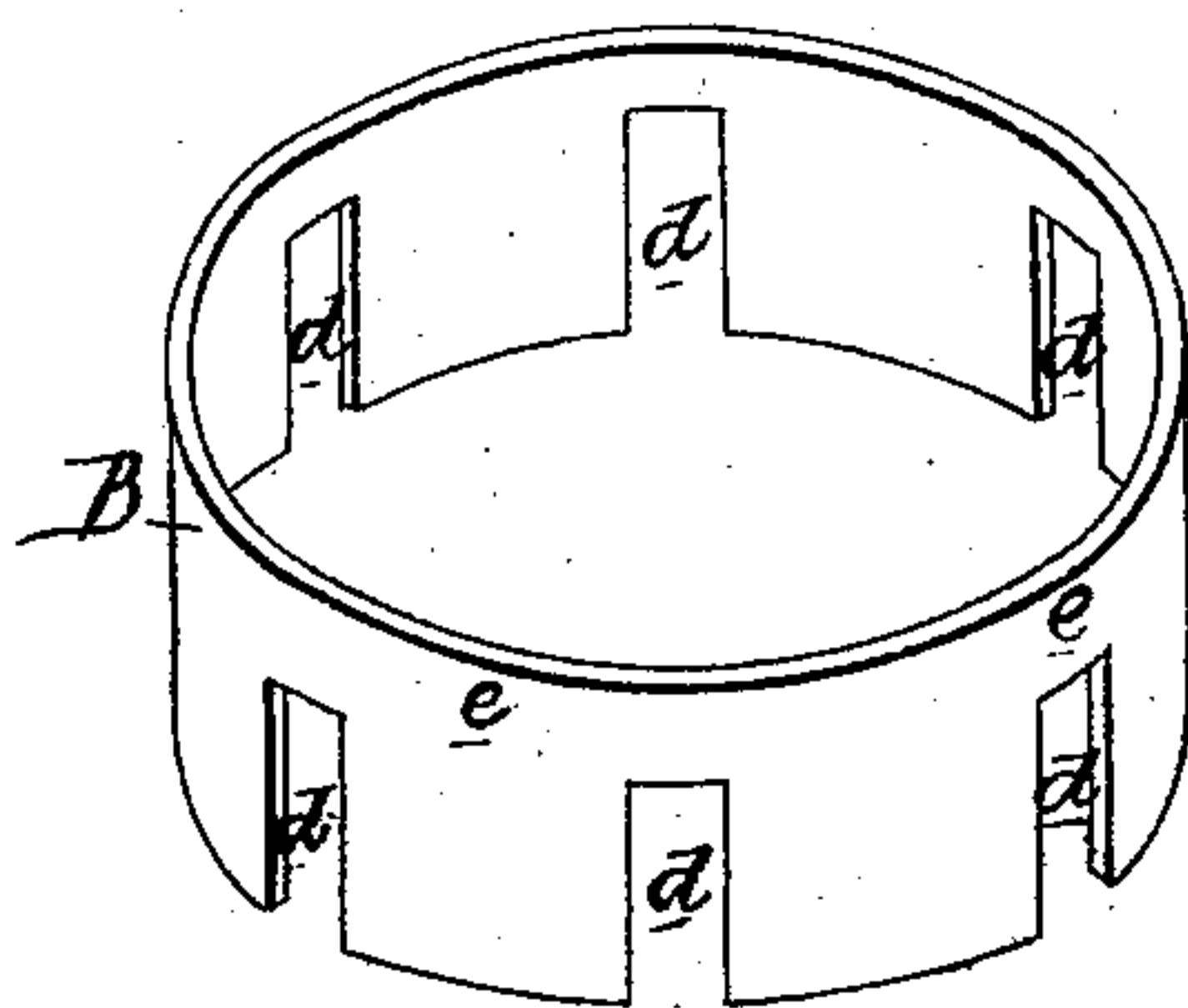


Fig 3.



Witnesses
 Ellwood G. Dietz
 Harry Smith

John Mawson,
 by his Attorneys
 Howson and Son

UNITED STATES PATENT OFFICE.

JOHN MAWSON, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN BOBBINS FOR SPINNING-MACHINES.

Specification forming part of Letters Patent No. **184,404**, dated November 14, 1876; application filed July 10, 1876.

To all whom it may concern:

Be it known that I, JOHN MAWSON, of Philadelphia, Pennsylvania, have invented an Improvement in Bobbins, of which the following is a specification:

My invention relates to an improvement in that class of bobbins the lower ends of which are provided with slots for the reception of a pin on the spindle; and the object of my invention is to so construct a bobbin of this class that the excessive wear of the fingers between the slots, as well as the tendency of the bobbin to split, may be prevented. This object I attain in the manner which I will now proceed to describe, reference being had to the accompanying drawing, in which—

Figure 1 is a vertical section of the lower end of a bobbin with my improvements; Fig. 2, a section on the line 1 2; and Fig. 3, a perspective view of the strengthening-ring.

A is the body of the bobbin, the lower enlarged end of which is provided with slots *a*, for the reception of a pin on the driving-spindle, this pin serving to impart motion to the bobbin. As the bobbins are usually made comparatively light, the pin rapidly wears the edges of the fingers *b* between the slots, so that the bobbin soon becomes useless and has to be discarded. This objection I overcome by forming in the lower edge of the bobbin an annular recess, extending for some distance above the upper ends of the slots, and by forcing into this recess a metal ring, B, Fig. 3, the lower portion of which is provided with

slots *d*, corresponding with the slots *a* in the bobbin, while its upper solid portion *e* is adapted to the upper portion of the recess above the slots. By this metal ring not only is the wearing of the edges of the fingers *b* prevented, but the solid portion of the ring so strengthens the entire lower portion of the bobbin that the splitting of the same is rendered almost impossible. In order to prevent the ring B from turning in the recess, I form in one or more of the fingers *b* an opening, *f*, and then, by means of a suitable punch, indent the ring B where it crosses the opening, so that a projection, *i*, is formed, which bears against the sides of the opening, and effectually prevents the turning of the ring independently of the bobbin.

The above device, while effectually accomplishing the object sought to be attained, is simple, cheap, and easily applied.

I claim as my invention—

The combination of the lower slotted end of the bobbin with the ring B, partly plain and partly slotted, to correspond with said slotted end of the bobbin, as set forth.

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

JOHN ^{his} × MAWSON.
mark.

Witnesses:

ELLWOOD T. DEETZ,
HARRY SMITH.