

W. ELDER.

FASTENING CARRIAGE WHEELS.

No. 110,557.

Patented Dec. 27, 1870.

Fig. 1.

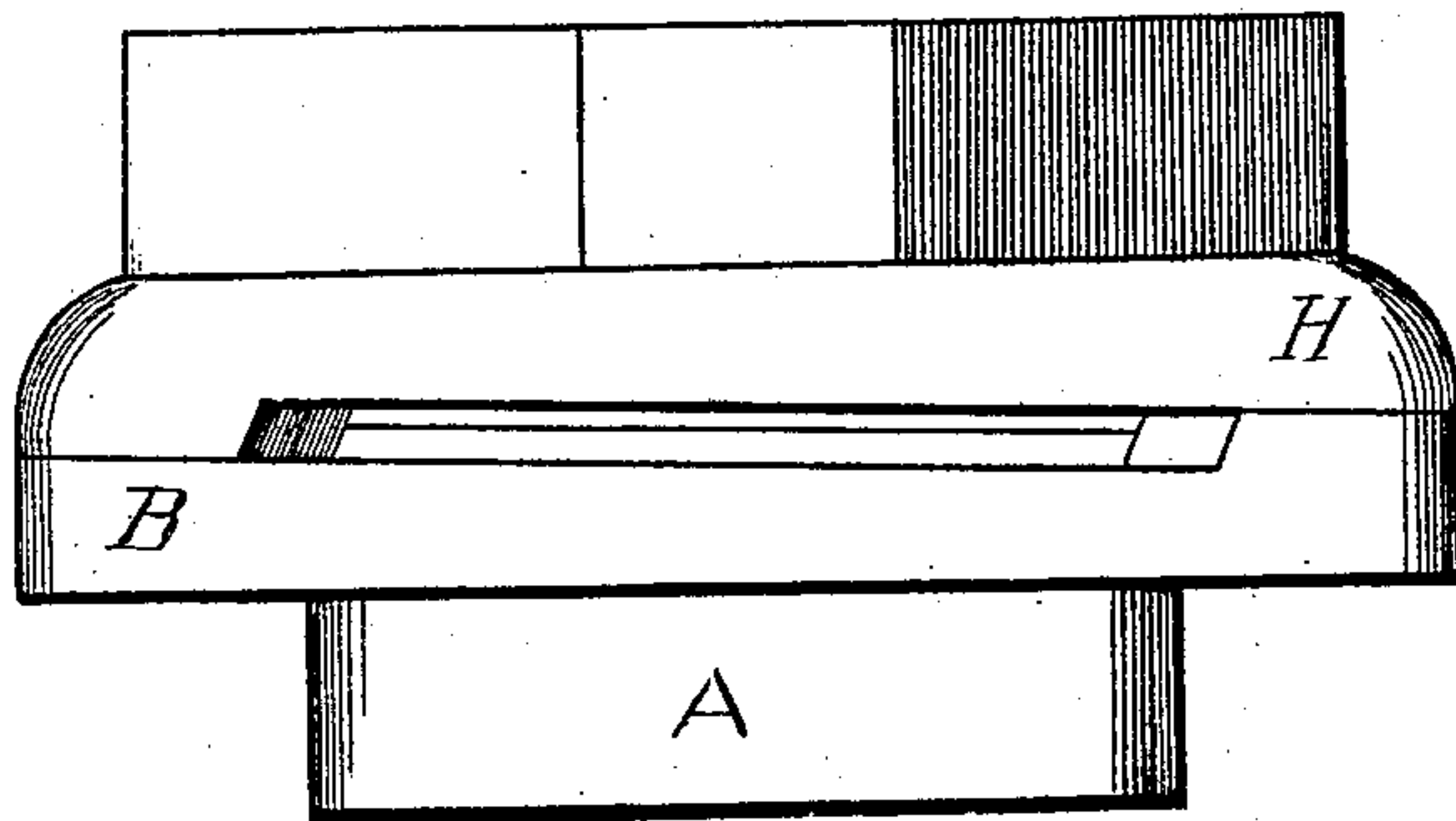


Fig. 2.

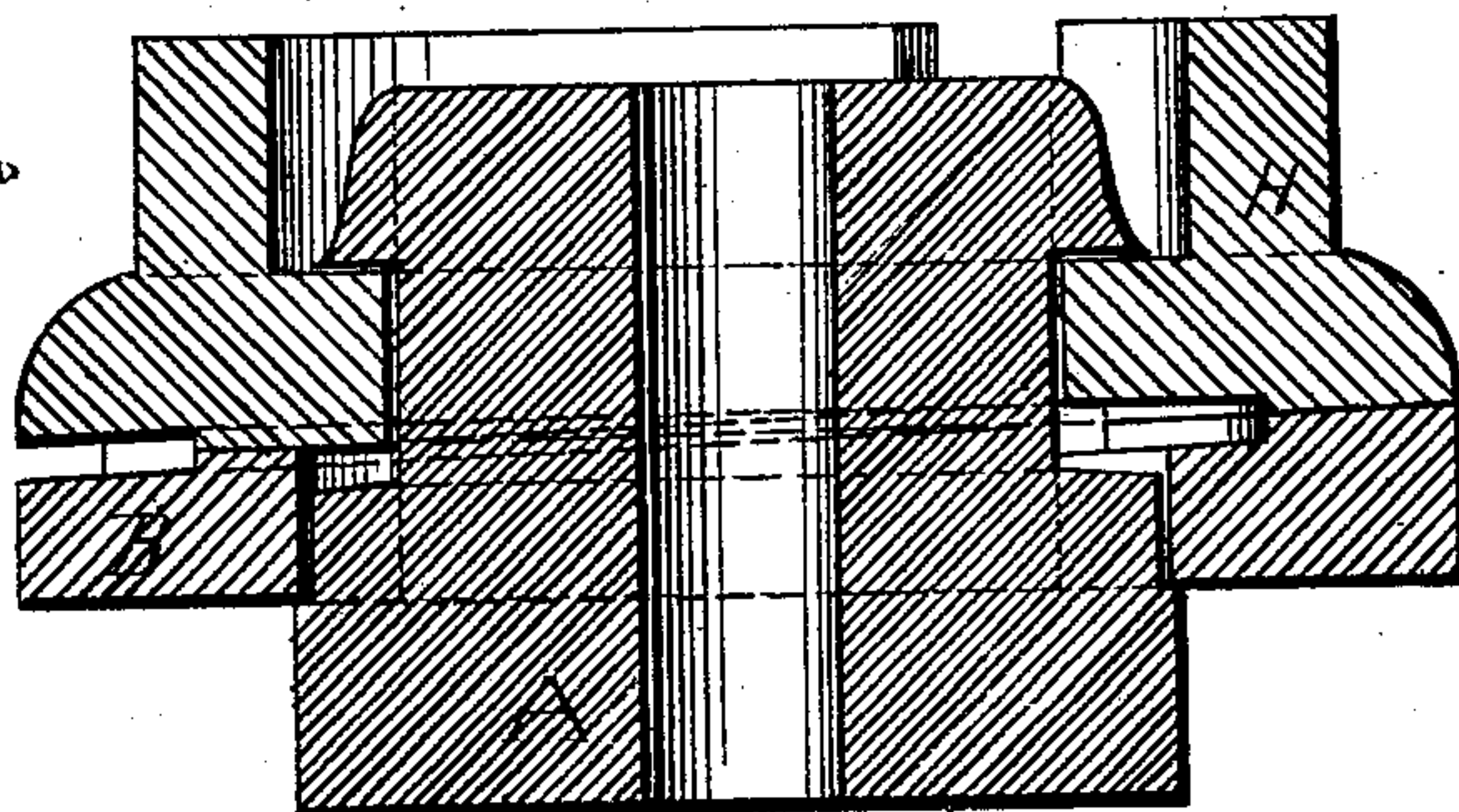
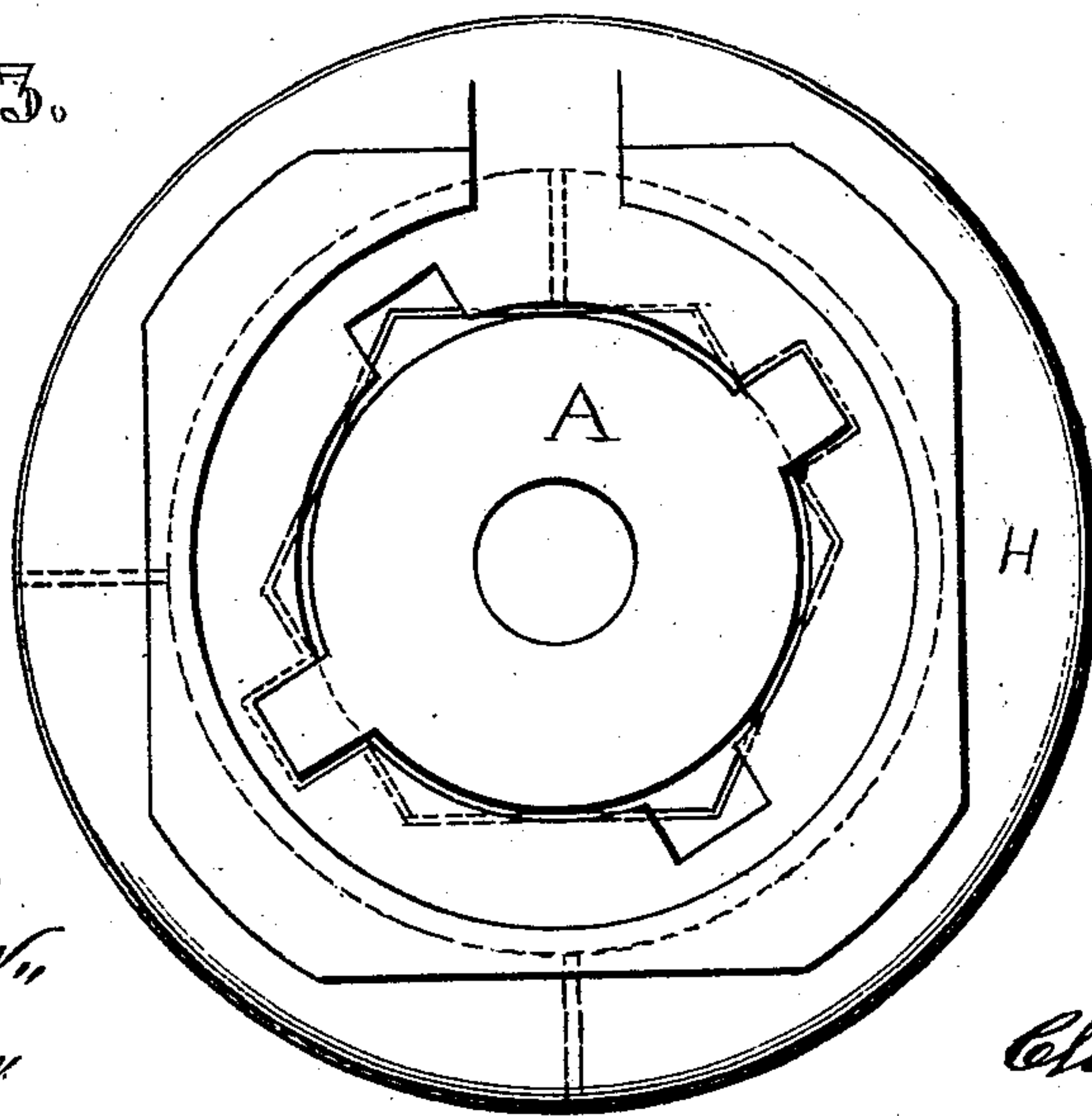


Fig. 3.



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Fig. 4.

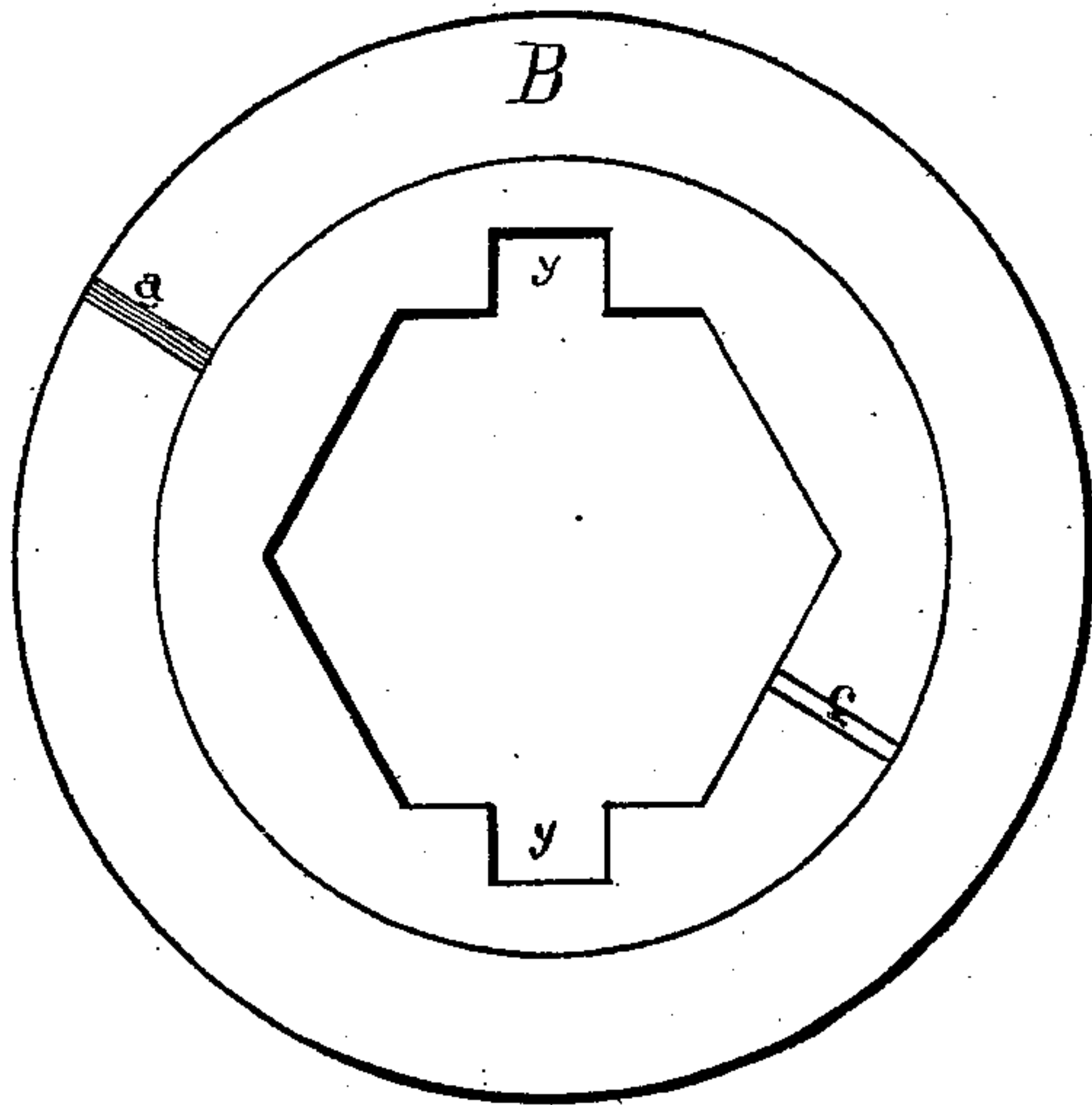


Fig. 5.

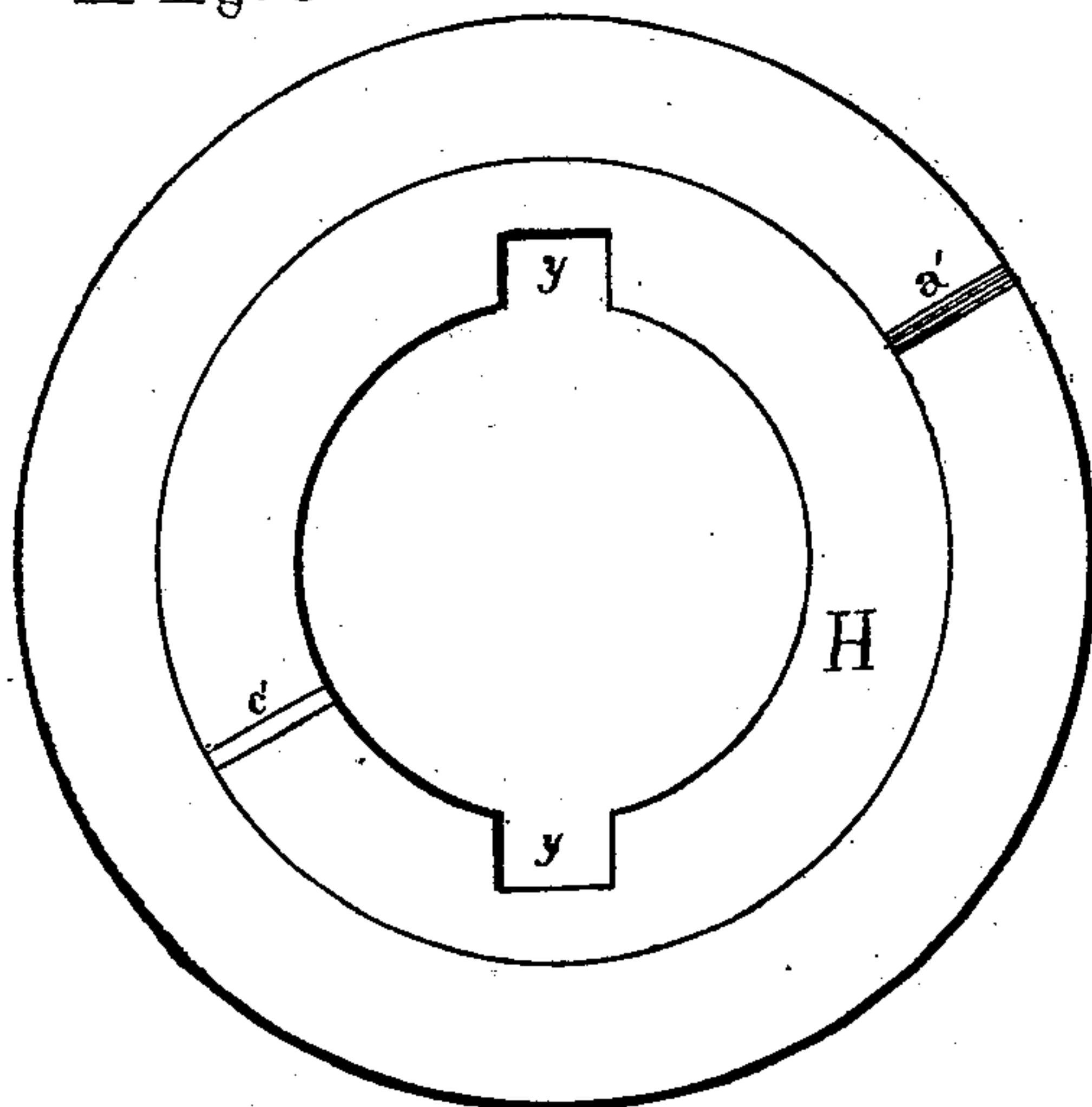


Fig. 7.

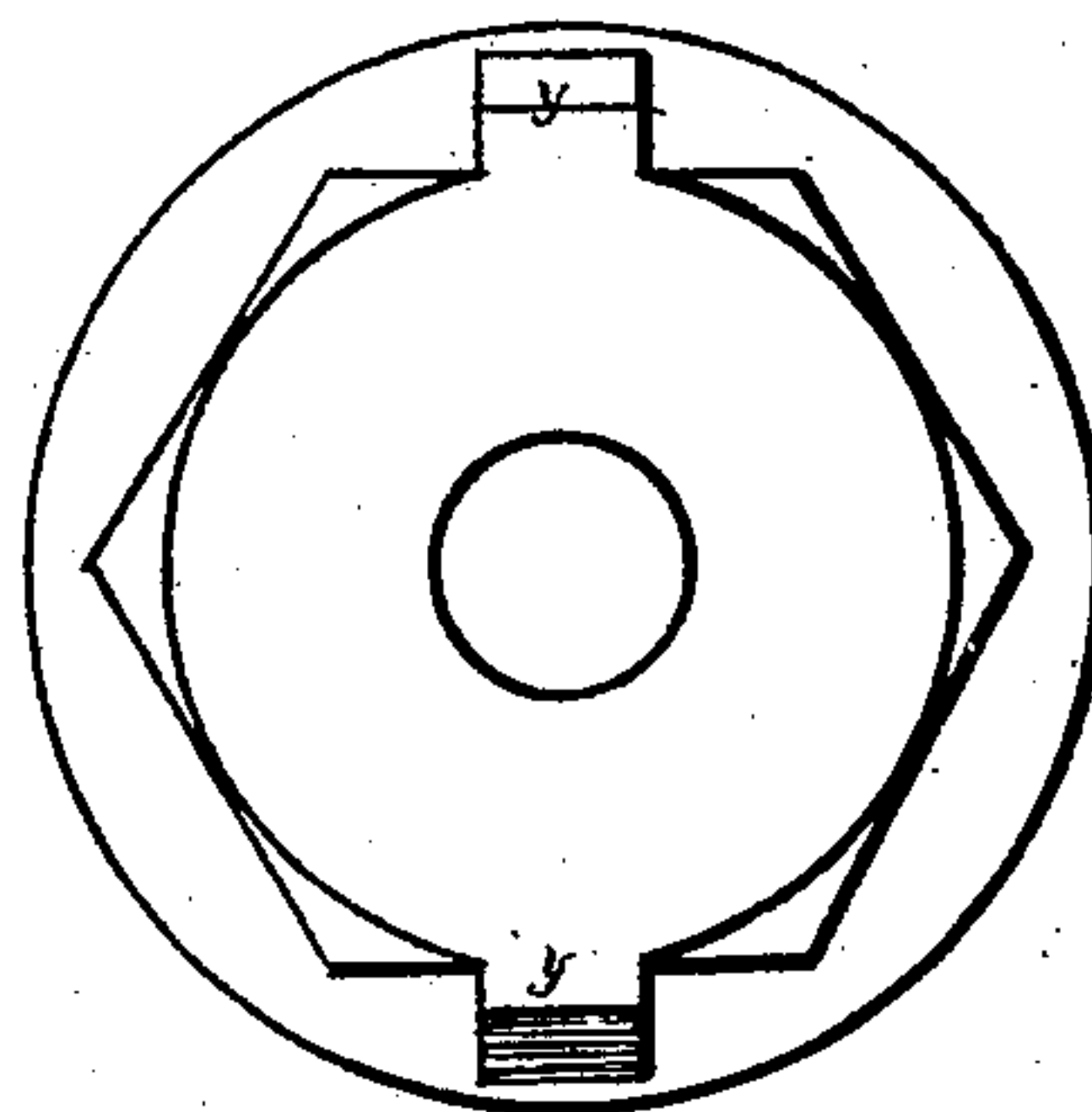


Fig. 6.

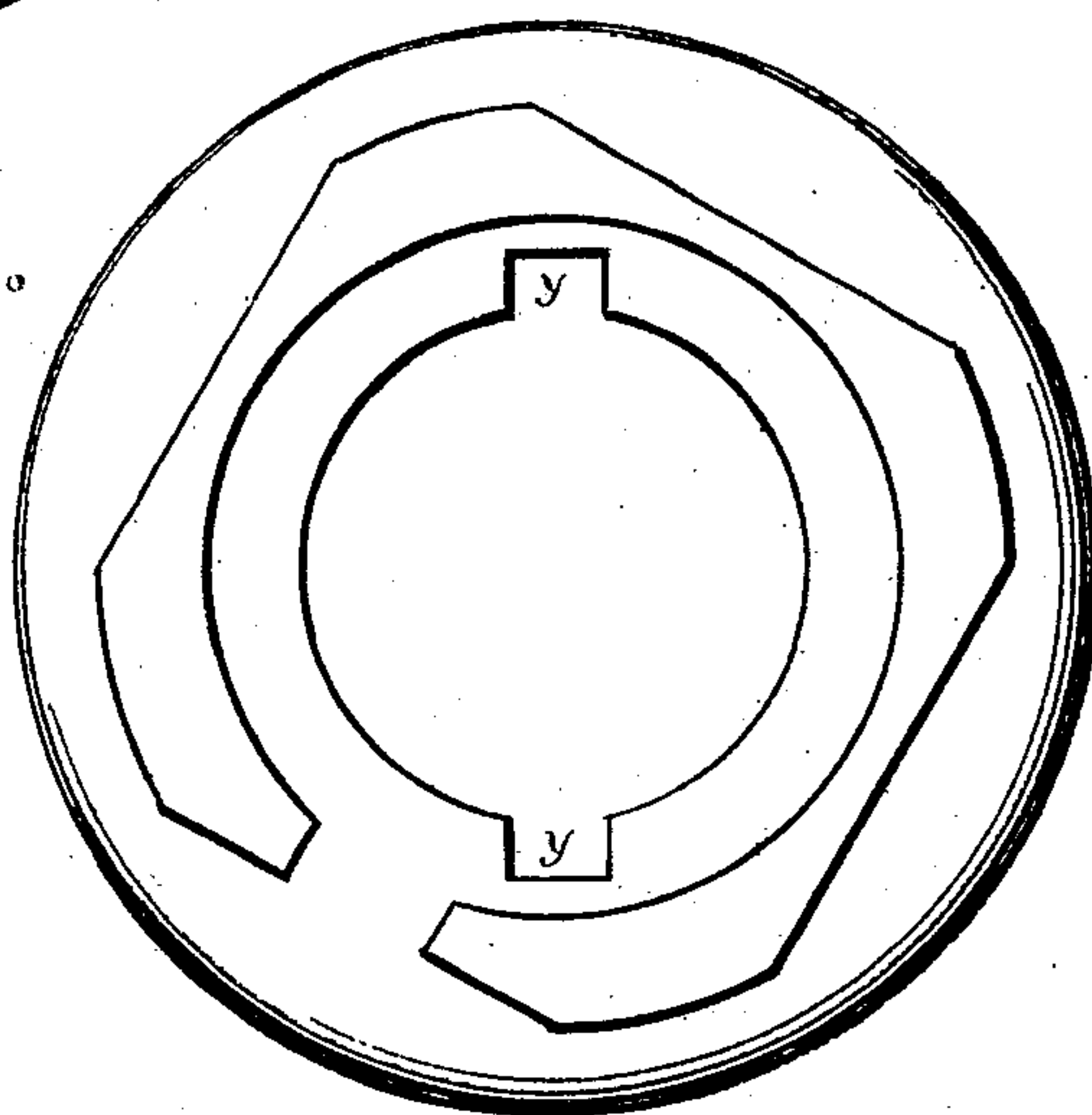
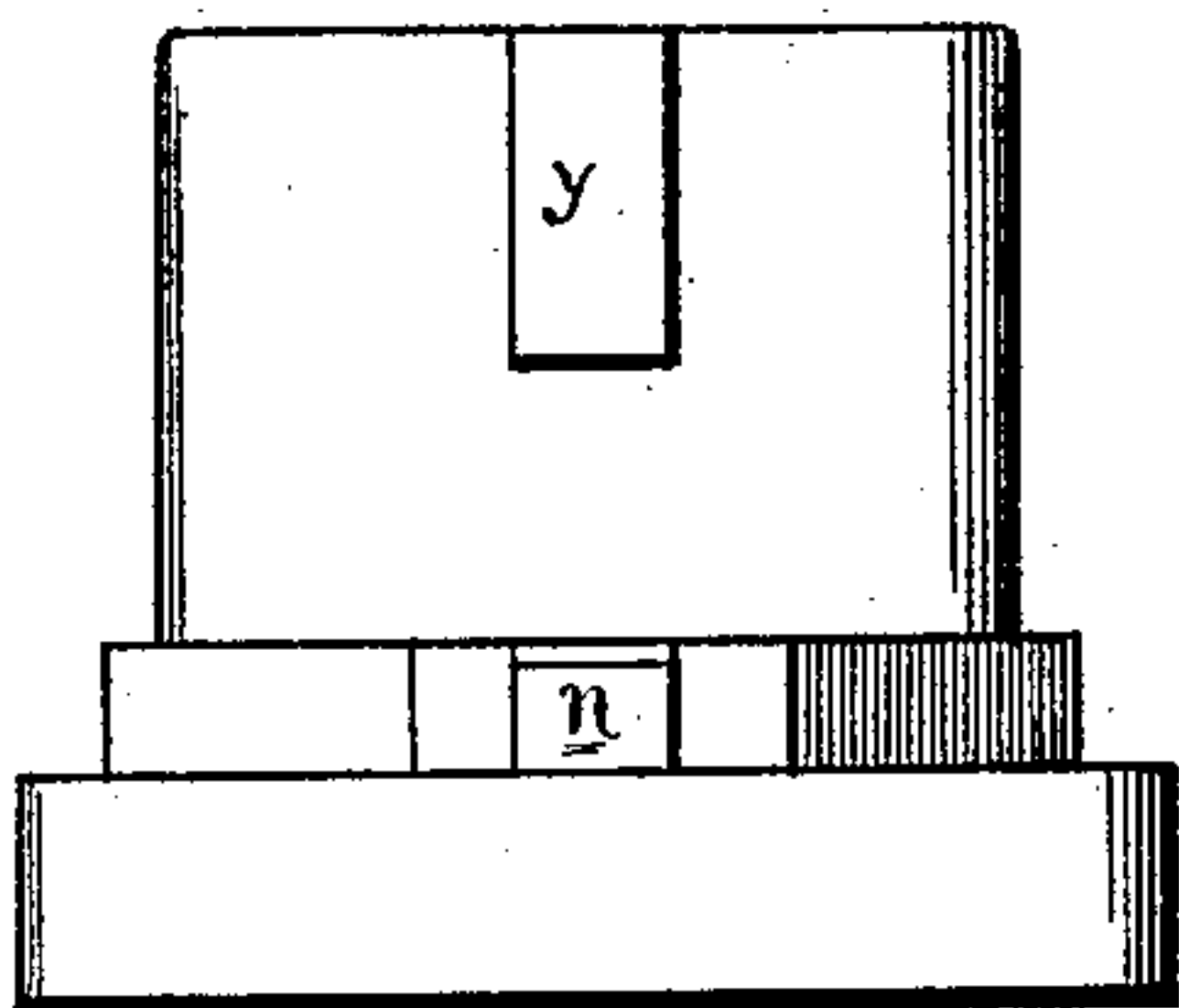


Fig. 8.



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WILSON ELDER, OF MILL HALL, PENNSYLVANIA.

Letters Patent No. 110,557, dated December 27, 1870.

IMPROVEMENT IN FASTENING CARRIAGE-WHEELS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, WILSON ELDER, of Mill Hall, in the county of Clinton and State of Pennsylvania, have invented a new and improved Mode of Securing the Wheels upon the Axles of Wagons, Carriages, &c.; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing and the letters of reference marked thereon.

Figure 1 of the drawing represents a plan view of my device;

Figure 2 is a sectional view;

Figure 3 is a front view; and

Figures 4, 5, 6, 7, and 8, are details.

My invention has relation to means for securing carriage-wheels upon their axles, and consists in the construction and novel arrangement of a beveled washer and beveled cap upon the spindle of the axle, and held in place by suitable lugs, as hereinafter particularly mentioned and described.

A of the drawing represents a carriage-axle; and

B, a washer, having a beveled outer face, as shown on fig. 4.

This washer has two shoulders, marked respectively *a* and *c*, from the bases of which the bevel commences, and forms gradual inclined planes to their tops, as shown.

The letter H represents a cap, constructed with a beveled inner surface or face.

It also has shoulders marked *a'* and *c'*, and its beveled portion corresponds in all respects with the bevels of the washer B, against and with which it operates.

The axle A is constructed with quadrangular shoulders, as shown on fig. 7, and the washer B is adapted to fit thereon.

I also attach ears or lugs *n* upon said shoulders, and make corresponding openings in the washer, so that it may be held firmly upon the shoulders of the axle.

The letters *y* represent ears or lugs affixed to the spindle, and are intended to aid in holding the cap in its position when on duty.

To operate my device, I first place the wheel upon the spindle, and arrange the washer upon its shoulders in such manner that its rear side shall rest against the wheel under its flange, while its beveled face shall turn outward. I then take the cap H, and after placing its beveled face against the cap, I turn it to the right until its shoulders *a c* respectively are wedged against the shoulders *a' c'* of the washer.

When this is accomplished, the wheel is secure upon the axle and ready for use.

I claim as my invention—

1. The washer B and cap H, each having beveled faces, as described, and arranged to operate in conjunction, substantially as and for the purpose specified.

2. In combination with the washer B and cap H, the lugs *n* and *y*, when arranged upon the spindle of an axle, substantially as and for the purpose set forth.

WILSON ELDER.

Witnesses:

I. G. MORRISON,
GEO. A. CRAMER.