

(No Model.)

2 Sheets—Sheet 1.

P. E. McINTOSH.

BOOK CASE.

No. 296,767.

Patented Apr. 15, 1884.

Fig. 1.

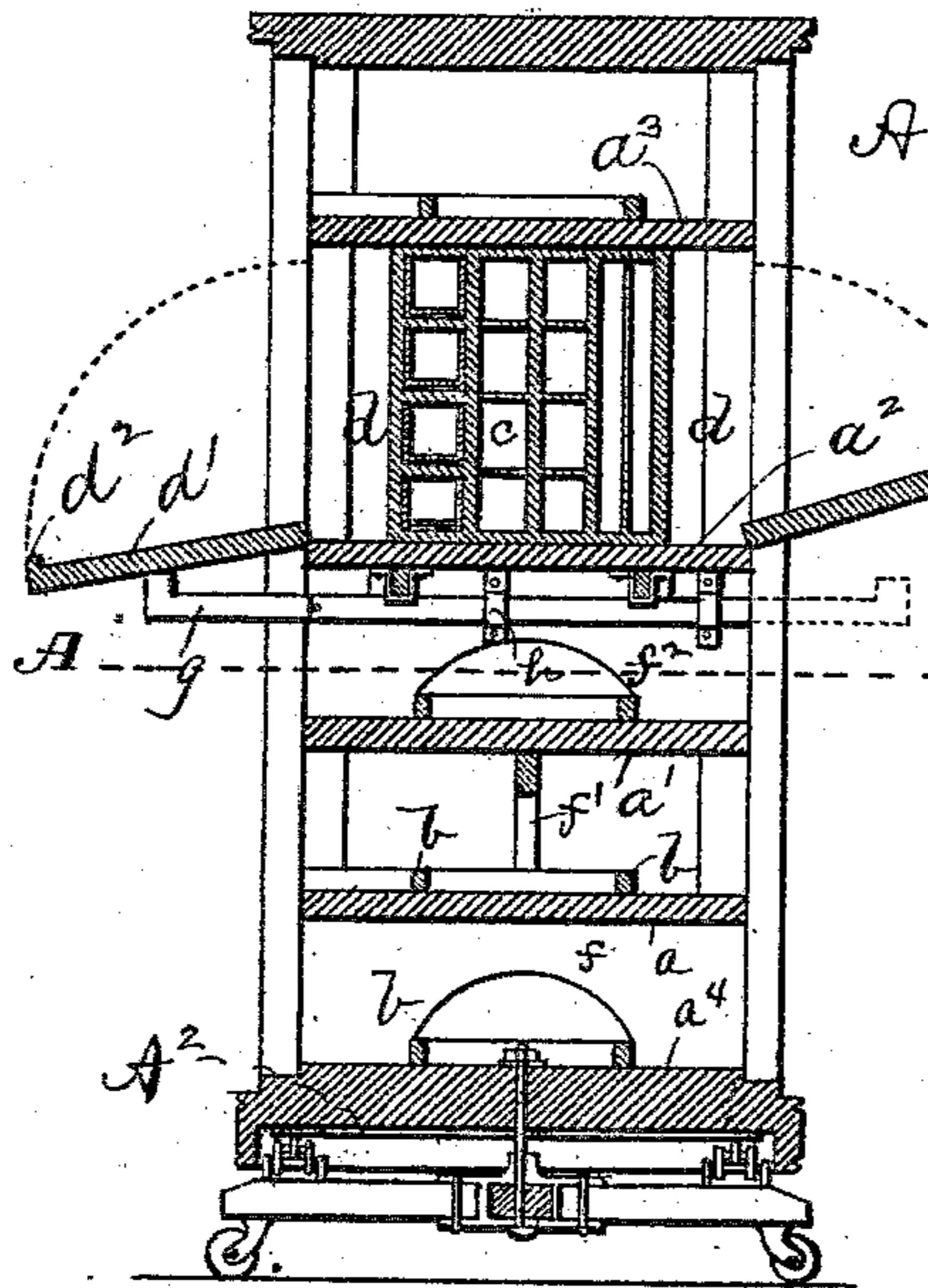


Fig. 2.

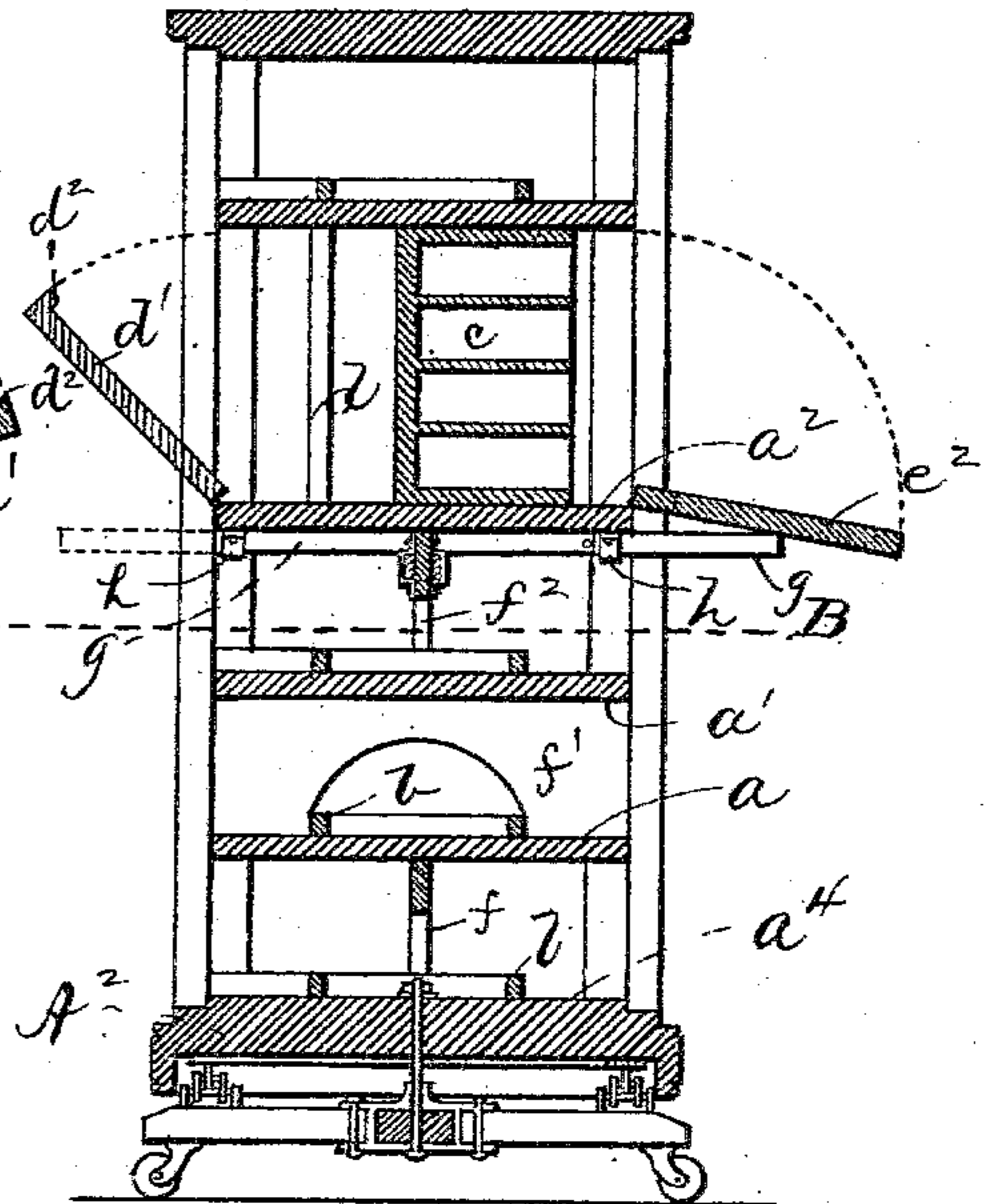


Fig. 3.

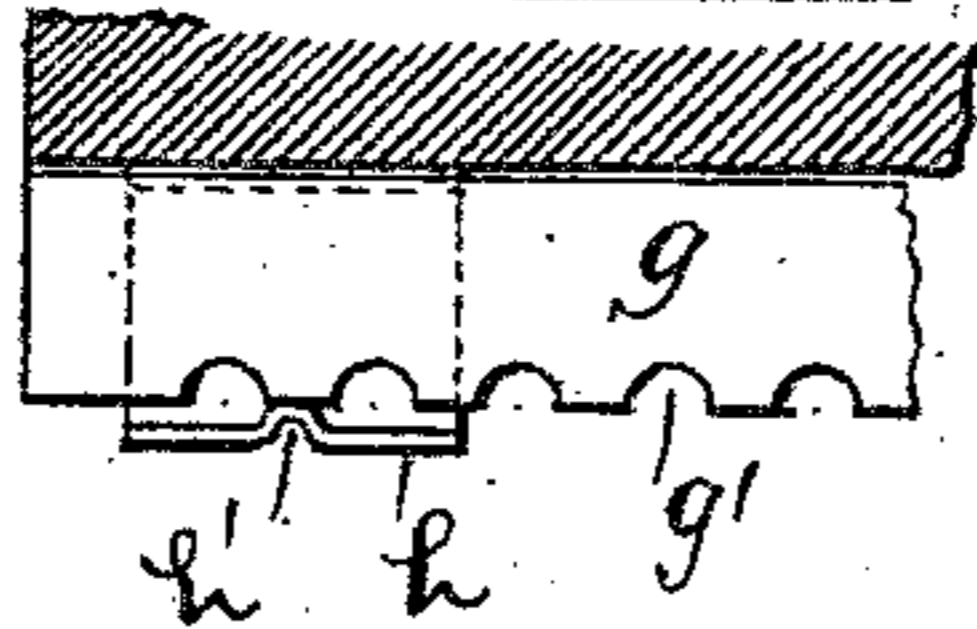


Fig. 4.

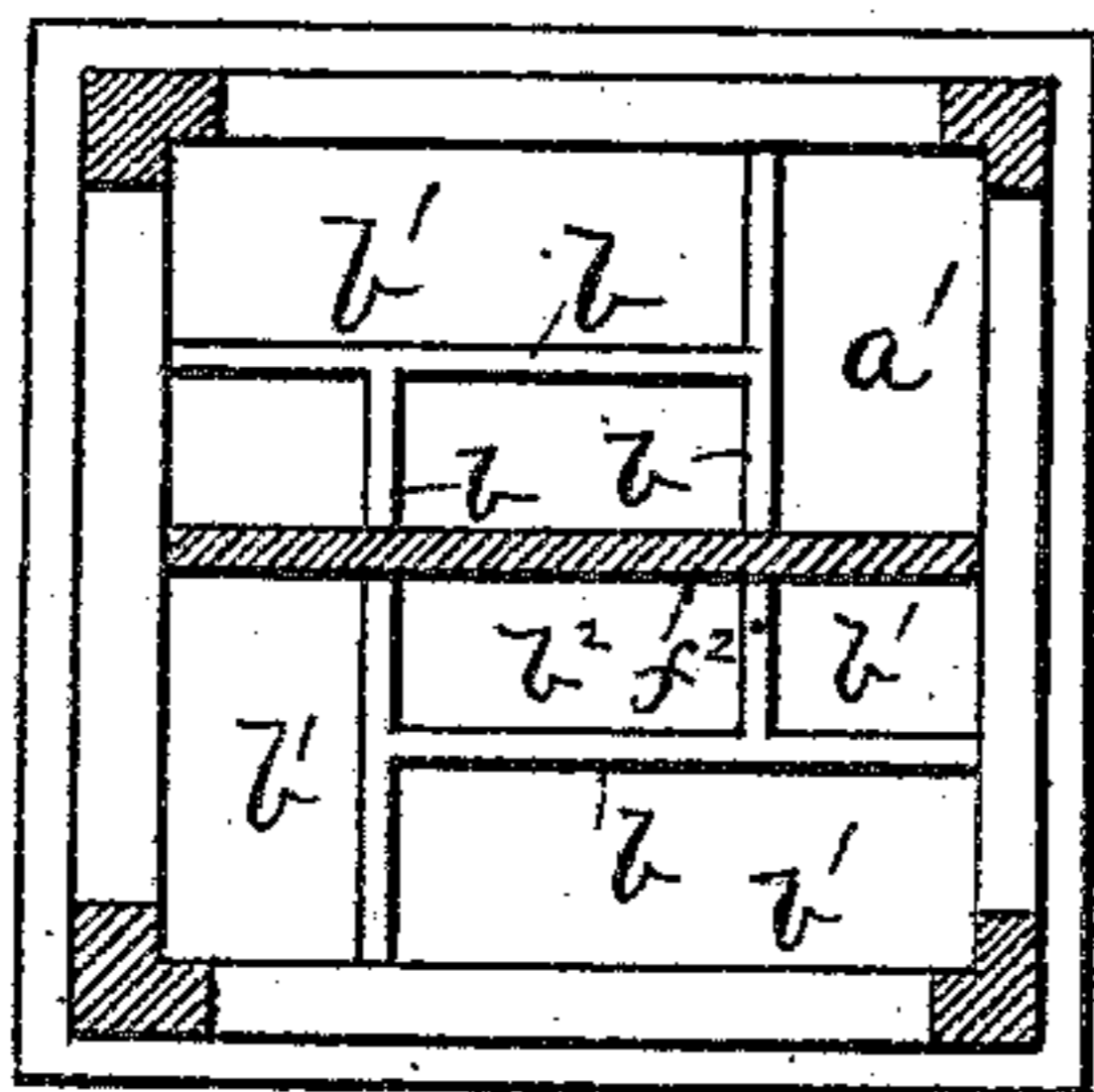
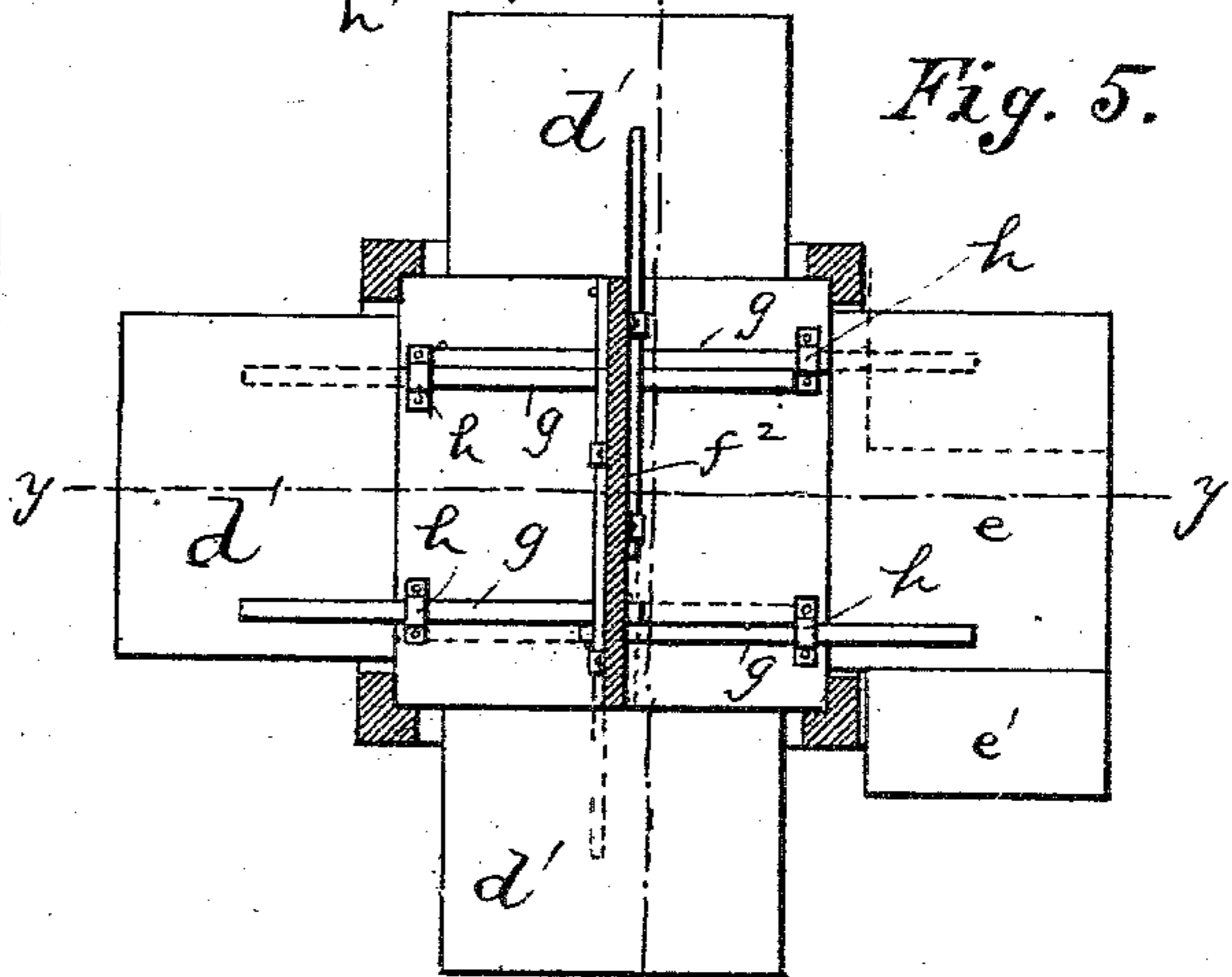


Fig. 5.



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Fig. 6.

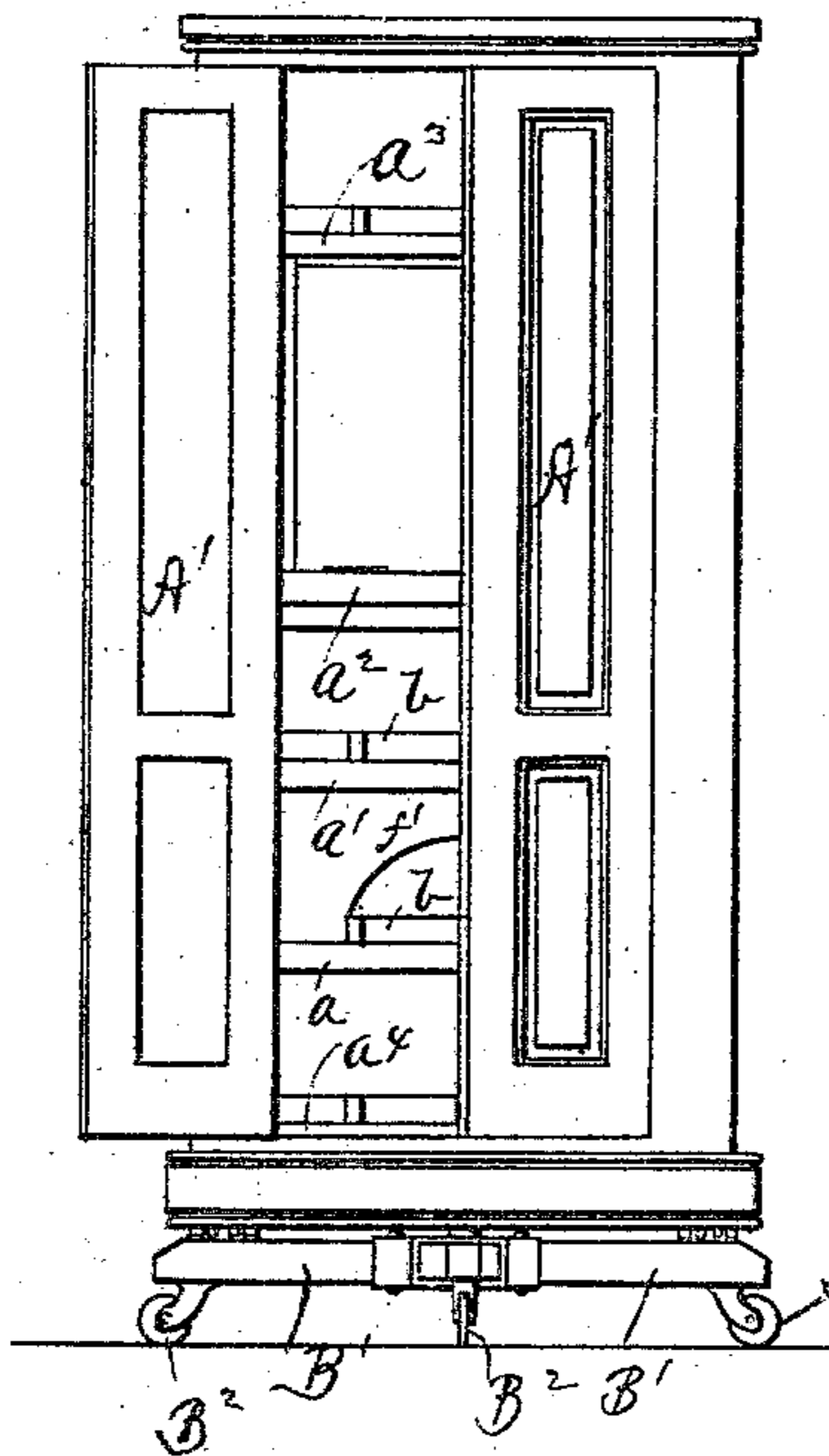


Fig. 7.

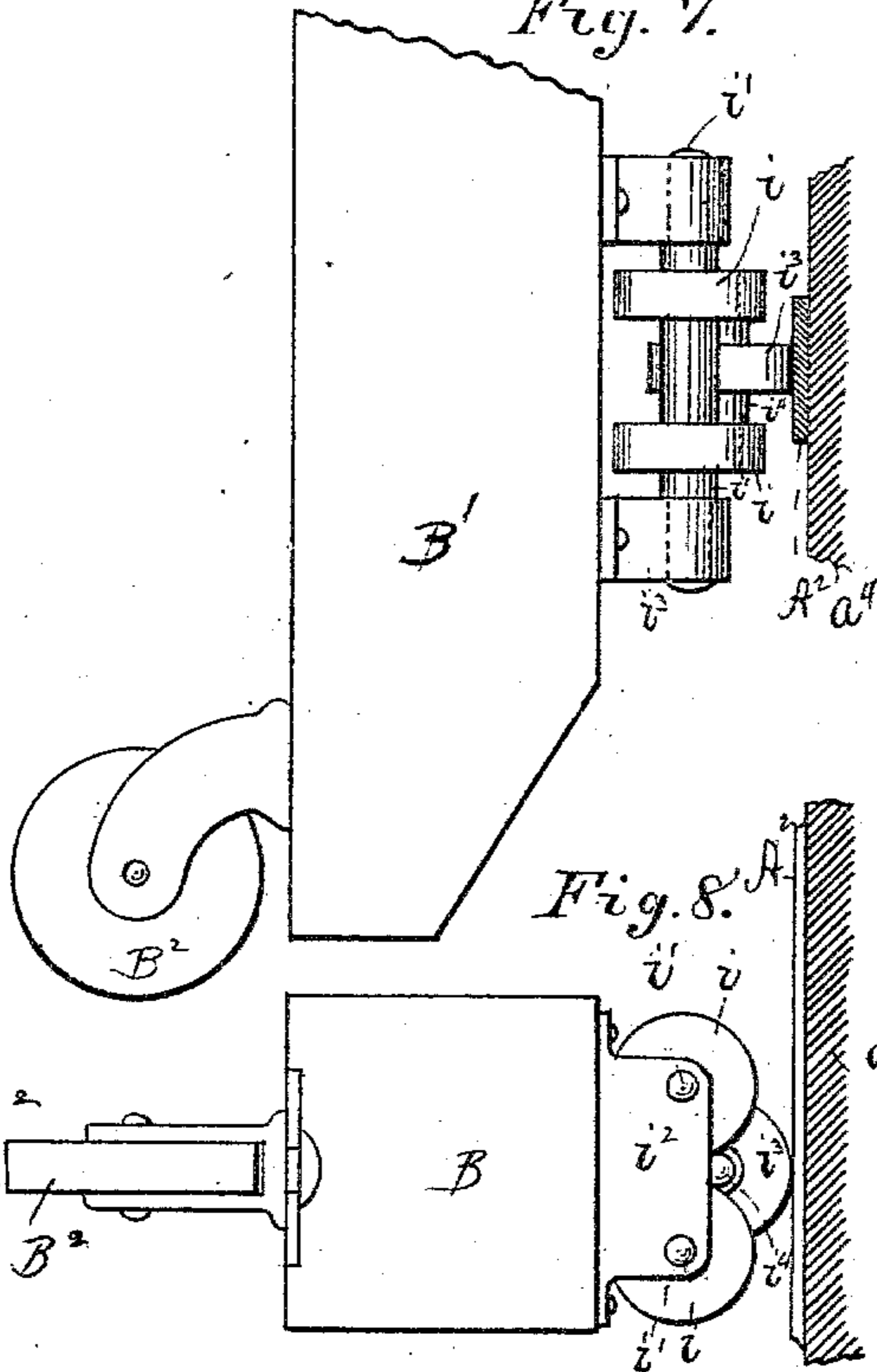


Fig. 8.

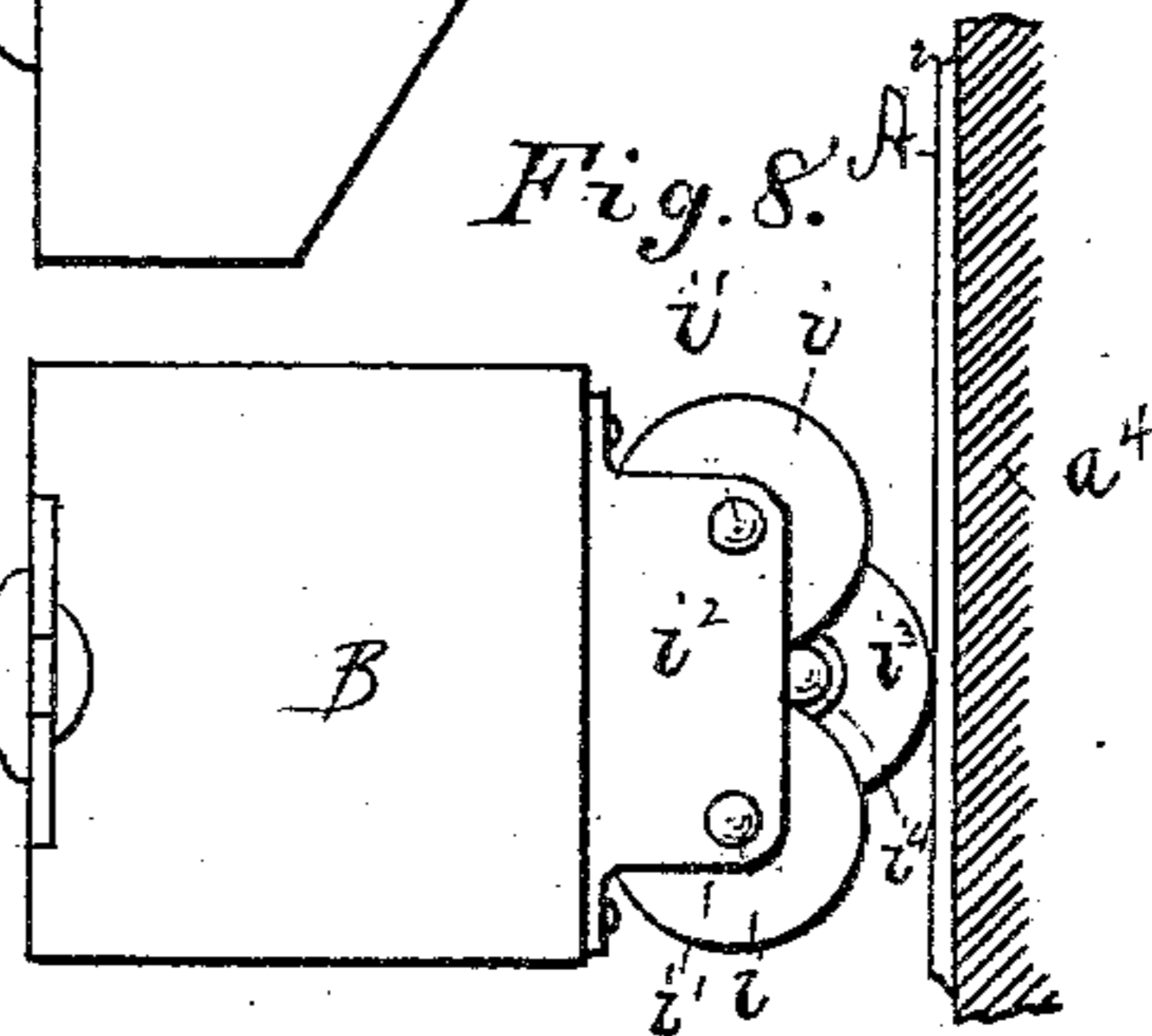


Fig. 9.

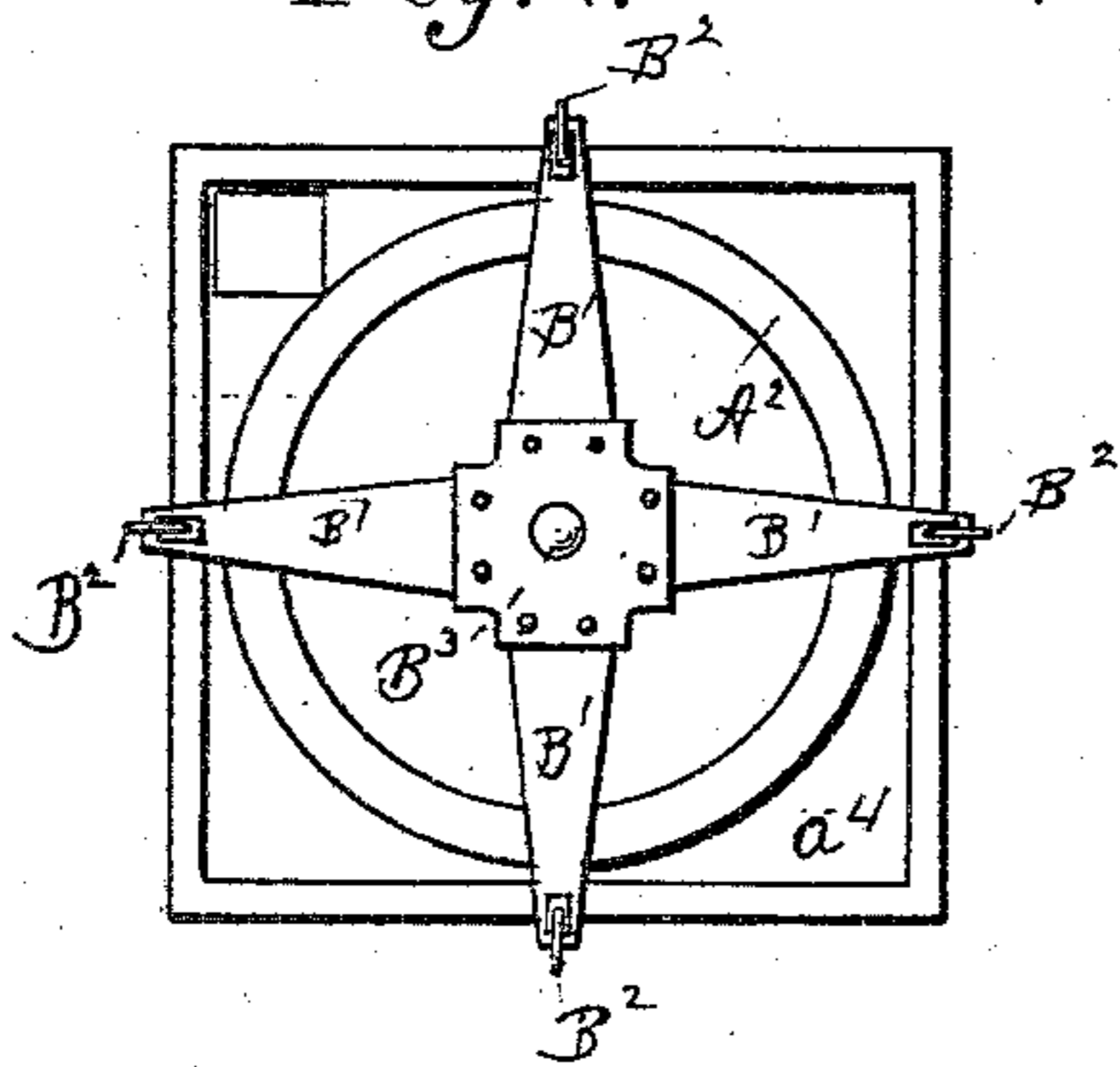
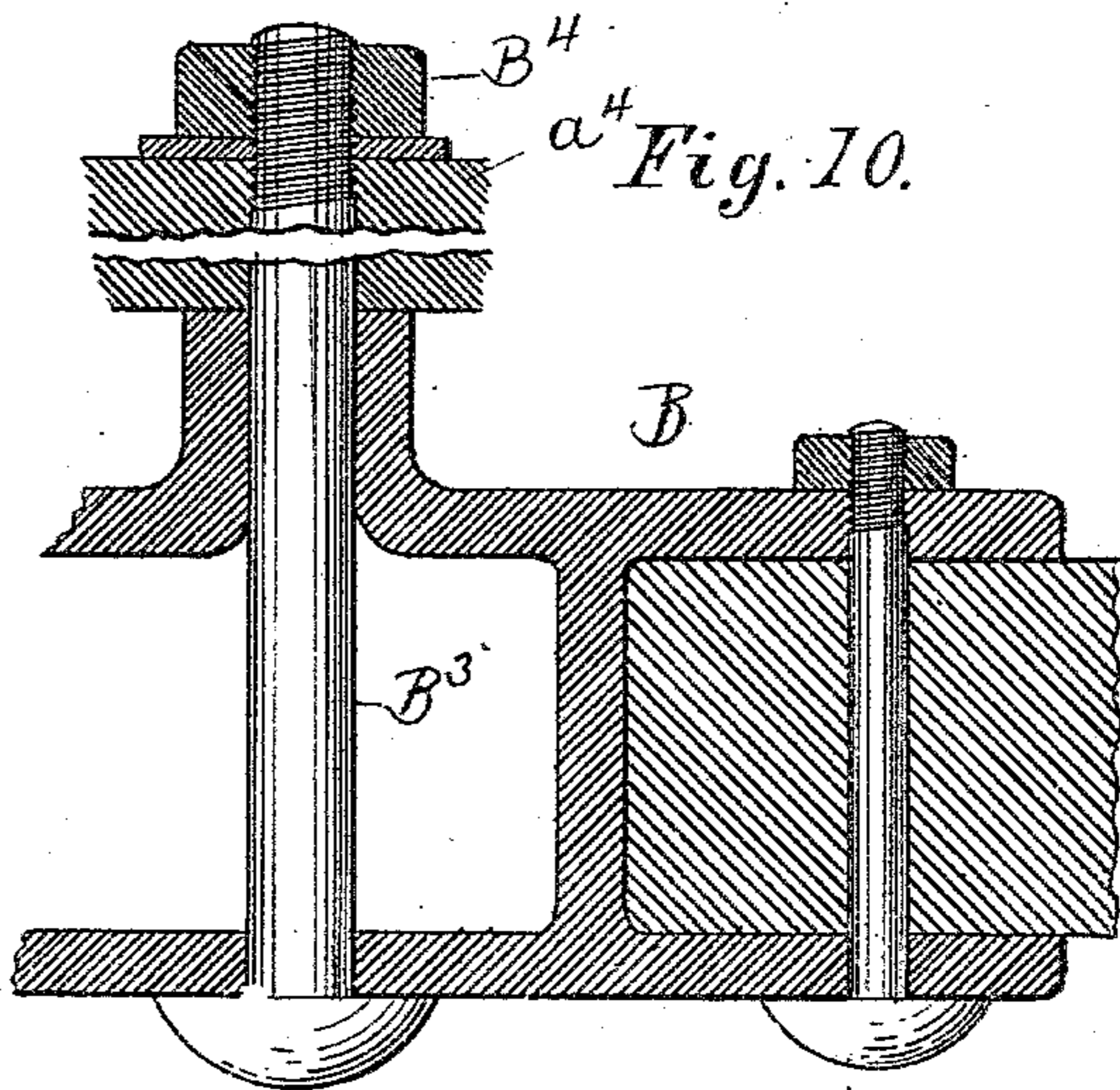


Fig. 10.



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UNITED STATES PATENT OFFICE.

PETER ELYEA MCINTOSH, OF ROCHESTER, NEW YORK.

BOOK-CASE.

SPECIFICATION forming part of Letters Patent No. 296,767, dated April 15, 1884.

Application filed August 15, 1883. (No model.)

To all whom it may concern:

Be it known that I, PETER E. MCINTOSH, a citizen of the United States, residing at Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Book-Cases; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in book-cases; and it consists in the construction, combination, and arrangement of the several parts, as will be hereinafter described and claimed.

In the drawings, Figures 1 and 2 are vertical sections of my case on respectively lines xx and yy , Fig. 5. Fig. 3 shows in detail the bar and its keeper, the said bar serving as a support for the book-supports and writing-desk hereinafter described. Figs. 4 and 5 are transverse sections on line A B, Figs. 1 and 2, looking the one down and the other up. Fig. 6 is an elevation with the doors, which are removed from Figs. 1, 2, 4, and 5, in place. Figs. 7 and 8 are detail views, enlarged, illustrating the rolling-bearing for the case proper. Fig. 9 is an inverted plan view of my improved book-case; and Fig. 10 is a detached sectional view of a part of the carriage.

The case proper, A, is made in the rectangular form shown, and provided with the doors A'. It is divided horizontally by the partitions a a' a^2 a^3 , arranged one above the other, as shown. The bottom b^4 and the partitions a a' a^2 are arranged equidistant apart, and the distance between the partition a^3 , and the top of the casing is the same as the distance between the divisions a and a' . The distance between the partitions a^2 and a^3 is greater than the other divisions named, as will be readily seen. On the upper side of the bottom a^4 and the partitions a , a' , and a^3 , I secure the strips or cleats b in about the arrangement shown in Fig. 4, whereby the book-racks b' and the interior receptacle, b^2 , is provided. Between the partitions a^2 a^3 , I arrange the pigeon-hole case c ,

the holes of which open on what, for convenience of reference, I will call the "front" of the casing. On the sides of and in rear of this case c , I form the book-racks d d' , as shown. Book-supports d' are hinged at their lower ends to the partition a^2 opposite these book-racks, and are provided at their outer ends with the ledge d^2 , whereby the books are prevented from sliding therefrom when the supports are inclined, as shown in Figs. 1 and 2. To the partition a^2 , opposite the pigeon-holes c , I hinge the writing-desk e , which turns down, as shown, and is provided with the wings or extensions e' , which turn outward, as indicated in Fig. 5, and make the said writing-table larger, as will be readily understood.

On the under side of the casing I secure or form the annular bearing A^2 , preferably made of metal to reduce friction.

The supporting-arches f f' f^2 are arranged between the bottom a^4 and partition a and the partitions a a' and $a' a^2$, as shown, the alternate arches being arranged parallel or in line with, and the adjacent ones being arranged at right angles to, each other. By this arrangement or staggering of the supports the case is given great strength and firmness, as will be appreciated.

In order to secure the book-supports and the writing-desk at any suitable degree of inclination desired, I provide the supporting-bars g , formed on their undersides with notches g' , which engage the projections h' of the keepers h , through which these bars g slide, and whereby they are held. These notches g' and projections h' serve to prevent any longitudinal movement of the bars g when the outer end of the said bar is depressed by the weight of the book-supports or writing-desks, as shown; but when the bar g is lifted up the notches will escape the projections, and it (the bar) may be adjusted longitudinally in or out, as will be seen from Fig. 3.

The carriage B is composed of the bars B' B', crossing each other at right angles, and provided on their under sides, near their outer ends, with suitable swiveled casters, B². This carriage is secured to casing A by the pivot-bolt B³, passing through the bottom a^4 of the casing, and provided with retaining-nut B⁴.

In order to facilitate the easy revolution of the casing A on its carriage, I provide on each bar B' the anti-friction devices, which I will now describe. The rollers *i i i i* are arranged in pairs, each pair secured on a common shaft, *i'*, and two of these shafts are journaled in suitable brackets, *i''*, on each bar B', at right angles to said bar, and so that the peripheries of the rollers secured on said shafts nearly touch. The rollers of each pair are secured sufficiently apart to permit the roller *i''* to rest between them. This roller is supported by its gudgeons or shafts *i'''*, resting down between the rollers of the adjacent pairs *i i*, and it bears against the rail A², and supports the casing A, providing for the same a rolling bearing, whereby it may be readily revolved, as is desirable in book-cases of the class to which my invention belongs.

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

1. The revolving book-case, substantially as described and shown, composed of the casing A, provided with suitable doors, and divided horizontally by a series of partitions, *a a' a''*, the partitions *a a'* serving as book-racks, and the partition *a''* provided on three of its sides with book-racks *d* and book-supports *d'*, hinged to said partition, and provided on its remaining side with the pigeon-hole case *c*, and the writing-desk *e*, hinged to the partition opposite the pigeon-holes, and provided with the hinged wings or extensions *e' e'*, all as and for the purposes set forth.

2. In a book-case, the combination of the book-supports and writing-desk, hinged to the casing and turning outward, as described, the loops or keepers *h*, constructed with the projection *h'*, and the supporting-bars passed through said keepers, and provided on their under side with a series of notches arranged to engage the projection *h'*, whereby the said bars may be secured at any point desired, and the book-supports and desks supported on the outer end of said bars held at any suitable degree of inclination, substantially as set forth.

3. The combination, with the casing, of the partitions *a a' a''* and the supports *f f' f''*, said supports being staggered or arranged as described, the adjacent ones being at right angles and the alternate ones in line with each other, substantially as and for the purposes specified.

4. The combination of the casing, a writing-desk hinged to and turning outward from the casing, the supporting-bar movable outward under the writing-desk, said bar being indented, and a device, substantially as shown, for engaging said indentations, whereby said bar may be held at any point desired, as and for the purposes set forth.

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

PETER ELYEA MCINTOSH.

Witnesses:

WM. R. MUDGE,
A. W. MUDGE.