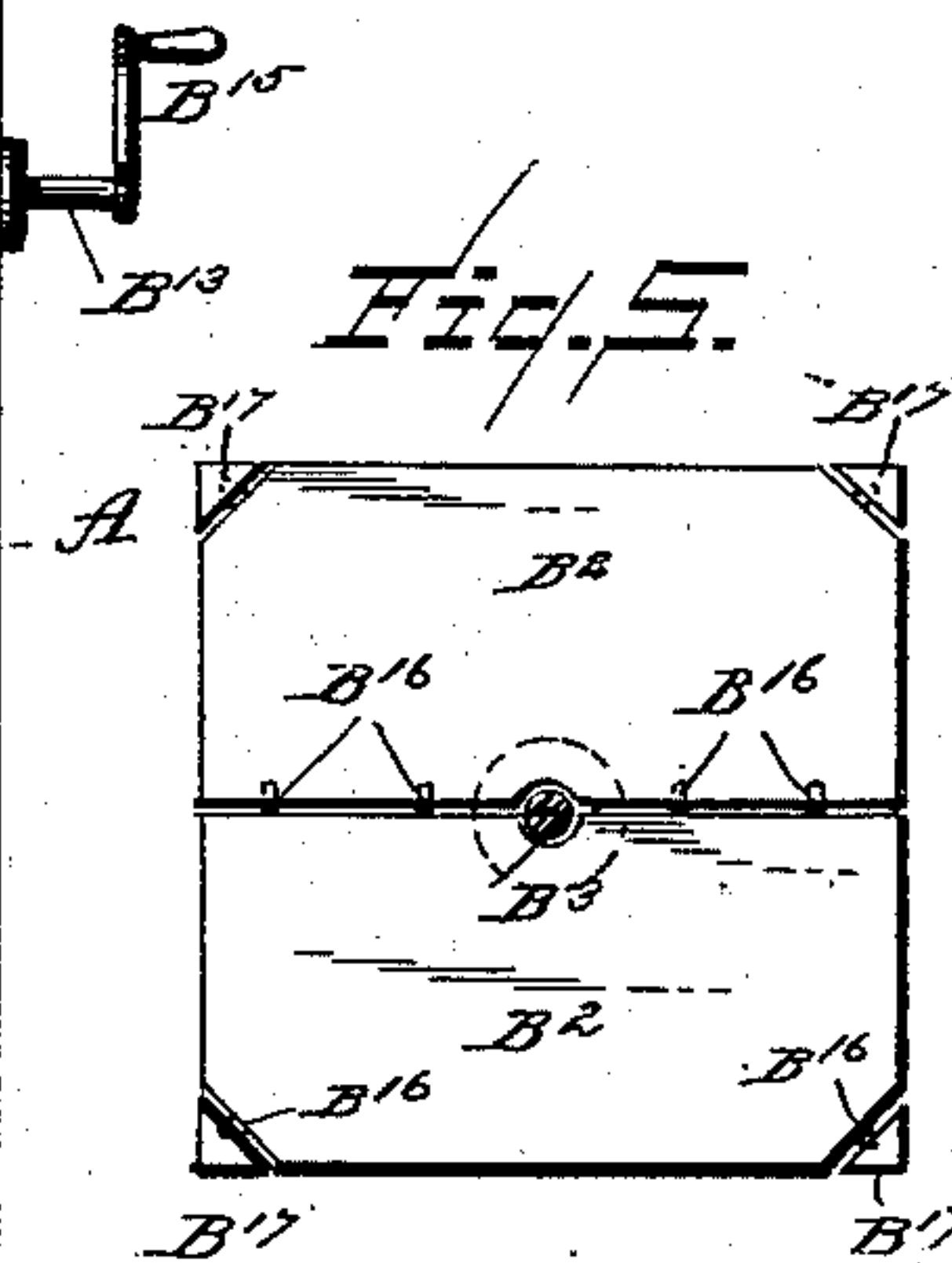
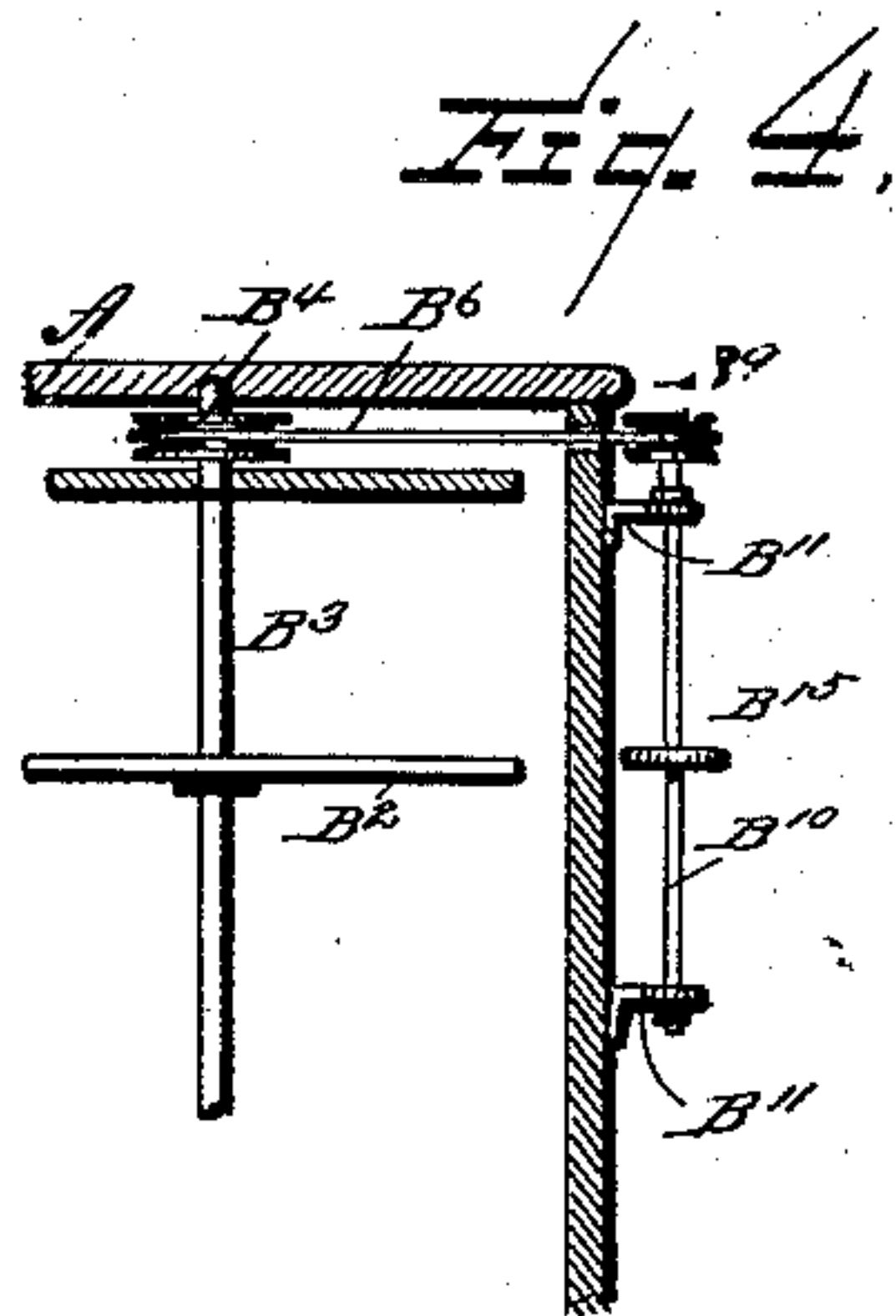
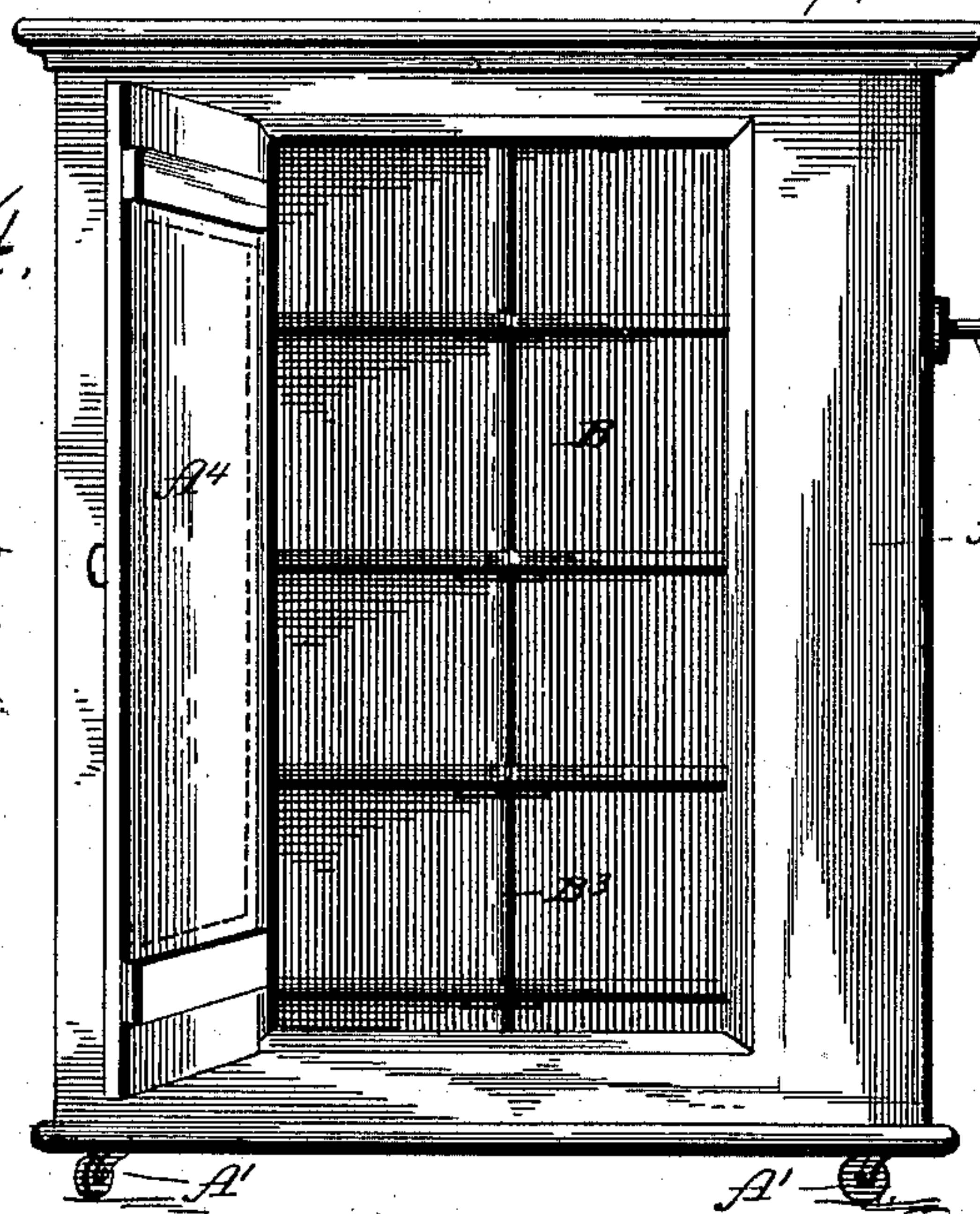


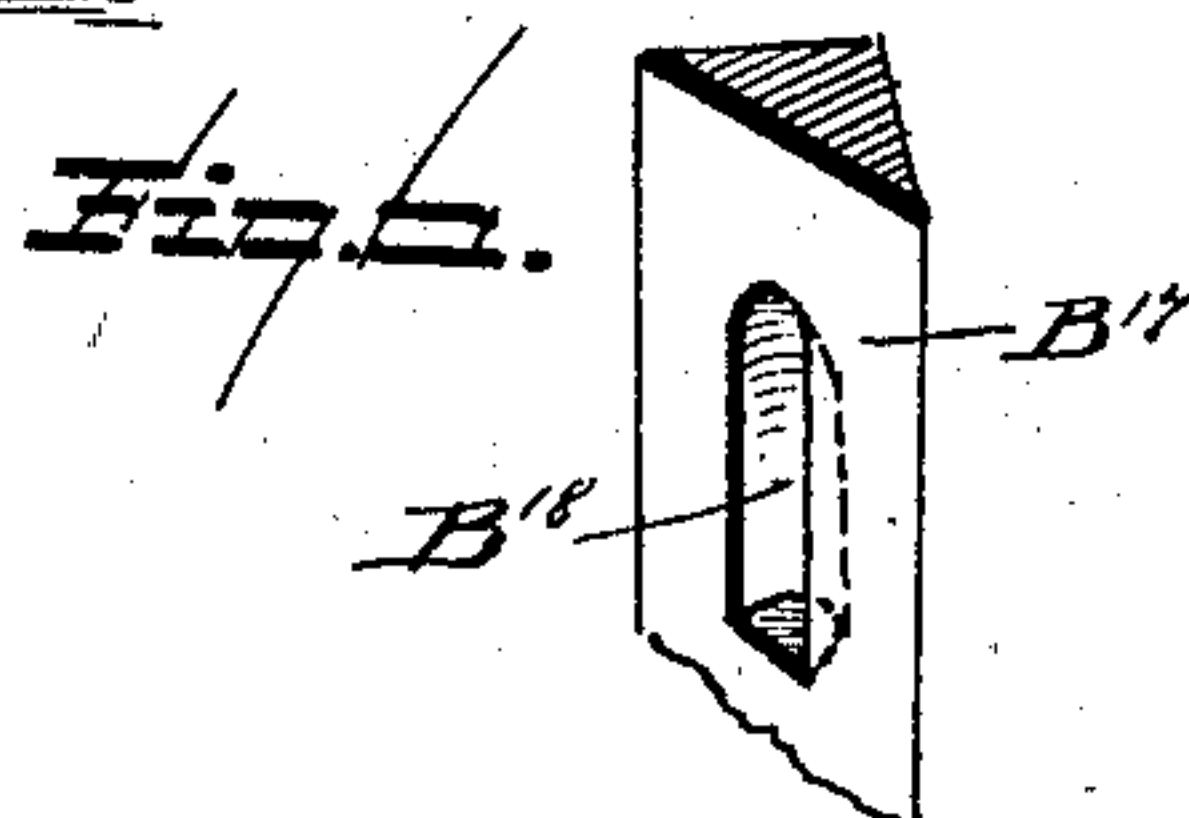
J. B. ZETTLER.
REVOLVING BOOK CASE.

Patented July 9, 1889.



Witnesses:

S. C. Mills,
W. S. Duwall



Inventor:

J. B. Zettler.

By *ER Stocking*
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UNITED STATES PATENT OFFICE.

JOHN B. ZETTLER, OF CANTON, OHIO.

REVOLVING BOOK-CASE.

SPECIFICATION forming part of Letters Patent No. 406,555, dated July 9, 1889.

Application filed January 10, 1888. Serial No. 260,286. (No model.)

To all whom it may concern:

Be it known that I, JOHN B. ZETTLER, a citizen of the United States, residing at Canton, in the county of Stark, State of Ohio, have invented certain new and useful Improvements in Revolving Book - Cases, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention has relation to revolving book-cases; and among the objects in view are to provide a book-case of the class described that will thoroughly protect from dust and vermin all books placed therein, and that can be revolved without disturbing articles resting on the top of the case, and to provide mechanism within convenient reach of the hand whereby said case may be revolved to bring any of the shelves opposite the opening or door, so that access can be had to any particular book contained in the case.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be particularly pointed out in the claim.

Referring to the drawings, Figure 1 is a central vertical section of a revolving book-case constructed in accordance with my invention. Fig. 2 is a similar view of a modified construction. Fig. 3 is a front elevation. Fig. 4 is a further modification, and Fig. 5 is a plan showing manner of securing shelves.

Like letters of reference indicate like parts in all the figures of the drawings.

A represents a suitable outer casing, which may be either polygonal, cylindrical, or rectangular, as desired, which casing is mounted upon suitable supports—in this instance casters A'.

B represents the book-rack, which, by the usual vertical partitions B', is divided into compartments having shelves B². These shelves are preferably removable, as hereinafter described, so that the case may be used as a wardrobe or show-case for clothing and other articles desired to be protected or displayed.

The rack B is provided with a central vertical rod B³, the terminals of which are seated and adapted to revolve in bearing-plates A³, secured to the top and bottom of the outer case A. The case A may consist of four or

more vertical corner pieces or posts, a wire-netting surrounding the case with the exception of an opening or door; or, as shown in Fig. 1, the walls of the casing may be provided with a door A⁴, adapted to be closed and locked, so that the books or other articles contained in the rack may be preserved against vermin, thieves, &c. The door A⁴ may be omitted and a suitable curtain substituted therefor, if desired.

Secured to the central rod B³ is a beveled gear B⁴, and meshing therewith is a gear B⁵, mounted upon a shaft B⁶, supported in bearings B⁷. The shaft B⁶ is provided with a similar gear B⁸ at its opposite end, with which meshes a beveled gear B⁹, mounted upon a vertical rod or shaft B¹⁰, supported in suitable bearings B¹¹, extending from the outer casing A, which shaft carries a second gear B¹². A shaft B¹³, journaled in the wall of the outer casing, is provided with a gear B¹⁴ at its inner end, which meshes with the gear B¹², and is provided with a suitable operating-crank B¹⁵ at its opposite end, which crank is upon the outside of the outer casing and within easy grasp of the hand.

By the construction and arrangement of the gearing described it is apparent that by revolving the crank B¹⁵ motion will be imparted to the shafts and gears and from them to the gear B⁴ and the central vertical shaft B³, thus revolving the book-rack so as to bring any book, shelf, or volume of books opposite the opening or door A⁴, when they may be readily removed or replaced, as the case may be.

Numerous arrangements of the gearing may be adopted or substituted for the one shown—for instance, that shown in Fig. 2, in which case the arrangement is much simpler; or, as shown in Fig. 4, belts and pulleys may be substituted for the gears and shaft illustrated.

In Fig. 2 I have illustrated an additional means for supporting the book-rack solidly and preventing the same from wobbling upon the central bearing-plate (only one being preferably used in such instance) after the same has become worn; and it consists in providing the bottom of the outer case with inverted casters, against which the lower shelf of the book-rack may ride.

In Fig. 5 I have shown one manner of forming the shelves removable, and it consists in forming tenons B¹⁶ on the shelf at its inner edge, designed to enter opposite apertures in the inner edge of a companion shelf. The outer corners of the shelves may be supported in a like manner—namely, provided with tenons adapted to rest in notches formed in the inner faces of the usual corner-posts B¹⁷ or upon simple ledges. These notches are formed as shown at B¹⁸ in Fig. 6, and are designed to receive the tenons at the outer corners of the shelves, as shown in Fig. 5. As thus constructed each shelf is composed of two halves having tenons at the corners, and one having tenons at its inner edge and the other having holes to receive said tenons in its inner edge. Each half is provided with a semicircular notch at the middle of its inner edge, designed to come together and embrace the center post or shaft B², as shown at Fig. 5. Just under the point of juncture of these notches is the supporting-flange. (Shown in Fig. 1 and in dotted lines in Fig. 5.) To insert the shelves, one half is introduced on each side of the shaft B² and the corner tenons introduced into the notches B¹⁸. In this

preliminary position the two halves slope upward toward the middle—like a gable roof—the inner tenons on one half being contiguous to the inner holes on the other. The middle edges are then depressed and the shelves brought into a common horizontal plane, the effect being to thrust the tenons into their holes and solidly adjust the shelves upon their supporting-flanges.

Having described my invention and its operation, what I claim is—

In a revolving book-case, an outer casing provided with shaft-bearings and friction-rollers, in combination with an interior casing mounted upon a central shaft pivoted in said bearings, and consisting of corner-posts B¹⁷ and removable shelves B², connected to each other and to the corner-posts by pins B¹⁶, and suitable gearing, substantially as and for the purpose specified.

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

JOHN B. ZETTLER.

Witnesses:

NILS LARSON,
HERMANN WYSER.