

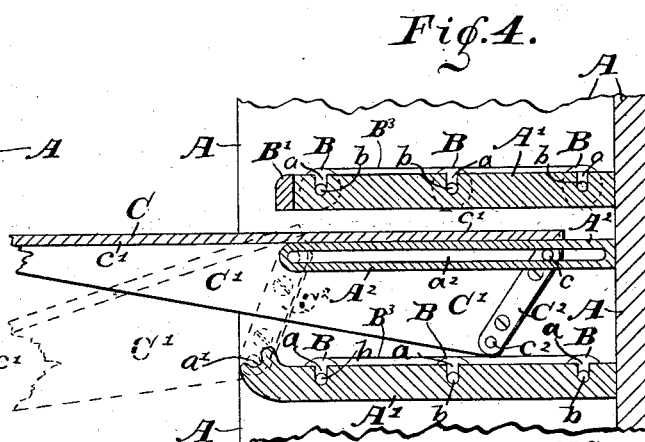
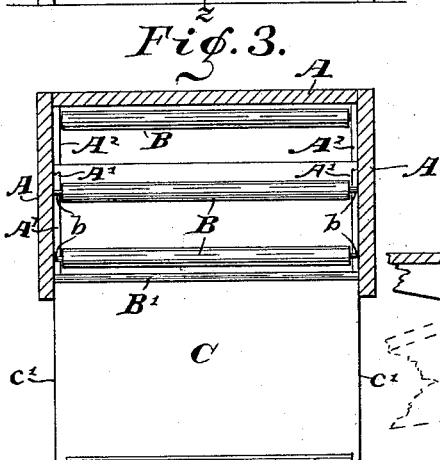
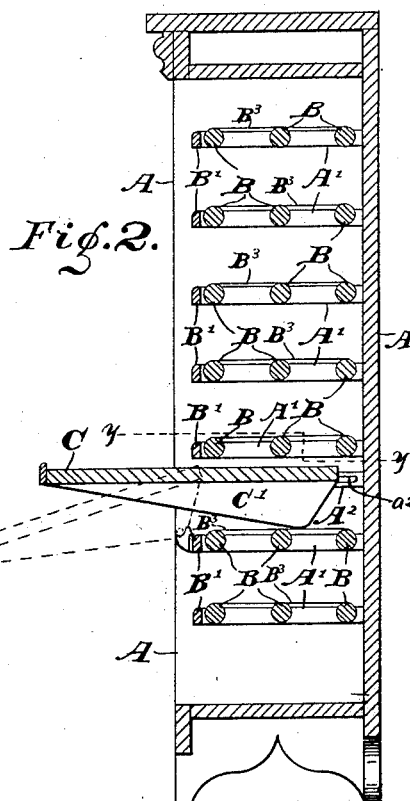
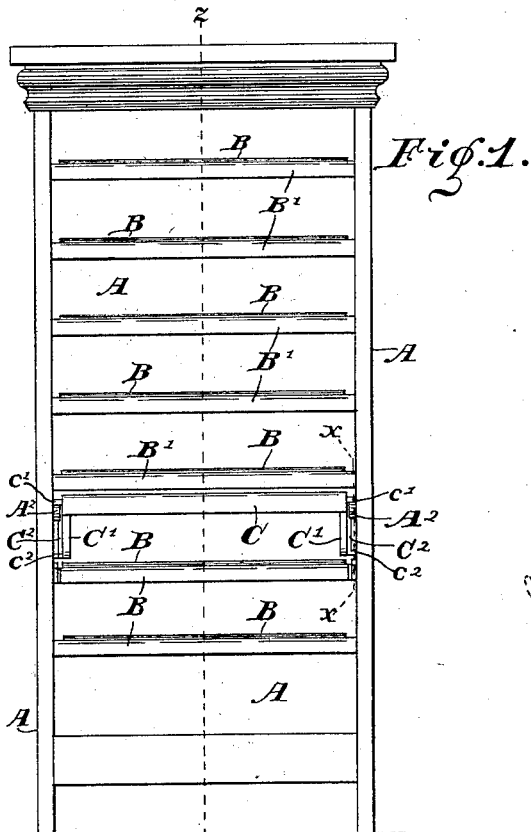
(No Model.)

H. H. & C. W. OLDS.

BOOK CASE.

No. 345,986.

Patented July 20, 1886.



WITNESSES.

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BOOK-CASE.

SPECIFICATION forming part of Letters Patent No. 345,986, dated July 20, 1886.

Application filed December 22, 1884. Serial No. 150,892. (No model.)

To all whom it may concern:

Be it known that we, HENRY H. OLDS and CHARLES W. OLDS, of the city of Martinsville, county of Morgan, and State of Indiana, have invented certain new and useful Improvements in Book-Cases, of which the following is a specification.

Our said invention relates to an improved construction of book-cases especially designed for heavy and unwieldy books—such as public records, &c.; and it principally consists in providing said cases with shelves composed exclusively of rollers extending entirely across the book-spaces, whereby the labor of handling and the wear and tear of the books is much lessened and space economized.

It further consists in the combination, with such a case, of an adjustable reference-shelf constructed to be used therewith, as will be hereinafter more particularly described.

Referring to the accompanying drawings, which are made a part hereof, and on which similar letters of reference indicate similar parts, Figure 1 is a front elevation of a book-case embodying our said invention; Fig. 2, a transverse vertical sectional view of the same, looking to the left from the dotted line *z z* in Fig. 1; Fig. 3, a horizontal sectional view looking downwardly from the dotted line *y y* in Fig. 2, the canvas belt being removed, and Fig. 4, a detail sectional view looking to the left from the dotted line *x x* in Fig. 1.

In said drawings the portions marked A represent the casing or frame-work of the book-case; B, the rollers, and C the adjustable shelf on which the books may be placed while in use.

The case A is or may be a simple box-like casing, similar to an ordinary book-case, and therefore in itself needs no special description. It is provided with cleats A' on each side of its interior, in which are formed bearings *a*, for the journals of the rollers. Said journal-bearings are preferably formed open topped, for the purpose of allowing the rollers to be easily removed or put in place. The front ends of one set of the cleats are extended out and formed into catches *a'*, which engage with lugs on the under side of the shelf C and support said shelf when it is drawn out for use, as will be presently more fully described.

Slides A², provided with longitudinal grooves *a*², are secured at the proper height for the shelf between a pair of the cleats, as shown.

The rollers B have journals *b* formed on or inserted in their ends, which are mounted in the bearings *a* in the cleats A'. They are of a suitable size to support the books, and each set of cleats is preferably provided with three, as shown, although two or four or any other number may be used if desired. A strip, B', is preferably secured in front of each set of rollers, upon which may be placed labels indicating the character of the books, and which also conceal the rollers, thus giving the roller-shelf the appearance of a regular shelf. A belt, B³, of canvas or other flexible material, is also preferably provided around each set of rollers, to prevent any friction between said rollers and the books thereon.

The shelf C is provided for the purpose of supporting the books while being used for reference, and is preferably provided with sides C', which strengthen the shelf, and are provided on their rear ends with metal strips C², extending transversely thereof. Said shelf is mounted on the slides A², guide-studs *c* on the top part of the metal strip C² engaging with the grooves, and a flange, *c'*, on the ends of said shelf resting on the top of said slide, thus adapting said shelf to be readily slid in and out. Lugs *c*² are formed on the lower ends of said strip C², which engage with the catches *a'* at the ends of the cleats, and thus support the shelf in an inclined position when drawn out. (See dotted lines in Fig. 2.) As will be readily seen the sides C' might be cast of metal, with the guide-studs *c*, flange *c'*, and lugs *c*² all cast integrally therewith, without departing from my invention. There being no back extending down from the shelf it does not impair the utility of the next roller-shelf below it, the space between the under side of the shelf C and said rollers being wide enough to receive a book.

The operation of our invention is as follows: When a book which the case contains is desired for use, it is easily pulled out, and is conveniently supported on the shelf C, which is pulled out for this purpose. When the use of the book is concluded, it is put back in place, a slight push being all that is required

to slide it into position. As the rollers extend entirely across the several book-spaces and form the whole shelf, no extra space is taken up, an even continuous support for the book is provided, while the whole device is cheap and simple in its construction.

We are aware that book-cases have heretofore been constructed having shelves provided with rows of short rollers arranged at intervals across their surfaces; and we are also aware that shelves have been provided with a roller at their front edges to facilitate the handling of the books; but we are not aware that any book-shelf has ever been constructed wholly of rollers, which extend entirely across the case and afford the entire support for the books.

Having thus fully described our said invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination, in a book-case, with the permanent shelves, of a sliding shelf, C, adapted to receive the books when drawn from their regular shelves, substantially as shown and described, and for the purposes specified.

2. In a book-case, the combination of the casing A, roller-shelves mounted therein, the slides A², and the adjustable shelf C, mounted thereon, substantially as set forth.

3. The combination, in a book-case, of the casing A, having cleats A', and sides A², roller-shelves B, and shelf C, said shelf being pro-

vided with sides C', and said sides having metal strips C" secured across their rear ends, the top ends of which are provided with guide-studs c, which engage with longitudinal grooves in the slides A², and the lower ends of which are provided with legs c', which engage with catches a' at the end of the cleats A' when said shelf is drawn out, whereby said shelf is supported, and the ends of said shelf having flanges which rest upon said slides, all substantially as set forth.

4. In a book-case having roller-shelves, the combination of the rollers and a flexible belt surrounding each shelf, substantially as set forth.

5. In a book-case, the combination, with the casing, of cleats secured to the sides of its interior and provided with journal-bearings, rollers journaled in said bearings and constituting the book-shelves of said case, and a flexible belt placed around each set of rollers, substantially as set forth.

In witness whereof we have hereunto set our hands and seals at Martinsville, Indiana, this 16th day of December, A. D. 1884.

HENRY H. OLDS. [L. S.]
CHARLES W. OLDS. [L. S.]

In presence of—

CHAS SEATAN,
MARSHAL BOAZ.