

(No Model.)

J. D. WALSH.  
EXTENSION BOOK CASE.

No. 348,252.

Patented Aug. 31, 1886.

Fig. 1.

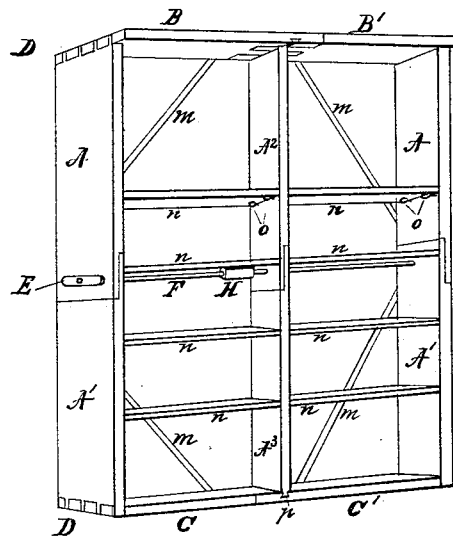
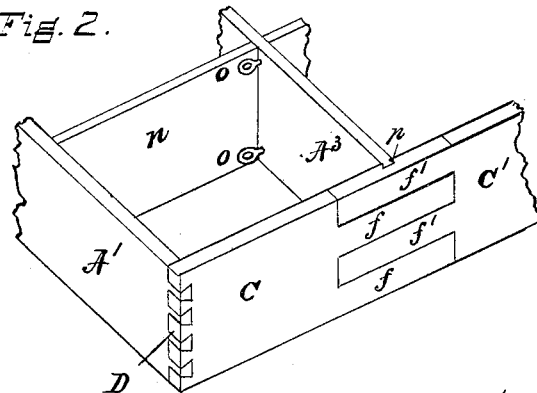


Fig. 2.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

JOHN D. WALSH, OF COVINGTON, KENTUCKY.

## EXTENSION BOOK-CASE.

SPECIFICATION forming part of Letters Patent No. 348,252, dated August 31, 1886.

Application filed January 11, 1886. Serial No. 188,270. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN D. WALSH, of Covington, Kenton county, Kentucky, have invented a new and useful Improvement in Folding Extension Book-Cases, of which the following is a full, clear, and exact specification, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of my book-case. Fig. 2 is a view in perspective of one corner of my book-case.

Similar letters of reference in the several drawings denote the same parts.

My invention relates to a system of portable shelves, and more especially to such a system when it is used as a portable extension book-case.

The advantage of my system, in addition to being portable, is in the small amount of lumber required for a book-case of a given capacity compared with an ordinary book-case, and also in the ease and simplicity with which it is put together or enlarged.

My invention consists, reference being had to the accompanying drawings, of the side pieces, A and A', the top and bottom pieces, B B' and C C', and of the means for rigidly connecting these pieces. The pieces C and C' B B' are spliced on their inner ends, having the tongues or projections *f f* and *f' f'*. The outer ends of the pieces C C' and B B' are cut in dovetail tongues, which fit into corresponding dovetail grooves in the end of the end piece, A', as shown in Fig. 2, and the inner ends of A and A' are cut so that they interlace or overlap. The pieces B B' are made in every respect as C C'. The center upright pieces, A<sup>2</sup> and A<sup>3</sup>, are in all respects similar to A and A'.

*m m* are braces extending from the end pieces, A and A', to the top pieces, B and B', and to the bottom pieces, C and C'.

*o o* are screw-eyes let into the upright pieces and serve as a support for the shelves *n n*. By means of said screw-eyes the height of any one shelf and the distance between shelves may be readily adjusted. I obtain by

this means a decided advantage over the ordinary book-shelf using notched pieces.

E is a metal plate on the outside pieces, A and A', to which the rod F is attached, said rod F being in two pieces, one on each side of the nut H, which nut H serves to lengthen and shorten the said rod F and so to bind the book-case together.

The overlapping ends of the pieces A A' and A<sup>2</sup> and A<sup>3</sup> may be of any desired length, in order that the rod F may be higher or lower in said laps, as the relative distances between shelves may require.

It is evident that the combined effect of the rod F and the braces *m* serves to render the book-case extremely rigid, however light the pieces used to make it.

If it be desired to extend this book-case, it may be done by inserting additional pieces composed in all respects as are the center pieces (shown as A<sup>2</sup> and A<sup>3</sup>) and additional top and bottom pieces meshing with the tongues *f f* and *f' f'* of pieces C and C'. It will be seen that the pieces A<sup>2</sup> and A<sup>3</sup> fit into the top and bottom pieces with a dovetail, as at *p*, Fig. 1. My book-case may also be made with the upright pieces unbroken.

Having thus described my invention, what I claim as new, is—

1. In a portable book-case, the top pieces and the bottom pieces cut so as to intermesh, and held together by a central upright piece which fits into them horizontally with a dovetail, substantially as described.

2. In a book-case, the clamping-piece E, the rod F, the nut H, the end pieces of said book-case, and the intermeshing top and bottom pieces of said book-case, substantially as described.

The foregoing specification of my invention signed by me this 2d day of January, A. D. 1886.

JOHN D. WALSH.

Witnesses:

OLIVER B. JONES,  
JEPHTHA GARRARD.