

No. 631,312.

Patented Aug. 22, 1899.

F. MACEY.
SECTIONAL BOOKCASE.

(Application filed Mar. 9, 1899.)

(No Model.)

2 Sheets—Sheet 1.

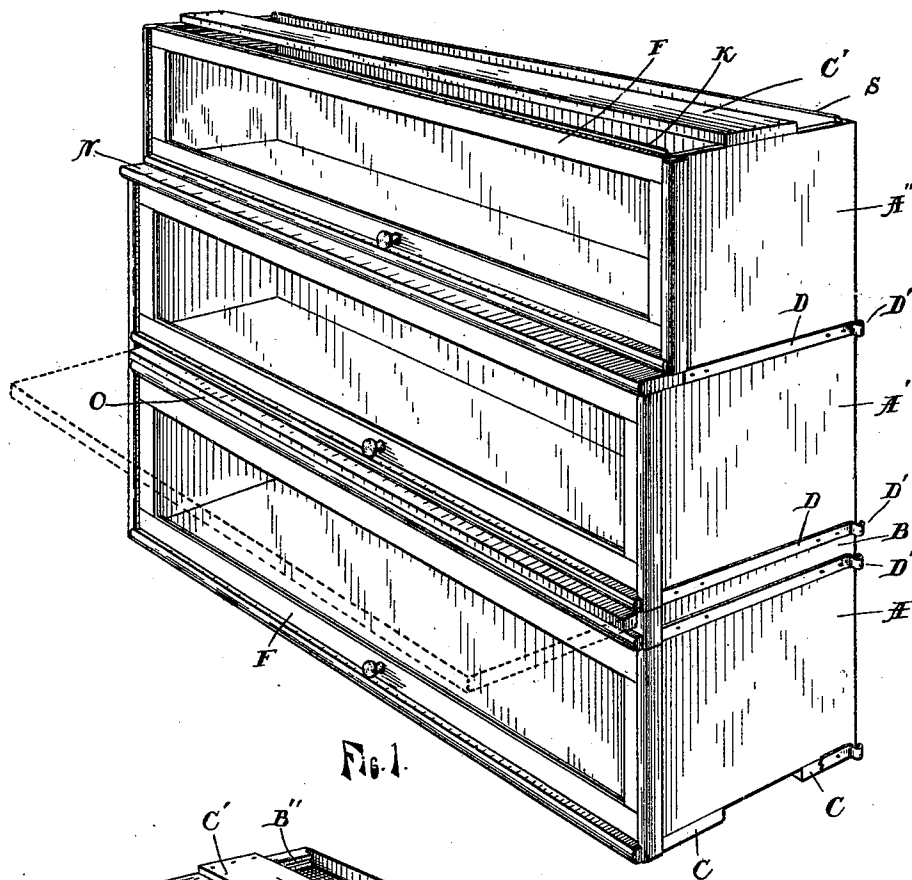


Fig. 1.

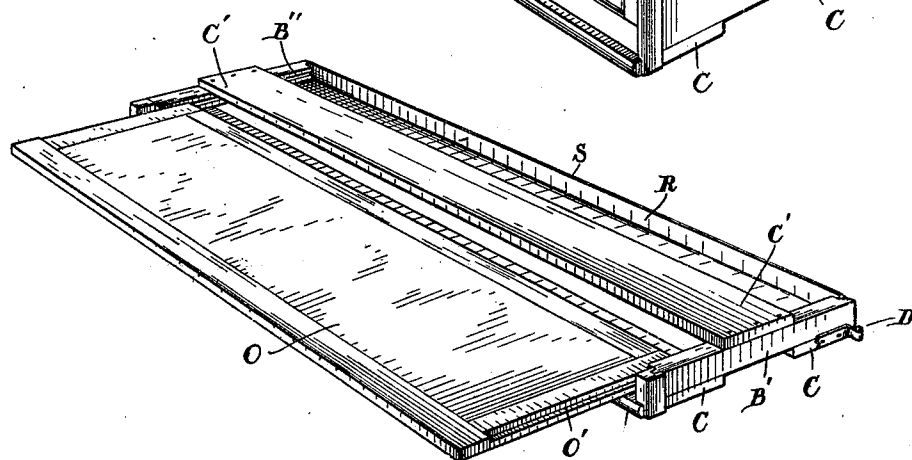


Fig. 2.

WITNESSES:

George Hollway
Edw. O. Hood

INVENTOR:

Frank Macey.
By *Moulton & Flanders.*
Attorneys.

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2 Sheets—Sheet 2.

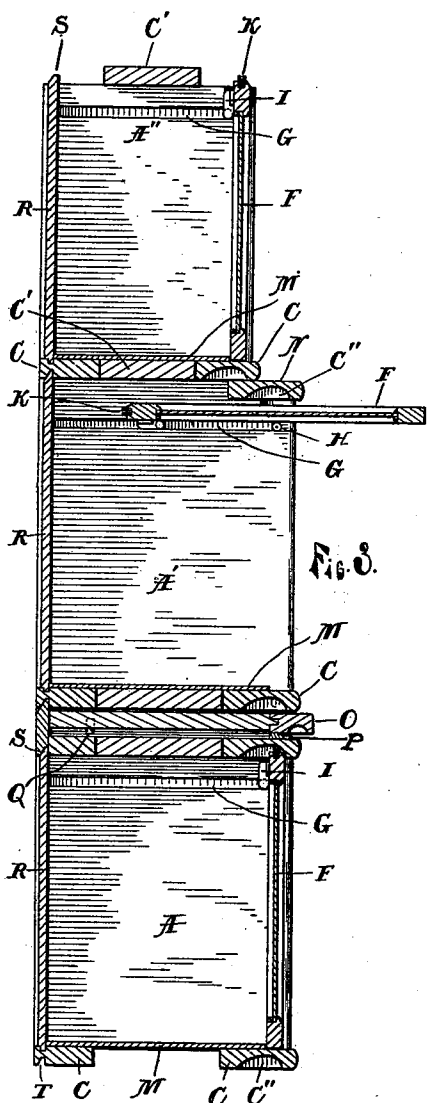


Fig. 8.

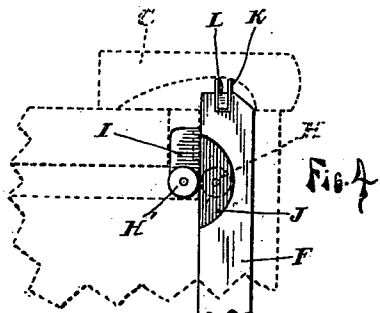


Fig. 4.

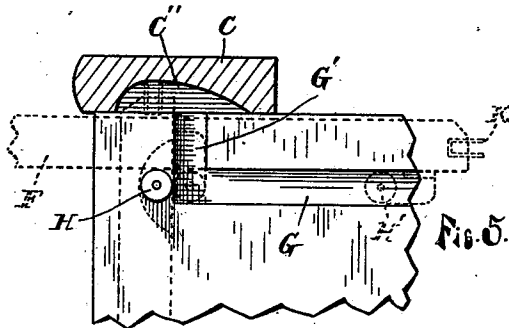


Fig. 5.

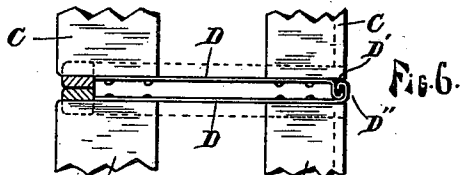


Fig. 6.

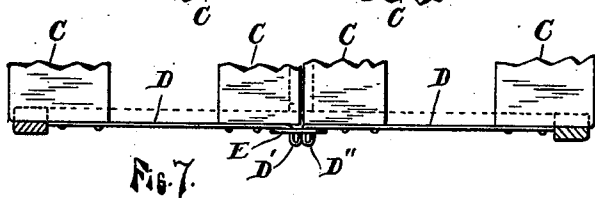


Fig. 7.

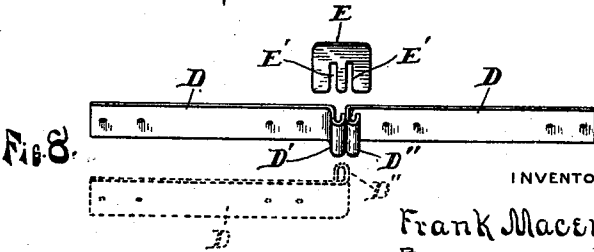


Fig. 8.

WITNESSES:

George Hollway
Edna O. Hood

INVENTOR:

Frank Macey.

By
Moulton & Standish
Attorneys.

UNITED STATES PATENT OFFICE.

FRANK MACEY, OF GRAND RAPIDS, MICHIGAN.

SECTIONAL BOOKCASE.

SPECIFICATION forming part of Letters Patent No. 631,312, dated August 22, 1899.

Application filed March 9, 1899. Serial No. 708,334. (No model.)

To all whom it may concern:

Be it known that I, FRANK MACEY, a citizen of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Sectional Bookcases; and I do hereby 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.

My invention relates to improvements in the construction of sectional bookcases; and its object is to provide improved means for supporting and operating the fronts of the sections, to provide improved fastenings at the ends of the sections, to provide an improved reducing-section, to provide a suitable sliding shelf-section, and to provide the device with certain new and useful features hereinafter more fully described and particularly pointed out in the claims.

My invention consists, essentially, in the several improved details of construction hereinafter described, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective of several sections of a device embodying my invention; Fig. 2, a perspective detail of the shelf-section; Fig. 3, a vertical section from front to rear of the parts shown in Fig. 1; Fig. 4, a detail showing a portion of the front of a section with adjacent parts of the section in dotted lines; Fig. 5, a detail showing an elevation of a portion of the inner side of the end of a section; Fig. 6, a detail in plan view showing the fastenings interlocked with the sections end to end; Fig. 7, the same as arranged with the sections back to back, and Fig. 8 a perspective of the end fastenings.

Like letters refer to like parts in all of the figures.

A represents one of the deeper sections of the case; A', a reducing-section of the same; A'', one of the shallower sections of the case adapted to use above the reducing-section, and B a sliding shelf-section adapted to be inserted between the bookcase-sections.

Each section is provided with an incomplete bottom, consisting of the strips C C, located at each side, and an incomplete top, consisting of the strip C', located at the middle

and adapted to fit between the strips C C of the adjacent section above and complete the bottom of the same, and by thus interlocking hold the sections in line one above the other.

To form a finish and cover the ends of the strips C C C' and to provide at the same time fastenings for attaching the sections horizontally end to end or back to back, strips of metal D are provided of uniform width and thickness throughout and, extending across the ends of said strips, are secured to the bottom strips C C of each section. The rear ends of each of these strips D are provided with interlocking hooks D' D'', the strip D on one end of the section extending to the rear corner thereof and thence outward and forward and thence inward, and the other extending to a distance short of the corner and thence outward and rearward and thence inward, whereby they may be interlocked, as in Fig. 6, when the sections are placed end to end in line or coupled by a plate E having two parallel slots E' E' when the sections are placed back to back, as in Fig. 7. The plate E is engaged by the ends of the hooks D' D'' and pressed against the strips D, and thus the latter are held in line when coupled by said plate. I am aware that metallic strips having interlocking dovetail tongues and grooves are used. These are necessarily expensive and heavy. By the construction shown I am enabled to use strips of band-iron or sheet metal, and thus make my device much cheaper and lighter.

Each section is provided with a front F, adapted to assume a vertical position and close the front of the section against ingress of dust or to assume a horizontal position within the upper part of the section. For this purpose the ends of the sections are provided near the top of each with horizontal grooves G, which grooves turn at right angles near the front and extend upward to the top of the end of the section. At the angle of the groove and in the plane of the horizontal part thereof is a fixed roll H to support the front F and permit the same to run in and out freely. Near the upper corners of the front are brackets I, projecting inward, on which are journaled rolls H', which rolls engage and traverse the grooves G G', and thus guide and carry the upper side of the front

and pivotally connect it to the section. By passing these rolls upward through the vertical slots G' the front may be detached from the section. In the end of the front and near the roll H' is a recess J to receive the roll H when the front turns to a vertical position.

In the under side of the front bottom strip C of each section is a recess C'', into which the upper edge of the front F of the section below turns, and to insure a dust-tight joint a strip K, of rubber, felt, or other suitable material, is inserted in a groove in the edge of the front, having its middle portion inserted under a strip of wood L, located in the groove, both edges of the strip K projecting upward from the top of the front to engage the recess C'' in the strip C. When the front is closed, its lower edge engages the front of the lining-piece M, and, being suspended on the roll H', projecting from its inner side, the tendency is to swing inward at the bottom. The front will thus remain tightly closed without special fastenings or attention. When turned to the horizontal position, the roll H is removed from the recess J and traverses the under side of the front F. The roll H', traversing the groove G, effectually guides the top of the front and prevents its binding as it runs back in the section.

The reducing-section A' is provided with a supplementary top strip N like the front bottom strip C of the sections. This strip N is detachably secured in place above the front of the same section in any convenient manner, and this section is made higher by the thickness of the strip N at the rear thereof and provided with the usual top strip C' for engagement with the bottom strips of the next section above, which latter can thus be made shallower by the width of the strip N. By removing the strip N the front F can be detached from the section by passing the rolls H' upward through the vertical grooves G'.

The sliding shelf-section B consists of two short ends B', provided with horizontal grooves B'', in which is slidably mounted a shelf O, provided with tongues O' at each end to engage the grooves B''. Connecting the ends B' are bottom top strips C C C' to correspond with those of the other sections and interlock therewith. A narrow strip P extends beneath the shelf O at the front and is attached at each end to the ends B' B', and a stop-pin Q in the shelf prevents drawing out the shelf too far. The back R of each section extends above the same a short distance and is reduced at the upper edge S and engaged with a groove T in the bottom strip C of the section above.

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

1. In combination with a sectional case, metallic strips attached to the respective ends of each section, and having their rear ends bent outward at right angles, and thence

turned inward in opposite directions forming hooks adapted to interlock when the sections are placed end to end, and to abut against each other when the sections are placed back to back, substantially as described.

2. In combination with a sectional case, metallic strips of uniform width and thickness throughout extending across the ends of said sections, the strips at one end extending outward at right angles and thence forward and thence inward, and the strips at the other end extending outward at right angles and thence rearward and thence inward, whereby they will interlock when the sections are placed end to end and abut against each other when the sections are placed back to back, substantially as described.

3. In combination with a sectional bookcase, metallic strips extending across the respective ends of the sections and provided with hooks adapted to interlock when the sections are placed end to end, and a slotted plate adapted to connect the hooks when the sections are placed back to back, substantially as described.

4. In combination with a sectional case, metallic strips attached to the respective ends of each section, and having their rear ends bent outward at right angles, and thence turned inward in opposite directions forming interlocking hooks, and a plate having two slots to receive the outwardly-extended parts of said strips, said plates being adapted to pass between the strips and the inwardly-turned ends thereof, and couple the said strips together, substantially as described.

5. In combination with a sectional bookcase, metallic strips extending across the respective ends of the sections and provided with hooks formed by bending one strip outward, thence rearward and thence inward and bending the other strip outward, thence forward and thence inward; and a flat plate having two parallel slots to engage the respective outward-projecting portions of said strips, and adapted to pass between the inwardly-turned ends of the strips and the outer faces of the same, substantially as described.

6. In a bookcase, a section having horizontal grooves in its ends terminating near the front sides thereof, fixed rolls near the front ends of said grooves, a front to the section having rolls attached to engage and traverse the grooves, and recesses in its ends to receive the fixed rolls, substantially as described.

7. In a bookcase, a section having horizontal grooves in its ends terminating near the front thereof and extending thence vertically to the top of the section, fixed rolls near the angles of the groove and in the plane of the horizontal part thereof, a front to the section having brackets extending inward, rolls journaled on said brackets and traversing the grooves, and recesses in the ends of the front to receive the fixed rolls, substantially as described.

8. In a sectional bookcase, a section having front and rear bottom strips, and a middle top strip adapted to pass between the bottom strips of a reduced upper section, and a front strip detachably secured to the upper front part of the section, and corresponding in form to the front bottom strip, and located below the plane of the said middle top strip, substantially as described.

9. In a sectional bookcase a section having horizontal grooves in its ends, terminating near the front thereof and extending thence

vertically to the top of the section, a front to the section having rolls attached and traversing said grooves, a front strip detachably supported upon the first-named section and engaging the rear of the detachable strip, substantially as described.

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

FRANK MACEY.

Witnesses:

LUTHER V. MOULTON;
LEWIS E. FLANDERS.