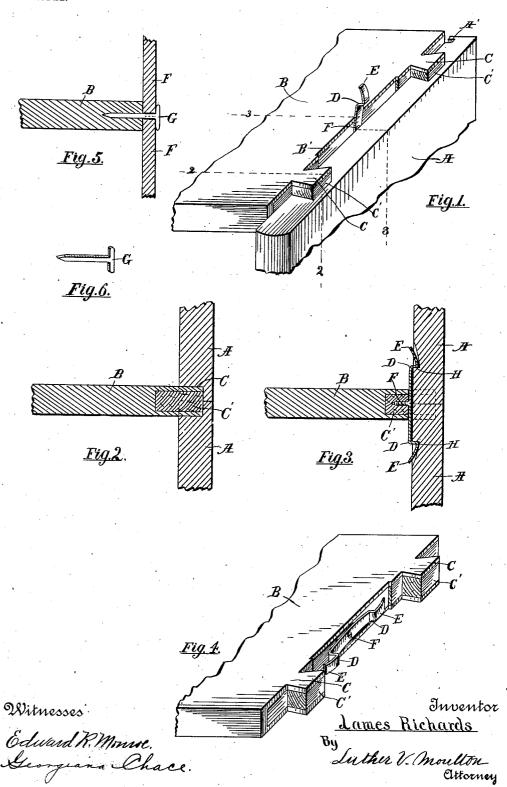
## J. RICHARDS. KNOCKDOWN SECTIONAL BOOKCASE. APPLICATION FILED OCT. 19, 1903.

NO MODEL.



## UNITED STATES PATENT OFFICE.

JAMES RICHARDS, OF GRAND RAPIDS, MICHIGAN.

## KNOCKDOWN SECTIONAL BOOKCASE.

SPECIFICATION forming part of Letters Patent No. 761,103, dated May 31, 1904.

Application filed October 19, 1903. Serial No. 177,551. (No model.)

To all whom it may concern:

Be it known that I, James Richards, 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 Knockdown 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 knockdown sectional bookcases, and more particularly to the same as shown in a patent issued to me, dated June 16, 1903, and numbered 731,223; and the object of my present invention is to provide improved means for securing the various parts in place when the bookcase is assembled and to provide the same with certain new and useful features hereinafter more fully described, and particularly pointed out in the claims.

My invention consists of fastening means whereby the various superposed sections are securely held in place when assembled and means for detachably securing the adjacent edges of the back sections to the shelves, as will more fully appear by reference to the accompanying drawings, in which—

Figure 1 is a perspective detail of portions of a shelf and end section; Fig. 2, a vertical section of the same on the line 2 2 of Fig. 1 with a superposed end section added; Fig. 3, the same on the line 3 3 of Fig. 1; Fig. 4, a 35 perspective detail of the end of a shelf with the fastening means in position for packing or storage; Fig. 5, a vertical sectional detail showing the means for holding the adjacent edges of the back sections in place, and Fig. 40 6 a perspective detail of said means datached.

Like letters refor to like parts in all of the

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

A represents the end sections of the case, which are superposed one above the other 45 and provided with a groove A' to receive the back sections F.

B is a shelf provided with dovetail tenons C to engage suitable recesses in the respective end sections. These tenons are shown in 5° the patent referred to.

To effectually hold the adjacent edges of the back sections from springing away from the rear edge of the shelves, I provide suitable studs G, having T-heads projecting oppositely therefrom, said studs being inserted 55 in the rear of the shelves, with the heads G a suitable distance therefrom, so that the studs extend between the back sections, and the T-heads extend vertically upward and downward and engage the rear of the back sections 60 and hold the same securely and detachably in place against the rear edge of the shelf B.

To further secure the parts in place, I provide strips of metal extending vertically along the inner surface of the end sections and span- 65 ning the joint between the same and bent near each end to form opposing shoulders D to engage shouldered recesses H in the respective end sections, and thus bind the sections together when assembled. These strips have 70 their ends E bent inward, whereby they may be readily sprung inward and detached from the shoulders H. These strips of metal are held in place when the device is assembled by the abutting end of the shelf F, which end is 75 also preferably recessed, as at B', to receive said strip. To prevent detachment of the same from the shelf, each strip is preferably perforated near the middle and secured within the recesses by a screw F, upon which screw 80 the strip may be turned within the plane of the shelf, and thus readily placed in suitable position for packing and storage purposes.

By means of the described device I am able to make a more substantial structure and one 85 that when assembled will not be easily displaced or spring and warp out of shape.

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

1. In a knockdown sectional bookcase, in combination with the shelf and back sections, a stud having a T-head and inserted in the shelf and adapted to project between the respective adjacent edges of the back sections 95 and with the head in engagement with the rear of said sections.

2. In a sectional bookcase in combination with end sections having shouldered recesses, a strip having opposing shoulders to engage 100

said recesses and arranged to span the joint between the sections whereby the same are held in place when assembled.

3. In a sectional bookcase, separable end 5 sections having opposing shoulders, a strip having opposing shoulders to engage the shoulders on the end sections, and a shelf having a recess in the end to receive the strip.

4. In a sectional bookcase, separable end sections having opposing shoulders, a strip having opposing shoulders to engage the shoulders on the end sections, and a shelf abutting against the strip and holding the same in place.

5. In a knockdown sectional bookcase, end sections having opposing shoulders, a shelf having a recess in its end to receive the strip, and a flexible strip pivoted to the shelf with-

in the recess and having opposing shoulders to engage the shoulders on the end sections. 20

6. In a knockdown sectional bookcase, end sections having opposing shouldered recesses, a shelf having dovetail tenons engaging recesses in the ends of the adjacent sections and a recess between said tenons, and a strip of 25 flexible material pivotally attached to the shelf within said recess, and having outwardly-projecting shoulders and inwardly-projecting ends.

In testimony whereof I affix my signature in 30 presence of two witnesses.

## JAMES RICHARDS.

Witnesses:

LUTHER V. MOULTON, GEORGIANA CHACE.