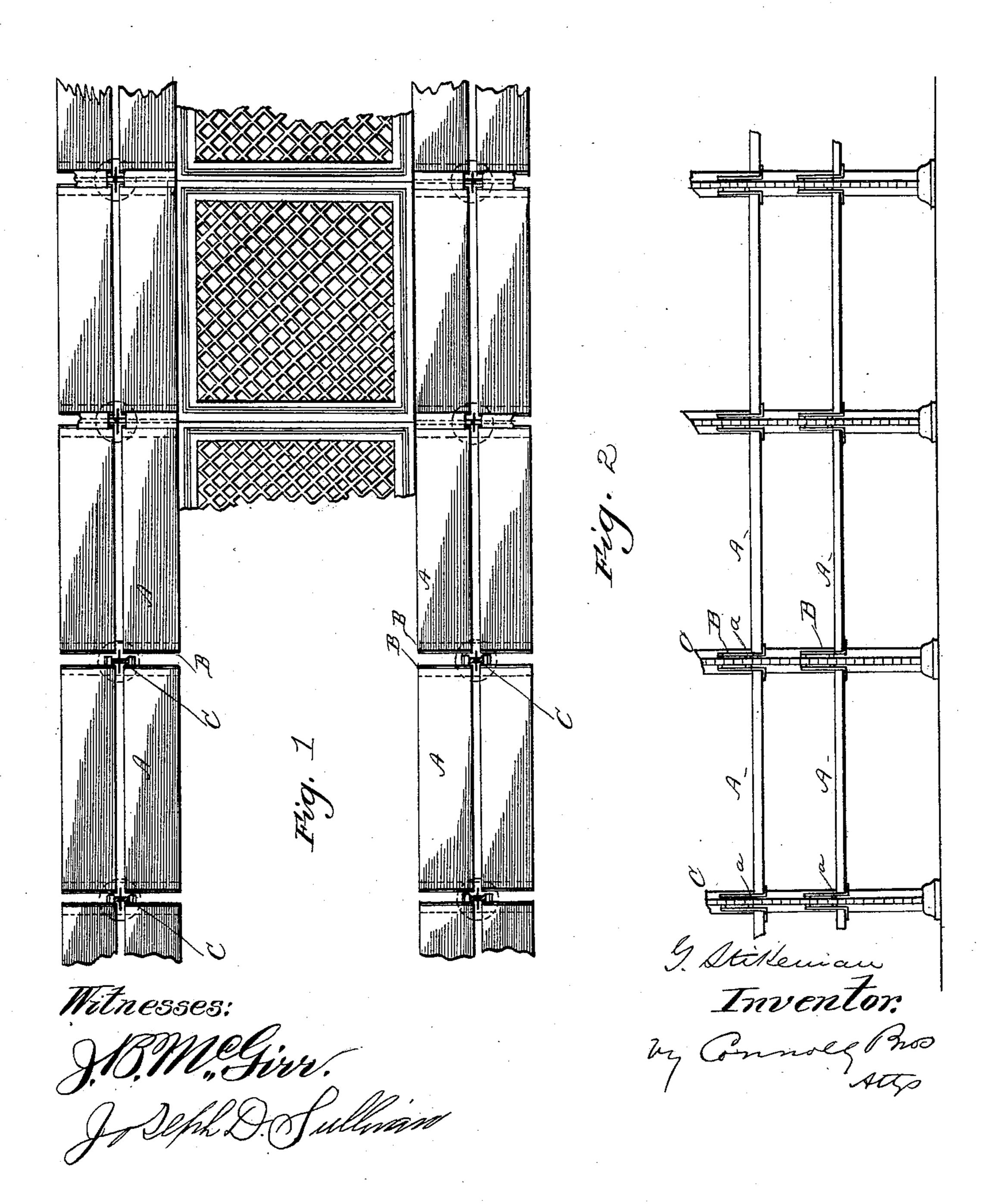
G. STIKEMAN. ADJUSTABLE BOOK SHELVING.

No. 475,627.

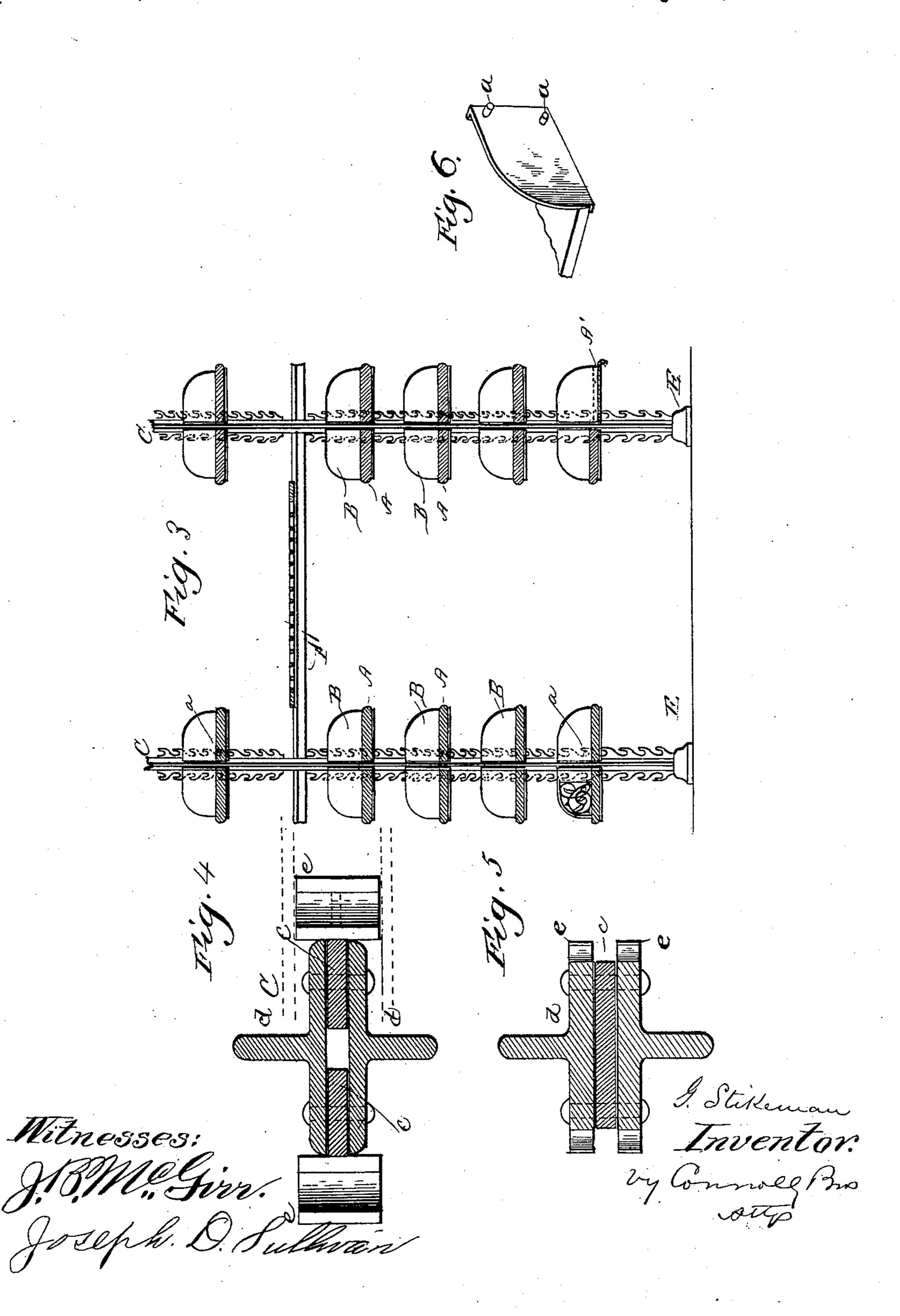
Patented May 24, 1892.



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United States Patent Office.

GEORGE STIKEMAN, OF BROOKLYN, NEW YORK.

ADJUSTABLE BOOK-SHELVING.

SPECIFICATION forming part of Letters Patent No. 475,627, dated May 24, 1892.

Application filed August 7, 1891. Serial No. 402,025. (No model.)

To all whom it may concern:

Be it known that I, George Stikeman, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Adjustable Book-Shelving; and I do hereby declare the following to be a full, clear, and exact description of the invention, reference being had to the accompanying drawings, which form part of this specification.

This invention has relation to adjustable shelving for library and store purposes, and has for its object the provision of a novel structure comprising suitable upright supports and horizontal shelving attached there to and vertically adjustable thereon, of such form and arrangement that the separate shelves of a line of shelving may be independently detached or adjusted.

The invention consists in the novel construction, combination, and arrangement of parts, as hereinafter described and specifically claimed.

As the shelving embodying my invention is intended and especially adapted for use in libraries, provision is made for dividing the room or compartment in which the structure is erected into aisles or alcoves, and in the accompanying drawings I have shown a room or compartment so divided.

Figure 1 is a horizontal section or architectural plan of a library fitted with my improved shelving. Fig. 2 is a front elevation of a line of shelving. Fig. 3 is a side elevation and transverse section of the same; and Fig. 4 is a transverse section, enlarged, of one of the shelf-supporting pillars or uprights. Fig. 5 is a transverse section of a modification of the supporting-pillars. Fig. 6 is a detail perspective view of one of the shelf-supporting brackets.

The shelves A, of any suitable length, may be made of wood, metal, slate, glass, or other material, and are secured at their ends to the 45 metal brackets or end pieces B B, on the outside of which are formed or fitted two or more projections a a, vertically aligned and serving as means for the support of the brackets upon the supporting pillars or posts and providing for the arrangement of the shelves at any desired height, each shelf being adjust-

able independently of all the others.

C C designate the shelf-supporting posts or pillars. Each such post or pillar is preferably formed of two pieces of flanged iron cc, 55 secured together by flat or T-shaped iron plates dc, bolted to the sides of the pieces cc, and the whole inserted at the lower ends in sockets Ec, which are fastened to the floor.

Upon the outer faces of the pieces c c are 60 formed or attached upwardly-curved teeth or hooks e e, which are adapted to receive and hold the projections a a, formed on the outside of the brackets or end pieces BB. These teeth or hooks are of sufficient width to re- 65 ceive and hold easily the projections from two aligned shelves, and hence each shelf of a line of shelves is independently adjustable and the shelves may be arranged in alignment or otherwise, as the conditions of use or expe- 70 diency may require. Necessary bracing to stiffen the structure will depend entirely upon the shape of the room and the position of the posts or pillars. At any desired height on the posts framing to support flooring is se- 75 cured, such framing consisting of beams or girders F F, bolted or riveted at their ends to the posts, and the flooring made of iron or other material. When a metallic shelf is used, it should be flanged on its front edge, and the 80 flange rounded and undercurved to prevent damage to the books in removing and replacing them, and such metallic shelves should be flanged at their ends and the flanges secured to the outside of the end pieces or brackets 85 B B, as shown in Fig. 3 of the drawings at A'.

As will be understood, the conditions of my invention require that each shelf should have a bracket on each end, in order that each shelf and brackets may be moved independently of others, as I am aware that adjustable shelves have heretofore been used, in which, however, it is necessary that all the shelves in a line must be in actual horizontal alignment, it being impossible to alter the position of any one shelf between two brackets without bringing all the shelves in the same line to the same level.

In Fig. 5 I have shown a modified construction of the supporting-pillars C, which may 100 be used instead of the form shown in Fig. 4. In this construction the T-shaped iron plates d are formed with hooks e, which support the shelves, and between these plates a single

plate c' is arranged and secured by bolts to the T-plates, in lieu of the two plates c c. (Shown in Fig. 4.)

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

1. An adjustable shelf structure comprising the upright posts C C, having upturned teeth or hooks on their edges, the shelf-supporting brackets B B, consisting of metallic plates having their lower horizontal edges flanged to receive the shelves and having each two vertically-aligned laterally-projecting pins a a at or near its rear edge, said pins being parallel with the line of shelves and adapted to enter said hooks, substantially as described.

2. The posts C, formed each of two T-shaped iron plates d and two plates c c, secured between and bolted to said T-plates, said posts being formed with upturned teeth or hooks to support shelf-brackets, in combi-

nation with the shelf-supporting brackets B B, consisting of metallic plates having their lower horizontal edges flanged to receive the shelves and having each two vertically- 25 aligned laterally-projecting pins a a at or near its rear edge, which are designed and adapted to enter the teeth or hooks of the posts C, substantially as described.

3. In a shelf-supporting structure, the shelf- 30 supporting posts C, consisting of the T-plates d and the plates c c, secured between the plates d, the plates c c being formed with upturned teeth or hooks, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 6th day of July, 1891.

GEORGE STIKEMAN.

Witnesses:

H. C. Lehrenkrauss, Julius Lehrenkrauss, Jr.