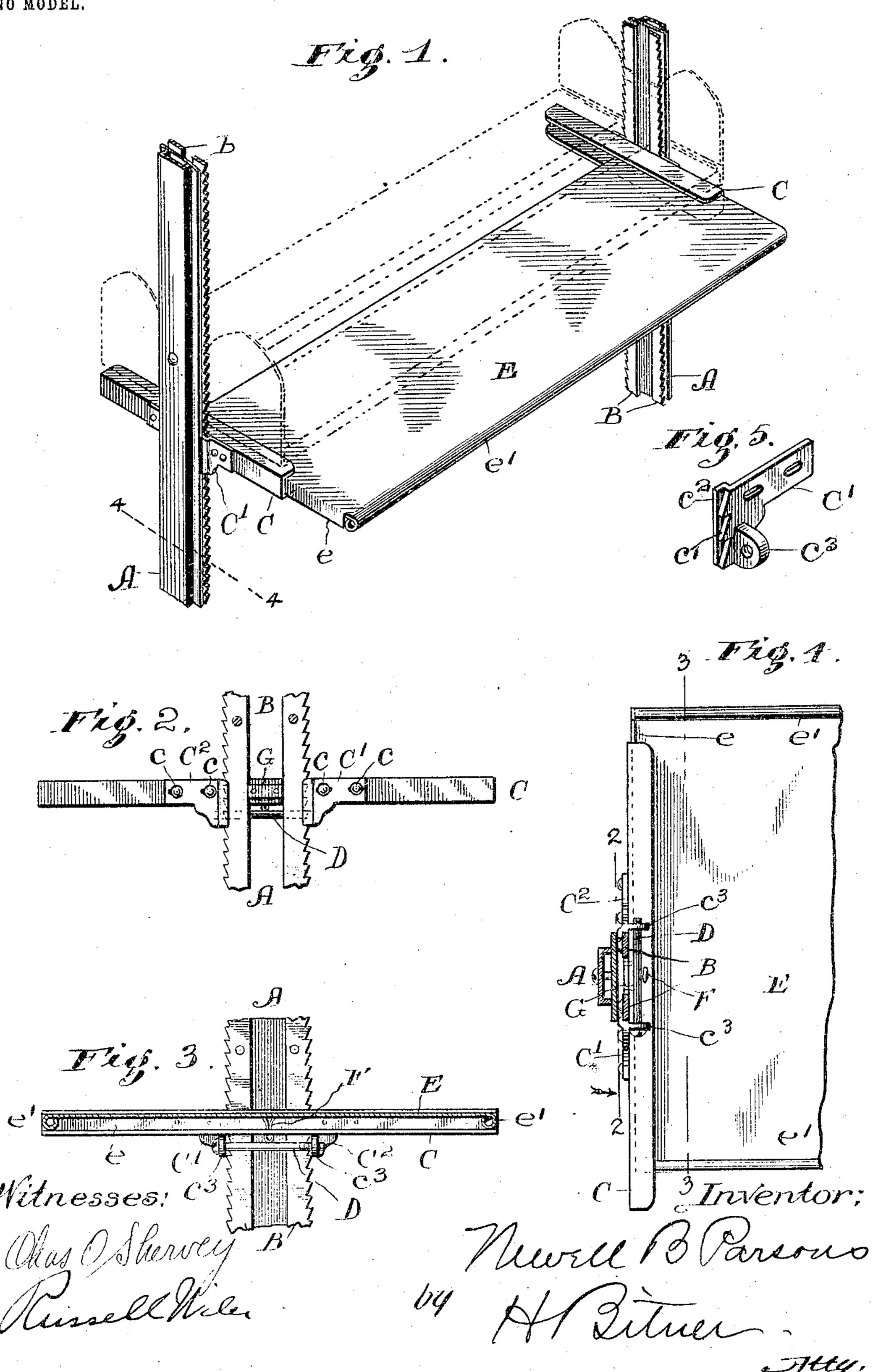
N. B. PARSONS. LIBRARY SHELF. APPLICATION FILED MAR. 21, 1904.

NO MODEL.



United States Patent Office.

NEWELL B. PARSONS, OF CHICAGO, ILLINOIS, ASSIGNOR TO LIBRARY BUREAU, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

LIBRARY-SHELF.

SPECIFICATION forming part of Letters Patent No. 775,496, dated November 22, 1904.

Application filed March 21, 1904. Serial No. 199,261. (No model.)

To all whom it may concern:

Be it known that I, Newell B. Parsons, a citizen of the United States of America, residing at Chicago, in the county of Cook and 5 State of Illinois, have invented certain new and useful Improvements in Library-Shelves, of which the following is a specification.

My invention relates to certain new and useful improvements in library-shelves; and its 10 object is to produce a device of this class which shall have certain advantages which will appear more fully and at large in the course of this specification.

To this end my invention consists in certain 15 novel features of construction, which are clearly illustrated in the accompanying drawings and described in this specification.

In the aforesaid drawings, Figure 1 is a perspective view of my improved device. Fig. 20 2 is an end view, certain parts of one of the supporting-posts being cut away in the line 2 2 of Fig. 4, the view being in the direction of the arrow. Fig. 3 is a vertical cross-section in the line 3 3 of Fig. 4. Fig. 4 is a sec-25 tion in the line 44 of Fig. 1 looking upward, and Fig. 5 is a perspective view of one of the locking members.

The shelf herein illustrated may be employed in a great variety of constructions and 3° is particularly useful in connection with library-stacks of the type shown in the joint application of myself, William H. Winslow, and Jackson L. Kail, filed on even date herewith and allotted Serial No. 199,272, and in 35 my application filed on even date herewith and allotted Serial No. 199,262. When used with such a stack, its object is to produce a shelf which can be placed immediately under the book-shelves proper and which can 40 be pulled out in either direction to make an additional shelf suitable for laying books upon for reference or for piling them upon in getting them out or putting them away.

In the drawings, which show my preferred 45 construction, A indicates the two supporting end posts of the stack, each of which bears upon its inner surface two bars B, having projecting teeth which are adapted to coact with corresponding teeth on the shelving to support the same, as set forth in the applications 50

above identified.

My improved sliding shelf runs between two substantially horizontal bars of channel-iron C, secured to the toothed bars B. Each of these channel-bars C has secured to it two 55 clips C' C², preferably movable on the channel-bar. The clips are secured in place by rivets c, passing through slots in the clips and secured in the channel-bar, thus permitting longitudinal movement of the clips on the 60 channel-bar. The construction of the clips C' C' is clearly indicated in Fig. 5, from which it will be seen that each bracket preferably has suitable teeth c', which engage with corresponding teeth on the ratchet-bars B, a 65 flange c^2 , which overhangs the edge of the corresponding ratchet-bar, and a projecting lug c^3 . The channel-bars are secured in place upon the supports by placing them at the desired height, with the teeth c' in position to engage 70 with the teeth on the ratchet-bars, and then drawing the brackets together by a screw D, which passes through the lugs c^3 , above described. A block G is preferably secured to each channel to hold the bars B apart when 75 the latter are arranged in pairs and would otherwise be liable to be distorted by the pressure of the clamping-screw. When the channel-bars have been thus secured in place, a shelf E is slid into place between. This shelf 80 in the preferred form of construction is made of sheet metal with downwardly-turned flanges e at its ends and downwardly-turned beads e' at its edges to give it the desired stiffness. When the shelf is in place, a split pin F is 85 passed through the lower flange of each channel-bar and secured in place by spreading its upper ends, this pin serving by engagement with the beads e' to prevent the removal of the shelf from place. In fact, this pin limits 90 the movement of the shelf to approximately one-half its total width in either direction.

It will be seen that with my improved structure a shelf is provided which is exceedingly cheap and simple in construction and which 95 can be placed under the shelves of a librarystack and slid out on either side of the stack to form an extra width of shelf.

While I have shown and described a clamping device for my improved shelf which is particularly adapted to engage with the ratchet-bar supporting device of the shelving shown in the applications already mentioned, I do not intend to limit myself to such specified clamping device, it being evident that the broad principles herein described can be embodied in a structure utilized upon stacks of different construction.

I realize that considerable variation is possible in the details of this construction without departing from the spirit of the invention, and I therefore do not intend to limit myself to the specific form herein shown and de-

scribed.

I claim as new and desire to secure by Let-

ters Patent—

1. In a device of the class described, the combination with suitable vertical supports, of opposing substantially horizontal channel-bars supported thereby, a shelf running between said channel-bars, and movable therein in either direction, and means for limiting such

2. In a device of the class described, the combination with suitable vertical posts, of two opposing substantially horizontal channel-bars supported thereby, a shelf running between said channel-bars and movable therein in either direction, downwardly-projecting engagement members at opposite edges of the shelf at the ends, and a stop in each channel-bar engaging with the projecting members to

35 limit the movement of the shelf.

3. In a device of the class described, the combination with suitable supporting-posts, of opposing substantially horizontal channel-bars supported thereby, a sheet-metal shelf having downwardly-turned flanges along its ends, and

downwardly-turned heads at its sides running

between said channel-bars, and a pin at the center of each channel-bar, engaging with beads on the shelf to limit the movement thereof in either direction.

4. In a device of the class described, the combination with supporting-posts, having longitudinal supporting members adjacent to their edges, arranged to support two shelves, side by side, and extending out on either side of 5° the post, of shelf-supporting bars secured upon said supporting members, and a shelf of a

width equal to the combined width of the two shelves and adapted to be slid on said shelfsupporting bars.

5. In a device of the class described, the combination with supporting-posts, of horizon-tally-opposing channel-bars vertically adjustable upon the posts, clamps for securing the channel-bars in place, and a sliding shelf sup- 60 ported by the channel-bars and horizontally

6. In a device of the class described, the combination with a double tier of shelves having supporting-posts provided with shelf-supporting means upon opposite sides thereof to support the two tiers of shelves, of opposing horizontal bars secured to the faces of the supporting-posts and extending laterally beneath both tiers of shelves, and a sliding shelf supported between and upon these bars and sliding in either direction from a position beneath the shelves to one upon either side thereof.

In witness whereof I have signed the above application for Letters Patent, at Chicago, in 75 the county of Cook and State of Illinois, this

25th day of February, A. D. 1904.

NEWELL B. PARSONS

Witnesses:

RUSSELL WILES, CHAS. O. SHERVEY.