J. B. O'CONNOR.

SHELVING.

APPLICATION FILED MAY 6, 1915.

1,165,703. Patented Dec. 28, 1915.

Fig. 1

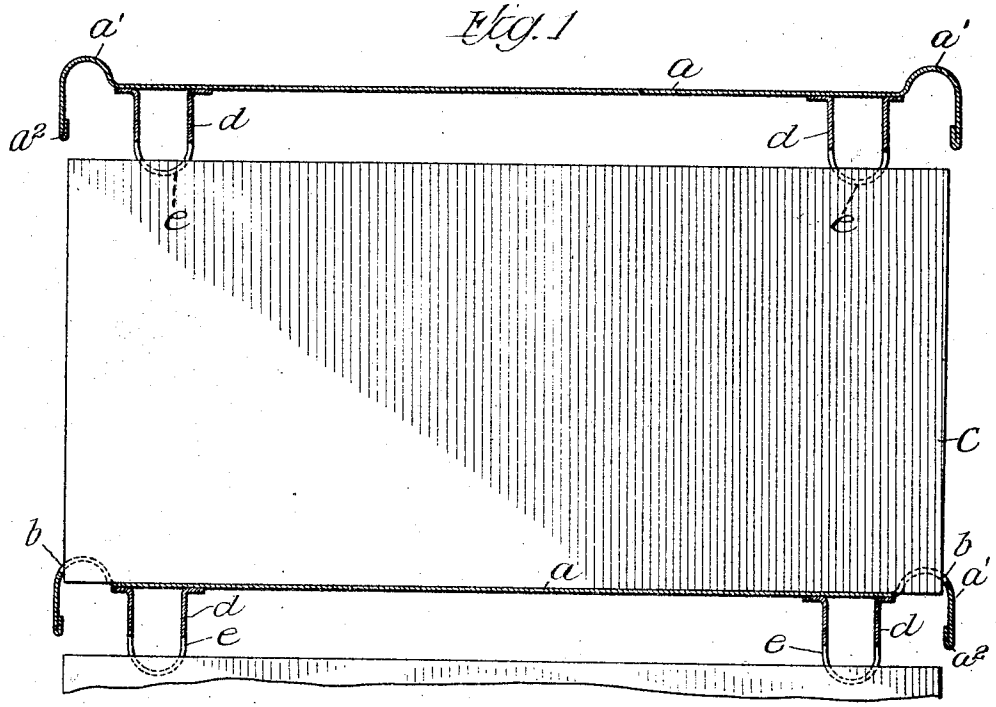
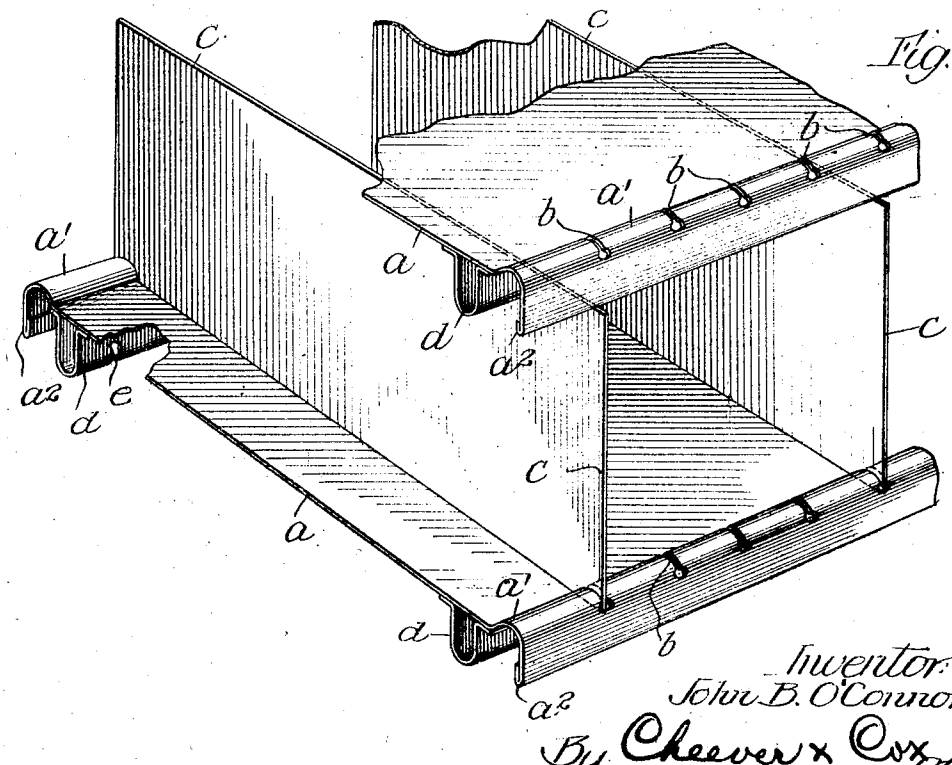


Fig. 2



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UNITED STATES PATENT OFFICE.

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SHELVING.

1,165,703. Specification of Letters Patent. Patented Dec. 28, 1915.

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To all whom it may concern:

Be it known that I, JOHN B. O'CONNOR, a citizen of the United States, residing at Aurora, in the county of Kane and State of Illinois, have invented a certain new and useful Improvement in Shelving, of which the following is a specification.

My invention relates to shelving and has particular reference to the removable partitions and the means by which they are supported and retained.

The object of the invention is to provide a construction such that the partitions may be removably held in place without the aid of bolts, screws or other fastenings. In shelving of my construction, the partitions may be instantly removed at any time, or adjusted to different positions. Furthermore, when the partitions are inserted they cannot be pushed or jammed out of position. Again, when the partitions are inserted they will drop down behind the front flange of the shelf and become locked into position, so that they cannot be accidentally dislodged and can only be removed by lifting and then drawing the partition.

Another object of my invention is to so construct the shelving that the bead which holds the partition from coming forward and keeps it in upright position will also prevent small objects or material on the shelf from rolling out at the front or back, thus dispensing with bin fronts and other similar attachments.

I accomplish my objects by the construction illustrated in the accompanying drawings, in which—

Figure 1 is an elevation partly in section taken transversely from front to rear of the shelving and showing a partition in acting position and held by the shelves above and beneath it. Fig. 2 is analagous to Fig. 1 and shows the parts in perspective.

Similar reference characters denote similar parts in both views.

In the particular design selected to illustrate the invention, the parts are made of sheet metal and the shelves *a* are supported at the ends by any suitable uprights (not shown). At the front and rear edge of each shelf there is formed a bead *a'* which rises somewhat above the plane of the shelf, and thereby, among other things, prevents the contents from becoming readily dislodged from the shelf. In other words, one of the functions performed by the bead is to hold the contents on the shelf and yet afford ready access to the shelf, and a smooth, rounded surface over which the contacts may be withdrawn. By preference the beads terminate at the outer edges with depending flanges a^2, which not only stiffen the shelf, but impart a finished appearance thereto.

Slots *b* are formed in each bead at proper intervals apart, these slots descending on the inner edge of the bead to, or substantially to, the surface of the shelf, but terminating above this level at the outer edge of the bead. The slots are just wide enough to freely receive the corners of the partitions *c*, and as the slots terminate at their outer ends at a point above the level of the shelf, said partitions will be held against both lateral and longitudinal movement.

The partitions are held at the top by means of bars *d* which extend along the under surface of the shelves parallel to and somewhat inside of the beads. In the design illustrated these bars are U shaped sheet metal and are rigidly fastened to the shelves in any suitable manner. These bars have slots *e* at the bottom for receiving the upper edge of the partition and preventing lateral movement thereof. The slots extend high enough to permit the partitions to be raised and drawn forward over the slotted portion of the shelf bead. It is not essential that the bar be slotted high enough to permit the lower edge of the partition to clear the highest point of the bead, but merely enough to permit it to be lifted and then drawn forward. In this connection it may be stated that in the particular design shown some care must be exercised to remove the partition, for the lower edge of the depending flange a^2 of the upper shelf hangs in front of the bar which is secured to that shelf and hence if the partition be lifted too high before being drawn forward, the upper forward corner of the partition will engage the flange and prevent the partition from being drawn forward. The advantage in thus proportioning the parts is that it minimizes the danger of the partition being accidentally withdrawn.

The operation will be evident from the foregoing description. When it is desired to remove a partition, all that is necessary

is for the partition to be raised slightly so that its lower edge will clear the slotted portion of the bead a'. The partition may then be drawn forward and removed from the shelving. The partition may be replaced either in the same or in a different position laterally by reversing the operation. It will be noted also that it may be withdrawn either from the front or from the rear of the shelving. As the slots occur at frequent intervals, a given length of shelf may receive either a large or small number of these partitions, thus making the compartments of practically any size or number desired.

It will be understood, of course, that commercially the shelves and partitions are manufactured to standard size and the parts are thus interchangeable. The shelves may be made of comparatively thin metal, for both the flanges a^2 and the bars e serve to stiffen them.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:

1. In shelving, the combination of two flat members arranged at right angles to each other, one vertical and the other horizontal, the horizontal member constituting a shelf, one of said members being stationary and the other removable, the stationary member being of sheet metal and having an integral beading running along the edge, said beading having a transverse slot for receiving a corner of the removable member, said slot being cut to the plane of the stationary member at the inner edge of the beading and at the outer edge of the beading being appreciably shallower for preventing endwise movement of the removable member.

2. In shelving, a partition, a shelf for supporting it, said shelf having a rise wherein there is formed a slot for receiving a corner of the partition, said slot being cut to the level of the main body of the shelf but terminating at such level short of the extreme front of the rise, whereby the partition may be withdrawn only by first slightly raising and then forwardly pulling the partition, and means for preventing lateral and permitting upward movement of the partition.

3. In shelving, a partition, a shelf having a raised bead at its margin, said bead being slotted to the level of the shelf part way to the outer edge of the bead, whereby the partition must be slightly raised before it can be drawn forward, and an upper shelf having a depending projection having therein a slot for receiving the upper edge of the partition and preventing lateral but permitting vertical movement of said partition.

4. In shelving, a rectangular partition, a lower shelf formed of sheet metal and having a bead formed at the front margin and terminating in a depending flange, said bead having a slot for receiving the forward lower corner of the partition, the slot being cut partially but not entirely through to the front of the bead at the level of the main body of the shelf, an upper shelf having a depending projection, slotted to receive the upper edge of the partition, said upper shelf also having a depending flange arranged in front of and slightly above the upper edge of the partition.

In witness whereof, I have hereunto subscribed my name.

JOHN B. O'CONNOR.