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COMPLETE SPECIFICATION.

Improvements in or relating to Cupboards or Shelf Structures provided with Movable Shelves, especially Shelf Structures for Store-rooms.

I, HARALD OSKAR LUNDQVIST, a subject of the King of Sweden, of 9, Brunkebergstorg, Stockholm, Sweden, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

The present invention relates to such cupboards or shelf structures as are provided with movable shelves, especially shelf structures for store-rooms, which are comprised of two side pieces, each including two corner standards, wherein all or some of the shelves are provided with members projecting from both sides of the shelf ends transversely to the longitudinal direction of the shelves said members being intended to rest against stops or abutments fitted in grooves provided in the sides facing each other of the corner standards of each side piece.

The invention is characterized by the fact that the shelves have a square portion cut out of their corners which are so proportioned as to fit closely to one of the flanges formed in the corner standard by the grooves, said flange thus being held between the projecting member and the edge of the cut out portion of the shelf parallel with said member.

Thus an extremely sturdy shelf structure is obtained, which due to the special method of attaching the shelves is braced lengthways as well as sideways.

In a preferred construction according to the invention the projecting members consist of iron strips attached vertically along the end surfaces of the shelf. By using such iron members the width of the grooves in the standards may be kept small, which in turn allows the utilisation of slender corner standards.

In the following the invention will be further described with reference to the constructions illustrated in the accompanying drawings in which:—

Figure 1 illustrates in perspective, a shelf structure according to the invention, while Figure 2 illustrates a part of a corner standard in perspective and Figure 3 illustrates a section through a corner standard along the line III—III of Figure 2, together with a part of a shelf.

Figure 4 illustrates a plan view of one end of a shelf, while Figure 5 is a section along the line V—V of Figure 4.

In the drawings 1, 2, 3 and 4 designate the corner standards of the side pieces of the shelf structure. At their top and bottom ends these standards are connected to one another by cross-connection members 5 and 6 and one or more intermediate members 7. The side pieces are connected by the shelves 8.

The corner standards of each side piece are provided with longitudinal grooves 10 on the sides facing each other.

A number of holes 11 are bored, one above the other, at right angles to the groove through which holes pins 12 acting as stops or abutments may be inserted for holding the shelves 8.

As shown in Figure 4 each of these shelves have square portions 14 cut out of their corners and to each end is attached an angle-shaped iron strip 17. The flange 17*b* of said strip fitted to the end surface of the shelf is extended with a part 17*c* over the edge 14*b* of the cut out portion, while the flange 17*a* parallel with the plane of the shelf is cut away flush with the edge 14*b* of the cut out portion. The shelves will thus rest entirely on the projecting vertical parts 17*c* of the flanges 17*b* of the iron strips 17. At the same time the whole structure will be braced by one of the flanges 25 formed by the grooves 10 in the corner standard entirely filling out the space bounded by the projecting iron strip and both edges 14*a* and 14*b* of the cut out portion. The angle-shaped iron strips are preferably set in the shelf (Figure 5) in

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such a manner that the flanges 17*a* parallel with the shelf will be located near to the under side of the shelf, thus weakening the shelf as little as possible with regard to vertical loading.

The width of the groove 10 in a corner standard should preferably allow two projecting flanges of iron strips to be lodged side by side, whereby the shelf structures may easily be extended by adding another set of shelves to the other side of the standards.

The invention may also be varied in several other ways within the scope of the invention.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. Cupboards or shelf structures provided with movable shelves, especially shelf structures for store-rooms which are comprised of two side pieces, each including two corner standards, wherein all or some of the shelves are provided with members projecting from both sides of the shelf ends transversely to the longitudinal direction of the shelves, said members being intended to rest against stops or abutments fitted in grooves provided in the sides facing each other of the corner standards of each side piece, characterized by the fact that the shelves have square portions cut out of their corners which are so proportioned as to fit closely to one of the flanges formed in the corner standard by the groove, said flanges thus being held between the projecting member and the edge of the cut out portion of the shelf parallel with said member.

2. Cupboards or shelf structures as claimed in Claim 1, characterized by the transversely projecting members consisting of iron strips attached flat along the end surfaces of the shelves.

3. Cupboards or shelf structures as claimed in Claim 2, wherein the iron strips are angle irons, the flange of said angle iron parallel with the plane of the shelf being cut away, where the iron projects from the shelf, thus allowing the shelf to rest only on the projecting vertical flange of the angle iron.

4. Cupboard or shelf structures provided with movable shelves, substantially as hereinbefore described and claimed with reference to the accompanying drawings.

Dated this 15th day of March, 1948.

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