

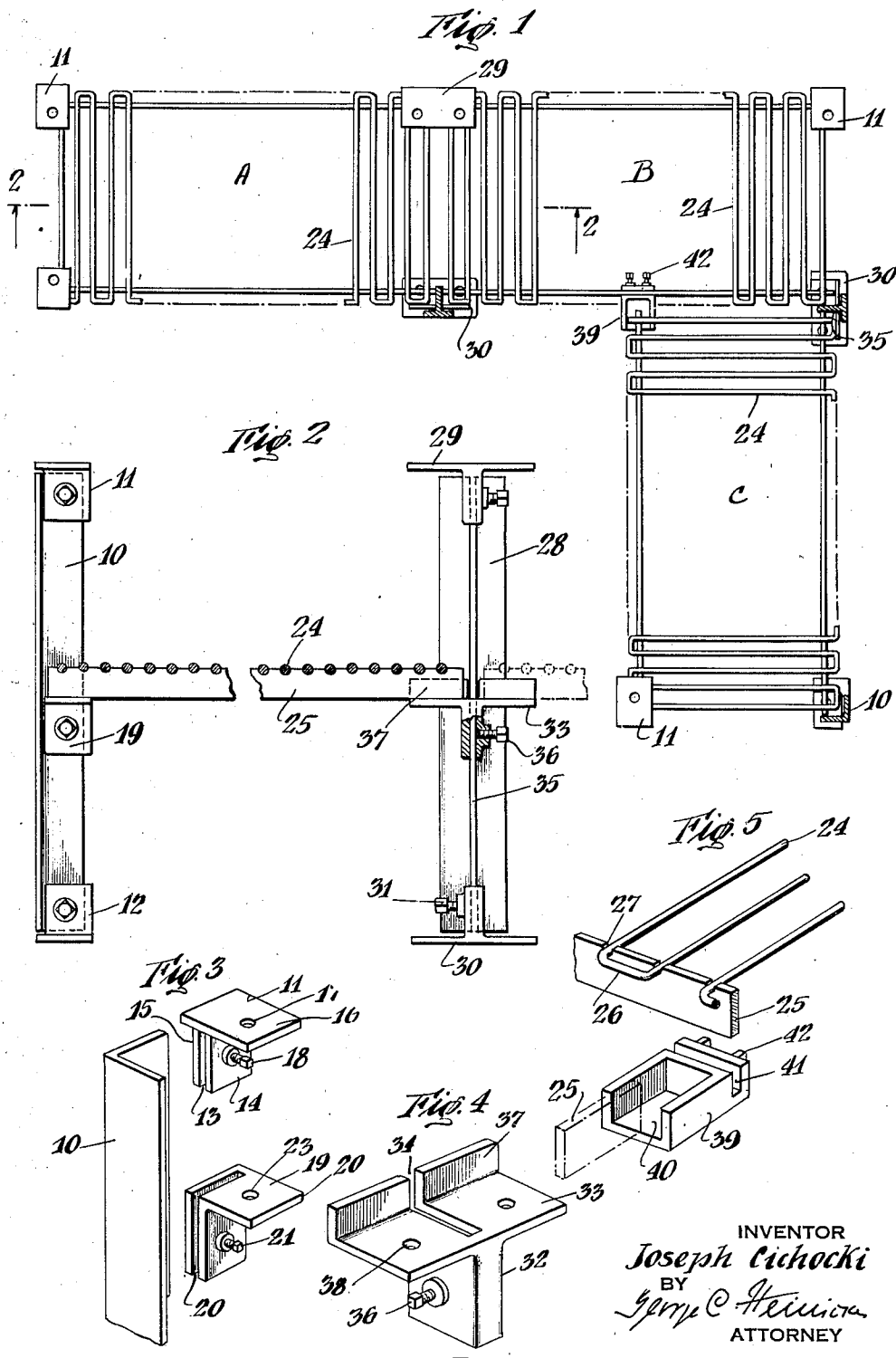
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ADJUSTABLE SHELVING

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ADJUSTABLE SHELVING

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My invention relates to improvements in shelving, particularly to an adjustable shelving which can be readily set up and dismantled in any desired plurality of sections for use in refrigerators, stores or for any other, similar purpose, and it is the principal object of my invention to produce a preferably metallic shelving, the individual parts of which are so connected and interconnected, that their article supporting trays can be suitably distanced from one another on their supporting posts by means of suitable brackets of a special construction attached to said posts on which the individual trays are firmly supported.

Another object of my invention is the provision of an adjustable shelving of comparatively simple and inexpensive construction, yet durable, and highly efficient in use, and which is sanitary as it can readily be cleaned. It may be set up in several sections which may either be aligned and connected or be angularly disposed to one another in which case specially and suitably designed brackets are used to support the ends of the inner tray bars without the necessity of using special fastening means.

Still another object of my invention is the provision of an adjustable shelving the trays of which are supported on specially constructed brackets adjustably secured to the supporting posts or standards which are preferably made of angle irons and to the upper and lower ends of which brackets are removably attached and provided with suitable openings for the passage of fastening means to secure the posts firmly to the upper and lower walls of refrigerators or like casings with which the shelving is to be used.

A further object of my invention is the provision of an adjustable shelving made in units of identical construction adapted to be set up end to end and at their meeting ends supported by specially constructed posts or standards to which the head and foot parts are readily connected while specially constructed brackets are adjustably secured to the posts intermediate their ends to support the trays of two adjoining units.

A still further object of my invention is the provision of an adjustable shelving, the single units of which when set up and connected form a compact whole and a rigid structure to support the trays having preferably grill or grate form the individual members of which are securely held on the frame bars of the trays.

These and other objects and advantages of my invention will become more fully known as the

description thereof proceeds, and will then be specifically defined in the appended claims.

In the accompanying drawing forming a material part of this disclosure:

Fig. 1 is a top plan view of an adjustable shelving constructed according to my invention, two of the units of the shelving are shown in alignment while a third unit is illustrated angularly disposed to the aligned units.

Fig. 2 is a fragmentary side elevation of the adjustable shelving according to my invention, partly in section on line 2-2 of Figure 1.

Fig. 3 shows in perspective views details of an angular post and the end and intermediary brackets adjustably to be secured thereto.

Fig. 4 is a perspective detail view of a bracket adjustably to be secured to an intermediary post to support trays of two adjoining sections of the shelving.

Fig. 5 shows in perspective views a bracket for the support of the inner tray bar of a shelf section angularly disposed to another section, and the manner of supporting the grill bars on the frame bars of the trays.

As illustrated in Figure 1, the individual sections or units of my adjustable shelving are designated A, B, and C respectively of which sections A and B are shown in alignment, while section C is angularly disposed to section B.

Each of the sections or units comprises the vertical corner posts substantially made from angle iron essentially L-shaped in cross-section. To the upper and lower ends of these posts are attached the upper and lower end brackets 11 and 12 respectively by engaging the upper and lower edges of the posts in the slots 13 formed between the vertically disposed bracket branches 14, 15 depending from an upper branch plate 16 if the bracket is used for the upper end of the post and upstanding from said plate if the bracket is to be used as a foot. Plate 16 is perforated, as at 17 for the passage of suitable fastening means for securing the brackets to the upper and lower walls of a refrigerator etc. The brackets 11 and 12 are held in place on the posts by means of the screws 18 or the like passing through the branch 14 of the brackets and engaging the post.

The intermediary tray supporting brackets for the corner posts as shown in Figure 3 are designated 19, and are each provided with the slots 20 into which engage the side edges of the post to be locked in their respective adjusted positions by means of the screws 21 passed through the branch of the bracket in which the slot is

formed and engaging the post. The other branch 20' of the bracket has the form of a plate and serves to support the trays which may be firmly held thereon by means of fastening means 3 passed through openings 23 in these plates 20'.

The trays of the shelving are substantially in the shape of grills or grates 24 having supporting bars or frames 25 provided at their upper edges with suitable depressions for the reception and holding of the grate bars having preferably the form of strong wire convolutions 26 engaging the depressions 27 in the frame bars 25 as indicated in Figure 5.

If two units are placed end to end, as shown in Figures 1 and 2, intermediary posts 28 are used between the units which are substantially T-shaped in cross-section and top and foot brackets 29, 30 having slots for the engagement of the ends of the posts 28 are provided to support the posts 28 on top and bottom walls of their respective casings and the posts are secured with their ends in these slots by means of screws 31 or the like.

In Figure 4 I have illustrated the brackets 25 used for the support of the trays of two aligned units, generally designated 32 having each a horizontally disposed plate member 33 and a member depending therefrom. The plate member as well as the depending member has a slot 34 formed therein into which engages the edge 35 of the T-post 28 and is held therein by means of the screws 36 or the like, while angularly disposed upright flanges 37 are engaged by the frame bars 25 of the trays which may be held in place by means of suitable fastening means passing through the openings 38 in plate member 33.

In Figure 5, I have illustrated a bracket 39 for the support of the inner end of the tray frame bar 25 of a section C, angularly disposed 40 to a section B of the shelving, as for instance illustrated in Figure 1, the frame bar 25 of the section C rests upon the bottom of a chamber 40 formed in the bracket 39. The other branch 45 of the bracket is separated from the chamber 40 by means of a channel 41 into which engages the frame bar 25 of the next adjoining section B to which the unit C is angularly disposed, and screws 42 or the like hold the bracket 39 in place on the grate frame bar 25 of section B.

For the support of the outer frame bars 25 of the trays of section or unit C posts 10 and 11 are used at the outer corners with brackets 11, 12, while similar brackets 30 are used to adjustably hold the outer ends of the supports for the trays 50 on the edges 35 of posts 28.

The operation and use of my adjustable shelving will be entirely clear from the above description thereof by having simultaneously reference to the accompanying drawing, and it will be entirely clear that by loosening the screws 18 the upper and lower brackets 11 and 12 of the corner posts can be removed, while by the loosening of the screws 21 the intermediary brackets 19 holding and supporting the trays can be adjusted at 65 any distance from one another on the posts 10 and 28 to vary the distance between the individual trays to suit the size of the articles to be supported thereby. The brackets 32 supporting two adjoining units of the shelving can likewise suitably be adjusted by means of the screws 36, while 70 the upper ends of the posts 10 and 28 can be securely held in position by means of the brackets 11 and 29 respectively which may be secured to the walls of a refrigerator or other casing for 75 the shelves. If one or several units are angularly

disposed to others, the casings or chambers 40 in brackets 39 are used to support the inner ends of the frame bars 25 of the trays loosely supporting the same within the chambers, while the outer ends or corners are supported in the above 5 described manner by posts 10 and 28.

It will be understood that I have described and shown the preferred form of my shelving only as an example of the many possible ways to practically construct the same, and that I may make 10 such changes in the general arrangement thereof and in the construction of its minor details as come within the scope of the appended claims without departure from the spirit of my invention and the principle involved.

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

1. An adjustable shelving for the support of trays comprising units adapted to be placed end 20 to end, each unit composed of substantially L-shaped corner posts and intermediate posts, perforated end brackets having channels for the reception of the ends of one branch of the L-shaped posts, screws for securing said brackets 25 to said posts, said end brackets adapted to be secured to the upper and lower walls of receptacles in which said shelving is placed by fastening means passed through the perforations in said end brackets, and intermediary brackets for 30 said corner posts adjustably held to the same in any of their adjusted positions and locked to said posts, and adjustable brackets for said intermediate posts adapted to be adjustably secured thereto and locked in their adjusted position, 35 said intermediate post brackets adapted to support the trays of two adjoining units of the shelving.

2. An adjustable shelving for the support of trays comprising a plurality of units engaged 40 end to end in alignment and a unit adapted to be angularly disposed to said aligned units, corner posts and intermediate posts for all of said units, adjustable and perforated end brackets 45 for said posts and a chambered bracket replacing one of the corner posts of said angularly disposed unit adapted to be secured to one of said aligned units, adjustable intermediate brackets on said posts for the support of the trays of said shelving, the tray frame bar of the angularly 50 disposed unit loosely supported in the chamber of said chambered bracket, and locking means for locking said intermediate brackets and said chambered bracket in their adjusted positions, 55 and means to lock the posts to the upper and bottom walls of a refrigerator in which the shelving is used.

3. In an adjustable shelving for the support of trays, channeled end brackets and substantially 60 L-shaped posts engaging in the channels of said end brackets, screws for securing said end brackets to said posts, perforated plates formed with said end brackets adapted to secure the same between the top and bottom walls of receptacles for said shelving by fastening means passed through 65 the perforations in said plates, channeled intermediate brackets, portions on said posts engaging in the channels of said intermediate brackets, and screws for locking said intermediate brackets to said posts in any of their adjusted 70 positions, perforated plates formed with said intermediate brackets to support the trays of said shelving thereon, and means passed through the perforations in said plates to lock the trays thereto.

4. In an adjustable shelving for the support of trays, preferably for use in refrigerators, said shelving composed of sections adapted to be aligned and angularly disposed relatively to one another, convolute grate bars, each of said sections comprising frame bars having depressions in their upper edges supporting said convolute grate bars resting near their apexes in said depressions, chambered brackets uniting the angularly disposed sections at their meeting ends at one end with the frame bar of the angularly disposed section resting on the bottom of the chamber of said brackets, said brackets channeled, and the frame bars of the sections adjoining the angularly disposed section resting in the channel of said brackets, and means to unite the other ends of said sections with substantially L-shaped corner posts, said means comprising brackets having slots to be engaged by one branch of the L-posts and upstanding flanges to engage behind the frame bars of the adjoining section.

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