

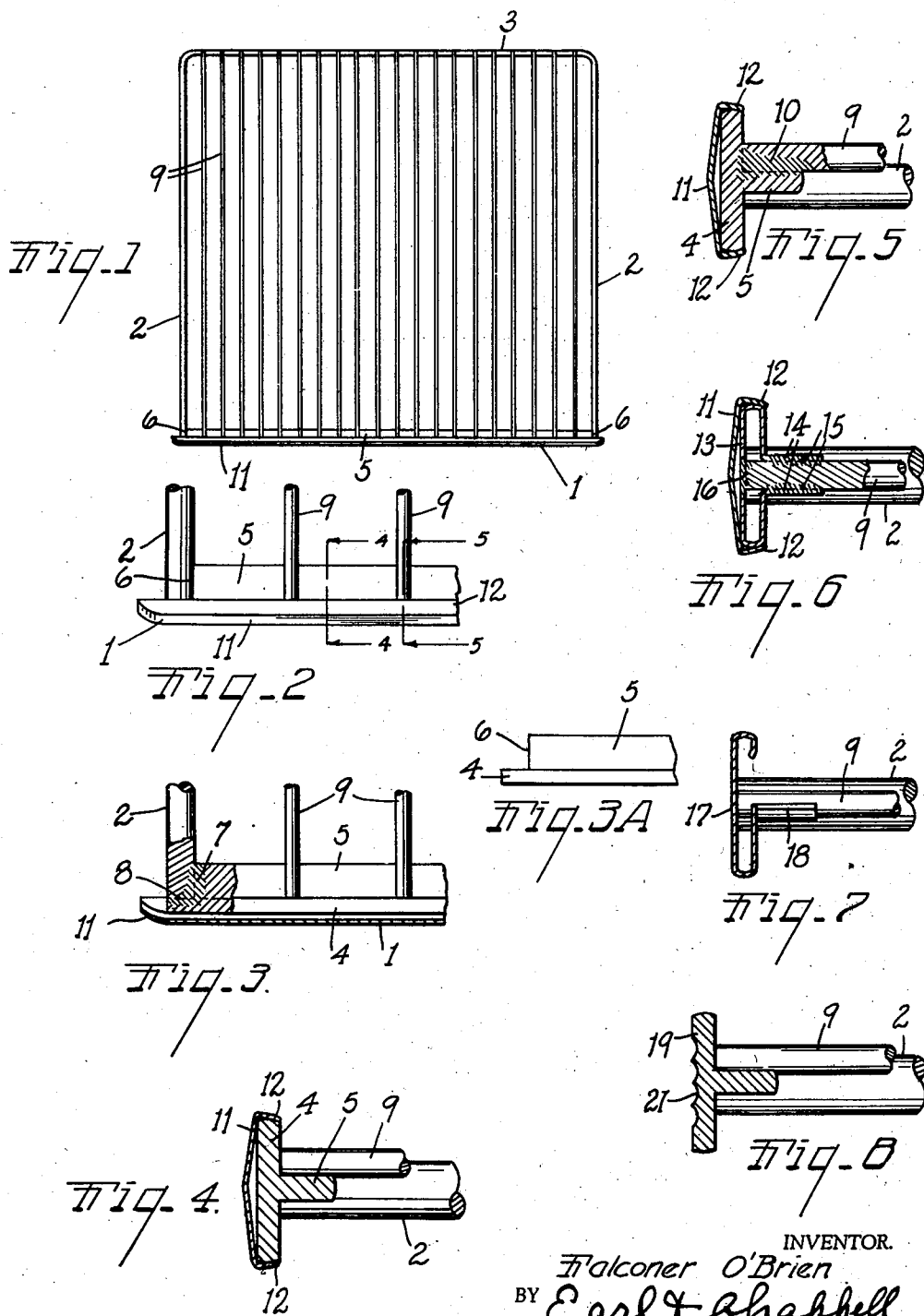
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SHELF OR RACK

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SHELF OR RACK

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This invention relates to improvements in a shelf or rack.

The main object of this invention is to provide a shelf or rack which is well adapted for use as a shelf or rack for refrigerators, ovens and the like, is very attractive in appearance, presents a finished front edge surface, and one which is not likely to engage articles as they are placed upon or removed from the shelf or cause injury to the user.

A further object is to provide a shelf or rack having these advantages which may be quite economically produced.

Further objects pertaining to details and economies of my invention will definitely appear from the description to follow. The invention is defined in the claims.

A structure embodying the features of my invention is clearly illustrated in the accompanying drawing, in which:

Fig. 1 is a plan view of a desirable embodiment of my invention in a structure designed for use as a refrigerator shelf or rack.

Fig. 2 is an enlarged fragmentary plan view.

Fig. 3 is a fragmentary plan view similar to that of Fig. 2 with parts in horizontal section.

Fig. 3A is a fragmentary plan view of the front frame member of the embodiment shown in Figs. 1 to 5.

Fig. 4 is a fragmentary view sectioned on line 4-4 of Fig. 2.

Fig. 5 is a fragmentary view sectioned on line 5-5 of Fig. 2.

Fig. 6 is a fragmentary view partially in section corresponding to that of Fig. 5 illustrating a modified form or embodiment of my invention.

Fig. 7 is a fragmentary view sectioned through the front frame member of another modification or embodiment of my invention.

Fig. 8 is a fragmentary view sectioned through the front frame in which the front frame member is ornamentally conformed.

Referring to the embodiment illustrated in Figs. 1 to 5, inclusive, the structure comprises a border frame having a front member designated generally by the numeral 1, side members 2, 2 and a rear member 3. The side and rear frame members are preferably formed integrally of round stock or stock of circular section. The front frame member 4 is of T angle iron disposed with the central flange or arm 5 thereof projecting inwardly. This flange or inwardly projecting arm 5 is cut away at each end to provide recesses 6 receiving the front ends of the side members 2. These side members are arranged with their sides

in contact with the ends of the arm or flange 5 and their ends in abutting relation to the inner side of the vertical portion of the front frame member and welded to the contacting parts as shown at 7 and 8, Fig. 3.

The grid or slat members 9 are formed of wire their front ends being disposed upon the inwardly projecting arm or flange 5 with their ends in abutting relation to the inner side of the web or vertical portion of the front frame member and welded both to the flange and to the vertical portion of the frame member as is indicated at 10 in Fig. 5.

With this arrangement of parts a rack is provided with a smooth top surface; the tops of the border frame members, which are of a diameter substantially exceeding that of the grid members, do not project objectionably above the grid members and the parts are secured together by very substantial welds. The rear ends of the grid members are lapped upon and welded to the rear frame member 3.

Since the welding operation, particularly where the ends of the grid member and the frame side members are butt welded to the front frame member, might require refinishing in order to secure the attractive appearance which I seek, I preferably provide a sheet metal finishing strip 11 formed into channel section and preferably longitudinally crowned as shown in the drawing, the flanges 12 of the strip being in sprung engagement with the edges of the front member.

The crowning of the finishing strip makes it practical to secure a very effective clamping action of the finishing strip upon the front frame member, although it might be effectively retained by suitably dimensioning and forming the flanges.

In the modification shown in Fig. 6 the front frame member 13 is formed of sheet metal folded longitudinally to provide a T section having spaced inwardly projecting flanges 14. These flanges are cut away at their ends to receive the frame members 2 and the grid members 9 are disposed with their front ends between the flanges and welded thereto as indicated at 15. The ends of the grid members abut and are welded to the web portion of the front frame member as indicated at 16. This embodiment also contains the finishing strip 11.

In the embodiment shown in Fig. 7 the front frame member 17 is formed of sheet metal conformed to provide a single inwardly projecting flange 18 to which the grid members are secured.

In the embodiment shown in Fig. 8 the front

frame piece 19 is provided with a longitudinally fluted ornamental face 21.

Structures embodying my invention are very attractive in appearance, may be made of quite light material, and at the same time are strong and rigid which enables making them for structures of considerable dimension without the employment of reinforcing cross pieces. The shelves or racks may be conveniently grasped for manipulation in a refrigerator, oven or the like, and the finish of the front bar may be readily made to conform to the desired finish of a refrigerator, for example.

I have not attempted to illustrate and describe all of the modifications which I contemplate as it is believed this disclosure will enable those skilled in the art to embody or adapt my improvements as may be desired.

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

1. In a shelf or rack, the combination with a border frame comprising front, rear and side members, the rear and side members being formed integrally of a rod of circular section, the front member being of T section disposed with its central arm projecting inwardly, such inwardly projecting arm being cut away at its ends to receive the front ends of said frame side members which are welded thereto with their ends in abut-

ting relation to the inner side of the vertical arm of the front member, spaced parallel grid members having their front ends disposed upon the inwardly projecting arm of said front frame member and welded thereto with their ends in abutting relation to the vertical arm of the frame member, their rear ends being welded to the rear frame member, and a longitudinally crowned sheet metal finishing strip of channel section having its flanges in sprung engagement with the edges of the vertical arms of said front frame member.

2. In a shelf or rack, the combination with a border frame comprising front, rear and side members, the front member being of angle section disposed with an arm thereof projecting inwardly, such inwardly projecting arm being cut away at its ends to receive the front ends of said side members which are welded thereto with their ends in abutting relation to the inner side of the vertical arm of the front member, grid members having their front ends disposed upon the inwardly projecting arm of said front frame member and welded thereto with their ends lying behind the vertical arm of the front frame member, and a sheet metal finishing strip of channel section embracing the vertical arm of said front frame member.

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