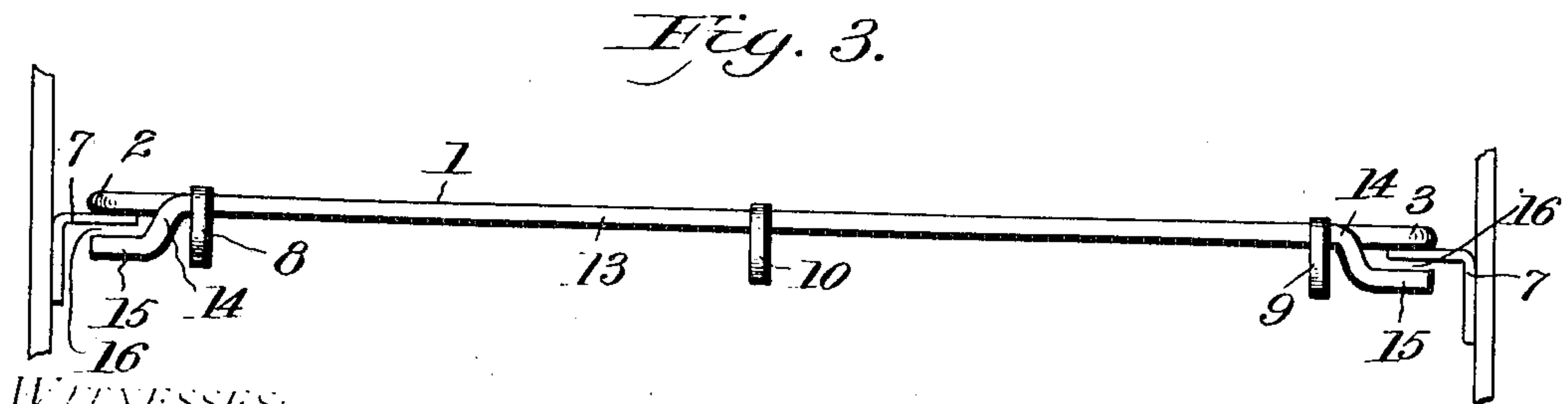
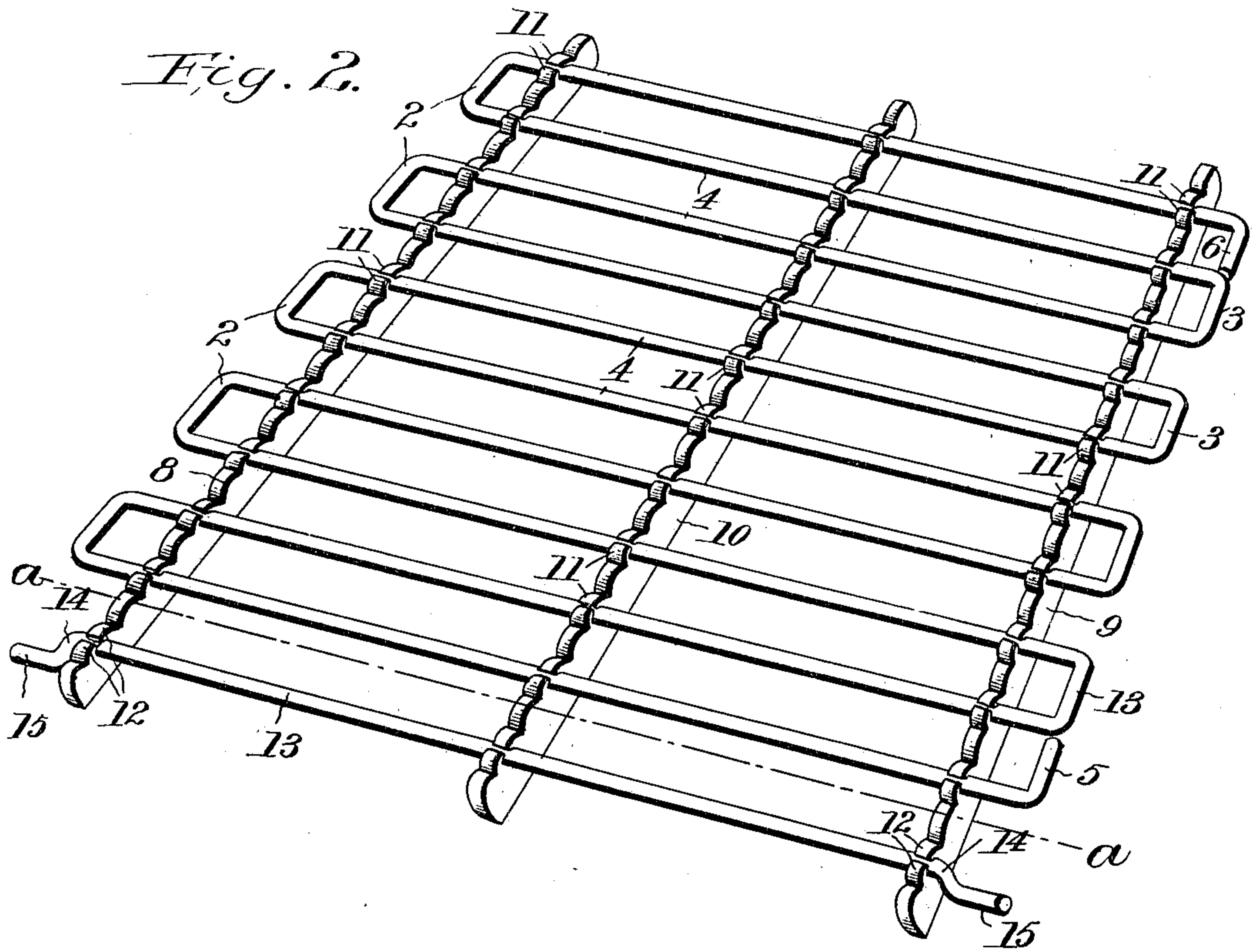
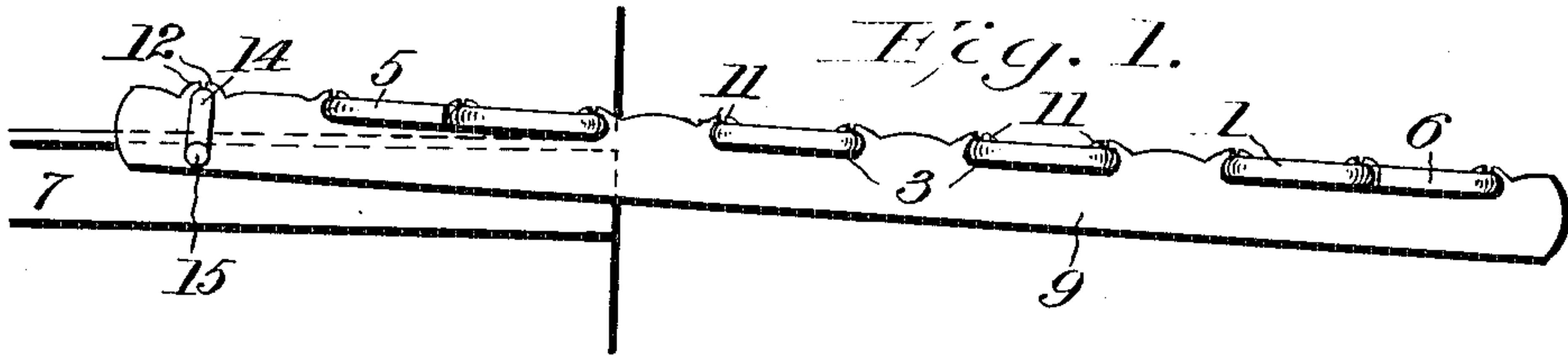


No. 825,631.

PATENTED JULY 10, 1906.

R. F. AGNEW.  
SHELF FOR REFRIGERATORS.  
APPLICATION FILED JUNE 22, 1904.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

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## SHELF FOR REFRIGERATORS.

No. 825,631.

Specification of Letters Patent.

Patented July 10, 1906.

Application filed June 22, 1904. Serial No. 213,690.

*To all whom it may concern:*

Be it known that I, RAY F. AGNEW, a citizen of the United States, residing in the city of Jackson, in the county of Jackson and State of Michigan, have invented certain new and useful Improvements in Shelves for Refrigerators, Ovens, or the Like, of which the following is a specification.

This invention relates to a rack or shelf for refrigerators, ovens, and other compartments wherein the same might be used to advantage.

One object of the invention resides in the provision of an exceedingly simple, economical, light, rigid, durable, and efficient rack, shelf, or the like for the purpose named.

Another object of the invention is to provide one form of my improved rack or shelf of a construction and arrangement wherein few parts are required and the use of separate clips or the like for securing intersecting elements or for any other purpose is obviated.

A still further object of one form of my invention resides in the provision of means to prevent the rack or shelf falling when partly withdrawn from its seat or rest.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the present invention.

In the accompanying drawings, Figure 1 is a side elevation, including portions of the sides of a refrigerator compartment or oven, illustrating the position of my improved shelf or rack when partly withdrawn therefrom. Fig. 2 is a detail perspective view of my improved rack or shelf looking from the rear thereof; and Fig. 3 is a rear view looking from the rear of the refrigerator, oven, or the like.

Referring now more particularly to the accompanying drawings, the reference character 1 designates the body portion of an improved rack or shelf, the same consisting of a

single wire, rod, or other suitable material bent or otherwise turned upon itself at intervals, as at 2 and 3, the portions 4 of the wire between the bends being preferably straight or parallel. These bent or otherwise formed portions 2 and 3 lie in direct alinement, as shown, with the ends 5 and 6 of the wire, rod, or other element, forming the body portion 1, being directed toward each other upon one and the same side of the rack or shelf. If desired, the ends 5 and 6 may terminate upon opposite sides of the shelf. It will be observed that all the foregoing parts lie in a common plane.

Inasmuch as the body portion 1 of the rack or shelf illustrated in the accompanying drawings may be of very stiff wire or other suitable material, and since the bent portions 2 and 3, forming the sides of the rack or shelf, may rest upon the guides or supports 7 of the refrigerator, oven, or other compartment, it is obvious that the single piece of material forming said body portion may in itself efficiently serve in the capacity of a rack, shelf, or the like without the use of other elements. While I may secure the body portion 1 upon the cross bars or members 8 and 9, of sheet metal or other suitable material, together with an intermediate bar or member 10 of like or other material, as shown, it is to be understood that any number of the cross members or bars 8, 9, and 10 may be employed and that no matter whether one or more are employed any disposition of the same with relation to the other elements may be made and that, if desired, the said members or bars may be entirely eliminated from the structure. It is to be still further understood that my improved shelf or rack may consist solely of a single piece of wire or other suitable material.

As has been premised in the foregoing, it is contemplated in one form of the invention to secure the body portion 1 to the bars or other members 8 and 9 without the employment of separate clips or the like. Therefore attention is now directed to the accompanying drawings, wherein it will be seen that a series of pairs of fingers 11 are formed in the upper edge of each cross bar or member by slitting or otherwise cutting into the members, the



series of pairs of fingers of each bar being arranged for direct alinement with relation one pair to another, and when the proper portions of the body portion 1 are arranged with respect to the bars or members—that is to say, with each straight or parallel portion between alining pairs of fingers—the latter are then bent or otherwise turned over, each finger of each pair toward its companion, thereby rigidly and otherwise highly satisfactorily securing the body portion to the said bars or members without the use of separate clips.

It will be seen in the embodiment of one form of my invention I form the bars or members 8, 9, and 10 of such length as to extend beyond the rear parallel or straight portion 4 of the body 1 and that the said bars or members in the rear of said portion 4 are each provided with a pair of fingers 12 for the reception of a keeper bar, rod, wire, or the like 13, arranged preferably parallel with the straight or parallel portions of the body 1. By reason of the fingers 12 being preferably formed in the same manner as the fingers 11 it is to be understood that the keeper bar, rod, wire, or the like is secured in the same manner as the portion 4 of the body of the rack or shelf. This keeper rod, wire, or the like 13 has the greater portion of its length lying in a plane common to the plane of the body portion of the shelf or rack; but reference to the accompanying drawings will disclose that the same has its opposite ends bent or otherwise turned downwardly, as at 14, with the extremities 15 thereof turned parallel with but beneath the main portion thereof, and the body portion of the rack or shelf forming a supporting-guide or the like 16, the keeper and body portion forming not only the supporting-guide, but the latter also serving to prevent the rack or shelf falling when partly withdrawn from the refrigerator, oven, or the like, as clearly shown in Fig. 1 of the drawings. In other words, by reason of the peculiar formation of the extremities of the keeper rod, bar, or the like 13 and their disposition with relation to the body portion a combined supporting-guide and keeper is the result, the rack or shelf when partly withdrawn falling to an inclined plane, causing a binding effect between the extremities 15 and the adjacent parallel or straight portion 4 of the body, preventing the falling of the shelf from its extended position, as now well understood. It might be stated that the bar, rod, wire, or the like 13 is not absolutely essential to the shelf or rack and that, if desired, the cross bars or members 8, 9, and 10 may be terminated along the line *a a*, as shown in Fig. 2 of the accompanying drawings, entirely eliminating the keeper feature.

Of course when the single piece of material is employed as a rack or shelf it is ob-

vious that clips are not needed, and, as has been disclosed, integral and not separate clips are preferably employed whenever it is desired to add cross-bars or other elements to the rack or shelf.

It is to be understood that I do not consider myself limited to the field of use hereinbefore outlined, but that, as heretofore intimated, my improved shelf or rack may be well appropriated to use as a shelf or rack, readily connected up in any suitable manner to stovepipes, boilers, ranges, or other devices or the like, the main object of the invention lying within the novel formation of my new and improved shelf or rack.

I claim—

1. A shelf or rack, including cross members, each having a series of pairs of fingers formed in the upper face thereof, and a single piece of material bent upon itself to form a body portion, the body portion between the bends thereof being parallel and arranged to register with pairs of said fingers, the latter being bent over corresponding parallel portions of said body.

2. A shelf or rack, including a cross member, said member having a series of pairs of fingers formed in the upper face thereof, a single piece of material bent upon itself to form a body portion, the body portion between the bends being parallel and arranged to register with pairs of said fingers, the latter being bent over corresponding parallel portions of said body to secure the latter to the said cross member.

3. A shelf or rack, including cross members, each having fingers formed in the upper face thereof, and a single piece of wire forming a body portion, the fingers of said cross members being bent over the wire to secure the body and cross members together.

4. A shelf or rack, comprising cross members, a single piece of material forming a body portion, means integral with said members for securing the body portion thereto, and means coöperating with the body portion to permit of the shelf or rack being tilted in its extended position.

5. A shelf or rack, including cross members, a single piece of material forming a body portion, means for securing the body portion to the said members, and means coöperating with the body portion to permit of the shelf or rack being tilted in its extended position.

6. A shelf or rack comprising a body portion made up of a single piece of material, and a cross-bar having a series of pairs of bendable fingers, the fingers of each pair being bent toward each other over the body portion to secure the latter to the former.

7. A shelf or rack comprising a body portion, and cross-bars, each cross-bar having a series of pairs of bendable fingers in its upper face, the fingers of each pair being bent



toward each other over the body portion to secure the latter to the cross-bars.

8. A shelf or rack, comprising cross-bars, a body portion made up of a single piece of wire, means integral with the bars for securing the body portion thereto, a keeper member connected to the said bars for coöperation with the body portion to permit of the shelf or rack being tilted in its extended position, and means integral with the bars for securing the keeper member thereto.

9. A shelf or rack, comprising a body portion formed of a single piece of material, cross-bars lying in contact with the body portion, and integral bendable means formed

with the cross-bars for securing the body and bars together.

10. A shelf or rack comprising a body portion and cross-bars, the latter each having bendable means for engagement with the former to secure the body and cross-bars together, and means to permit the shelf or rack being tilted in its extended position.

In testimony whereof I affix my signature in presence of two witnesses.

RAY F. AGNEW.

Witnesses:

CHAS. E. TOWNSEND,  
JAMES M. ADAMS.