

UNITED STATES PATENT OFFICE

2,355,651

SHELVING SUPPORT

William T. Hormes, Catonsville, Md.

Application August 20, 1942, Serial No. 455,480

4 Claims. (Cl. 248—243)

This invention is a shelving support of the type which employs suitable support strips, to be detachably engaged by support ears having projections complementary to spaced apart openings in the strips.

Earlier forms of shelving supports of this type are found in patent to Ostertag No. 598,742, dated February 8, 1898, and Schriefer, No. 754,816, issued March 15, 1904. In the Ostertag patent the cabinet sides are disclosed as provided with a vertical series of circular openings to be engaged by correspondingly shaped lugs on the removable shelf supporting ears. In the Schriefer patent a continuous perforated shelf supporting strip is employed, housed in a groove formed in the interior surface of the side of the cabinet, and the shelf-supporting ears are each provided with relatively thin, flat hooks which are inherently weak, engageable with the perforated strip. In this instance the continuous vertical grooves, plowed into the cabinet sides to house the strips, has a supplemental clearance groove, to provide space for the strip engagement lugs of the shelf support. Except for modification as to detail, such metal parts are now used extensively in the art. Another earlier form is disclosed in the patent to Hunter, No. 967,383, dated August 16, 1910, in which the shelf-supporting ear is provided with a thin hook adapted to enter very narrow slots formed in the metal strip.

One of the objects of the present invention is to provide a shelving structure of the type mentioned, which contemplates the use of a support strip so constructed and arranged that in one position of its use, shelf supports of the type disclosed in the Ostertag patent may be used, and while in a reversed position support ears with narrow engaging lugs of the type disclosed in the Hunter patent may be used. A further object is to provide a support strip of simple and inexpensive structure which may be readily installed or removed as occasion may require.

The invention will be hereinafter fully set forth and particularly pointed out in the claims.

Figure 1 is a perspective view, partly in section, illustrating the shelving support of the present invention in one of its operating positions.

Figure 2 is a similar view illustrating the support in its reversed position.

Figure 3 is a perspective view illustrating a supporting lug designed for use with the device in the position illustrated in Figure 1.

Figure 4 is a similar view of a support lug to

be employed when the strip is in the position shown in Figure 2.

Figure 5 is a longitudinal sectional view of Figure 1 showing the supporting ear in operative position.

Figure 6 is a longitudinal sectional view of Figure 2 showing the supporting ear in operative position.

Figure 7 is a perspective view illustrating a slight modification.

Referring to the drawing, 10 designates a supporting member, preferably constructed of wood, and which may be a vertical post of a shelving unit, or the end wall of a case or cabinet. In one surface of said supporting member 10 is formed a longitudinal recess 11, which is provided with an inner reduced portion 12, coextensive therewith and leading rearwardly from the bottom thereof. As illustrated in Figures 1 and 2, M designates a support member, which is preferably rolled metal provided with a body portion 15, of a width complementary to the width of the recess 11. Obviously the member M may be made of any other desired material without departing from the spirit of the invention. Said body 15 has portions 16 which are bent laterally across it, but spaced from the body, said portions 16 terminating in flanges 17 which extend laterally away from each other. In Figure 1 the portions 16 are shown so extended to positions adjacent the edges of the reduced portion 12 of the recess 11, so as to provide a relatively narrow channel 18 which is in register with said portion 12. The body portion of member M is also provided with a plurality of spaced openings 19 which are also in register with the reduced portion 12 of the recess 11. It will be observed that while the member M is in the position illustrated in Figure 1, supporting ears E of the type illustrated in Figure 4 may be employed for supporting shelving or the like. Each of said ears is provided with a cylindrical lug e, complementary to the openings 19, the space provided by the cross sectional shape of the member M being sufficient to provide the necessary clearance for said lugs. In this instance the lug e will not enter the reduced portion 12.

Referring to Figure 2, it will be observed that the member M is in a position reversed with respect to that illustrated in Figure 1. That is, the body 15 engages the bottom of the recess 11 and extends across and closes the extension 12 of said recess, the openings 19, however, being in register therewith. In this position the channel 18 is at the front of the recess and provides ample

clearance for the flat lug *e'* of the ear *E'* illustrated in Figure 5, the lug *e'* being of such dimensions that it may pass through an opening 19, and also extend into the reduced portion 12 of the recess 11, with plenty of clearance for manipulation.

In the form illustrated in Figure 7 the member *M'* has its body portion 15^a provided with arms 16^a, which extend at right angles therefrom, and terminate in the flanges 17^a, which are bent toward each other to provide the channel 18^a. The operation is identical to that already described with respect to the other form of the invention.

The advantages of the invention are that a very simple and inexpensive form of strong and rigid shelf supporting strip is provided, which, without any change in structure, may be used with support ears having cylindrical lugs or thin, flat lugs, as the case may be, by merely reversing the position of the strip within its complemental recess in the supporting member. It will also be observed that the support strip is of simple construction and may be readily secured within the recess of the supporting member or removed therefrom as may be desired, it being understood that the strip may be secured in position within the recess by any suitable means known in the art.

Having thus explained the nature of the invention and described an operative manner of constructing and using the same, although without attempting to set forth all of the forms in which it may be made, or all of the forms of its use, what is claimed is:

1. In a shelving structure of the character described, in combination, a supporting member having an elongated recess in a face thereof, said recess having a reduced portion coextensive in length therewith and extending rearwardly from the bottom thereof, and an elongated support-member reversibly located within the larger portion of said recess, the body portion of said support member being of a width complemental to the width of the recess, and provided with integral lateral flanges, which are positioned adjacent to and parallel with a face of said body portion and are also laterally spaced with respect to each other, so as to provide a narrow channel located in a position to register with the reduced

portion of said recess, said body portion having openings also in register with said reduced portion of the recess.

2. In a shelving structure of the character described, in combination, a supporting member having an elongated recess in a face thereof, said recess having a reduced portion coextensive in length therewith and extending rearwardly from the bottom thereof, and an elongated support member reversibly located within the larger portion of said recess, the body portion of said support member being of a width complemental to the width of the recess, and provided with integral lateral flanges which are positioned adjacent to and parallel with a face of said body portion and are also laterally spaced with respect to each other, so as to provide a narrow channel located in a position to register with the reduced portion of said recess, said body portion having a series of longitudinally and medially disposed openings each of a diameter approximating the width of the reduced portion of said recess and in register therewith.

3. In a shelving structure of the character described, an elongated support member having a main support portion provided with a series of vertically aligned openings, the longitudinal edges thereof having wing portions bent inwardly toward each other across said main portion and adjacent thereto, said wing portions having other portions bent laterally away from each other in lines parallel with said main portion in such manner as to extend laterally across the adjacent face of the main member.

4. In a shelving structure, an elongated support member having a main support portion provided with a series of longitudinally aligned openings therein adapted to receive and sustain projecting portions of shelf engaging elements, said main portion having wing portions extending away from its edges and toward each other, so as to provide a narrow channel located opposite to and parallel with said aligned openings, whereby a narrow channel is provided to receive said projecting portions of the support members while engaged with said openings, so as to maintain said support members in alignment with each other.

WILLIAM T. HORMES.