

April 9, 1935.

E. A. ROEGE

1,997,310

ARTICLE RACK FOR DISPLAY BOARDS

Filed June 24, 1932

2 Sheets-Sheet 1

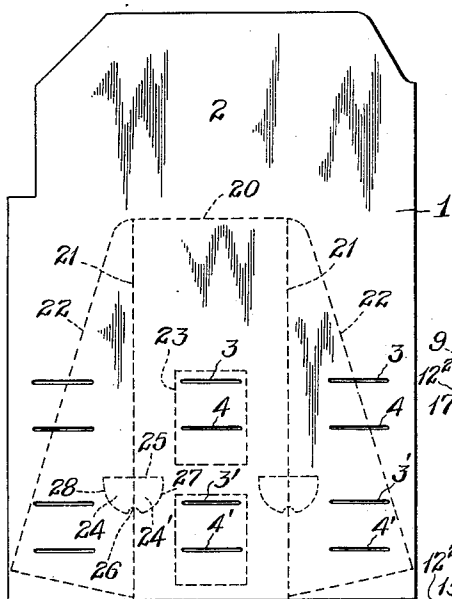


FIG. 1

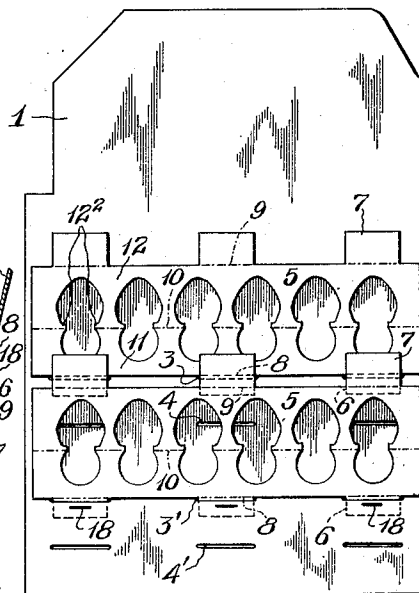


FIG. 3

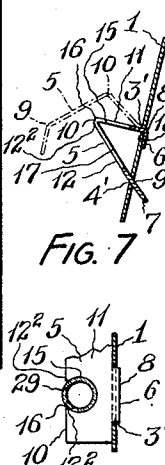


FIG. 7

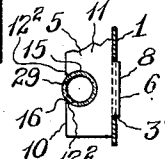


FIG. 8

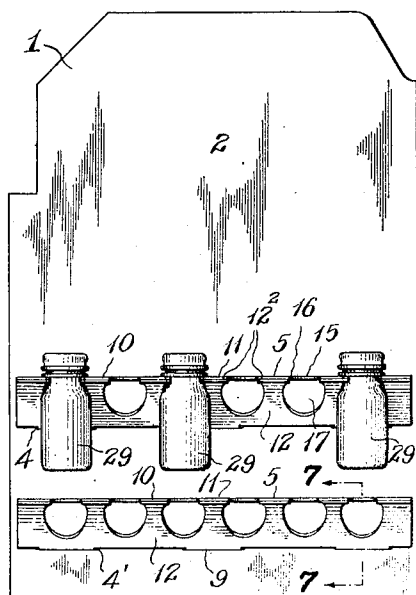


FIG. 4

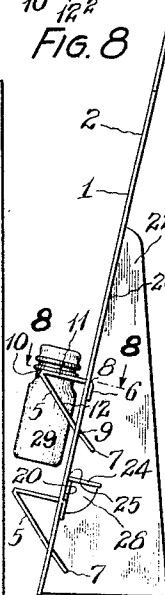


FIG. 6

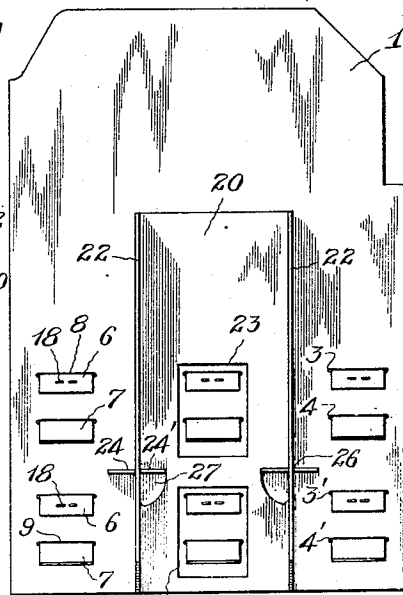


FIG. 5

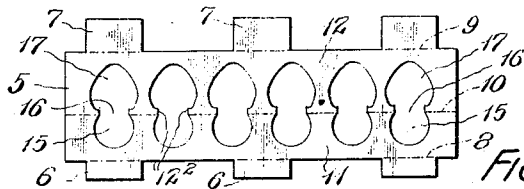


FIG. 2

INVENTOR:
EDWARD A. ROEGE

By *Sagwell & Wesseler*
ATTORNEYS

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E. A. ROEGE

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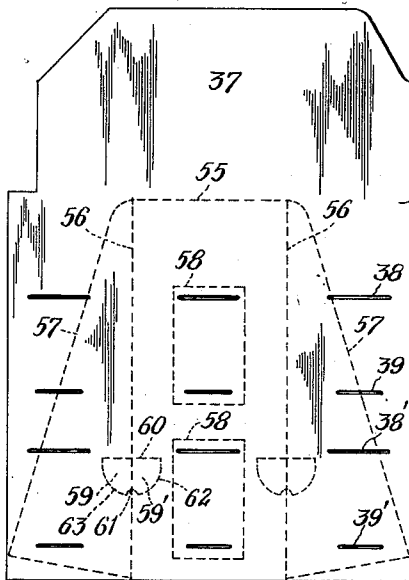


FIG. 9

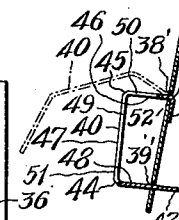


FIG. 15

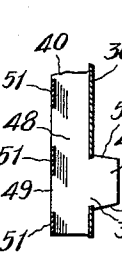


FIG. 16

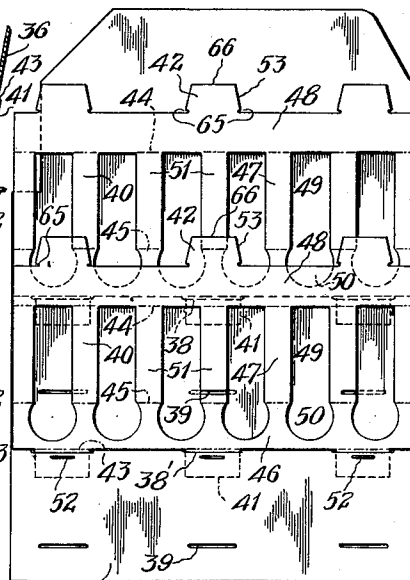


FIG. 11

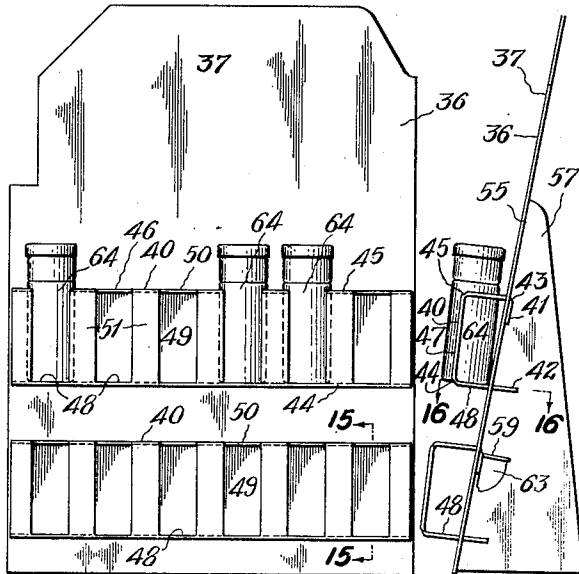


FIG. 12

FIG. 14

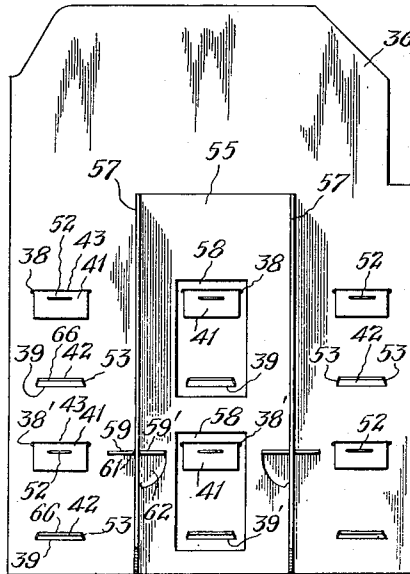


FIG. 13

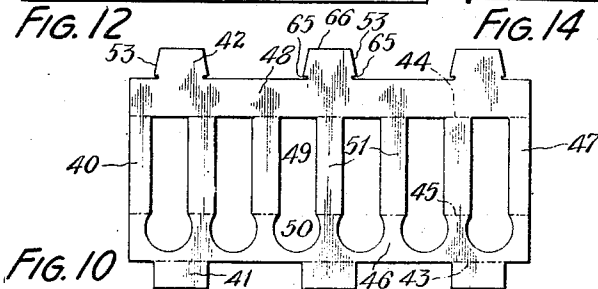


FIG. 10

INVENTOR:
EDWARD A. ROEGE

By

Saywell and Wesseler
ATTORNEYS

UNITED STATES PATENT OFFICE

1,997,310

ARTICLE RACK FOR DISPLAY BOARDS

Edward A. Roege, Cleveland, Ohio, assignor to
The Peerless Paper Box Manufacturing Com-
pany, Cleveland, Ohio, a corporation of Ohio

Application June 24, 1932, Serial No. 619,020

4 Claims. (Cl. 211-72)

My invention particularly relates to display boards for merchandise packaged in small containers, such as glues, powders, liquid goods of various sorts, etc., in small bottles, cans, and other suitable containers. The improved display board is particularly serviceable for use in retail merchandising. The purposes of the invention are to provide a device which will clearly and attractively display the articles offered for sale, to provide such display in a manner which furnishes easy accessibility, and convenient positioning of the goods on, and removal from, the board, to provide in conjunction with the display convenient means for advertising the article offered for sale, and to provide such a display board which may be packaged flat for convenient transportation, and yet may be conveniently assembled into operative position for use without the use of any tools.

The annexed drawings and the following description set forth in detail certain means embodying my invention, such disclosed means constituting, however, only two of the various forms in which the principle of the invention may be embodied.

In said annexed drawings:

Figure 1 is a front elevation of a panel forming the foundation or backing for one form of my improved display board, a suitable support or easel for holding the board in display position being secured to the back of the panel and being indicated in knockdown condition in broken lines;

Figure 2 is an elevation of the underside of an article rack blank which is adapted to be secured to the panel shown in Figure 1 and to be supported thereby and to serve, when bent into operative condition, as a rack for holding a plurality of the articles offered for sale in separate spaced relation and so that they may be readily removed from the display board as sold;

Figure 3 is a front elevation of the panel shown in Figure 1 and two of the rack blanks shown in Figure 2 secured to the panel, the assembly being shown in that condition intended for packaging and transporting of the display board;

Figure 4 is a front elevation of the assembly shown in Figure 3, when the two rack blanks thereof have been bent into operative racking positions, the view showing three of the displayed articles mounted in the upper of the two racks;

Figure 5 is a rear elevation of the elements shown in Figure 4;

Figure 6 is a view of the elements shown in Figure 4, taken from the right hand side of said Figure 4;

Figure 7 is a fragmentary vertical section, taken in the plane indicated by the line 7-7, Figure 4, the position of a rack member, when being bent into assembled position, being shown in broken lines;

Figure 8 is a plan section, taken in the plane indicated by the line 8-8, Figure 6;

Figure 9 is a front elevation of a panel or backing for a second form of my display board, the same being provided with a suitable easel or support which is attached to the back of the panel and is indicated in broken lines;

Figure 10 is a front elevation of an article rack blank adapted to be secured to the panel shown in Figure 9 and to form, when bent into operative condition, a support for a plurality of the displayed articles mounted in separate spaced relation and in easily removable position;

Figure 11 is an assembly of the panel of Figure 9 and two of the rack blanks shown in Figure 10, the assembly being shown in that condition which is intended for the packaging and transporting of the display board;

Figure 12 is a front elevation of the board with the two rack blanks bent into operative racking position, one of the racks being shown as supporting three of the articles displayed;

Figure 13 is a rear elevation of the elements shown in Figure 12;

Figure 14 is a view taken from the right-hand side of Figure 12;

Figure 15 is a fragmentary vertical section, taken from the plane indicated by the line 15-15, Figure 12, the position of a rack member, when being bent into assembled position, being shown in broken lines; and

Figure 16 is a plan section, taken in the plane indicated by the line 16-16, Figure 14.

Referring to the annexed drawings in which the same parts are indicated by the same respective numbers in the several views, a blank 1, Figures 1, 3, 4 and 5, preferably a plain board of any suitable material, such as cardboard, forms a foundation panel or backing for my improved display board. Preferably it is designed that the means for mounting or racking the displayed articles should be attached to the board 1 in the lower portion of the area thereof and that the upper portion 2 of the board 1 should furnish a surface upon which advertising or instructions regarding the displayed article can be placed. The marginal outline of the board 1 may take any suitable ornamental or convenient form desired.

The means for mounting the displayed arti-

cles is a rack provided with seats for holding the articles in separate spaced relation. Any suitable convenient number of such racks, and of any desired length, may be utilized. In the form of device shown in the accompanying drawings, I show two such racks supported transversely of the board 1 in substantially parallel upper and lower relation, each rack being capable of supporting six of the articles. The articles shown are merchandise packaged in bottles.

The racks are formed from blanks 5, Figure 2, which are formed with a plurality of spaced tongues 6 extending from one longitudinal edge and a plurality of oppositely disposed spaced tongues 7 extending from the opposite longitudinal edge. These tongues provide means for securing the rack blank 5 to the backing panel 1, the tongues 6 for permanently securing the panel 1 and rack blank 5 together, and the tongues 7 for removably securing them together to effect the display position of the rack 5. As an aid to the securing together of the panel 1 and rack blanks 5, I provide the panel 1 with two longitudinally spaced series of slots 3 and 4 and 3' and 4', one series for each rack blank 5. The slots of each series are in longitudinally spaced sets, and the slots of any one set are transversely spaced. For permanently securing the panel 1 and rack blank 5 together, the tongues 6 of the rack blank 5 are passed through the upper set of slots 3, from the front of the panel 1, and secured by clips 18, Figure 5, to the back of the panel. The second rack blank is correspondingly secured through the slots 3'. The rack blanks are formed with score lines 8 upon which the rack blanks can be bent so as to permit the packaging of the combined panel and two rack blanks in a flat package such as shown in Figure 3, thus providing for the convenient non-bulky shipping of the display board. In other words, a great number of the boards can thus be shipped flat in a comparatively small package.

The rack blank 5 is also formed with a longitudinal score line 9, Figure 2, which permits the bending of the extensions 7 relatively to the body of the rack blank 5, and with an intermediate longitudinal score line 10 which permits the bending of the body of the rack blank 5 into two body portions 11 and 12. The bending of the rack blank 5 along the score lines 9 and 10 is effected when it is desired to set the rack into its operative display position. Such position is illustrated, for instance, in Figures 6 and 7. In so doing, the rack blank 5 is bent downwardly from the position shown in Figure 3 upon the score line 8, and then bent upon the score lines 9 and 10, so as to cause the extensions 7 to pass through the slots 4 of the panel 1, thus producing the rack formation clearly shown in Figures 6 and 7.

The form of rack just described is designed to support merchandise packaged in bottles 29 which have contracted neck areas. For the purpose of providing seats for the reception of the bottles 29 and the supporting of the same in removable position upon the racks 5, portions of the rack blanks 5 are removed so as to provide the spaced slots clearly shown in Figure 2, and each of which consists of end portions 15 and 17 and an intermediate restricted connecting portion 16. When the rack blank 5 is bent into operative position, the portion 17 of the slot in the blank 5 becomes the lower slot portion and is of a size adapted to accommodate the diameter of the lower body portion of the bottle 29.

The portion 15 of the slot is the upper portion and is designed to engage the neck of the bottle 29. The restricted intermediate portion 16 of the slot is at the front of the rack and is of a width less than the diameter of the neck portion of the bottle 29 so as to prevent the bottle being easily displaced from the rack 5, but is not of a width so much less than the diameter of the neck of the bottle as to prevent the bottle being readily manually applied to the rack, and removed therefrom. The latter operation is effected by pulling the bottle forwardly from the rack and by the portions 12' of the rack body adjacent the ends of the restricted space 16. Due to the larger size of the top of the bottle, as compared with the diameter of the neck portion of the bottle, the bottle is suspended in the rack in the manner clearly shown in Figure 6.

Any suitable means is utilized for supporting the display board in display position. For purposes of illustration I show an easel for this purpose. The easel is secured to the back of the board 1 in any suitable manner, preferably by gluing or pasting the two members together. The easel comprises a body member 20 having score lines 21 providing two lateral wings 22 capable of being bent into relatively right angular relation to the plane of the body member 20. The body member 20 is formed with slots 23 which permit the securing of the central rack extensions 6 to the panel 1, for the securing together of the panel 1 and the rack blanks, and the passing of the central rack extensions 7 through the central slots 4 of the rack 1 for the assembling of the racks into operative position. In order that the wings 22 of the easel may be locked in supporting position at right angles to the plane of the body 20, which position is clearly shown in Figure 5, I blank two ears from the material of the body 20 and wings 22, as clearly shown in Figure 1, these ears being symmetrical with reference to the respective score lines 21 and consisting of one part 24 blanked from the material of the wing 22 and a connected and similar part 24' blanked from the material of the body 20. The ear member 24 is entirely disconnected from the wing 22, but the ear member 24' is connected to the body 20 along the score line 25. In thus blanking out the ear 24-24', a notch 26 is provided at the bottom of the ear in the plane of the score line 21. Therefore, when the wing 22 is bent into the position shown in Figure 5, the ear portion 24 does not bend therewith or at least is separate therefrom, so that the entire ear 24-24' can be bent upwardly upon the score line 25, and the notch 26 engaged with the wing 22 at the upper outer edge of the slot 23 created in the wing 22 by the blanking therefrom of the wing member 24, thus retaining the wing 22 in locked supporting position, and causing it to function as an easel. The slot created in the body 20 by the blanking out of the ear member 24' therefrom is indicated by number "27", Figure 5. It is evident from an inspection of Figure 1 that the easel can be packaged in flat position flush with the panel 1.

In the form of display board shown in Figures 9 to 16, the same general form and arrangement of main elements, as shown in Figures 1 to 8, is utilized with such modifications as serve to hold and display containers which are substantially the same diameter throughout their length. For displaying containers of this character, a platform is provided in the rack upon which

the containers are mounted, inasmuch as it is impracticable otherwise to securely hold them without the assistance of a restricted neck portion or other restricted area such as shown in Figures 1 to 8. The foundation panel or backing 36, Figure 9, is provided with the area 37 for advertising and analogous purposes, and is formed in its lower portion with two series of transversely spaced slots 38—39 and 38'—39', each series consisting of two longitudinally spaced sets, of which the upper sets 38—39 serve to secure and mount one container rack and the lower sets 38'—39' serve to secure and mount a lower and similar container rack. The rack blank 40, Figure 10, is formed with spaced extensions 41 extending from one longitudinal edge and spaced extensions 42 extending from the opposite longitudinal edge, a score line 43 providing for the bending of the extensions 41 whereby they can be passed through the slots 38 of the board 36 and secured to the rear of the latter by the fasteners 52. The rack blank 40 is also formed with a score line 44 disposed a spaced distance from the base of the extensions 42 so as to form a platform 48, Figure 14. This platform 48 is at the bottom of the rack, when the rack blank is bent downwardly from shipping position shown in Figure 11 to display position shown in Figure 14, so as to form a support upon which the bottles 64 can be mounted. The rack blank 40 is formed with a series of spaced transverse slots each comprised of two portions 49 and 50. The slot portions 49 are somewhat less in width than the diameter of the container 64 to be displayed, Figure 12, and the slot portions 50 are substantially equal in diameter to the diameter of the container. The rack blank 40 is formed with a further score line 45 running longitudinally of the blank 40 and substantially in the plane of the joint between the slot portions 49 and 50, Figure 10, and defining a rack body portion 46 opposite the platform 48, and within which the large slot members 50 are formed. The score line 45 also defines a rack body portion 47 within which the comparatively narrow slot sections 49 are formed. The spaced portions of the blank 40 between the comparatively narrow slot sections 49 are indicated by the number "51". The slot portions 49 are in length shorter than the length of the container 64 so that upon bending the blank 40 upon the score line 45 and mounting the container 64 upon the platform 48, Figure 14, the container extends above the portion 46 of the blank 40 within which the slot portions 50 are contained. The container 64 is prevented from being displaced forwardly by the engagement therewith of the walls of the restricted slot portions 49, the weight of the container 64 however being borne by the platform 48.

The display board panel backing 36 and the racks 40 can be packaged and shipped flat, as indicated in Figure 11, the racks 40 being turned upwardly from their extensions 41 upon the score line 43. When the board is to be used, the rack members 40 are turned down and bent upon the score lines 45 and 44 and the extensions 42 passed through the slots 39 of the board 36 so as to produce a rack and platform formation, clearly shown in Figure 14.

In order securely to lock the extensions 53 of the rack blank 40 in the recesses 39 of the panel 36, I taper the edges 53 of the extensions 42, as clearly indicated in Figure 10, the length of the slots 39 being substantially the same as the length

of the outer end 55 of the extensions 42. Furthermore, I provide notches 55 upon one or both sides of the extensions 42 adjacent the platform 48, which notches 55 engage with the material of the panel 36 laterally adjacent the ends of the slots 39. Thus, the extensions 42 are both tightly frictionally engaged with the side walls of the slots 39 and also interlocked with said walls.

For supporting the display board, any suitable and desired means may be utilized and for purposes of illustration I disclose an easel 55 having longitudinal spaced score lines 56 defining wings 57 which may be bent at right angles to the plane of the body 55, as indicated in Figure 13. This easel 55 is secured in any desired manner to the rear face of the board 36, preferably by gluing the two members together. The body portion 55 of the easel is formed with slots 58 to provide for the securing of the central extensions 41 of the racks 40 to the back of the board 36 and for the passing of the central extensions 42 of the racks 40 through the central slots 39 of the board 36. In order to lock the wings 57 of the easel 55, I blank ears from the material of the easel, these ears consisting of similar and symmetrical portions 59 and 59' taken from the material of the body 55 and the wings 57 and symmetrically arranged about the score lines 56. These members 59—59' are cut entirely away from the body of the easel except for a scored edge 60. Furthermore, in blanking out the ears 59—59', I form them with central notches 61. The slot in the body member 55 created by the blanking out of the ear member 59' is indicated by the number "62", Figure 13, and the slot in the wing 57 created by blanking out the ear member 59 is indicated by the number "63", Figure 14. It will be evident that upon bending the wings 57 on the score lines 56, the ear members 59 will not follow the wings 57, or at least will be free therefrom, so that the ears 59—59' can be bent upon the score lines 60 and the notches 61 engaged with the wings 57 at the top and rear edge of the slots 63, securely to lock the easel wings 57 in supporting position.

What I claim is:

1. An article rack for display boards for multiple articles, having means adapted for its attachment to a main support and also having a body member formed with a plurality of spaced slots each comprising communicating portions of different cross-sectional areas, each of said slots forming a seat for the reception in a removable position of one of the articles to be displayed, and, in combination with the material of the body member, forming a support for the article, the body member being scored to provide bending lines between the different sized portions of the seat slots to permit the bending of the member into operative position, and also into a position for flat packaging.

2. An article rack for display boards for multiple articles, having a body member formed with a plurality of spaced slots each comprising communicating portions of different cross-sectional areas, each of said slots forming a seat for the reception in a removable position of one of the articles to be displayed, and, in combination with the material of the body member, forming a support for the article, the body member being scored to provide bending lines between the different sized portions of the seat slots to permit the bending of the member into operative position, and also into a position for flat packaging, the peripheral edge of said body member being pro-

vided with spaced projecting tongues for cooperation with a main support.

3. An article rack for display boards for multiple articles, having means adapted for its attachment to a main support and also having a body member formed with a plurality of spaced slots, each of which slots comprises two communicating portions of different shapes and one of which is materially greater in cross-section than the other, each slot forming a seat for the reception in removable position of one of the articles to be displayed, and, in combination with the material of the body member, forming a support for the article, the body member being scored to provide bending lines between the different portions of the seat slots to permit the bending of the material into operative position and also into a position for flat packaging.

4. An article rack for display boards for multiple articles, having a body member formed with a plurality of transversely-aligned spaced slots, each of which slots comprises communicating portions of different shapes and sizes to form a seat for the reception of an article to be displayed, the body member being formed with a supporting platform adjacent the ends of said slots, the body member being transversely scored to provide bending lines between the different shaped and sized portions of the seat slots and also between and in transverse alignment with said ends of said slots to permit the bending of the member into operative position and to permit the flat packaging of the rack.

EDWARD A. ROEGE.