March 19, 1929. G. BRECHT 1,705,747

DISPLAY RACK

Filed Sept. 8, 1926

Fig. 1.

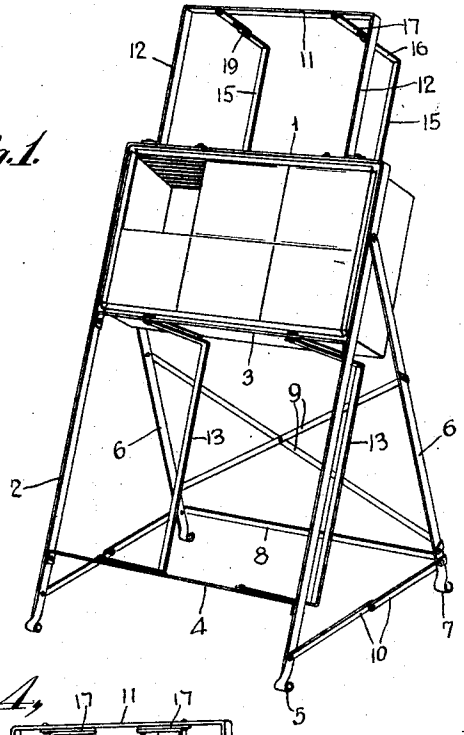


Fig. 2.

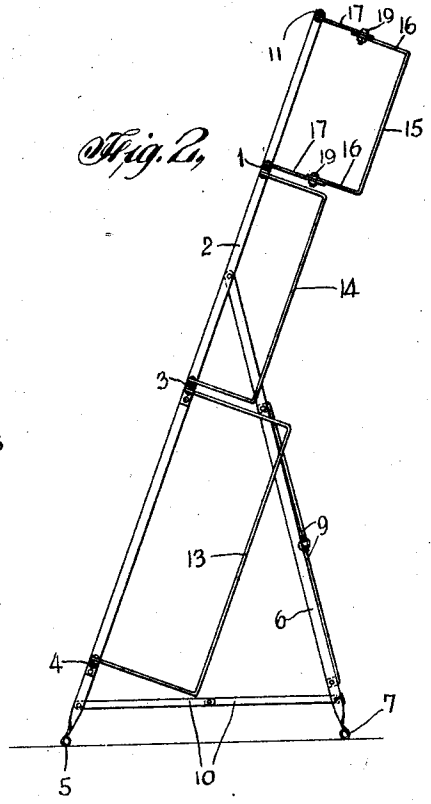


Fig. 4.

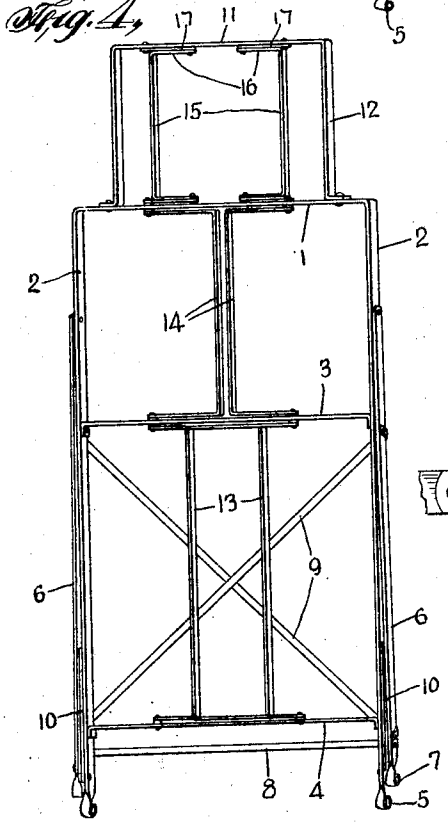
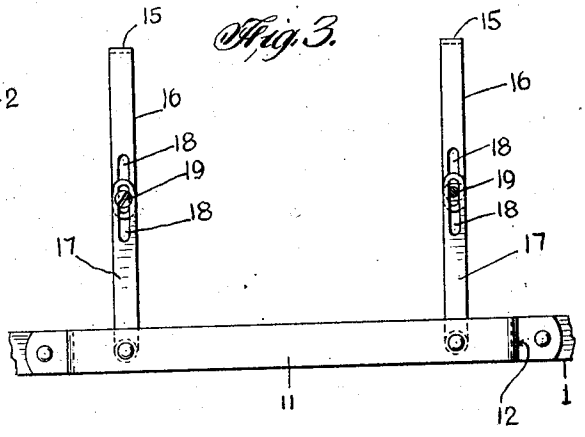


Fig. 3.



INVENTOR
George Brecht
BY
J. Granville Meyers.
ATTORNEY

Patented Mar. 19, 1929. 1,705,747

UNITED STATES PATENT OFFICE.

GEORGE BRECHT, OF DAYTON, OHIO, ASSIGNOR TO WESTON PAPER AND MFG. CO., OF DAYTON, OHIO, A CORPORATION OF OHIO.

DISPLAY RACK.

Application filed September 8, 1926. Serial No. 134,178.

One of the primary objects of the present invention is the provision of a rack, by means of which goods in cartons may be displayed in a pleasing manner, with the rack inclined, and with the open flaps of the cartons restrained from obstructing the clear view of the contents of the carton.

Another object is the provision of a rack having what is in effect a plurality of open pockets or holders for goods expansible into holding position, or contractible into a common plane, and wherein the depth of the pockets or holders may be varied.

Another object is the provision of a cheaply constructed, light weight rack, capable of being folded into a minimum space for storage and transportation, and of being set up in expanded condition without the use of tools.

With these and other objects in view, the invention consists in the construction and novel combination of parts fully described hereinafter, illustrated in the accompanying drawings, and pointed out in the claims appended hereto, it being understood that various changes in the form, proportion, size and minor details of construction within the scope of the claims, may be resorted to without departing from the spirit of the invention.

In the drawings forming a part hereof:

Fig. 1 is a perspective view of the rack in display position.

Fig. 2 is a vertical section of the expanded rack.

Fig. 3 is an enlarged detail in plan of a pocket adjustable in depth.

Fig. 4 is a perspective view of the folded rack.

In the present embodiment of the invention the improved rack is composed of a main frame of substantially U-shape, including a body 1 and arms 2, and the arms are connected at suitable intervals by cross-bars 3 and 4. The cross-bar 4 is near the ends of the arms remote from the body, and the said ends are bent into feet indicated at 5.

The main frame is adapted to be supported in inclined position by means of a brace frame composed of similar legs 6, each of which is pivoted at one end to an arm 2 of the main frame, and at the other is provided with a foot 7 similar to the feet 5. The legs 6 are connected by a cross-bar 8 near the ends remote from the main frame, and by cross-braces 9 above the cross-bar.

Stretchers are arranged between the lower ends of the legs 6 and the arms 2, each stretcher comprising pivotally connected members 10, which at their outer ends are pivoted to the legs and the arms respectively.

Referring to Figure 2, it will be seen that one member of each pair is pivoted to the inner face of the leg, while the other member of the pair is pivoted to the outer face of the arm. The arrangement is such that when the brace frame is folded into the plane of the main frame, the legs 6 being pivoted to the outer face of the arms 2, the stretchers will fold between the arms and the legs.

An extension or auxiliary frame consisting of a body 11 and arms 12, is connected with the body 1 of the main frame, the ends of the arms remote from the body 11 being secured to the body of the main frame as shown. The cross-bars 3 and 4 and the auxiliary frame divide the area of the entire display face of the rack into three portions. That is, they form with the main frame a plurality of framed openings, a lower opening relatively large, extending the full width of the frame and somewhat more than half the height of the main portion of the frame, a middle opening of the same width but less height than the lower opening, and an upper opening of less width than the lower opening.

Mechanism is provided in connection with the frame at each of these openings for cooperating with the main frame to provide a holder or pocket for a package of a size to fill the holder, or for a number of packages of an aggregate size to serve the same purpose. Between the cross-bars 3 and 4, a pair of U-shaped members 13 is arranged. Each of these members comprises a body and arms, and the arms are pivoted to the cross-bars. The arrangement is such that the members 13 may fold into the position of Figures 1 and 2, that is, with their planes parallel and perpendicular to the plane of the main frame, or into the position of Figure 4, that is, with the planes coinciding with the plane of the main frame.

Similar U-shaped members 14 are pivoted between the body of the main frame 1 and the cross-bar 3, these members 14 being arranged in precisely the same manner as are the members 13. However, the members 13 in the present instance provide a holder or pocket of less depth than that provided by the members 14, that is, the arms of the mem-

bers 13 are shorter than the arms of the members 14, although it is obvious that they might be of the same length, or even of greater length if desired.

In the space between the body of the auxiliary frame 11 and the body of the main frame 1, another pair of U-shaped members 15 is arranged. Each member includes a body and arms, and each arm is composed of sections 16 and 17 slidably connected. As shown more particularly in Figure 3, the lapping ends of the sections 16 and 17 are longitudinally slotted as shown at Figure 18, and through each pair of the slots is passed a screw-bolt 19. It is obvious that by loosening the nuts off the bolts, the sections may be moved with respect to each other to shorten or lengthen the arms. With this arrangement, the depth of the holder at the top of the frame may be increased or decreased in accordance with the size of the carton to be held.

During storage or transportation, the rack is folded into the position of Figure 4. The sections 16 and 17 of each of the U-shaped members at the top of the frame are folded upon each other, so that the bodies 15 and arms are within the plane of the auxiliary frame, and the U-shaped members 13 and 14 are folded in a similar manner. The arms of the members 14 are of a length such that the bodies of the members may move entirely into the plane of the main frame without lapping. The arms of the members 13 are of a length such that they lap upon each other when similarly folded.

When the U-shaped members 13, 14 and 15 have been folded, the stretchers 10 are broken, and the brace frame is folded into position outside of the main frame.

The improved rack may be of strap iron of suitable weight, and may be folded into a space of a depth approximately that of the width of the material from which the rack is made. Constructed as specified, it provides a support strong enough for the weight it is expected to sustain. When the cartons are placed in the pockets constituted by the main frame and the U-shaped members, the open flaps may be turned back along the sides of the carton, and they will be held in this position by engaging with adjacent cartons the body and sides of the main frame, or the cross-bars, as the case may be.

It will be evident from the description that the improved rack is composed of a frame with an easel support, and that the frame includes an outlining member, that is, the auxiliary frame and parts of frame 1—2, which is divided by cross-bars into a plurality of openings, each of which is framed by the cross-bars and frame parts. Each of these framed openings is converted into a goods receiving pocket or holder. Sundry of the pockets are adjustable in depth, and all may be so constructed if desired. The U-shaped member and the easel support are foldable into the plane of the frame. For storage or transportation the frame may be folded, and in order to set it up, it is only necessary to pull out the easel support and to open the U-shaped members. No tools are required, since there are no nuts or screws to tighten.

What is claimed as new is:

1. A display rack including a frame, and an easel support, the frame of open construction providing a plurality of substantially rectangular framed openings in a common plane, and a plurality of U-shaped members pivoted to the frame at each of the openings and adapted to be swung into the plane of the frame or at right angles thereto, each pair of members forming with the frame when at right angles thereto a pocket or holder at the opening for receiving goods to be displayed.

2. A display rack including a frame, and an easel support, the frame of open construction providing a plurality of substantially rectangular framed openings in a common plane, and a plurality of U-shaped members pivoted to the frame at each of the openings and adapted to be swung into the plane of the frame or at right angles thereto, each pair of members forming with the frame when at right angles thereto a pocket or holder at the opening for receiving goods to be displayed, the U-shaped members of the openings and the easel support foldable into the plane of the main frame.

3. A display rack including a frame, and an easel support, the frame of opening construction providing a plurality of substantially rectangular framed openings in a common plane, and a plurality of U-shaped members pivoted to the frame at each of the openings and adapted to be swung into the plane of the frame or at right angles thereto, each pair of members forming with the frame when at right angles thereto a pocket or holder at the opening for receiving goods to be displayed, the U-shaped members at sundry of the openings sectional, and the sections adjustable to vary the depths of the pockets in accordance with the size of the goods to hold said goods within the appropriate openings with the display faces thereof flush with the face of the frame, and the sections foldable to enable the members to fold into the plane of the frame.

4. A display rack including a frame with an easel support foldable into the plane of the frame, said frame composed of an outlining member and cross bars dividing the space within the outlining member into framed openings of various sizes and in the same plane, and means cooperating with the frame at each opening to form therewith a receptacle for supporting goods within the opening, said means of different depths in accordance with the size of the goods to be held to

hold said goods with the display faces thereof flush with the plane of the frame and with the framing of the opening.

5. A display rack including a frame with an easel support foldable into the plane of the frame, said frame composed of an outlining member and cross bars dividing the space within the outlining member into framed openings of various sizes and in the same plane, and means cooperating with the frame at each opening to form therewith a receptacle for supporting goods within the opening, said means of different depths in accordance with the size of the goods to be held to hold said goods with the display faces thereof flush with the plane of the frame and with the framing of the opening, the means at sundry of the openings sectional, and the sections adjustable to vary the depth of the receptacles.

Signed at Dayton, in the county of Montgomery and State of Ohio this 1st day of Sept., A. D. 1926.

GEORGE BRECHT.