April 26, 1938. C. J. WHITE 2,115,693

FLORAL RACK

Filed Nov. 16, 1936 2 Sheets-Sheet 1

FIG. 1.

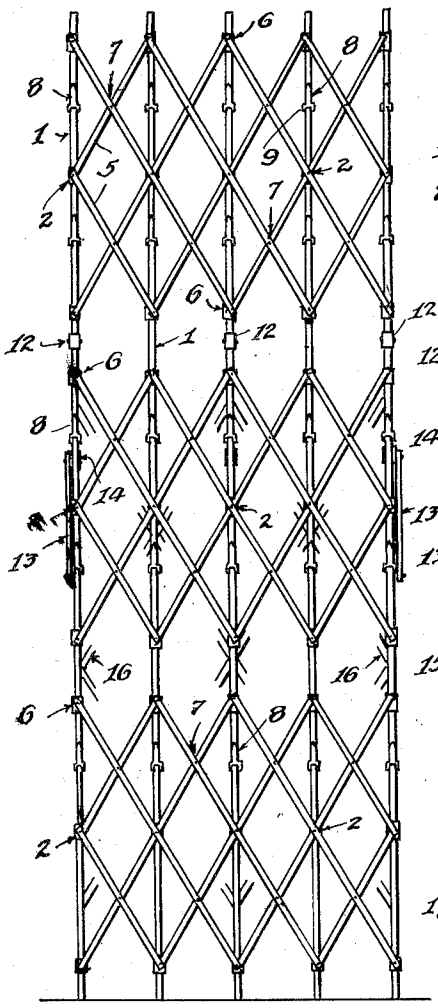


FIG. 2.

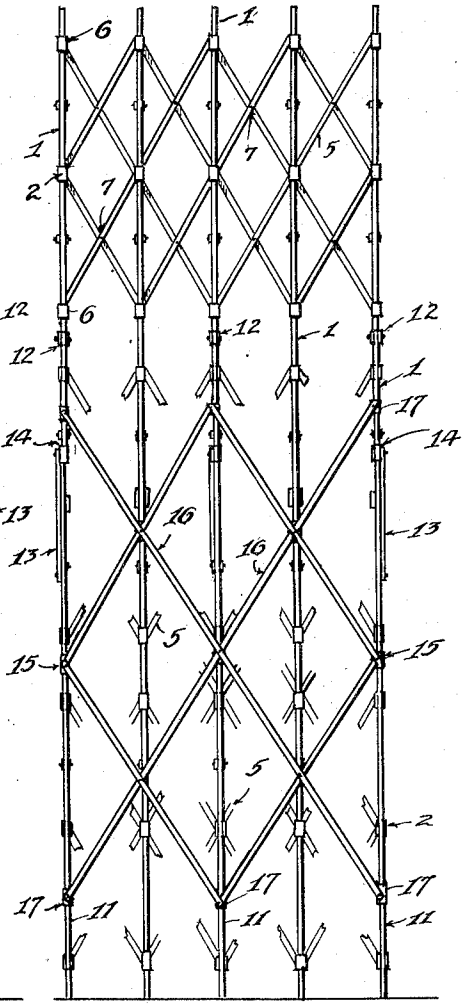
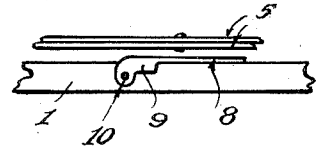


FIG. 2a.



Inventor
C. J. White,

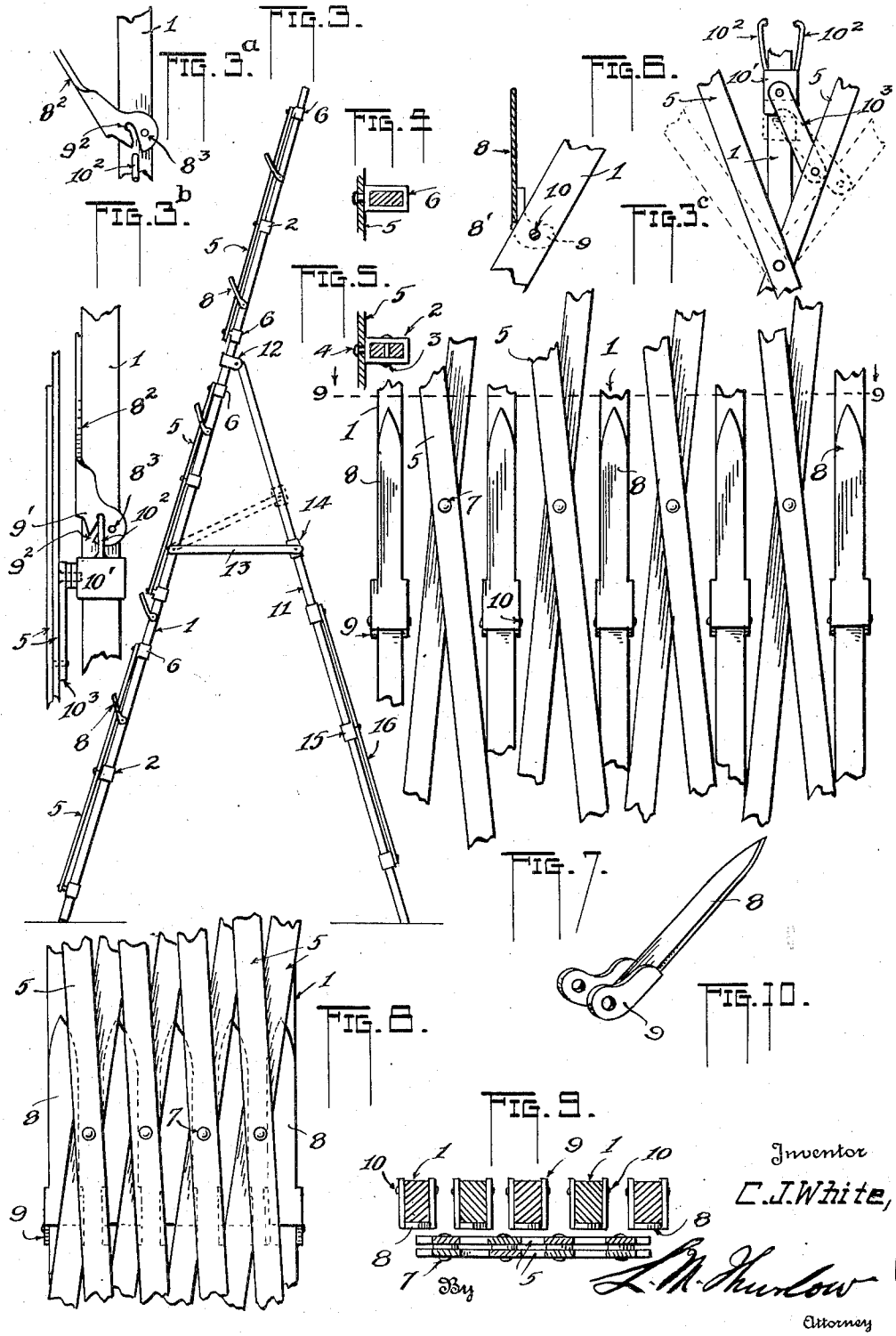
By L. M. Thurlow

Attorney

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FLORAL RACK

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Inventor
C. J. White,
By L. M. Thurlow
Attorney

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2,115,693

FLORAL RACK

Clarence J. White, Peoria, Ill.

Application November 16, 1936, Serial No. 110,974

9 Claims. (Cl. 248—195)

This invention pertains to improvements in floral racks, for use at funeral services in homes or churches.

An object of the invention is the provision of a rack of a structure which with its supporting props can be easily collapsed from a wide spreading affair into a very narrow form.

Another and very important object lies in providing a floral rack having pivotally mounted impalement prongs collapsible upon the members carrying them and which in the act of folding or collapsing the rack will be covered by certain members of the rack structure and protected by them against damage and so also that said prongs will not project from the face of the rack so as to catch upon articles or cause annoyance in any way.

Further, to provide means for positively collapsing impalement prongs and for positively moving them to the impalement position.

In order that the invention in all its details may be thoroughly understood the accompanying drawings are provided wherein.

Figures 1 and 2 are respectively, a front and a rear elevation of a rack according to the invention, certain parts in both figures being shown broken away that the balance thereof may be more clearly seen.

Figure 2^a is a side elevation of certain parts of the rack.

Figure 3 is a side elevation of the rack.

Figures 3^a and 3^b are side elevations of part of the rack and an impalement prong showing means for positively operating the latter.

Figure 3^c is a front elevation of parts shown in Figures 3^a and 3^b.

Figures 4 and 5 are plans of two forms of devices, in detail, shown in the earlier figures and illustrated in connection with other parts shown in cross section.

Figure 6 is a side elevation of a member of the rack with a pivotally mounted prong thereon shown in longitudinal section.

Figure 7 is a detail, much enlarged, of certain rack parts including impalement prongs.

Figure 8 is similar to Figure 7 showing the parts of that figure in closer relation.

Figure 9 is a horizontal section of the part shown in Figure 7 produced on line 9—9 thereof.

Figure 10 shows in perspective an impalement prong of some of the previous figures.

Floral racks have usually been of rigid types or those wherein the members thereof have been fixed relatively thereon requiring large carrying cases for transporting them, besides taking up much space for storage, and unfitted for placing in cramped quarters when set up for floral display at funeral services for example.

In addition to these facts the impalement prongs for receiving the floral pieces have either been fixed in position on the rack-frame, or if pivoted thereon were free at all times to extend from the face of the rack in danger of being bent and distorted together with the annoyance caused by catching upon clothing, or other objects with which they might come in contact.

With the object of avoiding the above disadvantages the rack herein described and shown has been designed and will be understood from the following, aided by the drawings.

In the said drawings the numeral 1 denotes severally, a series of bars of any desired length which lie parallel to one another and which are preferably rectangular in cross sections.

In Figures 1 and 2, in this instance only, five of such bars are shown of a length corresponding substantially to the longest type of rack usually employed. On each of the bars at their spaced position, in this instance, are members of any desired type affixed thereto. As shown in Figure 5 these take the form each of a tubular part designated at 2 secured by means of a pin or rivet 3, for example, said member or part 2 having an extended stud 4 which, depending upon its location, receives upon it the ends of flat member 5, or a pair of the same at their middles.

Spaced from these members or parts 2 at each side thereof is a member or part 6, Figure 4, which corresponds to the said members 2 but is slidable upon its bar 1. These cross members 5 are arranged as shown in Figures 1 and 2 forming the well known "lazy tongs" structure, their several extremities and their places of crossing having pivoted relation with said members or parts 2 and 6, and pivoted to each other as at 7, and in this particular instance, only, three of the "lazy tongs" lie in spaced groups at bars 1 serving the desired purpose.

Pivotally mounted on the bars 1 at desired positions between the members or parts 2, 6 are impalement prongs shown more particularly in Figures 6, 7, 8, and 10 and identified by the character 8. This may consist of a metal strip pointed at one end, if desired, and having a pair of spacd check-portions 9 to engage opposite sides of the bars 1, a pin 10, Figure 6, answering as the pivot member.

Since the rack is adapted to collapse in its own plane and since a back support is preferable for said rack, such support is likewise made collaps-

ible and comprises in this instance parallel bars 11, Figures 1 and 2, one of them being shown in Figure 3, these being pivoted at one of their ends at the bars 1 on members 12 corresponding to 2 of Figure 5, the other end being free and adapted to rest upon a supporting surface with the said bars 1. Braces 13 are pivoted at one of their ends to said bars 1, their other ends being pivoted to a slide 14 corresponding to 6 in Figure 4, the several slides adapted to shift along the bars 1 when folding or unfolding the device.

Mounted on certain of the bars 1 are fixed members 15 to which cross members 16 are pivoted to form a "lazy tongs" as in the first instance, the cross members at their ends likewise being pivoted on slides 17. The entire device as constructed is then collapsible as a whole, the several described lazy tongs acting together and yet a thoroughly rigid rack is produced for any degree of spread.

When setting the rack up for use as shown in Figure 3, for example, the prongs 8, due to their free manner of mounting, will fall away from the members 1 and rest at their bases 8' against the latter, thus maintaining them at the proper angle for impalement purposes. At the time of collapsing the device it is held so that its front side is uppermost whereupon the prongs will fall to positions flat upon and parallel to the rods 1. The collapsing act is then brought about, and the members 5 as they turn upon their several pivots approach each other as shown in Figures 8 and 9, passing in front of and practically covering the prongs at a slight distance therefrom as shown in said Figure 9, and also in Figure 2^a preventing them falling forward, both protecting them from injury and removing them from chance engagement with objects. The rack is readily transportable in its collapsed form and whereas, as stated earlier herein, a very bulky carrying case is required for the rigid type of rack, the present rack requires a case of but three or four inches square, the length of the case, of course, being governed by the length of said rack. Quite often a rigid type of rack when set up for use cannot be suited to all conditions, i. e., where there are spaces between objects too narrow to receive the rack, the latter thus in many instances occupy floor space that should be available for other uses. A collapsible rack such as described, therefore, is readily adaptable to spaces of any width while just as effective for display purposes.

In Figures 3^a, 3^b and 3^c in lieu of depending upon gravity-operation of the prongs a manner of positively collapsing a prong upon the bar 1 is shown wherein 8^2 designates said prong pivoted at 8^3 to said bar. The check-portions 9' are slotted at 9^2, but one check being shown, said slot lying between the pivot and the body of the prong and opening downward. Slidable on the bar 1 is a sleeve portion 10' provided with an upwardly extended finger 10^2 at two opposite sides thereof, Figure 3^c, each to engage in a slot, such engagement for one of them being shown in Figure 3^b. Pivoted at one end to the sleeve 10' is a link 10^3, its other end being pivoted to one of the cross members 5, the relation of the parts being such that as the rack is spread or collapsed the sleeve 10' will be shifted. It is noted in Figure 3^a that slot 9^2 in the check 9' of the prong 8' lies in such position that when collapsing the rack the movement of the sleeve is in the direction of the prong causing the inwardly projecting ends of the fingers 10^2 to enter the said slot and that in a further movement the prong will be positively moved toward and rest upon the bar 1. In the reverse action, i. e., when the rack is extended, the said ends of the fingers when drawn down will engage the lower wall of the slot, Figure 3^b, and positively move said prong to the impalement position of Figure 3^a. While this is one manner of positively operating the prong it is understood that other ways may be used to attain the same result. It is understood that the open-end slot 9^2 is employed in order that the sleeve 10' may partake of any distance of travel after leaving the prong as the rack is spread.

Due to the fact that the prongs 8 are mounted on the vertical rod-member 1 they always lie on exactly vertical lines in any degree of spread of the rack.

Various slight alterations may be made throughout the structure without departing from the spirit of the invention or the scope of the accompanying claims, it being thus understood that I do not intend to be limited by what is shown and described.

I claim:

1. A collapsible display rack including in its construction pivotally related rod-members adapted to swing reative to each other in their own planes, an impalement prong hingedly mounted on one of the members adapted to swing from an outward impalement position to a neutral collapsed position upon the member, its point in the collapsed position lying between the member and another member of the structure and covered by the latter for preventing chance engagement of said point with an article.

2. A floral rack adapted to collapse in its own plane, including in its construction a series of substantially parallel bars, an impalement prong hingedly carried by one of them and free to assume an extended article-holding-position when the rack is erected for use, and cross-members carried by the bars constituting a lazy-tongs, certain of the members lying adjacent to and in front of the prong in the collapsed position of said rack, preventing the hinged action of said prong.

3. A floral rack including in its construction a plurality of members paralleling each other, a plurality of second members crossing the first members, and also crossing each other in diagonal directions forming a lazy-tongs, the said second members being pivotally connected and pivotally connected to said first members and guided in a shifting movement of their ends along the same, the whole adapted to collapse with all of the members of the structure lying in close order, and prongs pivoted to certain of the first members adapted to swing outwardly from and beyond the outer faces of said second members in the spread position of the structure, the points of the prongs adapted to lie between the first and second members in the collapsed or closed position of said structure.

4. The combination in a floral rack whose parts are arranged to move relatively in a given plane both to spread or to collapse the same, of a bar, an impalement prong pivoted thereto at one end adapted to swing between two extreme positions, a mounted part movable to and from the prong, adapted to engage the latter, and a link connected to said part and operated by a portion of the rack in the action of the latter adapted to positively swing the prong between its said two extreme positions.

5. A floral rack including in its construction a member, a pivotally mounted impalement prong thereon adapted to swing between two extreme

positions in a direction at right angles to the face of said member and paralleling the longitudinal line of the member, a member pivoted to the first said member and swingable parallel to the face of the same, and mechanism operated by the second named member in its swinging movement adapted to positively swing said prong in either direction on its pivot.

6. A collapsible display rack including in its construction pivotally related rod-members arranged to swing relative to each other in their own planes, an impalement prong hingedly mounted on one of the members adapted to swing in a plane lying at right angles to its hinge axis and at right angles to the face of the member and paralleling the longitudinal line of the member carrying it, said prong in one of its positions lying in an impalement position outward from the faces of all of the members, and in another position lying adjacent to and substantially paralleling the member on which it is mounted, and in the latter position lying between said member and the other members of the structure, and its point being entirely concealed and covered by the latter to prevent its chance engagement with an article.

7. A collapsible display rack including in its construction a plurality of rod-members paralleling each other, a lazy-tongs structure the members of which lie in diagonal positions across the same with respect to the longitudinal lines thereof and operatively connected therewith adapted to shift those members in their parallel relation to a collapsed position, an impalement prong pivotally mounted on a member of the rack, the same adapted to swing to and from said member in a plane lying substantially at right angles to the axis of the prong's pivotal movement, said plane lying substantially at right angles to the face of said member and paralleling the longtudinal line of the latter, said prong adapted to lie in an article holding position outward from the member in the path of movement of a part of the lazy tongs and in another position being maintained by said part in a collapsed position adjacent said member.

8. A collapsible floral rack including in its construction a plurality of substantially parallel bars, members diagonally crossing the said bars and forming the face of the rack, parts of the members having pivotal connection with said bars and parts thereof being shiftable therealong in connected relation providing for collapsing movement of the whole while maintaining said bars parallel to each other while moving relatively, in directions at right angles to their lengths, and a prong pivotally mounted on one of the bars adapted in an extended position thereof to project forward beyond the outer faces of the members when the rack is open and also adapted in the collapsed form of the rack to lie between the forward face of the bar and the adjacent rear faces of said members, parts of the members covering the point of said prong.

9. A floral rack including in its construction a member, a pivotally mounted impalement prong thereon adapted to swing between two extreme positions in a direction at right angles to the face thereof and having a slot therein, a second member mounted to move in a plane paralleling said face of the first member, a part movable along said first member, a portion thereof adapted both to enter and leave the slot and by movement of the second member adapted when engaged in the slot to swing the prong in either direction, and a link connecting the part and the said second named member.

CLARENCE J. WHITE.