

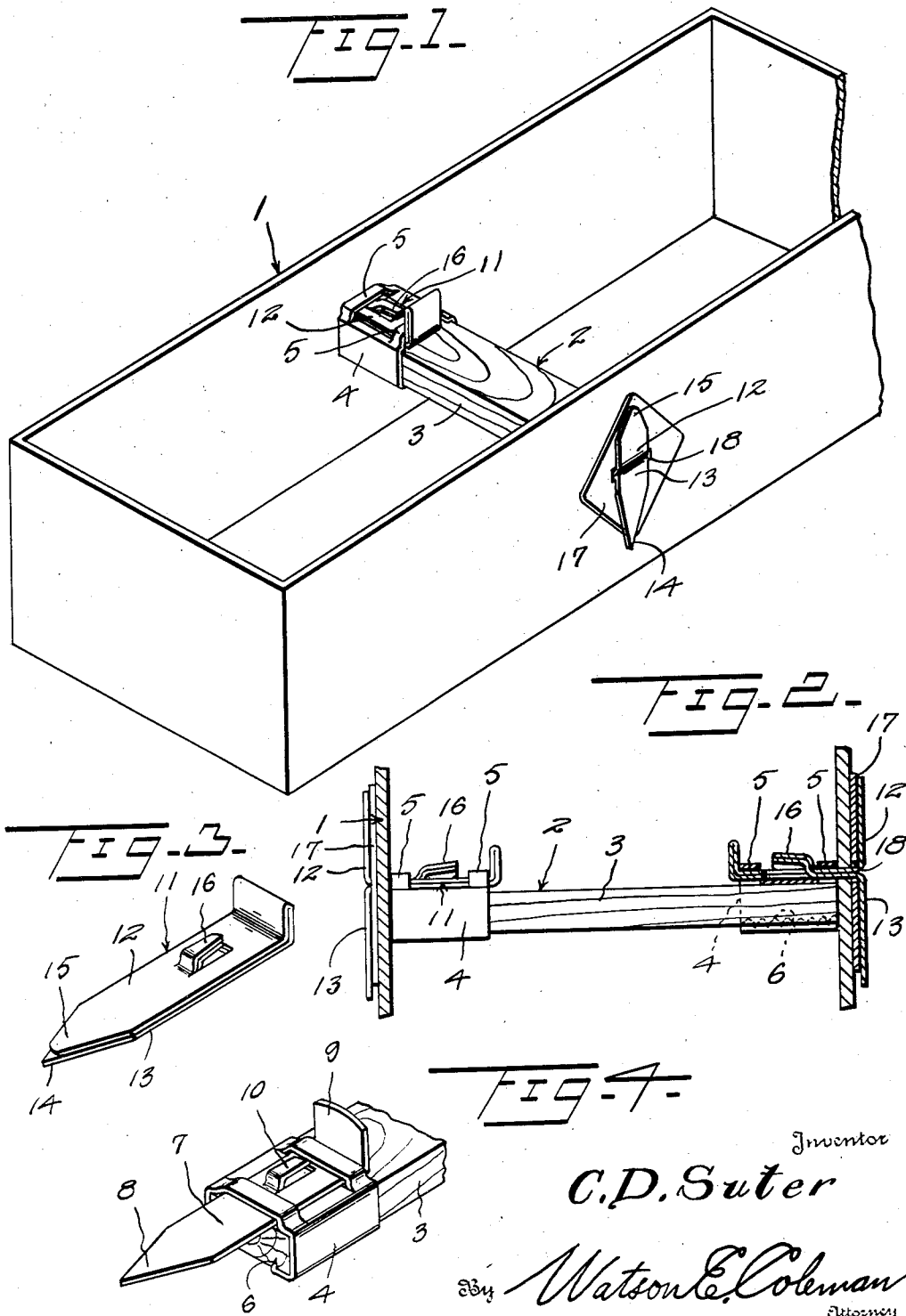
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CUT FLOWER HOLDER

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CUT FLOWER HOLDER

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This invention relates to improvements in devices for retaining cut flowers in shipping boxes.

The primary object of the present invention is to provide a device adapted to be secured in a flower box between two walls of the same to extend across the stems of and hold securely in position flowers placed in the box for shipment.

Another object of the invention is to provide a device for securing cut flowers in a box, which is adapted to be placed in position without necessitating the forcing or bending outwardly of either of the box walls.

A still further object of the invention is to provide a device of the above described character wherein a wall puncturing or penetrating element is carried upon an end of a brace bar which is designed to be disposed transversely of the box, so that when the bar is located in position, the penetrating device may be projected outwardly and forced through the box wall and then bent over to form a locking connection between the wall and bar, thus effecting both the retention of the flower stems in position and the connection of the box walls in such a manner as to prevent their bulging.

The invention will be best understood from a consideration of the following detailed description taken in connection with the accompanying drawing forming part of this specification, with the understanding, however, that the invention is not confined to any strict conformity with the showing of the drawing but may be changed or modified so long as such changes or modifications mark no material departure from the salient features of the invention as expressed in the appended claims.

In the drawing:—

Figure 1 is a view in perspective of a box showing one form of the present invention applied thereto.

Figure 2 is a view in transverse section of the box and showing a portion of the applied device in section.

Figure 3 is a view in perspective of a double prong.

Figure 4 is a view in perspective of a modified type of prong.

Referring to the drawing wherein like numerals of reference designate corresponding parts throughout the several views, the numeral 1 indicates generally a box of the character employed by florists for shipping cut flowers, in which is shown in operative position a device of the character embodying the present invention.

The device referred to is indicated generally

by the numeral 2 and comprises a bar 3 preferably of wood, which is designed to be disposed transversely of the box between the side walls of the same.

In devices of this character at present in use, the flower stem holding bar such as is indicated by the numeral 3, is provided at each end with some fixed form of penetrating element and when the device is placed in position, one end is first forced through the side wall and then the opposite side wall must be bent outwardly so as to bring the other end of the bar down to the proper elevation, after which the said opposite wall is forced back so as to cause the other end of the bar to penetrate through the same.

The present invention eliminates the necessity of bulging the box walls outwardly by providing a means whereby the bar can be located in position and the penetrating elements then shifted on the bar through the adjacent wall. In carrying out the present invention, the bar 3 has secured about each end a metal collar 4 from which are struck two upstanding bands 5 which extend transversely of the bar on one side thereof. The collar 4 is preferably split longitudinally and the longitudinal edges are turned inwardly and toothed to form penetrating points 6 which are pressed into one face of the bar on which the collar is mounted. Obviously, this is only one means of securing the collar in place for, it will be readily apparent, the collar may be formed integrally instead of split and slipped over the end of the bar.

Associated with each collar 4 is an elongated flat prong 7 which is cut to a point 8 at one end and has a portion of its other end upturned to form a fingerhold 9. The pointed end of this prong is adapted to slide beneath the bands 5 and the body of the prong has a resilient tongue 10 pressed therefrom which, after passing beneath one of the bands, prevents the prong being retracted.

From the foregoing, it will be obvious that after the bar 3 has been placed in position, the prongs may be projected longitudinally of the bar to pass through the adjacent walls of the box after which the pointed ends of the prongs may be bent upwardly or downwardly so as to prevent the box wall moving outwardly on the prong and also to turn the point of the same in such a manner as to prevent harm to the persons handling the box.

In Figure 4, a prong is shown which is cut from a single thickness of metal. However, the wall penetrating prong may be formed of double thickness material as illustrated in Figure 3 and

indicated generally by the numeral 11. In this form, the prong is formed by turning a strip of material on itself to form the two ends 12 and 13. One of these ends may be pointed, as indicated at 14, while the other may be finished off with a round tip, as indicated at 15, so that after the end 14 of the portion 13 has been forced through the box wall, the two ends may be readily separated and bent to extend in opposite directions in the manner illustrated in Figures 1 and 2. In this double thickness form of prong, the body portion has a resilient tongue struck therefrom, as indicated at 16, the same as described in connection with the prong 7 so that the prong will be retained in position by the bands 5 in the manner previously described.

In order to reinforce the box wall and prevent the prong being torn from position after it has been bent over the outer face of the wall, there may be provided a plate 17 having a slot 18 for the extension of the point or points of the prongs therethrough. By then turning the points in the manner illustrated, they will be out of the way so that persons handling the box will not be injured thereby and at the same time they will be prevented from tearing through the box wall by the underlying plate.

Another method of placing the bar in position is as follows. One of the prongs, either the single or the double thickness type, is first slipped beneath the bands 5 of one collar, the bars then introduced into the box and the point of the applied prong forced through the box wall at an elevation slightly below the top of the stalks of the flowers which are in the box. The opposite end of the bar is then forced downwardly into the box so as to compress the flower stalks and when the bar has been brought into substantially horizontal position, a prong is then introduced beneath the bands of the collar at the opposite end of the bar and forced longitudinally of the bar and through the adjacent wall. The extended ends of the prongs may then be bent out of the way in the manner previously described.

From the foregoing, it will be readily apparent that with the present invention, the flower stalks retaining bar may be placed in position without bulging or otherwise deforming the box, as previously described, and in addition, the bars with the collars upon the ends thereof may be used over and over again, as it will be apparent that when the box is emptied and the prongs have been removed, the bars with the collars thereon will be undamaged and may be used again with a new set of prongs.

It will be noted that the tongues 10 and 16 of the prongs have been twisted slightly after being raised from the body of the prong so that the free end edges of these tongues will be at an angle to the edge of the nearest band 5 and thus effectively prevent any considerable amount of reverse movement of the prong.

What is claimed is:—

1. The combination with a box of the character described, of an elongated body adapted to position between two opposite walls of the box to retain the contents of the box in position, a pair of prongs slidably attached to the elongated member, each at one end of the member and designed to penetrate an adjacent wall of the box, and means operating coincidently with the movement of the prongs to a predetermined position for preventing the retraction of the prongs after the same have been shifted to such position to penetrate the box wall.

2. A device of the character described, comprising a bar, an elongated pointed element disposed at each end of the bar, means at each end of the bar providing a guide for the adjacent pointed member whereby the latter may be slidably held for movement in a direction longitudinally of the bar, and means carried by each pointed member adapted to pass the guiding means when the pointed member is shifted in one direction and preventing the reverse movement of the pointed member.

3. A device of the character described, comprising a bar, an elongated element disposed upon each end of the bar and constituting two portions one overlying the other, one of said portions terminating in a sharp point, connecting means between the portions of each elongated element, the pointed ends of said elements being directed outwardly with respect to the adjacent end of the bar, and means carried by the bar at each end forming a guide for the adjacent elongated member whereby the latter is held on the bar for sliding movement longitudinally thereof, the portions of each of said elongated members being of bendable material.

4. The combination with a box, of a bar member of a length to be disposed horizontally in the box between two opposed walls, means forming a pair of guide loops transversely of each end of the bar, an elongated element for each end of the bar adapted to be slipped beneath the pair of guide loops thereon, each of said elongated members comprising two separable portions one of which has its advancing end pointed, means at the trailing end of each elongated member for facilitating grasping the same for forcing the pointed end of said one portion through the adjacent box wall, and a slotted plate adapted to be disposed against the outer side of the wall through which the elongated member is extended, to receive the said member, the portions of the member being bent apart over said plate.

5. The combination with a box, of a bar member of a length to be disposed horizontally in the box between two opposed walls, means forming a pair of guide loops transversely of each end of the bar, an elongated element for each end of the bar adapted to be slipped beneath the pair of guide loops thereon, each of said elongated members comprising two separable portions one of which has its advancing end pointed, means at the trailing end of each elongated member for facilitating grasping the same for forcing the pointed end of said one portion through the adjacent box wall, a slotted plate adapted to be disposed against the outer side of the wall through which the elongated member is extended to receive the said member, the portions of the member being bent apart over said plate, and a resilient tongue carried by each elongated member to pass beneath one of said guide loops and prevent the retraction of the member.

6. A device of the character described, comprising a bar, an elongated element disposed upon each end of the bar and constituting two portions one overlying the other, one of said portions terminating in a sharp point, connecting means between the portions of each elongated element, the pointed ends of said elements being directed outwardly with respect to the adjacent end of the bar, means carried by the bar at each end forming a guide for the adjacent elongated member whereby the latter is held on the bar for sliding movement longitudinally

thereof, the portions of each of said elongated members being of bendable material, and means carried by each element adapted to pass beneath the element guide and prevent the reverse movement of the element.

7. A device of the character described, comprising a bar, a body secured to one face of the bar at each end, a bendable prong slidably connected with each body and movable thereon longitudinally of the bar, and coacting means between each body and prong for automatically locking the prongs against reverse movement after movement on the bar a predetermined distance in one direction.

8. A device of the character described, comprising a bar designed for placement in a receptacle between two walls thereof, means for securing one end of the bar to one wall, an elongated prong member disposed longitudinally of the bar at the other end, means retaining the prong member for sliding movement longitudinally on the bar, and means coacting between the prong member and the retaining means for securing the prong member against reverse movement after its movement a predetermined distance in one direction relative to the retaining means.

9. A device of the character described, comprising a bar designed for placement in a receptacle between two walls thereof, means for securing one end of the bar to one wall, an elongated prong member disposed longitudinally of the bar at the other end, means fixed to the other end of the bar over which the prong member moves, guide connecting means between the member and the fixed means, and means for coupling the prong member and said fixed means together to prevent movement of the prong member in one direction relative to the fixed means.

10. A device for attachment to a bar of the character described, comprising an open yoke-like body designed to encircle a bar and having two free edges provided with teeth for the penetration of the bar to secure the body thereto, a pair of loops carried by the body in spaced relation to extend transversely of a bar to which the body may be attached, and an elongated prong member slidably on the body through said loops.

11. A device for attachment to a bar of the character described, comprising an open yoke-like body designed to encircle a bar and having two free edges provided with teeth for the penetration of the bar to secure the body thereto, an elongated prong element slidably connected with the body for movement longitudinally of a bar to which the body may be attached, and means carried by the prong and coacting with a portion of the body for limiting its sliding movement on the body.

12. A device designed for application to a bar of the character described, comprising a yoke-like body designed to encircle the bar, means for securing said body to the bar, a pair of loops struck from the body and disposed in spaced parallel relation in a plane above a parallel portion of the body, an elongated prong member slidably disposed beneath said loops and upon the portion of the body which is parallel with the loops, and means limiting the movement of the prong on the body and engaging one of said loops.

13. A device designed for application to a bar of the character described, comprising a yoke-like body designed to encircle the bar, means for securing said body to the bar, a pair of loops struck from the body and disposed in spaced parallel relation in a plane above a parallel portion of the body, an elongated prong member slidably disposed beneath said loops and upon the portion of the body which is parallel with the loops, and a resilient tongue struck up from said prong and adapted to pass beneath one of the loops and operating to prevent the reverse movement of the prong.

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