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L. WITTBOLD.

MOLD FOR MAKING FLORISTS' BENCHES.

APPLICATION FILED AUG. 9, 1907.

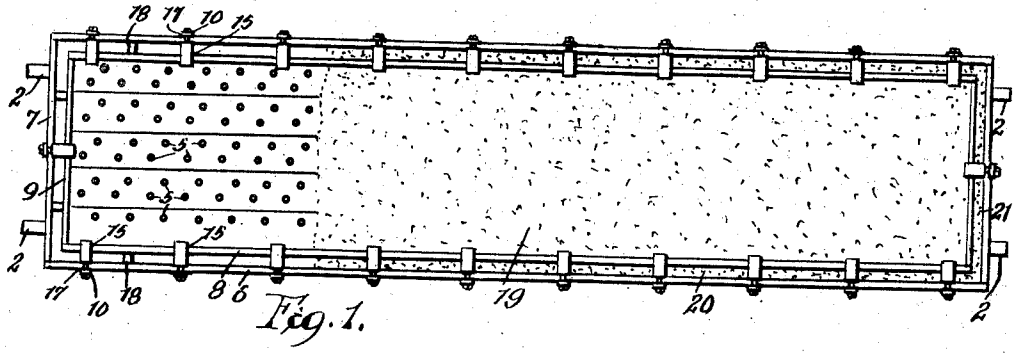


Fig. 1.

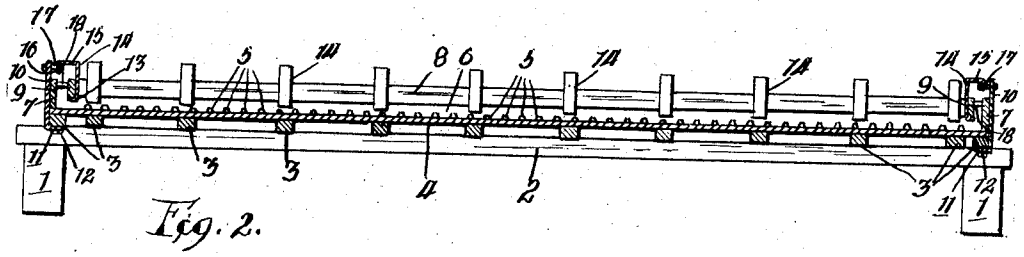
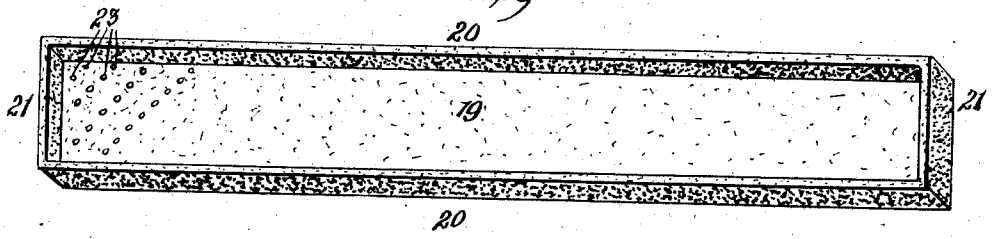


Fig. 2.

Fig. 5.



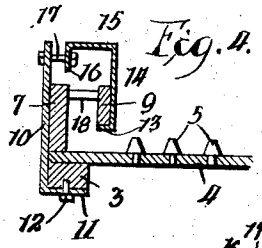
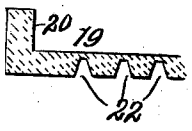


Fig. 4.

Fig. 6.



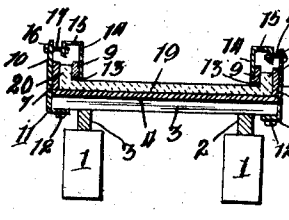


Fig. 3.

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MOLD FOR MAKING FLORISTS' BENCHES.

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Application filed August 9, 1907. Serial No. 387,839.

To all whom it may concern:

Be it known that I, LOUIS WITTBOLD, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Molds for Making Florists' Benches, of which the following is a specification.

The ordinary florists' bench is made of boards, and is open to the objection of the boards becoming rotten in use which destroys the bench. Various attempts have been made to construct a florists' bench from concrete, but owing to the length and shallow depth of such bench the attempts have not met with any great degree of success.

The objects of the present invention are to construct or make a florists' bench entirely of concrete, and possessing the necessary amount of strength and rigidity for use, and having a continuous bottom, side and end walls, with the bottom wall perforated for escaping the water and moisture in the use of the bench, and to do this by means of a knock-down mold adapted for the formation of the concrete bench of the invention; to furnish a mold for forming the concrete bench of the invention, said mold consisting of a bottom, an outer side piece, an inner side piece, an outer end piece and an inner end piece, and supporting brackets or hangers for the several side and end pieces; to furnish a mold for forming the concrete bench of the invention, said mold consisting of a bottom having tapered plugs, an outer side piece on each side, an inner side piece on each side and spaced apart from the outer side piece, an outer end piece at each end, an inner end piece at each end and spaced apart from the outer end piece, and brackets and hangers supporting the several side and end pieces; and the invention consists in the bench formed of concrete and in the mold for making the same, all as hereinafter more specifically described and pointed out in the claims.

In the drawings Figure 1 is a plan view, showing the mold, and showing the bench formed of concrete partly completed; Fig. 2 a longitudinal section through the mold; Fig. 3 a cross section of the mold and the bench; Fig. 4 an enlarged detail, showing the support for the bottom and the end pieces of the mold; Fig. 5 a perspective view of the completed bench; and Fig. 6 an enlarged detail, showing the bottom and side wall of the bench.

The construction shown has end supports 1 on which are placed longitudinal pieces 2, which support cross pieces 3, and these parts 1, 2 and 3 constitute the base for supporting the mold proper.

The mold proper consists of a bottom 4 which can be made of boards or other suitable material, and, as shown, the bottom has a plurality of upwardly projecting tapered plugs or corks 5 for the purpose of making tapered depressions in the bottom of the concrete bench of the invention. At each side of the mold is an outer wall 6 formed of a board or boards set edgewise, with the lower edge of the board or boards abutting against and resting on the bottom. The bottom and the outer side and end walls form a receptacle for the concrete. Adjacent to each side wall 6, and spaced apart therefrom, is an inner side wall 8, formed of a board or boards and located the required distance above the upper face of the bottom for the depth of concrete to make the bottom of the bench. Adjacent to each end wall 7, and spaced apart therefrom, is an inner end wall 9 located in the plane of the inner side walls 8, and formed of a board or boards. The outer side and end walls and the inner side and end walls are spaced apart for the thickness of the walls of the bench; and the height of the walls of the side and end walls of the bench will depend upon the height of the outer and inner side and end walls of the mold.

The outer and inner side and end walls for the mold should be removable in order to remove the completed bench; and, as shown, the outer and inner side and end walls are supported so as to be removable. The outer side and end walls rest against a series of supporting brackets, each bracket formed of metal or other suitable material, and each bracket having a vertical member 10 against which the outer side wall and end walls abut, and a horizontal member 11 extending under the end cross piece of the supporting base or frame, and if desired, the horizontal member of the bracket support can be secured to the cross piece at each end, for the side walls of the mold, and to the outer side of the end cross pieces, for the end walls of the mold, by a bolt 12, or otherwise, so as to be detachable. The member 10 of each bracket support extends above the upper edge of the side

and end walls in the arrangement shown. The lower edge of each inner side and end wall rests on a flange or step 13 of a hanger having a vertical member 14 and a horizontal member 15, terminating at its inner edge in a vertical flange or rib 16, by means of which flange and rib and a bolt 17 the hangers supporting the inner side and end walls are each connected with a bracket support for the outer side and end walls. The bolt 17 enables the hanger for supporting the inner side and end walls to be adjusted as required for the spacing apart of the outer and inner side and end walls to form the side and end walls of the completed bench of the required thickness; and when properly spaced apart the walls are held apart by means of cross pieces 18 interposed between the walls, as shown in Fig. 4, which cross pieces are removed as the concrete is filled into the space between the walls in making the bench.

The completed bench has a bottom 19, a wall 20 on each side, and a wall 21 at each end, as shown in Fig. 5; and the bottom 19 has, on its under face, a plurality of depressions 22, formed by the plugs or corks 5, which depressions do not extend entirely through the bottom, as shown in Fig. 6, but leave a thin portion which can be broken out by a suitable instrument so as to form a plurality of perforations 23, as shown in Fig. 5, which perforations, in connection with the depressions 22, furnish the necessary openings for drainage purposes.

The mold of the present invention is a knock-down mold, by which is meant that the bottom, side walls and end walls can all be taken apart when the mold is not in use; and in use the bottom 4 is formed by placing the boards in position on the cross pieces 3, then placing the outer side walls and the outer end walls in position, and resting against the bracket supports for these walls, then attaching the hanger supports for the inner side and end walls and placing the board or boards for such walls in position to rest on the foot or flange 13 of each hanger support, after which the inner side and end walls can be adjusted for the proper spacing apart of the walls, and when adjusted the walls are held spaced apart by means of the cross pieces or wedges between them.

In use, the mold is to be set up at the place where the bench is to be located, and after the mold has been set up the concrete is deposited within the mold so as to cover the bottom of the mold and form the bottom of the bench, and the concrete is entered into the spaces between the outer and inner side and end walls so as to form the side and end walls of the bench. After the bench has been properly formed in the mold the material is allowed to set a sufficient length of time so as to render the bench hard, firm and rigid, and when so set the outer and inner side and end walls and the bottom of the mold are removed, leaving the bench clear of the mold and resting on the posts therefor, which posts can be of wood, stone, or concrete molded into the proper shape for the bench to rest thereon. The bench is completed by breaking through the bottom crust in line with the depressions 22, so as to furnish the holes or perforations for drainage, which completes the bench ready for use in the usual manner for florists benches.

The present invention, by the knock-down mold enables a florists' bench of any required length and width to be formed from concrete at the place of use without any difficulty in so doing; and when the bench has been suitably set or hardened, the sides, ends and bottom of the mold can be removed by simply removing the bolts 12, which enables the entire mold to be knocked down, leaving the bench in perfect condition and possessing the required rigidity and strength for use as a bench, and in use, owing to its formation from concrete, will not deteriorate as does a bench made of wood in use. The concrete, if so desired, can be reinforced by wire netting or other suitable material as is usual in reinforcing concrete work, and if desired, a mold can be furnished for forming the supporting posts for the bench of concrete and integral with the bottom, so that the bench and its posts can all be formed from concrete.

What I claim as new and desire to secure by Letters Patent is:

1. In a mold for making concrete florists benches, the combination of a separable and removable bottom, removable outer and inner side walls spaced apart, with each inner side wall elevated above the bottom, removable outer and inner end walls spaced apart with each inner end wall elevated above the bottom, a series of detachable brackets upwardly extending on the outside of the outer side and end walls, a series of depending hangers for supporting the inner side and end walls, and means adjustably connecting the hangers with the brackets, substantially as described.

2. In a mold for making florists concrete benches, the combination of a supporting base, a separable and removable bottom, removable outer and inner side walls, removable outer and inner end walls, with a clearance between the bottom and the inner side and end walls and with the outer and inner walls spaced apart, a series of inner hangers each hanger having a vertical member and a horizontal flange at the lower end of the vertical member for holding the inner side and end walls elevated and against inward movement, and each hanger having an outwardly extending longitudinal arm at its upper end for connection with a companion bracket, and a series of detachable outer brackets, each bracket having a vertical

member holding the outer side and end walls against outward movement, and a horizontal member for securing the bracket in place, and each bracket having suspended from its upper end a hanger, substantially as described.

3. In a mold for making florists concrete benches, the combination of a supporting base, a separable and removable bottom on the base, removable outer and inner side walls spaced apart with each inner side wall elevated above the bottom, removable inner and outer end walls spaced apart with each inner end wall elevated above the bottom, a series of outer brackets and a series of inner hangers arranged in pairs, one bracket and one hanger for each pair, each bracket having a vertical member holding the outer side and end walls against outward movement, and each hanger having a vertical member and a horizontal flange at the lower end of the vertical member for holding the inner side and end walls elevated and against inward movement and each hanger at its upper end supported from the upper end of its companion bracket, and means for retaining the outer and inner side and end walls spaced apart and supported against the vertical members of the brackets and hangers, substantially as described.

4. In a mold for making florists concrete benches, the combination of a supporting base, a separable and removable bottom on the base, removable outer and inner side walls spaced apart with each inner side wall elevated above the bottom, removable inner and outer end walls spaced apart with each inner end wall elevated above the bottom, a series of outer brackets and a series of inner hangers arranged in pairs, one bracket and one hanger for each pair, each bracket having a vertical member holding the outer side and end walls against outward movement, and each hanger having a vertical member and a horizontal flange at the lower end of the vertical member for holding the inner side and end walls elevated and against inward movement and each hanger at its upper end supported from the upper end of its companion bracket, means for adjusting the hangers in and out, and means for retaining the outer and inner side and end walls spaced apart and supported against the vertical members of the brackets and hangers, substantially as described.

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Witnesses:
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