(No Model.) 2 Sheets—Sheet 1.

J. CARDONA.

COMBINATION TABLE, BATH TUB, AND WASH TUB.

No. 341,222. Patented May 4, 1886.

Fig. 1.

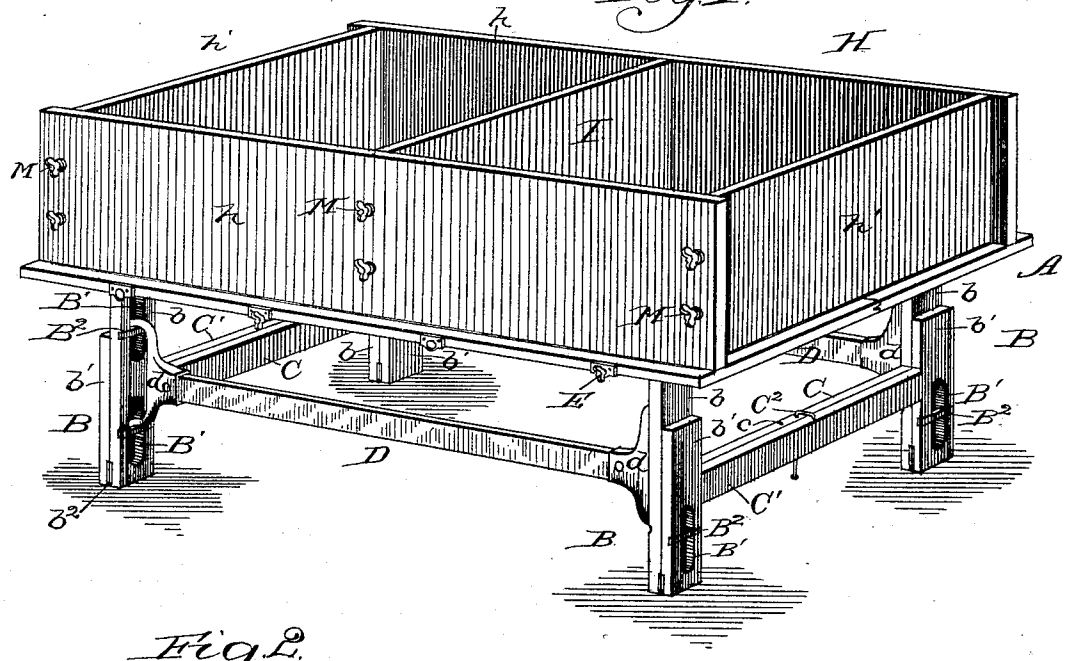


Fig. 2.

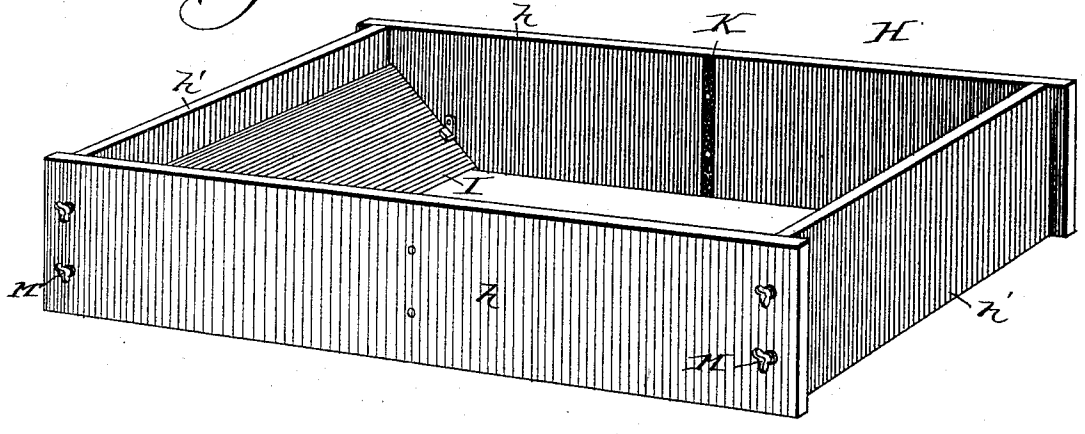
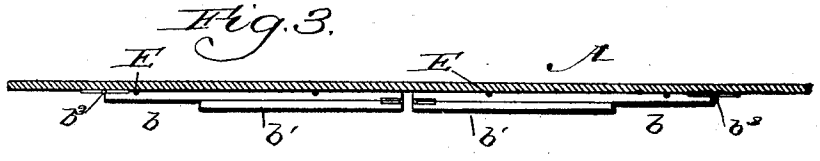


Fig. 3.



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(No Model.) 2 Sheets—Sheet 2.

J. CARDONA.

COMBINATION TABLE, BATH TUB, AND WASH TUB.

No. 341,222. Patented May 4, 1886.

Fig. 4.

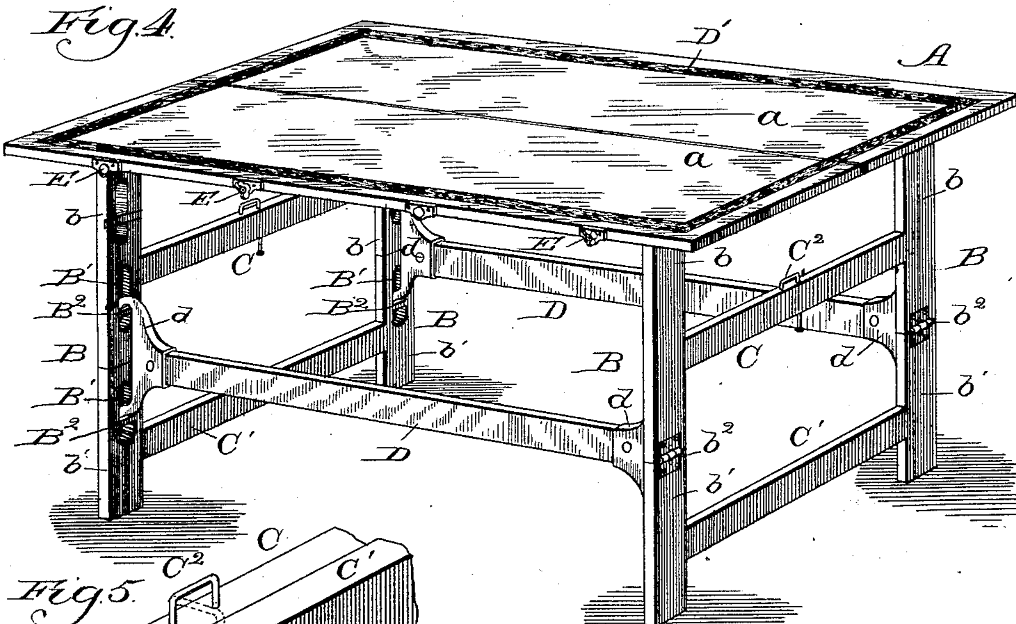


Fig. 5.

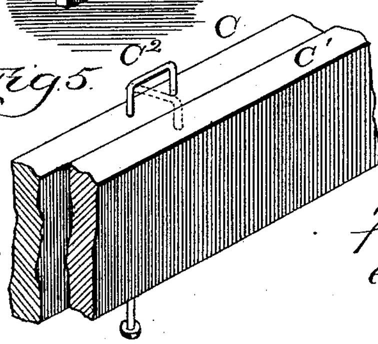


Fig. 6.

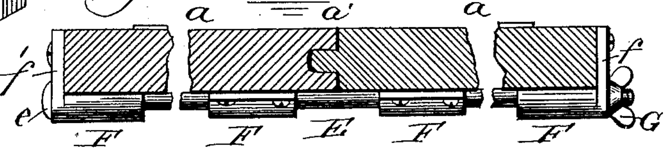


Fig. 10.

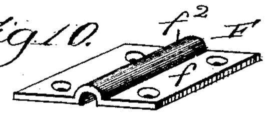


Fig. 7.

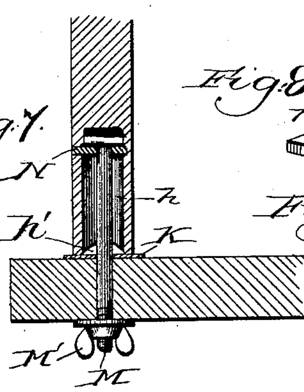


Fig. 8.

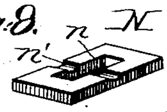
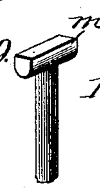


Fig. 9.



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N. PETERS. Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

JOSEPH CARDONA, OF CHICAGO, ILLINOIS.

COMBINATION TABLE, BATH-TUB, AND WASH-TUB.

SPECIFICATION forming part of Letters Patent No. 341,222, dated May 4, 1886.

Application filed September 21, 1885. Serial No. 177,644. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH CARDONA, 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 Combination Table, Bath-Tub, and Wash-Tub, of which the following is a specification.

The object of this invention is to provide a structure that may be readily converted into either a bath-tub, a wash-tub, or a table, as may be preferred, and also to adapt its main elements to be placed in compact form for storing. To such ends the structure comprises a main base portion and main top portion with the base portion adapted to serve as a table, having a top which, when used in connection with the main top portion, subserves the purpose of a bottom for either the bath-tub or the wash-tub. The legs or the supports of the structure may be shortened or extended to their full length, that when it is used as a tub either for bathing or washing it can be set down, in order to render the tub available for its several uses, while, on the other hand, when it is desired to use the structure as a table, the top thereof can be set at the usual height above the floor or ground, although if found necessary it can be set down as before, so as to provide a low-down table or bench.

In addition to the foregoing, the sides and ends of the tub portion can be readily taken apart to be packed or stored, and the legs can be folded up, so as to bring the structure within a small compass.

In the drawings, Figure 1 represents in perspective the structure set up as a bath-tub with a partition fitted centrally and transversely within the body of the bath-tub, so as to divide the same into two compartments, more especially serviceable for use in washing clothes. Fig. 2 is a perspective view of the upper frame portion arranged to provide the four sides of the bath-tub with the transverse partition of the preceding figure adjusted to provide an inclined head-board at one end of the bath-tub. Fig. 3 represents a longitudinal section through that portion of the structure which may serve either as a table-top or as a bottom for the tub, and illustrates the jointed supports or legs folded up. Fig. 4 represents in perspective the lower portion of the structure set up as a table. Fig. 5 is a detail perspective showing portions of two of the end cross-braces for the legs folded together, and illustrates in full and dotted lines the two positions of a device employed for locking said braces after they have been thus brought together. Fig. 6 is an enlarged detail section taken transversely through the boards that serve to provide either a top for the table or a bottom for a tub, said boards being for convenience of illustration broken away at two points. Fig. 7 is a sectional detail taken on a horizontal plane through one corner of the upper frame of either Fig. 1 or 2, and is designed to illustrate the devices employed for detachably connecting together the side and end boards of said frame. Fig. 8 represents in perspective the locking-plate that is shown in section in the preceding figure. Fig. 9 represents in perspective the bolt of Fig. 7, with one end portion broken away. Fig. 10 represents in perspective one of the bearing-plates that are secured to the under side of the boards which form the table-top or tub-bottom.

The main elements of the structure consist of a board, A, adapted to serve either as a top for the table or a bottom for the tub, legs B attached to the said board and serving either as table-legs or as portions of a base-support for the tub, and a rectangular frame, H, which, when properly secured upon the board A, provides in conjunction therewith a tub that may be utilized either for bathing or laundry purposes, as may be desired.

In order to check the tendency of the board A to warp, and also to brace and strengthen the same, as well as to avoid the cost of a single board of the width herein desirable, the said board is divided longitudinally or formed of two or more pieces joined together by a tongue-and-groove joint, as at a', Fig. 6. The two sections of this board are drawn and held together by means of the rods E, arranged against the under side of the jointed board, and held in position transversely to the line of joint by means of suitable bearings, F, which are secured at proper intervals to the board sections. These bearings consist of plates f, perforated with suitable screw-holes for the fastening-screws, and each formed with a middle groove or depression, f^2, serving to receive

some one of the tie-rods. Said bearings can all be made as in Fig. 10, excepting the several bearings designed to be applied at the two side edge portions of the jointed board A, and these last-mentioned bearings are desirably provided with flanges f', as in Fig. 6, adapted to be secured by screws against the edges of the board. The tie-bolts can at one end be screwed into sockets formed in the bearings along one edge of the board, or provided at said ends with appropriate heads—for example, as at e—while at their opposite ends said tie-bolts are threaded to receive thumb-nuts G, which, when tightened up against the bearings along this edge of the board, serve to draw and hold the two sections of the board together, and also to hold the tie-rods rigid against the under side of the jointed board. This arrangement renders the board of great strength and rigidity, and hence while affording a serviceable bottom for a tub effectively prevents the wood from warping when the structure is in use as a table. The legs B are hinged to the under side of the board A, so that when required they can be folded up as in Fig. 3, wherein the legs are shown notched at appropriate points to receive the cross-rods E when the legs are thus closed. The legs are also jointed or each composed of two sections hinged together, the upper sections, b, being hinged to the board A at one end and at their opposite ends hinged to the lower leg-sections, b', by means of any ordinary or suitable construction of hinges b^3. The upper leg-sections are connected together in pairs by means of the upper cross-braces, C, and the lower leg-sections are similarly connected together by the lower cross-braces, C', which said braces serve as the end cross-braces for the legs.

The side or front and rear braces, D, are detachable from the legs and are designed to engage the legs whether the latter are extended to their full height, as in Fig. 4, or shortened by folding, as in Fig. 1. For such purpose each upper leg-section is provided with two oblong recesses or mortises, B', each containing a fixed catch plate or piece, B^2, while each lower leg-section is provided with but one mortise, B', and one fixed catch-plate, B^2.

The side braces, D, have at each end a double-hooked plate, d, so formed that when the legs are extended to their full height the upper hooks of the plates d can be caught onto the catch-plates B^2 in the lower mortises of the upper leg-sections, while the lower hooks can be caught onto the catch-plates of the lower leg-sections, as in Fig. 4, thus bracing the legs and effectively preventing them from folding or doubling up. When, however, the lower leg-sections are folded up, as in Fig. 1, wherein the structure is in use as a tub, the side braces, which preparatory to said folding up will have been detached, can be simply caught onto the catch-plates of the upper leg-sections, and thus steady the shortened legs and hold the same against any tendency to fold up against the bottom of the board A. When the legs are thus doubled up and shortened, as in said Fig. 1, the lower leg-sections can be held against the outer sides of the upper leg-sections by appropriate latches or fastening devices, which, in the present illustration, consist of bent pins C^2, each having a shank extending through one of the upper cross end braces, C, and an upper end portion above the brace bent to form a hook, which can be caught into a socket, c, in the adjacent cross-brace. The shank of this bent pin or hook can be raised and lowered and also turned in the cross end brace, by which it is carried, so that the device may be readily manipulated for the purpose of either bringing the end of the hook into register with a socket, c, and then dropping the hook into engagement with said socket, or of lifting the hook out from the socket, as occasion may require.

The body of the tub is formed by a rectangular frame, H, which is designed to be seated and secured upon the board A, in which event the legs will be shortened, so as to more properly constitute portions of a base-support for the tub.

To provide a water-tight joint between the frame H and the board A, the latter is provided upon its top surface with a continuous strip, D, of rubber or other suitable packing material, arranged to match the entire edge of the frame, so that the latter may be seated upon the packing, and held in place thereon by appropriate tightening and locking devices—for example, by means of a construction of locking device illustrated in Fig. 7. Said construction of locking device, which is also applicable to hold together the side and end boards of the frame H, consists of a tie-bolt, M, a locking-plate, N, Fig. 8, and a thumb-nut, M'.

To apply a locking device comprising said elements, one board is placed with one of its edges against a packing-strip, K, upon one of the sides of another one of the boards, the board which is thus placed edgewise against the packing-strip being provided with a mortise, h, within which is fitted the locking-plate N. The tie-bolt M is inserted through both the other boards and the packing-strip thereon, and is also extended on into the mortise h, so as to permit it to be engaged with the locking-plate N, which latter holds the bolt at its inner end against the thumb-nut, which is applied to the outer end of the bolt, and tightened up against the outer side of one of the boards.

To permit the tie-bolt to be readily connected with and disconnected from the locking-plate N, the latter is provided with a slot, n, and a groove, n', arranged transversely to the slot and formed across one side of the plate. The bolt is provided at its inner end with a T head or end, m, which, when in coincidence with the slot, admits of the bolt being inserted through or withdrawn from the plate at will. To interlock the bolt with the plate

it is simply necessary to pass the T head or end of the bolt through the locking-plate, and to then give the bolt a quarter-turn, so as to bring the two arms of its said end into register with the two portions of the groove *n'*, into which said grooved portion of the plate the arms can be drawn by applying and tightening up the thumb-nut.

It is proposed to provide fastening devices of such character, both for securing the frame H down upon the board A and for securing together the side boards and the end boards of the frame, in which way the entire frame can be applied to and removed from the board A, and when not in use its sides and ends can be disconnected and packed away.

I denotes a board, which may be either fitted within the frame in an inclined position at one end portion of the frame, as in Fig. 2, or fitted in an upright position therein at a point intermediate of the two ends of the frame, as in Fig. 1. In the first of said arrangements the board I serves as an inclined head-board for the bath-tub when it is so desired to use the structure, while in the latter instance, Fig. 1, the board I serves to divide the frame into two compartments, which provide two convenient wash-tubs.

It will be understood that in the construction of the frame H a packing-strip, K—such as shown in Figs. 1 and 7—will be placed between each meeting edge of one board and one side surface of an adjacent board, so as to effectively pack the joints. It is also proposed to groove the edge portions of the boards at such joints, as at *h'*, Fig. 7, so that along each line of joint one board will have a double-edge bearing against a packing-strip, such construction serving to provide a tighter joint. The frame H will likewise be grooved along its bottom edge in a similar way, and hence Fig. 7 can represent either a section through one corner of frame H or a section through a portion of one side of said frame and a portion of the board A. It will also be understood that board A can be made of one, two, or more pieces, as may be desired.

What I claim is—

1. In combination with the board A, adapted to serve either as the top of a table or the bottom of a tub, the jointed legs B, hinged to the said board and provided with catches, and the detachable braces D, having double-hooked ends, substantially as and for the purpose set forth.

2. The combination, with the board A, adapted to serve as the top of a table or the bottom of a tub, of the hinged and jointed legs B, connected together in pairs by the end cross-braces, C, fastenings C^2, for the purpose set forth, and detachable braces, whereby the two pairs of legs may be held apart, substantially as described.

3. The combination, with board A and jointed legs B, hinged thereto, whereby such board may be supported at different elevations, of jointed frame H, detachably mounted upon such board, means for locking such frame in position, and a suitable packing interposed between the frame and board, as set forth.

4. The combination, with a two-part board, A, and tightening-rods E, of jointed legs B, hinged to such board, and provided with sockets B' and catch-plates B^2, and removable braces D, provided with double hook *d*, as set forth.

5. The combination, with two-part board A, tightening-rods E, and jointed legs B, hinged to such board, of jointed frame H, detachably mounted on such board, and packing interposed between the board and frame, as set forth.

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