

Oct. 29, 1957

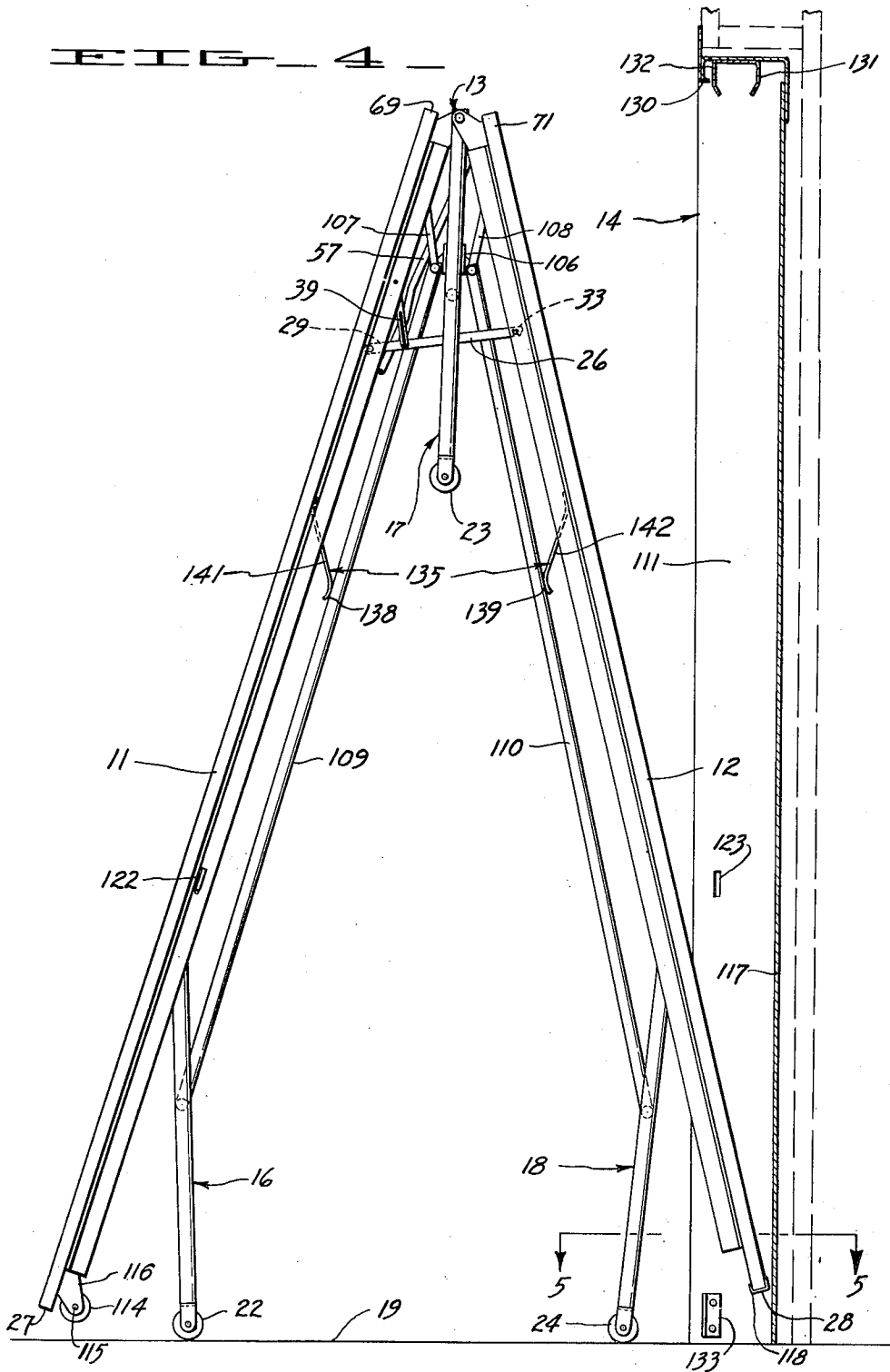
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2,811,400

FOLDABLE TABLE AND WALL SUPPORT THEREFOR

Filed June 28, 1954

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2,811,400

FOLDABLE TABLE AND WALL SUPPORT THEREFOR

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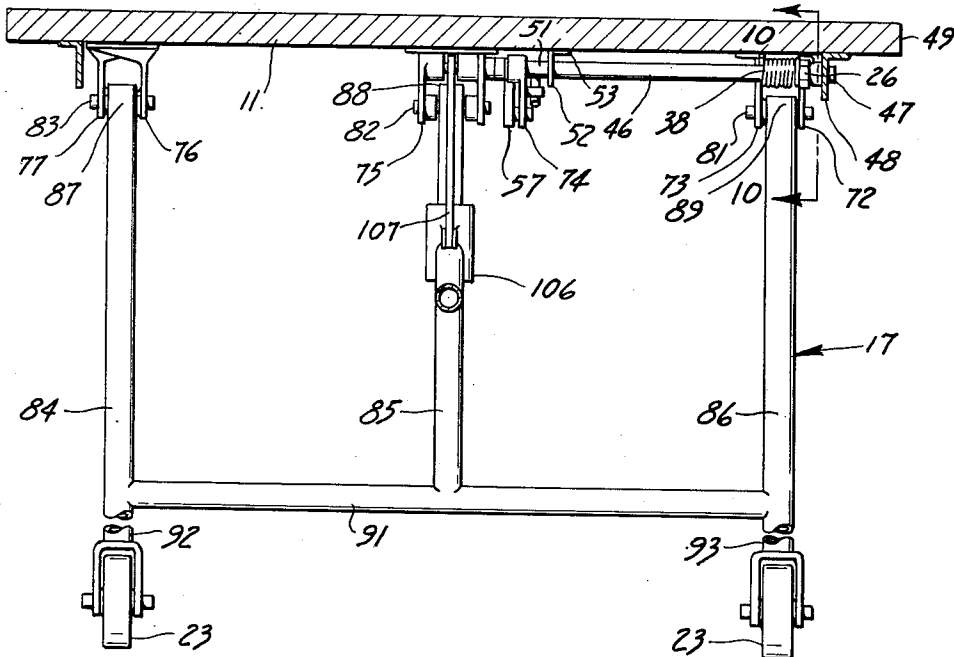


FIG. 9

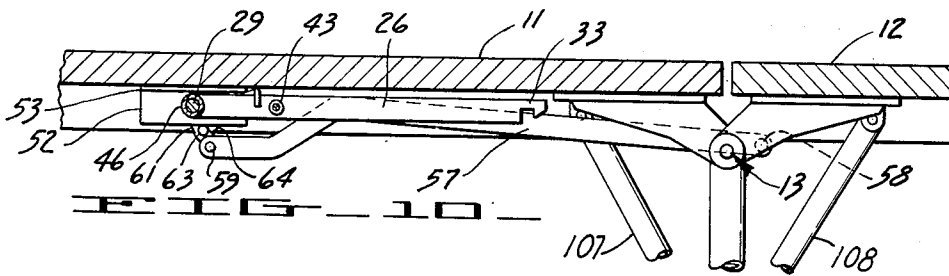


FIG. 10

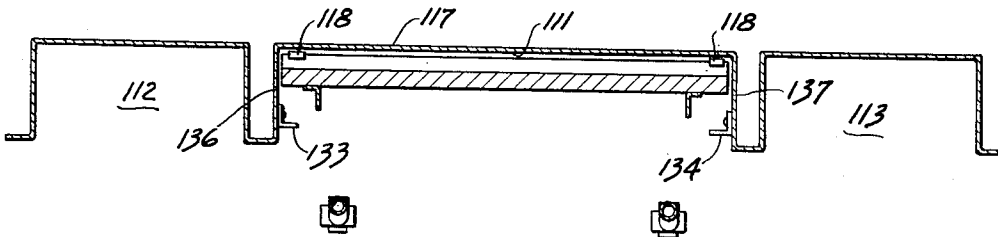


FIG. 11

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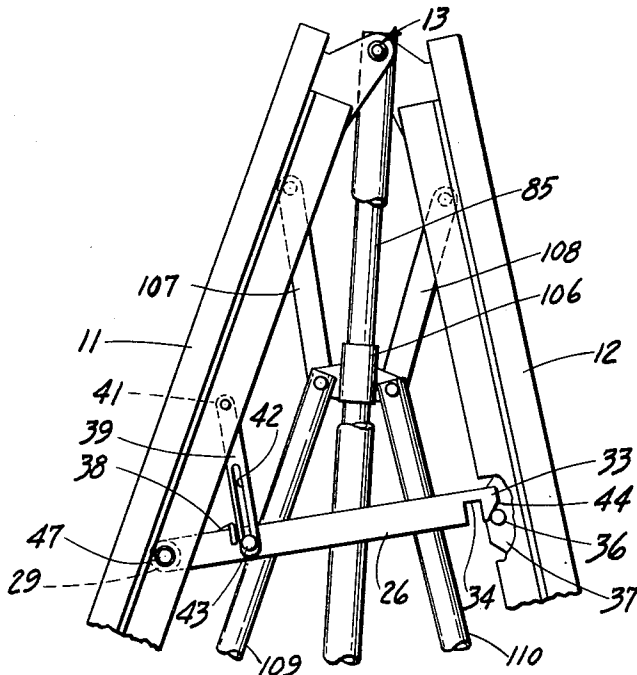


FIG. 6

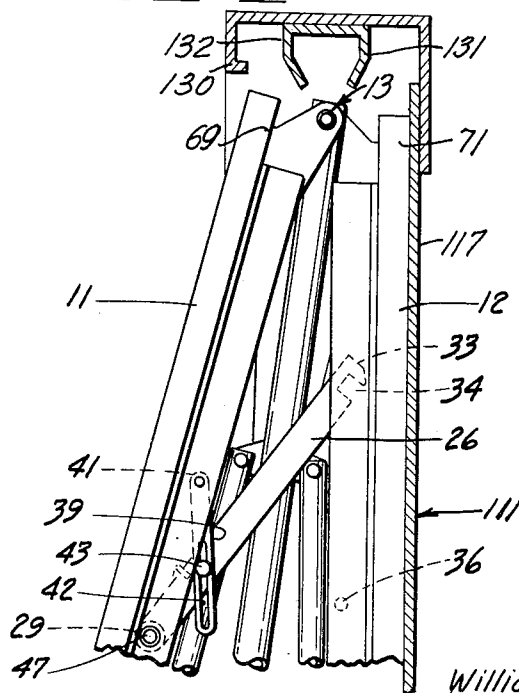


FIG. 7

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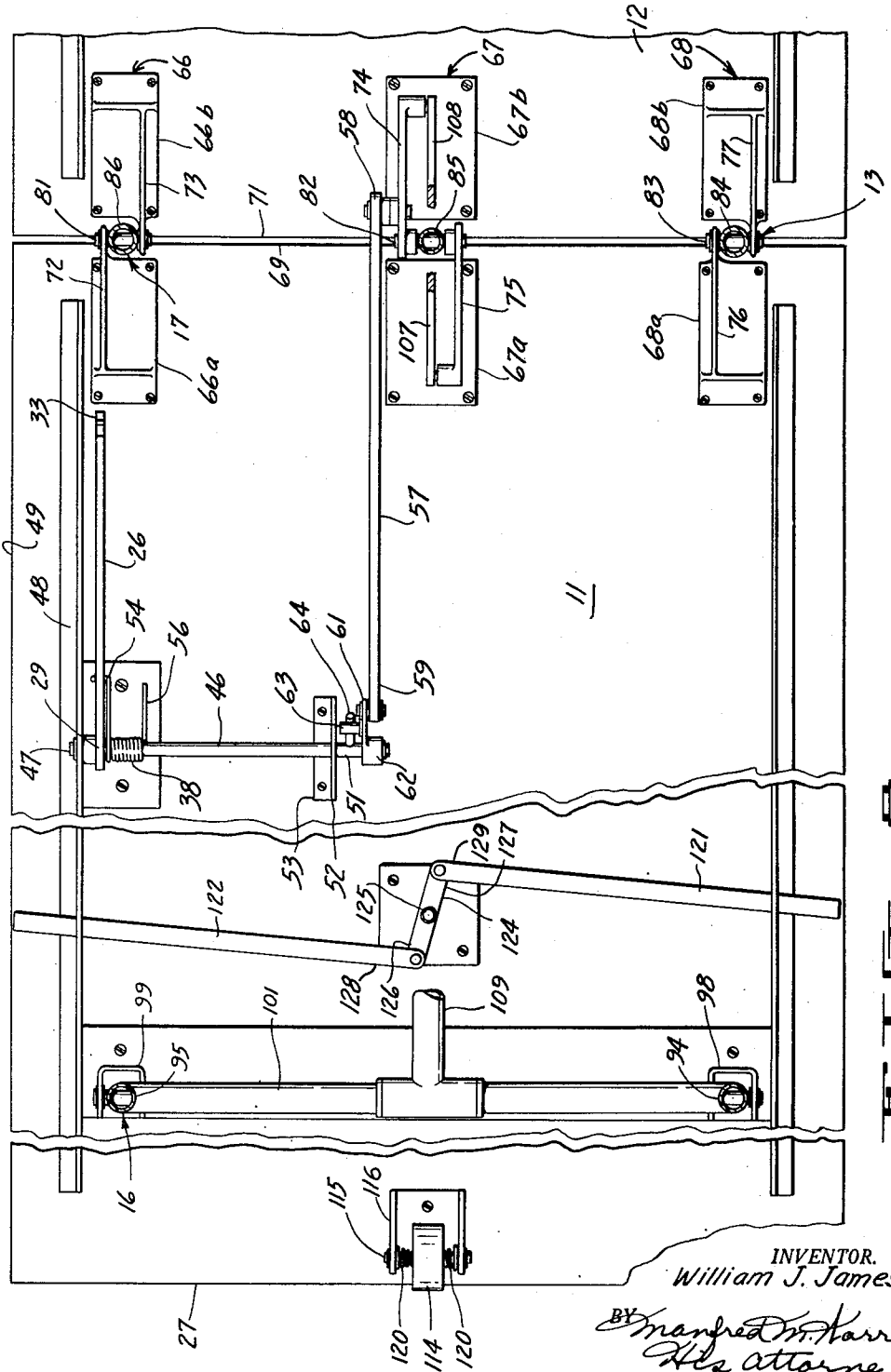
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FOLDABLE TABLE AND WALL SUPPORT THEREFOR

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2,811,400

FOLDABLE TABLE AND WALL SUPPORT THEREFOR

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Application June 28, 1954, Serial No. 439,725

12 Claims. (Cl. 311—16.5)

The invention relates to the construction of tables and benches of the type having hinged leaves arranged for folding into a compact wall pocket or the like for storage and for unfolding from the wall into a horizontally extended position for use.

Bench and table structures of the character described have been developed for use in schools, churches and the like in order to provide for multi-purpose rooms, as for example a combination cafeteria eating-room and auditorium. The value of such structures is further enhanced in some instances by the provision of bench-and-table structures which may be completely detached from their wall support so as to permit movement to various positions in the room or for movement from room to room, as required. The bench and table structures employed for the uses indicated are fairly large and correspondingly fairly heavy and awkward to handle. In accordance with the present invention and as a principal object thereof a bench-table structure of the character described is provided which has, in addition to its fully folded wall-attached position and its unfolded horizontally extended position, a stable intermediate position wherein the leaves are arranged in upwardly converging relation and are cross-braced so as to provide a rigid and stable A-frame form which may be more conveniently handled and moved about and even stored if desired in a semi-compacted position.

Another object of the present invention is to provide a structure of the character above which will automatically lock up in its stable A-frame intermediate position, above mentioned, upon movement of the leaves from either folded to unfolded position or vice versa, thereby providing a most important safety factor in the use and operation of the unit.

A further object of the present invention is to provide a bench-table unit of the character described which, despite its size and weight and complete portability, may be moved with ease and facility into precise alignment with the wall pocket for folding into a snugly fitted position within the pocket and with the outermost leaf providing a wall flush closure.

Still another object of the present invention is to provide a bench-table structure of the character above, incorporating a safety means requiring a preferred sequential movement of portions of the unfolding unit upon removal of the leaves from the wall pocket, thereby preventing overtopping of the unit and insuring a safe, easily controlled handling of the rather large and heavy parts upon unfolding from the wall pocket.

Yet a further object of the present invention is to provide a bench-table structure of the character described which is composed of a minimum number of sturdily formed parts which are designed and constructed to perform good and trouble-free operation over a long and useful life and to be capable of withstanding the rough use and even abuse which this type of equipment may receive.

The invention possesses other objects and features of

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advantage, some of which, with the foregoing, will be set forth in the following description of the preferred form of the invention which is illustrated in the drawings accompanying and forming part of the specification. It is to be understood, however, that variations in the showing made by the said drawings and description may be adopted within the scope of the invention as set forth in the claims.

Referring to said drawings:

Figure 1 is a side elevation of a bench-table structure constructed in accordance with the present invention.

Figure 2 is a plan view of the bench-table structure illustrated in Figure 1.

Figure 3 is a front elevation of the bench-table structure.

Figure 4 is a side elevation on an enlarged scale of the bench-table structure in an intermediate folded position.

Figure 5 is a cross-sectional view of the structure taken substantially on the plane of line 5—5 of Figure 4.

Figure 6 is a fragmentary side elevation on a further enlarged scale of a portion of the latch means used for holding the structure in intermediate folded position.

Figure 7 is a view similar to Figure 6 but showing the folding table parts and the associated wall cabinet just prior to closed folded position.

Figure 8 is a fragmentary bottom view of the structure.

Figure 9 is a cross-sectional view of the table taken substantially on the plane of line 9—9 of Figure 1 but on an enlarged scale.

Figure 10 is a fragmentary sectional view taken substantially on the plane of line 10—10 of Figure 9.

The basic structure of the present invention consists briefly of a pair of leaves 11 and 12 which are provided with a hinged joint 13 so as to permit the folding of the leaves from a fully folded parallel vertically set position of the leaves with the hinged joint uppermost and in compacted, attached position to a wall support 14, to an unfolded co-planar horizontal position of the leaves, such as illustrated in Figures 1 and 2 of the drawing. A plurality of legs 16, 17 and 18 are arranged to support the leaves in their co-planar horizontal position at desired height from a floor 19, and are pivoted to the leaves so as to maintain such support upon elevation of the hinged joint to folded position, as illustrated in Figure 4. The legs are connected by an appropriate linkage 21 so as to cause the legs to swing into substantially parallel relation to the leaves upon movement to folded position while constantly maintaining a support for the leaves. Floor-engaging rollers 22, 23 and 24 are desirably provided at the lower ends of the legs 16, 17 and 18 to facilitate the movement of the leaves between their folded and unfolded positions and for rolling about of the structure.

As an important feature of the present invention, means is provided for locking of the leaves in an intermediate semi-folded position as illustrated in Figure 4 of the drawings, wherein the leaves are arranged in upwardly converging position and are cross-braced by a latch arm 26 so as to provide a stable A-frame form. In this position the leaves are supported by the legs 16 and 18 with lower ends 27 and 28 of the forwardly and rearwardly disposed leaves 11 and 12 spaced from the floor 19 for rolling about of the structure. As will be best seen in Figures 4, 6 and 7, the arm 26 is pivotally connected at one end 29 thereof to the under side of the leaf 11 to swing in a plane perpendicular to the leaf so as to span the space between the leaves 11 and 12 in spaced relation to the hinged joint 13 and for connection of the opposite end 33 of the arm to the leaf 12. Preferably, detachable latch means is provided for this purpose and, as here shown, the arm end 33 is formed with a recess 34 which is adapted to receive and interlock

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with a pin 36 supported on a flanged part 37 at the under side of the leaf 12. The arm 26 is normally urged to an outwardly extended position from the under side of leaf 11 by a spring 38 constantly urging the rotation of the arm in a clockwise direction, as illustrated in Figure 6, to the rotational limit permitted by a stop 39, here in the form of a link pivoted at one end 41 to the under side of the leaf 11 and having an elongated slot 42 slidably receiving a pin 43 carried by the arm 26. As will also best be seen in Figure 6, the arm end 33 is provided with an inclined cam face 44 contiguous to the recess 34 and which functions upon striking of the pin 36 during the folding movement of the table to swing the arm in a counterclockwise direction against the resistance of spring 38 until the latch socket 34 snaps over the pin and locks up the assembly in the stable A-frame position. Further folding of the leaves from the intermediate A-frame position may be effected by manually engaging and raising the latch arm 26, whereupon the outer end 33 of the arm will ride up the under side of the leaf 12, permitting a full folding of the two leaves. In reverse movement, that is, on unfolding the table, the latch arm end 33 will ride down the under side of the leaf 12 under the urge of spring 38 until the latch socket 34 again snaps over the pin 36 so as to provide in this manner an automatic locking of the parts in the stable intermediate position in both the folding and unfolding movements of the leaves.

In the interests of convenient manual engagement of the latch arm 26, the latter is here mounted near the right hand edge of the leaves as viewed from the front of the unit, that is, facing the leaf 11. It is accordingly desirable that means be provided for swinging the arm to the under side of the leaves upon movement of the leaves to unfolded position so that the arm will be out of the way of the knees of a person sitting at the table. As will be seen from the bottom plan view of the table, Figure 8, and the transverse section, Figure 9, the arm 26 is fixed to a shaft 46 which is journaled at one end 47 in the depending flange 48 of an angle iron brace, here used as a reinforcement along the under side of the leaf 11 near the edge 49. The opposite end 51 of the shaft 46 is journaled in a depending flange 52 of a bracket 53 fixed to the under side of the leaf. The spring 38 may be conveniently mounted around the shaft 46 with its opposite ends 54 and 56 engaged with the arm 26 and the under side of the leaf. Swinging of the arm to the under side of the leaf in the unfolded position is here effected by a link 57 pivoted at one end 58 to the leaf 12 and having its opposite end 59 pivoted to an arm 61 having a hub 62 journaled on the shaft end 51. As will best be seen from Figure 10, the link 57 will effect a counter-clockwise rotation of the arm 61 on the shaft 46 upon movement of the leaves to unfolded position and a pin 63 is provided on the arm 61 in position to engage and displace a radially extending pin 64 carried by the shaft 46. In this manner, as the leaves are unfolded to their flat horizontal position, as illustrated in Figure 10, the pin 63 will strike and displace the shaft pin 64 and cause a counter-clockwise rotation of the shaft as viewed in Figure 10 so as to thereby swing the arm 26 to the underside of the leaf 11 against the urge of spring 38.

The hinged joint 13 is here provided by a plurality of hinge members 66, 67 and 68 positioned in transversely spaced relation across the width of the leaves 11 and 12 adjacent ends 69 and 71 thereof, the hinged members 66, 67 and 68 each being composed of a pair of sections 66a, 66b, 67a, 67b, 68a and 68b, secured to the leaves 11 and 12 and having flanged extensions 72, 73, 74, 75, 76 and 77 extending into transversely overlapping relation from the leaf ends 69 and 71 for receipt of co-axially aligned hinge pins 81, 82 and 83. As a feature of the present construction, the centrally disposed leg 17 of the unit is hinged at its upper extremity by the same hinge pins 81—83 so that the center leg 17 is pivoted co-axially with the leaves 11 and 12. As here shown, in Figure 9, the cen-

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ter leg 17 is composed of a plurality of transversely spaced leg members 84, 85 and 86, here of tubular form and mounted with their ends 87, 88 and 89 disposed between the flanged extensions 72—77 of the hinge members and secured thereat by the hinge pins 81—83. The leg members 84, 85 and 86 are integrally connected by a transverse brace 91 which connects the outside members 84 and 86 medially of their length so that the latter depend from the brace 91 for engagement with the floor. The aforementioned floor-engaging rollers 23 are carried at the lower ends 92 and 93 of the leg members 84 and 86. The pivotal connection of the actuator link 57 to the leaf 12 may be conveniently effected by connecting the link end 58 to the flanged extension 74 of the hinged section 67b.

The end legs 16 and 18 are of similar construction and, when viewed in end elevation, appear as in Figure 3. As there shown, the leg 16 is composed of a pair of transversely spaced leg members 94 and 95 pivotally secured in co-axial relation at their upper ends 96 and 97 in hinge brackets 98 and 99 secured to the under side of leaf 11. The members 94 and 95 are integrally secured for joint movement by a cross-brace 101 and carry at their lower ends the rollers 22 aforementioned.

In accordance with the present construction, means is provided for supporting the several legs 16, 17 and 18 in substantially perpendicular relation to the leaves in the unfolded position of the unit for supporting the leaves upon a floor at desired height and to further cause the legs to swing into substantially parallel relation to the leaves during the course of movement thereof to folded position. Such means here consists of the aforementioned linkage 21 extending between the several legs and the leaves. As will best be seen from Figures 1 and 4, the center leg 17 is constantly maintained in generally bisecting relation to the angle defined by the leaves 11 and 12 at the hinged joint 13 so as to remain in substantially vertical position throughout the full range of movement of the leaves from folded to unfolded position and vice versa. This is accomplished by the positioning on the center post 85 of the leg member of a tubular sleeve or slide 106 (see Figures 1, 4, 6 and 9) which is connected to the leaves 11 and 12 by links 107 and 108 pivoted at one end to the under side of the leaves 11 and 12 in spaced relation to the hinged joint 13 (see Figures 8, 9 and 10) and pivoted at their opposite ends to the slide 106 whereby the latter is reciprocated upon the center post 85 of the leg during the folding and unfolding movements of the leaves so as to thereby constantly maintain the center leg 17 midway between the leaves. Conjoint movement of the end legs 16 and 18 with the center leg 17 is accomplished by link members 109 and 110, each pivoted at one end to the slide 106 and pivoted at their opposite ends to the cross-brace of the legs 16 and 18; see, for example, the pivotal connection of link 109 to cross-member 101 as appears in Figure 3 of the drawing and which construction is typical as regards the opposite end leg 18. As a feature of this construction the link members 109 and 110 and the vertical slide member 106 are all arranged centrally of the width-wise dimension of the leaves where they are out of the way and may not normally be engaged by the legs of persons sitting at the table. This is particularly important in regard to the slide 106 and the center post 85, which may have lubricant applied thereto.

The wall support for the bench-table construction is only required to hold the table in its fully folded position. However in the interests of providing a more attractive and useful structure, the wall support may be formed, as here shown, to provide a recess or pocket 111 for receiving the folded leaves therein, and preferably the pocket is dimensioned so that the leaves will substantially fill the recess with the foremost leaf 11 providing a wall-flush closure. As will be seen in Figures 4 and 5, the wall support may conveniently be made as a sheet metal cabinet adapted for mounting in a building

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wall and which will provide a central pocket 111 for a foldable table and two side pockets 112 and 113 for receiving two foldable bench units, not shown, but of the same general construction as the table, it being understood that the bench units will fold down alongside the table to provide seating of persons at the table.

Where the bench-table structure is completely demountable from the wall support, as in the present case, the weight and rather large sizes of the leaves and other parts of the unit pose a problem in the easy insertion of the structure into the wall pocket. This problem is further made difficult because of the rather long, high structure of the leaves in folded position and the practical impossibility of obtaining perfect plumb of both the leaves and the opposite sides of the pocket for precise registration. The problem has been solved in the present construction by the provision on the lower end 27 of the front leaf 11 of a floor-engaging wheel or roller 114 (see Figures 4 and 8) which is movable into engagement with the floor 19 adjacent the folded position of the leaves so as to take over from the legs 16 and 18 the sole support of the structure in the folded position. The roller 114 is positioned centrally of the widthwise dimension of the leaf so as to provide a central fulcrum about which the entire leaf structure may be rocked to obtain perfect parallelism between the opposite sides of the leaves and the opposite sides of the pocket. At the same time the mounting 116 for the roller 114 is so arranged as to permit ready widthwise adjustment of the front leaf axially of the roller and laterally of the pocket so as to afford easy displacement of the unit into registration with the pocket. As will be best seen in Fig. 8, the roller 114 is journaled for rotation about a shaft 115 carried by the mounting 116 and is also freely displaceable axially on the shaft. A pair of opposed mounting springs 120 may be provided on the shaft 115 for normally holding the roller in a central position widthwise of the shaft.

Also, and as a further feature of the present invention, the linkage 21 is proportioned so that the distance from the center hinge 13 to the hinge connection of leg 16 to the forward leaf 11 is made slightly longer than the distance from hinge 13 to the hinge of leg 18 on the rearward leaf 12. This uneven length arrangement serves as a sort of toggle wherein the full weight of the unit is transferred to the leg 16 and then to the roller 114 as the front leaf 11 is rolled to nearly a vertical position, with the entire weight of the unit in folded position resting upon the roller 114. This action picks up the rear leaf 12 and its supporting leg 18 and roller 24, and provides a vertical displacement of the rear leaf and parts assembled thereto at the final movement of the front leaf to its vertical pocket-closing position.

Desirably, the roller 114 is mounted close to the lower end 27 of the front leaf so that this leaf end will be substantially on the floor in the closed folded position of the leaves. As will be noted, the pocket 111 is open-bottomed onto the adjacent floor 19 so that the structure may be rolled across the floor and into the case with the front leaf providing a snug fitting closure for the case.

Frequently the bench-table structure will be rolled to the wall support 14 in the A-frame position of the structure as illustrated in Figure 4. In this position the lower end portion of the rear leaf may be readily inserted into the wall pocket 111 as illustrated, and the operator, by standing at the front of the unit, may make easy lateral adjustments by eye to obtain a close alignment of the front leaf with the pocket. Thereupon the operator may reach around the side of the front leaf and engage and lift the latch arm 26, thereby releasing the leaves for further folding movement which may then be readily accomplished by pushing forwardly on the front leaf 11. As the unit is thus further folded, the lower end 28 of the rear leaf 12 will engage the rear wall 117 of the pocket 111 and ride downwardly thereon. Skid guards 118 may

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be provided on the lower end 28 of the table to take the wear. As the front leaf 11 approaches a vertical position, the weight is transferred onto the roller 114 and the final alignment and transverse adjustment to obtain registration may be effected as above described, and the front leaf pushed home to a vertical position in the cabinet.

Any convenient locking mechanism may be employed to hold the front leaf in the case. As here shown (see Figures 2 and 8), a pair of transversely reciprocating dogs 121 and 122 are mounted at the under side of the leaf 11 and may be projected transversely into appropriate openings 123 in the opposite sides of the pocket. Actuation of the dogs is here effected by a lever 124 mounted for rotation with a central stem part 125 journaled in the leaf 11, the lever 124 being connected at its opposite ends 126 and 127 to the innermost ends 128 and 129 of the dogs 121 and 122. Preferably, the stem 125 may be engaged as by means of a key from the front of the leaf 11 (see Figure 2) to effect rotation of the stem and corresponding reciprocation and locking and unlocking of the dogs 121 and 122.

Another important feature of the present invention is the provision of means operable during the unfolding of the structure from the wall support and which insures a proper sequential movement of the parts in the interests of safety to the operator and ease and convenience of handling of the unit. Briefly, such means functions to restrain the forward movement of the hinged joint 13 until after the lower end 27 of the forward leaf has moved outwardly from the pocket so as to thereby prevent dangerous overtoppling of the unit, and to further restrain the forward movement of the lower end 28 of the rear leaf until after the hinged joint moves outwardly from the support so as to thereby prevent an undershooting of the rear leaf and a dangerous collapse of the unit against the operator. The outward movement of the hinged joint 13 is restrained by forming the parts so that the uppermost portions of the table will engage and be held against movement from the wall by an upper lip portion 130 of the case 14 until unfolding takes place. Additional restraining is here provided by a clip member 131 which is secured to the top of the case 14 and depends therefrom into the pocket 111 for engagement with the upper end 71 of the rear leaf 12. As hereinabove noted, the hinged joint 13 is given a vertical displacement upon movement of the leaves to folded position, this displacement occurring abruptly when the front leaf 11 is pushed to its final vertical position, thereby elevating the rear leaf as described. In this final elevation of the rear leaf, as illustrated in Figure 7, the hinged joint 13 will rise up behind the downwardly extending lip 130 and the leaf end 71 will ride up the back wall 117 of the case to behind the depending clip member 131 so as to be thereby temporarily restrained against forward movement during the ensuing unfolding of the leaves from the case. As the lower end 27 of the front leaf 11 is pulled out from the case, the hinged joint 13 and the rear leaf end 71 will drop and be released from the lip 130 and the clip member 131 only after the lower end 27 of the front leaf has attained a substantial forward position, thus insuring the movement of the front leaf 11 to the A-frame position above described. A second clip member 132 may be mounted at the upper end of the case 111 so as to provide a stop for the upper end 69 of the front leaf, thereby locating the front leaf in flush wall position.

As above noted, means is further provided for restraining the forward movement of the rearwardly disposed leaf upon movement of the leaves from folded position until after the hinged joint 13 has moved forwardly, so as to thereby positively require the rear leaf 12 to assume the stable A-frame position. This means here consists of a pair of stop members 133 and 134 (see Figures 4 and 5) which are carried by the opposite sidewalls 136 and 137 of the case adjacent the lower end of the pocket at an elevation just below the elevation of the lower end

28 of the rear leaf in the intermediate A-frame position, so that upon rolling of the structure into the case in its A-frame position, the lower leaf end 28 will move over the tops of the stops 133 and 134 and to the rear thereof. The stops are preferably located somewhat forwardly in the pocket so as to permit the lowering of the rear leaf behind the stops so as to be retained thereby, and preferably the stops are located so as to engage and position the front leaf 11 in wall-flush position. Accordingly, when the structure is folded into the case from the A-frame position, as illustrated in Figure 4, the lower end 28 of the rear leaf will descend behind the stops 133 and 134. The geometry of the structure is so arranged that the stops 133 and 134 will intercept and prevent movement of the leaf end 28 from the pocket 111 until the leaves 11 and 12 have unfolded to the stable intermediate A-frame position. Upon unfolding of the structure, the rear leaf end 28 will first descend as the weight is transferred from the roller 114 to the legs 16 and 18. Thereafter, as the front leaf 11 is moved forwardly, the rear leaf end 28 will rise and reach an elevated position, clearing the upper ends of the stops 133 and 134 as the structure attains the A-frame position above described.

The above described means insuring sequential movement of the parts during the unfolding of the structure from the wall support may be supplemented by spring means 135 tending to urge the leaves apart when in folded position to insure initial outward movement of the lower end 27 of the forward leaf. As shown in Figure 4 such spring means may be provided by a pair of leaf spring members 141 and 142 secured to the undersides of leaves 11 and 12 and having end portions 138 and 139 arranged to bear against linkage members 109 and 110 when the leaves are moved to folded position. In certain bench-table structures such as those of a light weight nature the spring means 135 may prove adequate to insure sequential opening movement without recourse to one or more of the restraining clips 131-134. Changes in the exact form of the spring means 135 may be made, such as the use of coil springs, etc., or even plain blocks in place of springs 136 and 137, the latter being adapted to utilize the natural spring of links 109 and 110 to effect the unfolding action.

The basic foldable leaf structure and cooperating elements of the present invention may be adapted for use as either a table or a bench, with the hinged leaves providing a table top in the first instance, and providing a relatively lower but similarly horizontally arranged bench seating surface in the second instance. Of course the leaves are dimensioned appropriately for their intended use, being somewhat wider for table use than for bench use. Also the leg lengths are appropriately modified for desired height, and the mechanical linkages adjusted to conform. A typical installation is illustrated in Figure 3 of the drawing, wherein a pair of benches are represented on opposite sides of a table. For want of a better generic expression, the term "bench-table structure" where used in this application is intended to cover both the bench and the table. As shown in Figures 1, 2, 4, 6, 7, 8, 9 and 10, the parts are generally dimensioned or proportioned for table use.

I claim:

1. In a foldable structure of the character described, a support, a pair of leaves having a hinged joint for movement between a folded parallel vertically set position of said leaves with said hinged joint uppermost and in attached position to said support and an unfolded co-planar horizontally extended position with respect to said support, said hinged joint having a vertical displacement upon movement to said folded position, and means carried by said support and cooperating with said vertical displacement for receiving and retaining the upper end of one of said leaves upon movement of said leaves to said folded position.

2. In a foldable structure of the character described,

a support, a pair of leaves having a hinged joint for movement between a folded parallel vertically set position of said leaves with said hinged joint uppermost and in attached position to said support and an unfolded co-planar horizontally extended position with respect to said support, legs hingedly secured to said leaves, means supporting said legs substantially perpendicular to said leaves in said unfolded position for supporting said leaves from a floor and causing said legs to swing into substantially parallel relation to said leaves upon movement to said folded position, said legs being mounted and dimensioned to support said leaves in spaced relation to the floor during movement between said folded and unfolded positions, said hinged joint having a vertical displacement upon movement to said folded position, and means carried by said support and cooperating with said vertical displacement for receiving and retaining the upper end of one of said leaves upon movement of said leaves to said folded position.

3. In a foldable structure of the character described, a support providing a recess, a pair of leaves having a hinged joint for movement between a folded parallel vertically set position of said leaves with said hinged joint uppermost and an unfolded co-planar horizontally extended position of said leaves, said leaves in folded position being dimensioned to enter and substantially fill said recess, legs hingedly secured to said leaves, means supporting said legs substantially perpendicular to said leaves in said unfolded position for supporting said leaves from a floor and causing said legs to swing into substantially parallel relation to said leaves upon movement to said folded position, said legs being mounted and dimensioned to support said leaves in spaced relation to the floor during movement between said unfolded position and adjacent said folded position, the outermost leaf with respect to said recess having a longer dimension than the innermost leaf, a floor-engaging wheel carried at the lower end of said outermost leaf in said folded position and being movable into engagement with the floor adjacent said folded position so as to take over the support of said leaves from said legs when in folded position, and means retaining said leaves in said recess in said folded position.

4. In a foldable structure of the character described, a support providing a recess, a pair of leaves having a hinged joint for movement between a folded parallel vertically set position of said leaves with said hinged joint uppermost, and an unfolded co-planar horizontally extended position of said leaves, said leaves in folded position being dimensioned to enter and substantially fill said recess, legs hingedly secured to said leaves, means supporting said legs substantially perpendicular to said leaves in said unfolded position for supporting said leaves from a floor and causing said legs to swing into substantially parallel relation to said leaves upon movement to said folded position, said legs being mounted and dimensioned to support said leaves in spaced relation to the floor during movement between said unfolded position and adjacent said folded position, the outermost leaf with respect to said recess having a longer dimension than the innermost leaf, and a floor-engaging wheel carried at the lower end of said outermost leaf substantially centrally widthwise thereof and being journaled for rotation about a horizontal axis and being movable into engagement with the floor adjacent said folded position so as to take over and provide the sole support of said leaves in folded position, said outermost leaf being movable axially of said wheel while resting thereon for widthwise adjustment of the positioning of said leaves for registration with and fitting into said recess, and means retaining said leaves in said recess in said folded position.

5. In a foldable structure of the character described, a support providing a recess, a pair of leaves having a hinged joint for movement between a folded parallel vertically set position of said leaves with said hinged joint uppermost and an unfolded co-planar horizontally

extended position of said leaves, said leaves in folded position being dimensioned to enter and substantially fill said recess, legs hingedly secured to said leaves, means supporting said legs substantially perpendicular to said leaves in said unfolded position for supporting said leaves from a floor and causing said legs to swing into substantially parallel relation to said leaves upon movement to said folded position, said legs being mounted and dimensioned to support said leaves in spaced relation to the floor during movement between said unfolded position and adjacent said folded position, the outermost leaf with respect to said recess having a longer dimension than the innermost leaf, a floor-engaging wheel carried at the lower end of said outermost leaf in said folded position and being movable into engagement with the floor adjacent said folded position so as to take over the support of said leaves from said legs when in folded position, and means retaining said leaves in said recess in said folded position and including a retaining member carried by said support and depending from the top of said recess, the upper end of one of said leaves having a vertical displacement up and behind said retaining member upon movement of said leaves to folded position in said recess.

6. In a foldable structure of the character described, a support, a pair of leaves relatively and rearwardly disposed with respect to said support and having a hinged joint for movement in a forward direction from a folded parallel vertically set position of said leaves with said hinged joint uppermost to an intermediate upwardly converging position of said leaves and to an unfolded coplanar horizontally extended position of said leaves, means securing said leaves to said support in said folded position, and means carried by said support and restraining the forward movement of said rearwardly disposed leaf upon movement of said leaves from said folded position to said intermediate position and functioning to release said rearwardly disposed leaf at said intermediate position.

7. In a foldable structure of the character described, a support, a pair of leaves relatively and rearwardly disposed with respect to said support and having a hinged joint for movement in a forward direction from a folded parallel vertically set position of said leaves with said hinged joint uppermost to an intermediate upwardly converging position of said leaves and to an unfolded coplanar horizontally extended position of said leaves, the lower end of said hinged rearward leaf having a vertical displacement upon movement between said intermediate and folded positions, and means carried by said support and cooperating with said vertical displacement for retaining and preventing forward movement of said lower end upon movement of said leaves between said intermediate and folded positions.

8. In a foldable structure of the character described, a support, a pair of leaves relatively and rearwardly disposed with respect to said support and having a hinged joint for movement in a forward direction from a folded parallel vertically set position of said leaves with said hinged joint uppermost and in attached position to said support to an intermediate upwardly converging position of said leaves and to an unfolded horizontally extended position of said leaves, legs connected to and supporting said leaves in said unfolded and intermediate positions and being provided with floor-engaging rollers for rolling about of said structure free of said support in said unfolded and intermediate positions, and a stop mounted adjacent the floor at said support, the lower end of said rearward leaf being supported in said intermediate position for movement to said support over the top of said stop and lowering to behind said stop so as to be retained thereby against forward displacement upon movement of said leaves from intermediate position to folded position at said support.

9. A foldable structure as characterized in claim 8 and including means functioning automatically to detachably

lock said leaves in said intermediate position to provide a stable roll-about structure upon movement of said leaves from folded and unfolded positions to said intermediate position.

10. In a foldable structure of the character described, a support providing a recess, a pair of leaves relatively and rearwardly disposed with respect to said support and having a hinged joint for movement in a forward direction from a folded parallel vertically set position of said leaves with said hinged joint uppermost to an intermediate upwardly converging position of said leaves and to an unfolded horizontally extended position of said leaves, said leaves in said folded position being dimensioned to enter and substantially fill said recess, legs connected to and supporting said leaves in said unfolded and intermediate positions and being provided with rollers for rolling about of said structure free of said support in said folded and intermediate positions, and a stop carried by said support adjacent the lower end of said recess, the lower end of said rearward leaf being supported in said intermediate position for movement into said recess over the top of said stop and lowering to behind said stop so as to be retained thereby against forward displacement upon movement of said leaves from intermediate position to folded position, said stop being positioned to locate said forwardly disposed leaf in wall-flush position.

11. In a foldable structure of the character described, a support, a pair of leaves relatively and rearwardly disposed with respect to said support and having a hinged joint for movement in a forward direction from a folded parallel vertically set position of said leaves with said hinged joint uppermost to an intermediate upwardly converging position of said leaves and to an unfolded coplanar horizontally extended position of said leaves, means securing said leaves to said support in said folded position, legs connected to and supporting said leaves in said unfolded and intermediate positions and being provided with floor-engaging rollers for rolling about of said structure and for rolling movement of the lower ends of said leaves upon movement between said position, and means carried by said support and functioning upon movement of said leaves forwardly of said support from folded to intermediate position to restrain the forward movement of said hinged joint until after the lower end of said forwardly disposed leaf has moved away from said support towards said intermediate position and to further restrain the forward movement of the lower end of said rearwardly disposed leaf until after said hinged joint moves forwardly from said support.

12. A foldable structure as characterized in claim 11 and including means carried by said leaves and functioning to urge said leaves apart from said folded position for insuring the movement of the lower end of said forwardly disposed leaf away from said support prior to the forward movement of said hinged joint.

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