Aug. 23, 1955 T. L. LITWINSKI 2,715,757

PORTABLE KNOCKED DOWN STAND AND TENT

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Fig. 1.

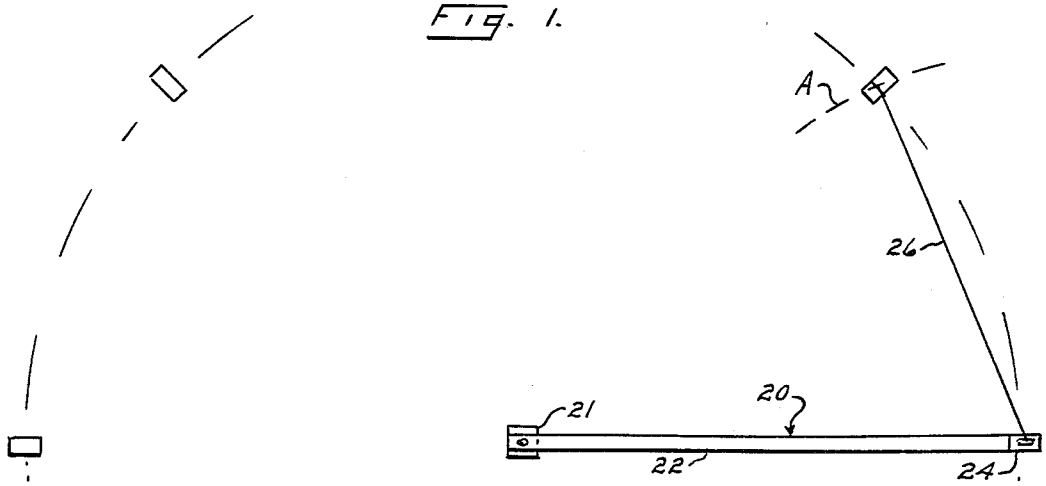


Fig. 2.

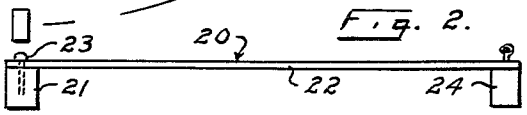


Fig. 4.

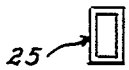


Fig. 3.

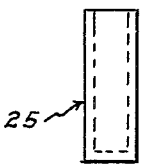


Fig. 6.

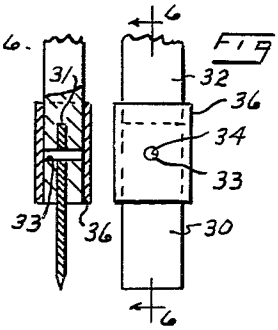


Fig. 5.

Fig. 9.

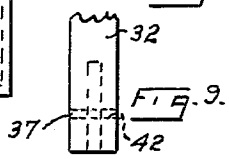


Fig. 8.

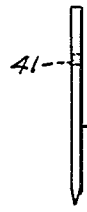


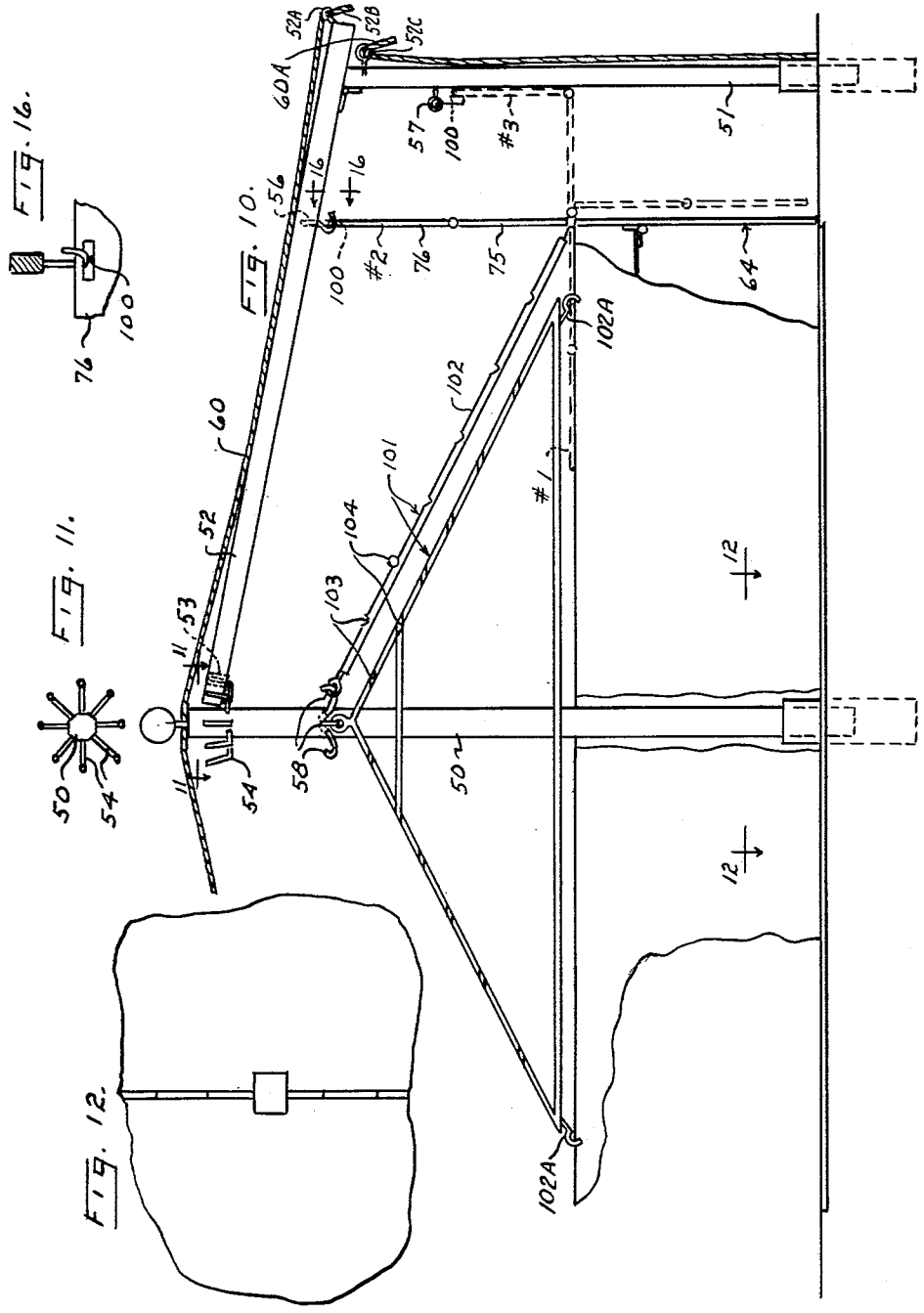
Fig. 7.

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PORTABLE KNOCKED DOWN STAND AND TENT

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PORTABLE KNOCKED DOWN STAND AND TENT

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Fig. 13.

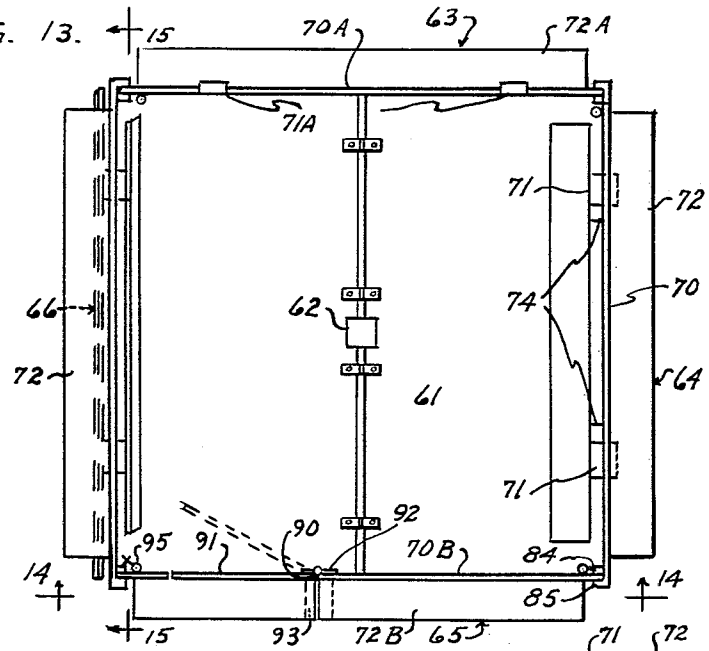
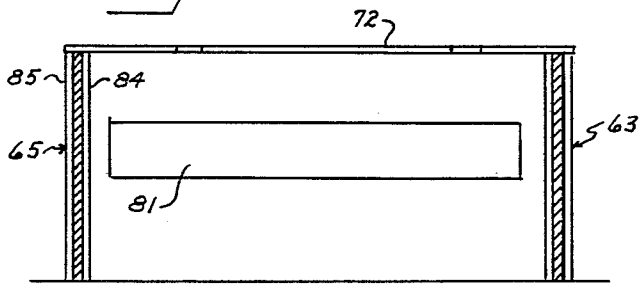


Fig. 14.

Fig. 15.



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PORTABLE KNOCKED DOWN STAND AND TENT

Theodore Lester Litwinski, Keyport, N. J.

Application November 1, 1951, Serial No. 254,257

5 Claims. (Cl. 20—1.6)

This invention relates to a portable stand and tent and more particularly to a stand comprised of a plurality of sections that may be quickly and easily assembled or disassembled and a tent that coacts with the stand and is also comprised of a plurality of members that are quickly and easily assembled or disassembled.

It is an object of this invention to provide a portable knocked down stand that includes a floor and four individual wall units that fasten together in adjoining relation around the edges of the floor to form a four sided stand.

Another object of this invention is to provide a portable knocked down stand and tent in which the stand when erected will be completely covered by the tent and in which means are provided on the tent supporting structure to retain the sides of the stand in various positions.

A still further object of this invention is to provide a portable knocked down stand and tent comprised of a plurality of units fastened together in adjoining or coacting relationship in which all units are simple in construction, durable in use and easily assembled and disassembled for transportation.

Other objects of this invention shall be apparent by reference to the accompanying detailed description and the drawings in which

Fig. 1 illustrates a plan view of the tent supporting structure,

Fig. 2 is a side elevational view of the spacer taken on line 2—2 of Fig. 1,

Fig. 3 is a side elevational view of a box stake,

Fig. 4 is a plan view of the box stake,

Fig. 5 is a side elevational view of another embodiment of the stakes,

Fig. 6 is a cross sectional view taken on line 6—6 of Fig.5,

Fig. 7 is a further embodiment of a stake,

Fig. 8 is a plan view of the stake,

Fig. 9 is an end view of a tent supporting element,

Fig. 10 is a cross sectional view illustrating the coacting relationship between the stand and the tent,

Fig. 11 is a cross sectional view taken on line 11—11 of Fig. 10,

Fig. 12 is a partial view of the floor taken on line 12—12 of Fig. 10,

Fig. 13 is a plan view of the stand,

Fig. 14 is a side elevational view taken on line 14—14 of Fig. 13,

Fig. 15 is an elevational view partly in cross section taken on line 15—15 of Fig. 13, and

Fig. 16 is a partial view taken on line 16—16 of Fig. 10.

Referring to the drawings in Fig. 1 we have illustrated a typical layout for positioning a tent supporting structure. Starting with a center we mount a box shaped stake 18 and utilizing a spacer 20 as illustrated in Fig. 2, the spacer being comprised of a block 21 which will fit into the hollow stake 18 and an arm 22 that is pivotally mounted to block 21 by a pin 23 and a block 24 mounted at the opposite end of arm 22. Thus by mounting the spacer

20 with block 21 inserted in stake 18 we may find the position of an outer tent support, that is, block 24 must fit into a hollow stake 25. Thus by driving a hollow box shaped stake 25 into the ground at this particular spot, the spacer block 24 will fit into the stake 25. A cord or rope 26 is provided and is attached to the spacer arm 22 directly over the center of block 24. The cord or rope is of a predetermined length and is provided with a marker at the unattached end. Using this marker an arc A may be marked on the ground and an arc B may be repeated in an opposite direction. The next step is simply lifting block 24 out of stake 25 and rotating the pivotally supported arm 22 until block 24 is centered over the arc A. At this particular point another stake 25 may be driven and likewise rotating arm 22 in an opposite direction until block 24 is centered over arc B. So the process of mounting block 24 and utilizing cord 26 to describe a new mark may be repeated to thus provide the eight points at which takes 25 must be driven to provide supports for the tent supporting structure. With the layout for the tent completed and the stakes 25 and stake 18 duly positioned, we are ready to erect the tent supporting structure.

Referring to Figs. 3 and 4 we have illustrated stake 25 which is a four sided box-like structure with one end tapered so that it may be driven, buried or mounted into the ground as illustrated to provide a proper foundation for the tent structure.

Referring to Figs. 5 and 6 we have illustrated another embodiment of the stake supporting elements. In this instance there is provided a flat blade 30 with one end sharpened and the other square end fitted into a slot 31 in the end of each tent supporting element 32. Blade 30 is also provided with an aperture 33 through which a bolt or pin 34 may be passed and likewise the end of the element 32 is provided with a similar aperture so that the bolt 34 will pass through to retain the blade locked in the position illustrated. Generally the elements 32 are square or rectangular in form and as illustrated in Figs. 5 and 6 presuming that they are square in form, we have provided a square box-like sleeve 36 that fits snugly about element 32. This sleeve 36 may be lifted to permit mounting the bolt or pin 34 and the sleeve 36 may then be dropped to thus lock the pin 34 and provided a reinforcing around the end of element 32.

Referring to Figs. 7, 8 and 9 there is illustrated a further embodiment of this invention in which a round stake 40 is utilized. Stake 40 may be driven into the ground and the supporting tent element 32 will be provided with a central bore 37 of approximately the same size as peg 40. Thus when peg 40 is driven into the ground with half of the peg above the ground, element 32 may be mounted directly over peg 40 and with an aperture 41 in peg 40 and an aperture 42 in the element 32 a bolt or pin may be passed through the aperture 42 and aperture 41 to retain the element 32 and peg 40 in a fixed relationship.

Referring to Fig. 10 we have illustrated a cross sectional view of the tent and stand mounted within the tent. The tent is comprised of a central post 50, the end of which is mounted in the hollow stake or post holder 18 and there are also provided eight upright supports 51 each one mounted in a hollow stake member 25. The upright supports 51 are each provided with a rafter 52 that is hingedly affixed thereto at the upper end thereof. The rafter 52 at its unsupported end is provided with an aperture 53. The central post 50 at its upper end is provided with a plurality (8 in number) of hook shaped members 54. The members 54 are equally spaced as illustrated in Fig. 11. It is apparent that member 54 is so shaped that the end of member 54 will fit through the aperture 53 of the rafter 52 thus providing the necessary support for rafter 52. Rafter 52 is also provided with an eye bolt 52A at the opposite

end thereof. This is to permit stretching a rope **52B** through each eye bolt to go around the circumference of the structure and provide a support for a canvas **60** that is to be spread over the complete tent structure. The canvas **60** is necessarily tailored to fit the circular structure and will be formed as a single piece. A canvas **60A** is also attached around the supports by tying the upper edge of the canvas to eye bolts **52C** with string or rope that is sewn into the canvas to provide an enclosure for the entire structure. Each rafter **52** is also provided with a supporting hook **56** on the under side thereof. The use of this will be explained later in conjunction with the stand. Each upright **51** is provided with an eye bolt **57** positioned adjacent to the top of element **51**, the use of which will be explained later. The center post **50** is also provided with a plurality of hooks **58**, the use of which will also be explained later.

Referring to Figs. 13, 14 and 15 in which Fig. 13 is a plan view of the portable stand which includes a hinged folding floor structure **61** generally square in its extended position, the floor **61** is provided with a central aperture **62** to fit around the post holder **18**. There are four separate sides **63**, **64**, **65** and **66** and for convenience the sides **63** and **65** are similar in structure while sides **66** and **64** are similar in structure. Sides **66** and **64** are formed of a single panel **70** of a predetermined length and height, the length being similar to the length of the side of the floor **61** while the height is approximately the average counter height. There are provided a pair of hinges **74** affixed to panel **70** and also affixed to the hinges **74** are a pair of folding panels **75** and **76**, panels **75** and **76** being of the same length as panel **70** but each being of half the width and as illustrated panels **75** and **76** are joined by a piano hinge **77**. A pair of hinges **71** are attached to the upper edge of panel **75**. A counter **72** is affixed to the hinges **71** so that it may be swung into a parallel relationship with panel **75** as illustrated in dotted lines in Fig. 14 and also counter **72** may be positioned at right angles to panels **70** and **75** to provide an extended counter as illustrated in Figs. 13 and 14. A pair of hinges **80** are affixed to panel **70** at a predetermined position and a shelf **81** is also affixed to the hinges **80** thus the shelf **81** may be positioned as illustrated in Fig. 14 and may be locked in that position by a supporting pin **82** positioned under shelf **81** or may be retained by a supporting hook **83** above shelf **81**. It is apparent that shelf **81** may be folded into a parallel relationship with panel **70**. Panel **70** at each end is provided with a pair of spaced blocks **84** and **85** thus providing a groove along the inner face of panel **70**. This groove is utilized to insert the edge of the opposite sides **63** and **65** when the stand is erected. Panel **63** is comprised of a single panel element **70A** similar to panel **70** of side **64**. Panel **70A** is provided with a pair of hinges **71A** attached to the upper edge thereof and a shelf **72A** is also attached to the hinges **71A** thus shelf **72A** may be positioned as illustrated in Fig. 13 or shelf **72A** may be rotated over into a parallel relationship with panel **70A**. Side **65** is similar to side **63** except that the panel **70B** of similar size to the panel **70A** is provided with a door opening **90** into which a door **91** is fitted, the door **91** is supported in this position by a piano hinge **92** attached to the door **91** and the panel **70B**. The counter **72B** that is similar to counter **72A** is cut on the line of the hinge **92** and a further hinge **93** is provided so that the counter **72B** in its extended position will be as illustrated in Fig. 13. However the end of counter **72B** may be rotated until the hinged end is in parallel relationship with the main counter so that the door **91** may be utilized. Referring to Figs. 13, 14 and 15, it is apparent that the four sides may be pressed into a fitted relationship and if necessary, hooks and eyes **95** may be provided on all four corners to lock the sides in their fitted relationship.

Referring to Fig. 10 it is apparent that anyone may quickly assemble the stand and tent structure. The tent may be erected as already described except that the floor **61** will be positioned about stake **18** before the post **50** is mounted in stake **18**. With the tent erected as already described the stand may be assembled by positioning sides **64** and **66** opposite to each other and sides **63** and **65** opposite to each other. Thus the sides **63** and **65** will be fitted into the grooves provided and may be hooked by the hook and eyes **95** to lock the sides in this assembled relationship.

Referring to the panels **75** and **76** it is apparent that they may be utilized for three purposes, the panels may be swung or rotated to position No. 1 to thus cover the stand and with the panels on each side so positioned the meeting edges may be provided with a hasp and lock **99** to thus permit locking the stand and its contents. Also the panels **75** and **76** may be rotated to position No. 2 and by means of the previously described hooks **56** the panels may be hooked into a supported position as illustrated, that is, the edge of panel **76** may be provided with apertures **100** as illustrated in Fig. 16 through which the hooks **56** will fit and thus support the panels as illustrated. Panels **75** and **76** may also be rotated to the position No. 3, that is, with panel **75** at right angles to the side **64** and panel **76** parallel to a support **51** and the aperture **100** of panels **76** may be hooked to an eye bolt **57** as already described. Thus panels **75** and **76** will be retained at the position illustrated. Position No. 1 as already stated provides a complete cover for the stand so that the stand and its contents may be locked. Position No. 2 provides a windbreak and with one or more sides provided with a pair of panels **75** and **76**, the stand may be protected from a strong wind in any of the four directions or two or three sides may be combined to form a protective enclosure. Position No. 3 illustrates a further use of the panels **75** and **76**. In this instance the panels are positioned to permit stocking up merchandise or displays to provide additional room when the stand is in use but when the side so formed is not to be used for serving. A further feature illustrated in Fig. 10 is the rack **101**. This rack may be of triangular formation and may be formed by two stringer elements **102**. Elements **102** are provided with an eye at each end so that at the upper end the eye may be hooked over the hook **58** already described as mounted on center post **50** while the lower ends of the stringers **102** may be attached by hooks **102A** to the corners or at any particular point along the upper edge of the sides such as side **64**. The stringers **102** are also provided with a plurality of notches **103** thus permitting cross bars **104** to be positioned in a pair of notches. Thus a plurality of supporting elements may be secured to the stringers **102** to provide a merchandising rack for display. Although we have described the supporting structure as composed of wooden elements, we may likewise utilize hollow metal elements and accomplish the same result.

It is apparent that the stand and tent supporting structure are constructed so that they may be quickly and easily erected and so that they may likewise be quickly and easily dismantled and each and every piece is so designed that they may be stacked into a compact relationship for transportation.

Various changes or modifications may be made in the tent supporting structure and in the construction of the portable stand without departing from this invention and this invention shall be limited only by the appended claims.

What is claimed is:

1. A portable stand and tent structure comprising four walls formed of detachable interconnected units arranged in adjacent boxlike form, the four walls being of approximately counter height, each wall provided with a service counter hingedly affixed to the upper edge, each of one pair of opposed walls provided with a two-piece folding cover, each of which is hingedly affixed to the upper edge, said folding covers completely covering the open structure in one position and lying adjacent to the opposed walls in another position, a central upright po-

sitioned in the middle of the boxlike form and provided with a plurality of hooks at the upper end thereof, a plurality of uprights spaced equally apart and at a predetermined distance from the central upright, a plurality of rafters, each hingedly affixed to an upright and provided with an aperture at the unattached end, said rafters being supported at the unattached ends by hooking to the central upright, and a canvas cover supported by said rafters.

2. In a device according to claim 1 in which said rafters are provided with a hook affixed to the under side of the rafter and positioned in a parallel line with one of the sides of the boxlike form positioned below, said folding covers provided with apertures on the outer edge thereof and in a position to meet with said hooks that are affixed to said rafters to support said cover in an upright position parallel with the side to which the cover is attached.

3. In a device according to claim 1 in which the plurality of uprights are provided with a hook mounted adjacent the upper end thereof and in which the folding covers are provided with apertures on the outer edge thereof and in a position to meet with said hooks that are affixed to said uprights to support said cover with the portion of the cover that is attached to the side of the

boxlike form in a horizontal position and to support the other portion of said folding cover in a perpendicular position to provide a supporting structure for stacking merchandise.

4. In a device according to claim 1 in which a triangular shaped rack is connected to one of said walls and in which said central upright is provided with a plurality of hooks at a predetermined position above counter height, said rack being provided with an eye bolt at the apex of the triangle to support said rack on said central upright and hinges are affixed to the base of said triangular rack, supporting said rack on the side of said boxlike structure.

5. In a device according to claim 1 in which one or more of said sides of said boxlike structure is provided with an internal shelf that are hingedly affixed to said sides.

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