Jan. 21, 1930. J. H. PHILLIPS 1,744,079

SAND TRAY

Filed Nov. 14, 1928

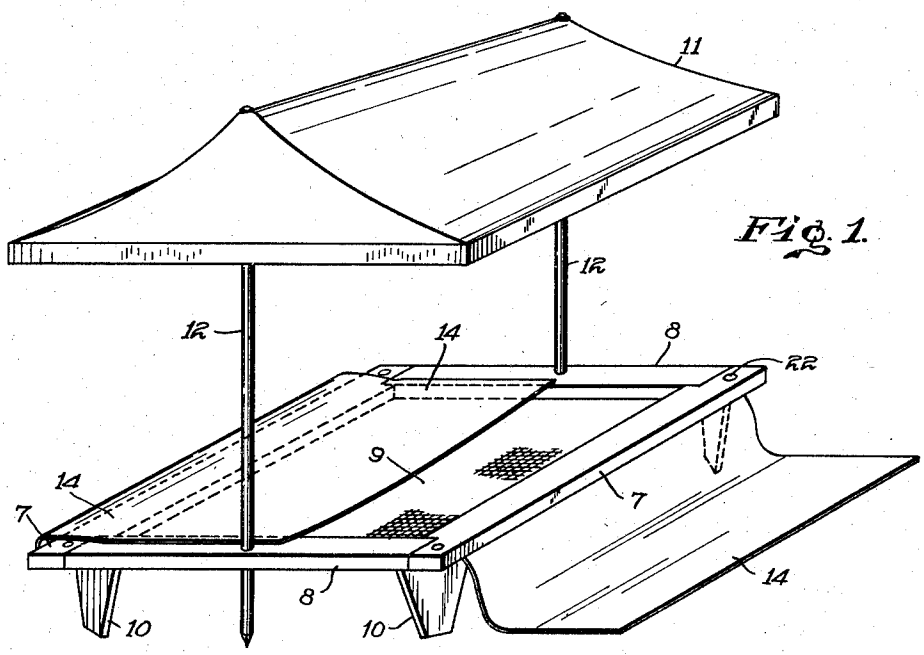


Fig. 1.

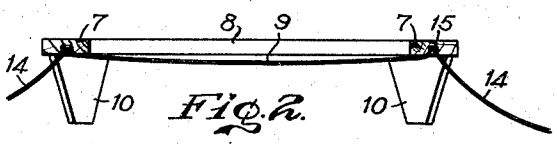


Fig. 2.

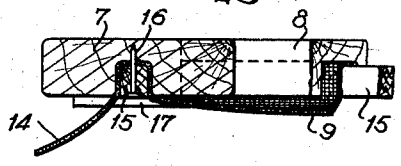


Fig. 4.

Fig. 3.

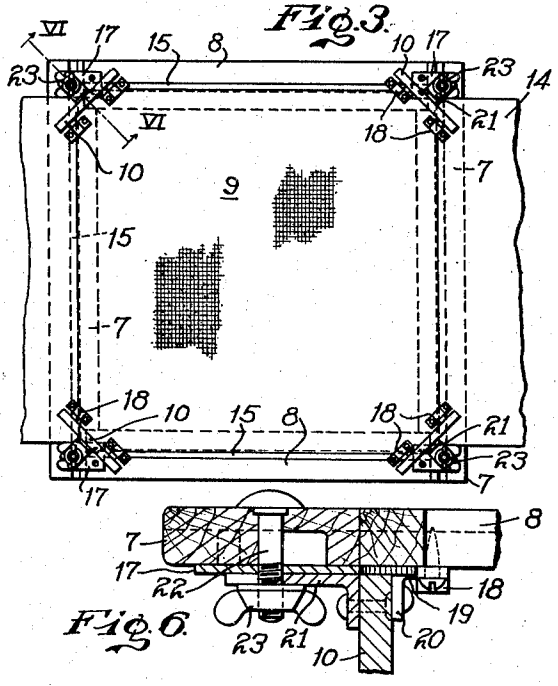


Fig. 6.

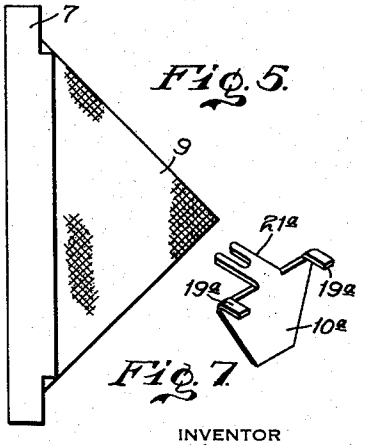


Fig. 5.

Fig. 7.

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UNITED STATES PATENT OFFICE

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SAND TRAY

Application filed November 14, 1928. Serial No. 319,415.

My invention relates to sand trays for use more particularly in play grounds.

One object of my invention is to provide a structure of the class described that may be readily knocked down or collapsed for convenience in transportation or storage.

Another object of my invention is to provide a sand tray or box structure that is of light weight for a given capacity.

Still another object of my invention is to simplify and improve generally the structure and arrangement of devices of the character referred to.

Some of the forms which my invention may take are shown in the accompanying drawing, wherein Figure 1 is a perspective view of one form of device; Fig. 2 is a cross sectional view of the structure of Fig. 1; Fig. 3 is an inverted plan view of the device; Fig. 4 is a vertical sectional view taken across one side of the device of Fig. 1, on an enlarged scale; Fig. 5 is a diagrammatic view illustrating the tray partly in the folded position; Fig. 6 is a sectional view taken along the line VI—VI of Fig. 3, on an enlarged scale, showing the manner in which the legs and the frame members are connected together, and Fig. 7 shows a modification of the leg and the connecting means of Fig. 6.

The structure is composed of an interlocking frame having side frame members 7 and end frame members 8, a bottom member 9 of canvas or other suitable material and legs 10, which are held in assembled relation as hereinafter described. For outdoor use a canopy or awning 11 may be provided mounted upon posts 12 which extend through holes in the end frames 8 and may also be driven into the ground somewhat for more rigid support.

The bottom member 9 has flap portions 14 which may be integral therewith or of lighter material secured to the frame and spread upon the ground to afford a kneeling surface for users of the device, and folded over the top of the tray when it is not in use or when packing the same. The canvas body 9 is held in place in the frames by means of clamping strips or bars 15 which may have a drive fit with the walls of grooves formed in the underside of the frame members, and may be further secured in place by nails 16 to more firmly anchor the canvas, as shown in Figs. 2 and 4.

Tautness of the bottom member holds the frame members in interlocking position. To prevent tilting or canting of the frame members, bifurcated locking plates 17 are secured to each end of the members 8, and underlie the adjacent ends of the members 7. Bolts 22 extend through the side members 7 and the bifurcated locking plates 17.

The adjacent ends of the frame members 7—8 each have a clip 18 secured thereto for the reception of tongues 19 that are formed on brackets 20 which are bolted or riveted to the legs 10.

Leg-supporting brackets 21 are also riveted to the legs 10 and have bifurcated extensions between which the ends of the bolts 22 may lie. These bolts carry wing nuts 23 to permit of the convenient assembly and disassembly of the device. It will be seen that when the parts are connected as shown more clearly in Figs. 3 and 6, the frame members 7—8 are not only rigidly connected together but are also rigidly secured to the legs 10.

Upon removal of the wing nuts 23, the legs and the brackets 20 and 21 carried thereby may be pulled away from the frame members and the locking plates 17 released, by reason of the flexibility of the canvas and the broken connections at the corners of the frame members, the tray structure proper can be folded along lines diagonally of the tray and wrapped within the canvas body. The legs also may be wrapped therein, if desired, thus making a compact package of the structure.

In Fig. 7, I show a leg 10^a of pressed metal which has tongue members 19^a and a bracket portion 21^a formed integrally therewith, the portions 18^a and 21^a corresponding to the members 18 and 21 of Fig. 6.

I claim as my invention:—

1. Tray structure comprising a frame portion of rectangularly arranged bars, means for preventing inward movement of said bars when so arranged, a flexible bottom portion secured to said bars, and detachable means for rigidly connecting the adjacent ends of the bars at each corner of the frame.

2. Tray structure comprising a frame, a flexible body secured to said frame and having a flap portion extending beyond one edge of the frame to serve as a kneeling cloth.

3. Tray structure comprising a frame member, means for supporting the frame member in elevated position, a flexible bottom secured to the underside of the frame member, and a flap extending beyond the edge of the frame member to serve as a kneeling cloth.

4. Tray structure comprising a frame composed of bars some of which have grooves in their undersides, a flexible bottom disposed beneath the frame, clamping strips disposed beneath the said body and clamping portions thereof within the said grooves, and detachable means for rigidly connecting the adjacent ends of the bars.

5. Tray structure comprising a frame portion composed of bars that are loosely associated, a canvas bottom secured against the undersides of said bars, and detachable means for rigidly connecting the adjacent ends of the bars.

6. Tray structure comprising interlocking side and end frame members, and a flexible bottom tautly secured to the underside of the frame members for maintaining said frame members in interlocking position.

7. Tray structure comprising interlocking side and end frame members, a flexible bottom tautly secured to the frame members, and means for locking said frame members against tilting movement.

8. Tray structure comprising a frame portion of rectangularly-arranged bars which are disposed in a common plane and each bar having abutting engagement with two adjacent bars, a flexible bottom portion secured to said bars, a leg for supporting each of the corners of the frame, and means for detachably connecting the legs to the frame.

9. Tray structure comprising a frame portion of rectangularly-arranged bars which are disposed in a common plane and each of two oppositely-disposed bars having abutting engagement with the adjacent ends of the two other bars, a flexible bottom portion secured to said oppositely-disposed bars, a leg for supporting each of the corners of the frame, and means for detachably connecting each leg to two of the bars.

In testimony whereof I, the said JOHN H. PHILLIPS, have hereunto set my hand.

JOHN H. PHILLIPS.