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PLAY APPARATUS

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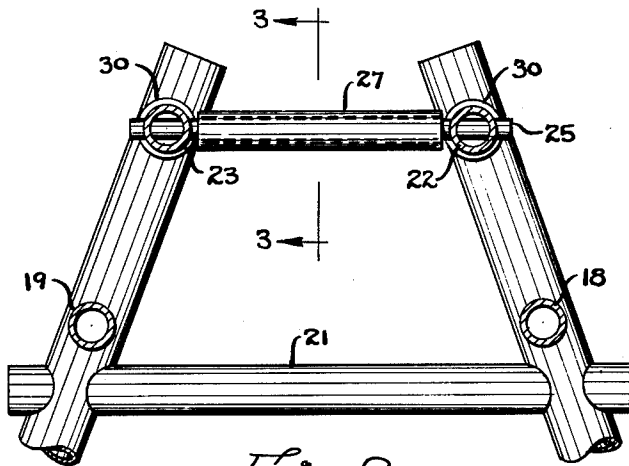


*Fig. 2*

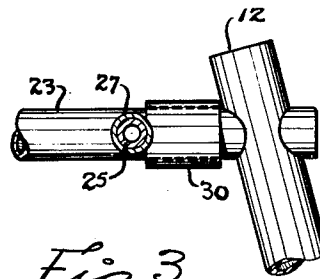


*Fig. 3*

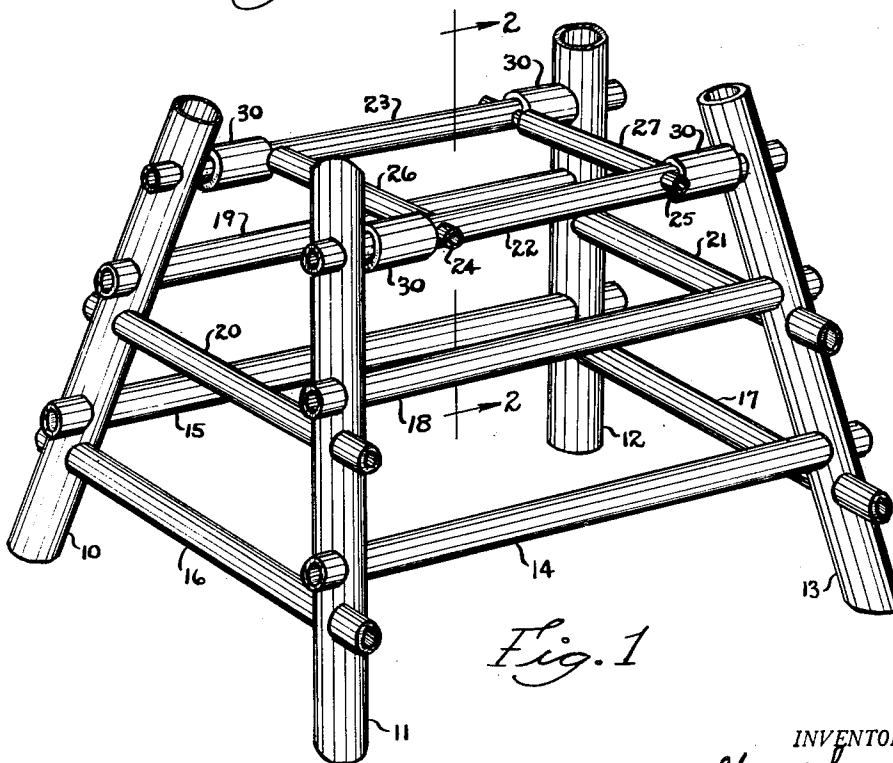


*Fig. 1*

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## PLAY APPARATUS

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2 Claims. (Cl. 272—60)

This invention relates to a play apparatus for small children. More specifically, the invention relates to a reticulated climbing structure for use in outdoor playgrounds or indoors.

My play apparatus is constructed exclusively of paper tubes or cores which may be impregnated with asphalt or other suitable water-repellant materials so as not to be impaired by water or moisture coming in contact therewith. My construction is light weight and can be readily moved to any desired location for use by children. The play apparatus can be easily erected from the constituent paper tubes and can also be easily disassembled for storage in a convenient box when not in use.

Further advantages and details of my invention will be apparent from the following specification and accompanying drawings, wherein:

Figure 1 is a perspective view of my assembled play apparatus constructed of reticulated paper tubes,

Figure 2 is a view taken on lines 2—2 of Figure 1, and Figure 3 is a view taken on lines 3—3 of Figure 2.

Referring to the drawings, the play construction is formed entirely of paper tubes or cores of suitable length and diameter. The tubes may be made of kraft or other suitable paper, spirally wound to suitable thickness, for example  $\frac{1}{2}$  inch, and adhered to provide rigid tubes. The tubes may be provided with an exterior liner of colored paper to present a smooth and pleasing surface. Four leg or upright tubes 10, 11, 12 and 13 are provided of suitable length, for example about 50 inches long, and having an outside diameter of  $3\frac{1}{4}$  inches, and inside diameter of 3 inches. The leg tubes are provided with a plurality of spaced aligned openings to snugly receive therein opposed pairs of cross-tubes 14, 15 and 16 and 17, respectively, as shown in Figure 1, which are frictionally retained in place by the leg tubes. The ends of these cross-tubes preferably project slightly beyond the outer portions of the leg tubes so as to provide a rigid load support.

Intermediate pairs of cross-members 18, 19 and 20, 21 are also provided which also extend through suitable aligned openings in the leg tubes, as shown in Figure 1. It will be noted that the pairs of cross-members 14, 15 and 18, 19 are positioned a relatively short distance above their respective pairs of intersecting adjacent cross-members 16, 17 and 20, 21.

A pair of upper cross-members 22 and 23 are provided which are retained in aligned openings adjacent the upper ends of leg members 11, 13 and 10, 12, respectively. A pair of upper cross-members 24 and 25 are also provided which are retained in suitable aligned openings in the opposed cross-members 22 and 23. Tubular sleeves 26 and 27 are positioned on cross-members 24 and 25, respectively, intermediate the cross-members 22 and 23. These sleeves are also made of paper tubes or cores of suitable diameter so that they may be positioned on tubes 24 and 25 and moved into proper position. The sleeves 26 and 27 are preferably of a length so as to have their ends abut the cross-members 22 and 23, thereby functioning as locking means against lateral slippage of cross-members 24 and 25 through their respective supporting openings in the leg members.

Tubular sleeve members 30 of suitable diameter and length are also positioned adjacent the ends of cross-members 22 and 23 so as to abut the adjacent upper portions of the leg members of cross-members 26 and 27, as shown in Figures 2 and 3. These sleeve members also serve as locking members and prevent lateral slippage of

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cross-members 22 and 23 through the upper openings in the leg members.

The play apparatus as described may be made of suitable dimensions for use by young children. For example, it may be constructed of paper tubes so that the top of the legs are about 50 inches from the floor. The tubular leg members may be 3 inches inside diameter and  $3\frac{1}{4}$  inches outside diameter. The cross-tubes may be  $1\frac{1}{8}$  inches inside diameter and  $2\frac{3}{8}$  inches outside diameter. The opposed legs 10, 11 and 12, 13 may be about  $53\frac{1}{2}$  inches apart on the floor on the side and about 50 inches across the ends, outside dimensions. It will be noted that the four upright legs 10, 11, 12 and 13 are positioned so as to incline inwardly in three directions from the perpendicular so as to form the shape of a pyramid and thus brace themselves against each other for strength and rigidity. The lower ends of the leg portions are cut so that the ends are parallel to the plane of the supporting surface for greater stability. The four legs are pierced with holes of suitable diameter and at the proper locations so that the cross-bar tubes can be inserted through them snugly and are thus frictionally held in position. The tubular sleeve portions 26, 27 and 30, previously described, are located so as to prevent the legs from slipping or converging at the top from the sides or ends.

I prefer to use paper tubes for my play construction in preference to metal, wood or other hard substances because it is practically impossible for a child to get an abrasion while climbing on my apparatus. There are no metal clips or fasteners at any point in the structure which might cause injury. If a child should bump his head or body on the apparatus during play, the inherent resilience of the paper tubes will prevent an injury such as could result from a hard material.

My apparatus is so light in weight as to be easily movable into or out of shade or sun or away from muddy spots. When folded up by removing the four end bars and pushing the sides together, it can be taken through any door or stored in a small space. A special feature of the construction is that it can be used indoors as it will not injure floors, doorways or furniture because of its resilient nature. The play apparatus can be easily erected or disassembled for storage in a convenient box when not in use. However, when the cold or rainy season sets in, it can be used indoors very conveniently. It is during such months that children most need exercise of the larger arm and leg muscles which this apparatus affords.

It is to be understood that the foregoing description of my play construction is intended to be only an illustrative embodiment of my invention and that the invention is not restricted to the specific details of form, arrangement or dimensions herein disclosed. The form and arrangement of the leg portions and cross-tubes may be greatly varied depending upon the size and shape of the apparatus desired. For example, additional leg supports may be provided intermediate the corner legs if desired for further reinforcement, especially if the cross-tubes are long. The number and arrangement of the cross-tubes or rungs may also be greatly varied while utilizing the essential structural features of my invention. Such modification and changes are intended to be included within the scope of the appended claims.

I claim:

1. A play apparatus for playgrounds and the like suitable for use as a climbing structure by young children formed of tubular paper tubes comprising spaced vertically positioned tubular paper leg members, said leg members being inwardly inclined towards each other, said leg members being provided with a plurality of spaced and aligned openings for receiving tubular paper cross-members therein, tubular paper cross-members inserted in said aligned openings for forming a rigid climbing structure, said cross-members being positioned in successive courses spaced above each other, the topmost pair of cross-members being retained in position by a pair of intersecting paper tubular members retained in spaced aligned openings in said topmost pairs of cross-members, tubular sleeve members positioned adjacent the ends of said uppermost cross-members and said intersecting tubular members, and tubular sleeve members positioned on

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said intersecting tubular members intermediate said topmost cross-members.

2. A play apparatus for playgrounds and the like suitable for use as a climbing structure by young children formed of tubular paper tubes comprising four spaced vertically positioned tubular paper leg members, said leg members being inwardly inclined towards each other and arranged in pyramid form, said leg members being provided with a plurality of spaced and aligned openings for receiving tubular paper cross-members therein to form a plurality of climbing rungs, tubular paper cross-members inserted in said aligned openings for forming a rigid climbing structure, said cross-members being positioned in successive courses spaced above each other, the topmost pair of cross-members being retained in position by a pair of intersecting paper tubular members retained in spaced

aligned openings in said topmost pairs of cross-members, tubular sleeve members positioned adjacent the ends of said uppermost cross-members and said intersecting tubular members, and tubular sleeve members positioned on said intersecting tubular members intermediate said topmost cross-members.

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