July 19, 1966 S. E. SMITH 3,261,605

CONVERTIBLE SEE-SAW AND HUT

Filed March 23, 1964 2 Sheets-Sheet 1

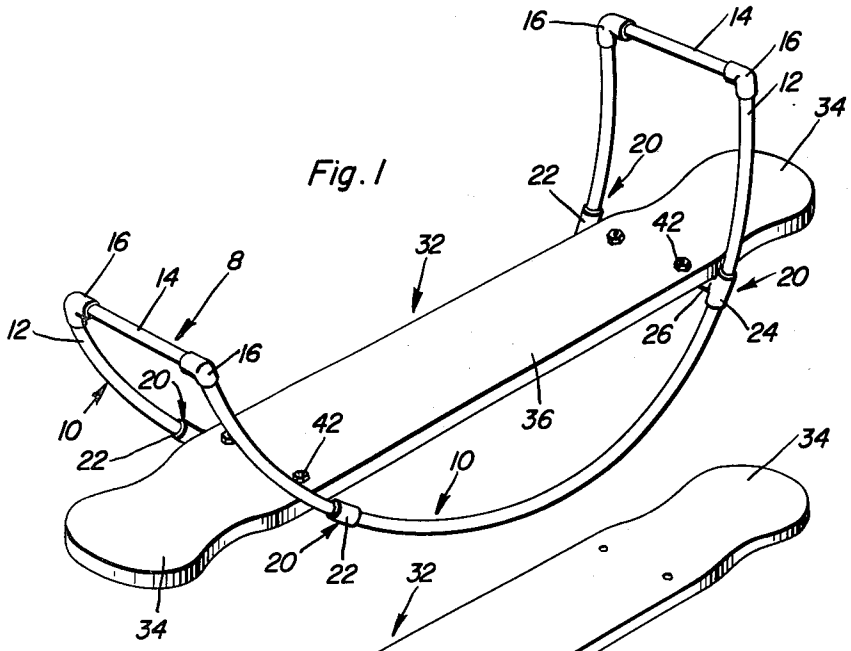


Fig. 1

Fig. 2

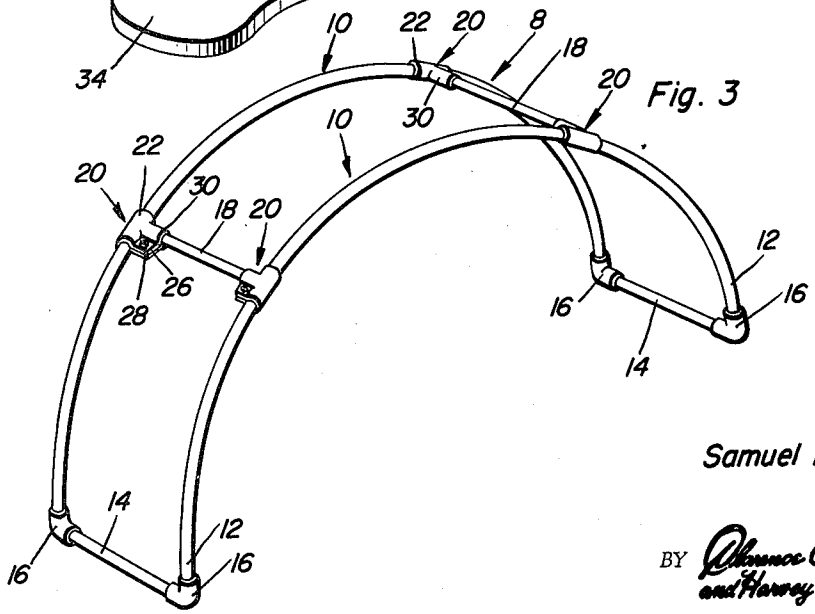


Fig. 3

Samuel E. Smith
INVENTOR.

BY Clarence A. O'Brien and Harvey B. Jacobson
Attorneys

July 19, 1966 S. E. SMITH 3,261,605

CONVERTIBLE SEE-SAW AND HUT

Filed March 23, 1964 2 Sheets-Sheet 2

Fig. 4

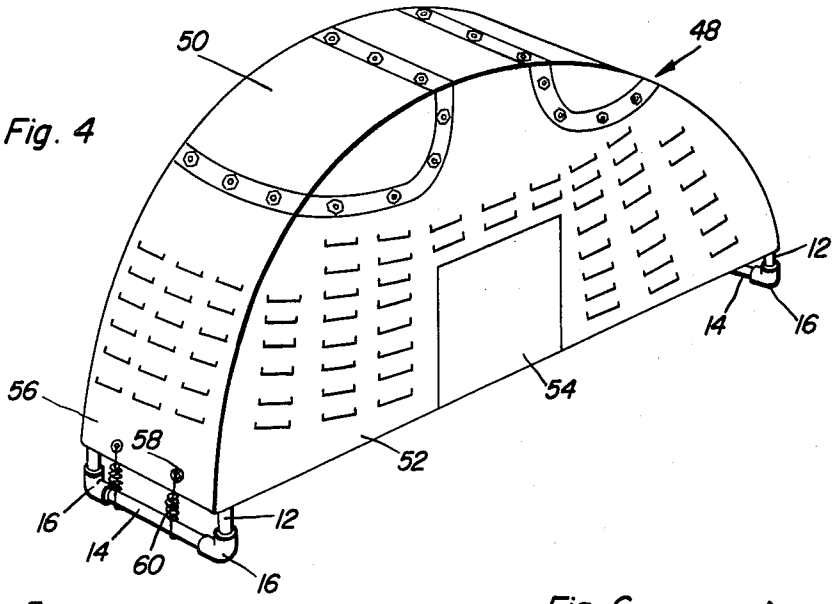


Fig. 5

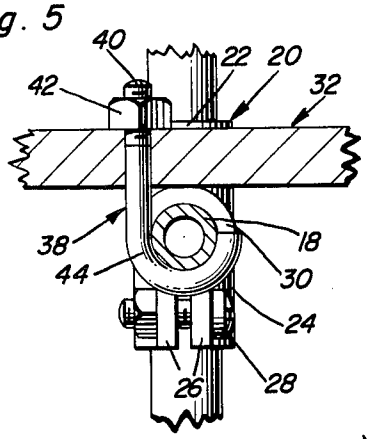


Fig. 6

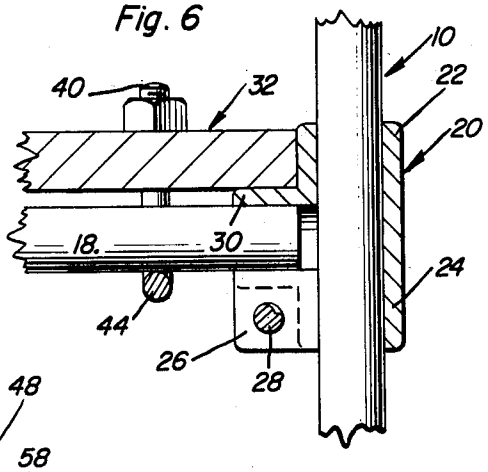
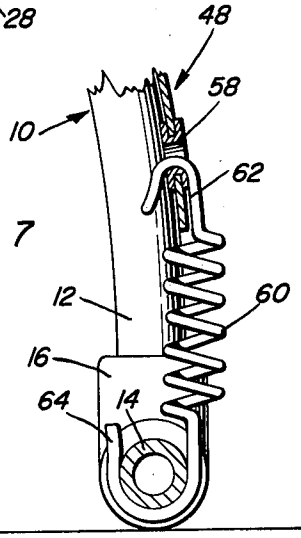


Fig. 7



Samuel E. Smith
INVENTOR.

BY Clarence A. O'Brien and Harvey B. Jacobson
Attorneys

United States Patent Office 3,261,605 Patented July 19, 1966

3,261,605

CONVERTIBLE SEE-SAW AND HUT

Samuel E. Smith, R.F.D. 2, Flushing, Ohio

Filed Mar. 23, 1964, Ser. No. 353,670
4 Claims. (Cl. 272—56)

This invention relates to a portable multipurpose apparatus which is functionally designed and structurally adapted for amusement and exercising of school age youngsters and has to do, more particularly, with a novel openwork frame structure, a readily applicable and removable and adjustable board or plank, and means for mounting and cradling said plank in a balanced manner on said frame structure.

Briefly, the frame structure comprises a pair of opposed spaced correspondingly constructed side frame members which are parallel to each other and are connected at their respective outer ends by like transverse cross members, and are preferably longitudinally bowed. Additional transverse cross members are interposed between and are coupled or bracketed to median portions of the side frame members. The plank or board spans the space across the cradle-like frame structure and has end portions provided with seats and detachably bolted atop said additional cross members.

One object of the invention is to utilize the invention as a see-saw. To this end the arcuate or bowed side or frame members constitute and serve as rockers, thus transforming the frame structure into a balanced cradle.

Another object of the invention is to provide end seats which extend outwardly beyond their respective rockers, to use the cross members as handlebars, and the major or body portion so that a single user can "walk the plank" and perform balancing stunts in keeping with his stunt acting abilities.

A further objective is to so mount the plank that it is optionally applicable and removable and what is also significant, is adjustable vertically so that the horizontal plane thereof is suitable and safe for youngsters of varying ages and sizes.

A still further object is to enable the user to invert or turn the frame structure upside-down, with or without the plank. With the plank it provides one form or style of a non-rocking apparatus similar to so-called playground frames and bars and on which climbing and on-the-spot gymnastics can be performed. Then, too, the plank can be detached leaving the bare framework or structure to please users who prefer the latter in a manner which is more in keeping with individual skills.

Furthermore, the frame structure without the multipurpose plank provides and is aptly usable as simple support means for an optionally usable cover. With this cover enclosing the framework the user has at his disposal a hut and, depending on the nature of the exterior artwork, imagines it to be a teepee, an igloo, an army tent, rocket or the like. Concerning the cover, novel anchoring springs serve as canvas tautening and quick-applicable holddown means.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

FIGURE 1 is a view in perspective showing a multipurpose convertible-type amusement and exercising apparatus or device constructed in accordance with the present invention and adapted to serve as a see-saw;

FIG. 2 is a view in perspective of the attachable and detachable plank or seatboard by itself;

FIGURE 3 is a view in perspective based on FIG. 1 but with the plank removed and illustrating how the device is adapted to be used as a relatively stationary adaptation for climbing and other purposes;

FIGURE 4 is a perspective view showing the frame of FIG. 3 enclosed with a canvas or an equivalent readily attachable cover and providing an open bottom hut;

FIGURE 5 is an enlarged detail view in section and elevation illustrating how the edge portions of the plank rest atop the mounting and adjusting brackets or sleeves and how bolted in place;

FIGURE 6 is a view at right angles to FIG. 5; and

FIGURE 7 is an enlarged view in section and elevation showing one of the cover holddown springs and how it is constructed and used.

Referring first to FIGS. 1 to 3 in particular it will be seen that the openwork frame structure or unit is denoted by the numeral **8**. The component parts thereof may be lightweight but durable tubular members. The two side frame members **10** are identical in construction and each member comprises a longitudinally bowed (substantially semicircular) tube or equivalent member. The respective outer terminal end portions **12** are rigidly connected in spaced-apart parallelism by primary tubular or equivalent cross members **14** which constitute and provide end frame members. These members extend transversely between the end portions **12** and are joined thereto by elbows or equivalent fittings **16**. Auxiliary tubular cross members **18** are provided and these are interposed between median portions of the longitudinal side members **10** and provide stabilizing braces. The end portions of these cross members **18** are attached to longitudinally spaced median portions of the side frame members **10** through the medium of duplicate end brackets **20**. These brackets **20** are adjustable and consequently it is within the purview of the concept to shift the cross-members or braces **18** closer together (FIG. 3) or farther apart (FIG. 1). Each adapter or attaching bracket **20** is the same in construction and a description of one will suffice for all. Attention is therefore directed to FIGS. 5 and 6 wherein it will be seen that the bracket comprises a suitably elongated sleeve **22** which is made to fit snugly yet slidingly on the portion of the side member **10** which is encompassed thereby. One end portion **24** is longitudinally slotted on the interior side and the slotted portion is provided with outstanding spaced lugs or ears **26** which are connected by a bolt and nut **28**. Manifestly the nut can be loosened to slide the sleeve either way or tightened to clamp the sleeve in a selected position. Cooperable with the clamping means is an inwardly directed integral collar which constitutes a socket member **30** and which telescopingly receives the end portion of the cross-member **18**. This cross member **18** can be used as a climbing step, a handgrip or however desired by the user. However, its primary purpose is to provide an adjustable support for the cooperating portion of a seatboard or plank **32**. This plank is rigid and may be of any suitable material and is preferably flat-faced and carefully finished to adapt it for safe and sane use. The plank is of a width that the end portions thereof extend therough and beyond the space existing between the parallel side frame members **10**. The extending end portions as illustrated in FIG. 1 are suitably shaped to provide comfortable and conveniently usable seats **34**. When in place as illustrated, for example, in FIG. 1 the plank provides not only the seat **34** but the median or body portion **36** provides a balanced standing board which can be employed, usually by a single user, while standing thereon and rocking the device back and forth. In some instances this area or zone **36** can be also employed as extra seat means.

With respect now to the readily applicable and detachable feature it will be noted that the longitudinal edge portions of the plank rest directly on the socket members **30** (see FIGS. 5 and 6) and bolt means is employed

to maintain this relationship of parts. Preferably the bolt is of J-shaped construction and is denoted by the numeral **38** (FIG. 5). The threaded shank **40** is passed through a bolthole provided in the plank and serves to accommodate an assembling and clamping nut **42**. The lower hook-shaped end **44** partially embraces and clampingly secures the bolt to the cross member or brace **18** when the nut is tightened in an evident manner.

It should be pointed out here that the plank or board **32** is ordinarily thought of as a significant and primary feature in making the see-saw illustrated in FIG. 1. Here it will be evident that the usual end occupants use the seats **34** and also employ the end frame members **14** as handlebars. When the structure is inverted, that is turned upside down, as illustrated in FIG. 3 the same cross members **14** serve as rests and reside firmly on the ground, floor or other supporting surface.

Although the plank is shown by itself and detached in FIG. 2 and applied in FIG. 1 it will be evident that there are instances where the see-saw can be inverted whereby when it is thus upside down the plank is still in place and can be used as a component part of the climbing and exercising apparatus. Alternatively, the plank can be unbolted and placed aside for ready reuse and the bare frame structure employed in the manner suggested in FIG. 3. It may be desirable, as in FIG. 3 to adjust the cross members **18** so that they are closer together. The fact that the adapter brackets **20** can be slid and clamped in place makes this quick adjustment feature feasible. Also, the adjustability of the adapter brackets makes it possible to raise or lower and thus change the plane or elevation of the plank **32** when it is being used as see-saw, whereby to adapt the same for use of youngsters of varying ages and sizes.

The purpose of FIG. 4, as is evident, is to emphasize the versatile or convertible aspect of the overall invention in that the inverted frame structure of FIG. 3 may now be employed as support means for the tent-like hut. With reference to FIG. 4 the canvas or equivalent flexible cover is denoted by the numeral **48** and takes the form of a three-wall hood. The curvate top wall **50** is conformingly shaped to effectually fit over the component parts of the overall frame structure **8**. The side walls are vertical and parallel and each side wall is denoted by the numeral **52** and in actual practice may be provided with a suitable door or merely an entrance and exit opening as suggested at **54**. This open bottom snug fitting hood when applied over the frame transforms the same into a unique play enclosure. It is also within the purview of the invention to paint, mark or otherwise decorate the exterior surfaces of the walls **50** and **52** to represent the particular hut which is desired. The drawing is merely exemplary of a general idea of selected markings and these will vary in keeping with the requirements of representing a teepee, army tent, rocket or the like.

It will be further noted that the size of the cover is such that the edges of the walls are preferably spaced above the ground, floor or other supporting surface. To maintain the cover in place the lower end portion **56** at each end of the top wall **50** is provided with grommets **58** which serve to accommodate appropriately tensioned coiled holddown springs **60**. One such spring is shown in FIG. 7 wherein it will be noted that the hook **62** at the upper end is releasably engaged with the grommet and the hook **64** at the lower end is fashioned and positioned for releasable anchorage on the cross member **14**.

It will be clear from the illustrative figures of the accompanying drawings that the invention constitutes a simple, practical and reliable amusement and exercising apparatus or device which serves the purposes for which it is intended. It will be evident from FIG. 1 how the cradle or frame structure **8** is employed as a support and rocker in providing a balanced see-saw. The manner of using the optional plank **32** is believed to be evident from this figure as well as the construction and manner of usage of the plank-supporting and adjusting cross members **18**. Although the inverted position of FIG. 1 is not illustrated it is believed that it is easy to visualize and that such an illustration is accordingly unnecessary. While the plank will often be used when the structure of FIG. 1 is turned upside down it is more likely than not that the plank might be detached and the bare frame structure of FIG. 3 used as the climbing and exercising apparatus or device there illustrated. The manner of utilization of the structure as a tent or hut is clear, it is submitted from FIG. 4. Therefore, a more extended description is believed to be unnecessary.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. A convertible amusement device comprising a portable openwork frame structure having rockers, a rigid plank having seats at its ends, means on said frame structure detachably and adjustably mounting said plank in a balanced ready-to-use manner on said frame structure with said seats readily accessible and usable, said plank having a normally horizontal balanced position with its body portion unobstructedly available for use, said frame structure comprising a pair of opposed elongated spaced parallel longitudinally bowed cooperating frame members constituting said rockers, said frame structure being bodily invertible and having transverse cross-members interposed between and connecting and assembling the respective end portions of said frame members after said plank has been detached and said frame has been inverted, and in combination, a readily applicable and removable form-fitting open-bottom cover attachable to and adapted to enclose the frame structure inverted and used upside down, whereby to provide a hut for small children, said cover having end portions provided with holddown springs and said springs having lower ends which are detachably connectible with their respective transverse cross-members in a manner to tauten and retain the cover in a tight-fitting manner over and enclosing said frame structure.

2. An amusement and exercising device primarily for use by youngsters comprising: a frame structure embodying a first longitudinally bowed side frame member, a second longitudinally bowed side frame member parallel with and spaced from said first side member, both of said side frame members being alike in construction, primary transverse end frame members interposed between the respective end portions of said side frame members and having their ends coupled thereto, at least two auxiliary transverse cross-members spaced from the primary members and also each other, interposed between and connected at their ends to median portions of said frame members and providing stabilizing braces, the thus constructed overall frame structure being invertible and convertible, usable as a rocker-type see-saw support, as an arched playground-type climbing and exercising apparatus, and also as a hut-like tent building frame and, in combination, a readily attachable and detachable hood-like canvas cover embodying a longitudinally arched top wall provided with spaced parallel vertical depending side walls functionally designed and structurally adapted to fit snugly over said frame members and auxiliary cross-members, the end portions of said top wall having grommets, and readily attachable and detachable coiled holddown springs having attaching and retaining hooks at their upper ends connected to said grommets, and anchoring hooks at their lower ends connectible with their respectively adjacent primary end-members.

3. The structure defined in claim 2 and, in combination, an optionally usable readily applicable and removable plank providing a see-saw, said plank being normally in a horizontal plane above the bottom portions of said side frame members, being in a plane below the plane of the end frame members and having end portions resting atop the respectively adjacent auxiliary transverse cross-members, the end portions of said plank extending beyond adjacent portions of the side frame members and being fashioned into individual occupant seats, means detachably mounting said plank on said auxiliary transverse cross members.

4. An amusement and exercising device primarily adapted for use by youngsters comprising a frame structure embodying a first longitudinally bowed linearly straight side frame member, a second longitudinally bowed side frame member parallel to and spaced from said first side member, said side frame members being alike in construction and constituting and providing rockers, primary end frame members at right angles to and interposed between respective end portions of said side frame members and having their ends coupled to the cooperating ends of the side frame members, pairs of opposed sleeves mounted on and longitudinally adjustable along their respectively cooperating side frame members, said sleeves having clamping ears bolted together and provided with turned-in socket members, complemental cross-members

spanning the space between and interposed between the side frame members and having end portions thereof telescopingly fitted into their respectively cooperating socket members and being clamped therein and providing braces capable of adjustment toward and from the end frame members as well as toward and from each other, an elongated flat rigid plank spanning the space between said side frame members when the frame structure is facing upwardly for use, for example, as a see-saw, said ends having seats projecting through and beyond the side frame members and located in a plane below the end frame members with the latter serving as handlebars, said ends being provided with J-bolts having hooked ends, and said hooked ends being separably connected with their respectively cooperable cross-members.

References Cited by the Examiner

UNITED STATES PATENTS

1,270,219	6/1918	Schwarz	272—56
2,768,828	10/1956	Pack	272—56
3,165,110	1/1965	Brooks	135—1

F. BARRY SHAY, *Primary Examiner.*

RICHARD C. PINKHAM, *Examiner.*

F. B. LEONARD, *Assistant Examiner.*