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J. R. DAVIS ET AL

GYMNASTIC APPARATUS FOR CHILDREN

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To all whom it may concern:

Be it known that we, John R. Davis and Joseph P. Belanger, citizens of the United States, residing at Seattle, in the county of King and State of Washington, have invented certain new and useful Improvements in Gymnastic Apparatus for Children, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to exercising apparatus in the nature of swings, trapeze, etc., and particularly to a structure of this character which may be readily put up and taken down and which is designed for the use and amusement of children and which includes a swing support, a swing mounted thereon, and a trapeze support conjoined therewith.

A further object is to provide a construction of this character which is very strong, simply made, and which may be readily put up and taken down.

A further object is to provide improved means for supporting the swing.

Other objects will appear in the course of the following description.

Our invention is illustrated in the accompanying drawings, wherein:

Figure 1 is a perspective view of a gymnastic apparatus constructed in accordance with our invention;

Figure 2 is an enlarged fragmentary elevation of the upper portion of the swing support;

Figure 3 is an end elevation of the seat board 33 and the means for mounting it upon the beam 32;

Figure 4 is a side elevation showing the means for connecting the beam 14 to the beams 10.

Referring to these drawings, it will be seen that the swing supporting frame consists of two pairs of diagonally extending beams or timbers 10 which cross each other and which are bolted together at the intersection. The upper ends of these cross beams 10 are connected by transverse beams 11 which are notched at their outer ends to fit upon the upper ends of the beams 10 and which are bolted or otherwise secured to the supporting beams 10. The lower ends of each pair of supporting beams 10 is connected by means of a transverse brace 12 bolted thereto, and preferably the lower ends of the beams 10 are provided with rubber pads or feet 13.

Coacting with the swing supporting frame is a trapeze and ring supporting frame consisting of a longitudinally extending beam 14 having at its outer end two divergently disposed legs 15 bolted at their upper ends to the beam 14 on each side thereof and held by the angular iron braces 16. At its opposite end this beam 14 has attached thereto a metallic cap 17 and a longitudinally extending bolt 18 extends into the end of the beam 14, through this cap, and extends through the adjacent cross beam 10, as illustrated in Figure 4. Thus one end of the beam 14 is supported upon the adjacent pair of beams 10, while the other end is supported upon the leg 15. Metallic braces 19 are attached to the beam 14 and extend downward in divergent relation and are bolted to the cross beams 10. To the beam 14 are attached the eyes 20, from which depend chains supporting the trapeze bar 21 and the rings 22. Preferably these chains are connected to the trapeze bar and the rings by means of snap hooks 23.

The cross beams 11 are connected to the beams 10 by means of angle irons 24 having vertical, laterally inclined portions which are bolted to the upper ends of the beams 10 and horizontal portions which are bolted to the beams 11 and short vertical portions 25. Attached to the middle portion of each of the beams 11 is an angle iron 26, the extremities of which are downwardly extended at 27 to face the portions 25. Passing through these ears or downwardly extending portions 25 and 27 is a rod 28 constituting a pintle for the support of the swing rods 29. There are two pairs of these swing rods and a pair associated with each pintle 28 and extending vertically downward therefrom. The lower ends of each pair of swing rods are connected by means of braces 30, and cross bars 31 extend through the conjoined ends of the braces 30, and of the rods 29. Above these cross bars 30 are disposed the transverse bolts 32, and supported upon these bolts is a seat board 33, the extremities of which are formed to provide seats 34, and attached to the under face of this board adjacent opposite ends thereof are the transversely extending irons 35 formed with ears 36 through which the bolts 32 pass.
Disposed above the seat board are the transversely extending handle bars 37. Children sit upon the extremities of the seat board with their feet upon the rods 30 and their hands on the rods 37, and then by pulling upon the rods 37 and pushing upon the rods 30 the swing is caused to oscillate in an obvious and well known manner. It will be seen, of course, that the swing rods 29 are always disposed in parallel relation to each other and that the connecting braces 31 and the seat board always remain in a horizontal position.

It will be seen that a supporting frame of this kind is very rigid, strong, and that it will resist any tipping strains caused by gymnastics likely to be indulged in by children. This is for the reason that the frame cannot move longitudinally because of the relatively wide base given by the swing structure, which is sufficiently heavy and sufficiently wide to counteract any longitudinal movement which the beam 14 would be likely to have under stress. This would not be the case to anything like this extent were the beam 14 supported merely by oppositely disposed pairs of legs 15, but the beam 14 being supported at one end against vertical stress by the legs 15 is supported against longitudinal stress which would tend to tip it by the swing frame which is particularly wide and strong. The same may be said with any tipping stress applied to the beam 14 which would tend to tip it transversely to its length. Here again the relatively long base given by the pairs of beams 10 and the direction of these beams will tend to fully counteract any such stress as this. At the same time the beam 14 with the legs 15 tends to support and brace the swing frame.

It will be noted that the swing structure is normally held with the pairs of beams in angular relation to each other by brace rods 38 but that when these brace rods are removed that the swing structure may be folded so that the supporting beams are nearly parallel. The swing supporting rods may be detached, the longitudinal beam 14 may be detached and the whole structure folded into compact form so that it is readily portable and may be readily taken down from one place and set up at another.

While we have illustrated a form of our invention which we have found to be thoroughly practical and which is relatively simple and may be cheaply made and is very strong, we do not wish to be limited thereto, as it is obvious that minor changes might be made in the details without departing from the spirit of the invention as defined in the appended claims.

We claim:—

1. The combination with a foldable swing structure including a swing supporting frame formed of crossed pairs of beams, each pair of beams being connected at their upper and lower ends, a longitudinally extending beam abutting at one end adjacent the crossed beams at the intersection of the crossed beams, downwardly divergent legs attached to the extremities of the beam remote from the supporting frame, a metallic member engaging that end of the longitudinal beam adjacent the swing structure, and means engaging said longitudinal beam with the swing structure at the intersection of the crossed beams thereof, said means engaging the metallic member.

2. The combination with a foldable swing structure including a swing supporting frame formed of crossed pairs of beams, each pair of beams being connected at their upper and lower ends, a longitudinally extending beam abutting at one end against the adjacent crossed beams at the intersection of said crossed beams, downwardly divergent legs attached to the extremities of the longitudinal beam remote from the supporting frame, a U-shaped metallic member embracing that end of the longitudinal beam adjacent the swing structure, and a bolt passing through the intersection of the crossed beams of the swing structure and into said longitudinal beam.

In testimony whereof we hereunto affix our signatures.

JOHN R. DAVIS.

JOSEPH P. BELANGER.