

2,809,383

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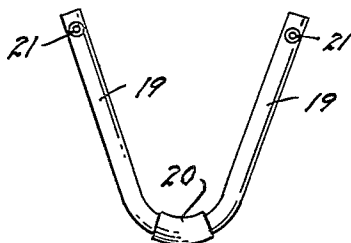
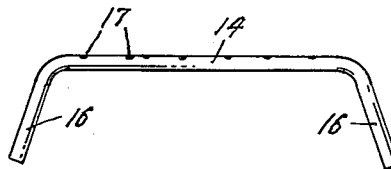
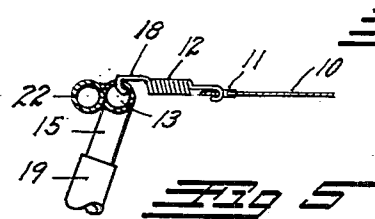
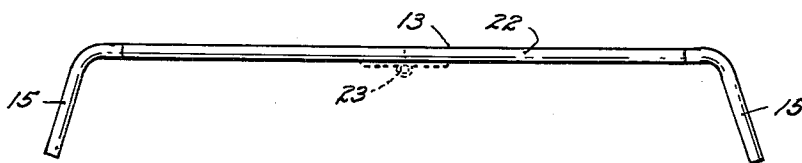
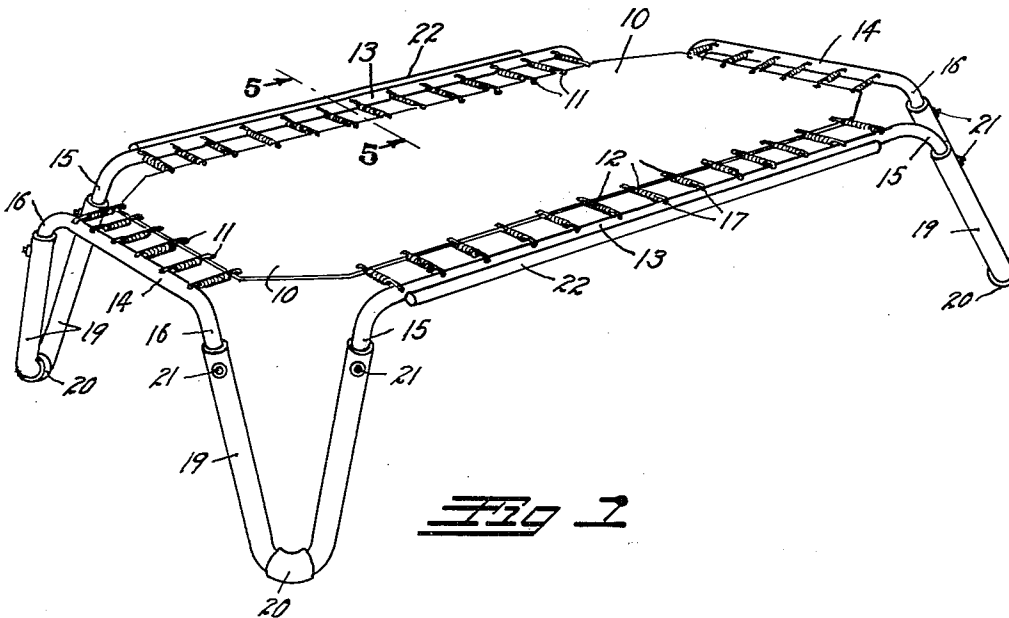


FIG 3
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TRAMPOLINES

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3 Claims. (Cl. 5—211)

This invention relates to a bouncing table of the type known as a "trampoline," and has for its principal object the provision of a simple supporting structure for a trampoline mat which will consist of a minimum of simple structural members which can be quickly and easily assembled and disassembled, and to provide a trampoline which will be exceedingly light in weight and economical to manufacture so that it may be sold for use by children.

Another object is to provide a trampoline mat-supporting structure which can be quickly and easily adjusted to simultaneously increase the tension in the mat and the height thereof so that it may be easily adapted for the use of children of varying sizes, weights, and ages.

A further object is to provide a trampoline mat support in which all structural members beneath the mat will be eliminated so as to prevent injury to the user.

Other objects and advantages reside in the detail construction of the invention, which is designed for simplicity, economy, and efficiency. These will become more apparent from the following description.

In the following detailed description of the invention, reference is had to the accompanying drawing which forms a part hereof. Like numerals refer to like parts in all views of the drawing and throughout the description.

In the drawing:

Fig. 1 is a perspective view of the assembled improved child's trampoline;

Fig. 2 is a detail, side elevational view of a side frame member employed in the improved trampoline;

Fig. 3 is a similar view of an end member used therein;

Fig. 4 is a similar view illustrating a leg member employed in the trampoline; and

Fig. 5 is an enlarged, fragmentary section, taken on the line 5—5 of Fig. 1.

The improved trampoline employs the usual bed or mat 10 which may have any of the conventional constructions, such as crossed webbing or the like. As illustrated, it comprises a sheet of flexible material, such as canvas or the like, provided with grommets 11 about its periphery through which suitable tension springs 12 are hooked.

The mat is supported from a framework consisting of two similar, elongated, tubular side frame members 13 and two similar, tubular end frame members 14 of less length than the side frame members 13. The side frame members 13 each comprise a length of pipe or tubing having angularly bent end portions which provide downwardly and outwardly flaring attachment extremities 15. Each end frame member 14 also comprises a length of pipe or tubing having similar angularly bent end portions which form similar attachment extremities 16. The extremities 15 and 16 of the frame members extend at an obtuse angle to the axis of the members 13 and 14. An angle of approximately 110° has been found to be satisfactory. All of the frame members 13 and 14 are provided with aligned perforations 17 uniformly spaced along their upper surfaces into which attachment hooks

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18, formed on the springs 12, are engaged. While the frame members 13 and 14 may be formed of any suitable material, it has been found that standard 1" iron pipe is satisfactory for this purpose.

5 The extremities 15 and 16 of the members 13 and 14 are designed to be slidably received in open upper extremities of tubular, generally V-shaped leg members 19, there being one of the leg members positioned at each corner of the trampoline. The leg members are preferably provided with tubular pads 20 for supporting them from a floor or other supporting surface. The tubular pads may be formed from short lengths of rubber hose slipped over the mid-portions of the members 19. The members 19 may be formed from any suitable material. 15 A length of 1 1/4" iron pipe has been found satisfactory for this purpose, as it will easily and slidably receive the extremities 15 and 16 of the frame members. The latter extremities may be locked at any desired height in the leg members 19 by means of suitable set screws 21.

20 It is desired to call attention to the simplicity of the supporting frame. It consists of four simple bent pipe leg members, with two simple bent pipe end members and two simple bent pipe side members, all of which can be quickly and easily assembled by hand without tools 25 by simply sliding the extremities of the side and end frame members into the open upper extremities of the four leg members.

Should it be desired to increase the height of the mat to accommodate a larger and heavier user, it is only necessary to raise the extremities 15 and 16 of the frame members in the leg members 19 and set them at an increased height therein by means of the set screws 21.

It will be noted that, due to the flaring sides of the V-shaped leg members 19, the side frame members will be caused to move away from each other as they are 35 lifted in the leg members, thereby increasing the width and length of the frame and simultaneously increasing the tension in the springs 12 as the height of the mat is increased. This simultaneous increase in both height and tension is highly desirable, since an increase in both height and tension is necessary to make the mat adaptable for use by a heavier person.

The entire structure can be quickly disassembled by simply loosening the set screws 21 and lifting the ex- 40 tremities 15 and 16 from the leg members 19. The side and end frame members and the leg members can be placed upon the mat and the entire structure rolled into the mat.

It will be noted that the relatively long side frame members are subjected to considerable bending stress, and it has been found desirable to strengthen them against distortion by welding a reinforcing tube 22 along the outside face of each member 13 to increase the resistance thereof to bending.

It is desired to call attention to the fact that there are no structural members beneath the mat 10, so that the latter has free movement completely to the floor without interference.

Should it be found desirable to still further decrease the size of the folded trampoline, the side members 13, with their reinforcing tubes 22, could be formed in two half sections connected together at the center by means of a suitable hinge, such as indicated in broken line at 23 in Fig. 2. Such a hinge would now allow the side 60 members to collapse downwardly, but would allow them to be folded upwardly at their middles to reduce the overall length for storage and shipping purposes.

While a specific form of the improvement has been described and illustrated herein, it is desired to be understood that the same may be varied, within the scope of the appended claims, without departing from the spirit of the invention.

Having thus described the invention, what is claimed and desired secured by Letters Patent is:

1. A trampoline comprising: two elongated tubular side frame members; two elongated tubular end frame members of less length than said side frame members; downwardly turned extremities formed on each end of each side and end frame member, said extremities extending at an obtuse angle to the axis of said members so as to flare downwardly and outwardly from said members; four generally V-shaped tubular leg members, each leg member having two open upper extremities adapted to receive and adjustably telescope with the downwardly turned extremity of an end frame member, and the downwardly turned extremity of a side frame member; a flexible mat; and tension members securing the sides of said mat to said side members and the ends of said mat to said end members.

2. A trampoline as described in claim 1 in which the sides of the V-shaped leg members flare outwardly from each other so that when the downwardly turned extremities of the side and end frame members are

elevated in the leg members, they will move away from each other so as to increase the tension in said springs.

3. A trampoline as described in claim 2 having means for locking the downwardly turned extremities of the side and end frame members in the open upper extremities of the leg members, in the desired combined lateral and longitudinal tensioned position of the flexible mat.

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