

Oct. 10, 1933.

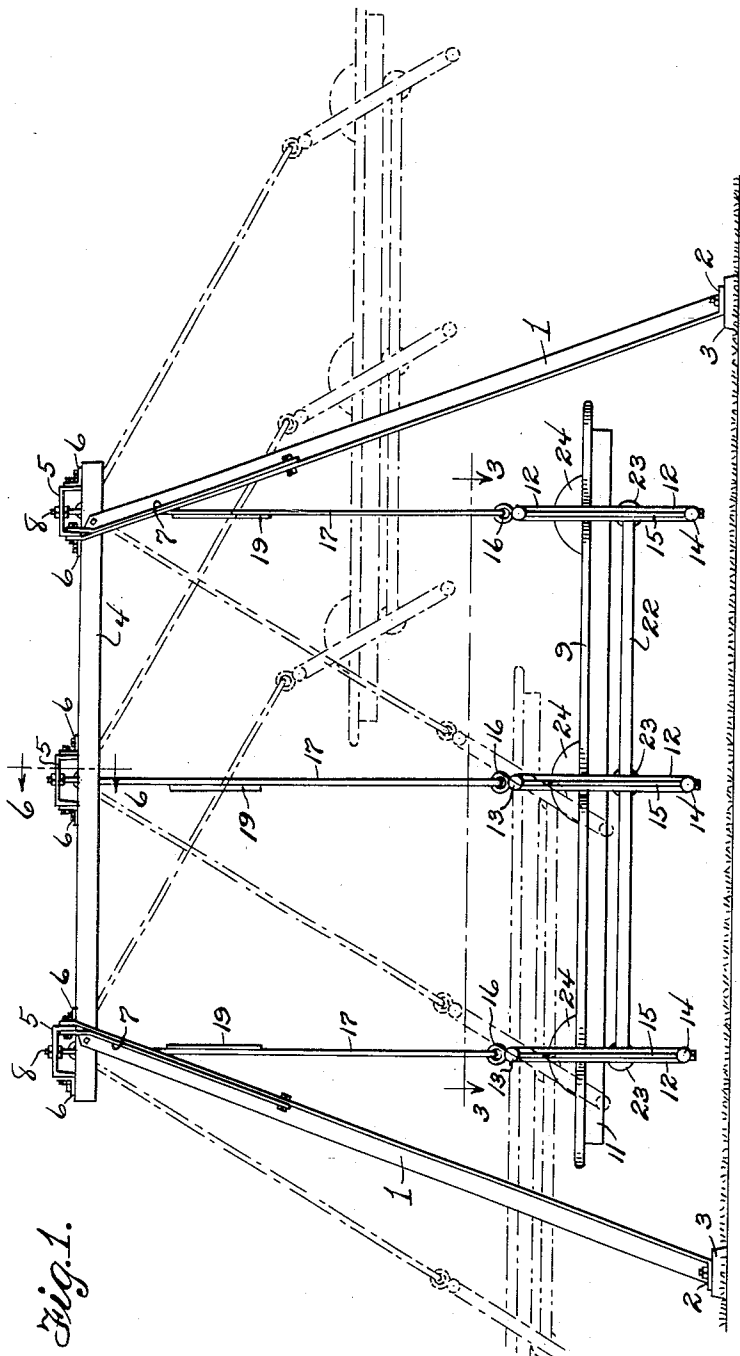
E. E. WAGNER ET AL

1,930,375

SWING

Filed Sept. 9, 1932

2 Sheets-Sheet 1



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2 Sheets-Sheet 2

Fig. 2.

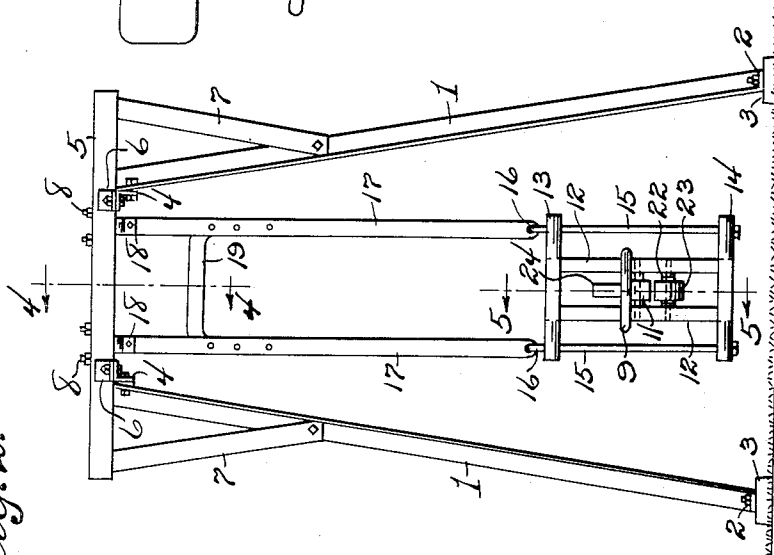


Fig. 3.

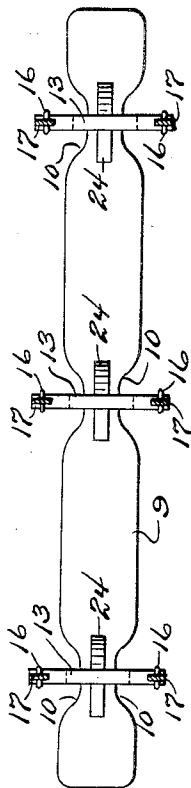


Fig. 4.

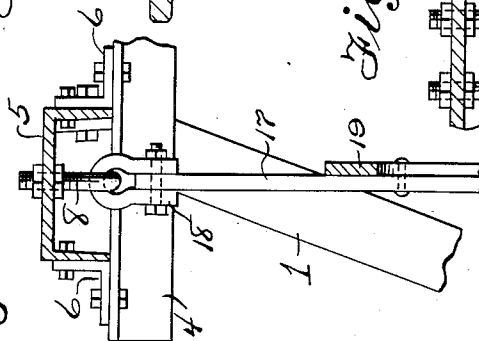


Fig. 5.

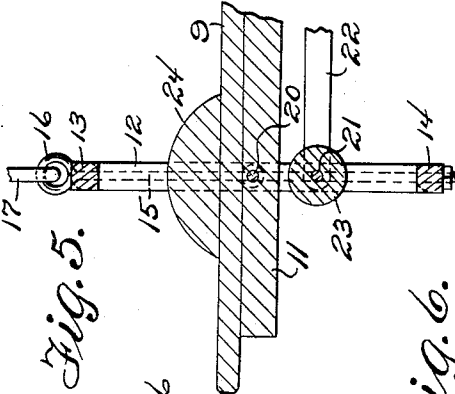
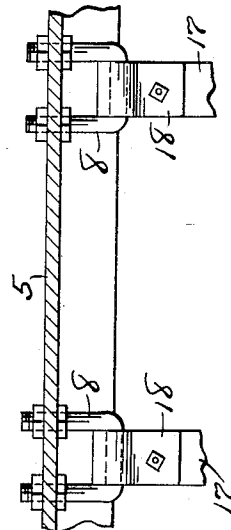


Fig. 6.



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UNITED STATES PATENT OFFICE

1,930,375

SWING

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Lamar, Mo.

Application September 9, 1932. Serial No. 632,435

7 Claims. (Cl. 155—63)

This invention relates to lawn swings and its general object is to provide a swing capable of being used by a plurality of persons, especially children without fear of being injured by falling therefrom or being pinched by the moving parts, or being brought into contact with other parts thereof, with the result the swing is safe for children of practically all ages

A further object of the invention is to provide a swing that will promote the health of the users, in that it requires them to bring practically all of the muscles into action when operating the swing which can be used and operated by one or more persons, depending upon the number of persons using the same and capacity thereof.

A still further object of the invention is to provide a lawn swing that includes a carrier, adapted to be straddled by the user or users, and is provided with foot and handle bars connected with the seat of the carrier, the bars being adapted to be worked upon by the users, so as to give the carrier an oscillating movement, and the carrier is connected to the supporting frame in a manner to allow the carrier to raise to a great height by momentum as well as to oscillate for a maximum period of time after the users have stopped working to raise the swing.

Another object of the invention is to provide a supporting frame that is strong and sturdy, and includes means overlying the hanger bearings of the swing to protect the same from weather elements.

Another object of the invention is to provide a swing of the character set forth, that is simple in construction, easy to install, inexpensive to manufacture, and extremely efficient in operation and service.

This invention also consists in certain other features of construction and in the combination and arrangement of the several parts, to be hereinafter fully described, illustrated in the accompanying drawings and specifically pointed out in the appended claims.

In describing our invention in detail, reference will be had to the accompanying drawings wherein like characters denote like or corresponding parts throughout the several views, and in which:—

Figure 1 is a side elevation of the swing which forms the subject matter of the present invention with parts in normal position in full lines and in active position in dotted lines.

Figure 2 is an end view of the swing.

Figure 3 is a sectional view taken approxi-

mately on line 3—3 of Figure 1, looking in the direction of the arrows.

Figure 4 is a sectional view taken approximately on line 4—4 of Figure 2, looking in the direction of the arrows.

Figure 5 is a sectional view taken approximately on line 5—5 of Figure 2, looking in the direction of the arrows.

Figure 6 is a sectional view taken approximately on line 6—6 of Figure 1, looking in the direction of the arrows.

Referring to the drawings in detail, the reference numeral 1 indicates the uprights or standards of our swing frame and it will be noted that these uprights are formed from angle iron with feet 2 at their lower ends, which are anchored to suitable blocks 3. Secured to the upper ends of the uprights 1 are sills in the form of parallel angle bars 4 which have bridging the same and extending a considerable distance upon the opposite sides thereof channel bars 5, the latter being secured to the angle bars 4 through the instrumentality of angle iron pieces 6. The outer ends of the channel bars 5 have secured thereto the upper ends of brace members 7 while the lower ends of these brace members are fixed to the uprights 1 which are arranged at an inclination as shown in Figures 1 and 2.

The channel bars are inverted as best shown in Figure 4, and it will be noted that I employ three channel bars for the size of the swing as shown, but I want it understood that the swing can be made in any sizes that will function properly, without departing from the spirit of the invention. Secured to and depending from the horizontal portions of the channel bars 5 are U-bolts 8 for a purpose which will be later described.

The carrier of our swing in the form as shown, is capable of carrying six users and includes an elongated seat 9 which is reduced adjacent its ends and midway the ends by providing recesses 10 upon opposite sides thereof as clearly shown in Figure 3. Secured to the underside of the seat 9 and arranged longitudinally of the center thereof, but terminating inwardly of its ends is a reinforcing strip 11 that materially increases the strength of the seat as will be apparent.

Pivotaly connected to the reinforcing strip 11 upon opposite sides of the reduced portions of the seat are levers 12 arranged in connected pairs, and these levers are connected by hand or handle bars 13 at their upper ends and foot bars 14 at their lower ends. The handle bars and

foot bars extend beyond the sides of the levers 12 and passing through the bars 13 and 14 are brace rods 15 which cooperate with the bars 13 and 14 to provide substantially bail like frames, as best shown in Figure 4, and the rods 15 have their upper ends bent upon themselves to provide eyes 16 which are received in openings formed in the lower ends of hangers 17, the latter having secured to their upper ends clevis members 18 that are received by the U-bolts 8 as clearly shown in Figure 6 of the drawings.

The hangers 17 are of course arranged in pairs, and each pair are suitably braced and held associated through the instrumentality of U-bracket members 19 which have the arm portions thereof riveted or otherwise secured to the hangers, while the bight portions of the U-bracket members bridge the pairs of hangers as shown in Figure 2.

It will be noted that pins 20 provide the means for pivotally connecting the levers 12 with respect to the reinforcing strip 11 and arranged below the pins 20 and bridging the levers 12 are pins 21 that pass through openings arranged in the ends and intermediate the ends of a pair of strips 22 that act as connecting means for the pairs of levers 12 as best shown in Figure 1, and arranged between the strips 22 and holding them in spaced relation with respect to each other, as well as being mounted upon the pins 21 are disk members 23 which act in the capacity as bumpers to limit the movement of the levers 12 and therefore prevent the latter and the handle bars from coming too close to the user. This feature also prevents the clothing of the user from being caught between the levers 12 and the seat 9. It will be apparent that the disk members 23 engage the strip 11 when the carrier has reached a certain height during the swinging movement, as indicated in dotted lines on the left in Figure 1, but notwithstanding the fact that this engagement takes place, the carrier will raise to a higher position as shown in dotted lines on the right hand side of Figure 1. The reason that the carrier can be swung to the high position, is due to the eye-connection between the rods 15 and the hangers 17 as clearly shown in Figure 5.

Secured to the seat 9 between the levers 12 are substantially semi-circular blocks 24 which prevent the users from getting too close to the levers, and with this feature together with the disk members 23 which act as bumpers, it will be apparent that it is practically impossible for small children to be injured by the levers and handle bars and of course this also applies to other children as well as adults who may use the swing.

From the above description and disclosure of the drawings, it will be obvious that we have provided a swing that is primarily designed for use by children of all ages, and is especially safe for small children, who can easily support themselves by grasping the handle bars, with the result fear of falling from the seat will be reduced to a minimum.

While we have disclosed a swing capable of accommodating six persons arranged in pairs, with the person of each pair facing each other, we want it understood that the swing can be constructed to accommodate any reasonable number of persons or one person only, without departing from the spirit of the invention.

It is thought from the foregoing description

that the advantages and novel features of our invention will be readily apparent.

We desire it to be understood that we may make changes in the construction and in the combination and arrangement of the several parts, provided that such changes fall within the scope of the appended claims.

What we claim is:—

1. A lawn swing comprising a frame, hangers pivotally secured to and depending from said frame, a carrier including a seat, levers pivotally connected with respect to said seat, handle bars and foot bars secured to said levers, and rods extending through said handle bars and foot bars and being pivotally connected to the hangers.

2. A lawn swing comprising a frame, hangers pivotally secured to and depending from said frame and being arranged in pairs, a carrier including a seat, a strip secured to the underside of said seat and arranged longitudinally with respect thereto, levers arranged in pairs and pivotally connected to said strip, handle bars secured to the upper ends of said levers, foot bars secured to the lower ends thereof, and rods extending through the handle bars and foot bars and being pivotally connected to the lower ends of the hangers.

3. A lawn swing comprising a frame, hangers arranged in pairs and pivotally secured and depending from said frame, a U-bracket brace member for each pair of hangers, a carrier including a seat recessed at intervals in its length and upon opposite sides thereof, levers having pivotal connection with respect to said seat and extending through the recesses, handle bars secured to the upper ends of said levers, foot bars secured to the lower ends thereof, strips having connection with the levers whereby the latter are movable in unison, and rods extending through the foot bars and handle bars and being pivotally connected to the hangers.

4. A lawn swing comprising a frame, hangers pivotally secured to and depending from said frame, brace members for said hangers, a carrier including a seat recessed at intervals upon opposite sides thereof, a strip secured to the underside of said seat and arranged longitudinally thereof, levers disposed in pairs and being pivotally connected to said strip upon opposite sides of the recesses, strips having connection with the pairs of levers whereby the latter are movable in unison, bumpers secured between the pairs of levers and engageable with the first mentioned strip to limit the movement of the levers, handle bars secured to the upper end of said levers, foot bars secured to the lower ends thereof, rods extending through the handle bars and the foot bars and terminating in eyes at their upper ends, and said eyes passing through the lower ends of the hangers for pivotally securing the carriers thereto.

5. A lawn swing comprising a frame, hangers pivotally secured to said frame and depending therefrom, a carrier including a seat recessed upon opposite sides, a reinforcing strip secured to the underside of the seat and disposed longitudinally thereof, levers arranged in pairs and pivotally connected to the reinforcing strip, means connecting the pairs of levers whereby they are movable in unison, disk members arranged between the pairs of levers and acting in the capacity as bumpers for engagement with the reinforcing strip to limit the movement of the levers, guard blocks secured to the upper

side of the seat and arranged between the levers, handle bars secured to the upper ends of said levers, foot bars secured to the lower ends thereof and rods extending through said bars and being pivotally secured to the hangers.

6. A lawn swing comprising a frame, hangers pivotally secured to and depending from said frame, a carrier including a seat, levers pivotally connected with respect to said seat, hand receiving means and foot receiving means secured to said levers, and rods extending through said hand receiving means and foot receiving means and being pivotally connected to the hangers.

7. A swing comprising spaced standards, horizontally arranged sills carried by the standards, pairs of hangers swingingly suspended from said sills, a bail like frame linked to each pair of hangers, hand and foot bars included in each frame, levers rising from the foot bars, a seat pivotally connected to the levers of each frame, and means connecting the levers of the frames to cause the latter to move in unison.

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15	90
20	95
25	100
30	105
35	110
40	115
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50	125
55	130
60	135
65	140
70	145
75	150