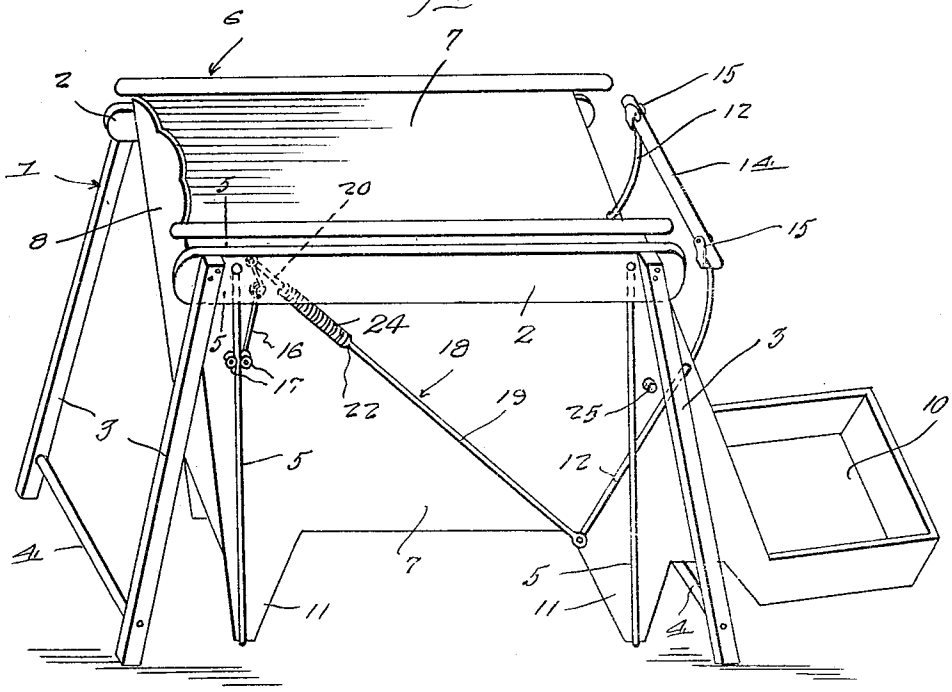
Jan. 3, 1933. J. JANUSZEWSKI 1,893,084

SWING

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Fig. 1.



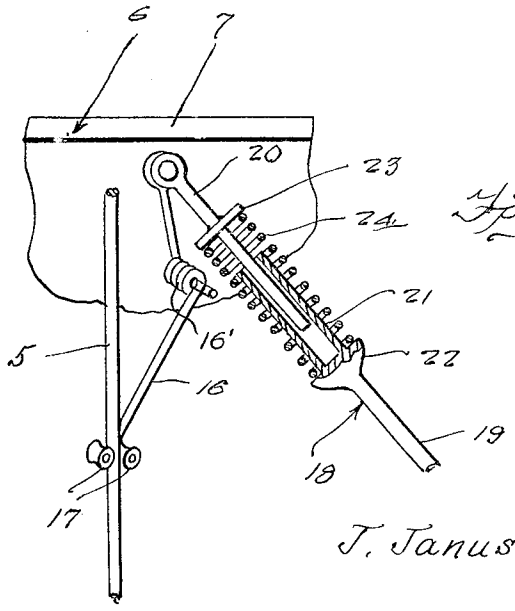


Fig. 3.

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Fig. 2.

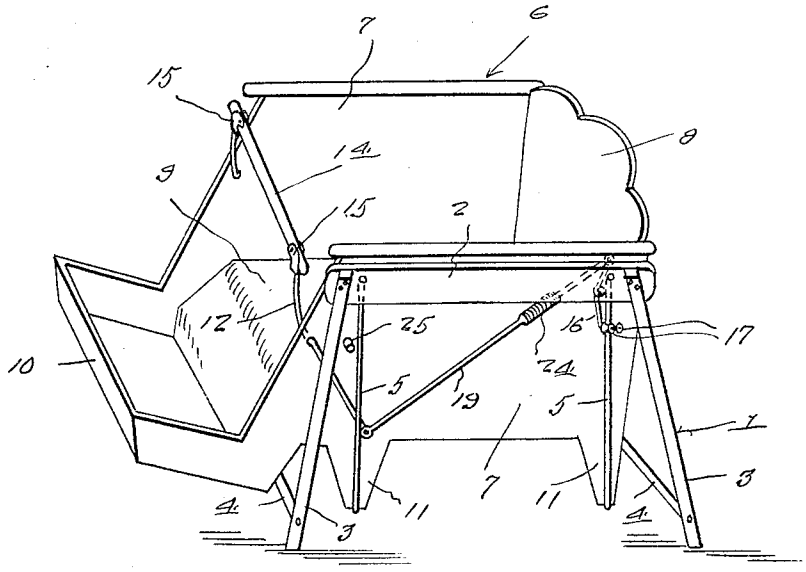


Fig. 4.

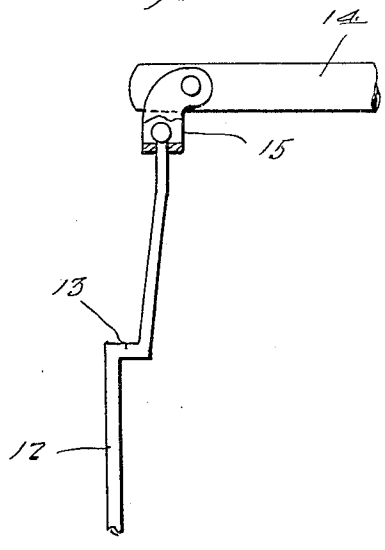
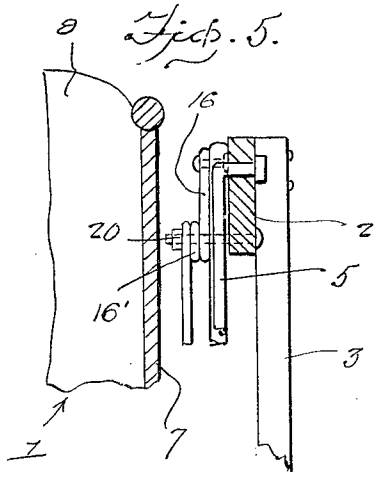


Fig. 5.



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1,893,084

UNITED STATES PATENT OFFICE

JULIUS JANUSZEWSKI, OF MIDDLE VILLAGE, LONG ISLAND, NEW YORK

SWING

Application filed March 18, 1932. Serial No. 599,792.

The present invention relates to a swing particularly for small children and has for its primary object to provide, in a manner as hereinafter set forth, a device of this character embodying a novel construction, combination and arrangement of parts through the medium of which the same may be actuated by the occupant thereof.

Other objects of the invention are to provide a swing of the aforementioned character which will be simple in construction, strong, durable, efficient and reliable in use and which may be manufactured at low cost.

All of the foregoing and still further objects and advantages of the invention will become apparent from a study of the following specification, taken in connection with the accompanying drawings wherein like characters of reference designate corresponding parts throughout the several views, and wherein:—

Figure 1 is a perspective view of a swing constructed in accordance with the present invention looking toward the rear portion of the swing.

Figure 2 is a perspective view thereof looking towards the front portion.

Figure 3 is a perspective view showing a portion of the actuating mechanism, a part of said mechanism being shown in section.

Figure 4 is a detail view in vertical section showing the means for mounting the handle on its supporting levers.

Figure 5 is a vertical sectional view, taken substantially on the line 5—5 of Figure 1, looking forward.

Referring now to the drawings in detail, it will be seen that the combination of the invention which has been illustrated comprises a supporting structure which is designated generally by the reference numeral 1, said supporting structure including the spaced, parallel rails 2 which are rigidly secured on the upper end portions of the upwardly converging front and rear pairs of legs 3. Braces 4 extend transversely between the lower portions of the front and rear pairs of legs.

Suspended for swinging movement from the rails 2 are the hangers 5, two hangers being provided on each of said rails, one adjacent each end. The hangers are provided with out-turned, headed upper end portions which are journaled in the rails 2.

Mounted on the hangers 5 is a body which is designated generally by the reference numeral 6, said body comprising the sides 7, a back 8, a seat 9 and a foot rest 10. Legs 11 depend from the sides 7 and are engaged on the hangers 5.

Levers 12 are mounted for swinging movement in a vertical plane on the forward portions of the side walls 7 of the body 6, said levers including right angular horizontal intermediate portions 13 journaled transversely in said walls 7. It will thus be seen that the upper portions of the levers 12 are disposed inwardly of the side walls and the lower portions thereof are disposed outwardly of said side walls. A handle bar 14 is mounted transversely on the upper ends of the levers 12 through the medium of the yokes 15.

Bell crank levers 16 are mounted for swinging movement in a vertical plane on the rear portions of the rails 2 between said rails and the body 6. Each bell crank lever 16 has mounted at its lower end a pair of grooved rollers 17 engaged with opposite sides of the adjacent hanger 5, thereby connecting the bell crank levers thereto for actuating said adjacent hanger. Each bell crank is formed of wire having its intermediate portion coiled to provide a number of convolutions, as shown at 16′, and a bolt 16″ passes through said coils and enters the rail 2.

A sectional pitman which is designated generally by the reference numeral 18 operatively connects the upper end of each bell crank 16 to the lower end of a lever 12 for actuation thereby. Each pitman 18 includes a comparatively long lower section 19 and a comparatively short upper section 20, said sections 19 and 20 being resiliently connected together through the medium of a joint which comprises a socket 21 on the upper end of the section 19 into which the section 20 slidably extends. A flange 22 is provided at the lower end of the socket 21. A flange 23 is provided on an intermediate portion of the

section 20. Then, the resilient section joint further includes an expansible and compressible coil spring 24 which encircles the socket 21 and the adjacent portion of the section 20 and has its ends anchored in any suitable manner to the flanges 22 and 23.

In use, as will be apparent, the body may be caused to swing back and forth by the occupant thereof by simply grasping and shifting the handle bar 14, thereby swinging the levers 12. The movement is transmitted through the pitmans 18 and the bell crank levers 16 to the rear hanger 5. Stops 25 project from the side walls 7 for engagement by the levers 12 to limit the swinging movement of said levers.

The coil portions of the bell cranks impart resiliency to said bell cranks so that when the body is swinging too violently the bell cranks through their resiliency will act as shock absorbers and resist the swinging movement and thus cause the swing or device to work smoothly back and forth. The spring forming portions of the pitmen 18 also act as shock absorbers and insure a smooth operation of the device.

It is believed that the many advantages of a swing constructed in accordance with the present invention will be readily understood, and although the preferred embodiment of the invention is as illustrated and described, it is to be understood that changes in the details of construction and in the combination and arrangement of parts may be resorted to which will fall within the scope of the invention as claimed.

What is claimed is:—

1. A swing comprising a supporting structure, hangers mounted for swinging movement on the supporting structure, a body mounted on the hangers, and means operable by an occupant of the body for causing said body to swing, said means including a resilient bell crank lever pivotally mounted on the supporting structure and operatively engaged with one of the hangers, a lever pivotally mounted for swinging movement on the body, and a pitman connecting the first named lever to the second named lever for actuation thereby.

2. A swing comprising a supporting structure, hangers mounted for swinging movement on the supporting structure, a body mounted on the hangers, a resilient bell crank lever pivotally mounted on the supporting structure and operatively engaged with one of the hangers for actuating the same, a lever pivotally mounted on the body, and a pitman connecting the bell crank lever to the second named lever for actuation thereby, said pitman being formed of two sections and resilient means connecting the two sections together.

3. A swing comprising a supporting structure, hangers mounted for swinging movement on the supporting structure, a body mounted on the hangers, a resilient bell crank lever pivotally mounted on the supporting structure and having rollers at one end operatively engaged with one of the hangers for actuating the same, a lever pivotally mounted on the body, and resilient means connecting the bell crank lever to the second named lever for actuation thereby, said means including a pitman comprising longitudinally aligned sections, one of said sections being pivotally connected, at one end, to the bell crank lever, the other section being pivotally connected, at one end, to the second named lever, said other section having a socket on its other end slidably receiving said one section, flanges on the sections, and a coil spring having its ends anchored to the flanges.

In testimony whereof I affix my signature.

JULIUS JANUSZEWSKI.