

No. 704,192.

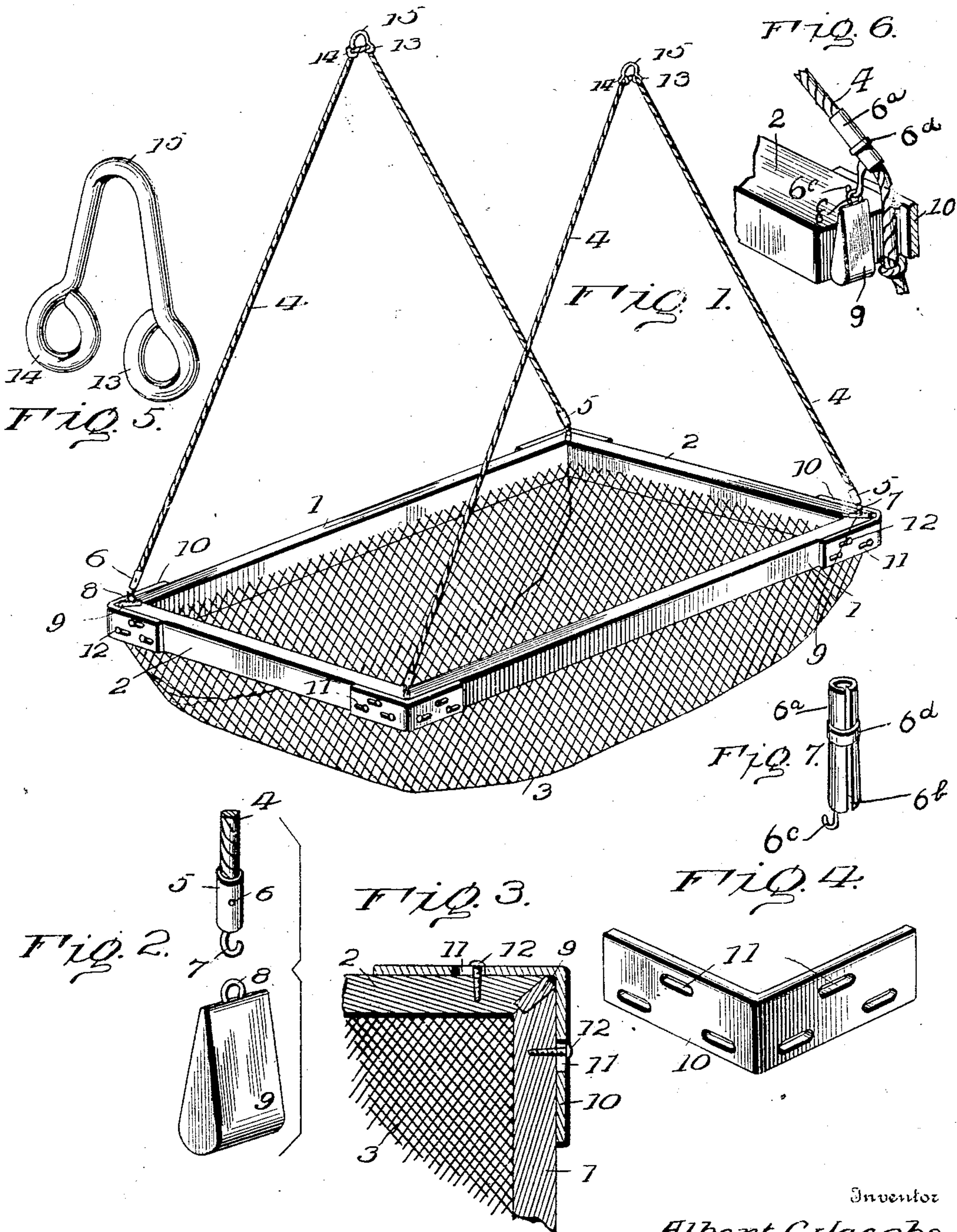
Patented July 8, 1902.

A. C. JACOBS.

SWING.

Application filed Dec. 30, 1901.

(No Model.)



Witnesses

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UNITED STATES PATENT OFFICE.

ALBERT C. JACOBS, OF BIRMINGHAM, ALABAMA.

SWING.

SPECIFICATION forming part of Letters Patent No. 704,192, dated July 8, 1902.

Application filed December 30, 1901. Serial No. 87,712. (No model.)

To all whom it may concern:

Be it known that I, ALBERT C. JACOBS, a citizen of the United States, residing at Birmingham, in the county of Jefferson and State of Alabama, have invented certain new and useful Improvements in Swings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has relation to swings; and it consists of certain novel features of combination and construction of parts, as will be hereinafter fully described and claimed, reference being had to the accompanying drawings, which are made a part of this application.

The object of my invention is to provide a swing which, while useful for all of the purposes for which such an appliance is desirable, will be found especially complete and efficient as a safety-swing for children, thereby rendering it a valuable and safe substitute for the ordinary form of cradle.

A further object of my invention is to render the frame-section of my improved swing self-adjusting, thus insuring that any tendency to sag or stretch on the part of the fabric employed to cooperate with the frame will be compensated for by the automatic extension of the frame itself, as will be hereinafter clearly specified.

A further object is to insure great safety to the child or children placed in the swing.

Other objects and advantages will be clearly apparent in the following specification, considered in connection with the accompanying drawings, in which—

Figure 1 is a perspective view of my improved swing complete ready for use. Fig. 2 is a detail view showing the preferred means employed to connect the supporting-rope to the frame of my swing. Fig. 3 is a detail view showing a section of one corner of my improved swing. Fig. 4 is the reinforcing-plate employed to cooperate with one of the corners of the frame. Fig. 5 is the preferred form of supporting device designed to connect with the rope by means of which my swing may be readily suspended upon a hook or by a rope or other convenient support.

Fig. 6 is a detail of corner construction. Fig. 7 is a perspective view of the rope-clamp.

In referring to the several details of my invention and cooperating accessories numerals will be employed, of which—

1 designates the side rails, and 2 the end sections, of my improved swing. The frame thus or otherwise provided may, it will be readily understood, be made of any desired size or shape, and to the frame-section I connect in any preferred way the flexible part of my swing, consisting in the present instance of the meshed cloth 3, which may be of any preferred material and size of mesh or may be entirely replaced by suitably-woven fabric designed by this purpose properly secured to the frame by extending the same through suitable apertures in the contiguous part thereof or otherwise connecting the edges of the fabric, as will be obvious. The frame-sections 1 and 2 may be properly beveled or fitted to each other and securely nailed or otherwise fastened permanently in position and a reinforcing corner-plate secured to the outer side thereof by screws, rivets, or the like. The supporting-ropes 4 may be connected by boring a hole through a contiguous part of the corner-sections and extending the end of said rope through said aperture and then tying a knot in the rope or otherwise securing it in place. The ropes 4 may of course be connected in a variety of ways to the frame-section, preferably, however, as indicated in Figs. 1, 2, and 6. I prefer to provide a socket 5 to receive the end of the rope, it being understood that a suitable rivet or rivets 6 may be passed through the socket and the rope, thereby securing the same permanently in combination with each other. The said socket at its free or lower end is provided with a preferably integral hook-like extension 7, adapted to engage the apertured ear 8, carried by the compensating wedge 9, said wedge being designed to fit a suitable recess formed in the contiguous parts of the side and end sections 1 and 2 and as more clearly shown in Fig. 3.

It is thought that the foregoing construction will prove very desirable and efficient, though, if preferred, the socket 5 may be dispensed with and the tubular clamp 6^a em-

ployed in lieu thereof. The tubular clamp, as will be seen by reference to Fig. 7, is provided with a slotted opening throughout its entire length, as indicated by the numeral 6^b, and while the lower end thereof is provided with the hook 6^c, which is adapted to engage the apertured ear 8 of the compensating wedge 9. In order to adjustably secure the tubular clamping-section 6^a at any desired point upon the rope 4, I am enabled to do so by means of the collar 6^d, inasmuch as the tubular clamp being slightly conical in form and having its smaller end at the top it is clear that a downward movement of the collar 6^d will bring the edges of the tubular clamp toward each other, and thereby tightly grip the rope and hold the clamp at any desired point thereon. The tubular clamp 6^a is made slightly larger at its bottom end, though the slightly-conical form thus produced is hardly appreciable in the scale of drawing employed in Fig. 7. It is also obvious that a readjustment of the clamp 6^a may be easily effected by forcing the collar 6^d upward, when the tensile property of the tubular clamp will cause the same to release the rope and permit the clamp to be freely moved to the desired point thereon. It will therefore be obvious that as weight is placed in the swing the compensating wedge will be drawn upward, thereby slightly separating the side and edge sections 1 and 2, respectively, sufficiently to compensate for any undue sagging or stretching of the material 3. By this arrangement it is always insured that the frame-section will be of proper size to hold the material 3 in a proper degree of tension. The corner-plates 10 are provided with the slots 11, adapted to receive the retaining-screws 12, and slots are thus provided instead of apertures in order to compensate for the relative movement of the frame-sections and said corner-plate when the compensating wedge is drawn slightly upward incident to the use of the swing.

The ropes 4 are passed through the eyes 13 and 14, formed upon the lower ends of the U-shaped member 15, said U-shaped member being designed to be disposed from a convenient hook or nail or be engaged by another rope adapted to secure it to a limb of a tree or other means of support.

While I have described the compensating device for the frame-section as illustrated in Figs. 2 and 3, I desire to reserve the right to rigidly connect the frame-sections 1 and 2 together, as by nailing them and reinforcing the corners with suitable plates 10, having simple apertures through which retaining-screws may be extended. I desire, however, to reserve the right to employ either form of construction in practice which I may find most desirable and efficient. The various parts of my improved swing may be formed of any de-

sired size and of any preferred material, and while I have described the preferred combination and construction involved I desire to secure in their application all substantial equivalents thereof which may be considered as falling fairly within the scope of my invention.

My improved swing will be found desirable for use in and out of doors and, as above set forth, will be especially desirable and important as a source of amusement for small children, inasmuch as they may be safely disposed within the swing without fear of accident.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The herein-described swing comprising a suitable frame-section; a flexible member 3 connected to the frame-section and depending therefrom; suitable supporting-ropes and means to secure the upper ends thereof, in combination with compensating corner-plates 10 having elongated apertures 11 operatively connected to each corner of said frame; a compensating wedge 9 within an opening between the meeting ends of the frame-sections, and suitable means to connect the lower ends of the supporting-ropes to said wedge, all substantially as specified and for the purpose set forth.

2. In a swing of the character specified, a suitable supporting-frame having expansible corner-sections; a wedge-section 9 for each corner of said frame, each wedge having an apertured ear upon its tapered edge, in combination with an expansible tubular clamp fitting around each of said ropes near each corner of the swing; a collar fitting around said tubular clamp and adapted to secure the same in an adjusted position upon the rope and means to connect the tubular clamp and said ear, all combined substantially as specified and for the purpose set forth.

3. In a swing of the character specified, a frame-section and supporting-ropes, said frame-section having reinforcing corner-plates 10 provided with elongated apertures whereby when screws are entered through said apertures into the frame, the frame-sections are left free to move away from each other thereby expanding the frame, in combination with a wedge fitting in the opening between the meeting ends of the frame-sections and suitable means to connect said wedge with the supporting-rope, all combined substantially as specified and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

ALBERT C. JACOBS.

Witnesses:

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