

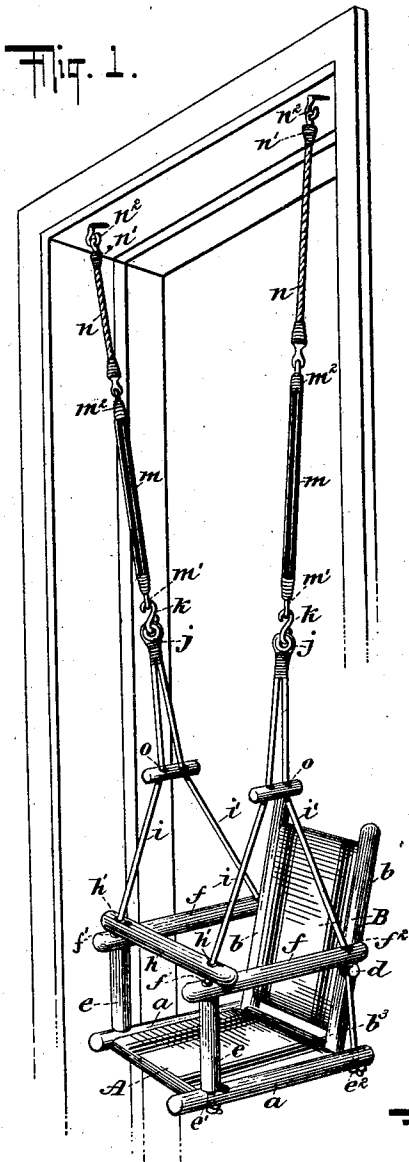
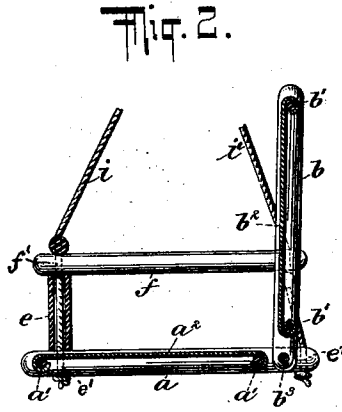
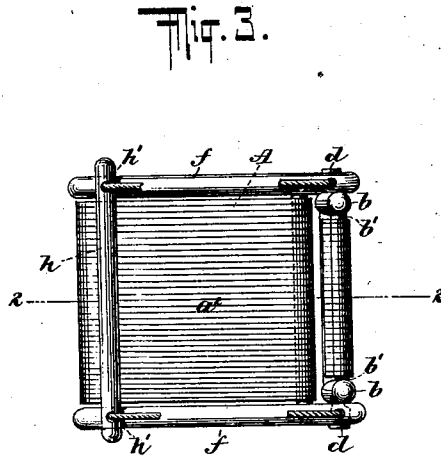
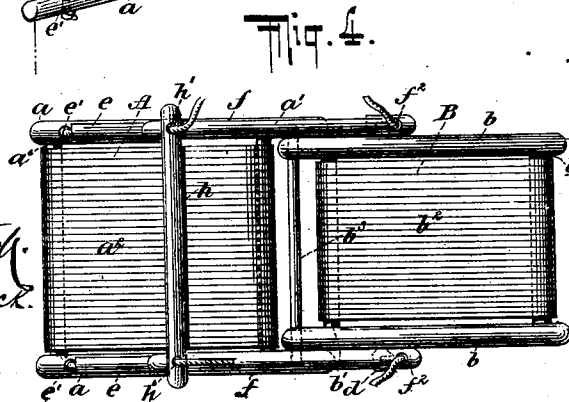
No. 703,458.

Patented July 1, 1902.

A. P. PERKINS.
COLLAPSIBLE BABY JUMPER.

(Application filed Nov. 27, 1901.)

(No Model.)



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COLLAPSIBLE BABY-JUMPER.

SPECIFICATION forming part of Letters Patent No. 703,458, dated July 1, 1902.

Application filed November 27, 1901. Serial No. 83,822. (No model.)

To all whom it may concern:

Be it known that I, ALFRED P. PERKINS, a citizen of the United States, residing in the city of New York, Manhattan borough, county and State of New York, have invented an Improved Collapsible Suspending Baby-Chair, of which the following is a specification.

My invention relates to suspending-chairs, and has for its object to provide an inexpensive, simple, and practical suspending baby-chair whose parts may be readily assembled and as readily collapsed when desired and which, besides having a swinging to-and-fro movement, will have an agreeable up-and-down bouncing movement, a further object of the invention being to provide a suspending-chair wherein substantially all the parts—*i. e.*, the seat, back, arms, guard-rail, &c.—are suspended and maintained in their assembled position simply by the suspension-cords without the employment of catches or other fastening devices, all arranged so that the chair when collapsed will occupy a minimum amount of space, a feature of value for transportation and other purposes.

To these ends the invention consists in the novel details of improvement and combination of parts hereinafter more fully described and claimed.

Reference is to be had to the accompanying drawings, forming part hereof, wherein—

Figure 1 is a perspective view of my improved suspending-chair in position for use. Fig. 2 is a section of the chair on the line 2 2 of Fig. 3. Fig. 3 is a plan or top view of the same, and Fig. 4 is a plan view of the chair knocked down or collapsed.

Similar letters of reference indicate like parts in all the figures.

In the accompanying drawings, A indicates the seat of the chair, which preferably is a rectangular frame-like structure consisting of side bars or rods *a a*, jointed to cross-bars *a' a'* by a sort of tongue-and-groove joint or otherwise, and between and over the rods *a' a'* is stretched and fastened a canvas or other covering *a²*; but any convenient form of seat may be employed.

B indicates the back of the chair, which also preferably is constructed of side bars or rods *b b*, jointed to cross bars or rods *b' b'* by a tongue-and-groove joint or otherwise, the

four bars forming a frame-like structure, and over and between the rods *b' b'* thereof is stretched and secured a canvas or other covering *b²*, (see Figs. 2 and 4;) but any other convenient form of back may be employed. At the lower end of the back B and passing through and between the side bars *b b* thereof is a rod or shaft *b³*, whose opposite and exposed ends fit into and are frictionally held in grooves or openings in the inner side of the bars *a a* of the seat, Figs. 1, 2, and 4, thus forming a hinge-like joint between the seat and back, permitting the back to be raised and lowered, as hereinafter described; but the back and seat portions of the chair may be joined or connected by a hinge-band or otherwise to accomplish the same result. Projecting from the outer side of each side bar *b* of the back B is a short arm or shoulder *d*, having an opening or aperture there-through for the passage of the suspension-cords, hereinafter described. In place of the shoulder *d* a screw-eye or the like may be employed.

e e indicate hollow rods or standards resting upon the end of each side bar *a* of the seat, the opening or passage in each standard being adapted to register with an opening or passage *e'* in the bar *a* for the passage of the suspension-cords, as will be presently described. The opposite end of each bar *a* also has an aperture or opening *e²* for the passage of the suspension-cords.

f indicates a rod or bar at opposite sides of and constituting the arms of the chair, one end of each arm being adapted to rest upon the standard *e* and the opposite end upon the shoulder *d*, the arm *f* having the openings or apertures *f' f²* for the passage of the suspension-cords and said openings being adapted to register respectively with the openings or passages in the standard *e* and shoulder *d*.

h indicates a guard rail or bar adapted to rest upon the arms or rods *f f*, as shown, which rail has openings or passages *h' h'* at each end for the passage of the suspension-cords and which openings are adapted to register respectively with the openings *f' f'* in the arms *f f*.

The parts are suspended and maintained in their assembled position by suspension cords or connections *i i'* at each side of the chair,

which cords diverge from a loop or ring *j*, Fig. 1, the cord *i* passing through the opening *h'* in the guard-rail *h*, through the opening *f'* in the arm *f*, then through the hollow standard *e*, and through the opening *e'* of the side bar *a* of the seat, where the cord *i* is securely knotted or fastened to prevent the parts slipping therefrom. Similarly the cord *i'* passes through the opening *f''* in the arm *f*, through the opening in the shoulder *d*, then through the opening *e''* in the side bar *a* of the seat, where the cord is knotted or otherwise secured to prevent the parts slipping therefrom. The various openings or passages in the parts above referred to are of such size that the cords *i* *i'* will have free and easy movement therethrough.

m m indicate elastic cords or connections, each of whose lower ends is adapted to engage with the loop or hook *j* of the suspension-cords by means of a hook or catch *m'* and S-hook or ring *k*, Fig. 1, the upper end of the elastic cord *m* also being provided with a catch or hook *m''*, adapted to engage a ring or loop at the end of a cord or connection *n*, the upper end of the cord *n* being provided with a ring or loop *n'*, adapted to engage a hook or the like *n''* upon a suitable support, as the upper part of a doorway. It will be evident that the cord or section *n* may be omitted and the elastic cords *m* attached directly to a support, it being also obvious that instead of the elastic cords or connections *m* constituting separate sections attached to the suspension-cords the cords *i* *i'* may be made partly elastic or may be provided with an elastic insertion in a portion of their length.

o indicates a tension device for regulating the tension of the cords *i* *i'*, the same being shown as a tent-cord fastener, (see Fig. 1;) but any other device for regulating the tension of the cords may be employed.

The weight of the child or other user of the chair tends to draw the cords taut and to keep the back *B*, by means of the suspension-cords passing through the shoulder *d*, in a substantially upright or partially-inclined position, which object is further assisted by drawing the diverging suspension-cords *i* *i'* more tightly together by means of the tension device *o*, this tightening of the cords *i* *i'* also tending to keep the guard-rail *h* in place, so as to prevent the infant from falling out of the chair. Straps or other safeguards to further insure safety in this regard may be employed.

When the chair is not in use, the suspension-cords and connections may be detached from their supports, and for purposes of storage and transportation the chair may be knocked down or collapsed (see Fig. 4) by simply releasing the tension device and pushing or turning down the hinged back to a plane with the seat, which can be done in an

instant, and the connected parts—the arms, standards, and guard-rail—will readily yield and give way and collapse, as all the parts are held together by the cords and succumb with the cords when the weight is removed from the chair and the back pulled down. It will be seen, Fig. 4, that when the back is let down the seat and back present substantially a plane surface, taking up little space, and making the chair when collapsed a handy portable structure having many obvious advantages for transportation and other purposes. The back *B* instead of being knocked down to the position shown in Fig. 4 may be turned down in the opposite direction and almost upon the seat *A*, face to face, in which case the upright standards *ee* and other parts are pulled out from between the seat and back.

By means of the elastic cord or insertion hereinabove referred to the chair will receive an agreeable up-and-down bouncing movement, and by the use of such elastic insertions the employment of springs, which have many disadvantages in structures of this character, is dispensed with.

Although I have described my invention as intended for a baby-chair, it is evident that the same may be utilized for other analogous purposes.

It will be noted that the chair being supported by the suspension-cords passing through the openings described and knotted at their lower extremities to prevent the chair slipping therefrom may readily be raised or lowered or the seat inclined by simply pushing the chair up or down upon the cords and knotting or fastening the ends of the cords at the desired height or incline.

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

1. In a chair of the character described, a seat-frame, hollow standards on the front of the side bars of the seat-frame, arms on the standards, a guard-rail on the arms, a back hinged to the side of the seat, shoulders on the back-frame for supporting the arms, and combined binding and suspending cords run through the guard, arms, standards and the side bars of the seat at the front and through the arms, shoulders and side bars of the seat at the rear, as and for the purpose described.

2. In a chair, a seat-frame, hollow standards, side arms and a guard, a back hinged to the seat-frame and a flexible connection run through holes of the guard, arms, hollow standards and seat-frame and comprising the means for binding the parts together and for suspending the chair as and for the purpose described.

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Witnesses:

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