L. O. COLVIN

Improvement in Baby-Jumpers and Walkers.

No. 131,083. Patented Sep. 3, 1872.

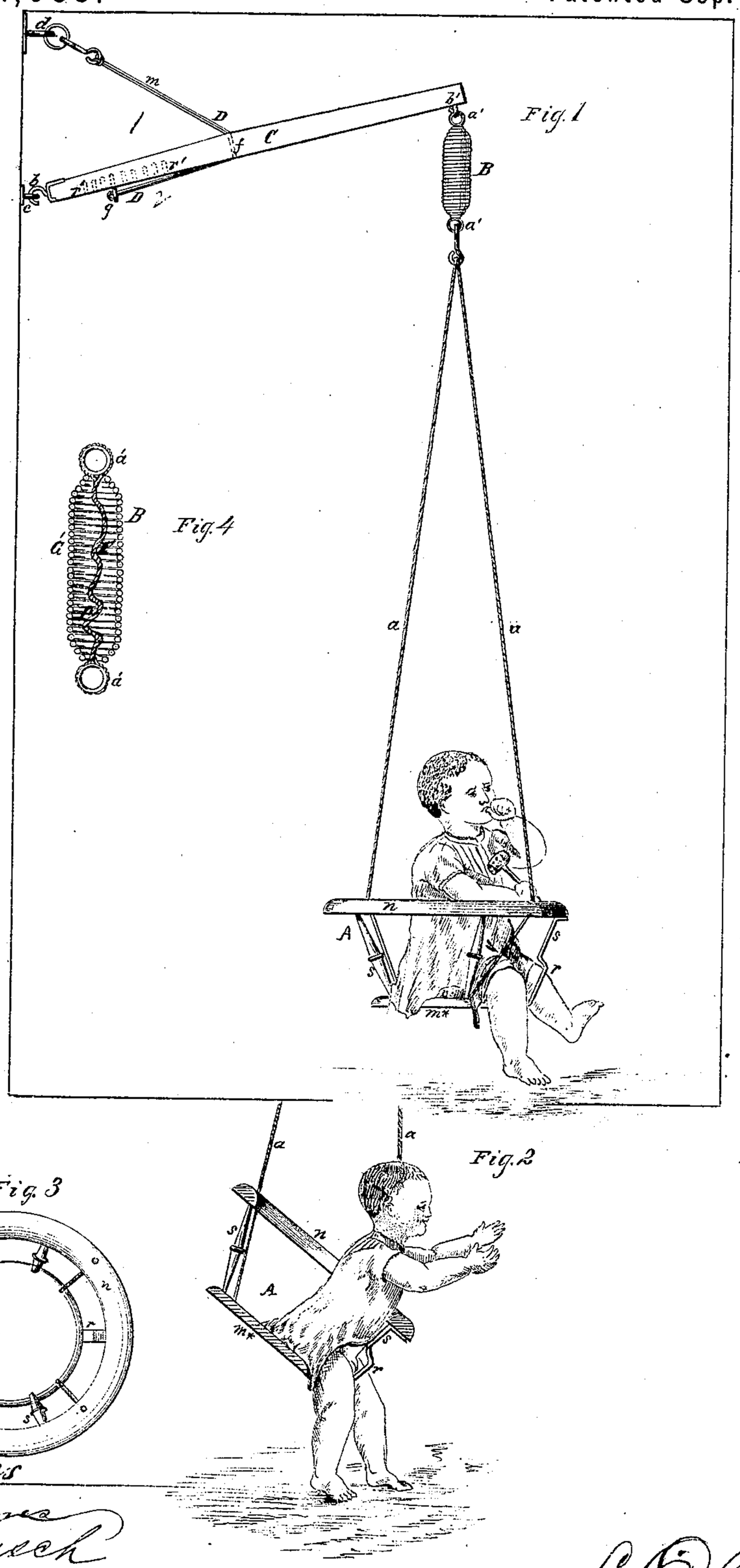

Fig. 1

Fig. 4

Fig. 2

Fig. 3

Witnesses

Fred Haynes

H. C. Church

L. O. Colvin

UNITED STATES PATENT OFFICE.

LEIGHTON O. COLVIN, OF NEWARK, NEW JERSEY.

IMPROVEMENT IN BABY JUMPERS AND WALKERS.

Specification forming part of Letters Patent No. **131,083,** dated September 3, 1872.

Specification describing an Improvement in Combined Baby Jumper, Walker, Chair and Swing, invented by LEIGHTON O. COLVIN, of Newark, in the county of Essex and State of New Jersey.

This invention is designed to furnish an apparatus for nursery use, which may be made to perform the functions or occasion of a baby jumper, walker, chair, or swing.

It consists in certain novel means whereby the swing is caused to be automatically or gradually checked at the end of each vibration, so as to prevent any jar or concussion to the infant occupying the chair forming a portion of the apparatus, and also to prevent the swinging movement from being carried further than may be desirable; whereby the height of the aforesaid chair may be adjusted to any requisite height from the floor, so that all liability of injury to the infant from violent contact with the forward part of the chair is avoided, and the length of the elastic portion of the devices employed for suspending the chair may be readily adjusted to suit the desired vertical movement of the chair when in use as a jumper.

Figure 1 is a side view of the apparatus constructed according to my invention. Fig. 2 is a vertical transverse section of one portion of the same. Fig. 3 is a plan view of the part shown in Fig. 2. Fig. 4 is a longitudinal section of another portion of the apparatus.

The chair A is attached by cords *a* to the elastic device B, which is formed with a ring, *a*, at either end, one for the attachment of the cords *a*, as shown in Fig. 1, the other for attachment to the outer end of the suspension bar C by means of a hook, *b*, or other suitable device. The inner end of the bar C is provided with a hook, *b*, for hooking into a staple or ring-bolt, *c*, provided in the wall of the room where the apparatus is to be used. Above the staple *c* is a bolt, *d*, extending outward some little distance beyond the staple, as represented in Fig. 1. From the ring or outer end of this bolt *d* the part *m* of the brace D extends to and connects with a point more or less approaching the centre of the bar C, the tension of which brace resists the downward pressure exerted upon the bar by weight of the chair A and its occupant. It will be seen that a line drawn from the outer end of the bolt *d* to that of the staple *c* indicates the axis about or upon which the bar C swings when a lateral movement is given to the chair by the occupant thereof. From the inclined position of this axial line it follows that the bar C will find its lowest position or place of rest when at right angles to the wall from which it is suspended, and that when moved laterally it will rise in proportion to the extent of such lateral movement, producing in effect a limited swinging motion in which the infant is kept from any jar or concussion which might otherwise injuriously affect it, and is also prevented from coming in contact with the wall to which the apparatus is applied, as previously herein set forth. The brace D may be formed of a short cord or any suitable flexible material, and is passed through a hole formed in the bar C, as indicated in dotted outline at *f* in Fig. 1, and has upon its lower extremity a pin, *g*. The lowermost portion of the brace is extended along the under side of the bar C, with its pin *g* thrust into one or another of holes shown in dotted outline at *r'* in Fig. 1, as formed in line in such under side of the bar. By placing the pin *g* in one of the holes *r'* more or less remote from the lower end of the bar C, the upper or suspending portion *m* of the brace may be lengthened or shortened to bring the chair A to any preferred distance from the floor. The chair A is formed of the bottom *m* and annular top *n*, connected by the inclined rounds *s*, the bottom being of much less diameter than the top, which not only subserves the special purpose herein presently set forth, but also insures economy of material in manufacture, as the bottom may be made of the piece removed from the center of the top in bringing the same to its annular form, The size of the bottom of circular form is such as to comfortably support the occupant of the chair with more or less lateral support from the inclined rounds *s*. One of these rounds—that immediately in front—is bent outward or bowed, as shown at *r*, in such manner that when the occupant of the chair is thrown forward as in the attempt to walk, indicated in Fig. 2, the chest and upper portions of the stomach may rest upon the adjacent portion of the top and upon the upper portion

of the front round. It will be seen that the space afforded by the bowed form of the said round at *r* affords ample room for the pelvis and, the circular chair-bottom being in contact at its front with the thighs, while the body is sustained, as described, by the top and the upper part of the front round, any injury to the genitals, (should the occupant of the chair be a male infant,) liable to occur by contact with hard material, as the use of a chair formed with a straddle-bar, is effectually provided against. The elastic device B is composed of a wire-coiled spring, G′, axially through which is passed a cord, I′, of such material, size, and make that its length may be readily diminished by twisting it upon its central or axial line, each end of this cord being passed around and firmly attached to one of the rings *a*, these latter resting in contact with the diminished ends of the coil or spring. It will be seen that by twisting the string to diminish its length, the length to which the spring can be extended will be reduced in like proportion, and vice versa. By this means, therefore, the tension of the spring can be adjusted and the extent of the vertical movement of the chair, when used as a jumper, may be also adjusted. By my mode of suspending the chair a child is enabled to swing, walk, run, or jump at a much earlier age than he could do so naturally, and this without any liability to injury.

What I claim as my invention is—

1. The suspension bar C, furnished with the adjustable brace D, and having its axial line or axis of motion in a position inclined from the vertical, as described, in connection with the chair A suspended therefrom, substantially as and for the purpose herein set forth.

2. The combination in the chair A of the bottom *m*, the annular top *n*, and the front round *s*, formed with the outward curve or bow *r*, substantially as and for the purpose specified.

L. O. COLVIN.

Witnesses:
HENRY T. BROWN,
FRED. HAYNES.