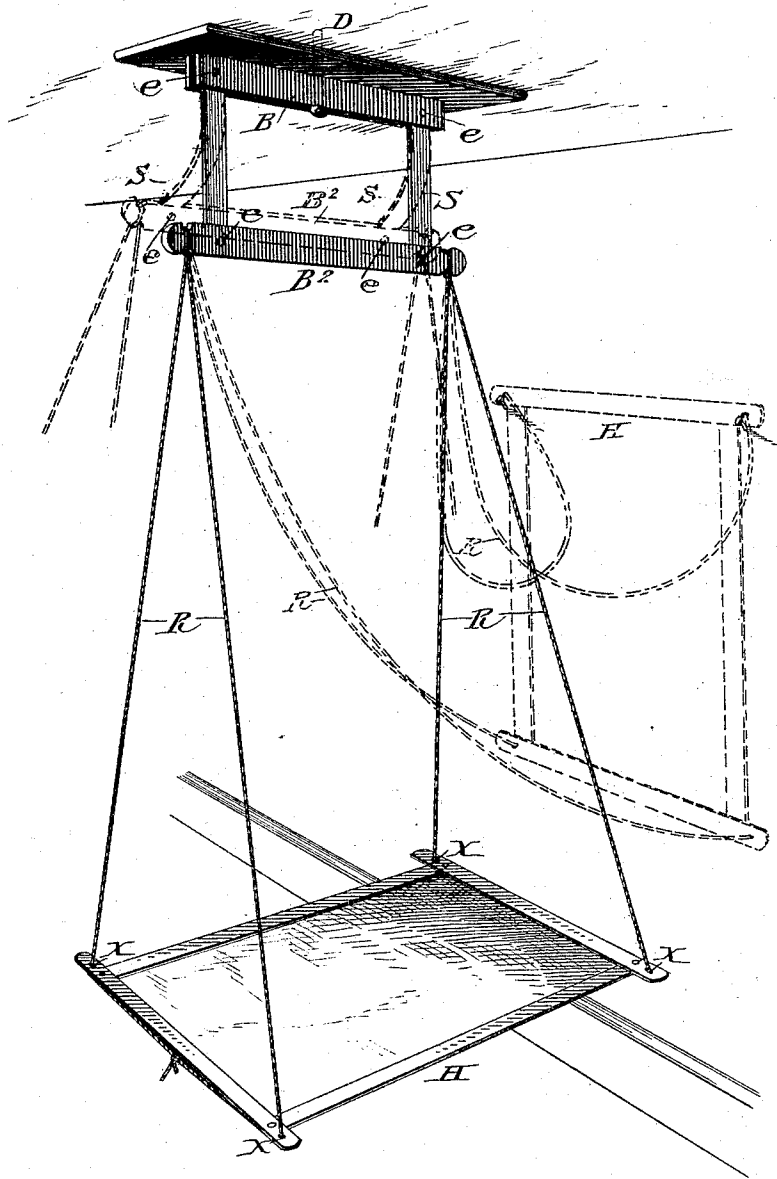


(No Model.)

W. O. BUNKER.
SWING.

No. 487,246.

Patented Dec. 6, 1892.



Witnesses

Ira O. Bunker
John W. Martin

Inventor:

William O. Bunker

UNITED STATES PATENT OFFICE.

WILLIAM O. BUNKER, OF NEVADA, MISSOURI.

SWING.

SPECIFICATION forming part of Letters Patent No. 487,246, dated December 6, 1892.

Application filed February 9, 1892. Serial No. 420,851. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM O. BUNKER, a citizen of the United States, residing at Nevada, in the county of Vernon and State of Missouri, have invented a new and useful Improvement in Swings, of which the following is a specification.

My invention relates to improvements in swings in which the usual pivots, eyelets, or bearings are dispensed with and rigidly-connected springs are used instead.

The object of my invention is to provide a simple and inexpensive swing which will swing easier and maintain its motion longer than others in general use and which will be especially useful for swinging infants and children. I attain these objects by the mechanism illustrated in the accompanying drawing, in which the figure is a view in perspective of the entire swing with a hammock suspended. In dotted lines is shown the hammock hung up out of the way when not in use.

Similar letters of reference indicate corresponding parts.

B is a horizontal bar, which is secured to a ceiling or other suitable support by means of a bolt D. Said bar has a slot in either end, in which are inserted thin springs S S. Said springs are rigidly connected to the bar B and likewise connected at their lower ends to a bar B² and firmly secured to both bars by means of rivets e e e e. The ends of the bar B² are grooved to receive ropes R R, to which is suspended a cot or hammock H, consisting of a frame covered with cloth or other suitable material adjusted to bag down to conveniently receive an infant or child. In the ends of the side pieces of said frame are holes X X X X, through which the ropes R R are

passed and tied together, which admits of adjusting the hammock to a horizontal or inclined position by slipping the ropes through the holes. When desired, a seat, basket, or other receptacle can be used in place of the hammock.

The operation is as follows: The swing is given an impulse by pushing or pulling it, and the springs when bent in either direction by the swinging weight beneath exert the same force upon the weight in returning that is required to bend them. Thus the friction so common to pivots, eyelets, and other bearings is dispensed with.

I am aware that swings are in use which hang suspended by spiral springs loosely connected to eyelets which impart an up-and-down motion, all of which I disclaim. The advantages I claim for my swing are: Its motion is easy and noiseless, and also its simplicity. It can be hung up out of the way in a moment, as shown in the drawing. A mother can take it down, place her child in it, give it a start, and it will vibrate nearly an hour before stopping.

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

In a swing, the combination of flat springs S S with an upper fixed cross-bar B and a lower swinging cross-bar B², supporting the swing-seat, said springs being secured at their ends to both cross-bars, substantially as described.

WILLIAM O. BUNKER.

Witnesses:

IRA S. BUNKER,
JNO. W. MARTIN, Jr.