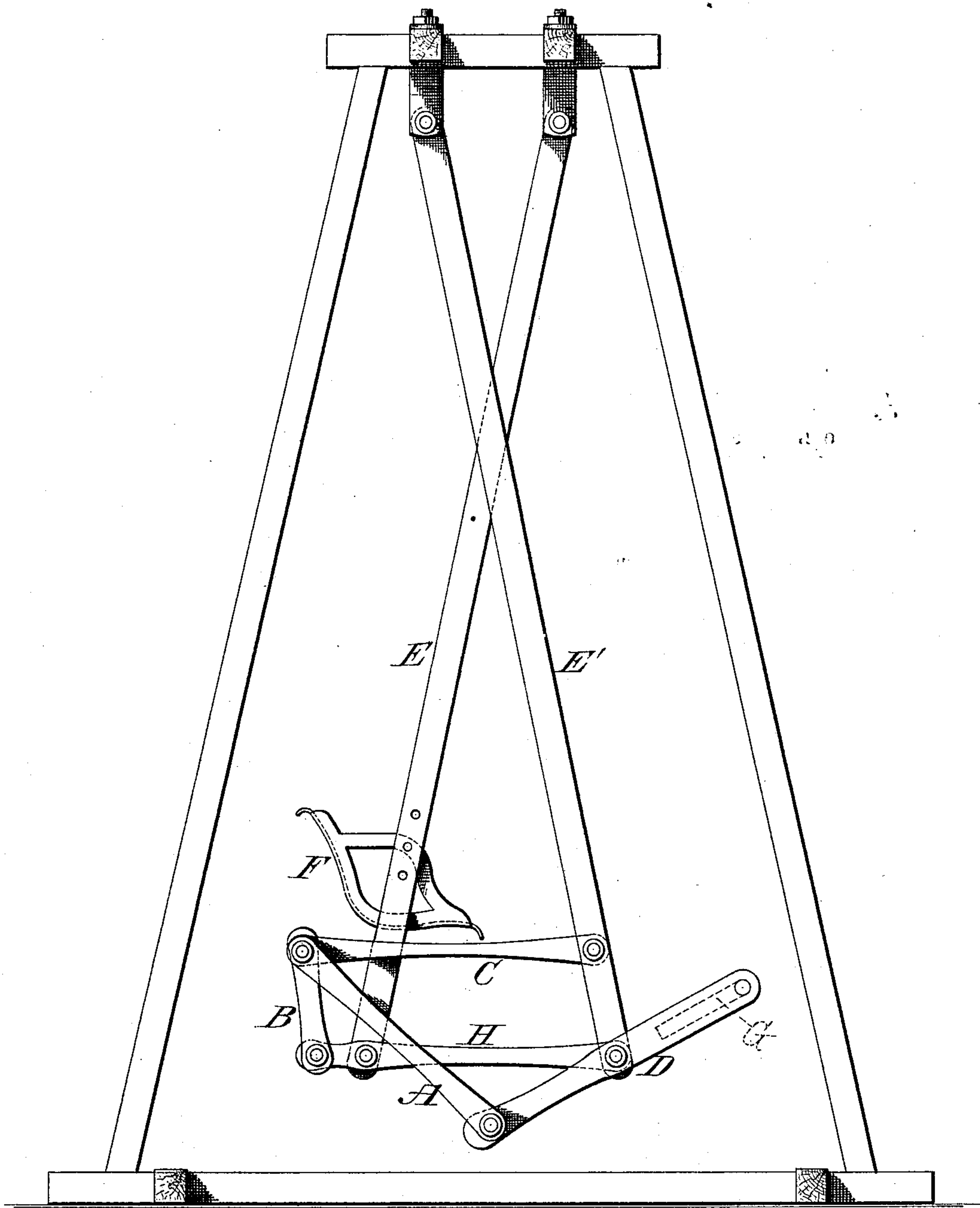


G. W. BAUER.
Swing.

No. 233,914.

Patented Nov. 2, 1880.



Witnesses:
Dennis L. Rogers
Frank M. Carroll

Inventor:
George W. Bauer
per *Edwin A. Burlingame*
Attorney

UNITED STATES PATENT OFFICE.

GEORGE W. BAUER, OF GRAND RAPIDS, MICHIGAN, ASSIGNOR OF ONE-HALF TO FRED. BEHL, OF SAME PLACE.

SWING.

SPECIFICATION forming part of Letters Patent No. 233,914, dated November 2, 1880.

Application filed February 6, 1880.

To all whom it may concern:

Be it known that I, GEORGE W. BAUER, of Grand Rapids, in the county of Kent and State of Michigan, 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 same, reference being made to the accompanying drawing, forming a part of this specification, which represents a side elevation of my improved swing.

My invention relates to certain new and useful improvements in the class of swings propelled by changing the center of gravity; and the invention consists in the general construction, combination, and arrangement of parts, all as will be hereinafter fully described, and specifically pointed out in the claim.

In the drawing, E E' represent the usual suspended arms, crossing each other, for supporting the swing and seat F, which is adjustably secured to the arms E, only one of which is shown in the drawing.

C represents a bar, pivoted at one end to the arm E' and connected at its other end to one end of the bars A B, the opposite ends of said bars A B being connected respectively to one end of the bars D H, which, in turn, are respectively connected to the lower end of the bar E', the bar H being also connected to the lower end of the bar E. The bar D projects forward of the bar E', and to the projecting end is attached one end of the foot-rest G. Upon the opposite side of the swing are arranged a similar set of bars, to which the opposite ends of the seat and foot-rest are connected, which, however, are not shown in the drawing.

The operation of my improved swing is as follows: The person being seated as the swing hangs at rest, by leaning slightly against the back of the seat the center of gravity of the swing will be changed so as to move the swing forward, which forward movement, through the medium of the connecting-bars A, B, C, D, and H, will throw the foot-rest G backward toward and in reach of the feet of the person swinging, when a light pressure with the feet will move the swing backward, and a repetition of these two above-described movements will increase the velocity of the swing until it attains any desired altitude.

I am aware that swings propelled by changing the center of gravity through the medium of a series of connecting-bars are old, and such I do not desire to be understood as claiming, broadly, as of my invention; but,

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

In a swing propelled by changing the center of gravity, the combination, with the suspended cross-arms E E' and the seat F, of the parallel bars C H, connected at their front ends by the arm E' and at their rear ends by the bar B, and the oppositely-inclined bars A D, connected together and to the bars B C and the arm E', the bar D, provided with foot-rest G, and the bar H, connected to arm E, the several parts constructed and relatively arranged to operate substantially in the manner herein shown and described.

GEORGE W. BAUER.

Witnesses:

EDWIN A. BURLINGAME,
ISAIAH B. HAMILTON.