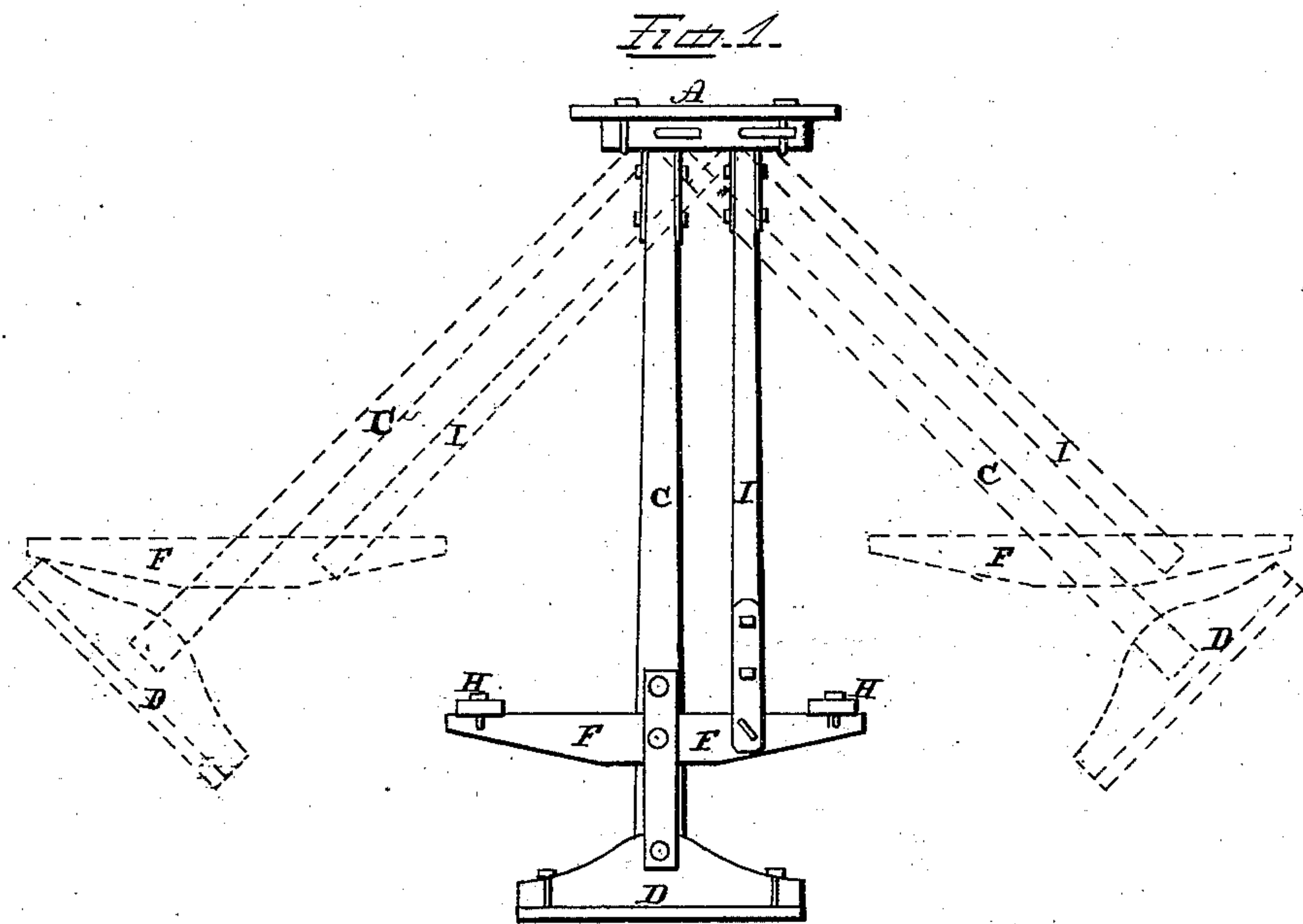


(Model.)

A. B. HARMON.
Swing.

No. 228,065.

Patented May 25, 1880.



Witnesses=
W. W. Mortimer
W. H. Kern

Inventor=
A. B. Harmon,
per
F. A. Lehmann,
Atty

UNITED STATES PATENT OFFICE.

ALPHEUS B. HARMON, OF TRAER, IOWA.

SWING.

SPECIFICATION forming part of Letters Patent No. 228,065, dated May 25, 1880.

Application filed March 12, 1880. (Model.)

To all whom it may concern:

Be it known that I, ALPHEUS B. HARMON, of Traer, in the county of Tama and State of Iowa, have invented certain new and useful
5 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 pertains to make and use it, reference being
10 had to the accompanying drawing, which forms part of this specification.

My invention relates to an improvement in swings; and it consists in securing the foot-board rigidly to the lower part of the hanging
15 beam, and pivoting upon this hanging beam the two horizontal bars upon which the seats are secured, and then connecting to these seat-bars a driving-beam, by means of which persons on the seats can start the swing in
20 motion by pressing downward upon the foot-board with their feet, as will be more fully described hereinafter.

The object of my invention is to produce a swing in which the weight of the persons
25 swinging shall be used as a leverage to propel the swing, and thus make the work of keeping the swing in motion much more easy and pleasant.

The accompanying drawing represents my
30 invention, and shows in dotted lines the positions the seats assume as the swing moves back and forth.

A represents a suitable support, which is secured to a ceiling or other high place, and
35 which has two cleats secured to its under side, and in between which the upper ends of the swinging beams are pivoted. These cleats serve not only for the purpose of strengthening the support A, but also act as a guide to
40 make the swing move straight and prevent any twisting or straining upon the pivots.

To the bottom of the beam C is rigidly secured the foot-board D, and pivoted to the
45 outer sides of these two beams C are the two seat-bars F, upon which the two seats H are secured at their outer ends. Hanging parallel with the beams C are the two driving-beams I, which are pivoted at their lower ends to

the seat-bars, in between the pivots upon which the bars turn, and the seat on their
50 ends. These two driving-beams I are placed on one side only of the beams C, as one set are amply sufficient.

Persons sitting in the swing have the whole of their weight placed upon the two seats, 55 and then, by pressing down upon alternate sides with their feet upon the foot-board, cause the swing to move back and forth. Unlike other swings of this class, the foot-board is not pivoted to both beams, C and I', so as to
60 always maintain a level, but is rigidly secured to the beam C, and alternately moves near to and away from each of the seats, so that when it is near to one seat the parties sitting
65 thereon can give a push upon it with their feet, while the persons on the opposite side are raised upward, as shown in dotted lines, so that their feet will merely touch, while their weight acts in the same direction as the
70 push given by the feet of the persons on the opposite side.

By thus securing the foot-board rigidly to the lower end of the beams C, and providing a driving-beam, the swing can be operated
75 much more readily and easily by those seated thereon than can be done where both suspending beams are pivoted to both the seat-bars and the foot-board, as has heretofore been the case.

Having thus described my invention, I 80 claim—

In a swing, the combination of the beams C, having the seat-bars pivoted to them, and the foot-board D, secured rigidly to their lower
85 ends, with the driving-beams I, having their lower ends pivoted to the seat-bars between the seat on one side and the beams C, substantially as shown.

In testimony that I claim the foregoing I have hereunto set my hand this 13th day of 90 March, 1880.

ALPHEUS B. HARMON.

Witnesses:

F. A. LEHMANN,
WILL. H. KERN.