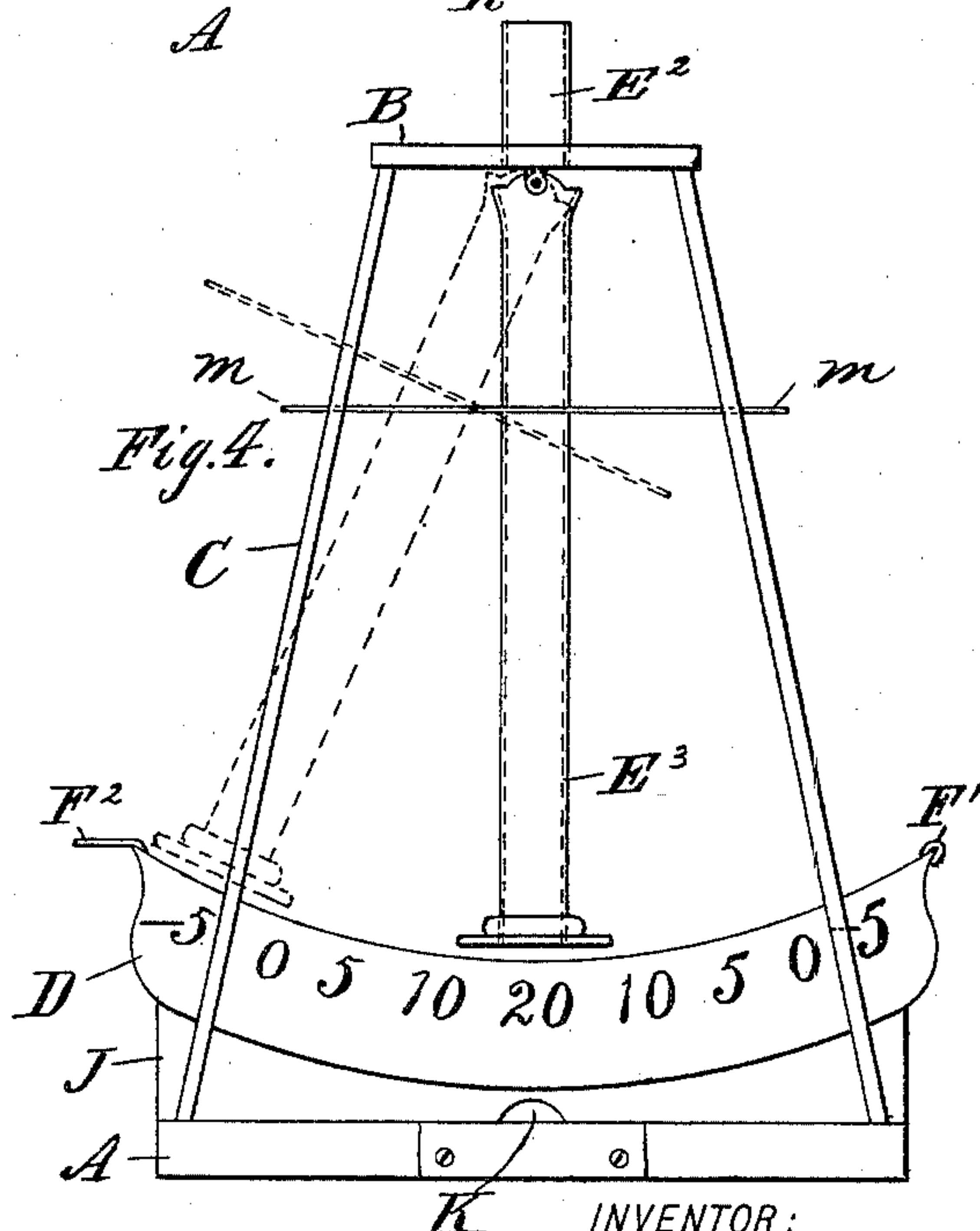
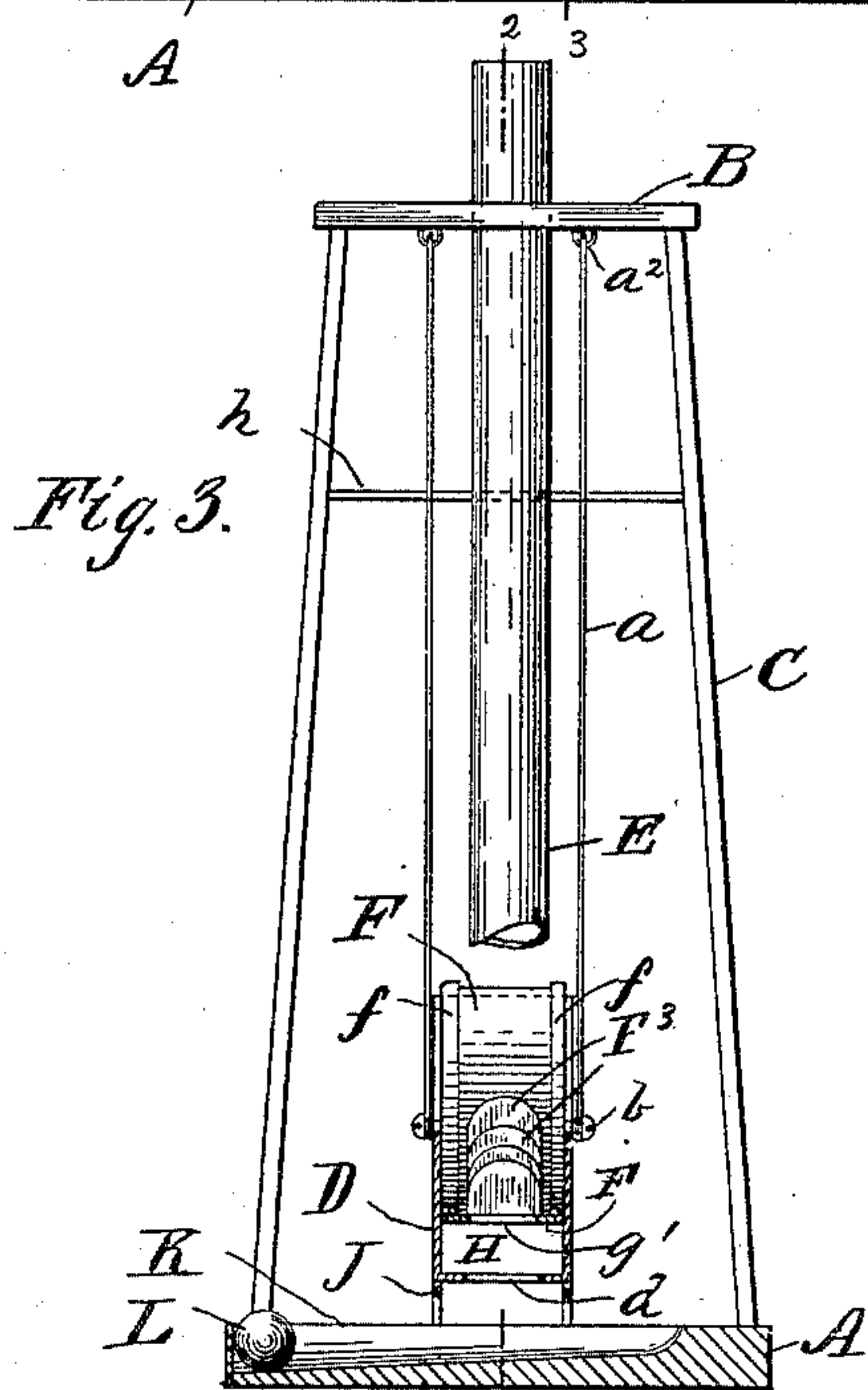
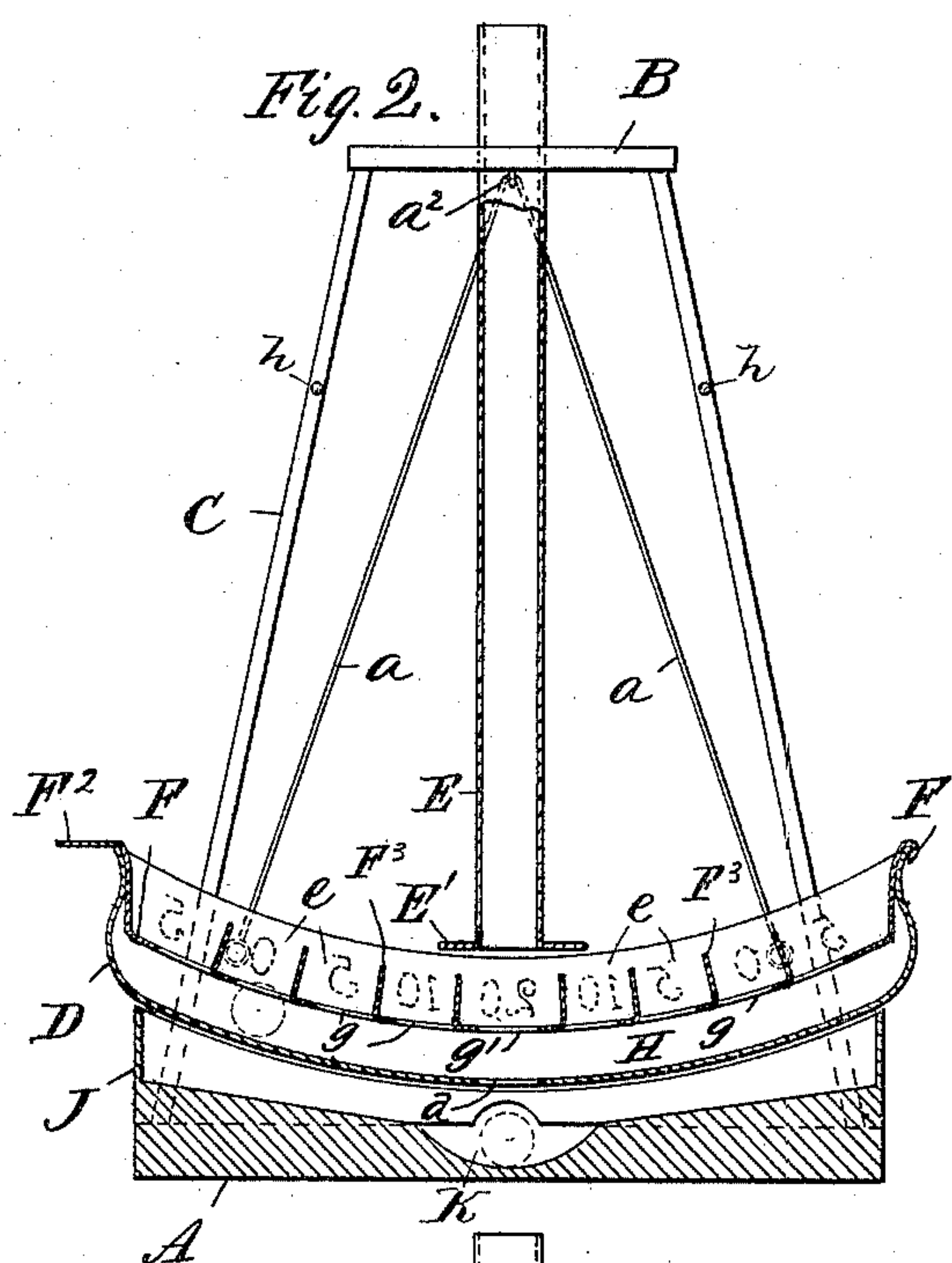
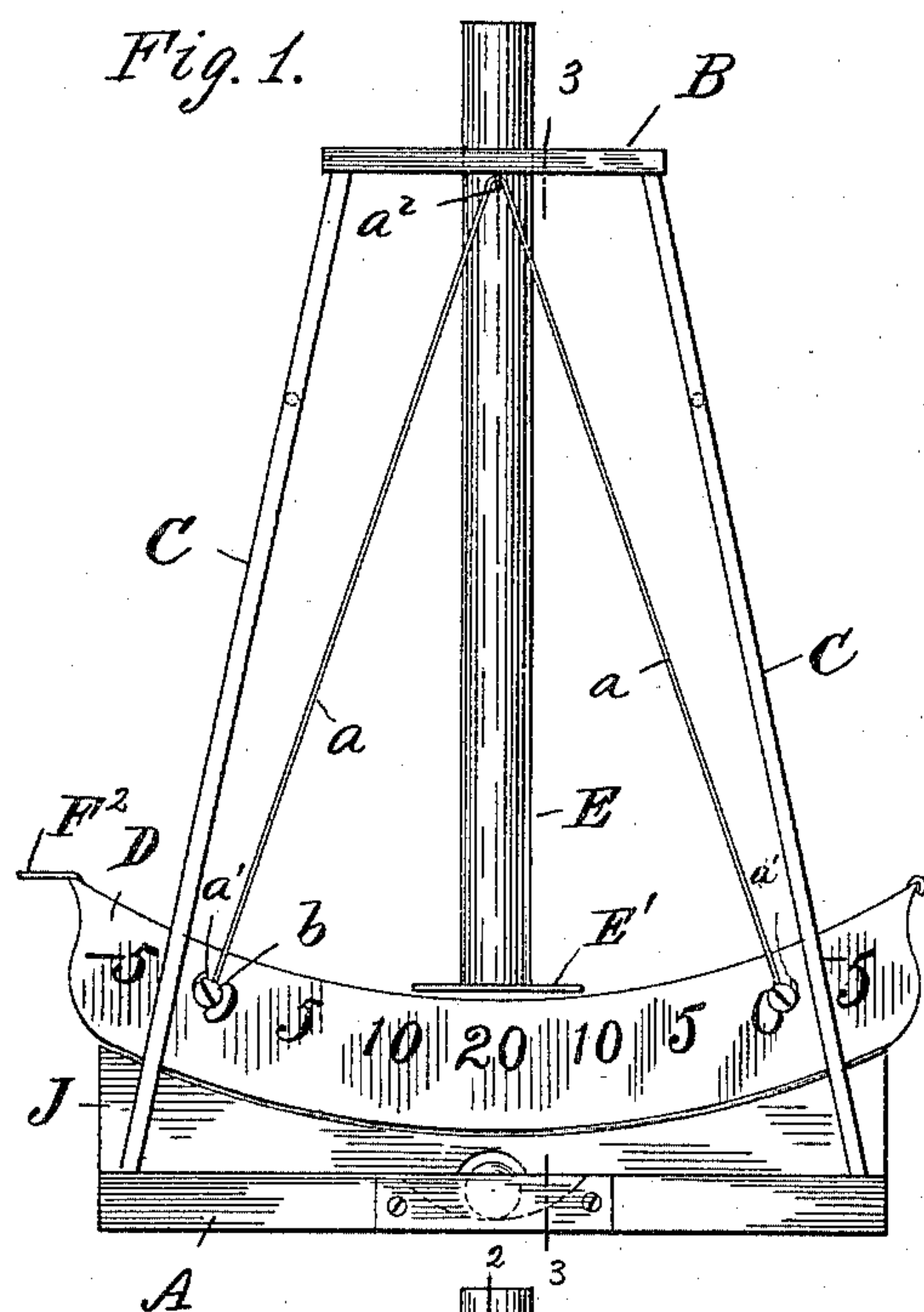


(No Model.)

F. PRIES.
GAME APPARATUS.

No. 436,637.

Patented Sept. 16, 1890.



WITNESSES:

J. Henry Thebrath.
to Sedgwick

INVENTOR:

F. Pries
BY *Munn & Co.*
ATTORNEYS

UNITED STATES PATENT OFFICE.

FREDERICK PRIES, OF FLORENCE, NEBRASKA.

GAME APPARATUS.

SPECIFICATION forming part of Letters Patent No. 436,637, dated September 16, 1890.

Application filed February 19, 1890. Serial No. 340,996. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK PRIES, of Florence, in the county of Douglas and State of Nebraska, have invented a new and Improved Game Apparatus, of which the following is a full, clear, and exact description.

My invention relates to improvements in games; and the object of my invention is to provide an amusing and instructive toy or game apparatus, in which the laws of gravitation and oscillation are illustrated, and in which the use of skill and judgment will insure success.

To this end my invention consists in certain features of construction and combinations of parts, that will be hereinafter fully described, and specifically pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a front elevation of the device. Fig. 2 is a vertical section of the same on the line 2 2 of Fig. 3. Fig. 3 is a vertical cross-section on the line 3 3 of Fig. 1, and Fig. 4 is a front elevation of a modified form of the device.

The frame of the device consists of the broad flat base-plate A, upon which it rests, a flat horizontal top piece B, and the diagonal standards C, which connect the base and top plates and which are suitably attached to the corners thereof.

A car D is suspended from the top plate B by stiff wires *a*, which are provided with hooks *a'* at their lower ends to engage the screws *b*, which are attached to each side of the car D near the ends thereof. There is one wire upon each side of the frame, which is bent in the middle at the point *a²* and suitably pivoted at said point to the top plate B, and the terminal ends of which are provided with hooks, as described. The car will thus be able to swing freely like a pendulum. The car D is formed, preferably, of sheet metal, but may be made of any suitable material. The car is formed with two parallel flat sides, is open at the top, and curved at the top and bottom to conform to the arc of oscillation, and the bottom and ends may be formed of one piece, which is shaped to fit the side pieces. In the center of the car-bottom is a

hole *d*, which when the car is still will be in vertical line with the tube E, which is fixed vertically in the top piece B and extends nearly to the car D, having its lower end provided with a laterally-extending flange *E'*, which prevents the ball used in the game from bounding out of the car, as hereinafter described.

Inclosed in the car D is a strip F, made, preferably, of sheet metal and curved to conform with the shape of the car-bottom and forming a false bottom. It is suspended in the car so that there will be a space H between it and the car-bottom somewhat less in depth than the diameter of the ball or balls used in one game. It has one of its ends formed into a hook *F'*, which is hooked upon one end of the car, and the other end *F²* is bent at an angle, so as to extend beyond the other end of the car, and the extended end may be used as a handle to raise the car, if desired. It will thus be seen that the strip F will be suspended by its ends. At frequent intervals upon the upper surface of the strip F are vertical partitions *F³*, forming cells *e* between the partitions, and in the bottom of each cell is a hole *g*, large enough to permit the ball or balls used to pass through the same. The strip F may be stiffened by folding the edges *f*, as shown in Fig. 3. The hole *g'* in the center cell *e* is cut all around, and will be directly below the tube E and above the hole *d* of the car-bottom when the car is at rest; but the other holes *g* may be cut upon three sides and the cut portion turned up to form the partitions *F³*.

Beneath the car D and attached to the base-plate A is a narrow receptacle J, which is of about the same length as the car D, and the bottom of which slopes from each end to the center, where it connects with the groove K in the base-plate A, which inclines toward the front of the same, so that a ball L dropped into the receptacle J will roll into the groove K and then to the front of the car. In order that the device may not swing too far, I provide the frame with stops or rods *h*, which extend across the ends of the frame between the standards C, so that the wires *a* will strike the same and limit the movement of the car D.

The device is operated as follows: The game

consists in an effort to drop the ball L through the tube E and through the holes g' and d to the groove K. A number indicating the highest count is therefore placed opposite the cell provided with the hole g' , and the other cells are numbered with reference to the degree of skill required to drop a ball into them, the numbers being placed upon the sides of the car D opposite the respective cells e . It has been found that if the ball L be dropped through the tube E at the same time that the car D is dropped from an elevation and allowed to swing, the ball will drop through the holes d and g' to the groove K. In making the game one of skill, therefore, the car is set in motion, and after swinging a few times the ball is dropped through the tube E, and if great judgment is used it will fall through the holes g' and d and count the highest amount possible for the player. If a less degree of skill is used it will fall into one of the other cells e and be retained in a hole g , thus counting a smaller amount for the player.

To release the ball from a hole g , the strip F is raised by means of the extended end F^2 , and the ball will roll along the bottom of the car D and drop through the hole d to the groove K and roll to the front of the device. When the ball is dropped, it is likely to rebound, and for this reason I provide the tube with the flange E' , which extends over the top of a cell, and prevents the ball from bounding.

In Fig. 4 I have shown a modification of the device, in which the car remains stationary and the tube swings. A tube E^2 is fixed in the top plate B of the frame, and to the lower end thereof is pivoted the swing-tube E^3 , having its lower end provided with a suitable flange, as shown. Near the upper portion of the tube is a wire m , extending laterally therefrom, by means of which the tube is swung. When this form of the device is used, the tube is set in motion and the ball L dropped through the same, as in the other form of the device.

The tubes E E^3 may be made of any material, and any suitable chute may be substituted, if desired. It is also evident that the car may be made of any desired length, and

that if extended so as to form a wheel the principle would be the same.

This device, while affording a good deal of amusement, may also be used with good results in educational institutions to illustrate the laws of gravitation.

The ball is very likely to drop into the end cells of the car, and for that reason the numbers opposite said cells are preceded by the minus-sign, as shown, as the amount is deducted from a player's score when a ball falls into one of said cells.

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

1. The combination, in a game apparatus with a frame and a vertical tube fixed therein, of a swinging car pivoted to the frame in line with said tube, said car having a central perforation in the bottom thereof and having a curved partition therein provided with a number of cells having perforated bottoms, substantially as described.

2. The combination, with an upright frame and with the vertical tube E, having the flange E' fixed thereon, of the swinging car D, having the hole d in the bottom thereof, and the strip F, having means, as hook F' and extended end F^2 , for fixing it in the car, and having partitions F^3 and holes $g g'$ therein, substantially as shown and described.

3. The combination, with an upright frame having the base-plate thereof provided with a receptacle J and groove K, as shown, of the swinging perforated car D, having the strip F, holes d , and cells e therein, and the vertical tube E, fixed in the frame above said car, substantially as shown, and for the purpose described.

4. The combination, with the car D, adapted to swing, as shown, of the strip F, having means, as hook F' and extended end F^2 , for fixing it in the car, and having cells e and perforations $g g'$ to hold a ball dropped therein, substantially as described.

FREDERICK PRIES.

Witnesses:

WM. W. KEYSOR,
CLARK KEYSOR.