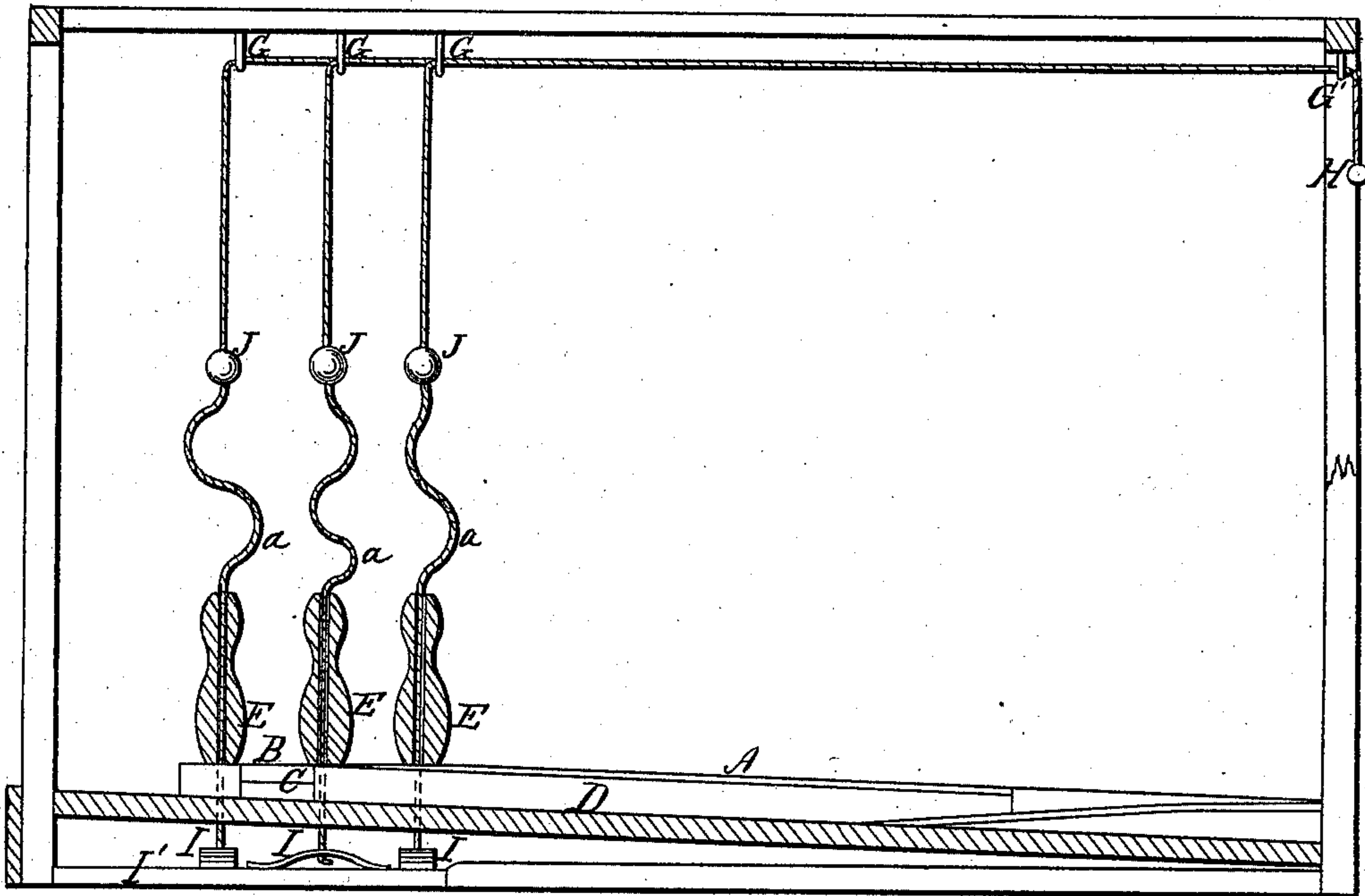
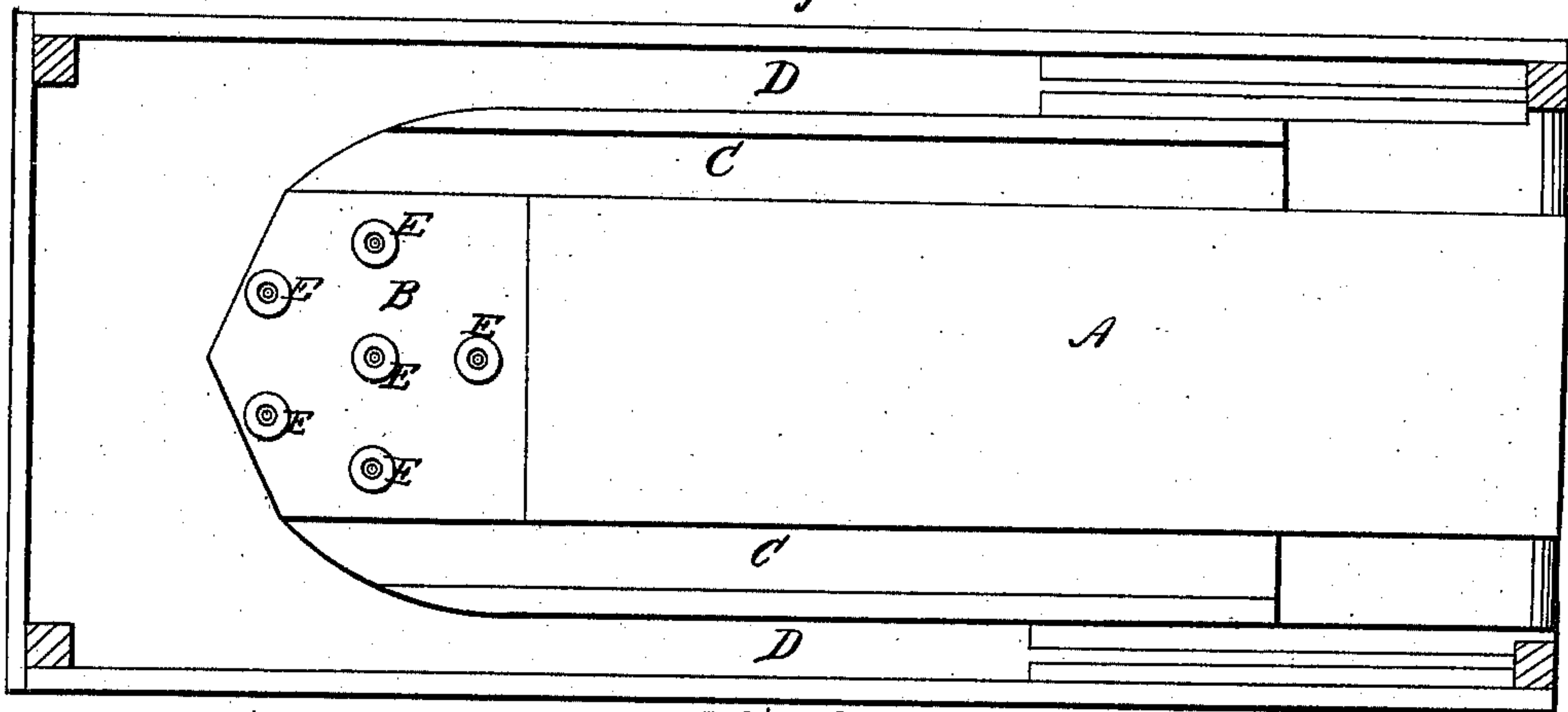


*J. D. Patrick,*  
*Game Board,*  
*No. 81,676, Patented Sep. 1, 1868.*



*Fig. 1.*



*Fig. 2.*

*Witnesses;*  
*Geo. H. Strong,*  
*J. L. Boone*

*Inventor;*  
*J. D. Patrick*  
*By his Atty's Dewey & Co.*

# United States Patent Office.

JAMES DILLON PATRICK, OF SAN FRANCISCO, CALIFORNIA.

*Letters Patent No. 81,676, dated September 1, 1868; antedated August 25, 1868.*

## BALL-ALLEY.

The Schedule referred to in these Letters Patent and making part of the same.

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, JAMES DILLON PATRICK, of the city and county of San Francisco, State of California, have invented an Improved Ball-Alley; and I do hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention or improvements without further invention or experiment.

The object of my invention is to provide an improved ball-alley, so that when the balls reach the end of the alley, or fall from the sides before they arrive at the end, they will return by their own gravity, and not come in contact with each other while being propelled or while returning.

It also relates to a device for setting up the pins by the player himself, from the playing-end of the alley, and consists in constructing the alley at an incline towards the player.

At the sides of the alley are ways, one outside of the other, for the return of the balls, and to prevent their coming in contact with one another should any roll from the sides of the alley.

Small cords are attached to India-rubber bands placed underneath the alley, at its rear end, which pass up through small holes in the alley. The pins have holes made longitudinally through them, and the cord passes through them and up through staples in the frame above, directly over the pins, and from thence overhead to the opposite end of the alley, where they pass through another set of staples, and are attached to a longitudinal bar.

To more fully illustrate and describe my invention, reference is had to the accompanying drawings, and letters marked thereon, of which—

Figure 1 is a side sectional elevation.

Figure 2 is a plan.

A is the alley, inclining towards the point where the player is supposed to stand, the opposite end, B, being a plane, so that the pins may stand on a level.

On either side of the alley are ways, C C, elevated a little from the floor, so that in case the balls should roll off the alley before they reach the pins, they will pass to the end of the way C, and fall upon the floor, and roll back to the player by the return-ways D D, which are also constructed at such an incline as to force the ball down it by its own gravity.

The rear end of the alley is rounded, so as to present no obstacle to the balls after falling from the end of the alley until they pass down the return-ways.

Through the plane B, at the rear end of the alley, are made small holes directly in the place where the pins are intended to stand. Small cords, *a a a*, are attached to springs I I I, under the alley, and pass up through the holes in it. The cord then passes through holes E E E, made longitudinally through the pins. From thence they pass up to staples G G, directly over each pin, thence along the ceiling of the alley through staples G' G', at the playing-end, where they are attached to a horizontal bar, H. Small weights, J J, are attached to each cord midway between the ceiling and the pins.

In the operation of my alley, the pins being down, the player takes hold of the horizontal bar and pulls it towards him, which draws up the cords, bringing the pins to an upright position, when the bar is released and the weights draw down the cords, giving the pins free play to fall in any direction, while the use of springs beneath the pins compensates for the difference in the length of the strings, and prevents their being broken by too great strain upon them.

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

1. The springs I I, attached to the spring-board I', the holes E in the pins, through which the cords pass, and the weights J J, in combination with the cords, substantially as described.

2. Constructing the ways C C, so that the balls that roll from the sides of the alley will not come in contact with those that are thrown against the bank or end of the alley, substantially as herein set forth.

In witness whereof, I have hereunto set my hand and seal.

J. D. PATRICK. [L. s.]

Witnesses:

C. W. M. SMITH,

J. L. BOONE.