

No. 835,554.

PATENTED NOV. 13, 1906.

E. POWERS.
BOWLING ALLEY.
APPLICATION FILED SEPT. 19, 1904.

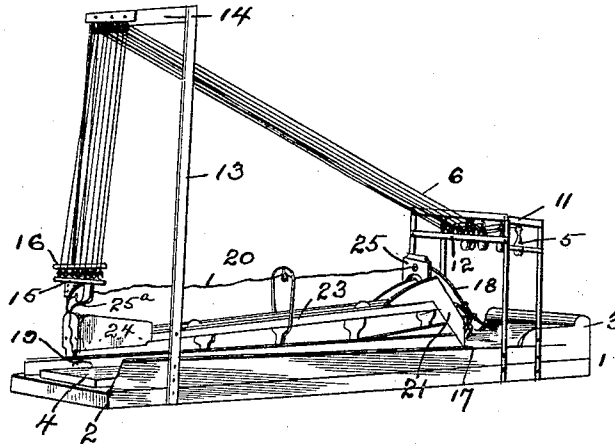


Fig. 1.

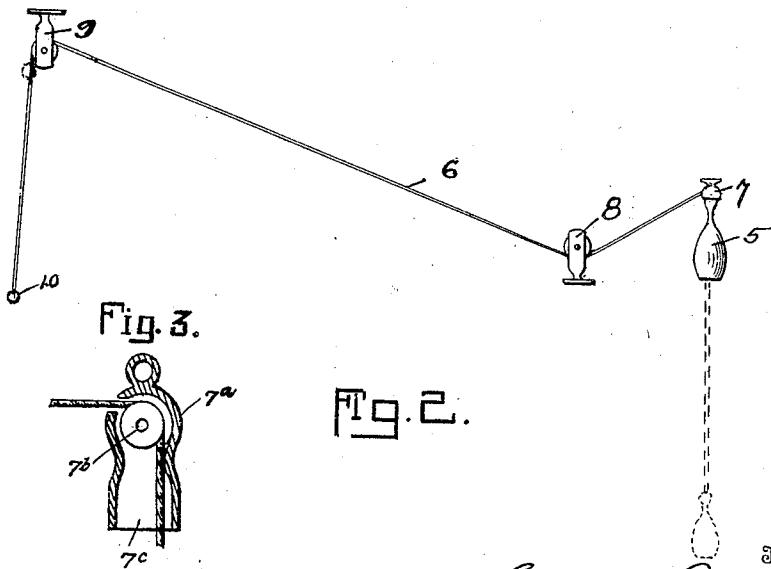


Fig. 2.

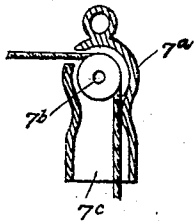


Fig. 3.

Witnesses
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UNITED STATES PATENT OFFICE.

EDWARD POWERS, OF SHELBYVILLE, ILLINOIS.

BOWLING-ALLEY.

No. 835,554.

Specification of Letters Patent.

Patented Nov. 13, 1906.

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To all whom it may concern:

Be it known that I, EDWARD POWERS, a citizen of the United States, residing at Shelbyville, in the county of Shelby and State of Illinois, have invented certain new and useful Improvements in Bowling-Alleys, of which the following is a specification.

This invention relates to improvements in bowling-alleys, the main object being the provision of a means whereby the resetting of the pins are controlled from the front end of the alley, thus dispensing with the use of the boys generally employed for setting the pins.

Another object of my invention is the provision of a bowling-alley embodying novel features of construction and combination of part, substantially as disclosed herein.

In the accompanying drawings, Figure 1 is a perspective view of the complete apparatus. Fig. 2 is a detached view of a pin and resetting mechanism. Fig. 3 is a detail sectional view of one of the incased pulleys and its cupped portion.

Referring to the drawings, the numeral 1 designates the alley proper, which is provided with an open end 2 and the closed end 3. Mounted within the alley is the runway 4, upon one end of which are adapted to rest the pins 5. To each one of the pins is connected a rope or cord 6, which passes through pulley-cases 7, 8, and 9 and is provided upon opposite end with the knob or operating-handle 10. The pulley-case 7, the construction of which is clearly shown in Fig. 3, is supported upon a framework 11, which is mounted above and opposed to the rear end of the bowling-alley, as clearly shown in Fig. 1, while the pulleys 8 are mounted upon the brace or stay-rod 12 in the forward part of said frame. The case 7 consists, primarily, of two parts or members 7^a, having a pulley 7^b journaled in the upper bulged portion, while the lower portion of the members form the pin-centering cupped portion 7^c, the cord that is attached to the pin passing over the pulley, as clearly shown in Fig. 3. Mounted in the forward portion of the bowling-alley are the uprights 13, carrying the horizontal board 14, to which are secured the pulleys 9. A rack 15 is secured to one of the supports 13 and supporting-strip 16 for engaging the handles 10 of the cords. This much of the construction constitutes the mechanism where-

by the pins are lifted and then lowered upon the runway, and as the pulleys 7 are disposed in the frame 11 vertically above the exact position that the pins will occupy upon the runway the said pins when lowered will sit in such positions.

From the foregoing description, taken in connection with the drawings, it is evident that I provide a construction of bowling-alley in which the pins can be set from the opposite end of the alley and by which the balls can be returned, thus dispensing with the assistance of any one at the end of the alley for setting up the pins and returning the balls.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a bowling-alley, the combination of a runway, a framework mounted at the rear end thereof provided with a series of pulley-cases 8, another series of pulley-cases 7 provided with cupped portions for the reception of the head of the pin for alining the same with its "spot," another framework mounted in the forward portion of the runway, a series of pins and a series of flexible connections passing through the pulley-cases 8 and 7 and connected to the pins.

2. In a bowling-alley, the combination of a runway, a series of pins, a low frame mounted above and to the rear end of the runway provided with a front bar, a series of pulley-cases 8 mounted upon said bar, another series of pulley-cases 7 carried in the upper portion of the frame and provided with cupped portions for receiving the heads of the pins and alining them upon their "spots," a high frame mounted in the forward end of the runway, a series of pulleys carried at the top of said high frame to one side thereof, a series of flexible connections passing over all of said pulley-cases, one flexible connection connected to each pin, a rack carried to one side of the frame, and handles carried by the forward end of the flexible connection for engaging said rack to hold the pin above the runway.

In testimony whereof I affix my signature in presence of two witnesses.

EDWARD POWERS.

Witnesses:

FRED. E. LATCH,
B. S. YOST.