(No Model.)

E. REISKY & W. WOLFF.

BOWLING ALLEY.

No. 359,542. Patented Mar. 15, 1887.

Fig. 1

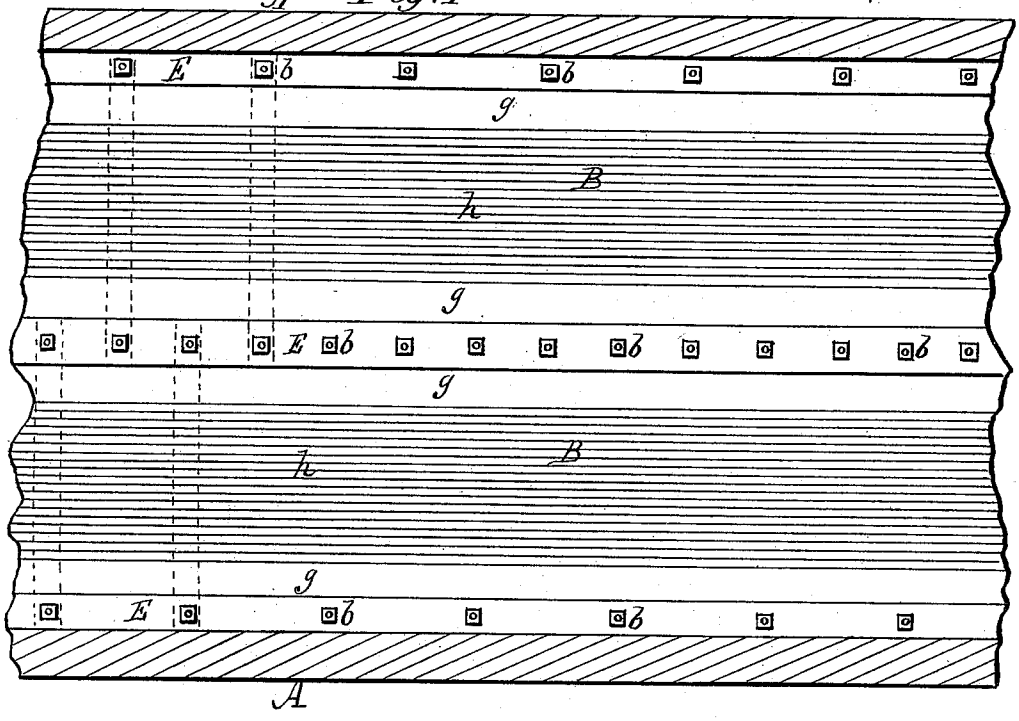


Fig. 2.

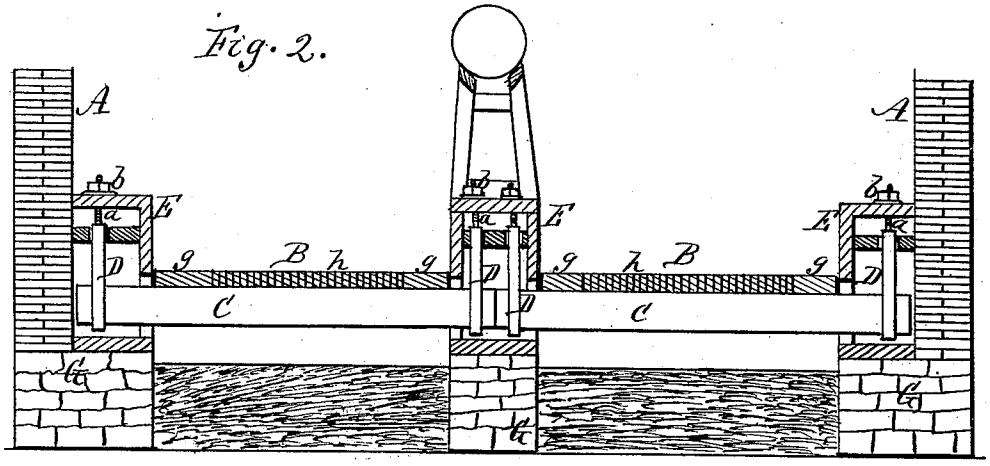
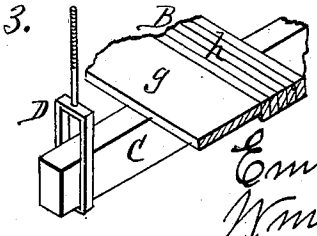


Fig. 3.



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UNITED STATES PATENT OFFICE.

EMIL REISKY AND WILLIAM WOLFF, OF ROCHESTER, NEW YORK; SAID REISKY ASSIGNOR TO CHARLES RAU, OF SAME PLACE.

BOWLING-ALLEY.

SPECIFICATION forming part of Letters Patent No. 359,542, dated March 15, 1887.

Application filed October 17, 1884. Serial No. 145,800. (No model.)

To all whom it may concern:

Be it known that we, EMIL REISKY and WILLIAM WOLFF, both of Rochester, in the county of Monroe and State of New York, have invented a certain new and useful Improvement in Bowling-Alleys; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a plan view of a portion of a bowling-alley, showing our improvement applied thereto. Fig. 2 is a cross-section of the same on an enlarged scale. Fig. 3 is a perspective view showing the devices for adjusting the floor.

The object of our improvement is to adjust and level the floors or runways of bowling-alleys. As ordinarily constructed they are built in a stiff and formal manner, and in constant use are liable to sag and settle at some portion of their length, which throws the balls out of line as they run forward.

The object of our improvement is the construction and arrangement hereinafter more fully described and definitely claimed.

In the drawings, A A show the side walls or partitions of a building, and B B show the two floors or runways of the alley, a small section only of the length being shown in Fig. 1.

C C are the cross-sills on which the floor rests, the same consisting of ordinary joists. The floor is nailed fast to the cross-sills; but the timbers are loose and their ends rest in hangers or loops D D, having screw-shanks *a a*, on which screw nuts *b b*, by which the hangers, with the cross sills and floor attached, can be raised or lowered.

E E E are supports for the hangers, one at each end and one in the middle, as shown, when two alleys are used side by side. In case a single alley is used, only two supports are used, one at each side. They are made in the form of a boxing, as shown, and raised some distance above the floor, serving as a stop to prevent the balls from running off. The floor, which is attached to the cross-sills, is free from the supports E E and adjusts up and down between them. The nuts *b b*, with suitable washers under them, rest on top of the supports, and as the nuts are turned it will be seen the hangers, with the cross-sills and floor attached, will be moved up or down. Two rows of hangers are used in the center, as shown, each holding the ends of the cross-sills on one side, so that one alley can be adjusted independently of the other; but, if desired, a single line can be used, taking the ends of the timbers of both alleys. The supports E E E rest on a solid foundation, G, and the middle support has the ordinary return-runway, H, for the return of the balls.

The floor B consists of smooth flat strips *g g* at the sides, and a center portion composed of narrow strips *h h* set edgewise and nailed fast to the flooring-timbers, which insures great solidity and strength and gives direction to the balls in rolling forward.

The great advantage of this invention is that it enables any portion of the alley to be raised up and adjusted at any time to a perfectly level position. This can be done not only longitudinally, but laterally. It is only necessary to go over the surface of the alley with a straight edge and level and turn up such screws as may be required on one side and the other. It is perfectly under control of the operator, who can make the adjustment with the greatest facility and ease.

In ordinary bowling-alleys, owing to their great length, they are very liable to settle, especially after long use, and when once settled out of place they can never be righted again to work well. It is essential that the alley should be kept always level, otherwise the balls will not run true, and there will be no certainty in the game. All these difficulties are obviated in this invention.

To make this invention effective, the flooring-timbers must be loose or capable of free vertical movement. The floor must also be attached to the flooring-timbers, and must also have free movement at the sides of the alley. The flooring-timbers must also be connected with the hangers, and the hangers must also be capable of free vertical movement in suitable supports. These form the distinguishing features of our invention.

By the use of this invention the foundations

on which the alley rests can be made lighter, and therefore there is less cost in the construction. If settling should occur from heaving of the frost or other causes, it can be rectified at once by turning up the screws.

Having described our invention, we disclaim a starch-table provided with stringers and cross-sills adjusted by hangers, as shown in Patent No. 243,270.

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

1. In a bowling-alley, the combination of the boxings E E, the hangers D D, resting in the boxings and made adjustable vertically by means of nuts, the cross-sills C C, extending through slots of the boxings and resting in the hangers, and the floor B, resting directly on the cross-sills and moving freely between the boxings, as set forth.

2. In a bowling-alley, the combination of the boxings E E E, the hangers D D D, resting in the boxings and made adjustable vertically by means of nuts, the cross-sills C C, extending through slots of the boxings and resting in the hangers, the floors B B, resting directly on the cross-sills and moving freely between the boxings, and the return-runway for the balls located on the center boxing, as shown and described, and for the purpose specified.

In witness whereof we have hereunto signed our names in the presence of two subscribing witnesses.

EMIL REISKY.
WILLIAM WOLFF.

Witnesses:
R. F. OSGOOD,
Z. L. DAVIS.