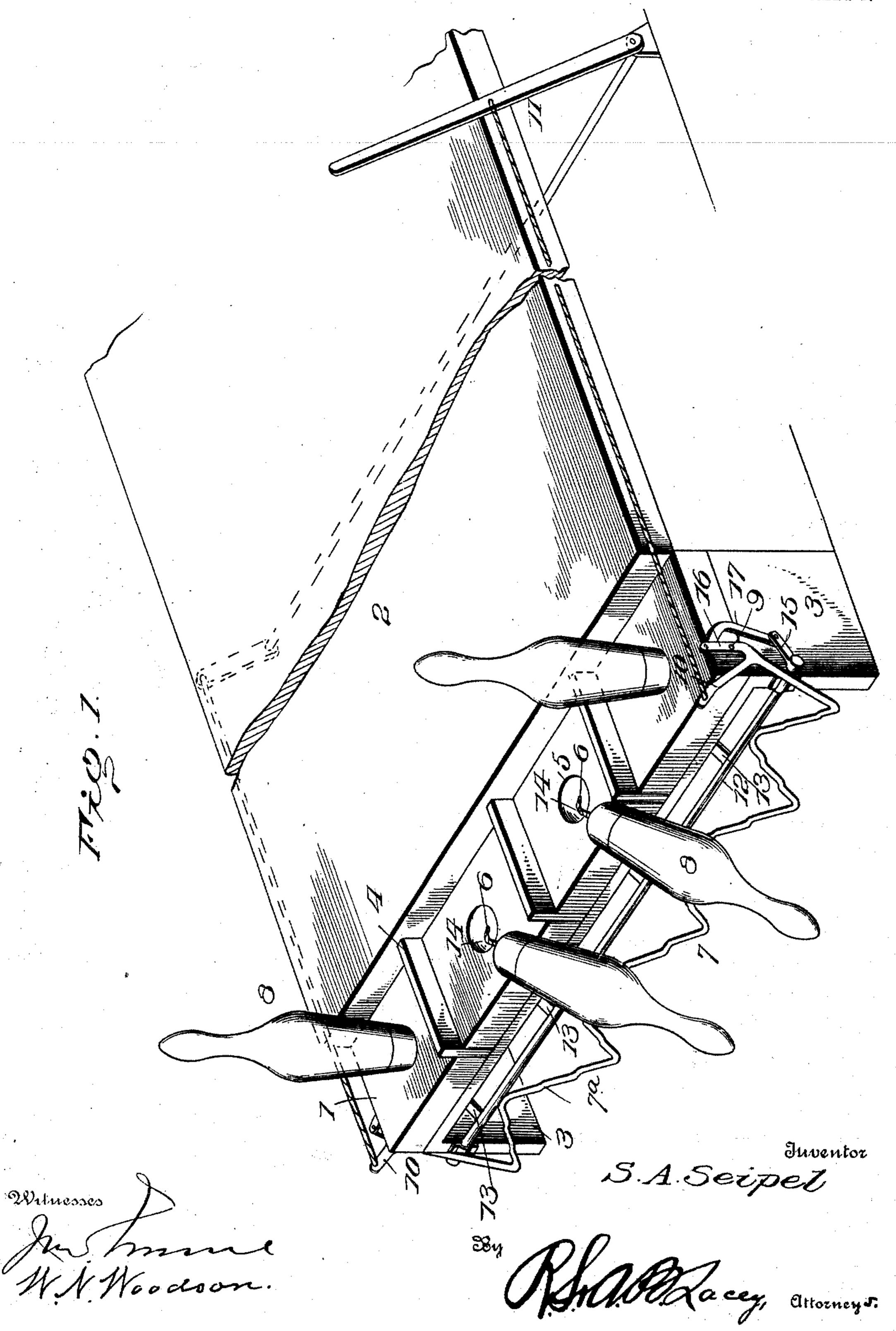
S. A. SEIPEL.

MECHANICAL MEANS FOR RESETTING PINS OF BOWLING ALLEYS. APPLICATION FILED AUG. 27, 1903.

NO MODEL.

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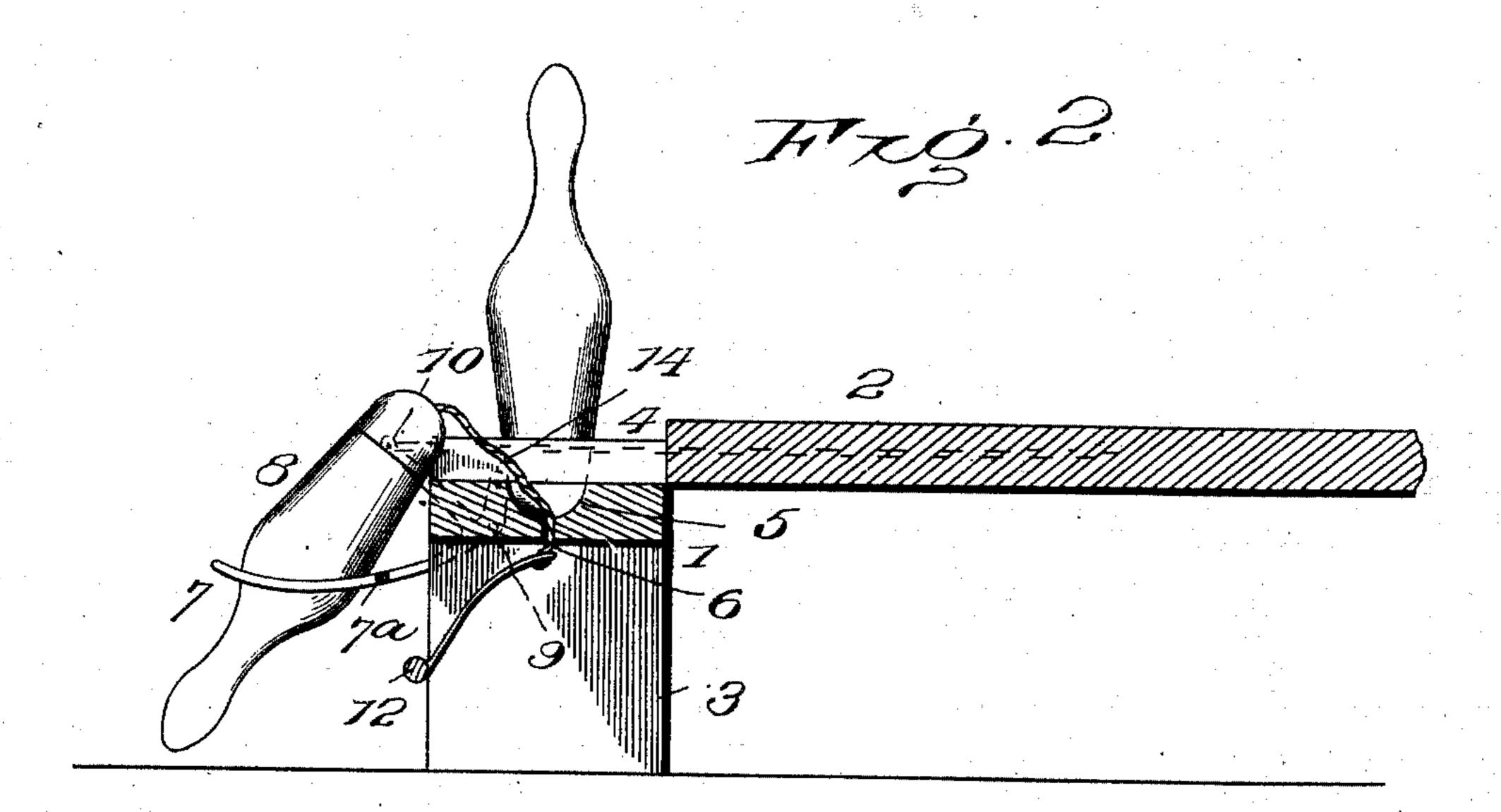


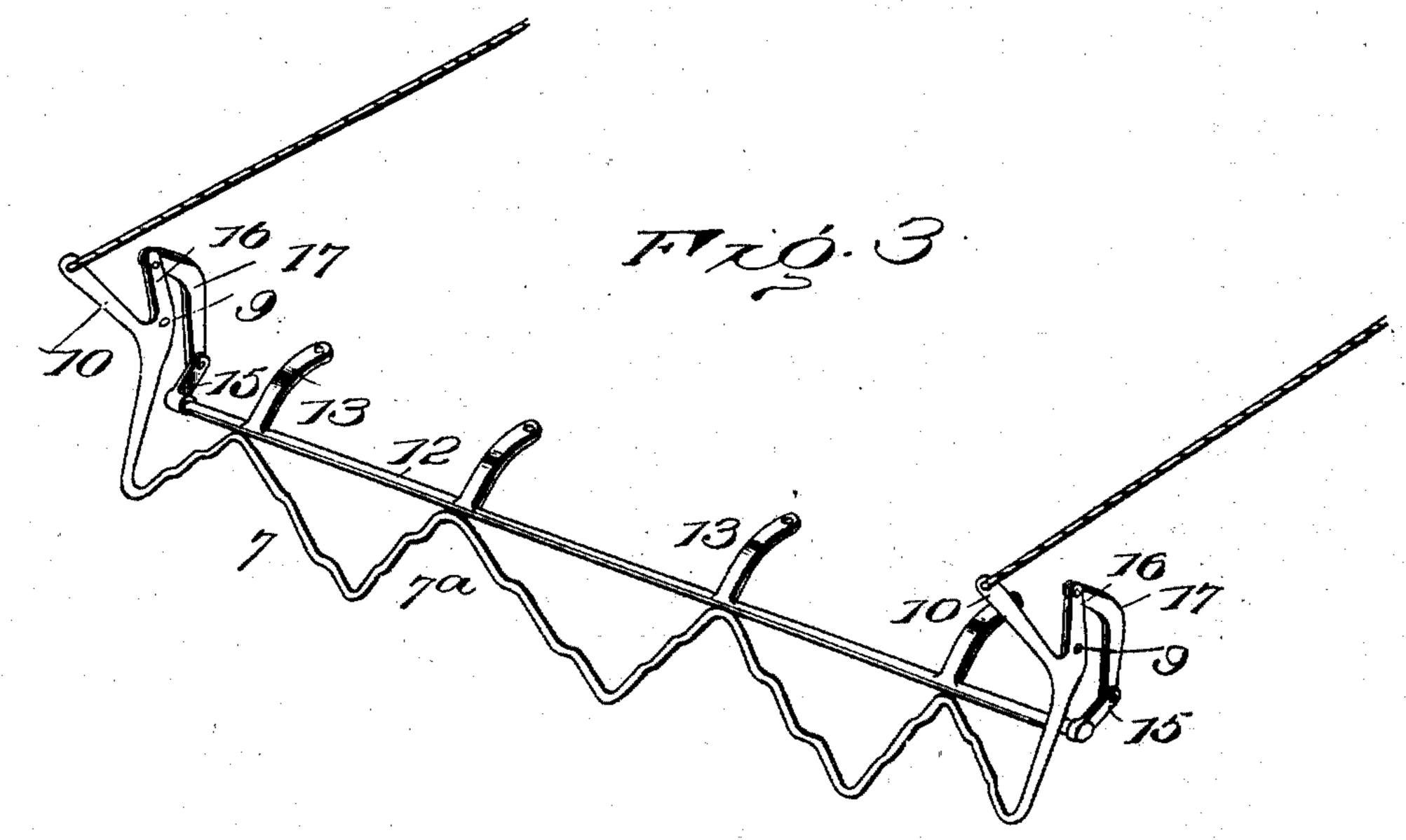
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5.A. Sezzel anventor

Witnesses January & Survival

Rhaddacey, attorneys.

United States Patent Office.

SERENE A. SEIPEL, OF MARIETTA, OHIO.

MECHANICAL MEANS FOR RESETTING PINS OF BOWLING-ALLEYS.

SPECIFICATION forming part of Letters Patent No. 760,026, dated May 17, 1904.

Application filed August 27, 1903. Serial No. 171,006. (No model.)

To all whom it may concern:

Be it known that I, SERENE A. SEIPEL, a citizen of the United States, residing at Marietta, in the county of Washington and State of Ohio, have invented certain new and useful Improvements in Mechanical Means for Resetting Pins of Bowling-Alleys, of which the following is a specification.

This invention provides means for resetting pins of bowling-alleys mechanically, thereby obviating the necessity of having an attendant for performing this service. The device embodied in the invention is more especially adapted for resetting the pins in playing those games wherein the said pins are arranged in

The use of the device is very desirable for practice purposes also. For instance, many players find it difficult in bowling to hit a single pin which may be left standing after a "spare" or "strike" has been missed, and thus a player by employing this invention may become quite skilful in those plays which under other circumstances and without a device of this character might take a very considerable amount of time to learn when playing in the usual manner.

For a full description of the invention and the merits thereof and also to acquire a knowl30 edge of the details of construction of the means for effecting the result reference is to be had to the following description and drawings hereto attached.

While the essential and characteristic features of the invention are susceptible to modification, still the preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the rear end of a bowling-alley, showing my invention applied thereto. Fig. 2 is a side elevation of a bowling-alley, the central portion thereof broken away, having the resetting devices in proper position. Fig. 3 is a perspective view of the resetting-bar and the adjacent coöperating shaft which is operated thereby.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same

5° reference characters.

In the preferred arrangement of parts comprising my invention a platform 1 is arranged at the rear end of the alley 2, the latter being of course of the common type, the platform 1 being disposed at a slightly lower elevation 55 than the surface of the alley. Supports 3 of any suitable nature are utilized to sustain the platform in its relative position, as shown. The platform 1 is divided into a plurality of parts by partitions 4, which correspond in 60 number to the number of pins used. Depressions 5 intermediate the several partitions 4 receive the butt-ends of the pins in a manner readily apparent, forming seats therefor. Openings 6 centrally of the depressions 5 65 pass through the platform 1. Adjacent the platform, in rear thereof, is mounted a resetting-bar 7, having a plurality of deflected portions 7^a to receive the respective pins when the latter are in a fallen position. The de- 7° flected portions 7° are of a number corresponding to the number of pins 8 and are approximately angular in form, so as to center the pins when the same have been overthrown, to thereby dispose same in rear of the platform 1. 75 The resetting-bar 7 is pivoted to the platform. 1, as shown at 9, and is provided with upward extensions 10 adjacent the pivotal points thereof. The extensions 10 are connected by suitable means—such as a cable, rope, or the like—80 to a lever 11, which is disposed upon the alley adjacent the end from which the ball is thrown by the bowler.

In order to direct the butt-ends of the pins 8 toward the seats of depressions 5 upon the 85 platform 1, a shaft 12 is mounted adjacent the resetting-bar 7, and this shaft 12 is provided with a plurality of arms 13, which by means of flexible connections 14, which pass through the openings 6, are connected to the respec- 90 tive butt-ends of the pins 8. The shaft 12 is also provided with outermost arms 15, which are connected to arms 16 upon the resettingbar 7 by means of links 17. The shaft 12 is thus adapted for simultaneous operation as 95 the resetting-bar is actuated to raise the fallen pins, and this causes the arms 13, projected from the shaft, to be lowered, consequently directing the butt-ends of the pins to the seats of depressions 5 through the medium of the 100 connections 14. The connections 14 also serve to limit the movement of the pins 8 when same are struck by the ball, as will be readily

comprehended.

As soon as the bowler has knocked down all the pins, either by a "spare" or "strike" play, he merely grasps the lever 11, which is adjacent him, and by pulling upon the same raises the resetting-bar 7, this action simultaneously actuating the shaft 12 and the arms 13 in a manner before described, the player being then ready for another bowl.

The partitions 4 serve to confine the pins within a certain range of movement, constituting stops after a manner, so that the pins must necessarily fall within the deflected portions of the resetting-bar 7, to be supported thereby preparatory to the operation of the

said bar.

Having thus described the invention, what

is claimed as new is—

1. In a pin-resetting device for bowling-alleys, the combination with a platform for supporting the pins disposed at an elevation lower than the surface of the bowling-alley, a resetting-bar disposed adjacent the said platform, and partitions for separating the pins disposed upon the platform and means for directing the pins to their respective positions upon the platform after being overthrown.

2. In a pin-resetting device for bowlingalleys, the combination with a pin-supporting platform, a resetting-bar pivoted to the 35 said platform for raising the pins, a shaft disposed adjacent the resetting-bar, connecting means between the butt-ends of the pins and the said shaft, and means for actuation

of the said resetting-bar and shaft.

3. In a pin-resetting device for bowlingalleys, the combination with a pin-supporting platform, a resetting-bar pivoted to the said platform for raising the pins, a shaft disposed adjacent the resetting-bar, connecting means between the butt-ends of the pins and the said shaft, and means for simultaneously operating the said bar and shaft.

4. In a pin-resetting device for bowlingalleys, the combination with a pin-supporting platform, a resetting-bar pivoted to the said platform and provided with a plurality of deflected portions, a shaft disposed adjacent the resetting-bar for coöperation therewith, connecting means between the said shaft and the butt-ends of the pins, connecting means between the resetting-bar and the aforesaid shaft for effecting simultaneous operation of said bar and shaft, and means for actuating

50 5. In a pin-resetting device for bowlingalleys, the combination with a platform for supporting the pins, a resetting-bar pivoted to

the bar so as to raise the pins.

the said platform and provided with a plurality of deflected portions, a shaft mounted adjacent the resetting-bar and provided with a 65 plurality of arms projected therefrom, connecting means between the butt-ends of the pins and the arms of the shaft aforesaid, and connecting means between the resetting-bar and the shaft for effecting simultaneous oper-70 ation thereof.

6. In a pin-resetting device for bowling-alleys, the combination with a platform for supporting the pins, a plurality of seats disposed upon the platform, a resetting-bar piv-75 oted to the platform and provided with a plurality of deflected portions, a shaft mounted adjacent the said bar and having a plurality of arms, connecting means between the said arms and the butt-ends of the pins whereby, upon actuation of the shaft aforesaid, the said butt-ends of the pins will be directed toward their respective seats upon the platform, and means for effecting simultaneous operation of the resetting-bar and shaft.

7. In a pin-resetting device for bowlingalleys, the combination with a platform, a plurality of partitions disposed upon the platform, seats located intermediate said partitions, a resetting-bar pivoted to the platform and pro- 90 vided with a series of deflected portions corresponding in number to the number of pins, a shaft mounted adjacent the resetting-bar for simultaneous operation therewith, arms projected from the said shaft, connecting means 95 between the said arms and the butt-ends of the pins whereby, upon actuation of the shaft, the butt-ends aforesaid will be directed toward their respective seats upon the platform, links connecting the shaft to the resetting- 100 bar, and an operating-lever connected to the resetting-bar for simultaneously effecting operation of the same and actuation of the shaft.

8. In a pin-setting device for bowlingalleys, the combination with a pin-supporting 105 platform, a resetting-bar disposed in rear of said platform for raising the pins, and means for directing the pins to their respective positions upon the platform after same have

been overthrown.

9. In a pin-resetting device for bowling-alleys, the combination with a pin-supporting platform, a resetting-bar pivoted to the rear

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of the said platform for raising the pins, and means cooperating with the resetting-bar for 115 positively directing the pins to their respective positions upon the platform after same have been overthrown.

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

SERENE A. SEIPEL. [L. s.]

Witnesses:

H. E. Jordan, T. J. Summers.