

May 26, 1931.

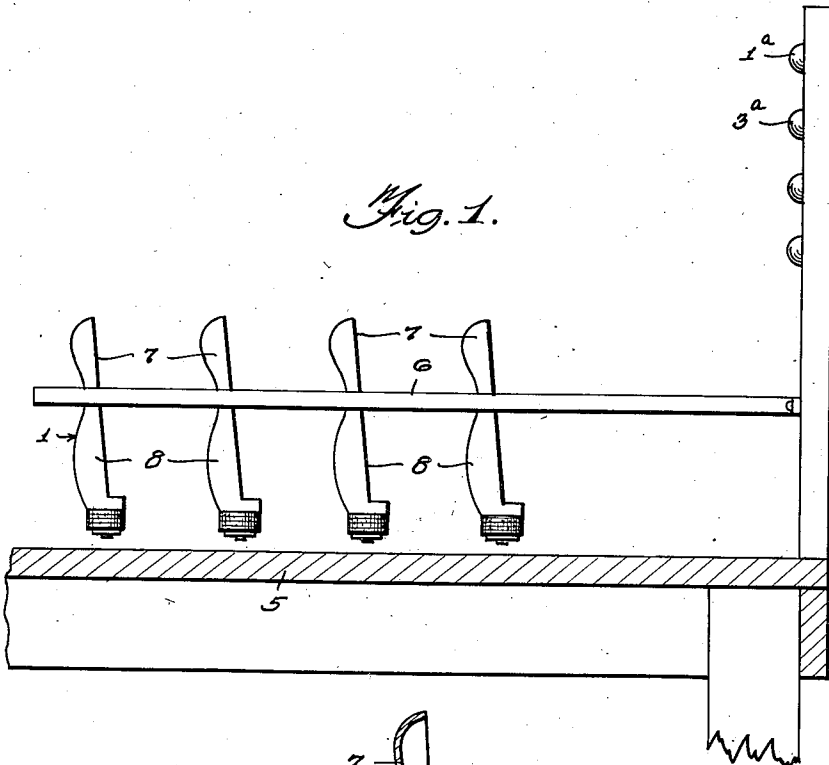
J. H. SHEARS

1,807,074

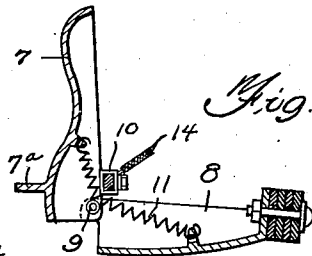
GAME

Filed March 19, 1928

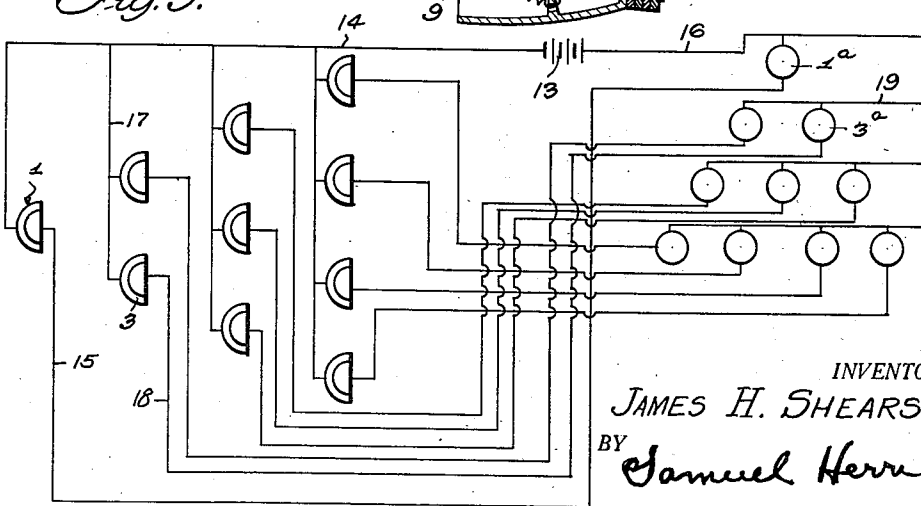
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



INVENTOR.  
JAMES H. SHEARS,  
BY Samuel Herricks  
ATTORNEY.

# UNITED STATES PATENT OFFICE

JAMES H. SHEARS, OF OKLAHOMA CITY, OKLAHOMA

## GAME

Application filed March 19, 1928. Serial No. 262,910.

This invention relates to games, and more particularly to a game of the character of that illustrated in Patent No. 1,531,420, issued to me on March 31st, 1925.

The apparatus constituting the subject matter of the aforesaid patent is in the nature of ten-pins. That is to say, it comprises a group of ten-pins supported in the triangular formation common to bowling or duck pins. These pins are made in two parts, the upper parts being held stationary in a frame, and the lower parts being hinged with respect to the upper parts, and being swung upon their hinges by the impact of the ball thereagainst. The movement of the ball may be under the influence of a cue, as in playing pool, or the ball may be rolled by hand, as in bowling. The pins of the patent aforesaid carry contact making elements, so that a contact may be made to complete an electric circuit when the pin is struck, and its lower portion is moved upon its hinge.

The present application goes further than the prior patent in that it associates with the pins, a display board having electric lights thereon, arranged in the same triangular formation as the pins, together with electric connections, through which the lights will be illuminated when the pins are struck, the arrangement being such that when the head pin, for example, is struck, the head light on the display board will be illuminated. That is to say, the connections are such that if the number 10 pin is struck, the number 10 light will be lighted. Thus the player will be apprised of the exact position of the pins that have been struck, and of the pins that remain standing, and is thereby better able to gauge his succeeding shots.

In the accompanying drawings:

Fig. 1 is a transverse sectional view through the table of the game apparatus, with the pins and light supporting board in elevation.

Fig. 2 is a detail view of one of the pins, and

Fig. 3 is a diagrammatic view, illustrating one form of wiring that may be employed.

Like numerals designate corresponding parts in all of the figures of the drawings.

Referring to the drawings, 5 designates the

bed of the table of the apparatus, along which the balls are rolled. A fixed frame 6 supports the pins in triangular formation above the table, with their lower ends free of the table. The upper portions 7 of the pins are fixed and the lower portions 8 of the pins are hinged to the upper portions at 9. Contact straps 10 are carried by insulating bars 10<sup>a</sup> and are contacted by springs 11 when the lower portion of the pin is struck and thrown upwardly. The springs act to hold the lower portion of the pin in either of its limits of movement, since it acts upon opposite sides of the hinge 9 at said limits of movement.

By referring to the diagrammatic Fig. 3, it will be seen that the connections are such that when any individual pin is struck, and its contact members are brought together, a circuit is completed to cause the illumination of the corresponding light. For example, when the head or number 1 pin, designated number 1, is struck, a circuit is completed from a battery or other source of E. M. F. 13, through conductor 14, head pin 1, conductor 15, head light 1<sup>a</sup> and conductor 16, back to the battery. If number 3 pin is struck, a circuit is completed from battery 13, through conductor 14, connection 17, pin 3, conductor 18, light 3<sup>a</sup>, connection 19, and conductor 16, back to the battery. Since the other connections are the same as those described, no further description is deemed necessary. One of the conductors for each pin leads from its strap 10, the circuit being completed through spring 11, and body of the pin to bracket 7<sup>a</sup> and thence to the other conductor.

The arrangement shown and described is of utility and value in that it enables the player to ascertain, at a glance, the relative positions of the pins remaining to be struck, and this, in turn, enables him to gauge his succeeding shots to better advantage.

Furthermore, the novelty of the apparatus appeals to the player, increases his enjoyment of the game, and correspondingly increases the revenue of the proprietor of the apparatus.

It is to be understood that the invention is not limited to the precise construction set forth, but that it includes within its purview

whatever changes fairly come within either the terms or the spirit of the appended claims.

Having described my invention, what I claim is:

5 1. A device of the character described, comprising a group of two-part pins transversely of the alley and above the level of the pins arranged in the usual triangular relation common to the game of bowling a bed or alley at  
10 one end of which said group of pins is located, the upper portions of said pins being fixed, and the lower portions of said pins being hinged with respect to the upper portions, a  
15 group of lights arranged in a substantially vertical plane in juxtaposition to the pins, and corresponding in triangular formation to the formation of the pins, and electrical connections between the pins and the lights of a nature to cause the illumination of the lights  
20 when the lower portions of the pins are moved to circuit closing position by the contact of a ball therewith, the connections being so arranged that each pin is connected to that light to which it corresponds, in the triangular dis-  
25 position of the pins and lights.

2. A game apparatus comprising a bed or runway along which balls may be rolled, in combination with a group of pins supported at one end of the runway out of contact with  
30 the runway, contact making elements carried by the several pins arranged to complete an electric circuit with respect to such of the pins as are struck by the balls rolled along the runway, a light supporting board at the rear end  
35 of the runway extending transversely thereof, a group of lights arranged in triangular formation and in correspondence with the formation of the pins, and electrical connections between the several lights and the several  
40 pins, so arranged that when a given pin, in the pin formation, is struck by a ball, the corresponding light, in the light formation, will be illuminated, said lights being supported by the board materially above the level of the  
45 pins.

In testimony whereof he affixes his signature.

JAMES H. SHEARS.

50

55

60

65