

(No Model.)

A. E. ARP.
GAME COUNTER.

No. 438,977.

Patented Oct. 21, 1890.

Fig. 1.

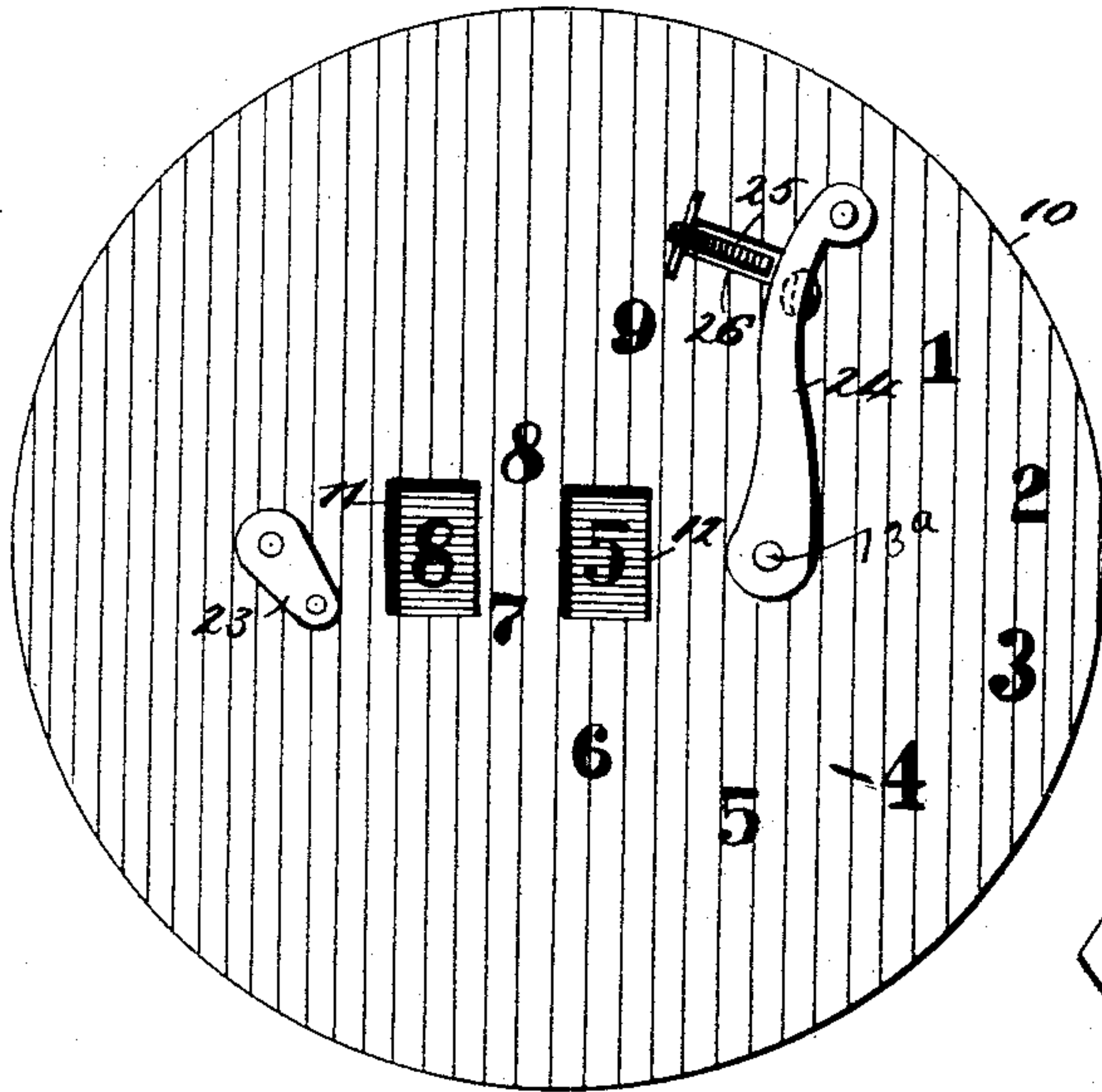


Fig. 5.

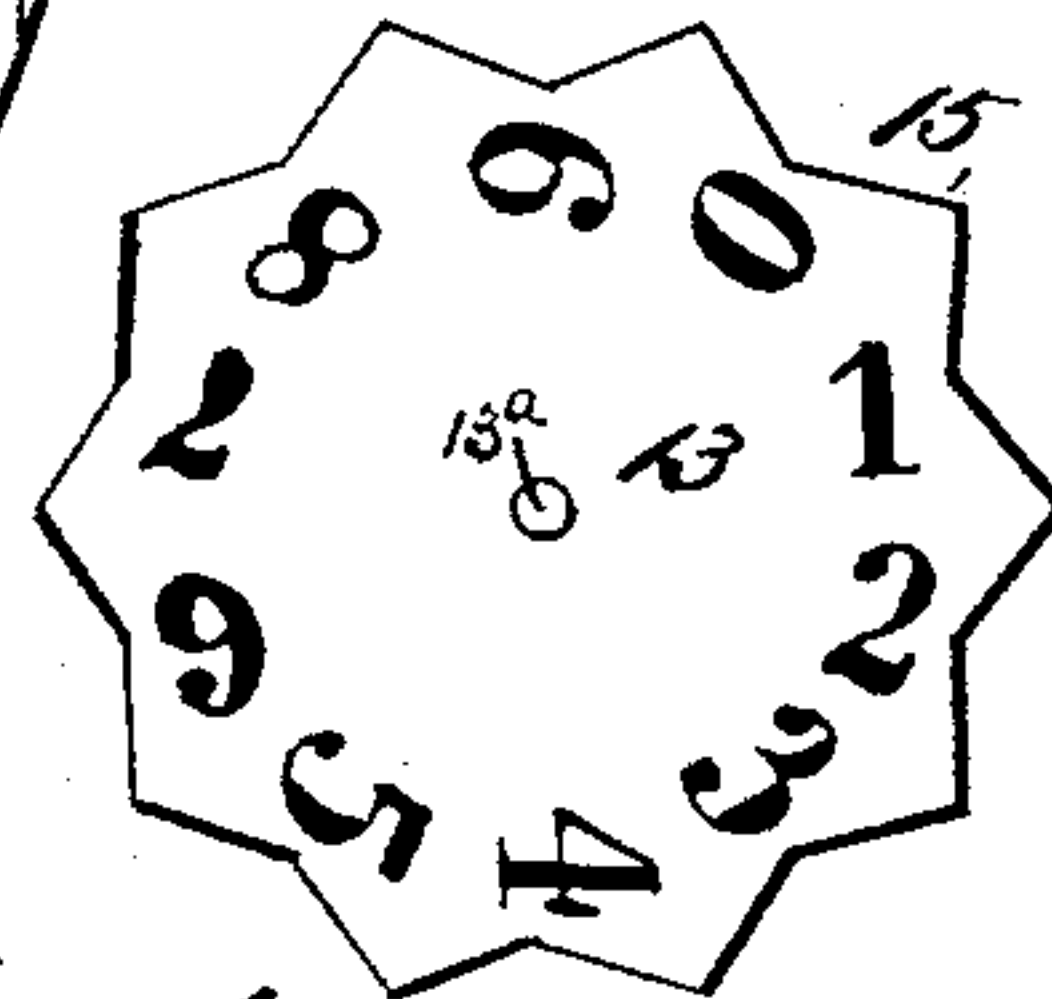


Fig. 3.

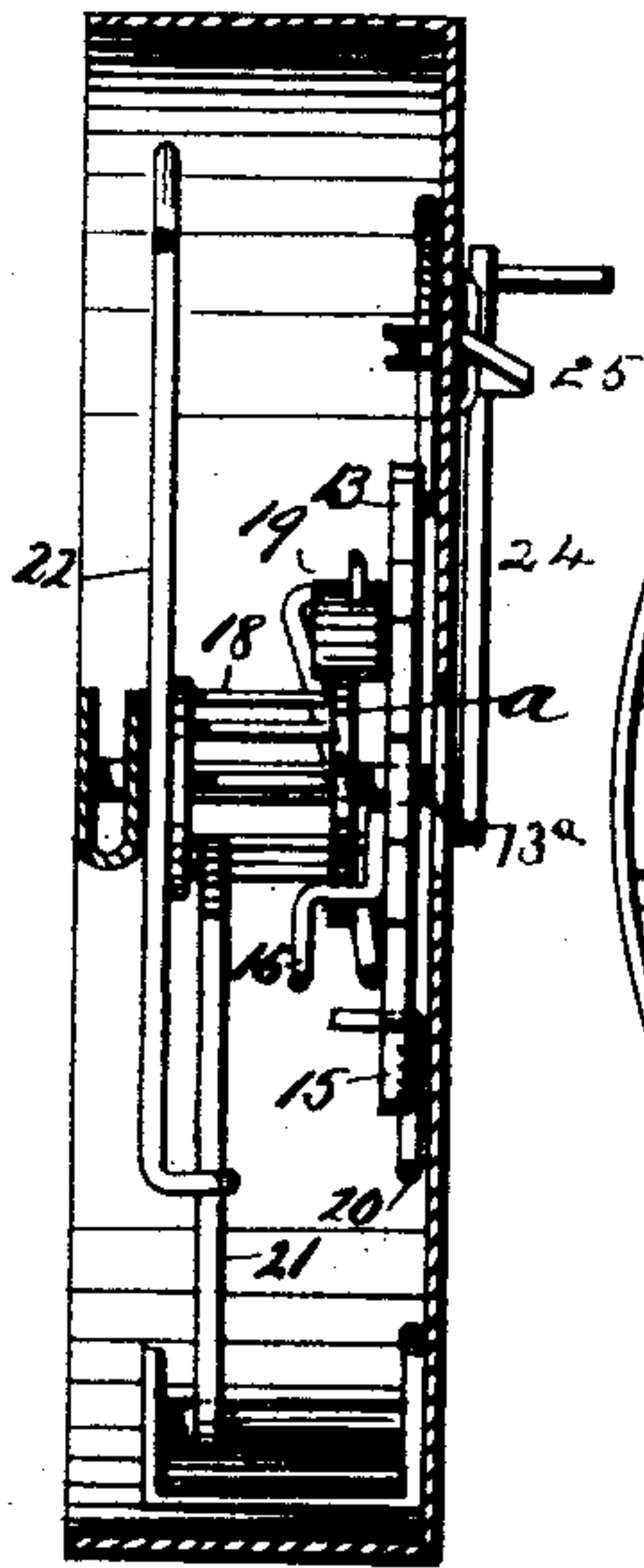


Fig. 2.

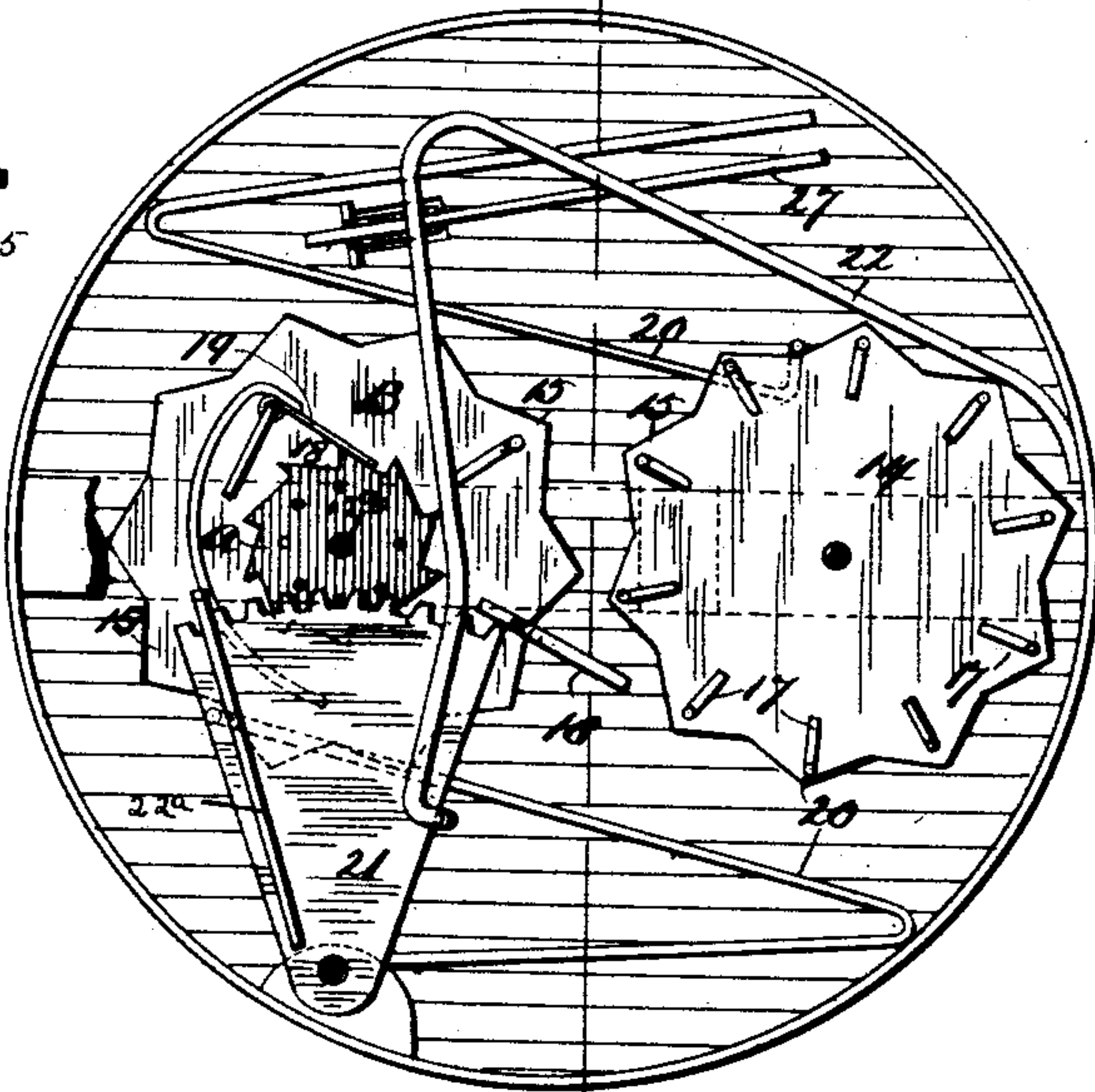
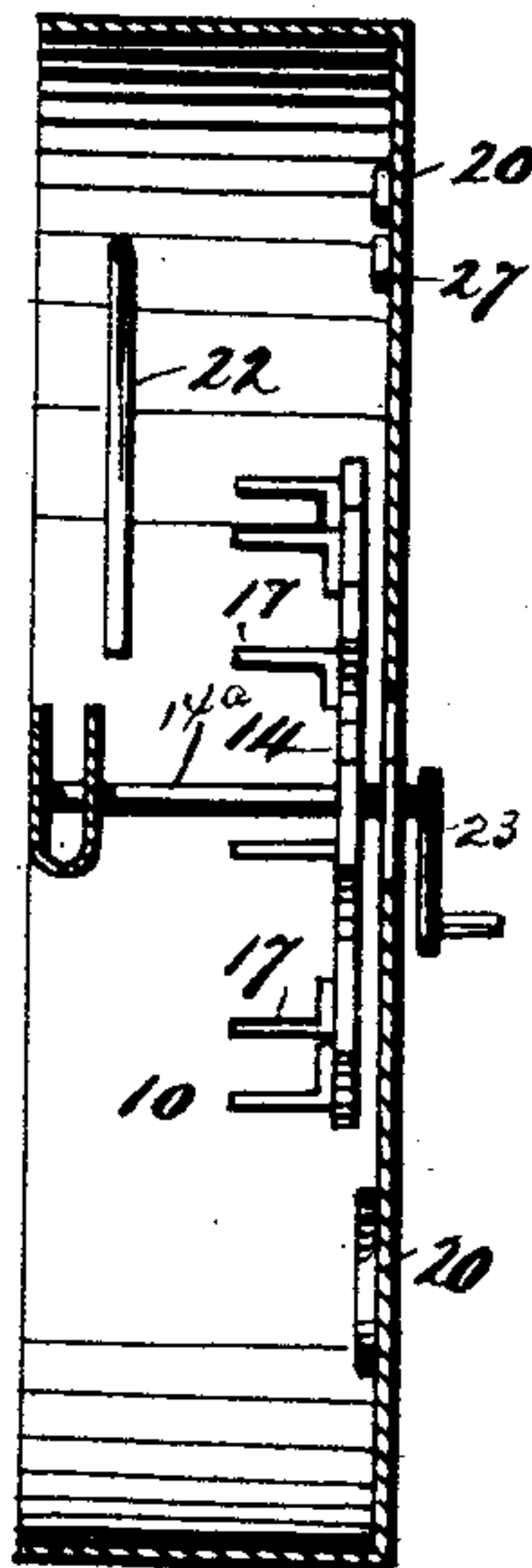


Fig. 4.



WITNESSES:

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ARTHUR EDWARD ARP, OF SPIRIT LAKE, IOWA.

GAME-COUNTER.

SPECIFICATION forming part of Letters Patent No. 438,977, dated October 21, 1890.

Application filed June 9, 1890. Serial No. 354,719. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR EDWARD ARP, of Spirit Lake, in the county of Dickinson and State of Iowa, have invented a new and useful Improvement in Game-Counters, of which the following is a full, clear, and exact description.

My invention relates to an improved game counter or scorer, and has for its object to provide a device of simple and economic construction for use in connection with billiards, pool, ten-pins, cards, and other games, which will accurately indicate the total of the score at all times.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a front elevation of the counter. Fig. 2 is a rear view of the same, a portion of the back of the casing being removed. Figs. 3 and 4 are sections on line $x x$ of Fig. 2, looking in opposite directions, as indicated by the arrows; and Fig. 5 is a front elevation of one of the dials detached.

The casing 10 may be of any desired shape, preferably, however, circular, and is provided in its front face with two adjoining panel-openings 11 and 12. Within the casing two dials 13 and 14 are pivoted, the pintles 13^a and 14^a whereof extend through the front face of the casing, the dial 13 being loosely mounted on its pintle. The periphery of each dial has formed thereon a number of angular teeth 15, and upon the outer face of the dials digits are produced, commencing with "0" and ending with "9," the said digits being circularly arranged and located near the margin. The number of teeth 15 is preferably made to correspond to the number of digits.

The dials are placed side by side, and are so located that a digit will at all times be visible through the panel-openings. The dial 13, the digits of which represent units, has attached to its inner face an arm 16, extending upwardly and outwardly beyond the periphery and adapted to engage with pins 17, attached to the inner face of the dial 14, extending

outward at a right angle therefrom, the digits of the dial 14 being adapted to represent tens. A pin 17 is secured to each tooth, as is best illustrated in Fig. 2.

The pintle 13^a of the dial 13 has secured thereto a lantern-wheel 18, having a ratchet-surface a formed integral with its outer face. The ratchet-surface of the lantern-wheel is engaged by a spring-pressed dog 19, pivoted upon the dial 13. The toothed periphery of each of the dials is engaged by a spring pawl 20, the object of the pawls being to prevent the dials from turning unless so desired.

A rack 21 is pivoted at one end in the casing, the said rack being preferably segmental, and the toothed surface of the rack is adapted for engagement with the spokes of the lantern-wheel. The teeth of the rack are held in constant engagement with the lantern-wheel by a spring 22, secured at one end to the casing and having a bearing at the other end against one side of the rack, as is best shown in Fig. 2. The rack may, if desired, be provided with a stop 22^a, adapted when employed to limit the movement of the rack in one direction.

A crank 23 is secured to the projecting end of the pintle 14^a of the dial 14, and a longer crank 24 is attached to the pintle 13^a of the dial 13, and in the path of the revolution of the crank-arm 24 digits from "0" to "9" are produced upon the outer face of the casing, as illustrated in Fig. 1. A stop 25 is pivoted in an opening 26, produced in the front face of the casing, which stop is normally held to project beyond the casing and form a bearing for the crank 24 by a spring 27, having an engagement with its under face. The outer surface of the stop 25 is beveled in order that when the crank-arm 24 is carried around the circle of digits and past the digit "9" the arm will ride up upon the stop, press the same downward, and be able to reach a position over the digit "0" immediately in front of the stop, which springs outward the moment the arm has passed it.

In operation, the dials having been set so that an "0" appears at each panel-opening if the player should make four points the crank-arm 24 is carried downward until it is brought over the digit "4," whereupon the figure "4" on the dial 13 will be visible at the

opening 12 in the casing. The crank-arm is then released, and the spring-pressed rack 21, acting upon the lantern-wheel 18, will force the crank-arm back to its normal position in engagement with the stop 25. Should the next gain be 12, the crank-arm is carried around the circle and over the stop until it reaches the figure "2" upon the face of the casing, whereupon the arm is released and is automatically returned to its normal position. This will have caused the figure "16" to appear at the panel-openings, the "1" appearing in the panel 11 and the "6" in the panel 12, as the dial 13 will have made more than a complete revolution, and at the complete revolution of the dial 13 the arm 16 thereof is brought into engagement with one of the pins 17 on the dial 14 and moves the dial one tooth, thereby exposing the figure "1" instead of the "0" at the opening 11, and so all the plays are constantly added as the arm is carried to the proper numbers and the totals are rendered visible at the panel-openings. When the play is over and the dials are to be returned to their normal positions, one dial is turned by means of the crank-arm 24 and the other by the crank-arm 23.

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

1. In a game-scorer, the combination, with a casing having panel-openings therein and digits produced upon the outer face of the casing, of two dials journaled within the casing and provided with digits thereon capable of registering with the panel-openings, pins projected upward from one of the dials, an arm projected outward from the other dial, adapted to engage with said pins, a lantern-wheel attached to the spindle of the arm-carrying dial, a spring-pressed segmental rack pivoted at one end in the casing and engaging with the lantern-wheel, and a ratchet-connection between the dial and the lantern-wheel, as and for the purpose specified.

2. In a game-scorer, the combination, with

a casing provided with panel-openings, a dial mounted to turn with a spindle journaled in the casing, a second dial held to turn upon a spindle also journaled in the casing, pins projected from one dial, and an arm extending from the opposite dial, adapted for engagement with the pins, of a lantern-wheel attached to the spindle of the loosely-mounted dial, provided with a ratchet at one end, a spring-pressed dog secured to the loosely-mounted dial, adapted for engagement with the ratchet, a spring-pressed segmental rack pivoted at one end in the casing and adapted for engagement with the lantern-wheel, and a crank-arm secured to the spindle of the loosely-mounted dial, the said crank-arm being adapted to rotate over the digits of the casing, substantially as shown and described.

3. In a game-scorer, the combination, with a casing provided with panel-openings, a dial mounted to turn with a spindle journaled in the casing, a second dial held to turn upon a spindle also journaled in the casing, pins projected from one dial, and an arm extending from the opposite dial, adapted for engagement with the pins, of a lantern-wheel attached to the spindle of the loosely-mounted dial and provided with a ratchet at one end, a spring-pressed dog secured to the loosely-mounted dial and adapted for engagement with the ratchet, a spring-pressed segmental rack pivoted at one end in the casing and adapted for engagement with the lantern-wheel, a crank-arm secured to the spindle of the loosely-mounted dial, the said crank-arm being adapted to rotate over the digits of the casing, a spring-actuated stop journaled in the casing, having a beveled outer face and adapted for engagement with the crank-arm, and means for rotating the dials independently, as and for the purpose specified.

ARTHUR EDWARD ARP.

Witnesses:

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