

(No Model.)

F. D. SMITH.
GAME COUNTER.

No. 440,374.

Patented Nov. 11, 1890.

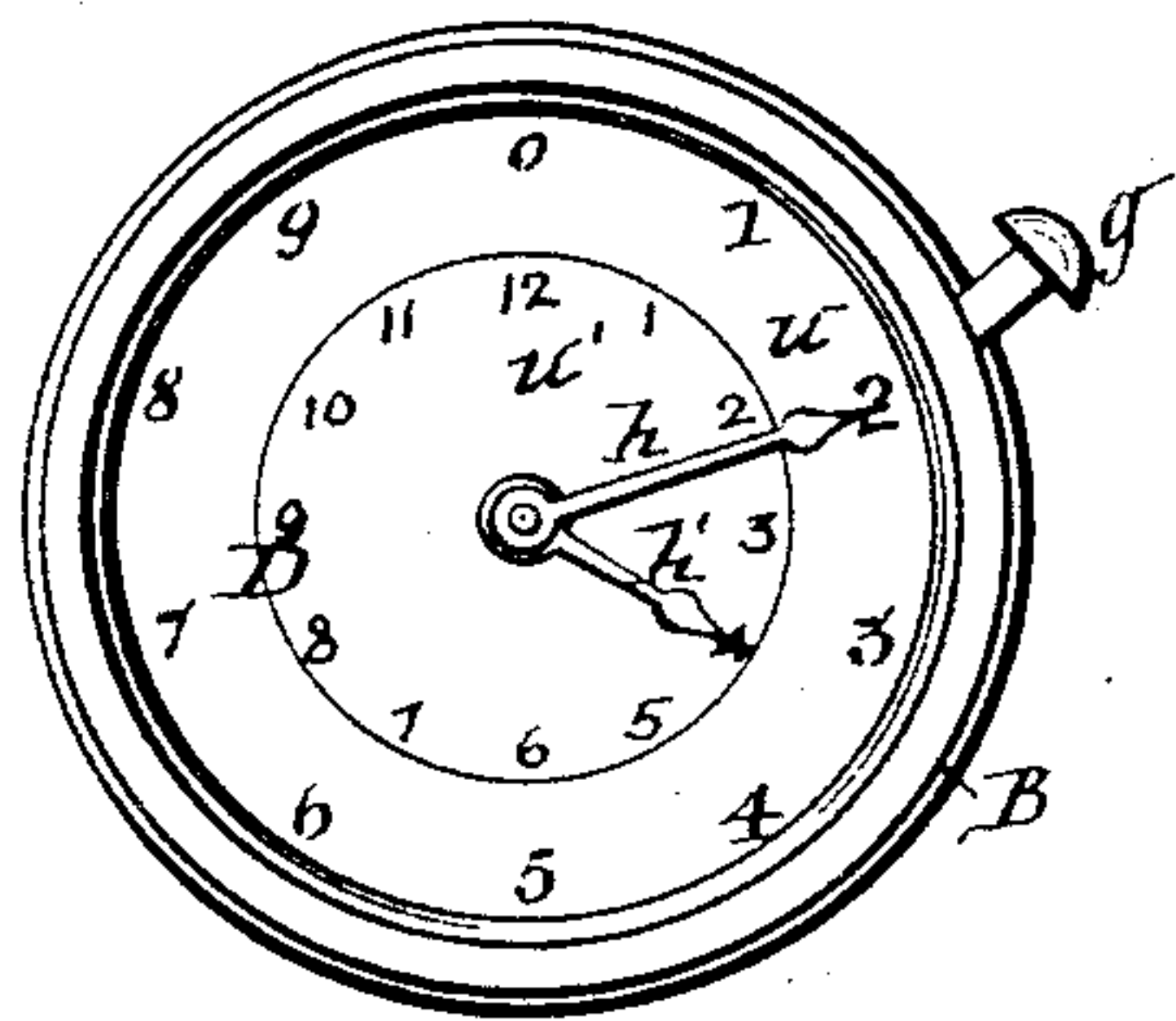


Fig. 1

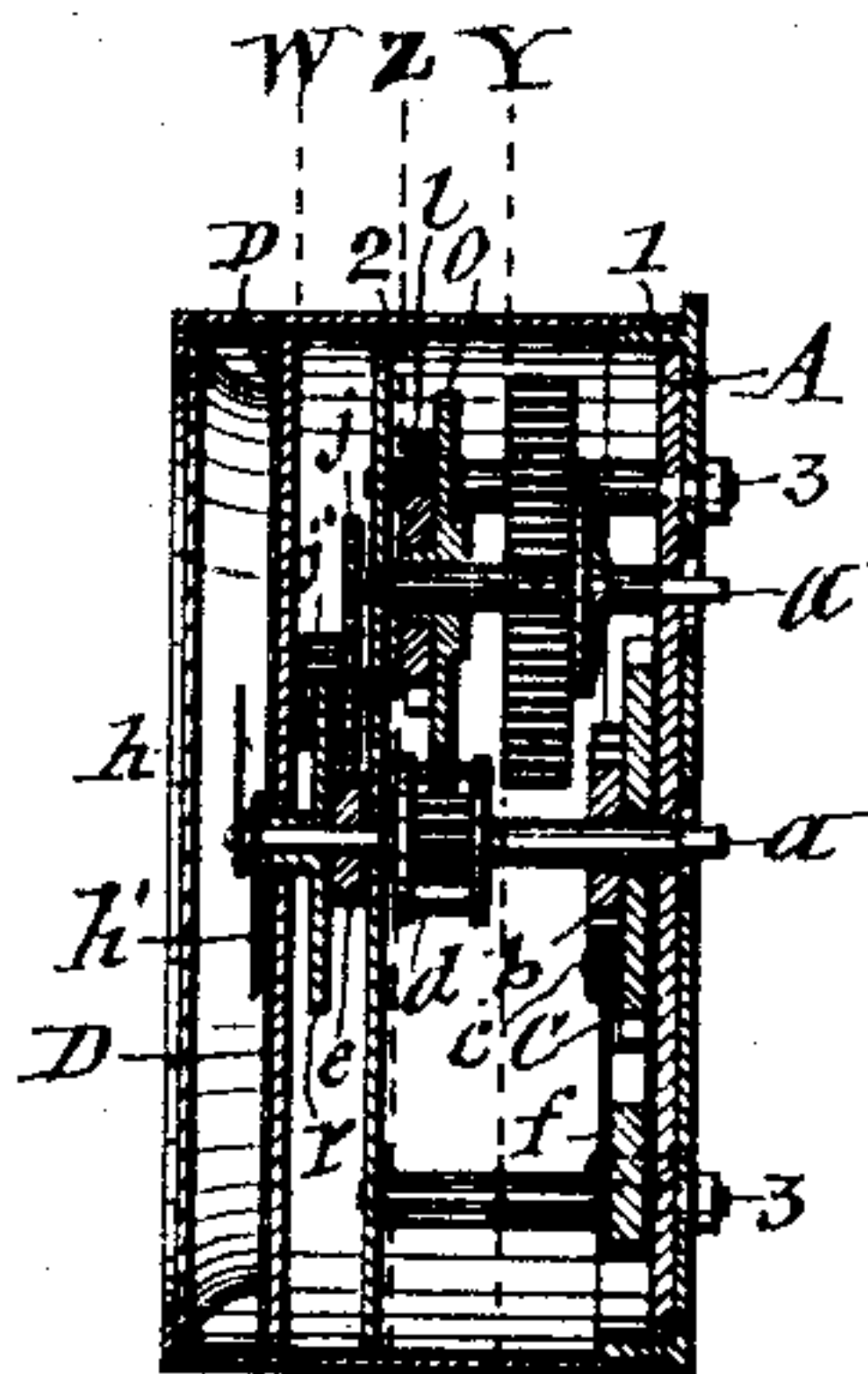


Fig. 2

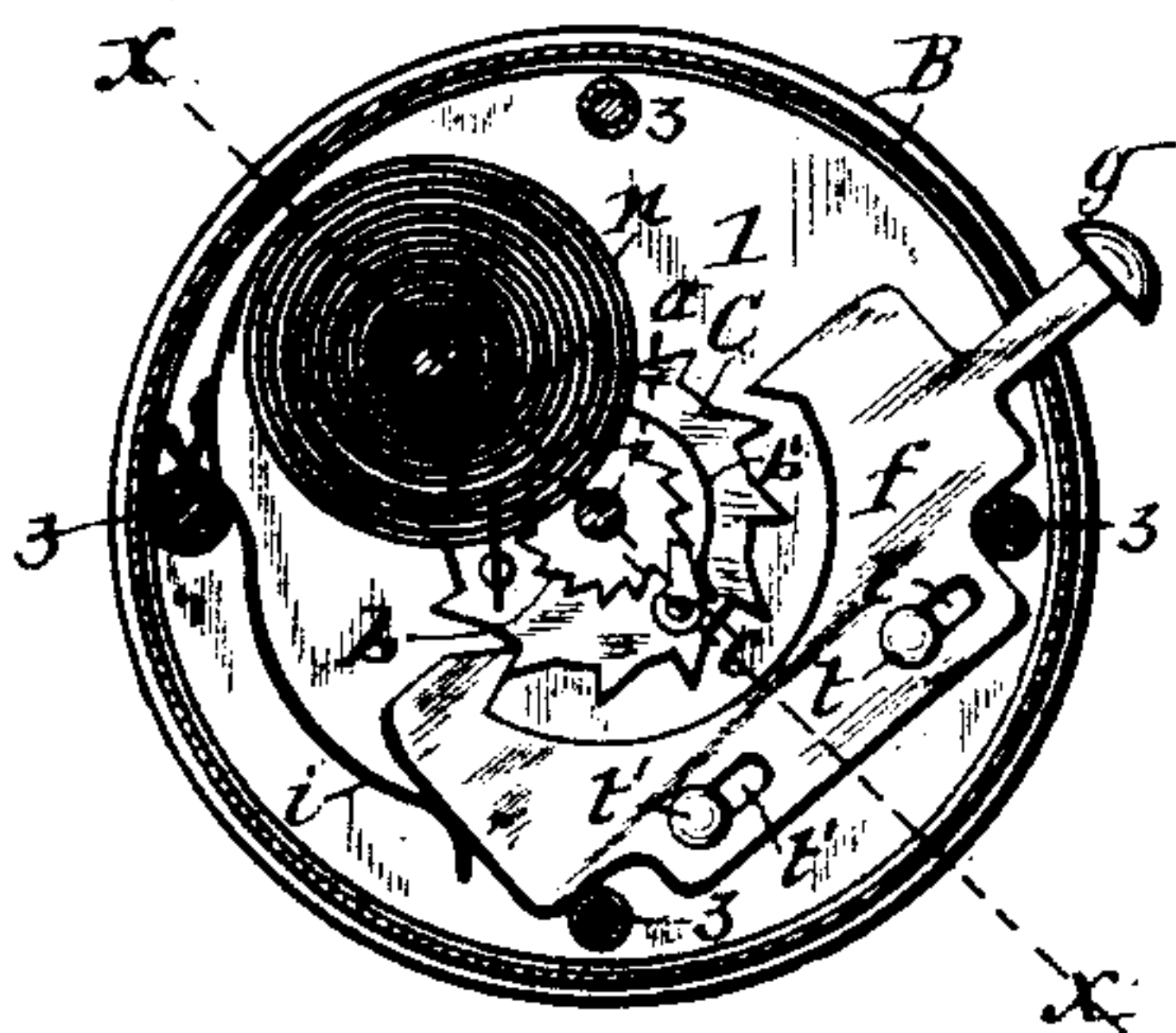


Fig. 3

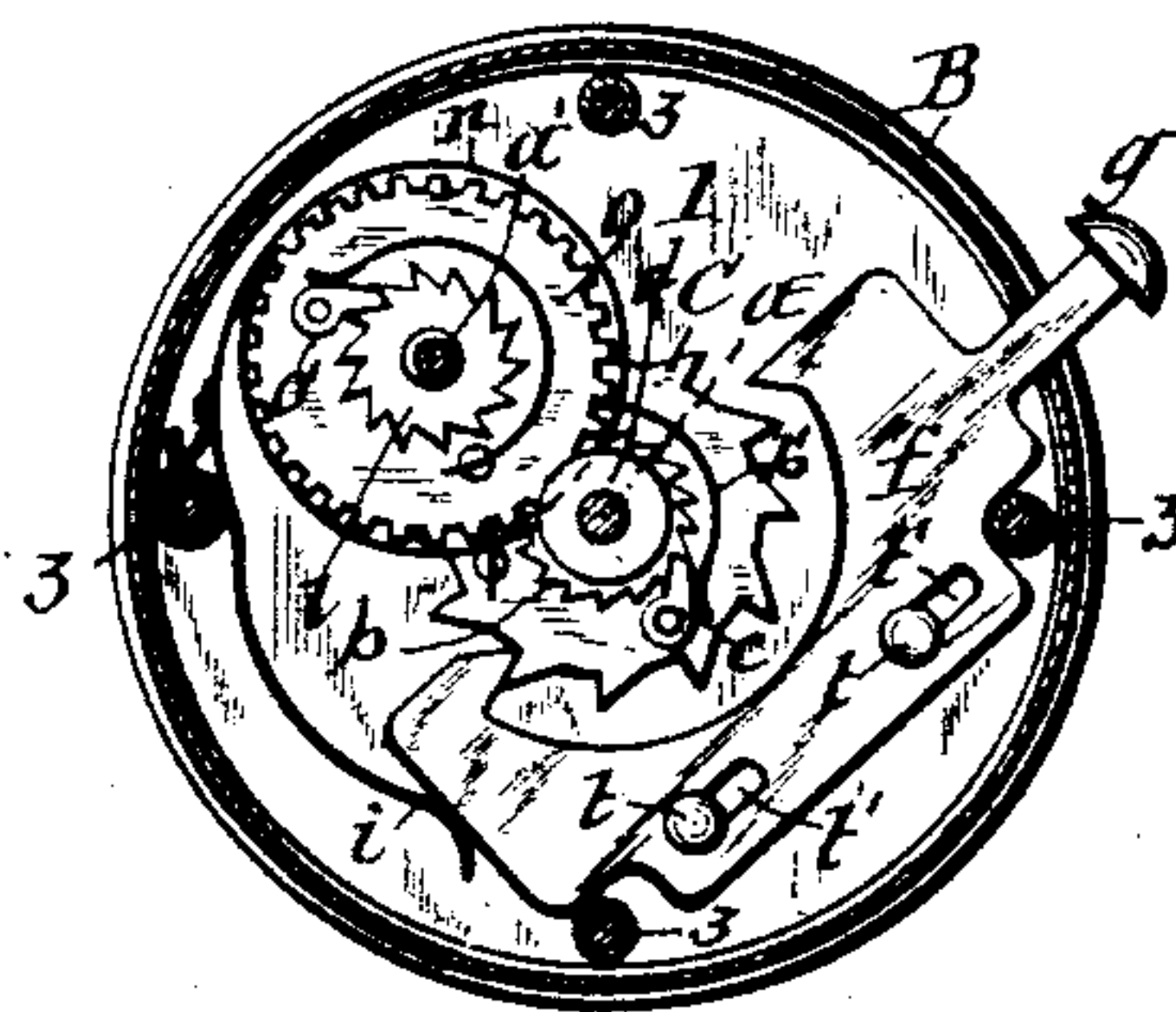


Fig. 4

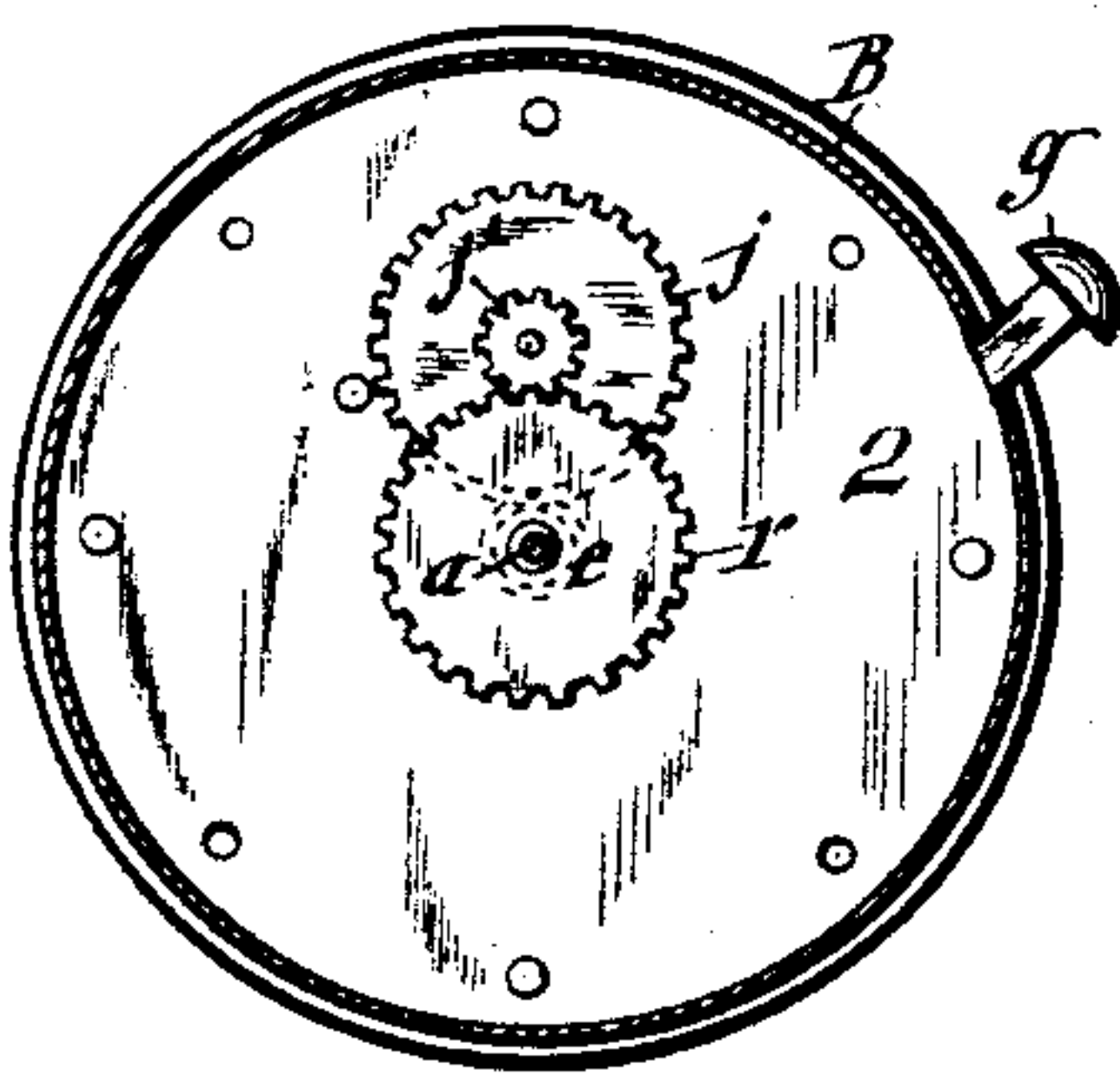


Fig. 5

WITNESSES:

C. L. Bendixon
Mark W. Dewey

INVENTOR :

INVENTOR:
Ferdinand H. Smith
BY
Hull, Lucas & Hull
his ATTORNEYS

UNITED STATES PATENT OFFICE.

FERDINAND D. SMITH, OF CORTLAND, NEW YORK.

GAME-COUNTER.

SPECIFICATION forming part of Letters Patent No. 440,374, dated November 11, 1890.

Application filed July 18, 1890. Serial No. 359,210. (No model.)

To all whom it may concern:

Be it known that I, FERDINAND D. SMITH, of Cortland, in the county of Cortland, in the State of New York, have invented new and useful Improvements in Game-Counters, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

The invention relates to the class of registering or counting devices employed by card-players for keeping account of the number of points made in the game and of the number of games played; and the invention consists in a novel, simple, and efficient spring-actuated mechanism moving two hands or indicators at different speeds over dials graduated to represent, respectively, the number of points made in a game and the number of games played, and the whole controlled by a manipulative anchor, as hereinafter fully described, and specifically set forth in the claims.

In the annexed drawings, Figure 1 is a face view of a game registering or counting device embodying my invention. Fig. 2 is a transverse section on line *x x*, Fig. 3; and Figs. 3, 4, and 5 are transverse sections taken in the planes of *y y*, *z z*, and *w w* of Fig. 2.

Similar letters of reference indicate corresponding parts.

A represents the frame on which the mechanism is mounted, and which consists of two parallel plates 1 and 2, disposed one over the other and sustained a proper distance apart by posts 3 3, interposed between said plates and firmly secured thereto.

Over the top plate 2 is the duplex dial D, which is secured to said plate and sustained a short distance from it.

To the centers of the plates 1 and 2 is pivoted a post *a*, which protrudes through the back plate 1, and is formed thereat with a square or angular stem for the application of a key by which to turn the post when desired to set the hands or indicators. The opposite end of the said post is extended through the dial D, and has secured to its protruding end the hand or indicator *h*.

Between the plates 1 and 2 is the escapement-wheel C, disposed concentric with the post *a* and loosely fitted thereto, and over said escapement-wheel is a ratchet-wheel *b*,

rigidly attached to the post *a*. A dog *c* is pivoted to the escapement-wheel and held in engagement with the ratchet-wheel *b* by a spring *b'*, which is attached at one end to the escapement-wheel and bears with the opposite end on the aforesaid dog, as shown in Fig. 3 of the drawings.

Above the ratchet-wheel *b* is a pinion *d*, rigidly secured to the post *a*, as shown in Fig. 4 of the drawings, and with this pinion meshes a gear-wheel *o*, which is mounted loosely on a post *a'*, pivoted to the plates 1 and 2, as shown in Fig. 2 of the drawings. This latter post is surrounded by a coil-spring *n*, which is connected at one end to said post and at the opposite end to the frame A.

Over the wheel *o* is a ratchet-wheel *l*, fastened to the post *a'*, and a dog *o'*, pivoted to the wheel *o*, is held in engagement with the ratchet-wheel *l* by a spring connected at one end to the wheel *o* and pressing with the opposite end on the said dog, as shown in Fig. 4 of the drawings.

f represents the anchor, which slides on the plate 1, and is guided in a tangential direction in relation to the escapement-wheel by means of lugs *t t*, secured to the plate 1 and projecting through slots *t' t'* in the anchor, as illustrated in Fig. 3 of the drawings. Said anchor has projecting from one of its ends a push-pin *g*, which protrudes through a slot in the side of the case B, which incloses the mechanism, and against the opposite end of the anchor presses a spring *i*, which forces the anchor longitudinally in opposition to the push-pin.

Between the plate 2 and dial D is a pinion *e*, fastened to the post *a*, and a gear-wheel *r*, fitted loosely on said post. On a spindle between the aforesaid plate and dial and secured thereto is pivoted a gear-wheel *j*, which meshes with the pinion *e*, and to the said gear-wheel is fastened a pinion *j'*, which meshes with the wheel *r*. This latter wheel is formed with a sleeve, which protrudes through the dial D and has the hand *h'* attached to it. By means of the intermediate gears *j* and *j'* the hand *h* is caused to turn faster than the hand *h'*. The portion *u* of the dial D to which the hand *h* points is graduated to represent the number of points made in the game, and the other portion *u'* of the dial to which the hand

h' points is marked to represent the number of games played.

In operating the described register or counter the person in charge thereof presses the push-bar g inward a number of times equal to the number of points made in the game. By this movement the anchor f is reciprocated and caused to allow the escapement-wheel C to turn intermittently with a number of impulses equal to the number of the pressures applied to the push-bar, and consequently the hand h receives a corresponding number of impulses, which move said hand to the mark on the dial portion u indicating said number. The hand h' is at the same time moved part way toward the number on the dial portion u' , indicating the number of the game in progress, and by the time the hand h arrives at the number equal to the number of points required to make a game the hand h' is moved to the number indicating the number of games played.

It is obvious that the gears can be variously proportioned to move the hands h h' at different speeds, according to the different number of points required to make different games. It is also obvious that separated dials may be provided for the hands and arranged either side by side or one under the other.

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

1. In combination with the dial, pivoted post a , having the hand h attached to it, and spring-actuated gears imparting motion to said post, the escapement-wheel C , mounted loosely on said post, the ratchet-wheel b , fixed to the post a , the dog c , connected to the escapement-wheel and engaging said ratchet-wheel, and a manipulative anchor adapted to engage and release the escapement-wheel, as set forth.

2. In combination with the frame A , dial D ,

pivoted post a , and the hand h , attached to said post, the pinion d , rigidly attached to the post a , the post a' , pivoted to the frame, the coil-spring n , connected to the latter post and frame, the gear-wheel o , fitted loosely to the post a' and engaging the pinion d , the ratchet-wheel l , fixed to said post, the dog o' , connected to the wheel o and engaging the wheel l , the escapement-wheel C , connected to the post a , the anchor f , provided with the push-pin g , and the spring i , pressing on the anchor in opposition to the push-pin, substantially as described and shown.

3. In combination with the frame A , dial D , pivoted post a , and hand h , attached to said post, the escapement-wheel C , loosely connected to the post a , the anchor f , guided tangentially in relation to the escapement-wheel, the push-pin g , extending from one end of the anchor, the spring i , pressing against the opposite end of the anchor, the ratchet-wheel b , fixed to the post a , the dog c , connected to the escapement-wheel and engaging the aforesaid ratchet-wheel, the pinions d and e , rigidly attached to the aforesaid post, the gear-wheel r , loosely on said post, the post a' , pivoted to the frame, the coil-spring n , connected to said latter post and frame, the gear-wheel o , loosely on the post a' and engaging the pinion d , the ratchet-wheel l , fixed to said latter post, the dog o' , connected to the wheel o and engaging the wheel l , the intermediate gear and pinion j and j' , fastened to each other and engaging, respectively, the pinion e and wheel r , and the hand h' , connected to the latter wheel, all combined to operate substantially as described and shown.

In testimony whereof I have hereunto signed my name this 11th day of July, 1890.

FERDINAND D. SMITH. [L. S.]

Witnesses:

R. B. STONE,

D. W. VAN HOESEN.