

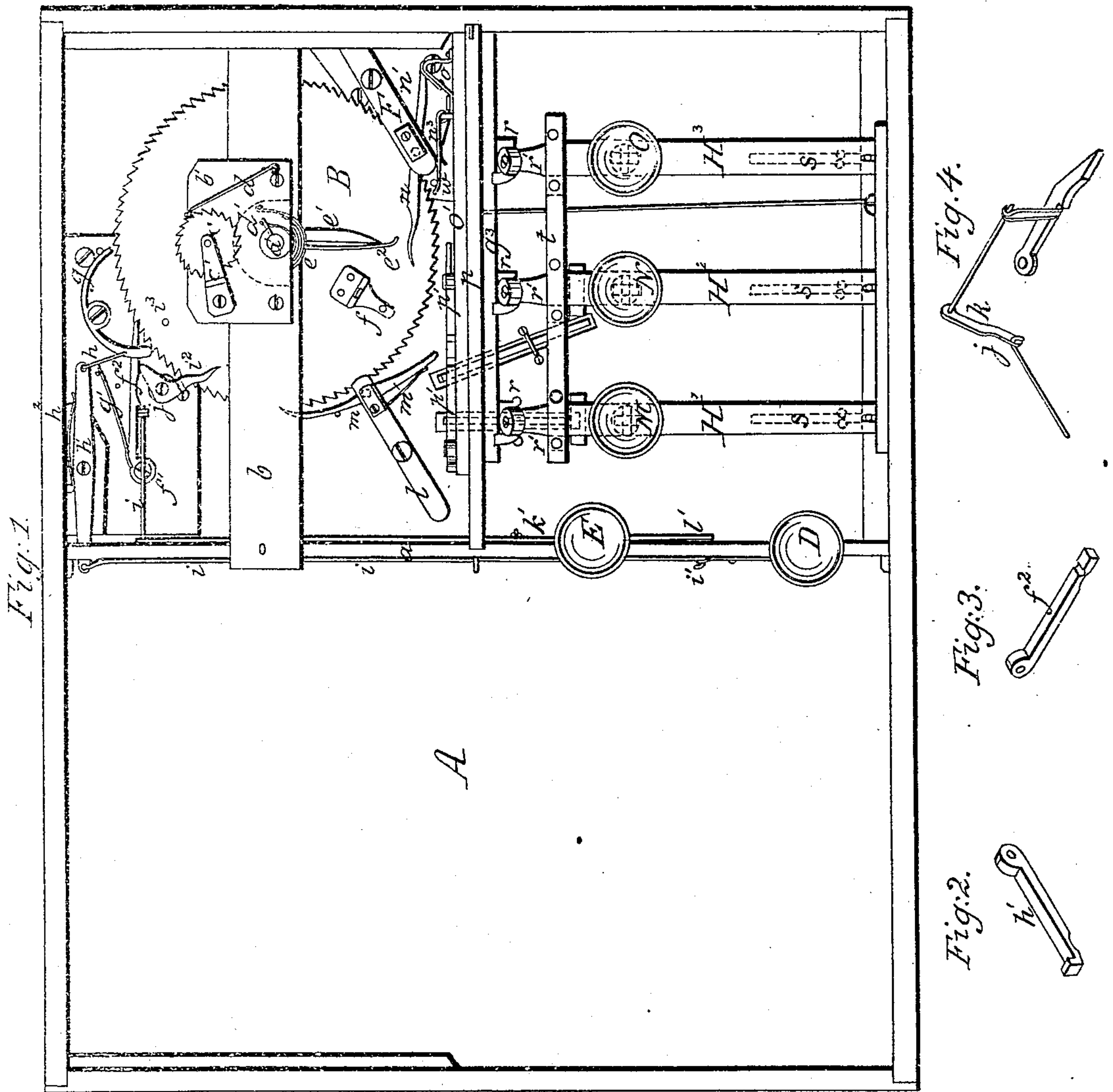
Sheet 1, 2 Sheets.

H. Ball.

Billard Counter.

Patented Jul. 6, 1869.

No. 92,247.



Witnesses

Jno. A. Ellis  
Jas. V. White

Inventor.

H. Ball

Per.

J. H. Alexander  
att'y

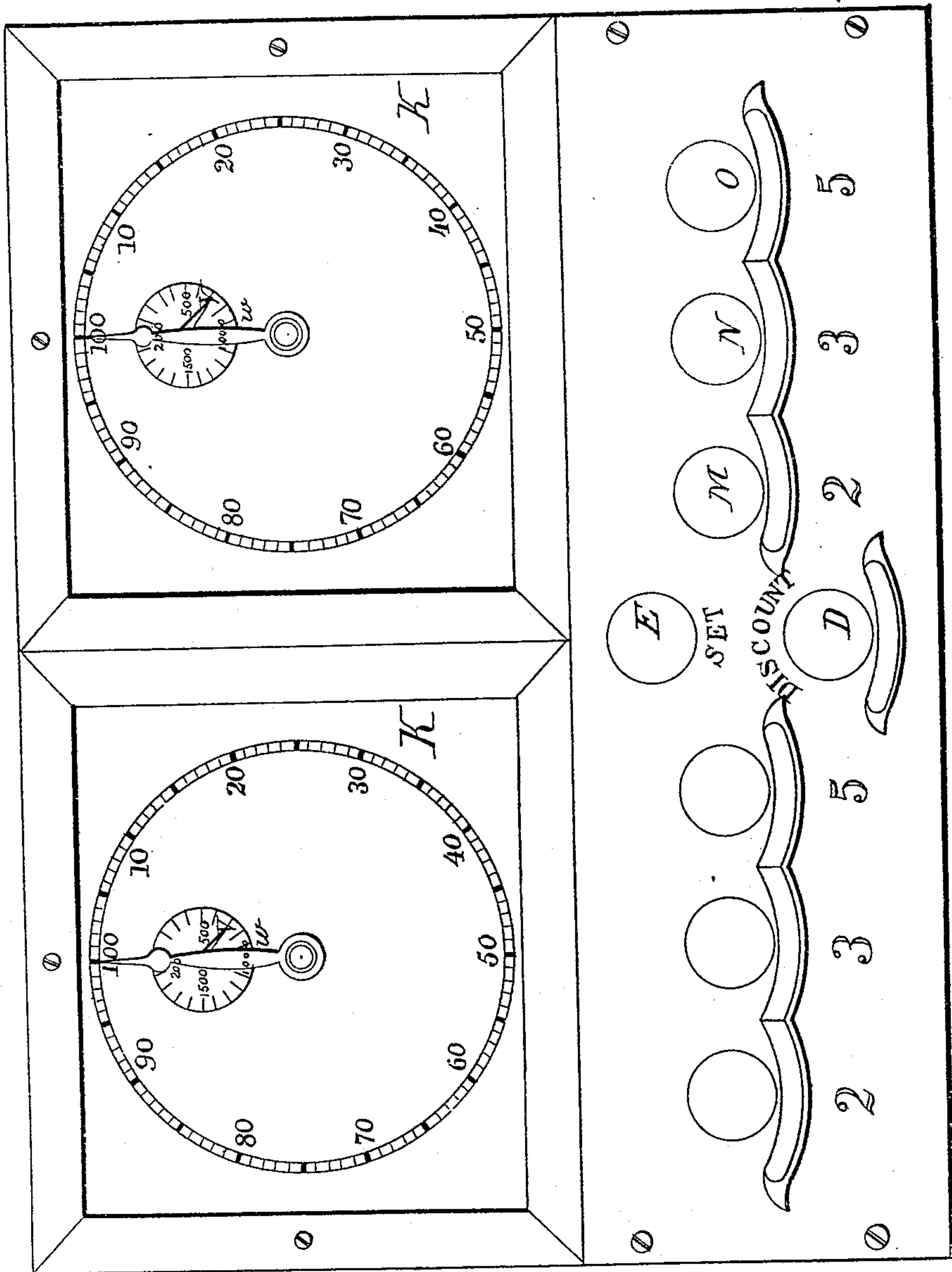
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Fig: 5.



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# United States Patent Office.

HARVEY BALL, OF WALPOLE, NEW HAMPSHIRE.

Letters Patent No. 92,247, dated July 6, 1869.

## IMPROVEMENT IN BILLIARD-COUNTER.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, HARVEY BALL, of Walpole, in the county of Cheshire, and State of New Hampshire, have invented certain new and useful Improvements in Billiard-Counting; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification, and in which—

Figure 1 represents a plan view, with the dial removed;

Figure 2, a perspective view of the lower clamp;

Figure 3, a perspective of the upper clamp;

Figure 4, a perspective of the clamp and stop combined; and

Figure 5, a plan view, showing the counters and dial.

Similar letters indicate like parts in all the figures.

The object of my invention is to construct a machine for counting and discounting games of billiards; and to this end it consists in the employment of a box provided with wheels and springs, operated by means of keys, by which the number of points made, and the games played, are indicated substantially in the manner hereinafter specified.

To enable others skilled in the art to which my invention appertains, to make and use the same, I will now describe it.

In the accompanying drawings—

A represents an ordinary box, which is divided into two parts by the partition *a*, so as to construct a device for counting in each division of the box.

B represents a wheel, formed with teeth around its circumference, as seen in the drawing.

This wheel is pivoted to the box A by means of the shaft *a'* passing through the cross-bar *b*, and entering a receptacle formed in the bottom of the box.

On the cross-bar is secured the wooden plate *b'*, the shaft *a'* passing through this plate.

*c* represents a toothed wheel, pivoted to the plate *b'*, by means of the metal bar *c'*.

*d* is a spring-pawl, one end of which is pivoted to the bar or plate *b'*, and the other formed with a bend, which works into the toothed wheel *c*.

*d'* represents a spring attached to a cap, secured to the head of the shaft, and working into the toothed wheel *c*. The plate *b'* is slotted on its lower surface, so as to form an opening between itself and the cross-bar *b*.

In this opening, around the shaft *a'*, is coiled the spring *e*.

Below the cross-bar *b*, on the shaft *a'*, is attached the lever *e'*, provided with a spring, *e''*, which is so arranged, in connection with the plate *f*, which is secured to the toothed wheel B, that by each revolution of the wheel B, the spring *e''* will strike the projection

on the plate *f*, and disengage the toothed wheel *c* from the pawl *d*, thereby permitting a new game to be commenced.

This game will be indicated by the small hand *x* on the dial in the manner hereinafter described.

*f'* represents a wooden block attached to the bottom of the box.

On this block is pivoted the pawl *g*, one end working into the toothed wheel B; and the other end provided with a pin which works in combination with the end of the lever *f''*, provided with the spring *g'*. It will be observed that the end of this lever is formed so as to end the teeth of the wheel B, as seen in fig. 1.

The end of the lever *f''* is provided with the rod *h*, connecting with the pivoted lever *h'*, secured to a block attached to the block *f'*.

This lever is also provided with a spring, *h''*.

The lever *h'* is attached at its outer end to the rod *i*, which connects with one end of the pivoted triangular lever *i'*, the other end of this lever being attached to the discount-key D.

The block *f'* is also provided with the pivoted stop *i''*, and with an upright, to which is attached one end of the rod *i*, which is provided with the lever *j*, acting at its lower end upon the lever *f''*.

The outer end of the rod *i* is attached to the upper end of the lever *k*, (seen in fig. 4) the lower end of the lever being attached to one end of the rod *k'*. The other end of this rod is secured to one arm of the pivoted lever *l*. The other end of this lever is pivoted to the set-key E.

*l* represents a block secured to the bottom of the box A, as seen in fig. 1, and is provided with the pivoted double-acting pawl *m*, one end being so arranged as to work in the teeth made in the wheel B, and the other end acting as a stop, in the manner hereinafter described.

This pawl is also provided with a spring, *m'*.

*F* represents a block which is provided with the pivoted lever *n*, to which is attached the spring *n'*.

The spring *e''*, heretofore described, acts upon one end of this lever, while the other end of the lever *n* works in connection with the flange *o*, secured to the slide *o'*.

The slide *o'* slides in a horizontal direction against the upper surface of the partition *p*, and is provided with the pivoted levers *p'* *p''*, which work in connection with springs attached to their ends.

On the lower surface of the partition *p* is slid the slide *g''*.

This slide is formed with three or more inclined projections *r r r*.

*H'* *H''* *H'''*, represent three bars, provided at one end with the rollers *r r r*, and pivoted at their other ends to the inner surface of the box A, as seen in fig. 1.

To the bars *H'* *H''* *H'''*, are pivoted the keys M N O, respectively.



S S S are springs attached to the bottom of the box A, and working in connection with the bars  $H^1 H^2 H^3$ .

$t$  is a bar attached to the bottom of the box A, for the purpose of keeping the bars  $H^1 H^2 H^3$  in place.

K represents the dial provided with the large hand  $u$  for counting the points, and with the small hand  $v$ , for indicating the number of games.

Having thus described my invention,

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

1. The latch  $n$  and stop  $f$ , arranged in connection with the slide  $o'$  and toothed wheel, B, substantially in the manner and for the purpose specified.

2. The pawl  $n^3$ , constructed and operated in connection with pin  $n^2$ , and slide  $o'$ , substantially as and for the purpose described.

3. The pivoted levers  $p^1 p^1$ , arranged to operate substantially as and for the purpose set forth.

4. The combination of the levers  $p^1 p^1$ , slide  $o'$ , and pawl  $m$ , substantially as and for the purpose described.

5. The toothed wheel B, provided with stop  $f$  and pin,  $p^2$ , in combination with latch  $n$  and dog,  $e^2$ , operating as and for the purpose set forth.

6. The pawls  $g$  and  $f^2$ , operating conjointly or independently, for either setting back one or more points, substantially in the manner described.

7. The combination of the lever  $h^1$ , pawls  $g$  and  $f^2$ , and toothed wheels B, all operating substantially as and for the purpose set forth.

8. The combination of the pawl  $f^2$ , with lever  $g$  and toothed wheel B, substantially as and for the purpose specified.

In testimony that I claim the foregoing as my own, I affix my signature, in presence of two witnesses.

HARVEY BALL.

Witnesses:

JOHN W. LOVEJOY,

JOHN H. SMITH.