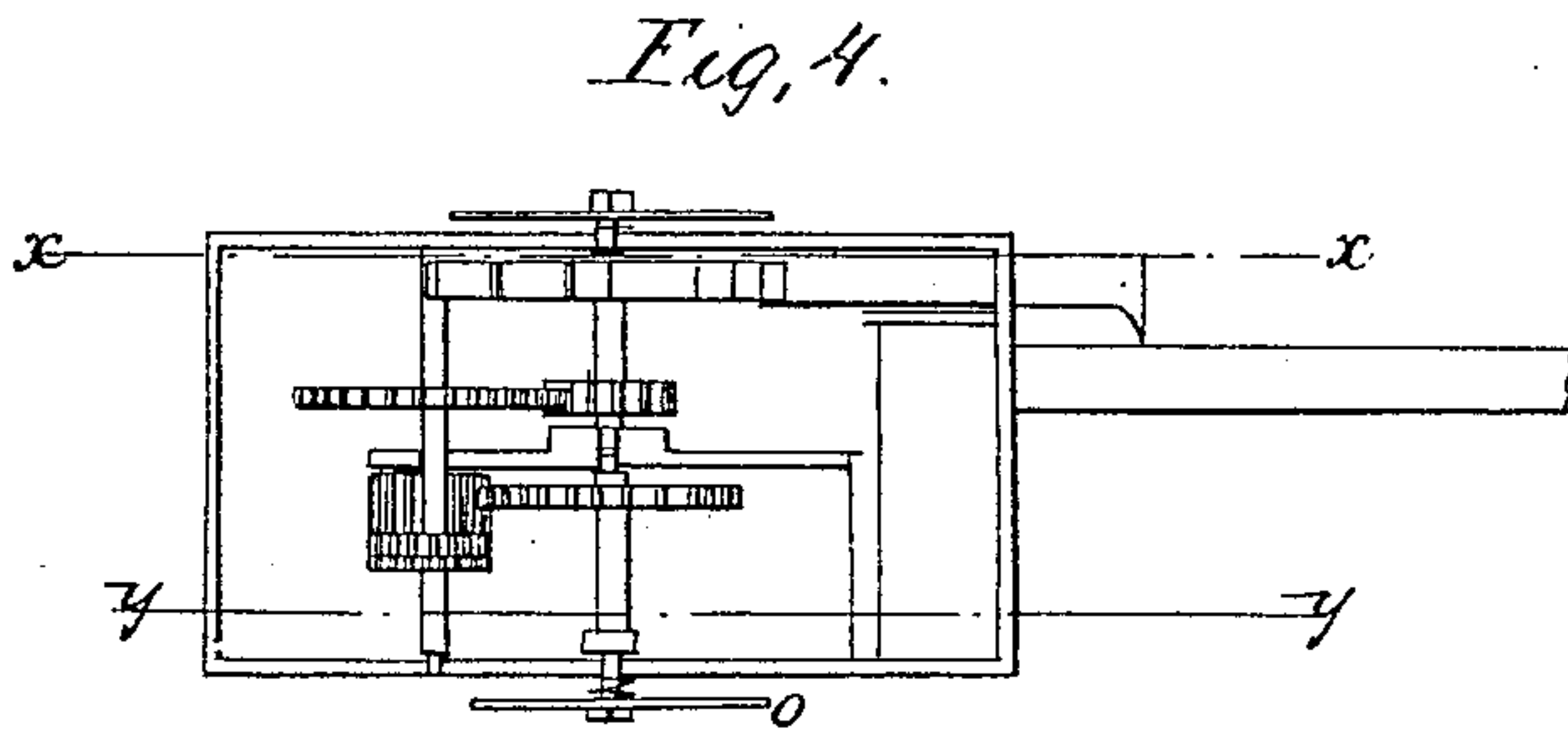
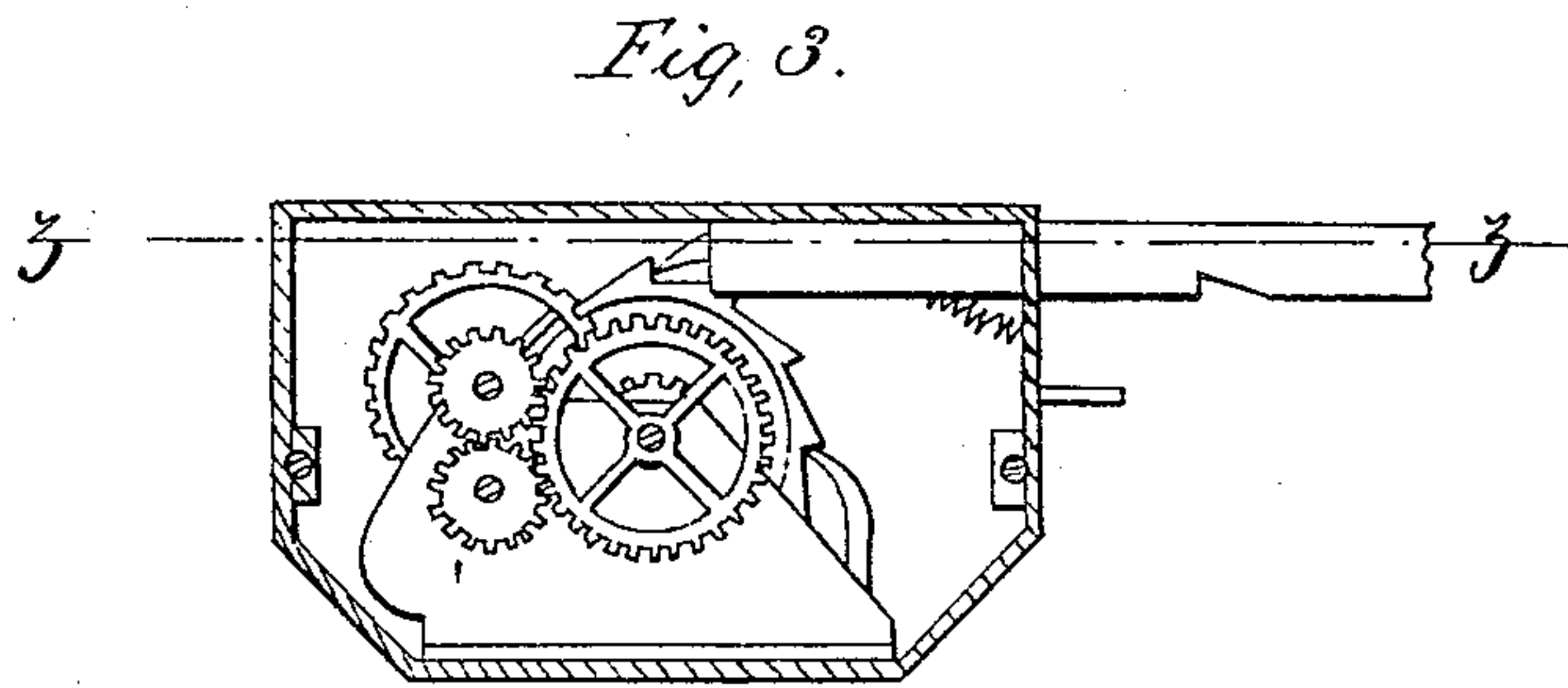
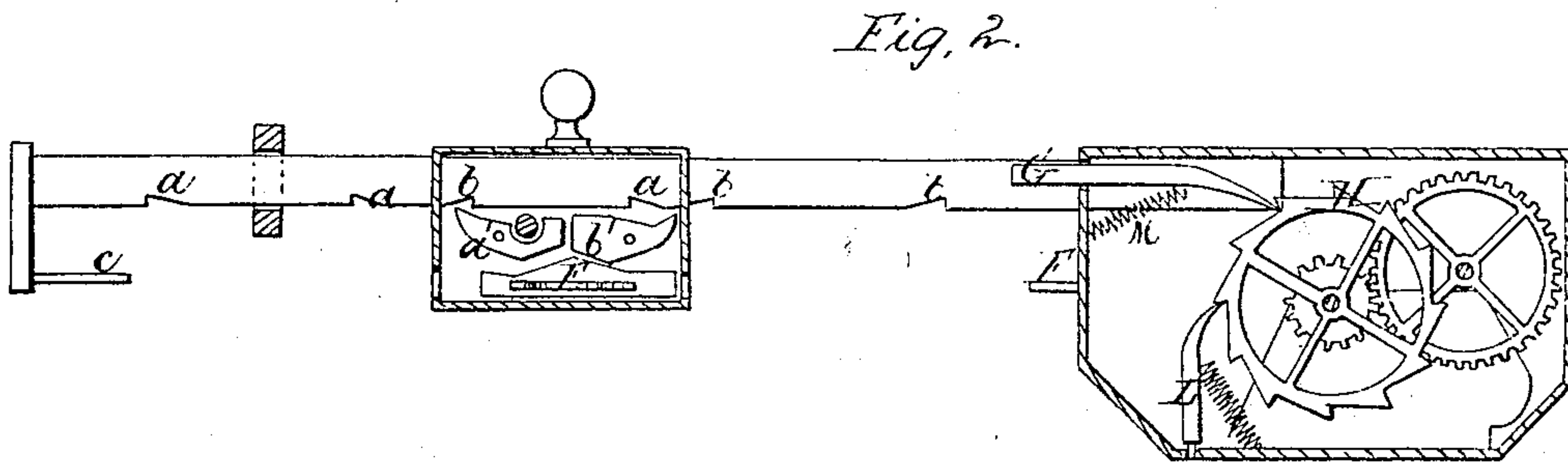
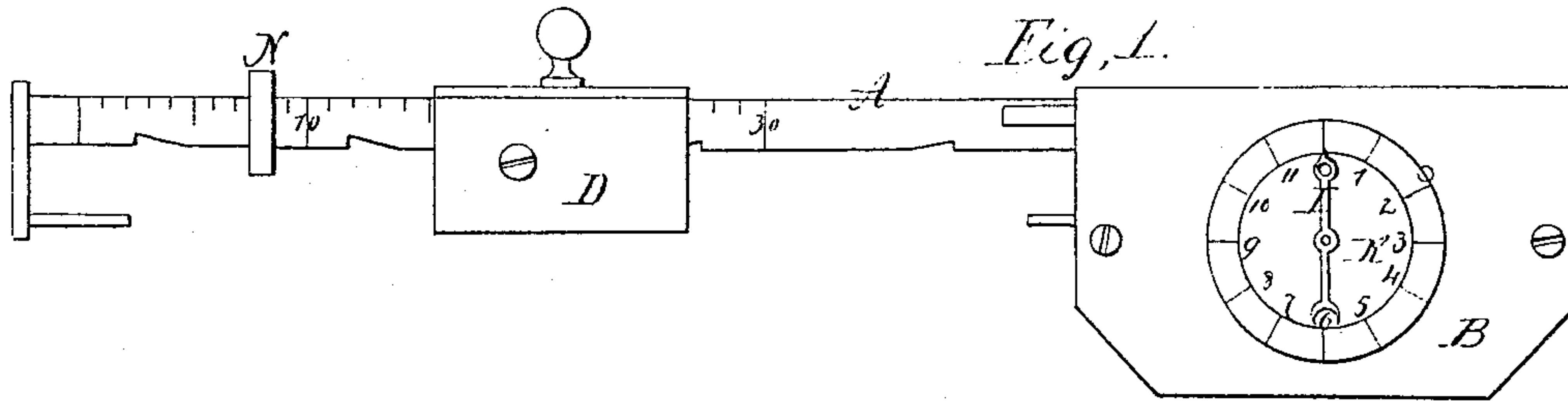


W. A. Hough,

Game Counter.

No. 89,408.

Patented Apr. 27, 1869.



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W. A. HOUGH, OF ST. JOHNSVILLE, NEW YORK.

Letters Patent No. 89,408, dated April 27, 1869.

IMPROVEMENT IN GAME-REGISTER FOR BILLIARDS.

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, W. A. HOUGH, of St. Johnsville, in the county of Montgomery, and State of New York, have invented a new and improved Registering-Counter for Billiards; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to improvements in counting and registering-apparatus for billiards, and has for its object to provide a simple and reliable apparatus, that will keep the count for each game, and register the number played by each party, and the whole number played during a day or other stated period.

It consists of a slide, so arranged upon a graduated bar, for marking the count for each game, that when it is set for moving over the bar, to make the said count, it cannot be moved back until it has traversed the whole length of the bar, and moved the pointers upon the registering-index, when it will be so adjusted that it may be moved back to the zero of the scale, and then be adjusted to mark a new count.

Figure 1 represents a side elevation of my improved apparatus;

Figure 2 represents a longitudinal sectional elevation of the same, taken on the line *xx* of fig. 4;

Figure 3 represents a longitudinal sectional elevation of the registering-apparatus, taken on the line *yy* of fig. 4; and

Figure 4 represents a horizontal section, taken on the line *zz* of fig. 3.

Similar letters of reference indicate corresponding parts.

A represents graduated a scale-bar, upon one end of which is suspended the case B of the registering-apparatus.

The opposite end is provided with a pin, or stud, C, and the lower face with two series of notches, *a* and *b*, arranged in opposition to each other.

D represents a slide, or counter, to be moved along the bar over the scale, to keep the count as the game progresses.

It is provided internally with a pawl, *a'*, calculated to work into the notches *a*, and another, *b'*, for working in the notches *b*.

The said pawls are weighted, in a manner to cause them to take into their respective notches when not prevented, and the weighted ends are provided with inclined planes on their under faces, as represented in fig. 2.

E represents a slide arranged within the counter-slide D, and provided with a vertical projection, having inclined sides, corresponding with those on the pawls, and arranged to act alternately thereon, to prevent the said pawls from taking into their notches in the bar A.

F represents a stud projecting from the case B, and corresponding to the stud C.

When the counter is moved up to zero, for the commencement of a count, the stud C, entering a

hole in the end of the counter-case, will strike the end of the slide E, and cause it to take the position shown in fig. 2, throwing the weighted end of the pawl *b'* up, and preventing the other end from engaging in the notches *b*.

In this condition, the counter is free to be moved forward to mark the count.

At the same time, the other incline of the slide E is thrown out of contact with the weighted end of the pawl *a'*, allowing its other end freedom to engage with the notches *a*, and prevent the counter being returned to the point of beginning.

The counter will remain in this condition until it is moved over the entire length of the scale, and has communicated a short movement to the sliding pawl G, engaging with the teeth of a ratchet-wheel, upon the axis of which, outside of the case, a pointer, I, is fixed, which will be moved over one degree on the dial K, and thereby register one game.

A holding-pawl, L, will hold the ratchet-wheel in that position when the sliding pawl G has been retracted by a spring, M.

Simultaneously with the movement of the sliding pawl G, the stud F, entering a hole in the end of the case of the counter D, will readjust the slide, so as to throw the pawl *a'* up, and prevent it from engaging with the notches *a*, and allow the pawl *b'* to act.

In this condition the counter may be moved back to the starting-point, and cannot be moved over the scale-bar in the opposite direction until it has been moved up to the place of beginning, and the slide E readjusted, as before.

N represents a follower, which may be used to indicate the number of points made in a run.

Suitable gearing may be interposed within the case B of the registering-apparatus, to communicate a sufficiently slow motion to another pointer, O, upon another dial, for registering the whole number of games for a day, or any other stated period of time, or the pointer O, by a well-known arrangement, may be made to work over the dial K.

The scale-bar and counter, for convenience, are arranged over or near the table, and the registering-apparatus may be connected with it, and arranged as represented in the drawings; or, by detaching the registering-apparatus, and causing the sliding pawl G to move a bell-crank, or other suitable arrangement of levers, the registering-apparatus may be placed upon the manager's desk, and motion imparted to it by wires, communicating from the said bell-crank or levers to it, in a manner well understood.

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

The combination, with the bar A, having the series of notches *a* and *b*, of the counter D, provided with the pawls *a'* *b'*, and the slide E, having an inclined projection, all substantially as and for the purpose described.

W. A. HOUGH.

Witnesses:

G. HOUGH,

N. S. SHOFFER.