

(No Model.)

S. D. STURGIS, Jr. & F. P. PECK.
GAME COUNTER.

No. 481,657.

Patented Aug. 30, 1892.

Fig. 1.

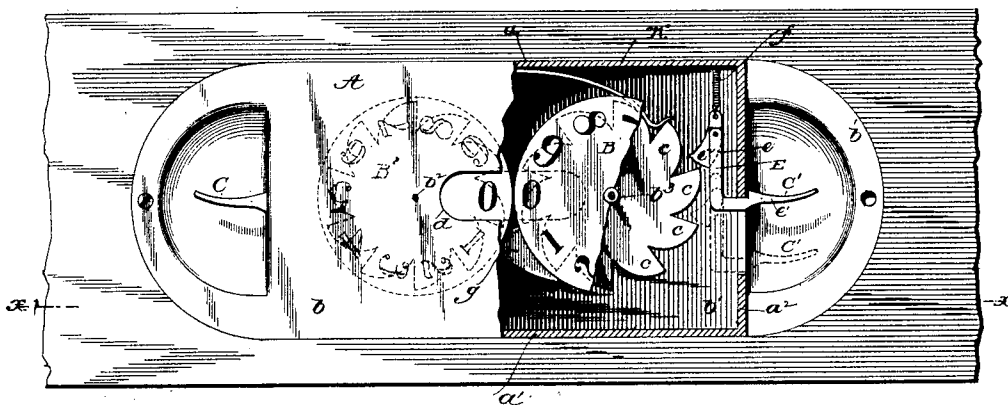


Fig. 2.

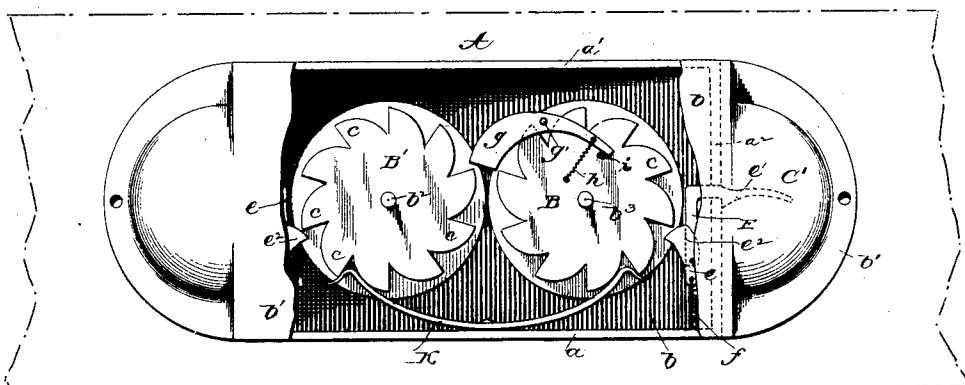
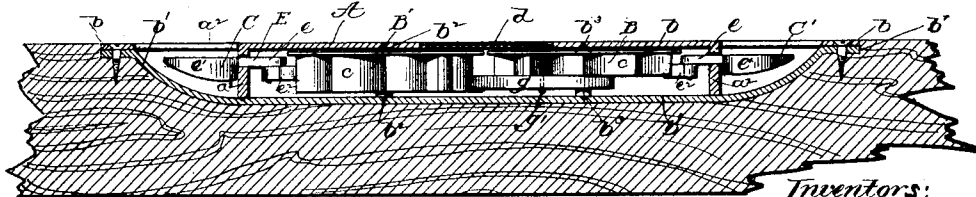


Fig. 3.
on line x-x



Witnesses:

N. N. Morhmet.
A. R. Kennedy.

Inventors:

S. D. Sturgis, Jr.
F. P. Peck
By Phil T. Dodge Atty

UNITED STATES PATENT OFFICE.

SAMUEL D. STURGIS, JR., AND FREMONT P. PECK, OF PRESIDIO, CALIFORNIA.

GAME-COUNTER.

SPECIFICATION forming part of Letters Patent No. 481,657, dated August 30, 1892.

Application filed September 26, 1889. Serial No. 325,123. (No model.)

To all whom it may concern:

Be it known that we, SAMUEL D. STURGIS, Jr., and FREMONT P. PECK, of Presidio, in the county of San Francisco and State of California, have invented certain Improvements in Registering Devices, of which the following is a specification.

Our invention has reference to that class of registering devices commonly known as "game-counters," in which two or more disks bearing figures on their faces are employed, the said figures being brought successively to a predetermined position to indicate the score of the game.

The invention consists in certain improvements on this class of devices designed to render their operation effective and the arrangement of their parts compact.

It further consists in the details of construction and the combination of parts hereinafter described and claimed.

In the drawings, Figure 1 is a plan view of our improved registering device, a portion of the case being removed to expose the internal parts to view. Fig. 2 is a similar view from the opposite side of the device. Fig. 3 is a section on the line $x x$ of Fig. 1.

Our device in the form illustrated is adapted to be let into the upper edge of the surrounding wooden sill of a billiard-table; but it is to be understood that it may be employed in any manner and for any purpose, provided the essential parts of its operative mechanism are retained.

The device consists of a suitable rectangular casing A, having four side walls a , a' , a^2 , and a^3 and upper and lower walls b and b' . The upper wall extends at either end somewhat beyond the end walls a^2 and a^3 , where it is provided with perforations to receive fastening-screws, by means of which the device is securely fastened to the table. The lower wall b' extends at either end to the ends of the upper wall, as shown.

$B B'$ represent two disks, which are mounted loosely, respectively, on shafts $b^2 b^3$, fixed between the upper and lower walls of the casing. These disks are provided on their peripheral edges with teeth c , formed with straight and curved sides. They are numbered, as shown, from "0" upward, one number being provided

for each tooth. These numbers are adapted to be brought opposite a glass-covered opening d in the upper wall of the casing, through which the score of the game may at any time be viewed.

The disk B we designate the "units-disk" and that B' the "tens-disk," connections, more fully described hereinafter, being provided between the two disks, by means of which the tens-disk is advanced one tooth for every revolution of the units-disk.

At either end of the casing beyond the disks $B B'$ we provide actuating-dogs C C' for advancing the disks to register the score of the game. Each of the dogs consist of an angular plate E, having one arm e arranged within the casing and the other arm e' extended outward through the end wall, as shown. This plate is adapted to slide back and forth and is moved by the application of the finger to the arm e' .

On the end of the arm e a pawl e^2 is pivoted in position to engage the teeth on the wheel. This pawl is sustained in its proper relative position to the disk by a spiral spring f , connected to its end and to the casing. The spring acts to return the dog to its normal position after it has been moved to turn the disk.

From the foregoing description it will be seen that on the application of force to the arm e' the dog will be moved against the influence of the spring f and the pawl e^2 , engaging the tooth of the disk, will revolve the same on its axis. On the release of the arm the pivoted pawl will yield in passing the teeth on the disk and the spring will return the dog to its normal position. The movement of the dog is limited, so that the disk can be moved but one tooth at a time. The upper wall of the casing is recessed at its ends, as shown, to allow the application of the finger to the arm e' of the dog for the purpose of moving the same.

In order that upon every revolution of the units-disk the tens-disk may be moved one tooth, we provide the units-disk with a rocking lever g . This lever is pivoted at g' to the disk and has its outer end extending normally in the path of the teeth on the opposite disk, being sustained in this position by means of a spiral spring h , connected to its inner end and to the disk. The outward movement of the outer end of the lever is limited by a stop i , arranged

to encounter its inner end. The relative arrangement of the lever and the teeth on the tens-disk is such that as the units-disk is revolved the end of the lever will encounter the straight side of the tooth and the continued movement of the units-wheel will advance the tens-disk until the straight edge of the tooth passes beyond the end of the lever, the latter yielding as its outer edge encounters the tooth, thus permitting the continued revolution of the units-disk to register the score of the game.

It will be observed that owing to the peculiar form of the lever *g* and its arrangement with relation to the teeth of the disk *B'* the latter may be moved freely by its independent actuating-dog, the lever *g* yielding as the curved edge of each tooth successively encounters the same. This construction is of especial advantage where it is desired to register the score when a large number of "points" have been made, for the reason that, instead of the repeated operation of the units-disk, the tens-disk may be turned at once to the proper point to register the tens and the units-disk subsequently turned to register the units to be read in connection with the tens.

In order that the two disks may be held in the position to which they have been turned

and their accidental movement prevented, we provide the spring-plate *K*, which is attached at its middle to the casing at the side of the disks and has its two ends bearing on the periphery of the disks.

Having thus described our invention, what we claim is—

In a game-counter, the combination, with the casing provided at opposite ends with two depressed portions and with the intermediate opening, of the two disks *B* and *B'*, mounted side by side to turn within said casing, said disks provided with the teeth and corresponding numbers adapted to be brought opposite the opening, the finger *g*, pivoted to disk *B*, its returning-spring and stop, and the two independent disk-actuating dogs mounted at opposite ends of the casing and each provided with an arm extending through the casing into the depressed portions thereof.

In testimony whereof we hereunto set our hands, this 21st day of August, 1889, in the presence of two attesting witnesses.

SAML. D. STURGIS, JR.
FREMONT P. PECK.

Witnesses:

JOHN E. HAYDEN,
WM. PITT WASHBURN.