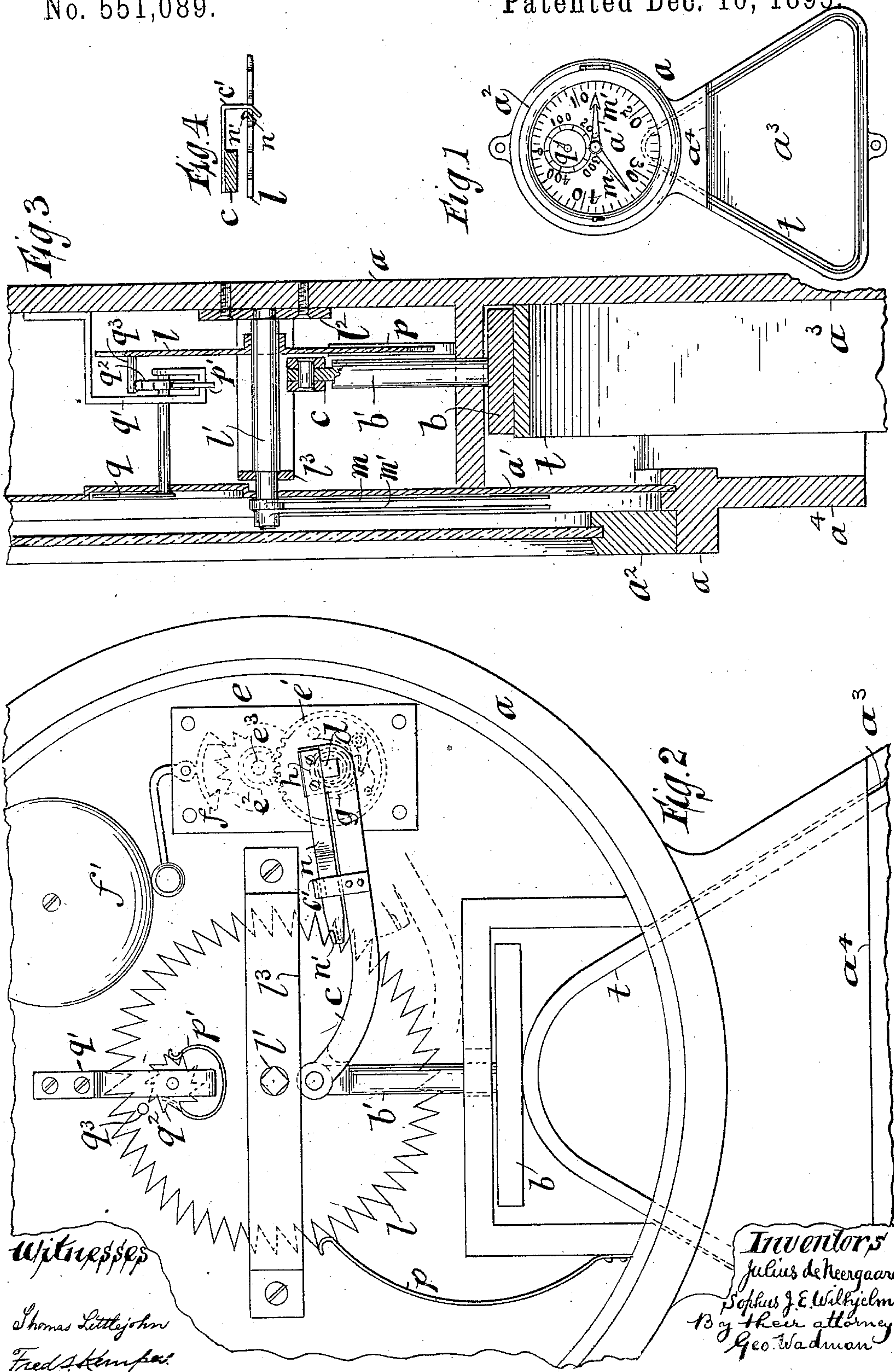


(No Model.)

J. DE NEERGAARD & S. J. E. WILHJELM.  
REGISTER FOR POOL TRIANGLES.

No. 551,089.

Patented Dec. 10, 1895.



Witnesses

Thomas Littlejohn  
Fred A. Kempfer

Inventors  
Julius de Neergaard  
Sophus J. E. Wilhjelm  
By their attorney  
Geo. Wadman



# UNITED STATES PATENT OFFICE.

JULIUS DE NEERGAARD AND SOPHUS J. E. WILHJELM, OF BROOKLYN,  
NEW YORK.

## REGISTER FOR POOL-TRIANGLES.

SPECIFICATION forming part of Letters Patent No. 551,089, dated December 10, 1895.

Application filed April 6, 1895. Serial No. 544,750. (No model.)

*To all whom it may concern:*

Be it known that we, JULIUS DE NEERGAARD, a citizen of the United States, and SOPHUS J. E. WILHJELM, a subject of the  
5 King of Denmark, residents of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Registers, of which the following is a specification.

10 The object of our invention is to provide a register adapted for use in rooms used for games pertaining to billiards, and more particularly for games of pool, in which a frame or triangle is used to collect the balls and ad-  
15 just them in position on a table for a new game.

By our invention the proprietor will be informed as to the number of games to be settled for at the end of a series and also what  
20 the cash returns should be during the day.

In the accompanying drawings, Figure 1 is a front view of a register constructed according to our invention. Fig. 2 is an enlarged front view of a portion thereof with some of  
25 the parts removed. Fig. 3 is a sectional side view thereof, and Fig. 4 is a detail of certain parts.

*a* designates a casing, which may be of any suitable design and material. As here  
30 shown, it has a circular upper portion to inclose the operating mechanism of the register, which is covered by a dial-plate *a'* and by a hinged cover *a''*, the latter capable of being locked to the casing and having its central  
35 portion formed of glass. The lower portion of the casing may conform approximately in shape to that of an ordinary triangle and is provided with a receptacle *a'''* for holding the  
40 latter when not in use. This receptacle comprises a back portion having bottom and side walls or strips to guide and support the triangle in place. The upper portion of the receptacle *a'''* is inclosed by the cover *a''* and  
45 also by a strip *a''''*, secured to the casing and extending downwardly a suitable distance.

*b* is a push-bar fitted to slide between parallel side walls arranged at the uppermost end of the receptacle. This bar is secured to a stem *b'*, passing through the top wall of the  
50 receptacle and pivotally connected to the free end of a lever *c*.

In order to replace the triangle in its receptacle, it is necessary to insert one of its corners beneath the strip *a''''* and then raise the triangle sufficiently for its bottom side to  
55 pass over the bottom wall of the receptacle. In doing this the push-bar *b* will be forced upwardly, causing the lever *c* to be rocked. The lever *c* is affixed to the spindle *d* of an ordinary alarm device *e*, comprising a gear-  
60 wheel *e'*, loosely mounted on the spindle *d* and engaging in a pinion *e''*, secured to a shaft *e'''*.

*f* is an escapement device provided with a hammer to act on a bell *f'*.  
65

*g* is a ratchet-wheel secured to the spindle *d* and arranged to impart motion to the wheel *e'* during the downward movement of the push-bar *b*.

*h* is a coil-spring, which is wound up during the upward movement of the push-bar *b* and aids to lower the latter and operate the register mechanism each time a triangle is withdrawn from the receptacle.  
70

*l* is a wheel provided with a suitable number of preferably ratchet-shaped teeth around its periphery. It is secured to a shaft *l'*, working in a bearing *l''*, and in a bridge-piece *l'''*, secured to the casing. This shaft extends  
75 through the dial-plate *a'*, whose dial corresponds in number of divisions to the number of teeth around the wheel *l*.  
80

*m* is a pointer fitted to a squared portion of the shaft *l'*, in order to travel continuously therewith and register the total number of  
85 games played during the day or other period of time.

*m'* is a pointer secured, friction-tight, on a cylindrical portion of the shaft *l'*, in order that it may be set back by the proprietor to  
90 zero at the end of a series of games played by different parties.

The wheel *l* is rotated by means of a finger *n* in the form of a resilient strip of thin material, rigidly secured at one end to the hub  
95 of the lever *c*. The extremity of the free end of this finger is provided with a lip or flange *n'*, and is inclined in cross-section in order that its front edge may occupy a plane slightly beyond the outer side of the wheel *l*  
100 and its rear edge occupy a plane slightly beyond the inner side thereof. When the fin-



ger is rocked upwardly along with the lever  $c$ , its rear edge will, by reason of the inclined end and resiliency of the finger, pass freely over the front of a tooth of the wheel and be sprung in between it and its adjacent tooth, as shown in Fig. 2. The downward movement of the finger will, by means of the lip  $n'$ , rotate the wheel a distance equal to the pitch of the teeth and then pass out of engagement therewith, as shown dotted in Fig. 2. An arm  $c'$  of the lever  $c$  may be arranged to sustain the front edge and bottom side of the finger when operating to rotate the wheel, as shown in Fig. 4.

$q$  is a pointer to indicate the number of revolutions of the pointer  $m$  and multiply the numbering capacity of the register. Its spindle is journaled in a frame  $q'$ , secured to the casing, and is provided with a toothed wheel  $q^2$ , containing teeth corresponding in number to that of the divisions of the index of the pointer  $q$ . Motion is imparted to the wheel  $q^2$  to the extent of the pitch of its teeth by a pin  $q^3$ , secured to the wheel  $l$ .

$p$   $p'$  are resilient detents respectively engaging the teeth of the wheels  $l$  and  $q^2$  to lock them in correct position after each movement thereof.

The wheel  $l$  and the finger  $n$  coacting therewith may be arranged in any position, and if desired the finger may be fulcrumed between its ends and the push-rod and finger arranged on opposite sides thereof. In this case the register-pointer will operate during the insertion of the triangle instead of its withdrawal.

Our improvement is applicable to a number of uses, and we do not confine ourselves to the precise form of construction shown. The alarm mechanism may also be dispensed with, if desired.

We claim—

1. In combination with the casing of the register, of a triangle receptacle secured thereto, and arranged beneath the same, and comprising a back portion having bottom and converging side walls, its apex having a push

piece fitted to slide therein to operate the register by means of the triangle, substantially as described.

2. In a register, the combination of a toothed wheel, a detent to hold the same in correct positions and a resilient pawl or finger mounted on a stationary pivot for rotating the wheel, the pawl being in the form of a flat thin strip of resilient metal, provided with a projecting lip at its extremity, and having its free end inclined to the transverse plane of the teeth of the wheel, to be sprung sidewise to pass the same without engaging them when rocked in one direction, and to engage and rotate the wheel the distance of a tooth when rocked in a reverse direction, substantially as described.

3. In a register, the combination of a casing containing a receptacle for a triangle, having its upper portion inclosed, a toothed wheel operating a dial pointer, a resilient detent to hold the wheel in correct positions, a supplementary pointer having its actuating tooth wheel rotated the space of a tooth by the main pointer wheel each revolution thereof and locked in position by a resilient detent, alarm mechanism to sound at each movement of the pointer, a lever mounted on the spindle of the alarm mechanism and pivotally connected to the stem of a push bar within the receptacle, and a resilient finger secured to rock with the lever, the said finger having a free end portion, inclined to pass the teeth of the wheel freely when rocked upwardly and containing a lip to engage and rotate the wheel when rocked downwardly, and to pass out of engagement therewith, substantially as described.

In testimony that we claim the foregoing as our invention we have signed our names, in presence of two witnesses, this 30th day of March, 1895.

JULIUS DE NEERGAARD.  
SOPHUS J. E. WILHJELM.

Witnesses:

EGMONT RUSCHKE,  
GEO. WADMAN.