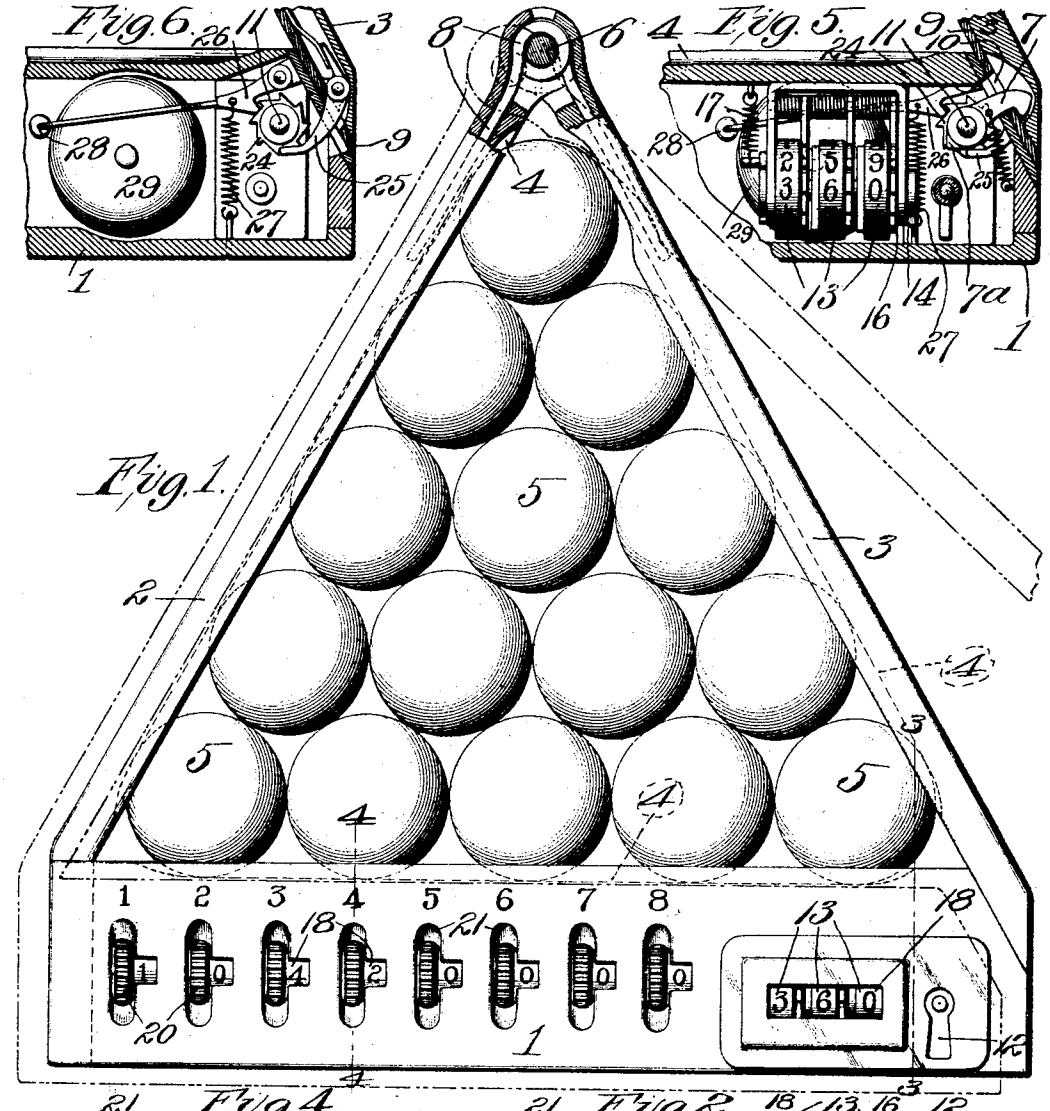
No. 766,228. PATENTED AUG. 2, 1904.

J. H. DOUGHERTY.

REGISTERING TRIANGLE.

APPLICATION FILED JULY 30, 1903.

NO MODEL.



Witnesses:
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No. 766,228. Patented August 2, 1904.

UNITED STATES PATENT OFFICE.

JOSEPH H. DOUGHERTY, OF ST. LOUIS, MISSOURI.

REGISTERING-TRIANGLE.

SPECIFICATION forming part of Letters Patent No. 766,228, dated August 2, 1904.

Application filed July 30, 1903. Serial No. 167,545. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH H. DOUGHERTY, a citizen of the United States, residing at St. Louis, Missouri, have invented a certain new and useful Improvement in Registering-Triangles, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a plan view of the device as in use. Fig. 2 is a detail of the counting mechanism. Fig. 3 is a sectional view on line 3 3 of Fig. 1. Fig. 4 is a sectional view on line 4 4 of Fig. 1. Fig. 5 is a top plan view of the totalizer, and Fig. 6 is a detail view of the alarm mechanism hereinafter described.

This invention relates to new and useful means for registering the number of games played on a pool-table; and it consists in certain features of construction and operation of parts of a triangle used to "set up" the balls, all as hereinafter more fully described, and specifically pointed out in the claims.

Referring to the drawings, 1, 2, and 3 indicate the members of a triangle proper, in which are provided channels 4, adapted to conform substantially to the contour of the balls 5, which balls are to be set up by means of said triangle.

Secured to the member 1 of the triangle is a fixed side piece 2, which is preferably immovably secured thereon, while hinged to the outer end of 2 is the wing 3, which is movable freely on its hinge 6 and has engaging with its free end a spring-actuated catch 7, which catch is supported in the member 1.

A spring 8 normally holds the free end of the wing 3 in closed position—that is, in such position that its free end will be in contact with the member 1. Secured to the free end of the movable wing 3 is a plate 9, in which there is a slot 10. Coöperating with said slot 10 is said spring-actuated catch 7, pivotally supported at 11 in a housing formed in the member 1 of the triangle. Extending oppositely from the catch 7 is an integral extension 7^a, adapted to rest normally in the path of the wing of a key insertible in the slot 12 in said member 1 of the triangle.

Within the member 1 is a counting mechanism comprising, preferably, a plurality of number-wheels 13, adapted to coöperate and serve as a totalizer to indicate the whole number of games played in which the triangle is used to set up the balls. This totalizer is shown as comprising three numbered wheels connected in series, one of which is the units-wheel, one a tens-wheel, and one a hundreds-wheel, though it will be evident that a greater or less number of such wheels may be used to serve as a totalizer, as may be desired. These counting-wheels are connected in series in the usual manner, and the units-wheel has coöperating with it any suitable means, as a lever 14, for actuating the same. This lever is adapted to lie normally in the path of the wing of the key and be movable thereby in the direction of the arrow (shown in Fig. 3) to actuate the counting means. To the details of construction of the counting means, however, I make no claim, as I prefer to adopt such means for counting as may be easily obtainable in the open market and only show the present device to illustrate the general features and operation of my invention. However, it will be noted that as the key moves the lever 14 the pawl 15, carried thereby, will advance one step on the ratchet 16 on the counting-wheel shaft, and when the key has passed said lever the spring 17 will return the lever 14 to its normal position, said numeral-wheels being visible through a sight-opening 18 in the member 1.

As it is desirable in addition to registering the total number of games played to also keep tally of the games to be paid for by the several individuals playing at a table, I provide a series of numeral-wheels 18, arranged in parallelism on a single shaft 19, each of which numeral-wheels 18 is provided with a milled disk 20, projecting slightly above a channeled portion 21 of the member 1, so as to be accessible to rotate said wheels 18, while a spring-actuated pawl 22 engages a ratchet-wheel 23 movable with the wheels 18 to prevent accidental movement thereof.

To provide against unlawful use of the device, I provide an alarm which is adapted to be sounded every time the movable member 3 is closed. This alarm consists of a gong 23, and it is sounded as follows: Upon the stud 11 is a ratchet 24, which is freely rotatable. Upon the wing 3 is a spring-held pawl 25, adapted to engage the ratchet 24 whenever the wing 3 is closed, whereby the ratchet will be advanced one degree, causing the spring-actuated hammer-carrying member 26 to ride upon a tooth of said ratchet, and when the ratchet has advanced one degree the member 26 will be drawn down by the spring 27, whereby the hammer 28 will strike the bell 29 and sound an alarm. This only occurs when the triangle is closed. Hence a general attendant may be able to determine approximately the diligence of each table attendant from a distance, if desired. Owing to the channel 4, the balls cannot be released without "breaking" the triangle, and only the regular attendant can operate the device.

I am aware that minor changes in the construction, arrangement, and combination of the several parts of my device can be made and substituted for those herein shown and described without in the least departing from the nature and principle of my invention.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. The combination with a triangle including a movable side hinged to another side and adapted to come to rest in closed position against the third side of the triangle, said movable side being adapted to occupy either an open or closed position, of a registering mechanism, and means for operating said registering mechanism whenever said movable side assumes one of said positions; substantially as described.

2. The combination with a triangle having a movable side hinged to another side, and means for locking said movable side in closed position, of a registering mechanism, and means whereby said registering mechanism is operated upon the unlocking of said movable side; substantially as described.

3. The combination with a triangle having a movable side hinged to another side, and a catch upon the third side of said triangle and coöperating with said movable side to lock the latter in position, of a registering mechanism, and means whereby said registering mechanism is operated upon operation of said catch; substantially as described.

4. The combination with a triangle including a movable side, of a gong, a movable hammer-arm carrying a hammer coöperating with said gong, a rotatable ratchet-disk which engages said arm, and a pawl carried by said movable side of the triangle and coöperating with said ratchet-disk; substantially as described.

In testimony whereof I hereunto affix my signature, in the presence of two witnesses, this 23d day of July, 1903.

JOSEPH H. DOUGHERTY.

Witnesses:

G. A. PENNINGTON,

GEORGE BAKEWELL.