

No. 847,522.

PATENTED MAR. 19, 1907.

W. STEEL.
COMBINED FAN AND SCORE CARD.

APPLICATION FILED DEC. 5, 1905.

2 SHEETS—SHEET 1.

Fig. 2.

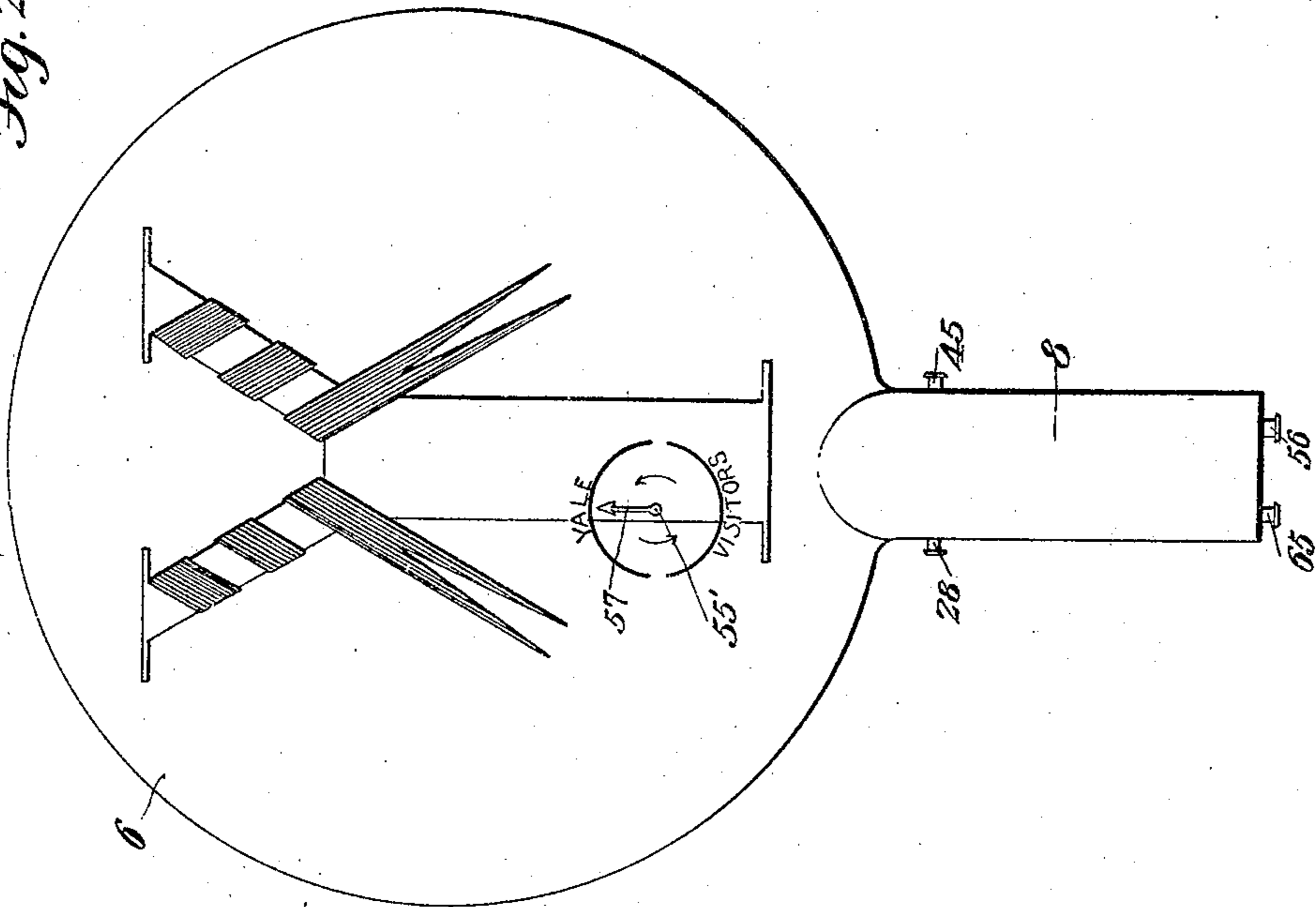
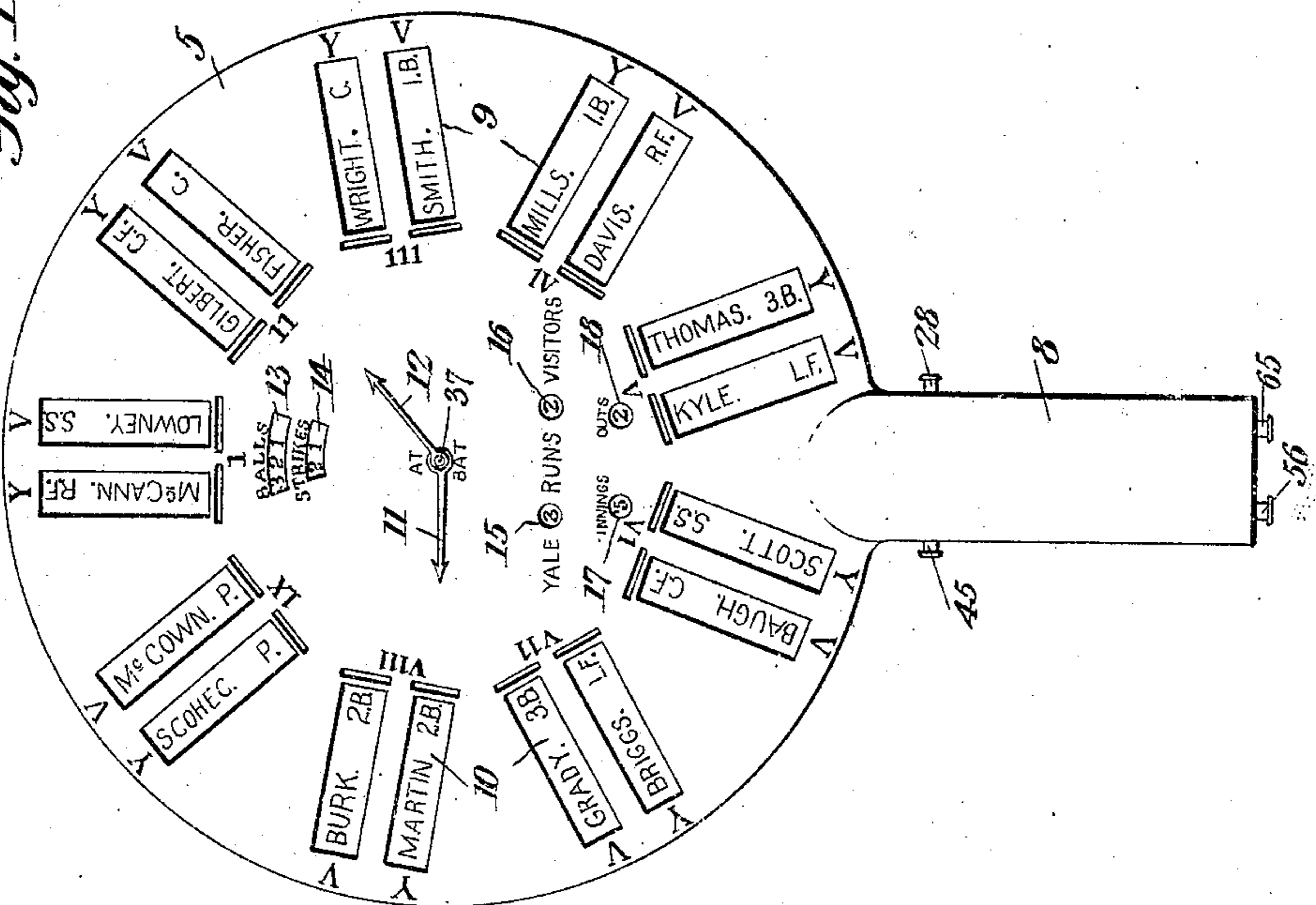


Fig. 1.



Witnesses
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2 SHEETS—SHEET 2.

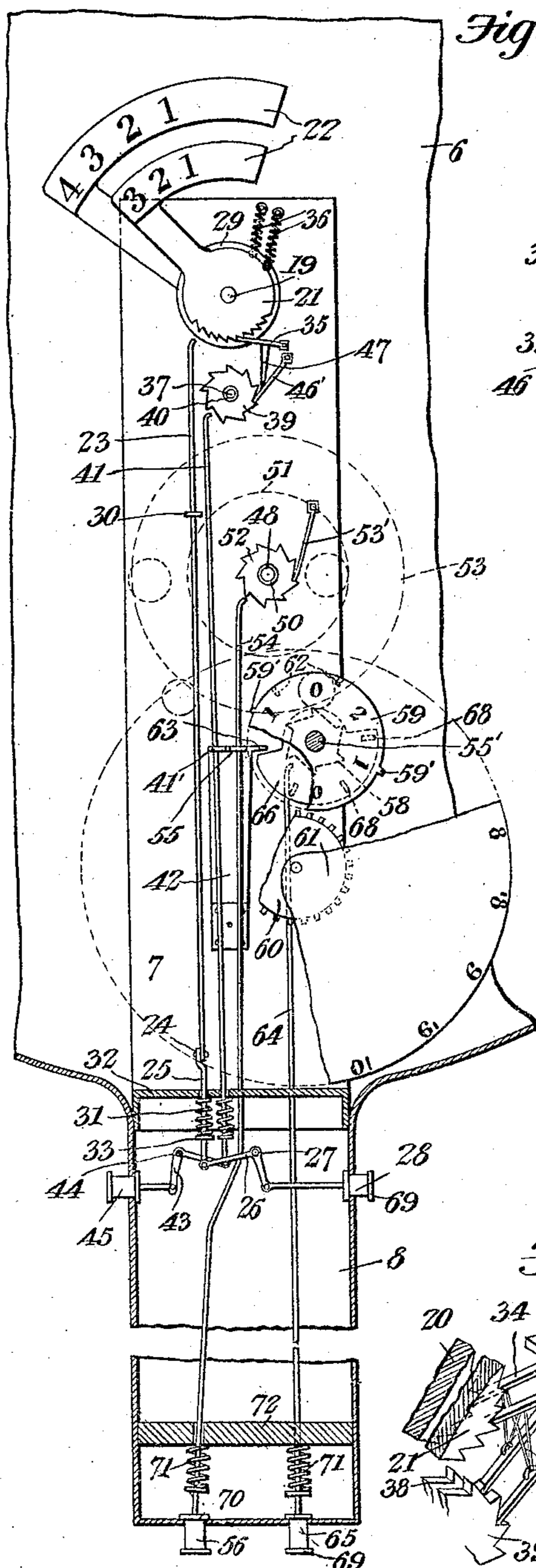


Fig. 3.

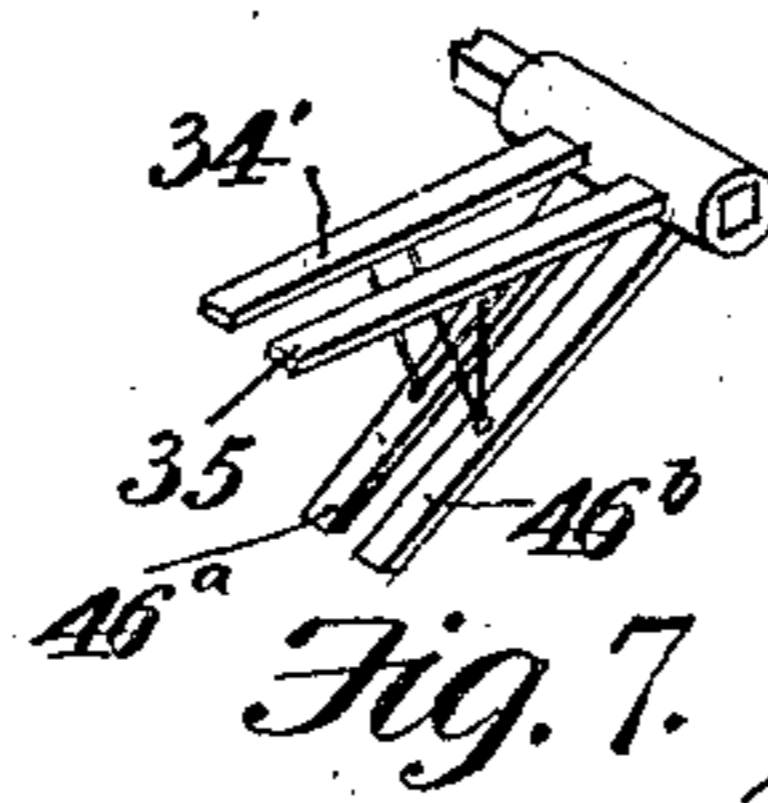


Fig. 7.

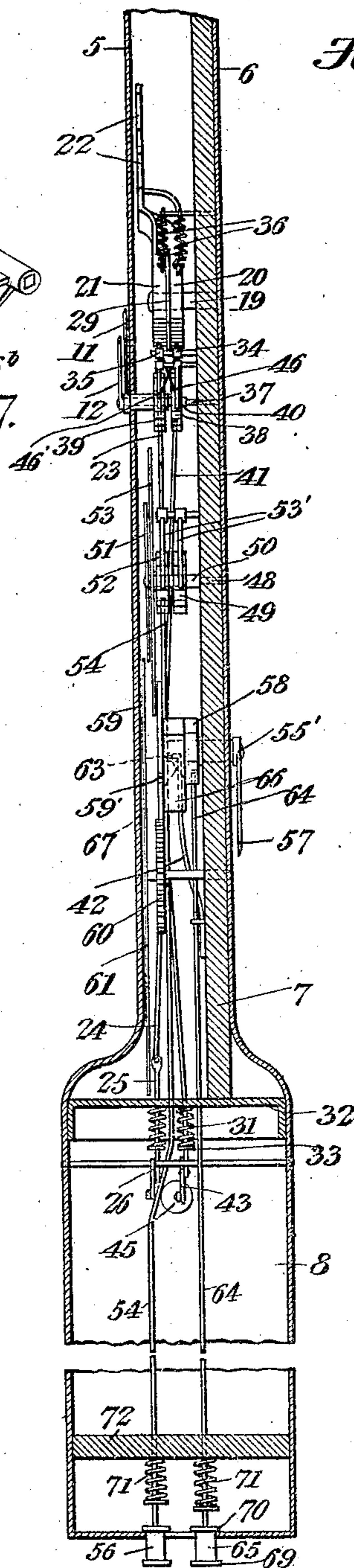


Fig. 4.

Fig. 5.

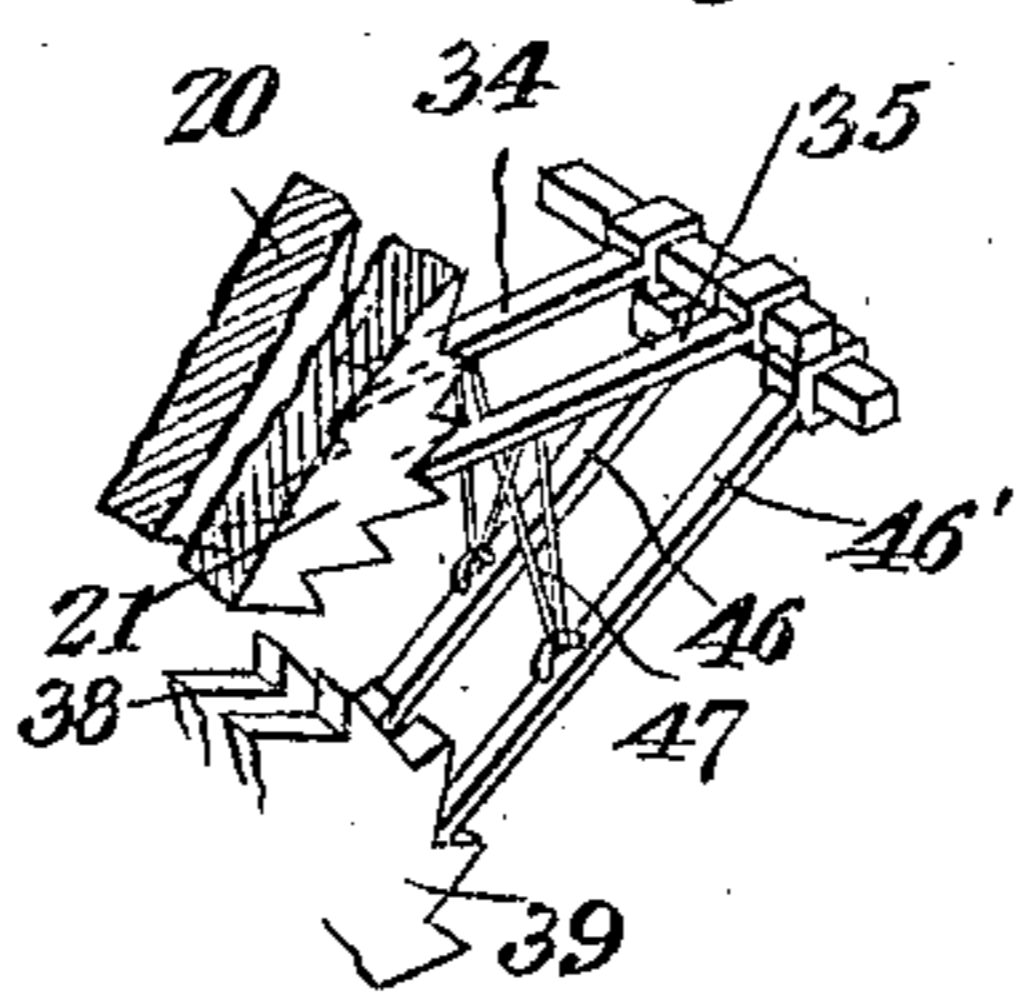


Fig. 6.

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UNITED STATES PATENT OFFICE.

WILL STEEL, OF TEXARKANA, ARKANSAS.

COMBINED FAN AND SCORE-CARD.

No. 847,522.

Specification of Letters Patent.

Patented March 19, 1907.

Application filed December 5, 1905. Serial No. 290,471.

To all whom it may concern:

Be it known that I, WILL STEEL, a citizen of the United States, residing at Texarkana, in the county of Miller and State of Arkansas, have invented a new and useful Combined Fan and Score-Card, of which the following is a specification.

This invention relates to a combined fan and score-card, and has for its object to provide a combined device of this character, particularly designed for use by persons attending base-ball games and the like and by means of which the several points made by the opposing teams during the progress of the game may be conveniently registered and an accurate account kept thereof.

A further object of the invention is to provide means for registering the same points of the game for both teams and means for indicating which team is at the bat during any particular inning.

A further object is to provide a pivoted actuating member movable by gravity into engagement with the ball and strike indicating dials, so that a single push-button may be used for operating both dials.

A further object is to provide a pair of arms or pointers movable over the face of the fan for indicating the batting order of the players on the respective teams and means for locking one of said pointers against rotation during the movement of the other.

A still further object is to provide a plurality of sets of dials operated through the medium of push-rods extending through and supported by a spring locking member and means for actuating the locking member to move the push-rods into engagement with one of the dials of each set.

With these and other objects in view the invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended, it being understood that various changes in form, proportions, and minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

In the accompanying drawings, forming a part of this specification, Figure 1 is a front elevation of a combined fan and score-card constructed in accordance with my invention. Fig. 2 is a rear elevation of the same. Fig. 3 is a longitudinal sectional view show-

ing the interior mechanism. Fig. 4 is a transverse sectional view. Fig. 5 is a detail perspective view of the locking-pawls of the indicating-hands and ball and strike dials, showing the flexible connection between the same. Fig. 6 is a detail transverse sectional view of the spring locking-plate, operating-cam, and adjacent dial. Fig. 7 is a perspective view showing a different manner of mounting the locking-pawls shown in Fig. 5.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

The device forming the subject-matter of the present invention consists of a casing or housing, preferably in the form of a fan, as shown, and comprising a pair of spaced plates 5 and 6, connected together in any suitable manner and provided with a central vertically-disposed reinforcing-strip 7, upon which is mounted the registering mechanism hereinafter described. The fan or casing is provided with a hollow handle 8, and formed in the face of the fan or plate 5 is a marginal row of openings 9, preferably arranged in pairs and designed to receive suitable cards 10, upon which may be printed the names of the several players together with the positions they occupy on their respective teams, the batting order of the players being printed or otherwise represented on the face of the fan between each pair of openings, as shown.

Mounted for independent rotation at the center of the plate 5 are arrows or pointers 11 and 12, operated alternately through the medium of a system of gearing to indicate which particular player of the home or visiting team is at the bat during the progress of the game, while disposed above the pointers are two segmental openings 13 and 14 for displaying the number of balls and strikes registered against each player during each half of each inning. Formed in the plate 5 immediately below the pointers 11 and 12 are openings 15 and 16 for displaying the number of runs made by the respective teams during the progress of the game, and arranged below and disposed in vertical alinement with said openings are two additional openings 17 and 18, through which is displayed the number of whole and half innings played and the number of men put out by either team during the progress of one-half of any particular inning.

The several openings above described may

be arranged in any suitable manner or prescribed order; but for sake of convenience in ascertaining the score I prefer to have them arranged in the manner shown.

5 Mounted for independent movement on a pin 19, secured to the reinforcing-strip 7, are toothed disks or wheels 20 and 21, each provided with a segmental plate 22, upon which
10 numbers representing balls and strikes, respectively, said disks being actuated alternately to successively display the numerals at the openings 13 and 14 in the casing by means of a gravity-actuated push-rod 23.
15 The push-rod 23 is pivoted at 24 to a rod 25, which in turn is connected to a bell-crank lever 26, mounted on a pin 27 in the handle 8 and to which is secured a push-button 28, so that when the fan is held in a substantially
20 horizontal position with the face up and the push-button pressed inwardly the free end of the rod 23 will engage the teeth on the wheel 20 and register the balls, and when the fan is held in a vertical position with its face
25 tilted toward the operator or said fan turned over with its face down and the button pushed the rod 23 will engage the wheel 21 and register the number of strikes credited to any particular player. Interposed between
30 the wheels 20 and 21 is a guard disk or plate 29, which projects a short distance beyond the teeth on said wheels and serves to space the wheels apart and prevent the rod from engaging but one wheel at a time. The lateral movement of the rod 23 is limited by a
35 guide loop or clip 30, secured in any suitable manner to the strip 7 and through which the rod passes, while the free end of said rod is returned to normal position below the guard-
40 disk 29 after each movement of the push-button by means of a coil-spring 31, interposed between a transverse partition 32 and a collar 33 on the rod, as shown.

Rigidly secured to a pin on the strip 7 are
45 spring-pawls 34 and 35, the free end of which engage the teeth on the wheels 20 and 21, respectively, for preventing backward movement of said wheels, and connected to each wheel is a coil-spring 36, the normal tendency
50 of which is to return the wheels to initial position as soon as the pawls 34 and 35 are released, as will be more fully explained hereinafter.

Mounted for independent rotation on a
55 stub-shaft 37, preferably positioned immediately below the stub-shaft 19, are toothed wheels 38 and 39, the wheel 38 being provided with a sleeve or collar 40, carrying the pointer 12, and the wheel 39, mounted for
60 rotation on said sleeve and carrying the pointer 11. The wheels 38 and 39 are alternately operated to rotate the pointers 11 and 12 by means of a push-rod 41, which passes through a guiding loop or eye 41' in a spring
65 locking member 42, and is connected to a

bell-crank lever 43, pivotally mounted in the handle of the fan at 44 and to which is secured a push-button 45. The rod 41 is movable laterally into engagement with either
70 the wheel 38 or 39, so that by operating the button 45 the wheels may be rotated to turn the hand 11 or the hand 12, and thereby indicate the batting order of the players on either team, as will be more fully explained
75 hereafter. The wheels 38 and 39 are locked against backward movement by means of spring-pawls 46 and 46', and connecting each of said pawls to the pawls 34 and 35 are
80 cords or other flexible mediums 47, whereby the movement of either of the wheels 38 and 39 will cause its corresponding locking-pawl to move laterally and through
85 the medium of the connecting-cords release the pawls 34 and 35, and thereby permit the ball and strike indicating disks to return to normal position or, in other words, to indicate zero at the opening 13 and 14 in the casing.

Arranged below and preferably to one side of the stub-shaft 37 is a similar shaft 48, upon
90 which is mounted a toothed wheel 49, provided with a sleeve or collar 50, to which is secured a disk 51, having numbers stamped or otherwise printed thereon to indicate the runs made by the visiting team. Mounted
95 for independent rotation on the sleeve 50 is a toothed wheel 52, carrying a disk 53, having similar numerals stamped thereon to indicate the runs made by the home team, the toothed wheels 49 and 52 being locked against backward rotation by suitable pawls 53'.

The wheels 49 and 52 are rotated to register the runs by means of a push-rod 54, which passes through an eye or loop 55 in the
105 locking-plate 42 and extends longitudinally of the handle 8 for connection with a push-button 56, preferably disposed at the base of the handle, as shown.

The locking-plate 42 is secured to the reinforcing-strip 7, and the free end thereof is
110 normally spaced from said strip, as best shown in Fig. 6, so that the rods 41 and 54 will normally be in position to engage the teeth on the wheels 39 and 52 when the push-button 45 and 56 are actuated, but when
115 said plate is depressed in the manner herein-after explained and the push-button operated said rods will engage the teeth on the wheels 38 and 49.

Journaled in the reinforcing-strip 7 is a
120 stub-shaft 55', which extends through the back plate 6 and is provided with a hand or finger 57, adapted to point alternately to the name of the home or visitors team, according to which team is at the bat, the name of the
125 respective teams being printed on said back plate, as shown. Secured to and mounted for rotation with the stub-shaft 55' is a toothed wheel 58, having movable therewith a wheel or disk 59, upon which is printed a
130

series of numbers adapted to register with the opening 18 in the fan-casing and indicate the number of men put out during one-half of any particular inning.

5 The disk 59 is provided with two transfer-teeth 59', so that when the wheel 58 is rotated the distance of three teeth, corresponding to three men put out in any particular inning, one of the transfer-teeth 59' will engage the
10 teeth of the innings-wheel 60 and cause the dial 61 of the latter to display a numeral at the opening 17, corresponding to the last half of one inning or the first half of the next, as the case may be.

15 The dial 61 is preferably formed of celluloid, isinglass, or similar transparent material, so as not to obstruct the opening 18, and the numerals which begin at zero and represent whole and half innings are stamped or other-
20 wise printed on the margin of the dial, as shown.

The inner face of the wheel or disk 59 is provided with a series of ratchet-teeth 62, preferably three in number, which coöperate
25 with a locking lip or point 63 on the locking-plate 42 and prevent backward movement with said wheel, the latter being rotated by a push-rod 64, connected with a push-button 65, extending through the base
30 of the handle 8.

Interposed between the toothed wheel 58 and disk 59 and mounted for rotation therewith is an intermediate wheel 66, provided with a cam 67, adapted to engage and de-
35 press the locking-plate 42 every time three successive outs are displayed at the opening 18, so that when one-half of any particular inning is finished the push-rods 41 and 54 will be shifted out of engagement with the
40 wheels 39 and 52 and into engagement with the toothed wheels 38 and 49, and thus lock the registering mechanism of the retiring team against movement during the rest of the inning. The cam 67 is formed with a series of
45 ratchet-teeth 68, similar to the teeth in the wheel 59, so that when the cam depresses the locking-plate 42 the locking-lip 63 will engage said teeth and prevent backward move-
50 ment of cam and wheel 59 while said cam is in engagement with the locking-plate.

The push-buttons are preferably provided with enlarged heads 69 and annular collars 70, which serve to limit the inward and out-
55 ward movement of said buttons. Coil-springs 71 are also mounted on the rods 54 and 64 beneath the transverse partition 72 of the handle to return the buttons 56 and 65 to normal position after being pressed inwardly.

The operation of the device will be readily
60 understood and is as follows: At the beginning of the game the register is set with zero at the opening 18 either by turning the hand 57 on the back of the fan or pushing the bot-
65 tom 65 until "1" shows at the opening 17 and the hand 57 points to one or the other of

the teams, which indicates that it is the first half of the first inning and no men are out. Suppose the first half of the fifth inning is being played and that the home team or "Yale" is at the bat, while one man is out and the op-
70 posing teams have scored two and three runs, respectively, as indicated in Fig. 1 of the drawings. Should the man at the bat get three balls, they may be successively regis-
75 tered by holding the fan in a substantially horizontal position with its face up and depressing the button 28, while any strikes that may be called by the umpire may likewise be
80 registered by turning the fan over with its face down or by tilting the face of the fan while in a vertical position toward the opera-
85 tor and depressing the same button. Should the batsman have three strikes called on him, the button 65 is first pushed inwardly, which registers "2" at the opening 18 and at the
90 same time actuates the wheel 60 to indicate at the opening 17 that the second half of the fifth inning is ready to commence. The but-
95 ton 45 is then depressed, which rotates the hand 12 to indicate the next man at the bat and at the same time releases the ball and strike indicators, permitting the same to be
100 returned by the action of the coil-springs to zero. Should the next man at the bat make a home run, the button 56 is depressed to reg-
105 ister the run at the opening 15 and the button 45 actuated to indicate the next "batter up" and clear the face of the fan of balls and strikes should any have been registered
110 against him before making his run. Now suppose the next man at the bat strikes out, the button 65 is again depressed, which indi-
115 cates zero or three men out at the opening 18 and at the same time moves the wheel 60 to indicate at the opening 17 the last half of the fifth inning. As the wheel 59 is rotated to in-
120 dicate zero at the opening 18 the cam 67 engages and depresses the spring locking-plate 42, causing the latter to shift the push-rods 41 and 54 into engagement with the wheels
125 38 and 49, so that a subsequent depression of the buttons 45 and 56 will actuate said wheels to indicate the next man at the bat on the visiting team and the runs made by said team, the wheels 38 and 49 being in the meantime
130 locked in inoperative position by their respective pawls. As the cam 67 moves into engagement with the locking-plate it will cause the hand on the back of the fan to point to the "Visitors," and when said cam clears the
locking-plate the hand will point to "Yale," thereby enabling the operator to determine at a glance which team is serving its term at the bat. It will of course be understood that as soon as three outs are registered for the
visiting team at the opening 18 the cam will clear the locking-plate, and thereby cause the latter to again shift the push-rods into en-
gagement with the wheels 39 and 52.

In Fig. 7 of the drawings there is illustrated 130

a modified form of the invention in which the spring-pawls 34', 35', 46^a, and 46^b are secured to a common pin or support, thereby dispensing with independent supports for said pawls.

If desired, a small watch or timepiece may be inserted in an opening in the face of the fan to enable the operator to ascertain the length of time it takes to play any particular inning. The face of the fan may also be enlarged and placed in stores, hotels, and the like, the mechanism being operated by means of wires extending to the base-ball grounds and connected to push-buttons at that end of the line, or said fan may be operated electrically or in any other suitable manner.

Having thus described the invention, what is claimed is—

1. In a game-register, a casing provided with a plurality of display-openings, registering-dials, and a pivoted spring-actuated operating member movable by gravity into engagement with the dials for displaying a numeral at said openings.

2. In a game-register, a casing provided with a plurality of display-openings, registering-dials, an operating member movable by gravity into engagement with the dials for displaying a numeral at said openings, and a guard interposed between said dials.

3. In a game-register, a casing provided with a plurality of display-openings, registering-dials, an operating member movable by gravity into engagement with the dials for displaying a numeral at said openings, a guard-plate interposed between the dials, and means for resetting the dials.

4. In a game-register, a casing provided with a plurality of display-openings, registering-dials carried by the casing, a push-rod movable by gravity into engagement with the dials for displaying a numeral at said openings, means for preventing backward movement of the dials, and means for resetting said dials.

5. In a game-register, a casing provided with a plurality of display-openings, registering-dials arranged within the casing, a pivoted push-rod movable by gravity into engagement with the dials for displaying a numeral at said openings, a bell-crank lever pivoted to the push-rod, means for preventing backward movement of the dials, and a spring for normally holding the push-rod out of engagement with the dials.

6. In a register, a casing provided with a plurality of display-openings, a plurality of registering-dials, an operating member movable laterally and alternately into engagement with the dials for successively displaying a numeral at said openings, and means for locking said member in engagement with each dial.

7. In a register, a casing provided with a plurality of display-openings, a plurality of

registering-dials a laterally-movable spring-actuated dial-operating member movable alternately into engagement with the dials for successively displaying a numeral at said openings, and means for locking the member in engagement with each dial.

8. In a game-register, a casing provided with a plurality of display-openings, a plurality of sets of dials carried by the casing, operating members movable alternately into engagement with the dials of each set for successively displaying a numeral at said openings, a pointer carried by both dials of one set and movable over the face of the register, and means for locking said members in operative position.

9. In a game-register, a casing provided with a plurality of display-openings, a plurality of sets of dials carried by the casing, operating members movable alternately into engagement with the dials of each set for successively displaying a numeral at said openings, a pointer carried by both dials of one set and movable over the face of the register, and means for locking said members in operative position, said means also serving to prevent movement of one of the pointers during the movement of the other.

10. In a game-register, a casing provided with a plurality of display-openings, a plurality of sets of dials carried by the casing, push-rods mounted for lateral movement within the casing and adapted to alternately engage the dials of each set for displaying a numeral at said openings, means for locking said members in operative position, and means for preventing backward rotation of the dials.

11. In a game-register, a casing provided with a plurality of display-openings, a plurality of sets of dials, operating members movable alternately into engagement with the dials of each set, and a connection between two of the sets of dials whereby the movement of one set will return the adjacent set to zero.

12. In a game-register, a casing provided with a plurality of display-openings, a plurality of sets of dials, operating members movable alternately into engagement with the dials of each set, a pointer carried by each dial of one set and movable over the face of the casing, and a connection between the pointer-actuating dials and the adjacent dials whereby the movement of either pointer will automatically reset said dials.

13. In a game-register, a casing provided with a plurality of display-openings, a plurality of sets of dials, operating members movable alternately into engagement with the dials of each set, a pointer carried by each dial of one set and movable over the face of the casing, spring-pawls for preventing backward movement of the several sets of dials, and a flexible connection between the pawls

of adjacent sets of dials whereby the movement of one set will automatically return the adjacent set to zero.

14. In a game-register, a casing provided with a plurality of display-openings, a plurality of sets of dials, operating members movable alternately into engagement with the dials of each set for successively displaying a numeral at said openings, and a spring-plate provided with openings for the reception of the operating members and serving to lock said members in operative position.

15. In a game-register, a casing provided with a plurality of display-openings, a plurality of sets of dials, a spring-plate secured to the casing and having its free end provided with guide-openings, and spring-actuated push-rods passing through the openings in the plate and adapted to alternately engage the dials of each set for successively displaying a numeral at the openings in the casing, said plate serving to lock the push-rods in operative position.

16. In a game-register, a casing provided with a plurality of display-openings, a plurality of sets of dials carried by the casing, operating members movable alternately into engagement with the dials of each set for successively displaying a numeral at said openings, means for holding the dial-operating members in operative position, and a cam for

actuating the locking means to shift the locking members.

17. In a game-register, a casing provided with a plurality of display-openings, a plurality of sets of dials carried by the casing, a spring-pressed locking-plate arranged within the casing, push-rods engaging said plate and movable alternately into engagement with the dials of each set for successively displaying a numeral at said openings, and a cam adapted to depress the locking-plate for shifting the push-rods.

18. In a game-register, a casing provided with a plurality of display-openings, a plurality of sets of dials, a spring-pressed locking-plate arranged within the casing and provided with a locking-lip, push-rods engaging said plate and movable alternately into engagement with the dials of each set for successively displaying a numeral at said openings, and a cam adapted to depress the locking-plate for shifting the push-rods said plate being provided with a series of teeth for engagement with the locking-lip.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILL STEEL.

Witnesses:

RALPH G. MOORE,
PRATT P. BACON.