J. F. MURRAY.

BASE BALL GAME APPARATUS.

APPLICATION FILED OCT. 20, 1909.

951,486.

Patented Mar. 8, 1910.

2 SHEETS—SHEET 1.

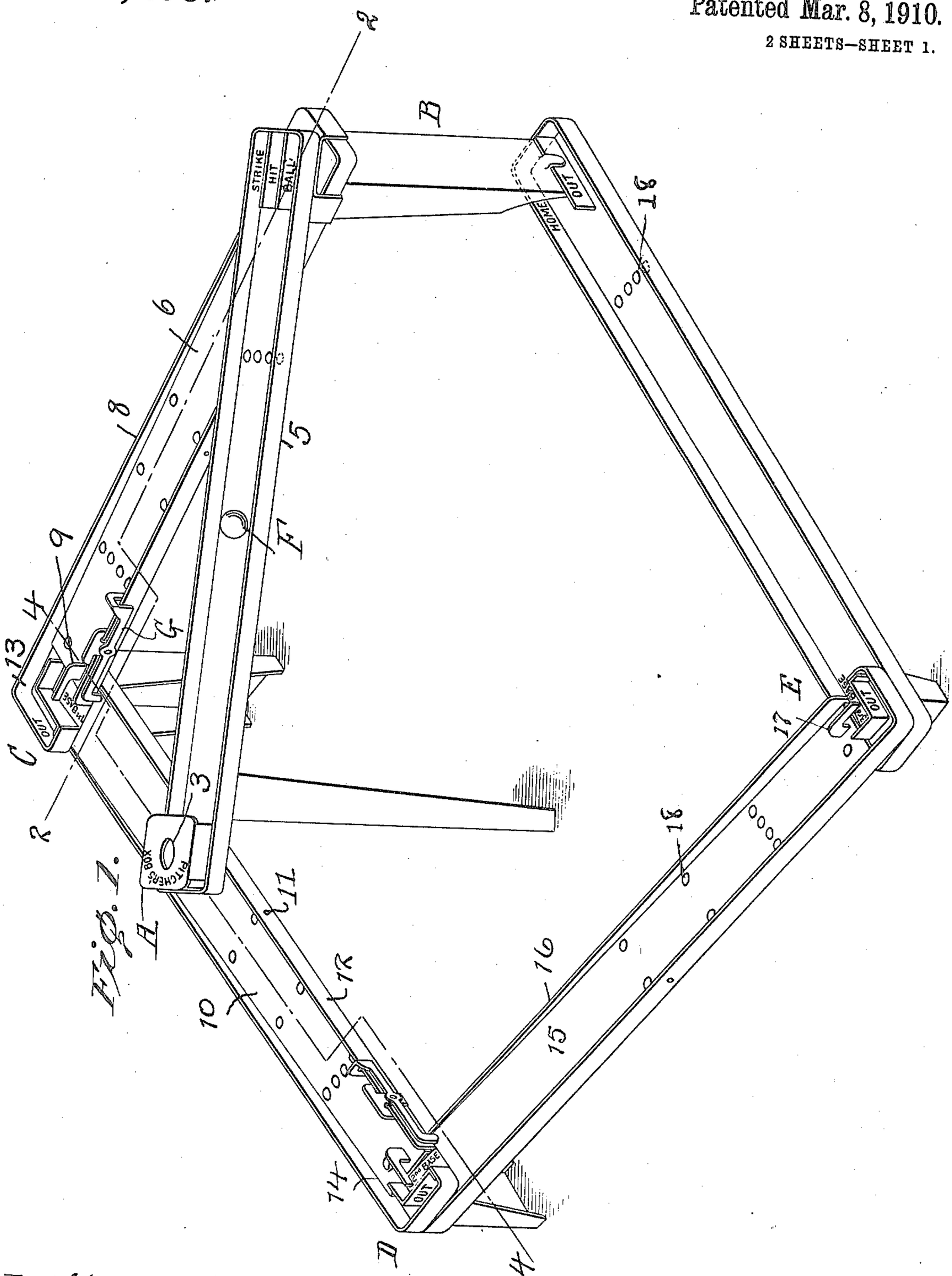

Fig. 1.

Witnesses:
Gertrude I. Porter.
May I. McCarry.

Inventor:
John Francis Murray
by Paul Benjamin
his Attorney.

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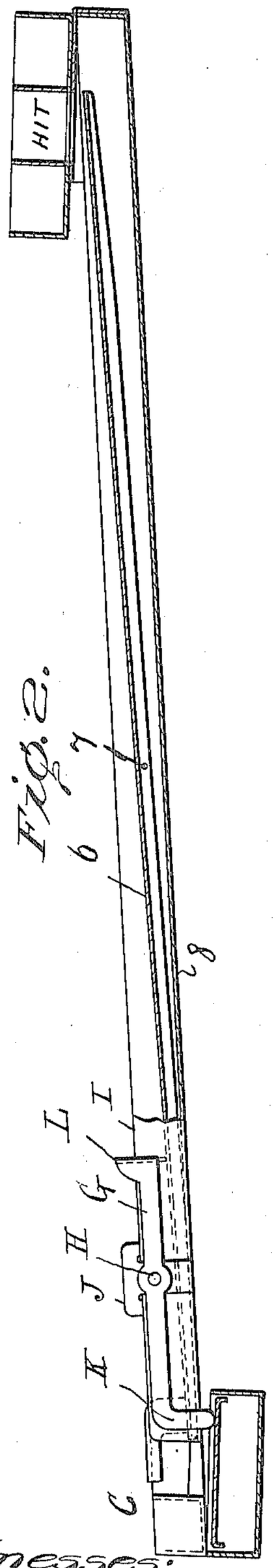

Fig. 2.

Fig. 3.

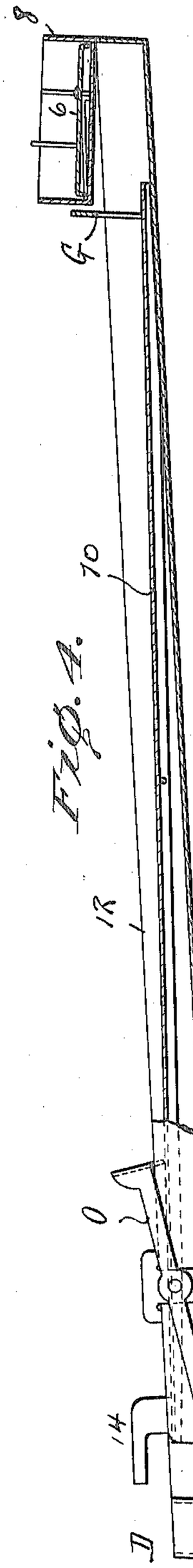

Fig. 4.

Witnesses:
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UNITED STATES PATENT OFFICE.

JOHN FRANCIS MURRAY, OF NEW YORK, N. Y.

BASE-BALL-GAME APPARATUS.

951,486. Specification of Letters Patent. Patented Mar. 8, 1910.

Application filed October 20, 1909. Serial No. 523,623.

To all whom it may concern:

Be it known that I, JOHN FRANCIS MURRAY, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented a certain new and useful Improvement in Base-Ball-Game Apparatus, of which the following is a specification.

The invention relates to base-ball game apparatus, and more particularly to the apparatus set forth in U. S. Letters Patent No. 915,108, granted to Edward C. S. Parker March 16th, 1909. In said Parker apparatus a continuously inclined diamond-shaped runway is traversed from base to base in the usual order by successive balls representing the players. The construction is such that the chance entry of a ball into one of a group of receptacles, located at the lower end of each member of the runway, determines whether the player is "out", holds his base or continues his run: and also such that the ball representing the player holding a base and so retained in one of said receptacles is released therefrom automatically by the next following ball, thus simulating the vacating of a base by one player upon the beginning of a run to that base by the next following player. In said Parker apparatus, however, a player holding second base cannot be automatically released therefrom by the next following player unless the ball representing said following player actually leaves first base to continue the run, and similarly, a player holding third base cannot in like manner be released unless the following player actually leaves second base. Or, in other words, if the ball representing the following player runs into the "out" compartment at either first or second base, the balls representing the players on second or third bases are not released. On the other hand, in order more nearly to simulate the actual conditions of the game, the players on second or third bases, or both, should run as soon as the player at the home plate makes his hit without regard to the possibility of his being put out on first base.

My present invention adds to the Parker apparatus, means for accomplishing the last described result, so that the moment a ball beginning the run to first base strikes the tilting table in the runway from home plate to first base, the consequent tilting of that table is directly communicated to the tilting table in the runway between first base and second base, so as to release the ball representing the player holding second base, and in turn the tilting of the table in the second runway is communicated to the table in the third runway so as to release the ball representing the player holding the third base. The consequence is, that if there is a ball representing the player on either second or third base or on both of them, this ball (or balls) is released irrespective of the fact that the ball running from home to first base may enter the "out" compartment at first base and proceed no farther.

In the accompanying drawings—Figure 1 is a perspective view of the apparatus of the aforesaid Parker patent with my attachment applied thereto, showing the several tilting tables in the runways in their normal position. Fig. 2 is a longitudinal sectional view of the runway leading from home to first base on the line 2, 2, of Fig. 1, showing the tilting table and my attachment in normal position with the table ready to receive the ball. Fig. 3 is a view similar to Fig. 2, but showing the ball at the upper end of the tilting table depressing said end and raising the lower end of said table, thereby rocking the lever of my attachment to cause said lever to depress the upper end of the tilting table in the runway between first base and second base, thus raising the latch on said second tilting table to release the ball already on second base. Fig. 4 is a section on line 4, 4, of Fig. 1, showing the tilting table, in the runway leading from first to second base, tilted by the lever of my attachment to effect the release of the ball on second base.

Similar letters and numbers of reference indicate like parts.

The general construction of the apparatus to which my attachment is applied being substantially the same as set forth in said Parker patent, reference is made to said patent for description of the details thereof. Following the nomenclature of the actual game, the position of the pitcher's box is at A, the home base at B, first base at C, second base at D and third base at E. Said bases are at the angles of an inclined diamond-shaped runway which is traversed by a ball or marble F which descends the incline by gravity and represents a player running from base to base.

The ball being inserted in the opening 3 of the pitcher's box runs down the runway

5 and may enter either of the three compartments at the end thereof marked in Fig. 1, respectively "strike," "hit" and "ball." If it enters either of the compartments marked "strike" or "ball" it is there held, but if it enters the compartment marked "hit" it passes through a hole in the bottom thereof, as described in said Parker patent, upon the upper end of a tilting table 6 which is pivoted in the trough like runway 8 extending from home to first base. On reaching the lower end of that table this ball may either pass to the left of the latch 9, Fig. 1, which extends upwardly from the extremity of said table, and then pass immediately upon the tilting table 10 pivoted at 11 in the runway 12 extending from first base to second base, or it may pass to the right of said latch and so become held by said latch, thus simulating a player holding first base, or it may run into the closed compartment 13 which prevents any further progress of the ball and simulates the condition of the player being "out" on first base. If now, a second ball, representing a following player, comes upon the tilting table 6 in runway 8, it will tilt that table to raise the latch 9 and so release the first ball if held by said latch. The first ball then running on tilting table 10 will, in like manner, raise the latch 14 on said table to release a ball holding second base, if one be there, and in like manner again, the advent of a ball on tilting table 15 in runway 16, leading from second base to third base, will raise the latch 17 and said tilting table 15 to release a ball on third base, if one be there. All of this is accomplished by the Parker apparatus aforesaid. Suppose, however, that a ball is held on second base by the latch 14 on tilting table 10, and that a following ball F passing upon runway 18 runs into the "out" compartment 13 at the end of said runway, as shown in dotted lines Fig. 3. Then it is clear that said following ball never gets to tilting table 10 in runway 12, and hence cannot release the ball on second base. On the other hand, in the actual game, as soon as a player makes a fair hit and begins his run, the players on the other bases also run in the endeavor to reach the next bases. This the Parker apparatus does not accomplish, and this is the result which I effect by my attachment now to be described.

G is a lever, preferably of thin metal, pivoted at H to the inner side of the upwardly turned flange I of runway 8. In order to make this attachment conveniently removable, I preferably pivot said lever to a metal plate J having two vertical slits into which the flanges I may enter, so that of the three parts into which the plate is thus divided, two lie on the inside and one—this being the part carrying the lever pivot H—lies on the outside of said flange. The location of the pivot H is to be near the lower end of the runway 8, so that the bent down extremity K of lever G may extend over the upper end of the tilting table in runway 12. The other extremity L of lever G is turned inwardly and slotted to straddle flange I, and its inner portion extends downwardly far enough to meet the upper surface of tilting table 6 in runway 8 when said lever is in normal position, as shown in Fig. 2.

In Fig. 3 the dotted circle represents a ball which has entered the "out" compartment 13 at the end of runway 8 and is being held thereby from further progress. Now assume a second and following ball M to enter runway 8 and strike and depress the upper end of tilting table 6 therein. Then the consequent raising of the lower end of tilting table 6 will raise the extremity L of lever G and depress the turned down end K thereof, thus depressing the upper end of tilting table 10 in runway 12 and raising the latch 14 on the lower end of said last named table, so that if there is already a ball held by said latch on second base, said ball will be free to run upon the tilting table 15 in runway 16, and so continue its run to third base. It will be obvious, therefore, that by reason of the direct motion transmitting mechanism afforded by the lever G, the tilting of table 6 in runway 8 causes the tilting of table 10 in runway 12, and this is in no wise affected by the fact that the ball which causes the tilting of table 6 ultimately runs into the "out" compartment 13 at the end of runway 8 and is there stopped from further progress.

In order that the ball representing the last runner may release the balls held on both second and third bases, I provide a second rocking lever O, similar to lever G, and pivoted in like manner to the flange of runway 12, as shown in Fig. 4. The depression of the upper end of tilting table 10 in runway 12, by lever G, operates the lever O, in the manner already described, to depress the upper end of tilting table 15 in runway 16, so as to release the ball held by the latch of said last named table at third base. Hence the following results. If there is a ball on second base only, the tilting of table 6 transmitted by lever G to table 10 releases that ball. If there is a ball on second base only, the tilting of table 6 transmitted by lever G to table 10 releases that ball. If there is a ball on third base only, the tilting of table 6 transmitted by lever G to table 10, and from table 10 by lever O to table 15, releases that ball. And if there are balls on both second and third bases, the last described operation releases both of them.

I do not limit myself to the precise means here shown for transmitting motion from one tilting table to another, since other

means will be apparent to the mechanic for accomplishing the same result.

In order to retard the speed of the ball in traveling over the tilting tables, I may form upward projections on said tables, as indicated by the circles shown at 18, Fig. 1.

I claim:

1. In a base-ball game apparatus of the type set forth, a plurality of runways forming a continuous incline, tilting tables in certain runways, and means for transmitting motion from one table to the next in succession to cause simultaneous tilting of said tables.

2. In a base-ball game apparatus of the type set forth, a plurality of runways forming a continuous incline, tilting tables in certain runways, and means for transmitting motion from one table to the other tables to cause simultaneous tilting of all.

3. In a base-ball game apparatus of the type set forth, a plurality of runways forming an incline, tilting tables in certain runways, a latch on the lower end of each of said tables for retaining a ball at said end, and mechanism for transmitting tilting motion successively from the first to the last tilting table to raise said latches and release said balls.

4. In a base-ball game apparatus of the type set forth, a plurality of trough-shaped runways forming an incline, tilting tables in certain runways, and levers pivoted on said runways; each lever having one end in contact with the tilting table in the runway on which it is pivoted, and the other end in contact with the tilting table in the next succeeding and lower runway.

5. In a base-ball game apparatus of the type set forth, a plurality of trough-shaped runways forming an incline, tilting tables in certain runways, supporting plates detachably connected to said runways, and levers pivoted to said plates: each lever having one end in contact with the tilting table in the runway to which its supporting plate is connected, and the other end in contact with the tilting table in the next succeeding and lower runway.

6. A base-ball game apparatus of the type set forth, comprising a continuous diamond-shaped inclined runway, latches at the angles of said runway, devices supported on said runway for controlling said latches, and means for connecting said devices; whereby motion imparted to the first device is transmitted to the other devices of the series simultaneously to operate said latches.

7. A base-ball game apparatus of the type set forth, comprising a continuous diamond-shaped inclined runway composed of a plurality of members and at the lower end of the second member of said runway means for retaining a descending ball and at the lower end of the first member of said runway means for releasing said retaining means, and means operable by a descending ball for operating said releasing means.

8. A base-ball game apparatus of the type set forth, comprising a continuous diamond-shaped inclined runway composed of a plurality of members and at the lower end of the second member of said runway means for retaining a descending ball and at the lower end of the first member of said runway means for retaining a descending ball, and means operable by a following descending ball for releasing both of said retaining means.

In testimony whereof I have affixed my signature in presence of two witnesses.

JOHN FRANCIS MURRAY.

Witnesses:
THOMAS E. MURRAY,
MAY T. MCGARRY.