(No Model.) 3 Sheets—Sheet 1.

J. W. WEAVER.

TOY.

No. 565,309. Patented Aug. 4, 1896.

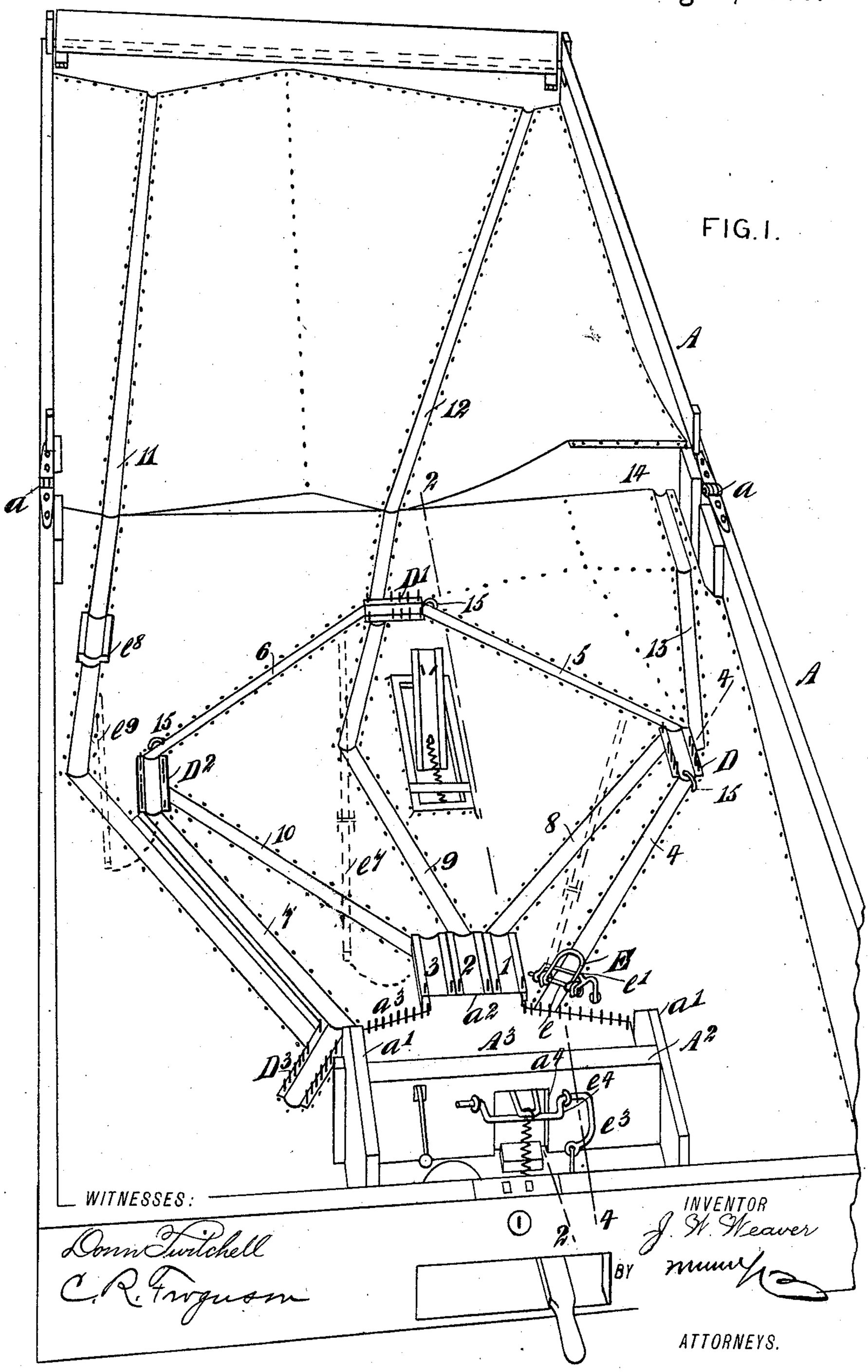

FIG. 1.

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3 Sheets—Sheet 2.

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FIG. 3.

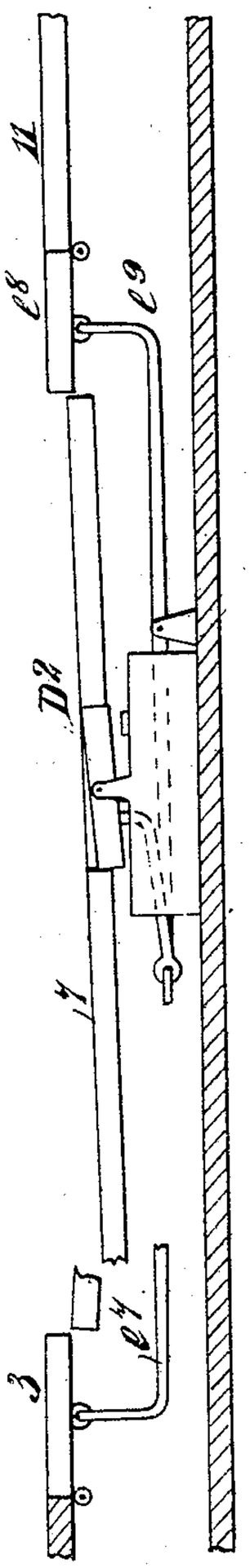


FIG. 2.

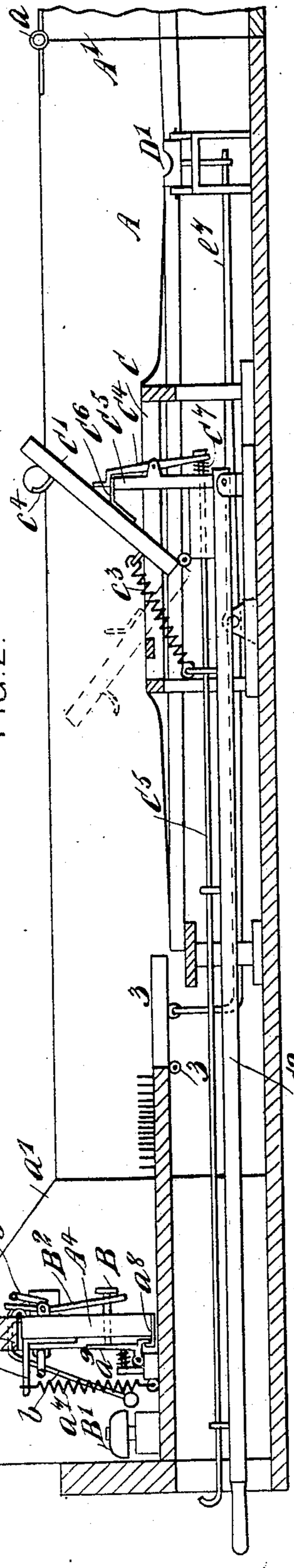


FIG. 5.

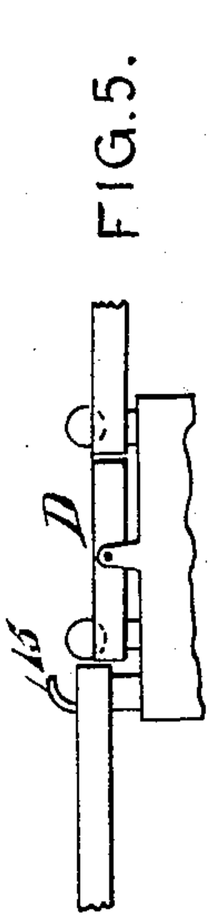
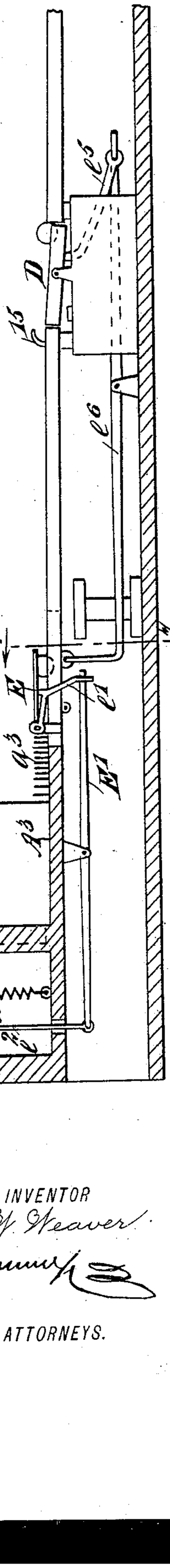


FIG. 4.



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(No Model.) 3 Sheets—Sheet 3.

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No. 565,309. Patented Aug. 4, 1896.

FIG. 6.

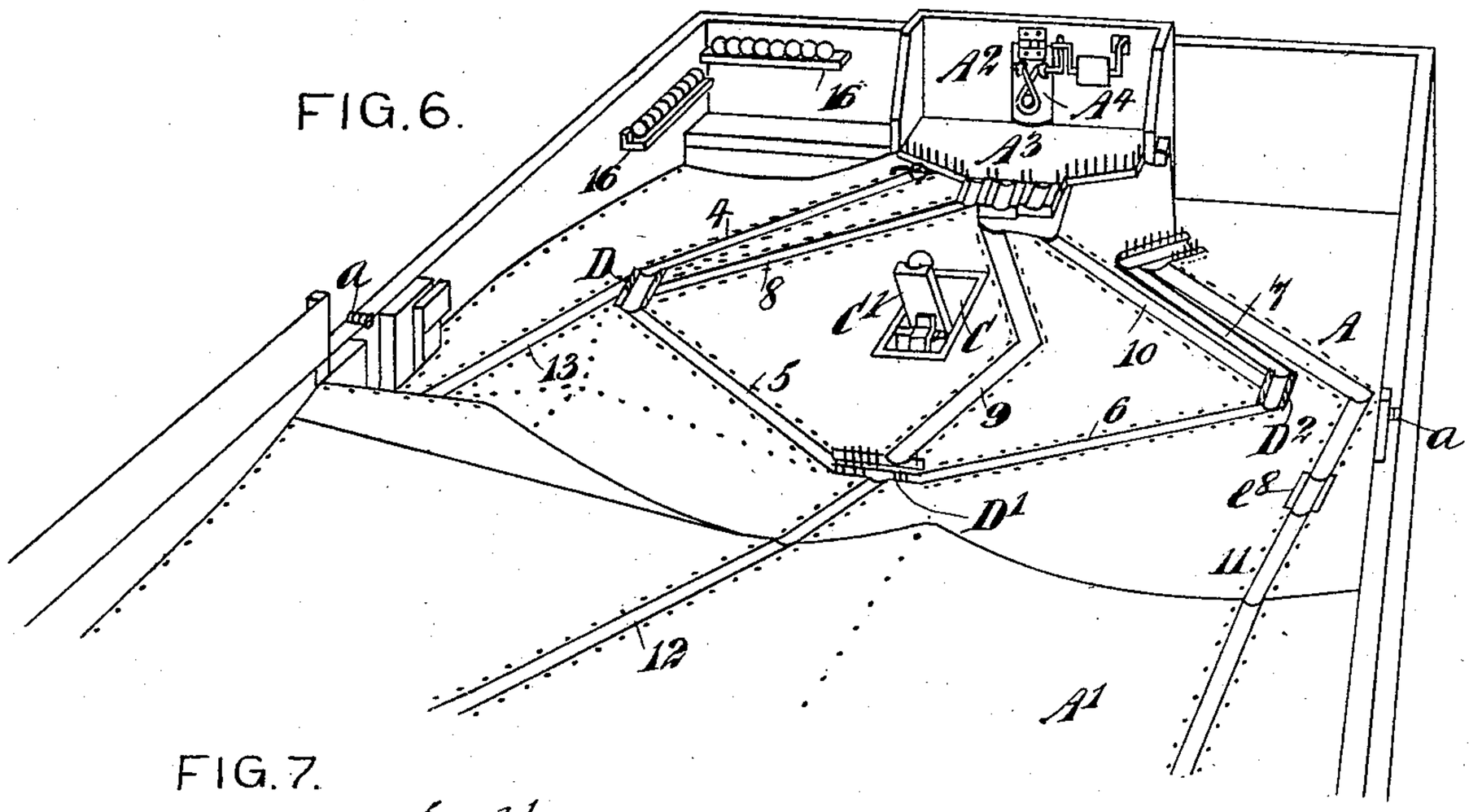


FIG. 7.

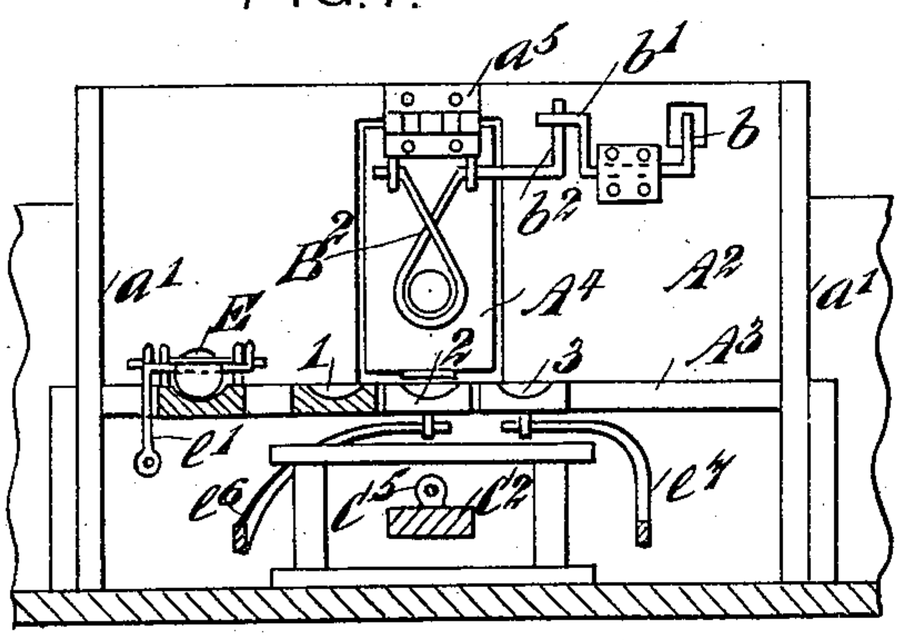


FIG. 8.

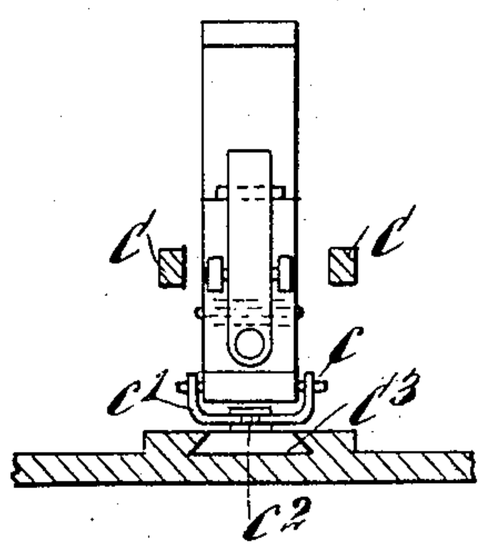


FIG. 9.

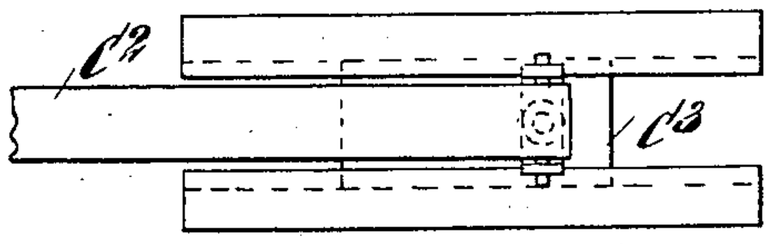


FIG. 10.

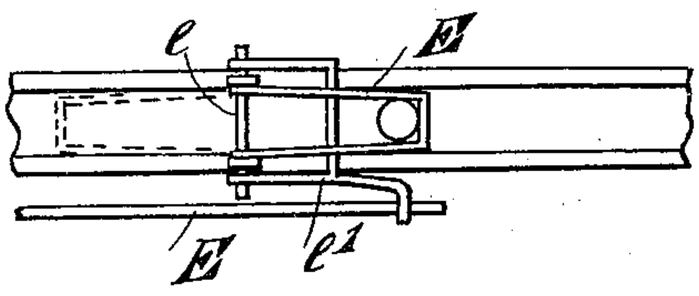
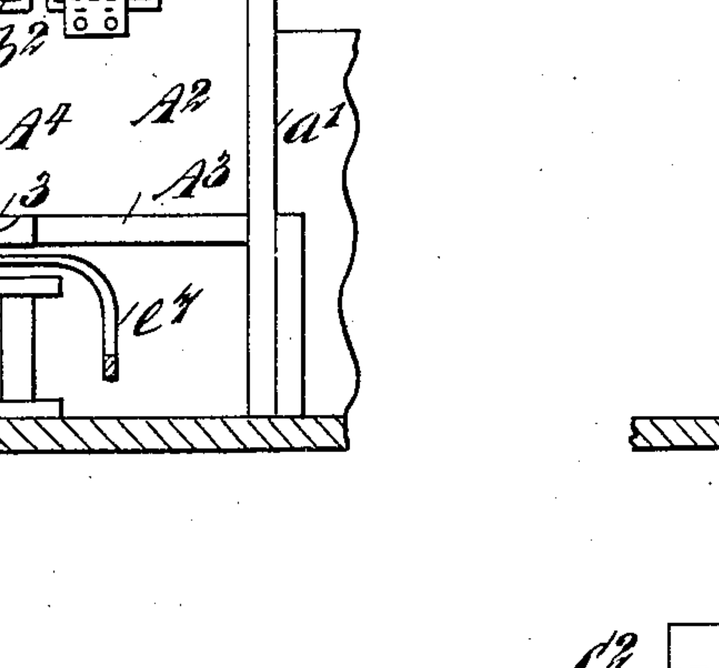


FIG. 11.



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UNITED STATES PATENT OFFICE.

JOHN WILLIS WEAVER, OF RICHMOND, VIRGINIA.

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SPECIFICATION forming part of Letters Patent No. 565,309, dated August 4, 1896.

Application filed January 18, 1896. Serial No. 575,959. (No model.)

To all whom it may concern:

Be it known that I, JOHN WILLIS WEAVER, of Richmond, in the county of Henrico and State of Virginia, have invented new and useful Improvements in Games or Toys, of which the following is a full, clear, and exact description.

This invention relates particularly to an apparatus for mechanically playing the game of base-ball, and the object is to provide certain apparatus which will not only afford amusement, but will also require certain amount of skill on the part of a manipulator in directing a ball from the pitcher to the batter.

The invention comprises, primarily, an outer and inner field, the inner field having a series of bases pivotally mounted, whereby a runner may be ejected from the base and started on its way to another base and wherein a pitched ball may also be directed to the bases.

The invention further consists in the construction and novel arrangement of parts, as will be hereinafter specified, and particularly pointed out in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a plan view of a game apparatus embodying my invention. Fig. 2 is a longitudinal section substantially on the line 2 2 of Fig. 1. Fig. 3 is a longitudinal section showing in elevation a third base and parts coacting therewith. Fig. 4 is a section substantially on the line 4 4 of Fig. 1. Fig. 5 is a side elevation of the first base. Fig. 6 is a perspective plan view of the infield. Fig. 7 is a section on the line 7 7 of Fig. 4, showing the batting apparatus in elevation. Fig. 8 is a rear elevation of the pitching apparatus. Fig. 9 is a plan view of the operating mechanism therefor. Fig. 10 is a plan view of a detent and operating mechanism for a base-runner prior to starting for the first base, and Fig. 11 is a perspective view showing the box containing the apparatus as closed.

Referring to the drawings, A A′ designate the two sections of the box for containing the apparatus, and the two sections contain, respectively, the inner and outer fields of the game, and they are hinged together, as at *a*, so as to be folded in compact form when the game is not in use, as indicated in Fig. 11.

I will first describe the batting apparatus employed. At the head portion of the infield is transversely arranged a back-stop A^2, from the ends of which wings *a′* extend forward. Forward of the back-stop A^2 and between the wings *a′* is a home-plate A^3, which has a contracted outlet a^2, guarded on its sides by upright pins a^3. The back-stop A^2 is provided with an opening a^4, within which is arranged to swing a batting-plate A^4. The batting-plate is hinged at its upper end to the back-stop at a^5. Extended rearward from the upper end of the batting-plate A^4 is an arm a^6, from which a spring a^7 extends to a connection with a fixed portion of the frame, as plainly indicated in Fig. 2. Extended rearward from the lower edge of the batting-plate is a latch a^8, adapted to be engaged by a trip-lever a^9, pivoted to a standard mounted on the frame. This trip-lever is held in engagement with the latch a^8 by means of a suitable spring engaging with the long arm of the lever. A trip-pin B extends through a perforation in the batting-plate and engages at its inner end with the trip-lever a^9. At its front end the said trip-pin B is provided with an enlarged head, which forms a target for a ball thrown by the pitching apparatus.

When a ball from the pitching apparatus fails to strike the target of the trip-pin but strikes closely adjacent thereto, it is to be called a "strike," and as a means for determining when such strikes should be called or recorded I provide an alarm, here shown as a bell B′, mounted behind the back-stop A^2, adapted to be sounded by a hammer on the end of a lever *b*, extended through an opening in the back-stop and pivotally connected to the front thereof, and also provided with a crank portion *b′*, adapted to be engaged by an arm b^2, extended from a loop of wire or similar material B^2, pivoted in eyes arranged at the upper portion of the batting-plate and extended around the trip-pin B. By this construction, should a ball from the pitching apparatus strike the loop B^2 it will rock the same on its pivot, and this will cause the arm b^2 to operate the arm *b* to sound the alarm. When, however, a ball from the pitching apparatus

strikes the trip-pin, it will force the same longitudinally and release the trip-lever a^9 from the batting-plate, so that the spring a^7 will swing said plate with considerable force outward to throw the ball into the field.

I will now describe the pitching apparatus or mechanism. Arranged within the diamond of the infield and in direct line with the batting-plate is what may be termed the "pitcher's box" C, comprising an open frame supported from the base of the device. C′ is the pitcher-arm, hinged at its lower end to a block mounted on an operating-lever C^2, extended forward underneath the field, and having a handle portion adapted to pass through an opening in the upper end of the frame, so that it may be within easy reach of a manipulator. The operating-lever C^2 is mounted on a carriage C^3, movable longitudinally in guideways formed in the base of the casing, as indicated clearly in Fig. 8, whereby said carriage may be moved longitudinally to bring the handle portion of the lever C^2 wholly within the casing when it is desired to close the same. The lever C^2 has a hinged connection c with a yoke c', which has a swivel connection c^2 with the carriage C^3. By this hinged and swivel arrangement the lever may be rocked both vertically and laterally by a manipulator to move the pitching-arm C′ into a position, which in the manipulator's judgment is the correct one for throwing a ball to strike the target of the trip-pin. A strong spring c^3 extends from engagement with the front side of the pitching-arm to a connection with the top of the lever C^2, serving, when the pitching-arm is released, to swing the same forward with considerable velocity to eject a ball which is supported by means of pins c^4, projected outward from the upper portion of the arm C′. From the rear end of the lever C^2 an arm c^5 extends upward, and to lugs extended rearward from this arm c^5 is pivoted a lever C^4, the upper end of which is bent forward to engage with a latch-plate c^6, extended from the pitching-arm C′, and adapted to engage on the upper end of the upright arm C^4. The lower end of the trip-lever C^4 is connected with a rod C^5, which extends forward through suitable guides on the lever C^2 and through the opening at the upper end of the casing or box. By this construction, when the rod C^5 is drawn forward it will rock the lever C^4 to release the pitching-arm C′, which will be impelled forward, as before described, by the spring c^3. A spring c^7, arranged between the lower portion of the lever C^4 and the upright c^4, serves to automatically return the lever C^4 to its locking position to engage with the plate c^6 when the pitching-arm is returned to its operative position.

I will now describe the bases, their operation, and the several runways. Arranged forward of the contracted portion a^2 of the home-plate A^3 are a series of short channels or grooved blocks 1 2 3, the block 1 being stationary and the others hinged, as at 3, so that their forward ends may swing downward. From one side of the contracted portion a^2 of the home-plate a groove or channel 4 extends to and is adapted to communicate with the channel in the first base D. From the opposite end of the first base D a groove or channel 5 extends to and is adapted to communicate with the groove of the second base D′, and from the opposite end of the second base D′ a groove or channel 6 extends to and is adapted to communicate with the third base, from the other end of which a groove or channel 7 extends to the home-base D^3. From the front end of the grooved block 1 a groove or channel 8 extends to one side of the first base D, from the front end of the grooved block 2 a groove or channel 9 extends to one side of the second base D′, and from the end of the grooved block 3 a groove or channel 10 extends to one side of the third base D^2. From the outer left field a groove or channel 11 provides a runway for a ball from said field to the home-base D^3, and a similar groove or channel 12 provides a runway from the right field to a connection with the groove or channel 9 of the second base. It may be here stated that these several grooves or channels are arranged on a proper incline, so that the several balls will roll by gravity to their proper destination, that is, the grooves or channels 4 8 are inclined downward toward the first base, the grooves or channels 5 9 are inclined downward to the second base, the grooves or channels 6 10 are inclined downward to the third base, the grooves or channels 7 11 are inclined downward to the home-base, and the groove or channel 12 is inclined downward to the second base. It will also be seen that in the outfield the surfaces are inclined toward the grooves or channels 11 12, so that a ball will be directed by said incline into one of the said channels or grooves.

To receive a ball from the groove or channel 8, a groove 13 may be formed to extend from the outer side of the first base D to the rear end of the infield, which is provided with an upright stop 14, and may be termed a "shortstop." The ground or base from the groove or channel 13 is inclined downward to the groove or channel 12.

The several bases are pivoted to rock vertically, one end being extended farther from the fulcrum-point, so that the said bases will, when not occupied by a ball, maintain a normally-tilted position. At the entrance end of each base a wire loop 15 is extended over the groove or channel through which the ball supposed to be running the bases is propelled. These loops will allow the passage of said base-running balls, but will prevent the passage into said channels of the ball thrown by the pitching apparatus.

Arranged above the entrance end of the groove or channel 4 is a loop E, having its ends pivotally connected to a bar e, extended across said groove or channel, and upon this bar e is also pivoted a trip-lever e', which has

an arm extended downward through the bed of the infield and engaged by a pivoted lever E′, arranged beneath the home-plate, and to the opposite end of which is connected a link e^2, which extends upward and engages with an arm e^3 of an angle-lever pivoted to the rear side of the back-stop A^2, and a central crank portion e^4 of which is adapted to be engaged by the downward movement of the arm a^6, when the batting-plate A^4 is released and moved outward. This loop E serves as a detent for a ball acting as a base-runner for the first base.

As a means for tilting the first base D, I provide it with a downwardly-extended arm e^5, which is engaged by a fulcrumed lever e^6, the opposite end of which has pivotal connection with the grooved block 2 at its under side, and a similar lever e^7 has a connection with an arm extended from the second base D′. Within the groove or channel 11 is arranged a tilting plate e^8, with the under side of which a lever e^9 is pivotally connected, the opposite end of the said lever being connected to an arm depending from the third base D^2, as plainly indicated in Fig. 3.

The game is played by means of eighteen marbles used for base-runners, nine of which are of one color and nine of which are of another color, and the marbles of each nine are consecutively numbered, thus representing two sides in a base-ball game. The several base-running marbles or balls may be placed in troughs or brackets 16, arranged at the upper end of the game-board, as shown in Fig. 6. A marble or ball of larger size than the base-running marbles is provided for the pitching and batting purposes and also to run from the batter's position to the several bases, the winning of the game depending upon which of the two balls shall first reach the respective bases. For instance, in starting the game, a base-running marble is to be placed within the loop E. Then the larger ball is placed on the pitching-arm. Then the manipulator, by drawing upon the rod C^5, will release the pitching-arm and allow it to throw the ball forward, and if this ball strikes the trip-pin B it will be forced out into the field by the outward swinging of the batting-plate A^4, and this movement of the batting-plate will release the base-running ball held by the detent E, so that the said ball will start for the first base. The weight of the said ball will tilt the base downward below the plane of the groove 13, the end of which will then serve as a stop to hold the ball for subsequent play. The ball having been returned from the field, into which it was batted, to the pitching-arm C′, the new runner is placed in the detent or loop E and the pitching-arm is again released. Should this pitched ball fail to strike the pin B, it will fall upon the home-plate, and should it roll into the grooved block 1 it will roll down the channel 8 without effect; but should the pitched ball trip the pin B and the ball falls into the channel the race would be between said ball and the ball in the detent to the first base. Instead, however, of the pitched ball running into the groove or channel 8, it shall be discharged into the groove or channel 9 and started on its way to the second base, and should the said ball reach the second base before the ball running from the first to the second base shall have reached the second base the running ball will be out and must be laid aside as one man out.

Should a runner be on the third base, the skill of the manipulator will be called into play to so regulate the pitching-arm that the ball propelled therefrom will be batted into the left field, from which it will roll into the groove or channel 11, and thence to the tilting plate e^8, where it will operate to tilt the third base to start the ball on said base toward the home-plate. Then, of course, the race will be between the base-running ball and the batted ball for the home-base. If the batted ball reached said home-base first, of course the running ball must be counted out. Should the said running ball first arrive at the home-base, it must be counted safe.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A mechanical base-ball game, comprising a pitching apparatus, a batting apparatus, a series of tilting bases adapted to be operated by the weight of a batted ball to release a base-runner, and channel runways between the bases, substantially as specified.

2. A mechanical base-ball game, comprising a home-plate, a series of bases, grooves or channels leading from base to base, and other grooves or channels leading from the home-plate to certain of the bases, substantially as specified.

3. A mechanical base-ball game, comprising an infield and an outfield, a series of tilting bases arranged within the infield, grooves and channels formed as runways between bases, a batting mechanism, a home-plate upon which said batting mechanism is arranged, channels or grooves formed to conduct the ball from said home-plate to the several bases, and channels or grooves formed in the outfield for directing a batted ball homeward, substantially as specified.

4. In a mechanical base-ball game, a series of bases, channels and grooves for communicating with the said bases and an automatically-released detent arranged across the entrance end of the channel or groove running to the first base and adapted to be released by the pitched ball, substantially as specified.

5. A mechanical base-ball game, an inner and an outer field provided with grooves or channels, the bed of the outfield being inclined to direct a ball to a groove or channel therein, substantially as specified.

6. A mechanical base-ball game, comprising a spring-impelled pitching device, a

spring-impelled batting device, a detent mechanism for said spring-impelled batting device, and an alarm adapted to be sounded should a pitched ball fail to release the detent mechanism, substantially as specified.

7. A mechanical base-ball game, comprising a series of tilting bases, a back-stop, a batting device supported by said back-stop, a home-plate extended forward from the back-stop, a series of grooved blocks with which the home-plate communicates, grooves or channels providing communication between said grooved blocks and the several bases, grooves or channels extended from base to base, and means for tilting the bases, substantially as specified.

8. In a mechanical base-ball game, a spring-impelled batting mechanism, a home-plate extended forward therefrom, a fixed grooved block communicating with the said home-plate, hinged grooved blocks communicating with said home-plate, and means for conducting or directing a ball from the said grooved blocks to the bases, substantially as specified.

9. In a mechanical base-ball game, the pitching device, comprising a pitching-arm adapted to receive a ball, a manipulating-lever upon which said arm is pivotally mounted, a spring having connection at one end with the arm and at the other end with the lever, a detent for holding the pitching-arm in operative position, a rod for operating said detent, a horizontally-movable carriage and pivotal connections between the operating-lever and carriage, whereby said lever may be swung laterally, substantially as specified.

10. In a mechanical base-ball game, the pitching device, comprising a pitching-arm adapted to receive a ball, a manipulating-lever upon which said arm is pivotally mounted, a spring having connection at one end with the arm and at the other end with the lever, a detent for holding the pitching-arm in operative position, a rod for operating said detent, a horizontally-movable carriage, and pivotal connections between the operating-lever and carriage, whereby said lever may be swung both vertically and laterally, substantially as specified.

11. In a mechanical base-ball game, a pitching device, a batting device, comprising a swinging plate, a spring for imparting movement to said plate, a detent-lever for locking the plate in operative position, a detent-pin for holding said lever, a bell arranged rearward of the batting-plate, a hammer-supporting lever and a loop pivotally connected to the batting-plate for operating the bell-sounding lever, substanially as specified.

12. A mechanical base-ball game, comprising a series of bases and grooves or channels substantially as described, a ball-detent arranged at the initial or entrance end of the groove or channel extended to the first base, a spring-impelled batting-plate, a trip-lever for moving the detent upward, and connections between the batting-plate and lever, for operating said lever, as specified.

13. A mechanical base-ball game, comprising an infield and an outfield hinged to fold together, and provided with grooves or channels for the guidance of the balls, a series of tilting bases in the infield, a spring-operated pitching-arm in said infield and a spring-impelled batting-plate at the upper end of the said infield, substantially as specified.

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