

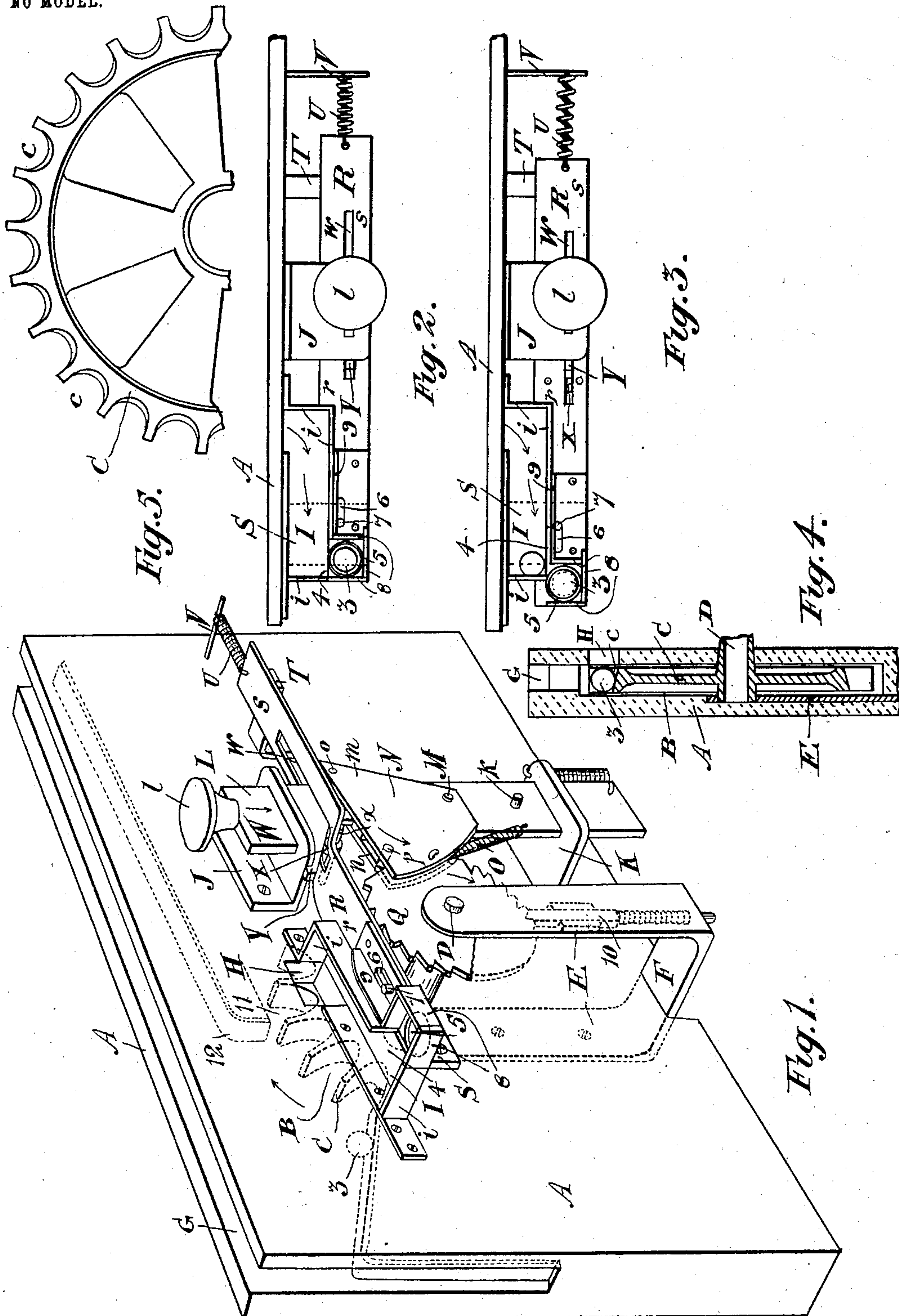
No. 728,218.

PATENTED MAY 19, 1903.

A. A. FARWELL.
VOTING MACHINE.

APPLICATION FILED JUNE 23, 1902.

NO MODEL.



Witnesses.
W. H. Smith
J. E. Hunter

Inventor.
A. A. Farwell
By Lynton R. Case, Atty.

UNITED STATES PATENT OFFICE.

ALFRED ABRAM FARWELL, OF TORONTO, CANADA.

VOTING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 728,218, dated May 19, 1903.

Application filed June 23, 1902. Serial No. 112,814. (No model.)

To all whom it may concern:

Be it known that I, ALFRED ABRAM FARWELL, physician, a subject of the King of Great Britain, residing at the city of Toronto, in the county of York, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Voting-Machines, of which the following is a specification.

My invention relates to improvements in voting-machines; and the object of my invention is to more particularly design a machine of this class for use in lodge-rooms for the purpose of voting with white and black balls. The machine consists, essentially, of a feeding-wheel journaled within a frame provided with a hopper, which is of sufficient width to hold a number of balls in the same plane above said feeding-wheel, the said feeding-wheel, which communicates with said hopper, being provided with a series of pockets, which essentially open from its periphery, so that the balls may be fed by gravity thereinto; a platform secured to the side of said frame and designed to receive the balls one at a time from said feeding-wheel; a sliding plate operated in conjunction with said platform, so as to receive one ball at a time therefrom and dispose of same synchronously with the reception of a ball by the said platform from said feeding-wheel, and means for synchronously operating said feeding-wheel and said sliding plate, as hereinafter more particularly explained.

In the drawings I have shown one machine complete, in which may be used either white or black balls. In practice I provide a machine similar to the one herein described for each kind of ball and place same side by side in any suitable frame and box same in in any suitable manner.

Figure 1 is a general perspective view of my voting-machine. Fig. 2 is a plan view of the stationary platform and the sliding plate in their normal position. Fig. 3 is a plan view of the stationary platform and the sliding plate in position for delivering a ball into its receptacle. Fig. 4 is a vertical section through the feeding-wheel and pocket for same. Fig. 5 is a side view of portion of the feeding-wheel.

In the drawings like characters of reference indicate corresponding parts in each figure.

A is any suitable frame, to which the several parts hereinafter described are secured. Within this frame is journaled in a suitable pocket B a feeding-wheel C, which by means of its spindle D is journaled in the uprights E of a suitable standard F, suitably attached to the frame A. Formed within the frame A and so as to have free communication with the feeding-wheel C is a hopper G, by means of which the balls are fed by gravity to said feeding-wheel. I do not confine myself to this construction of hopper, as it is quite obvious that different forms may be used without departing from the spirit of my invention. The periphery of the feeding-wheel C is constructed with a series of pockets c, the bottom of which is formed at an angle, so that the balls may be readily delivered therefrom. As the feeding-wheel is moved in the direction indicated by arrow, by means hereinafter described, each pocket c delivers its ball through the passage-way H as it registers therewith onto the platform I. The said passage-way is formed in the side of the frame A and opens into the platform I through the hopper G. The stationary platform shown is provided with sides l and is suitably secured to the frame A. Held in brackets J K, secured to the frame A, is a plunger-plate L, on upper end of which is a finger-button l. Straddling the plunger-plate L and pivotally connected thereto by the pin M is a latch N, consisting of two plates m and n, connected together by rivets, as shown. The rivet o limits the movement of the latch N in the direction indicated by arrow. O is a spring connecting the latch N to the plunger-plate L. P is a spring connecting the plunger-plate L with the bracket K.

R is a horizontal sliding plate, an upper portion r of which rests upon the bracket S, secured to the frame A. This bracket is shown by dotted lines in Figs. 2 and 3.

s is the lower portion of the sliding plate R and rests upon the bracket T, secured to the frame A, as shown.

U is a spring connecting the sliding plate R with the frame A by means of any suitable pin V, secured to said frame. To the inclined portion W of the sliding plate R and operating in the longitudinal slot w in said sliding plate is journaled a small roller X on a pin

x , which pin is suitably secured to the under side of said sliding plate. As shown in the drawings, the plunger-plate L passes through said longitudinal slot.

5 When the plunger-plate L is depressed, (the said plunger-plate is limited in its downward movement by the pin k abutting the bracket K,) the rivet p being spring-held against the ratchet-wheel Q, (which ratchet-wheel is
10 keyed to the spindle D,) operates the ratchet-wheel and feeding-wheel C and moves a pocket c to register with the passage-way H, thus delivering the ball onto the stationary platform I, which ball has a passage-way 4
15 from said stationary platform at its lowest end rolls toward said passage-way and would pass therethrough, but is prevented by means of a sliding plate, hereinafter described. When said plunger-plate is depressed and
20 simultaneously with the operation of the feeding-wheel and ratchet-wheel, above described, the upwardly-inclined arm Y (secured to or forming part of the plunger-plate) presses against the roller X and moves the
25 sliding plate R in the direction indicated by arrow into the position shown in Fig. 3, hence moving a flange 9, secured to or forming part of said sliding plate, to sufficiently close the passage-way 4 in the stationary platform
30 I, thus preventing the ball above described from passing therethrough. It must of course be understood that the flange 9 operates in front of the passage-way 4 at the time the ball is being delivered onto the platform
35 I. I am describing in this operation the course of only one ball from the hopper G out of the machine. When the plunger-plate L and the sliding plate R are returning to normal position and the flange 9 has moved
40 sufficiently, the ball 3 passes through the passage-way 4 into the position shown in Fig. 2. In this position the said ball is resting in the hole 5, formed in one end of the sliding plate R upon the bracket S, upon which the
45 upper portion of said sliding plate rests. Now when the plunger-plate L is again depressed one of the pieces 8 (secured to or forming part of the sliding plate R, which pieces surround the hole 5 on three sides of
50 same) moves the ball 3 from off the bracket S into the dotted position shown in Fig. 3, and said ball falls into any suitable receptacle for same.

It will be clearly understood from this
55 specification that during the operation of the delivery of the ball through the hole 5 the feeding-wheel C delivers a ball onto the stationary platform I, which takes up the position of the ball shown in full lines in Fig. 3
60 ready when the flange 9 has been moved sufficiently to take up the position shown in Fig. 2. The spring U returns the sliding plate R to normal. The upward movement of the plunger-plate L is limited by the arm Y
65 abutting the bracket J. When the plunger-plate L is released, its spring returns it to normal.

The sliding plate R is provided with a longitudinal slot 6, in which has movement the pin 7, secured to the bracket S. The object
70 of the slot 6 and pin 7 is to keep the sliding plate R in alinement with the platform I. I of course do not confine myself to this means for keeping said sliding plate L in alinement with said platform, but lay claim to any suitable means for this purpose. 75

It will of course be understood that the hopper G is designed to be filled with the ballot-balls and that the pockets c of the feeding-wheel C, operating in said hopper, will
80 each contain a ball. Only one ball is shown in Fig. 1, so that the drawings will not be confused.

The ratchet-wheel Q is prevented from backward movement by the spring-held pawl
85 10 (shown in dotted lines in Fig. 1) or in any other suitable way.

On reference to Fig. 1, (shown by dotted lines,) 12 is a projection forming an integral part of the frame A, which extends above and
90 adjacent the opening H, forming a small pocket 11, in which pocket the pocket c , delivering its ball through the opening H, must be. This construction permits only one ball at a time to pass through said opening H. I
95 of course do not confine myself to this construction.

I do not confine myself to any particular means for operating the feeding-wheel C and the sliding plate R, as it is quite obvious that
100 these parts may be operated in many ways without departing from the spirit of my invention; nor do I confine myself to the particular construction shown of the sliding plate R. 105

What I claim as my invention is—

1. In a voting-machine, in combination with a feeding-wheel for balls provided on its periphery with a series of pockets designed to hold, each, a ball; a hopper for said balls
110 communicating with said feeding-wheel; a support for said feeding-wheel, and a platform designed to receive the balls from said feeding-wheel, of a sliding plate operated in conjunction with said platform so as to receive one ball at a time therefrom and dispose of same synchronously with the reception of a ball by said platform from said feeding-wheel, and means for synchronously operating said feeding-wheel and said sliding
115 plate. 120

2. In a voting-machine, in combination with a feeding-wheel for balls provided on its periphery with a series of pockets designed to hold, each, a ball; a frame within which said
125 feeding-wheel is journaled; a hopper for said balls formed in said frame and communicating with said feeding-wheel, and a stationary platform secured to said frame and communicating with said hopper, of a sliding plate
130 operated in conjunction with said stationary platform so as to receive one ball at a time therefrom and dispose of same synchronously with the reception of a ball by said platform

from said feeding-wheel, and means for synchronously operating said feeding-wheel and said sliding plate.

3. In a voting-machine, in combination with
5 a feeding-wheel for balls provided on its periphery with a series of pockets designed to hold, each, a ball, the bottom of said pockets being constructed at an angle so as to facilitate the delivery of balls therefrom; a frame
10 within which said feeding-wheel is journaled; a hopper for balls formed in said frame and communicating with said feeding-wheel, and a stationary platform, provided with sides, secured to said frame and communicating
15 with said hopper, of a sliding plate operated in conjunction with said stationary platform so as to receive one ball at a time therefrom, the said sliding plate being provided with a hole in one of its ends; flanges surrounding
20 said hole on three sides; supporting means upon which said sliding plate rests; a flange secured to said sliding plate and operating, when the said sliding plate is moved to deliver a ball through said hole, to prevent the
25 passage of balls from stationary platform to said sliding plate, and means for synchronously operating said feeding-wheel and said sliding plate.

4. In a voting-machine, in combination with
30 a feeding-wheel for balls provided on its periphery with a series of pockets designed to hold, each, a ball, the bottom of said pockets being constructed at an angle so as to facilitate the delivery of balls therefrom; a frame
35 within which said feeding-wheel is journaled; a hopper for balls formed in said frame and communicating with said feeding-wheel, and a stationary platform, provided with sides, secured to said frame and communicating
40 with said hopper, of a sliding plate operated in conjunction with said stationary platform so as to receive one ball at a time therefrom, the said sliding plate being provided with a hole in one of its ends and also being provided
45 with a longitudinal slot; flanges surrounding said hole on three sides; supporting means upon which said sliding plate rests; a flange secured to said sliding plate and operating, when the said sliding plate is moved to deliver a ball through said hole, to prevent the
50 passage of balls from said stationary platform to said sliding plate; a pin secured to said supporting means upon which said sliding plate rests, operating in said longitudinal
55 slot so as to keep said sliding plate adjacent said stationary platform, and means for synchronously operating said feeding-wheel and said sliding plate.

5. In a voting-machine, in combination with
60 a feeding-wheel for balls provided on its periphery with a series of pockets designed to hold, each, a ball, the bottom of said pockets being constructed at an angle so as to facilitate the delivery of balls therefrom; a frame
65 within which said feeding-wheel is journaled; a hopper for balls formed in said frame and communicating with said feeding-wheel, and

a stationary platform, provided with sides, secured to said frame and communicating
70 with said hopper, of a spring-controlled sliding plate formed of an upper and a lower portion, the lower portion of said sliding plate being provided with a longitudinal slot which extends partly into said upper portion; a roller
75 journaled in said sliding plate and operating in said longitudinal slot near said upper portion of said sliding plate; a spring-controlled plunger-plate operating in said longitudinal slot; brackets secured to said frame in which
80 said plunger-plate has movement; an upwardly-inclined arm forming part of said plunger-plate and operating against said roller; a spring-controlled latch straddling said plunger-plate and pivoted to same, and
85 a ratchet-wheel keyed to said spindle carrying said feeding-wheel, the said spring-controlled latch engaging with said ratchet-wheel; the said plunger-plate, when depressed, operating said sliding plate and feeding-wheel
90 synchronously, as described.

6. In a voting-machine, in combination with
90 a stationary platform, and feeding means for supplying one ball at a time to said platform, of a sliding plate operated in conjunction with said platform so as to receive one
95 ball at a time therefrom and dispose of same synchronously with the reception of a ball by said platform from said feeding means, and means for synchronously operating said feeding means and said sliding plate.

7. In a voting-machine, in combination with
100 a feeding-wheel provided on its periphery with a series of pockets designed to hold each, a ball; a frame within which said feeding-wheel is journaled; a spindle to which said
105 feeding-wheel is keyed; a hopper for balls formed in said frame and communicating with said feeding-wheel, and a ratchet-wheel keyed on the opposite end of said spindle, of a
110 spring-controlled plunger-plate; brackets secured to said frame in which said plunger-plate has movements; a spring-controlled latch comprising two plates, one on each side
115 of said plunger-plate and riveted together, the said plates being pivoted to said plunger-plate, and a pin secured to each of said plates and operating in the teeth of said ratchet-wheel and revolving same when said plunger-plate is depressed, as described.

8. In a voting-machine, in combination with
120 a frame, and a stationary platform secured to same designed to receive and hold balls, of a sliding plate, provided with a hole in one end of same, operated in conjunction with
125 said stationary platform so as to receive one ball at a time therefrom; flanges surrounding said hole on three sides; a bracket upon which said sliding plate rests, secured to said
130 frame; a flange secured to said sliding plate and operating, when the said sliding plate is moved to deliver a ball through said hole, to prevent the passage of balls from said stationary platform to said sliding plate, and means for operating said sliding plate.

9. In combination with a frame provided with a hopper which is of sufficient width to hold a number of balls in the same plane, and being further provided with an opening 5 through which a ball at a time is designed to pass, of a feeding-wheel journaled within said frame and communicating with its hopper, the said feeding-wheel being provided with a series of pockets which essentially 10 open from its periphery so that balls may be fed by gravity thereinto, the bottom of said pockets being formed at an angle, the said pockets being on a level with said opening from said hopper so as to deliver their re- 15 spective balls one at a time through said opening, and means for operating said feeding-wheel.

10. In combination with a frame provided with an opening leading from a hopper, and a 20 pocket formed in said frame designed to contain a feeding-wheel; a hopper constructed in said frame, designed to hold balls, and a projection within said hopper placed above and ad-

jacentsaid opening in the side of said frame, the said projection overhanging the pocket 25 of said feeding-wheel that is delivering its ball through said hole or opening in side of said frame, and thus prevent more than one ball at a time being delivered through said opening, of a feeding-wheel journaled within 30 said pocket in said frame and communicating with said hopper, the said feeding-wheel being provided on its periphery with a series of pockets designed to hold, each, a ball, the said pockets being on the proper level with said 35 opening from said hopper so as to deliver their respective balls one at a time through said opening, and means for operating said feeding-wheel.

In testimony whereof I have signed my 40 name to this specification in the presence of two subscribing witnesses.

ALFRED ABRAM FARWELL.

Witnesses:

EGERTON R. CASE,
W. H. SMITH.