

of the cylinder F² and piston F¹ for actuating said mechanism, an auxiliary valve apparatus controlling said piston, and normally maintained in an open position to allow the water to flow out of the cylinder from either side of the piston, pistons for operating said auxiliary valve apparatus, primary valves for controlling said last pistons, and a rope connected to operate said controlling mechanism from the elevator, substantially as described.

No. 33,656. Electrically Controlled Elevator. (*Monte-charge contrôlé par l'électricité.*)

Otis Brothers & Company, (assignees of Charles E. Ongley), New York N. Y., U.S., 10th February, 1890; 5 years.

Claim.—1st. The combination, with an elevator car, its motor and the main valve, of an electro-magnet for actuating said main valve, a circuit closer upon the car which is in circuit with said magnet, and circuit closers at the landings also in circuit with said magnet, substantially as described. 2nd. The combination, with an elevator car, its motor and main valve for controlling its movements, of an electro-magnet for actuating said main valve, and circuit closers located at the landings which are in circuit with said magnet, substantially as described. 3rd. The combination, with an elevator car, its motor and main valve for controlling its movements, of electro-magnets for actuating said main valve to cause the car to move in opposite directions, circuit closers upon the car which are in circuit with said respective magnets, and corresponding circuit closers at the landings also in circuit with said respective magnets, substantially as described. 4th. The combination, with an elevator car, its motor and main valve for controlling its movements, of electro-magnets for actuating said main valve to cause the car to move in opposite directions, and circuit closers at the landings which are in circuit with said respective magnets, substantially as described. 5th. The combination, with an elevator car, its motor and main valve for controlling its movements, of an auxiliary valve, an electro-magnet for actuating said auxiliary valve, and an electric circuit including circuit closers at the landings, substantially as described. 6th. The combination, with an elevator car its motor and main valve for controlling its movements, of auxiliary valves for controlling the movements of the main valve in opposite directions, electro-magnets for actuating said auxiliary valves, and circuit closers at the landings in circuit with said respective magnets, substantially as described.

No. 33,657. Electrically Controlled Elevator. (*Monte-charge contrôlé par l'électricité.*)

Otis Brothers and Company (assignees of Charles E. Ongley), New York, N.Y., U.S., 10th February, 1890; 5 years.

Claim.—1st. The combination, with an elevator car and the mechanism for controlling its movements, of an electro-magnet for operating said controlling mechanism, a circuit-closer 15 or 19 in circuit with the magnet, and a circuit-closer operated by the car to close the circuit through the magnet shortly before the car arrives at a landing, substantially as described. 2nd. The combination, with an elevator car and the mechanism for controlling its movements, of an electro-magnet for operating said controlling mechanism, a circuit-closer 15 or 19 in circuit with the magnet, and a circuit-closer operated by the car to close the circuit through the magnet shortly before the car arrives at a landing, substantially as described. 3rd. The combination, with an elevator car and the mechanism for controlling its movements, of an electro-magnet for operating said controlling mechanism, a circuit-closer 15 or 19 in circuit with said magnet, a circuit-closer R or R' operated by a moving part of the elevator mechanism to close the circuit through the magnet when the car is in motion, and to break the circuit when the car is at rest, and a circuit-closer operated by the car to close the circuit through the magnet shortly before the car arrives at a landing, substantially as described. 4th. The combination, with an elevator car and the mechanism for controlling its movements, of electro-magnets for operating said controlling mechanism to cause the car to move in opposite directions, a circuit-closer 15 or 19 in circuit with both the said magnets, and a circuit-closer operated by the car to close the circuit through one of said magnets shortly before the car arrives at a landing going down, and through the other of said magnets shortly before the car arrives at the landing going up, substantially as described. 5th. The combination, with an elevator car and the mechanism for controlling its movements, of electro-magnets for operating said controlling mechanism to cause the car to move in opposite directions, a circuit-closer 15 or 19 in circuit with both the said magnets, a circuit-closer operated by the car to close the circuit through one of said magnets shortly before the car arrives at a landing going down, and through the other of said magnets shortly before the car arrives at the landing going up, and circuit-closers R, R', operated by a moving part of the elevator mechanism to close the circuit through one of said magnets when the car is in motion, and to break the circuits through both of said magnets when the car is at rest, substantially as described. 6th. The combination, with an elevator car and the mechanism for controlling its movements, of an auxiliary cylinder and piston for operating said controlling mechanism, an electro-magnet for actuating the auxiliary valve, an electric circuit including said magnet and a circuit-closer on the car and a to circulate from one side to the other of the auxiliary piston, substantially as described.

No. 33,658. Electrically Controlled Elevator. (*Monte-charge contrôlé par l'électricité.*)

Otis Brothers and Company (assignees of Charles E. Ongley), New York, N.Y., U.S., 10th February, 1890; 5 years.

Claim.—1st. The combination, with an elevator car its motor and the main valve for controlling the movements of the motor, of an

electro-magnet for controlling the movement of the main valve, an electric circuit for energizing said magnet, and a circuit-closer operated by a moving part of the mechanism to break the circuit through the magnet as the main valve reaches the limit of its working movement, substantially as described. 2nd. The combination, with an elevator car, its motor and the main valve for controlling the movements of the motor, of electro-magnets for controlling the movements of the main valve in opposite directions, electric circuits for energizing said magnets, and circuit-closers operated by a moving part of the mechanism to break the circuit through the respective magnets as the main valve reaches the limit of its working movements in opposite directions, substantially as described.

No. 33,659. Table Knife for Green Corn.

(*Couteau de table à blé d'inde*)

Jehiel F. Wyncoop and Alonzo L. Wilcox, Bralford, Penn., U.S., 10th February, 1890; 5 years.

Claim.—1st. The table knife for green corn, consisting of the handle A and the body C, the body being concave on its under side and having at its end the forwardly extending tines a, b, and the continuous cutting edge d, f, substantially as shown and described. 2nd. The table knife for green corn, consisting of the handle A and body C, the latter having the concave under surface and oppositely beveled upper surface, and having also at its end the forwardly extending tines a, b and cutting edges d, e, f, substantially as shown and described.

No. 33,660. Railway Gate.

(*Barrière de voie de fer.*)

The Edmonson Railway Gate Company, Richmond (assignee of Edwin L. Edmonson, Staunton), Va., U.S., 10th February, 1890; 5 years.

Claim.—1st. A cattle guard gate comprising a frame located on the track, a rock shaft journaled in the same beneath the rails, a series of vertical pickets carried by the shaft, a block secured to the shaft and adapted to be engaged by a locomotive, stops upon opposite sides of the shaft to limit the downward movement of the gate, and one or more weights longitudinally formed on the lower side of the shaft, substantially as described. 2nd. A rocking railroad gate consisting in the combination of a frame beneath the track, a counterbalanced rock shaft transversely journaled in the frame, a series of vertical pickets secured to, and extending up from the shaft, and an oppositely inclined block carried by one or more of the pickets and adapted to be engaged by a locomotive coming in either direction, substantially as described.

No. 33,661. Apparatus for Indicating the Progress of Races and Games.

(*Appareil pour indiquer la marche des courses et des jeux.*)

George H. Chappell and Francisco Lavandeyra, New York, N.Y., U.S., 10th February, 1890; 5 years.

Claim.—1st. An apparatus for indicating or portraying the progress of a race or game, comprising one or more imitation horses or other figures D, means, substantially as described, for actuating the same, and means, substantially as described, for starting and stopping, or retarding the movement of said figure or figures, substantially as specified. 2nd. In an apparatus for indicating or portraying the progress of a race or game, one or more miniature horses or figures D, and means, substantially as described, for actuating the same and for starting and stopping, or retarding the movement of said figure, in combination with a similar apparatus at a suitable distance from said first mentioned apparatus, and with wires or conductors connecting the stopping or starting devices of one apparatus with the corresponding devices in the other apparatus, whereby the corresponding devices in both said apparatuses will be actuated simultaneously and in unison, substantially as specified. 3rd. In an apparatus for indicating or portraying the progress of a race or game, one or more figures D, and means, substantially as described, for supporting the same, a motor for actuating the same, and frictional connections between said motor and said figure, and means, substantially as described, for stopping and starting said motor, and for stopping or retarding the movement of any figure D, substantially as specified. 4th. In an apparatus for indicating the progress of a race or game, figure D, and means, substantially as described, for actuating the same, combined with a brake for stopping or retarding said figure, and an electro-magnet and connections for actuating said brake, substantially as described. 5th. In an apparatus for indicating the progress of a race or game, a figure D, a motor for actuating the same, and connections between said figure and motor, in combination with a rod, finger or the like, for stopping said train of gearing, and the magnet and connections for actuating said rod or finger to stop or release said train of gearing, substantially as described. 6th. A figure D, a motor for actuating the same, a brake for stopping or retarding said figure, and a magnet and connections for actuating said brake, combined with a rod or finger for stopping the motor, and a magnet, and connections for actuating said rod or finger to stop or release the motor, substantially as described. 7th. The figure D, support B, plate or arm F, friction disk or projection e, and a motor for actuating the same, combined with means, substantially as described, for stopping or retarding the figure D, substantially as specified. 8th. The figure D, support B, plate or arm F, friction disk e and a motor for actuating the same, combined with a rod or finger for stopping and holding in check the motor, and a magnet and connections for actuating said rod or finger, substantially as described. 9th. The figure D, support B, plate or arm F, friction disk e and a motor for actuating the same, combined with means, substantially as described, for stopping or retarding the figure D and for stopping or holding in check the motor, substantially as described. 10th. The combination of the figures D, supports, B, plates or arm F, G, friction disks or projec-